Penn Parish

Design guidance and codes

Final report
March 2023

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Prepared by	Check by	Approved by
Daniel Mather	**Ben Castell**	**Ben Castell**
Graduate Urban Designer	Director	Director
Colin Bannon		
Associate		

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Contents

Introduction

01

1. Introduction

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

1.1 About this report

Penn Parish has established a Neighbourhood Plan Steering Group (NPSG) in order to shape and influence development within their area. The NPSG is currently in the process of preparing their Draft Neighbourhood Plan. Locality is the national membership network for community organisations that brings local people together to produce Neighbourhood Plans. Through Locality's Government-funded support programme, AECOM have been appointed to prepare this Design Guidance and code document, which will form part of the evidence base for their Neighbourhood Plan on behalf of Penn Parish.

1.2 Aims and objectives

The purpose of this document is to provide an appreciation of Penn Parish's existing character, in order to create a set of design guidelines and codes which will apply to any future housing development in the area. This will help to ensure that as any new development comes forward, it responds to its context and supports and enhances the quality of Penn Parish's existing character.
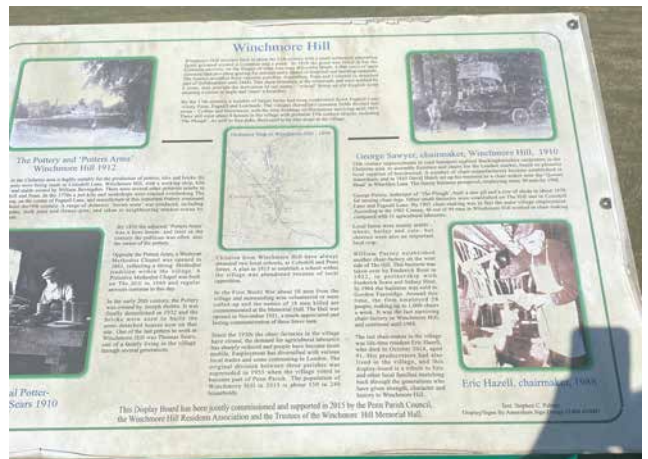
Figure 01: Penn House.

Figure 02: Winchmore Hill local history board, located on the village green.

Figure 03: Typical countryside view within the parish, Beacon Hill in Penn.

1.3 Process

The following steps were agreed with the Group to produce this report:

STEP 2

Review of existing baseline documents.

STEP 4

Preparation of the design guidelines and codes.

STEP
02

STEP
04

STEP
01

STEP
03

STEP
05

STEP 1

Initial meeting between AECOM and the Penn Parish Neighbourhood Plan Steering Group followed by a site visit.

STEP 3

Urban design and local character analysis.

STEP 5

Draft report with the design guidelines and codes and submission of the final report.

1.4 Area of study

Penn is a largely rural civil parish made up of five small villages and is located in the south-east of England, more specifically within the London Green Belt in between Beaconsfield and Amersham. The settlements are surrounded by Green Belt and eighty percent of the parish lies in Green Belt, Chilterns Area of Outstanding Natural Beauty (AONB) or both.

The area is well connected by the M40 which links it to both London to the south east and Birmingham to the north. It is also only half an hour from Heathrow airport via the M25. As well as this there are 3 railway stations nearby, the closest being Beaconsfield which is approximately 0.7 miles from Penn Parish. High Wycombe and Amersham (3.7 miles) are also nearby and within 5 miles from the parish. All of these stations provide links to London Marylebone and therefore make Penn an ideal place to live for a commuter as there are 3 options of stations to use.

The name of the place is Brythonic in origin, comparable with the modern Welsh typonym pen, and may mean "hill top" or "end". This is symbolic as the parish stands on a strong promontory of the Chiltern Hills. Host to many historical assets, Penn Parish is notable for the 'Holy Trinity' churches in Penn and Penn Street. Furthermore, there are over 77 listed buildings which further supports the historic status of the parish.

Holy Trinity, Penn Street is Grade II listed and Holy Trinity, Penn is Grade I listed and has strong links to Pennsylvania (William Penn) and the Quaker movement. Penn Parish had historic industries such as tile and chair making; much of this history is available to read online via Penn & Tylers Green Residents Society (P&TGRS) and Amersham Museum.

The parish has a range of amenities for local people to utilise. Penn, Penn Street, Winchmore Hill and Knotty Green all have Commons or Village Greens. Local public houses are at the centre of each village; the Red Lion in Penn village faces the village Common, as does The Plough and Potters Arms in Winchmore Hill. The Red Lion in Knotty Green is proximate to the Village Green and Cricket Ground. Penn village also has the Crown, Penn Street has The Hit or Miss and The Squirrel and Forty Green has the Royal Standard of England.

Figure 04: One of the many public footpaths throughout the parish which are organically formed and typically permeable.
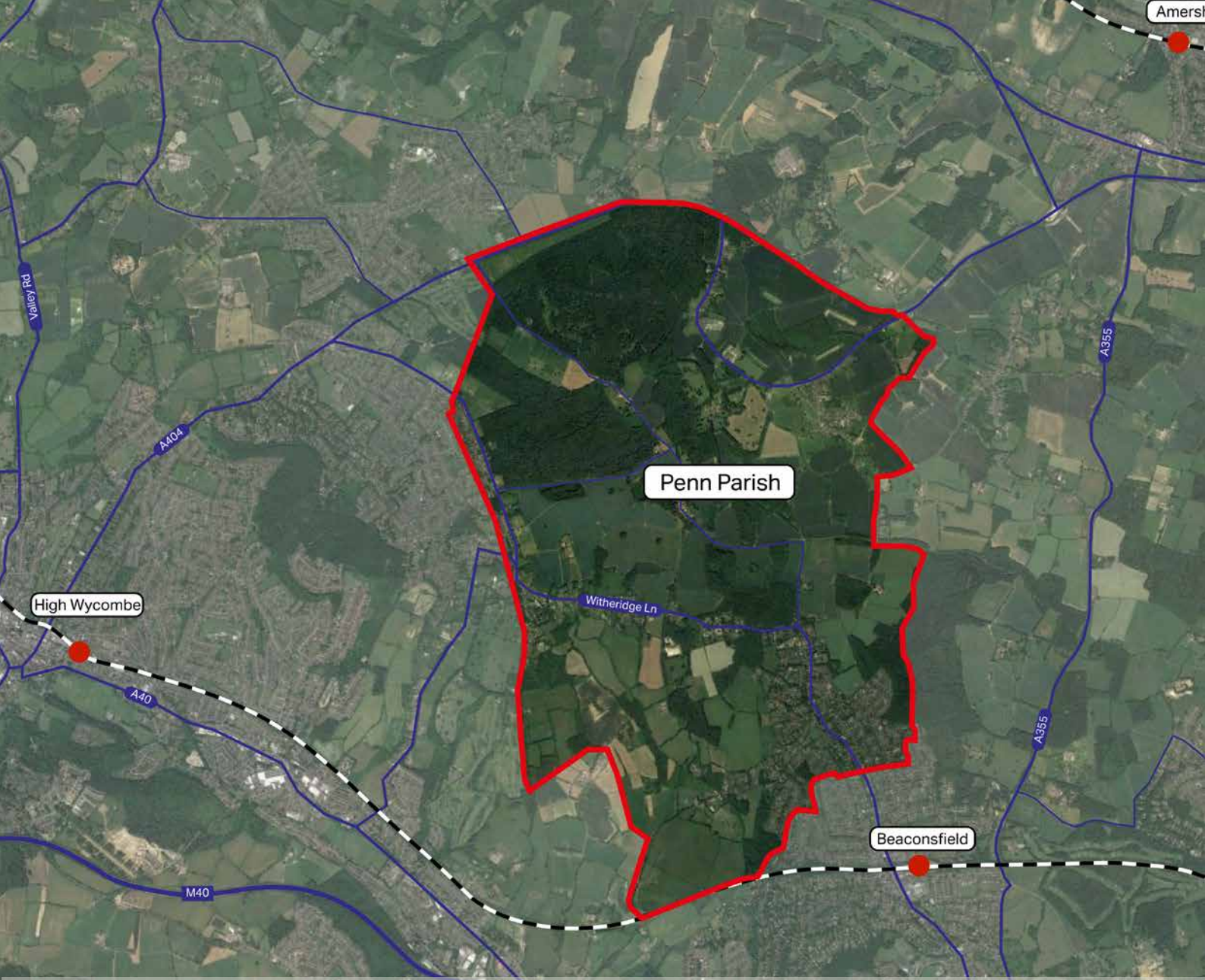
Figure 05: Surrounding context of Penn Parish, including main roads and the railway line to the south.

KEY

- ▭ Boundary
- ▬ Main Roads
- ▬ National Railway
- ● Railway Station

0 — 1km
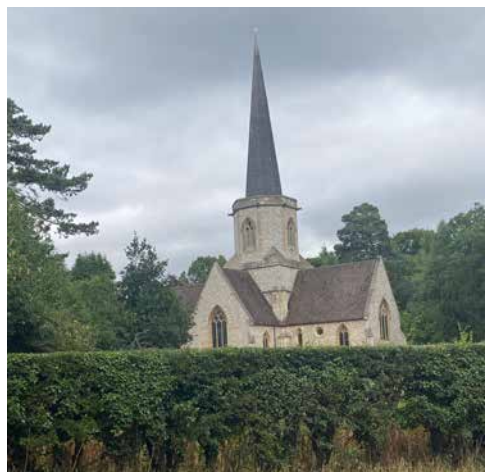
Figure 06: The Holy Trinity Church, Penn Street

Figure 07: Penn Church Hall (Holy Trinity)

Figure 08: Holy Trinity C of E Church, Penn

Policy context

02

2. Policy context

2.1 Introduction

The following documents have informed this report. Some of these guidelines have been produced at national level.

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

2021 - National Planning Policy Framework

Department for Levelling Up, Housing and Communities (DLUHC)

Relevant national planning policy is contained within the National Planning Policy Framework (NPPF, July 2021). The NPPF was updated in July 2021 to include reference to the National Design Guide and National Model Design Code and the use of area, neighbourhood and site-specific design guides. Paragraph 126 states that:

"*the creation of high-quality buildings and places is fundamental to what the planning and development process should achieve and outlines that 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".*

2021 - National Model Design Code
Department for Levelling Up, Housing and Communities (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.

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 developments, but can also provide useful prompts and questions for planning applicants.

2021 - National Design Guide

Department for Levelling Up, Housing and Communities (DLUHC)

The National Design Guide illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice. The ten characteristics identified includes: context, identity, built form, movement, nature, public spaces, uses, homes and buildings, resources and lifespan. The Guide also reinforces the National Planning Policy Framework's objective in creating high quality buildings and places. The document forms part of the government planning practice guidance.

NATIONAL LEVEL

Local planning policy context

Penn Parish lies within the newly formed Buckinghamshire Council and the new local planning authority has started the process of creating a new Local Plan for the area. The Chiltern and South Bucks Local Plan 2036 was withdrawn on 21st October 2020. Since then, four district councils have merged creating the new Buckinghamshire Council. Whilst the new Local Plan for Buckinghamshire is still in development, the 1997 Chiltern Local Plan remains the extant Local Plan, with the 2011 Chiltern Core Strategy specifying which policies were retained.

2017 and 2019 - Chiltern and South Bucks Townscape Character Study

In 2017 and 2019 (additional settlements) Chiltern and South Bucks Councils undertook a Townscape Character Study (Part 3) for both districts, to inform the now withdrawn joint Local Plan. The purpose of the document was to develop an evidence base for developing a consistent Development Management policy approach to protecting the townscape character. The document identifies areas within the settlements that have potential for change, including those that are vulnerable to change or where density could be increased with the least harm to the townscape character. Lastly, the document provides planning and design principles to guide change within the different townscape character typologies.

2010 - Chilterns Buildings Design Guide

The 2010 Chilterns Buildings Design Guide has been written to ensure that any development within the AONB is both responsible and in keeping with the local character. The foreword on page 2 of the design guide states that:

"The Design Guide has been supplemented by a series of Technical Notes on the use of flint, brick and roofing materials in the Chilterns. In addition environmental guidelines for the management of highways in the Chilterns have been produced. By disseminating this information the Board has done much to promote good design in the Chilterns over the past decade, and it is gratifying to see Design and Access Statements making reference to this advice and translating it into more carefully constructed and detailed buildings."

Neighbourhood Area
context analysis

03

3. Neighbourhood Area context analysis

This chapter describes the local context and key characteristics of Penn Parish related to history, built environment, streetscape, landscape and locally important views.

3.1 Rural context

Penn Parish is nestled between the towns of Amersham and Beaconsfield. It is unusually structured in that the villages lie in a ring round the edge with open countryside at the core. This means its land and woodland face particular pressures, as amenity space.

Typically for land in the Chilterns AONB, much of this land is actively farmed. The mixture of small and large fields, often divided by large and ancient hedges, is also a key influence on landscape character of Penn.

The Chilterns Building Design Guide states that nearly all settlements in the Chilterns can be found in four types of location. These include: in valley bottoms, at the foot of the scarpface, on the ridges and plateau (where they are often associated with common land) and along the north bank of the River Thames. Penn Parish is on the ridges and plateau and indeed is heavily characterised by its village commons. These are located in Winchmore Hill, Penn Street, Penn and Knotty Green.

Winchmore Hill and Penn Street are the most rural of the settlements. Penn village shares a boundary with Tylers Green which is a village in its own right and a suburb of Wycombe. Knotty Green shares a boundary

Figure 09: Housing in Winchmore Hill

Figure 10: Houses in Penn

Figure 11: Green belt land in the parish

with Beaconsfield and is a village with a more suburban feel. Forty Green's boundary is with Knotty Green and it is smaller and far more rural in character than its neighbour.

The five villages are well connected by public footpaths and roads which allow for these communities to integrate. The footpaths are generally used recreationally and are not used to move between communities in 'everyday life'. The settlements are geographically separated by the rolling hills of the Chilterns and Green Belt. This helps give the area its rural feel despite being so close to the towns of Beaconsfield and Amersham.

Figure 12: View of the Green Belt and ancient woodland from the edge of Penn

Figure 13: Low scale housing from Winchmore Hill common

KEY

- ▭ Boundary
- ▬ Railway
- ● Railway station
- Surrounding green space
- ▬ Roads
- Green Belt + AONB

Penn Street

Winchmore Hill

Penn

Knotty Green
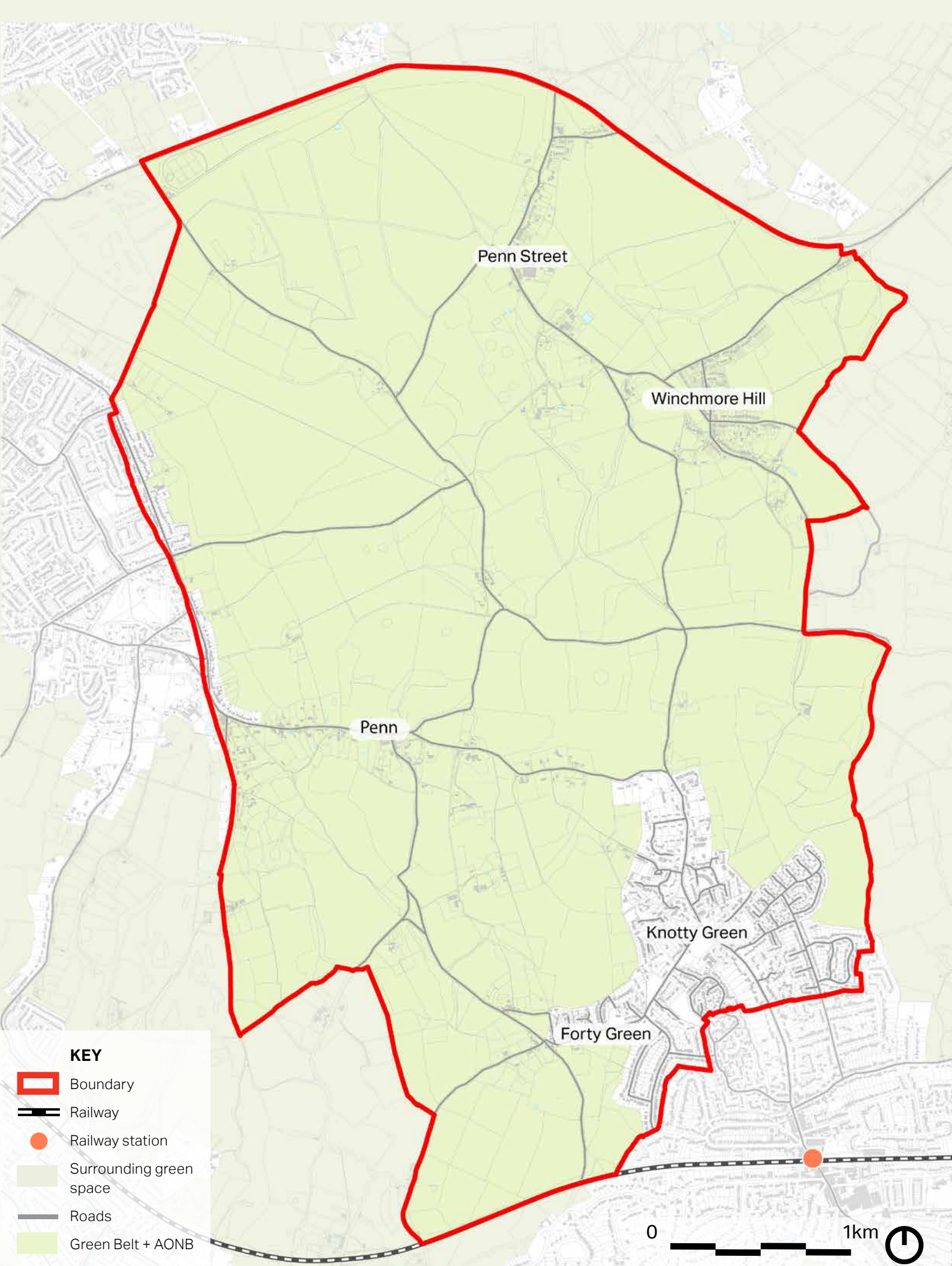
Forty Green

0   1km

Figure 14: Map showing Penn Parish and the settlements within it.

3.2 Green infrastructure and views

The Chilterns is a landscape that is shaped by chalk hillsides, characterful villages, and dense woodland. As can be seen by the contour lines on the figure below, the undulating topography allows for several spots which offer stunning views of the countryside and the villages.

Much of the woodland in the parish is a combination of ancient and semi-natural woodland and ancient replanted woodland. Ancient woodlands are the richest and most complex terrestrial habitat in the UK, and they are home to more threatened species than any other. Given this, they should be respected and preserved by any future development. Much of the woodland includes footpaths which allows people to benefit from the natural beauty that surrounds them in their parish. There are also areas of land where there are woodland grant schemes which create incentives for farmers and landowners to invest in woodland creation as a mitigation measure for climate change.

In addition, there are also ancient orchards scattered throughout the parish, and allotments in Winchmore Hill, Beacon Hill in Penn and Knotty Green.

Figure 15: Open space to the east of Knotty Green

Figure 16: View from Penn into open Green Belt farmland

Figure 17: One of the many scenic footpaths in the parish from Winchmore Hill towards Penn Street

KEY

- Boundary
- Railway
- Railway station
- Surrounding green space
- Roads
- Green Belt + Chilterns AONB
- Ancient woodland
- Contour lines
- Throsher's wood
- Common land

Penn Street

Winchmore Hill

Penn

Knotty Green

Forty Green

0   1km
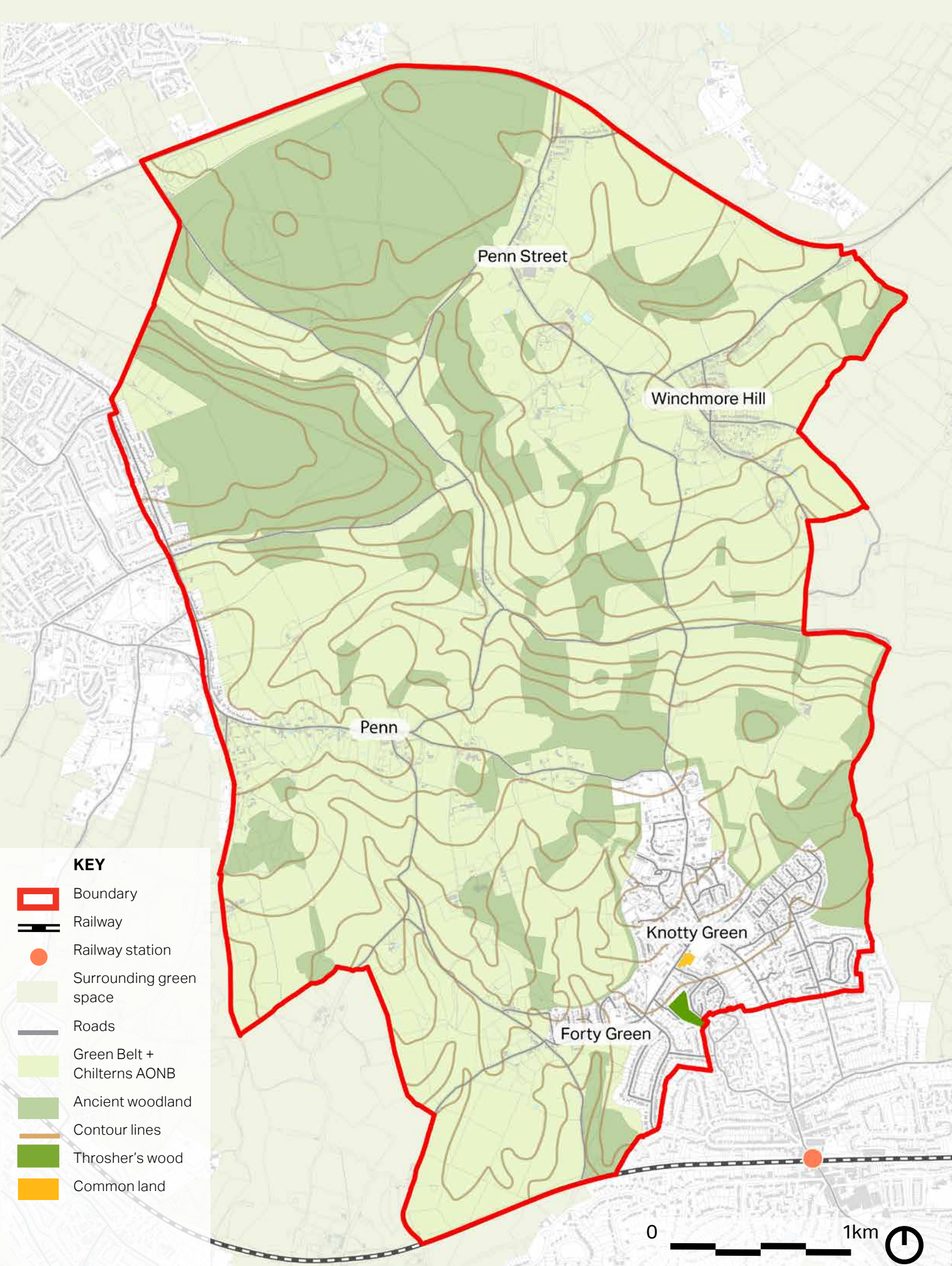
Figure 18: Map showing the green infrastructure assets within and surrounding Penn Parish.

3.3 Movement networks

The A404 provides direct access to the parish and Amersham and via the motorway network. Gravelly Way and Penn Street both have junctions with the A404 as does School Lane in Penn Street.Church Road and Common Wood Lane provide the west to east connectivity while the B474 rises to the south in Beaconsfield heading north into the parish. The latter provides the parish with an excellent link to the Beaconsfield railway station where there are further connections to London and Birmingham.

Most of the buildings in the parish are set along the primary, secondary and tertiary roads, with the few examples of cul-de-sacs being mainly in the more suburban areas of Knotty Green and Forty Green (in the south of the parish) with a few located in Penn village, Penn Street and Winchmore Hill. Smaller roads include: Gravelly Way, Whielden Lane , Fagnall Lane, Clay Street, Common Wood Lane and Church Road which link the villages. Many of the streets in the parish are single carriageways and are bordered by vegetation (trees and hedgerows) and residential uses.
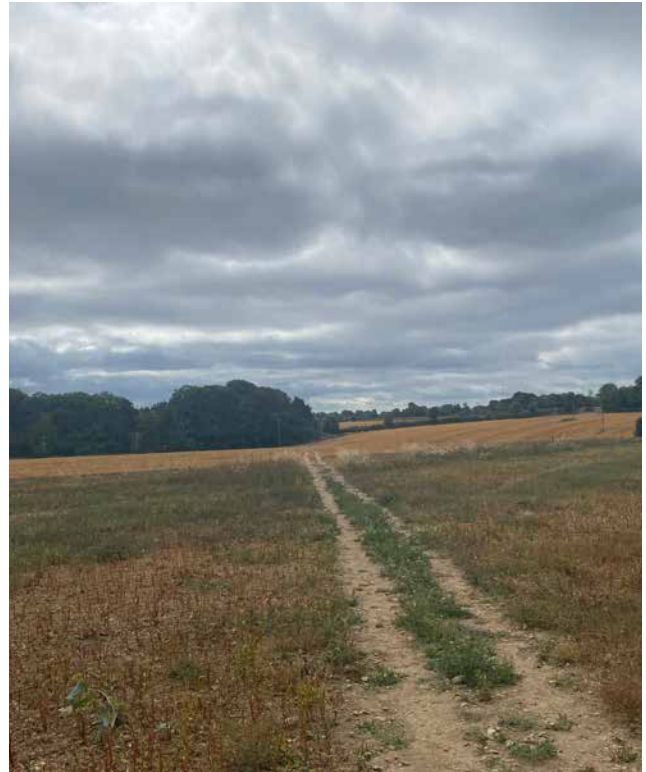
Figure 19: One of the many cross country footpaths in the parish

Figure 20: Penn Street, cutting through the ancient woodland in the north of the parish.
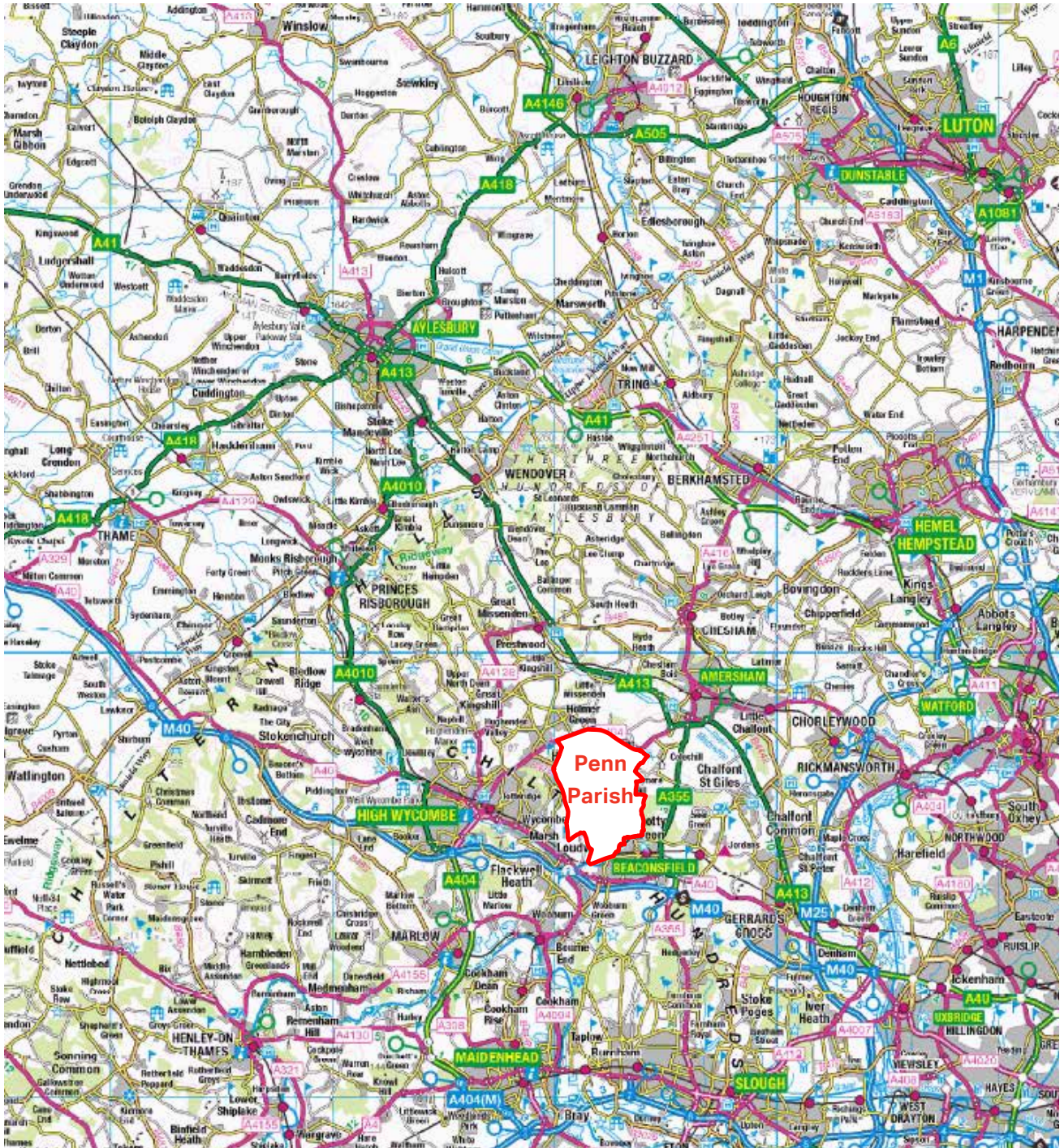
Figure 21: Penn wider connections, map using OS mapping

KEY

- Boundary
- Railway
- Railway station
- Surrounding green space
- Secondary roads
- Tertiary roads
- Public rights of way
- Cul-de-sacs
- Bus stops
- Green Belt + AONB

Penn Street

Winchmore Hill

Whielden Ln

Gravelly Way

Common Wood Ln

Clay St

Church Rd

Penn

Knotty Green

Forty Green

0   1km

Figure 22: Map showing the movement network within and surrounding Penn Parish.

3.4 Heritage

The parish has 77 listed buildings. The majority of these are grade II listed with three grade II* buildings. The only grade I listed building is the Holy Trinity Church which is in Penn village.

Winchmore Hill, located in the north east of the parish, developed around a common. The village has 4 Grade II listed buildings.

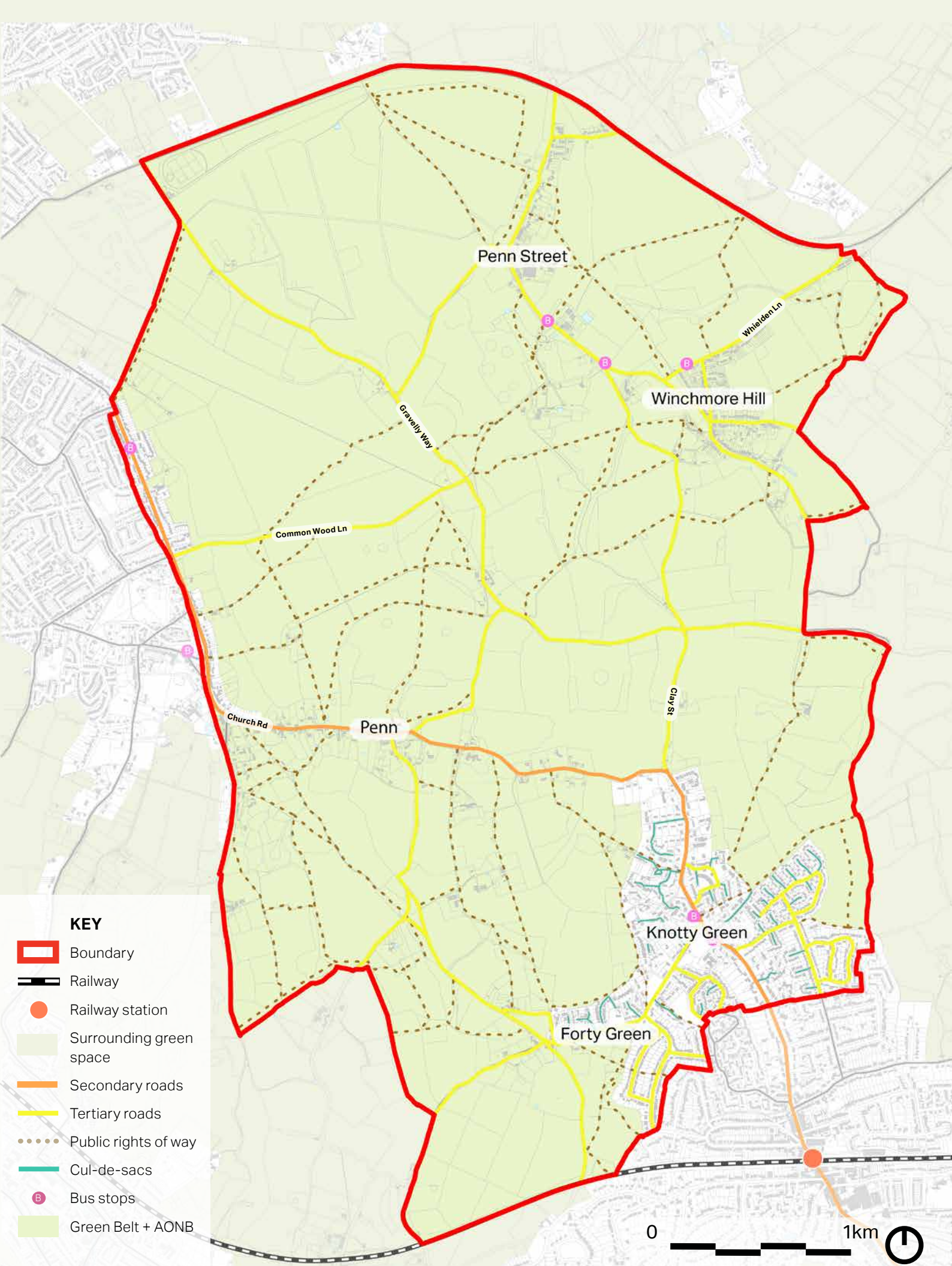Penn Street is in the north of the parish and has a very linear feel to it. It also has a common as well as ancient woodland. There are 16 listed buildings in the area, the most significant of which being the Church of Holy Trinity which is Grade II* listed (Figure 23).

Penn, in the centre of the parish also has a linear feel to it and gets more rural as it moves south and eastwards towards Knotty Green. Penn has over 30 listed buildings including both a Grade II* and Grade I listed buildings, thus highlighting the historic relevance of the area.

Knotty Green in the south of the parish has a more suburban feel to it. It has 5 listed buildings.

Forty Green which has a rural feel to it and just one listed building which is the Hill Farm Cottage and Barn.

As well as this there are 2 Conservation Areas within the parish. One in Penn Street and one in Penn. This shows that the areas have rich history which must be protected from any future development. Some of the historic buildings are listed below:

Figure 23: Holy Trinity Church, Penn Street

Figure 24: Listed building 'Holy Mount'

Listed Buildings (examples)

Church of the Holy Trinity, grade II*. 1849 by Benjamin Ferrey. Flint with stone dressings. Some local sarsen or greyweather, some imported limestone. Decorated style. Cruciform plan with central octagon tower above square stage and capped by shingled spire. Concrete tiled roofs (see Figure 23).

April Cottage, grade II. C17 origin: front elevation C18 and early C19. Two storeys, red brick with purple headers. Two 3-light leaded casements. Brick eaves cornice. Old tile roof with ridge at higher level on right. Two stacks. Basically, timber framed.

Holy Mount, grade II*. C20 built of roughcast with stone dressings, tarred plinths and green slate roof with 2 roughcast chimneystacks. Two storeys; 3 windows (see Figure 24).

Church Cottages, grade II. C18 refronting of C17 timber framed structure with exposed timbers at rear and internally. Flint rubble, red brick dressings, old tile roof; 2 storey, 5 bays. Three right hand bays with paired wood mullions casements; 2 left bays with modern 3 light casements.

Hill Farm Cottage, grade II. Late C16 or early C17. Two storeys. Timber frame, brick infill. Old tile roof with 2 gables. Letter L-plan; 2 casements (see Figure 25).

Fagnall Farmhouse, grade II. C17. Two storeys. Timber frame, brick ground floor and infill to first floor, 3 casements. Old tile roof (see Figure 26).

Figure 25: Listed building 'Hill Farm Cottage'

Figure 26: Listed building 'Fagnall Farmhouse'

22

KEY

- Boundary
- Railway
- Railway station
- Surrounding green space
- Roads
- Listed building
- Conservation Area

Penn Street

Winchmore Hill
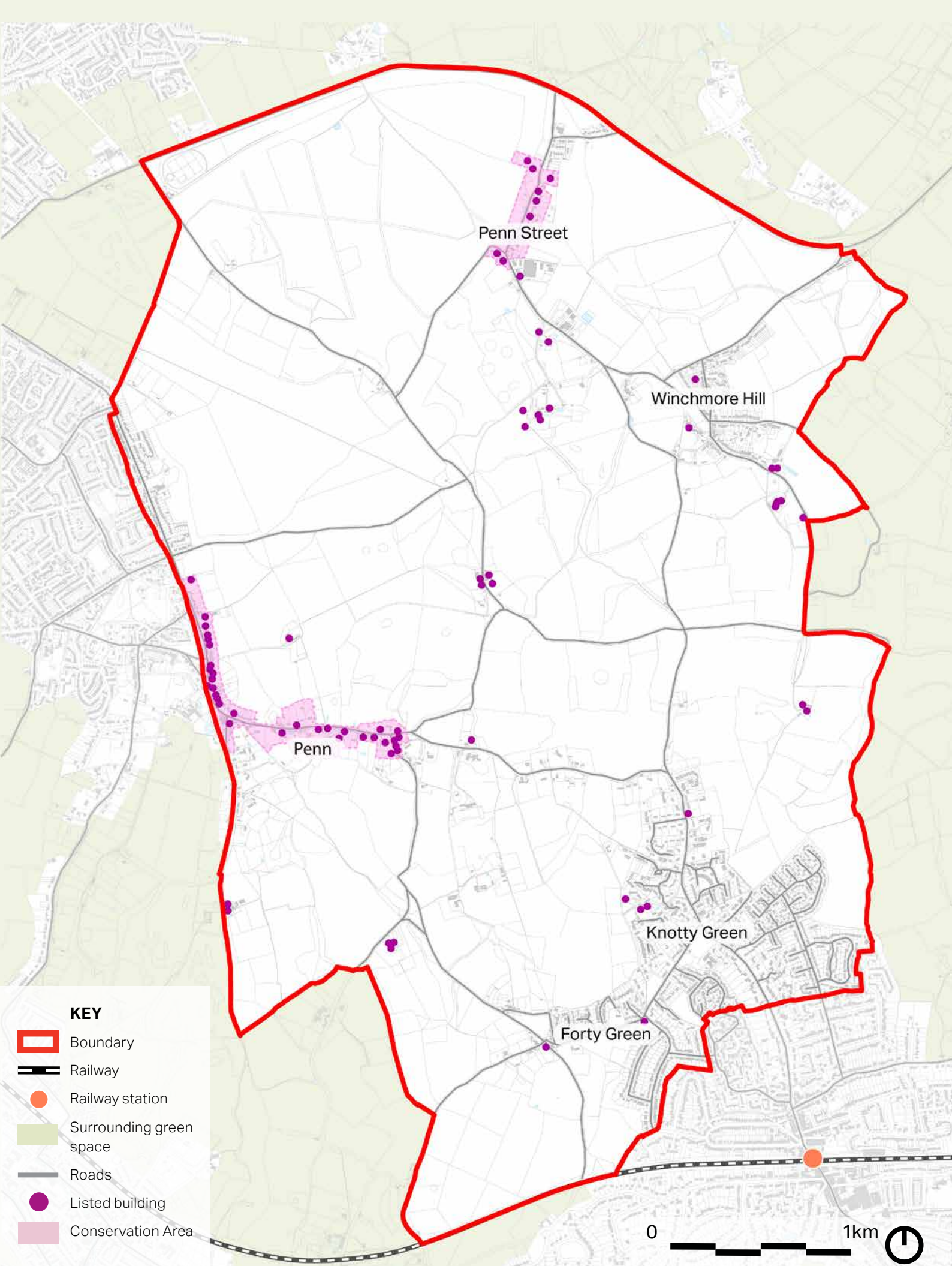
Penn

Knotty Green

Forty Green

0   1km

Figure 27: Map showing the historic assets within and surrounding Penn Parish.

Character area study

04

4. Character area study

This chapter provides character area assessment for five character areas identified.

4.1 Defining the character areas

Following on from the analysis set out above, this chapter focuses on the different character areas within the parish. The different areas are characterised by variations in topography, movement, views and landmarks, green space and landscape cover, public realm and streetscape, built form and architectural details. Principally, they are defined by the existing villages. Penn, Winchmore Hill and Knotty Green are all discussed in the Chiltern and South Bucks Townscape Study.

The parish has character areas (See Figure 28), which have been defined with the Neighbourhood Plan Steering Group, and are as follows:

- Character Area 1: Winchmore Hill

- Character Area 2: Penn Street

- Character Area 3: Penn

- Character Area 4: Knotty Green

- Character Area 5: Forty Green

CA1- Winchmore Hill

CA2- Penn Street

CA3- Penn

CA4- Knotty Green

CA5- Forty Green

KEY

- ▭ Boundary
- ▬ Railway
- ● Railway station
- Surrounding green space
- ▬ Roads
- ┅ Conservation Area
- Green Belt + AONB

Penn Street

Winchmore Hill

Penn

Knotty Green

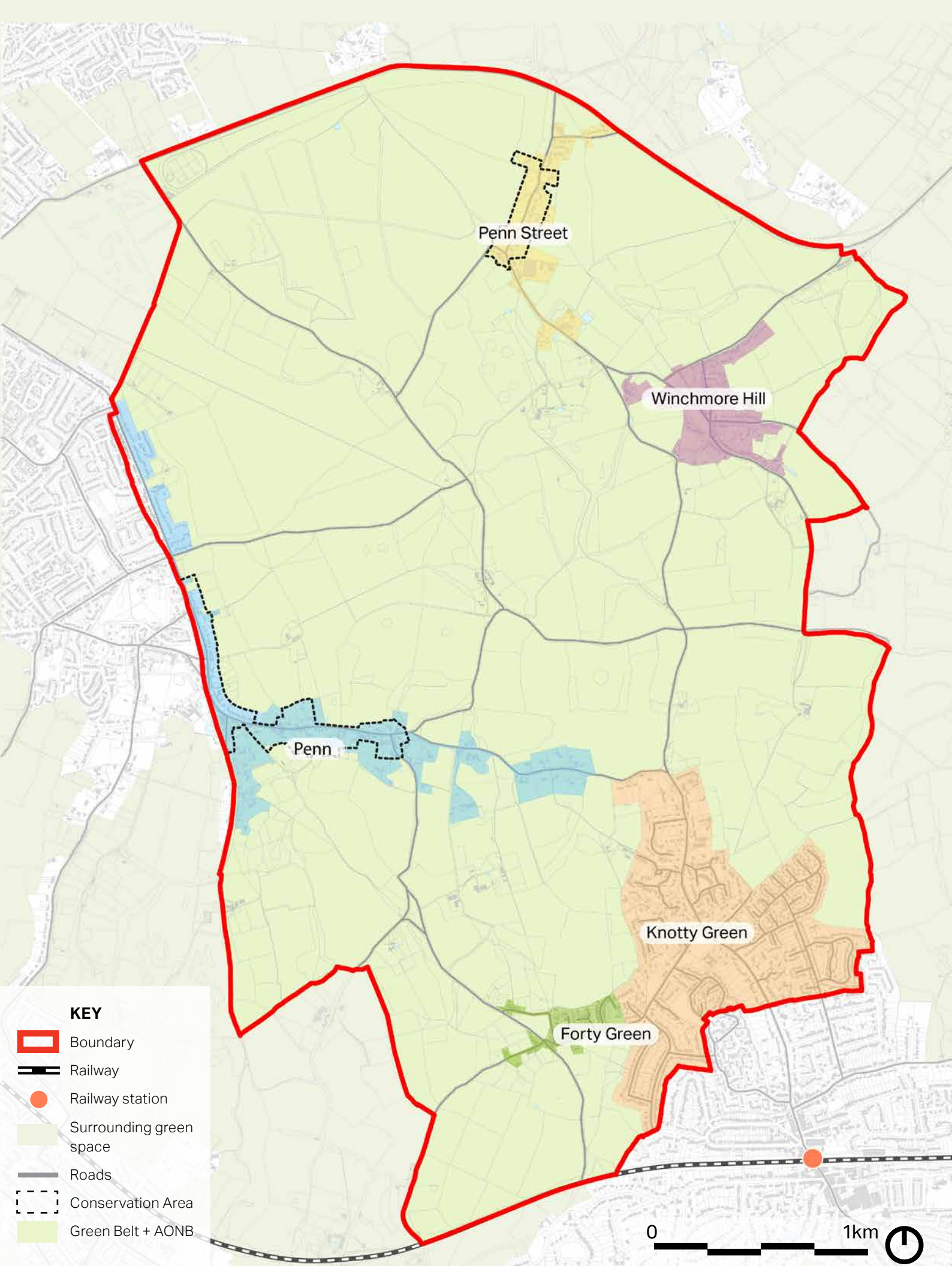Forty Green

0   1km

Figure 28: Map showing the character area boundaries in Penn Parish.

CHARACTER AREA BACKGROUND

WINCHMORE HILL

Winchmore Hill is a rural settlement in the north of the parish which is surrounded by stunning Green Belt and AONB countryside. It is characterised by its low scale housing and the central common, which is the focal point of the village. Houses are of typical Chilterns construction at 1.5 to 2 storeys with low roof and dormers, constructed from locally made red brick, flint and clay tiles, sometimes with an oak timber frame. These are historic Chilterns materials which are highlighted in the Chilterns Building Design Guide. As well as this, footpaths in Winchmore Hill are generally unmade, which adds to the rural feel of the area. Winchmore Hill is also within the Chiltern and South Bucks Townscape Study.

PENN STREET

Penn Street is in the north of the parish, was originally built on common land and probably settled in between the 12th and the 13th centuries when Earl Howe's ancestors moved their manor house from Penbury to the site of the current Penn House. The historic value of Penn Street is supported by the Conservation Area which covers the village centre. This area is has a pleasant rural feel to it which is derived from; the age and Chilterns design of the buildings; the common which is an attractive green space and focus for the area; and the many trees and hedges within the Conservation Area (many of which are designated as ancient woodland).

PENN

Penn is located on the western boundary of the parish. It has significant historic assets which are protected by the Penn Conservation Area which stretches from the common area to the Holy Trinity C of E church. Locally distinctive features include Landmark historic buildings such as, a 17th century Public House, and a 17th century Old Bank House, which has distinctive Dutch gables. As well as this there is a typically Chiltern coherent mix of vernacular architectural styles, including handmade red bricks with brown clay roof tiles, brick and flint walking and white painted weatherboarding. This is supported by the Chiltern and South Bucks Townscape Study.

KNOTTY GREEN

Knotty Green is the largest of the settlements and is where approximately 50% of the parish's population live. It shares a boundary with Beaconsfield and therefore has a much more suburban feel to it. In the Chiltern and South Bucks Townscape Study it was found that Knotty Green has 4 areas of special character. These are Penn Road, Forty Green Road, Seeley's Estate and Hogback Road to Woodlands Drive. We now propose that the Mynchen's Estate is also considered as an Area of Special Character given the distinctive open plan nature of residential estates with consistent pattern of unusual architectural buildings (e.g. the Anglo-Scandinavian chalet style architecture).
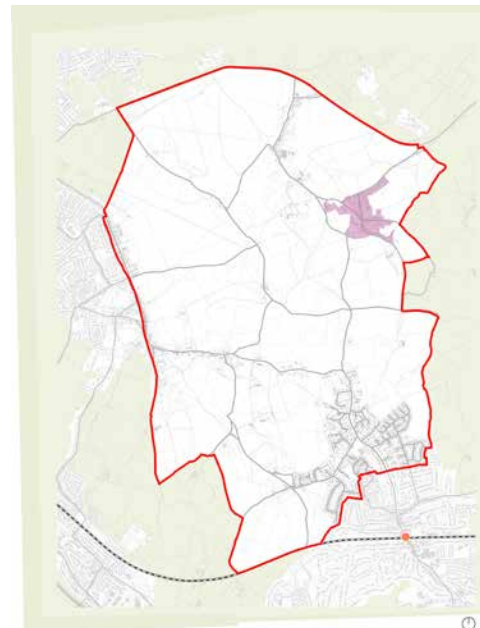
The Chiltern and South Bucks Townscape Study also found that Knotty Green has a distinctive garden suburb influence in places, including a coherent street pattern of elegant, winding residential drives, grass verges and front gardens. As well as this there are lots of mature trees which are mostly located in the exceptionally large private gardens.

FORTY GREEN

Forty Green is a small settlement which borders Knotty Green. Forty Green Road and much of the character area is characterised by heavy vegetation in the form of high rising hedgerows and trees which creates a rural and enclosed feel to the public realm. The density of housing is low with the exception of Gomms Wood Close, where it is a little higher. Forty Green provides a soft transition between the built environment and the Green Belt and AONB, something which any future development should look to replicate.

CA1- Winchmore Hill

Winchmore Hill is located in the north-east of the parish and is one of the larger settlements in the area. As the name suggests it is at the top of one of the rolling hills in the Chilterns and therefore has stunning views of the parish and the rest of the green belt. The character within Winchmore Hill makes it feel like a rural village, as is explained below.

Land Use	The majority of Winchmore Hill is made up of residential uses as well as there being two pubs (The Plough and Potter's Arms) in the centre of the village near the green and the village hall. Furthermore, there is a small industrial site on The Hill which is currently owned by Securon which is a valuable employment site.
Pattern Of Development	The settlement is predominantly made up of linear roads with rows of housing either side, which is typical for a rural village of Winchmore Hill's size. There are some instances of cul-de-sac infill developments such as Pond Close and the newer Long Meadow Close. There is a village common which is surrounded by historic buildings. Historic maps indicate that the settlement may have originated from here and expanded. This is an area that local people would like to see become one of special character.
Building Line/Plot Arrangement	Buildings are typically well setback from the road in Winchmore Hill with the exception of the terraced houses along The Hill, which leads to parking issues along that road. However, most of the dwellings in the area have large gardens and driveways, with a grass verge before the property boundary to further create a rural feel.
Boundary Treatment	Nearly all the boundaries are hedged, with wide verges, and there are very few examples of timber fences. Walls where they exist tend to be low and made of brick and flint.
Heights & Roofline	Buildings in Winchmore Hill are mostly 2 storeys in height, although there are a couple of slightly taller properties on Fagnall Lane which are 2.5 storeys.
Materials	The most common materials in Winchmore Hill are red brick, flint and white render with red clay peg tiles. These are characteristic of Chiltern villages. There are also some barn conversions which use dark coloured timber for their facades.
Public Realm	The main public space in Winchmore Hill is The Common in the centre of the settlement. As well as this there are communal allotments which allows locals to produce their own food. Existing roads are narrow often with limited visibility and not suited to on street parking creating a safety hazard for traffic and an obstacle for farm machinery and commercial vehicles.
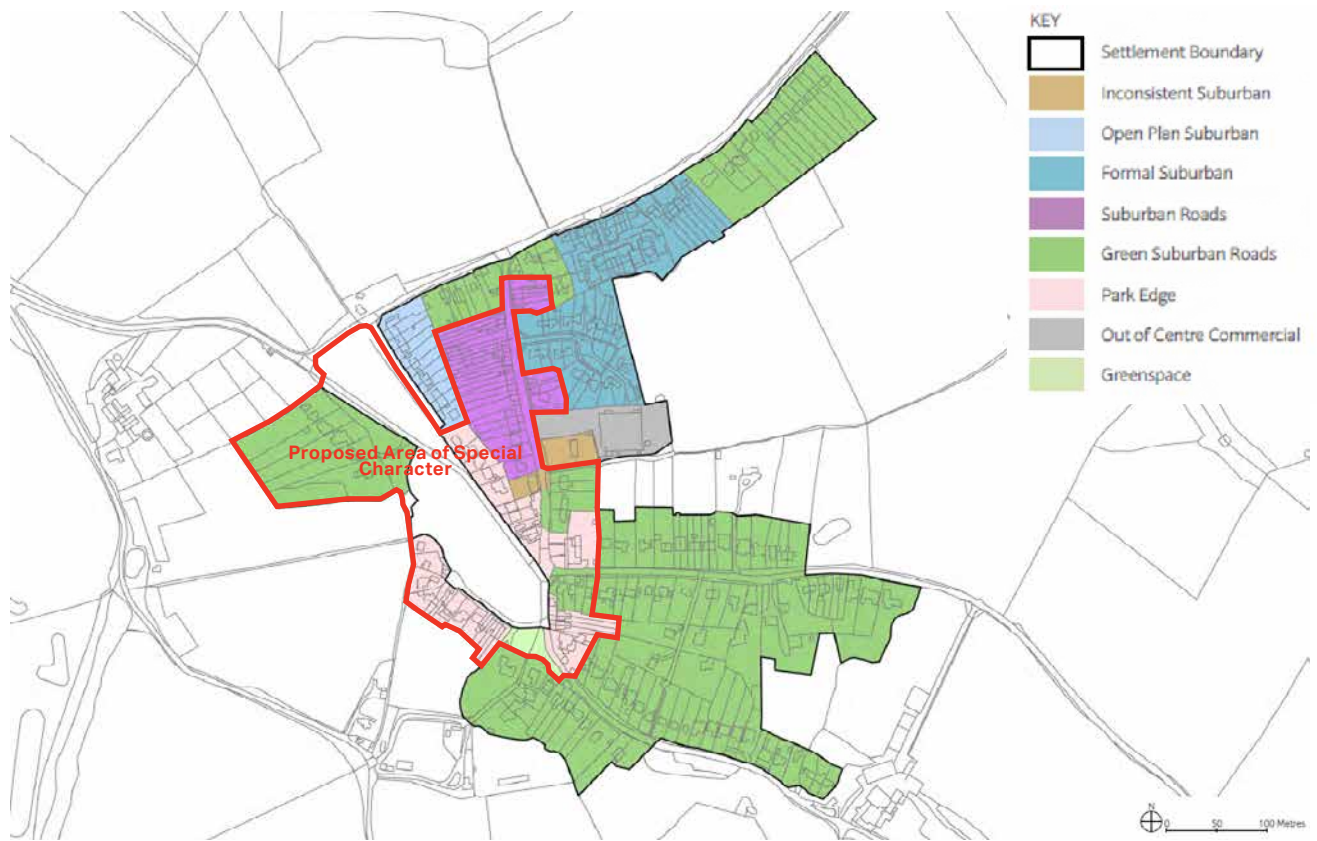
Figure 29: Winchmore Hill Character Typology from the Chiltern and South Bucks Townscape Study.

Figure 30: Example of semi-detached houses in Winchmore Hill

Figure 31: Typical street with grass verges in front of plots creating a rural feel to the area

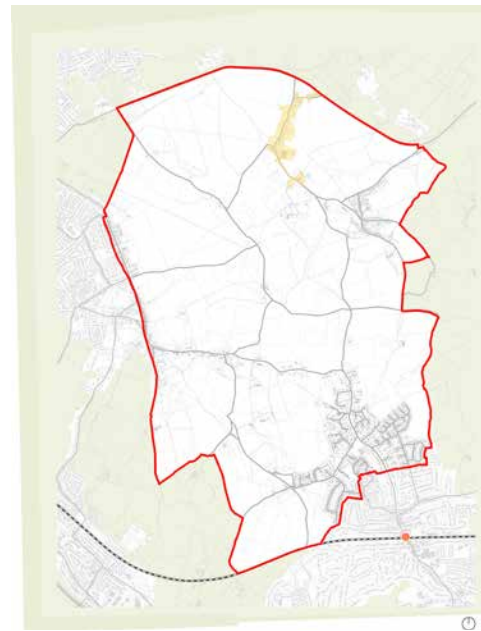**Figure 32:** Local signage also showing the typical vegetated boundaries in Winchmore Hill

Figure 33: One of the two local pubs in the village

Figure 34: Winchmore Hill common

CA2- Penn Street

Penn Street is a small settlement located in the north of the parish, just off the A404 and is comprised mostly of linear housing along Penn Street, surrounded by ancient woodland. This gives it a different, more enclosed feel to the other settlements. Much of the settlement around the village green is engulfed by the Penn Street Conservation Area, highlighting its beauty and historic importance to the parish.

Land Use	Residential uses predominate. 100 years ago, almost 50 percent of the village worked on or was connected to Penn House Estate. There are a couple of pubs (The Squirrel and The Hit or Miss), a village hall, the Listed Holy Trinity Church, offices, a small industrial estate and the primary school. There is also the employment sites of De Havilland Court and Penn Street Works. Finally there is arable farming which goes on in the surrounding fields (Penn House Estate).
Pattern Of Development	Penn Street is a very linear settlement with much of the development occurring on one side of the road, allowing these properties to have views on to green space and woodland. The village green is surrounded by heritage buildings, many of which are listed, suggesting that this is an original part of Penn Street. Historic maps indicate that the settlement may have originated from here and expanded.
Building Line/Plot Arrangement	Buildings are generously set back from the road, with large front and back gardens which increases the green feel of the area. The only exception to this is a row of terraced housing facing the common, which has a much shorter setback.
Boundary Treatment	The boundary of properties is typically defined by hedges and wide verges which soften the feel of the area as well as creating rural sense of place.
Heights & Roofline	Buildings in Penn Street are mostly 2 storeys in height with buildings such as the church being slightly taller. Nevertheless, the surrounding ancient woodland is taller than all of these buildings and therefore shields the settlement from the outside.
Materials	Penn Street's Buildings are typically built using red brick, flint, render, clay tiles and other key Chiltern materials.
Public Realm	The central area is the Village Green, which is opposite the pub The Squirrel (home of the local cricket team) and the Village Hall.

Figure 35: The Holy Trinity Church surrounded by ancient woodland

Figure 36: An example of detached housing which is facing onto the green

Figure 37: An example of terraced housing on Penn Street where there are less distinctive boundaries
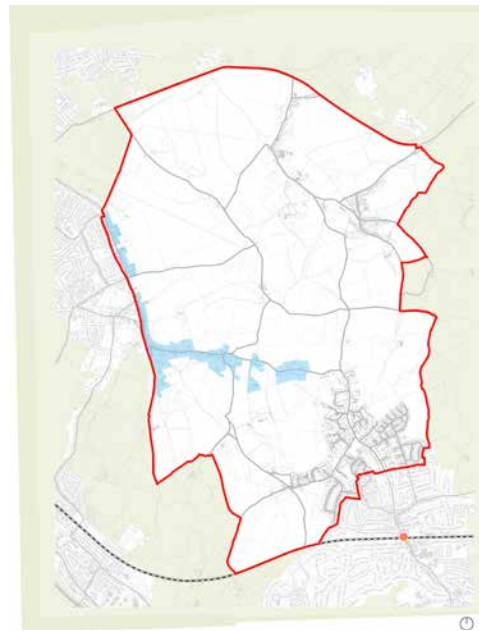

Figure 38: Local pub opposite the common

CA3- Penn

The northern part of Penn runs along a boundary with Tylers Green which has a more suburban feel to it, then moving down into the centre of the parish where it is engulfed by the Green Belt and feels very rural. The Penn Conservation Area runs down Elm Road and Church Road, including most of the settlement, thus highlighting the significance of the linear development that has happened.

Land Use	Like the other character areas, Penn is firstly a residential area made up of predominantly detached housing. As well as this there are a couple of pubs (The Crown and the Red Lion opposite Penn Common), a church, a village hall and the Slades Garage which hosts a range of classic and modern motor cars. There are also employment sites on Elm Road (Winters Garage) and on Hazlemere Road (Penn Motors & Gleesons Butchers, Monitran works).
Pattern Of Development	Plots in Penn are arranged in a linear fashion either side of the street. Development in the area originated from the Common (shared by Penn and Tylers Green) area and further down surrounding the Holy Trinity church. Since then historic maps suggest that the gaps have been filled in between with infill housing. There are also some examples of infill development that has taken place in more recent years.
Building Line/Plot Arrangement	Most of the buildings in the village are well set back with generous front gardens and driveways, the building line is consistent. The large setbacks allow for on plot parking which keeps parked cars off the road and benefits movement. Properties have large back gardens facing the green belt, providing the rear side of these houses with spectacular views.
Boundary Treatment	Boundaries in Penn are mainly hedges as well as some instances of low brick walls, stone walls and fencing.
Heights & Roofline	The majority of the houses in Penn village are 2 storeys in height which creates a uniform roofline, however there are some instances of slightly taller houses which break up this roofline. The church is also an example of a building that is an outlier.
Materials	Materials which are the most common in Penn are red brick, render and flint with slate and clay peg roof tiles. This is typical for houses in the Chilterns AONB.
Public Realm	In the southern part of the parish, Penn Common is a green public space that is free to use. The B474 is lined with vegetation and has pavement on at least one side of the road to allow for safe pedestrian travel through the settlement.

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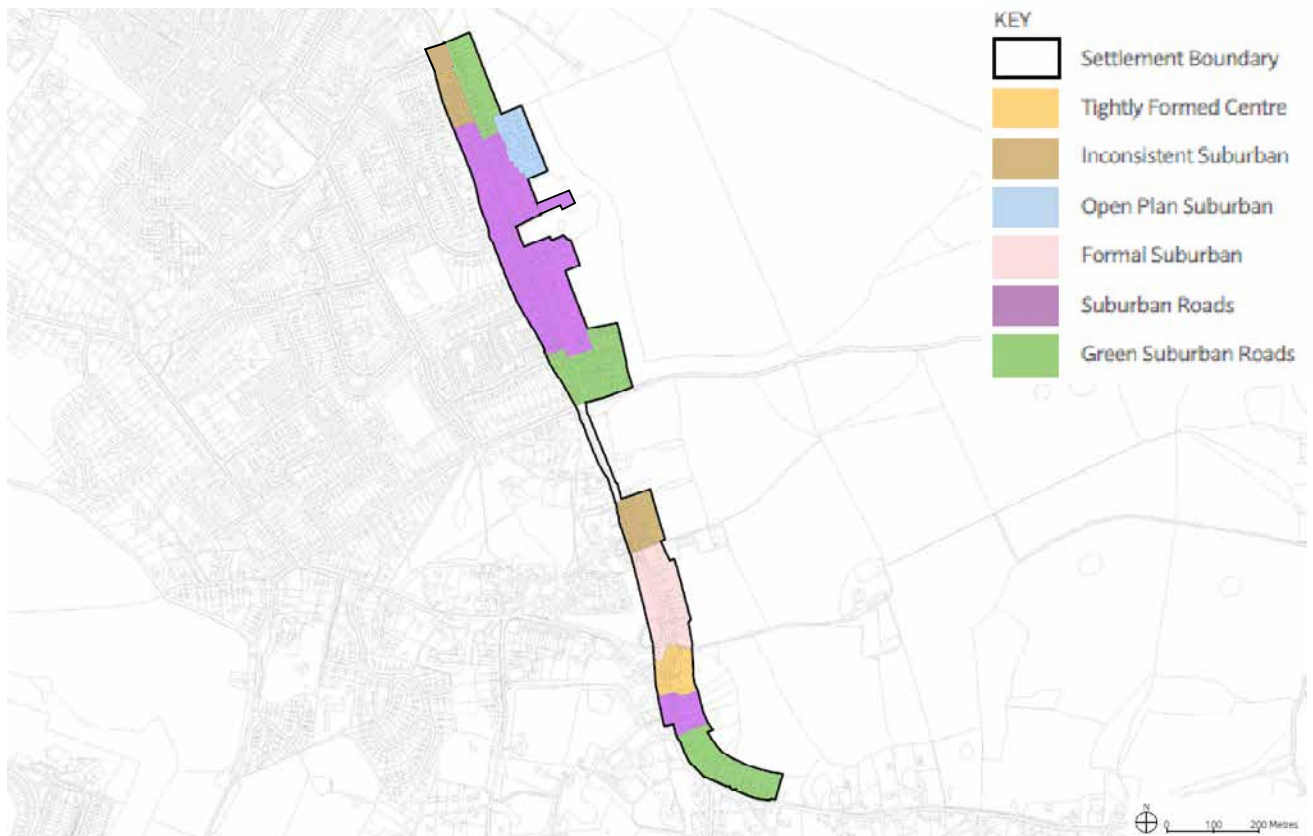
Figure 39: Penn Character Typology from the Chiltern and South Bucks Townscape Study.

Figure 40: Old local music shop located in the centre of Penn

Figure 41: Example of a low stone wall defining the boundary between public and private places

Figure 42: Detached house with a generous set back in Penn

Figure 43: Vintage car show room located opposite the garage in Penn

Figure 44: View down the original Penn High Street where there used to be a mix of uses and is now predominantly residential

CA4- Knotty Green

Knotty Green shares a boundary with Beaconsfield and is in the south of the parish. It is made up of several neighbourhoods focused on large, detached housing, developed over a period. This is the largest of the character areas and has the least rural feel to it. Within Knotty Green 4 areas have been identified as Areas of Special Character (Penn Road, Forty Green Road, Seeleys and Hogback Wood Road to Woodlands Drive) Another area The Mynchen estate has distinctive Anglo Scandinavian architecture.

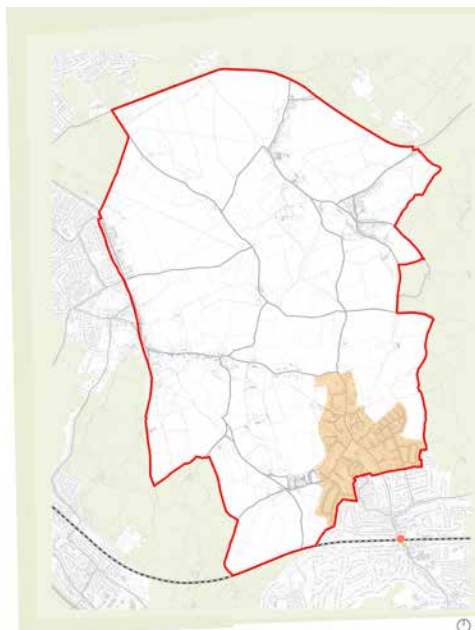|	
Land Use	Other than residential uses, the village is centred round a Village Green, there is an active Cricket Club, pub (The Red Lion) and a well-tended, large allotment site. There is an elderly care home and disability care facility, as well as a special school (Alfriston).
Pattern Of Development	The Chiltern and South Bucks Townscape Study notes that Knotty Green has a distinctive garden suburb influence in places, including a coherent street pattern of elegant, winding residential drives, grass verges and front gardens. On the east side of the Penn Road there has been considerable development of executive flats replacing single large houses on large plots of land. The west side of the Penn Road remains as single large houses within large plots with green borders of trees and hedges or wooden fences maintaining the green woodland road typology.
Building Line/Plot Arrangement	The building line is fairly consistent throughout the area. The Townscape Study noted that there are substantial detached houses, set back within large garden plots and contain mature trees, which contribute to a semi-rural streetscape character. Plots are arranged back-to-back where possible to ensure active edges and therefore natural surveillance in Knotty Green. As well as this there are parts of the settlements where open plan frontages are present such as the Seeleys and the Mynchen estates.
Boundary Treatment	The most common form of boundary treatment is hedges and other vegetation. As well as this timber fences and brick walls are frequently used. This helps give the area a leafy feel.
Heights & Roofline	Buildings are typically between 2 and 2.5 storeys in height. The roofline is often disturbed by trees and other forms of vegetation. The Scandinavian architecture in the Mynchen estate means that the roofs are tall and in some cases take up 2 storeys. There are single storey garages and the housing is low density which allows for views towards the woodland to be retained.
Materials	Materials which are the most common in Knotty Green are red brick, render and flint with slate and clay peg roof tiles. Windows are typically coloured white which blends well with the red brick, flint and render walling materials.

CA4- Knotty Green

Public Realm	Public realm within this character area is constrained to the Public Rights of Way network which links the surrounding settlements and Beaconsfield. Knotty Green has previously had 4 areas identified as Areas of Special Character (Penn Road, Forty Green Road, Seeleys, Hogback Wood Road to Woodlands Drive), thus supporting the idea that the public realm is characterful and worth protecting from insensitive development. There are also a significant number of paths through the estates, especially Seeleys estate, which make for easy navigation. Furthermore, north, east and west Knotty Green abuts Green Belt/AONB and ancient woodland and the footpaths allow easy access from the village to the open countryside.
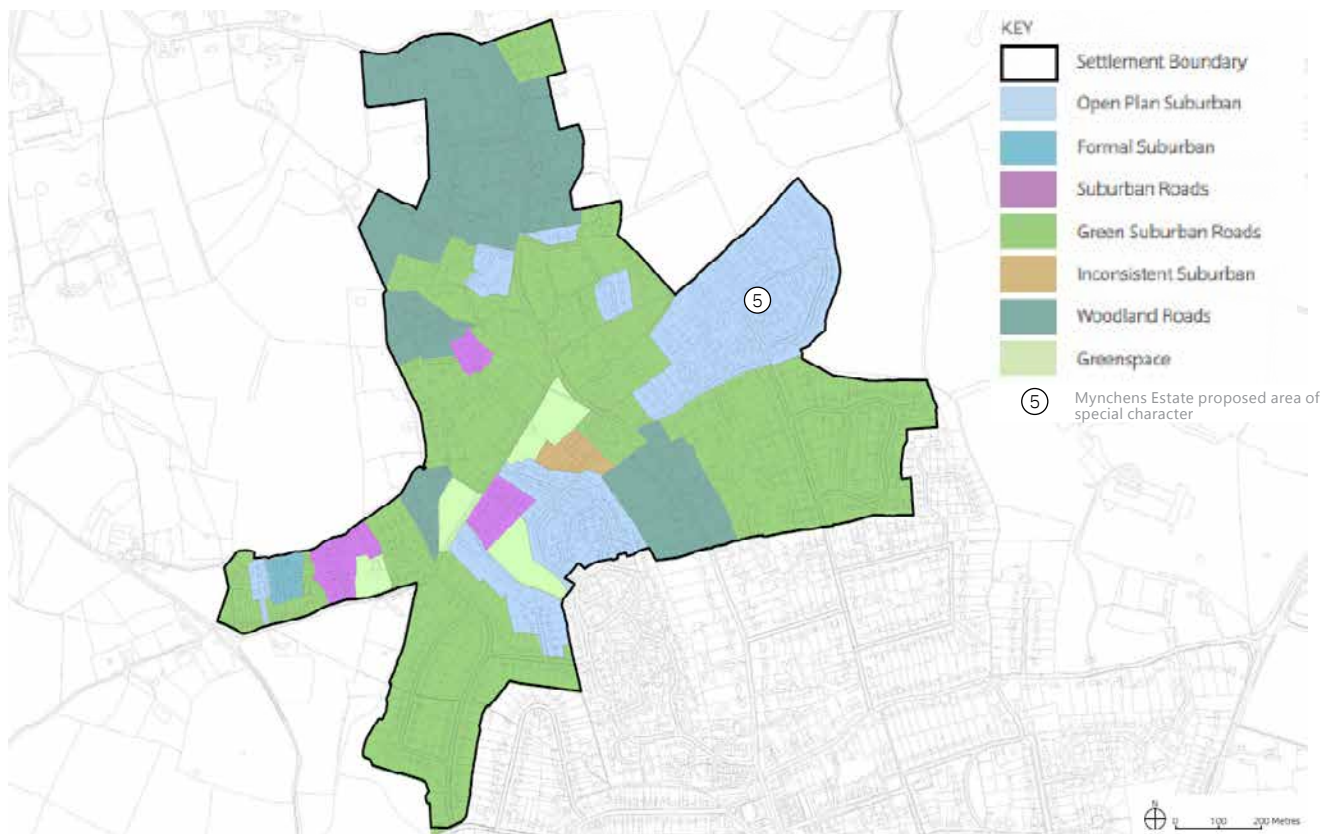
Figure 45: Knotty Green Character Typology from the Chiltern and South Bucks Townscape Study.
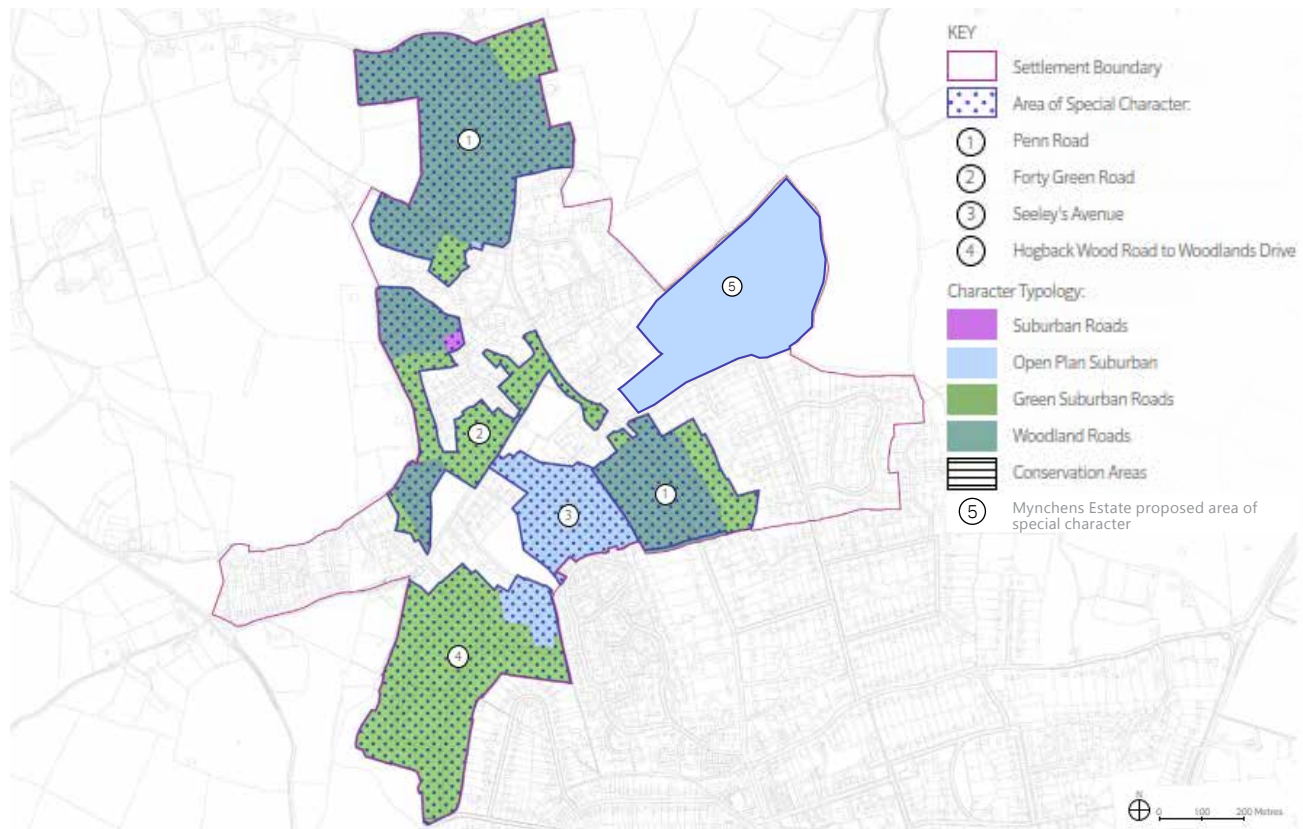
Figure 46: Knotty Green Special Character Areas map from the Chiltern and South Bucks Townscape Study.

Figure 47: Example of late 20th century large detached mock Tudor house on the western side of Knotty Green

Figure 48: House on the Mynchen estate with distinctive pitched roof

Figure 49: Example of one of the footpaths from Knotty Green providing quick access to the countryside

Figure 50: Local street displaying beech hedging as a popular boundary treatment in the local area, allowing it to keep its rural feel

CA5- Forty Green

Forty Green is a tiny hamlet located in the south of the parish and just west of Knotty Green. It is made up of mostly private housing but is also host to a pub and agricultural land uses. It is also the most rural feeling settlement.

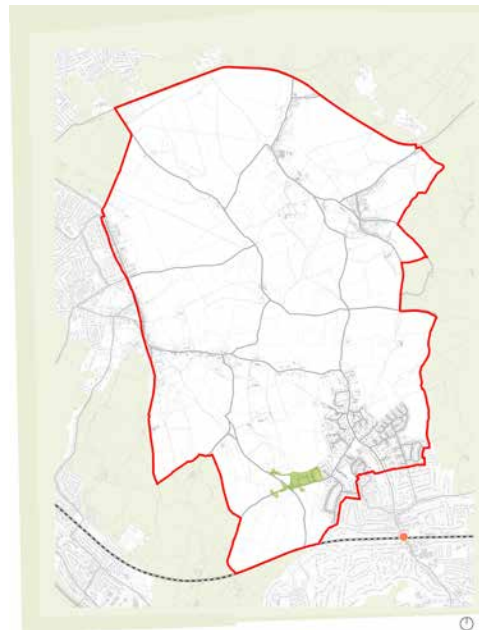|	
Land Use	Forty Green is predominantly made up of residential uses with the single pub. Gomms Wood Close, a denser former social housing cul-de-sac as well as the Forty Green Community Hall, with a popular Day Nursery and numerous classes and a small village play area. There are also a couple of agricultural buildings within the character area.
Pattern Of Development	Forty Green is separated from Knotty Green by a small wooded area and apart from the neighbouring character area, it is isolated and surrounded by arable fields. It has evolved over the last 2 centuries largely developed from several farms, retaining the rural outlook especially to the northern boundary. Housing density is low, with exception to Gomms Wood Close which has a greater housing density than the rest of the settlement.
Building Line/Plot Arrangement	Properties are often well set back from the road in a linear fashion with large front gardens which adds to the rural feel to the area. Houses also often have panoramic countryside views from the back of the property.
Boundary Treatment	The typical boundary treatment in the area is vegetation in the form of hedges and other shrubs which helps create a rural and leafy feel to the place.
Heights & Roofline	The majority of residential properties (including farmhouses) within this character area are two-storeys. The predominant roof styles are hipped and open-gabled.
Materials	Red brick, flint, timber cladding, red pantiles, black glazed pantiles as are used throughout as is typical within most Chiltern villages.
Public Realm	Public realm within this character area is constrained to the Public Rights of Way network which links the surrounding settlements and Beaconsfield.

Figure 51: Terraced housing within Gomms Wood Close.

Figure 52: Sign for the Royal Standard Pub in Forty Green.

Figure 53: View westwards up Brindle Lane

Figure 54: The listed Hill Farm Cottage and Barn

Design guidance and codes

05

5. Design guidance and codes

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

5.1 Introduction

The following section describes a set of design guidelines and codes that have been put together based on the existing context of Penn Parish.

This guidance and codes will aim to guide any changes or development within the parish to ensure the local character is respected whilst allowing space for innovation within the built environment.

The design guidelines and codes have been split into five categories. The first four sections are relevant to the whole parish, while the fifth section introduces design guidelines and codes for each of the identified character areas. It is important to note that guidelines and codes specific to a certain character area may not be applicable to the whole parish. Both national and local guidance, as outlined in chapter 2, should be read in conjunction with this document. This guidance will act as a support to these documents and should not be considered in isolation.
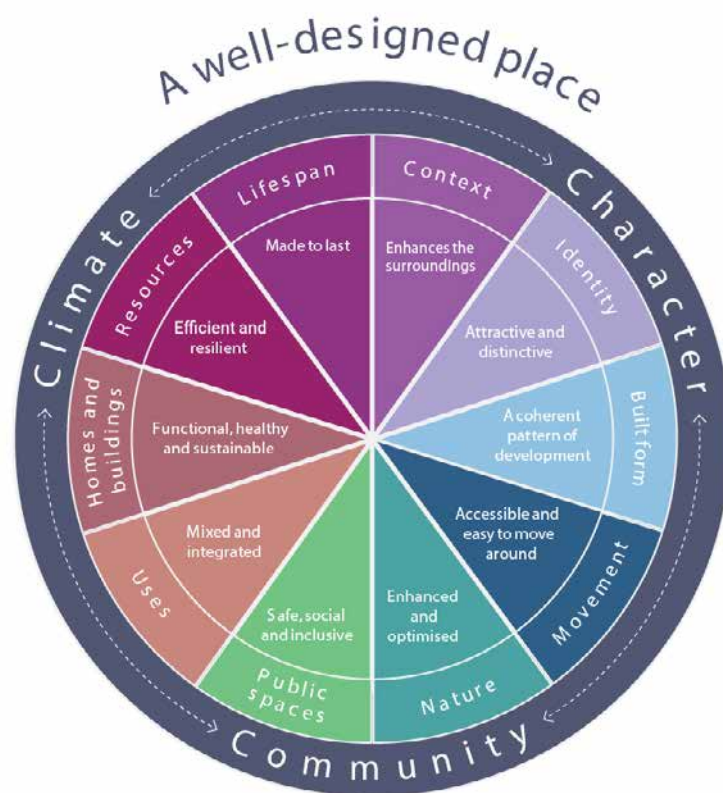
Figure 55: The 10 characteristics of well-designed places. (Source: National Design Guide, page 8).

The importance of good design

As the 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) has shown that good design of buildings and places can:

- Improve health and well-being;

- Increase civic pride and cultural activity;

- Reduce crime and anti-social behaviour; and

- Reduce pollution.

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

Placemaking and design codes

These design guidelines and codes are underpinned by a set of placemaking principles that should influence the design of future development areas, public realms, homes and green spaces, and the interfaces between them.

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

The placemaking principles set out in the following pages should be used to assess the design quality of future development or regeneration proposals. These key principles should be considered in all cases of future development as they reflect positive place-making and draw on the principles set out in many national urban design best practice documents.

The guidelines developed in this part focus on residential environments. However, new housing development should not be viewed in isolation, but considerations of design and layout must be informed by the wider context.

The local pattern of lanes and spaces, building traditions, materials and the natural environment should all help to determine the character and identity of a development.

It is important with any proposal that full account is taken of the local context and that the new design embodies the 'sense of place'.

Reference to context means using what is around, shown in the first three chapters, as inspiration and influence and it could be a contemporary solution that is in harmony with the surroundings.

5.2 How this document relates to the Chilterns Buildings Design Guide

Considering that much of the parish is located within the Chilterns AONB, development in the area is already subject to following a design guide. The Chilterns Buildings Design Guide contains practical advice for planners, architects and house owners on how to build or restore properties in keeping with the special qualities of the Chilterns AONB. It covers such topics as the setting of buildings, the design of vernacular features and the use of traditional local materials. By promoting the use of the Guide ensures consistency of design and materials across the Chilterns AONB.

The design guidance and codes in this document support the Chiltern Buildings Design Guide in general throughout the parish while going into finer detail in terms of the subtle differences of each of the character areas and therefore offer place specific guidance for each village.

5.3 General design guidance and codes

Based on the understanding gained in the previous chapters, this section will identify design guidelines and codes for future development to adhere to. As identified in the diagnostic report, the following design guidelines and codes have been created to apply to the whole parish.

Theme	Code	Title
Settlement Layout (SL)	SL 01	Patterns of development
	SL 02	Layout of buildings
Streets and parking (SP)	SP 01	Active travel
	SP 02	Car parking
	SP 03	Safeguard trees, landscaping and views
	SP 04	Street lighting and dark skies
Built form (BF)	BF 01	Overlook public space
	BF 02	Define front and back gardens
	BF 03	Maintain a consistent building line
	BF 04	Desired height profile
	BF 05	Establish a consistent property boundary
	BF 06	Extensions
	BF 07	Infill developments
	BF 08	Architectural details, materials and colour palette
Environmental and Energy Efficiency (EE)	EE 01	Features in dwellings
	EE 02	Wildlife friendly features

SL. Settlement layout

SL 01 PATTERNS OF DEVELOPMENT

The settlements in Penn Parish have typically originated from village greens which have expanded over time. Any new development should respect the following principles:

• Any development should be sympathetic to and appropriate in its context, with appropriate density, mass and scaling when compared to surrounding buildings, and its variety and style should reflect the Chilterns vernacular, styles, set out in the Chilterns Buildings Design Guide;

• Treatment of main road frontages should include hedges and trees, in preference to wooden fencing (which should be forward planted) if used. Brick and flint walls are preferred to red brick, and large gate piers and solid gated entrances are undesirable and out of keeping with the area; open wooden, or wrought iron gates, which provide view through to open country are preferable;

• Linear pattern settlement almost always orientates inwards towards the main road and turns its back towards the landscape to the rear. Building frontages should consider this where possible; and

• Boundary treatments can vary, from low walls to soft landscaped edges on the periphery of the settlement. Residential development with a hard edge which imposes an abrupt transition from the settlement to the surrounding countryside should be avoided.
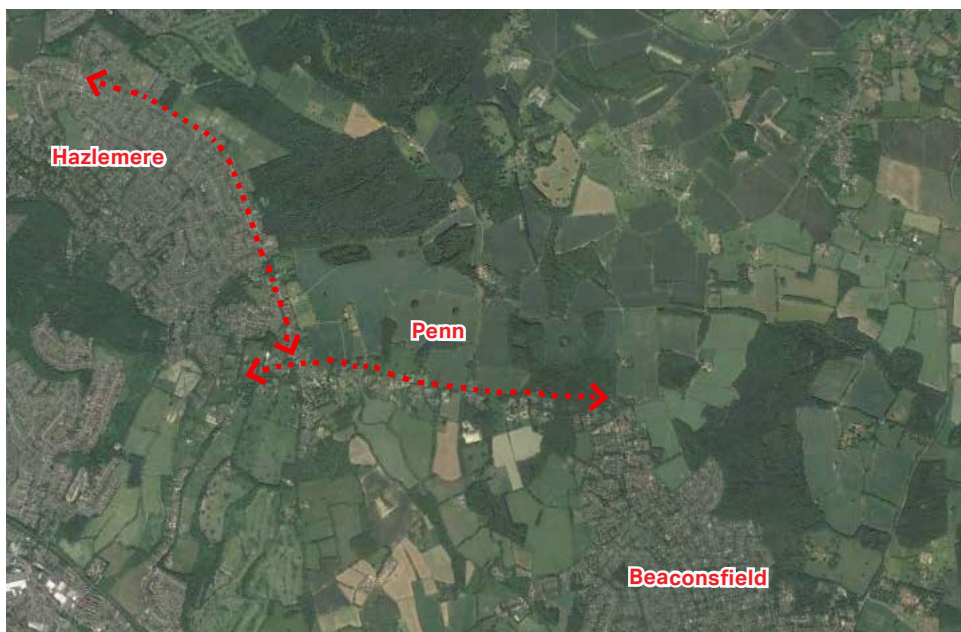
Figure 56: Penn's pattern of development. The development is formed between Beaconsfield and Hazlemere.

47

SL 02 LAYOUT OF BUILDINGS

Penn Parish owes much of its character to its historic evolution of its buildings and settlements. New developments should respect the particular building patterns of each settlement in order to contribute positively to their character. In particular:

- Development should adopt the enclosure characteristics demonstrated in each community. New development should knit in with the existing settlement morphology by adopting similar characteristics;

- Development should be considered strategically at the settlement level and should not be considered in isolation;

- New development should be planned to be permeable, promoting active travel. at all times, providing plentiful non-vehicular connections;

Network of Public Rights of Way to be retained and enhanced in new development proposals to promote active travel.

Informal arrangement of buildings can add interest and direct views.

A variety of housing types - the use of a repeating type of dwelling along an entire stretch should usually be avoided, unless that is the prevailing character/form.

Use of trees and landscape planting to shape views and enclose space.

Encouraging appropriate front and back garden solutions. Any new developments should have setbacks that can provide front gardens, or alternatively small areas that offer buffer zones between private and public spaces. Building setbacks should be varied by street level, local character, and type of structure.

Figure 57: Diagram showing layout of building elements such as enhancing PRoW networks, respecting views and front and back garden solution which could positively contribute to local character

- Layout, density, clustering and massing should take precedent from the pervailing character of development within the surrounding context. Figures 58, 59 and 60 show some precedent examples from the parish; and

- New development should respond to site specific micro-climates and sun paths and use these as key design drivers to increase the environmental comfort for building users, both internally and externally.

Figure 58: Linear development in Winchmore Hill, with an appropriate setback for the parish.

Figure 59: Terraced housing in Penn.

Figure 60: Example of a detached house in Knotty Green.

Development affecting the Conservation Areas and listed assets

Penn Parish has a rich history which defines the character of the area and is illustrated by the heritage buildings including Grade 1, Grade 2 and Grade 2* listed buildings throughout the Parish. Penn and Penn Street have Conservation Areas to protect their unique linear character and their proximity to open countryside. Therefore, design guidelines should be in place to guide development in close proximity to the above assets. Those guidelines are:;

- New development proposals should not be visually intrusive or block key views to and from heritage assets. This should be achieved through the appropriate scale and design including screening where appropriate;

- New development should retain the existing open spaces, vegetation and trees to preserve the historic form and pattern of development in the parish;

- The scale and massing of new development should be sensitive to the surrounding heritage assets;

- Gaps between buildings, open views and vistas should be respected and aim to demonstrate the significance of the asset; and

- Any development within the Conservation Areas must be in line with that Conservation Area's appraisal (Penn and Tylers Green + Penn Street Conservation Area planning appraisals).

Figure 61: The Holy Trinity Church, located within the Penn Street Conservation Area.

Figure 62: Penn House, located in the north of the parish.

SP. Streets and Parking

The following pages set out policies to consider when developing both existing and new development within the parish. They are generic design codes that apply to all areas of the parish and therefore any future development or redevelopment.

SP 01 ACTIVE TRAVEL

Increasing the number of residents walking and cycling around the parish is an important part of improving health and the quality of their experience.

- Where there is a choice, new development in Penn Parish should be selected where it would generate the least amount of car movements and be within a comfortable distance of local services. Car dependent development or re-development should be avoided. This will help to promote active travel, an important feature in 'liveable' neighbourhoods;

- New development should ensure that pedestrian and cycle routes are incorporated into new designs to incentivise modes of active travel,

- These routes should link to key services in the villages, Beaconsfield and other existing routes to form a network of walkable areas;

- Users of public and private space are varied and include disabled users, parents/carers with buggies and young children. It is important for these users to be catered for when designing new development; and

- Walking routes along a roadway should provide safety from vehicles on the road. This requires a footway or pavement that is wide enough to ensure pedestrians do not conflict with vehicles. Where development or redevelopment of a site is sought, cycle routes and a footway should be provided. Footpaths should also be made from a permeable surface.

Figure 63: Public footpath on the edge of Knotty Green going into the countryside.

Figure 64: Public footpath within Penn Street.

SP 02 CAR PARKING

Parking areas are a necessity of modern development. However, they do not need to be unsightly or dominate views towards the house. Parking provision should be undertaken as an exercise of placemaking.

- When placing parking at the front of a property, the area should be designed to minimise visual impact and to blend with the existing streetscape and materials. The aim is to keep a sense of enclosure and to break the potential of a continuous area of car parking in front of the dwellings. This can be achieved by means of walls, hedging, planting, and the use of quality paving materials;

- When needed, residential car parking can be translated into a mix of on-plot side, front, garage, and courtyard parking, with minimal on-street parking;

- For family homes, cars should be placed at the side (preferably) or front of the property. For small pockets of housing, a rear court is acceptable;

- New development should look to allocate at least one parking space per bedroom in the house; and

- Car parking design should be combined with landscaping to minimise the presence of vehicles.

On-Plot Side or Front Parking

Providing off street car parking should be a condition of any development/ re-development, including conditions to ensure that garages are used for car parking, and to conditions attached to prevent conversion to residential use, unless alternative parking is provided.

- On plot or side parking in our view any minimum front garden length should be determined in relation to neighbouring properties and the village context, and be consistent with the surrounding properties, and density.

- Parking provided on driveways directly in front of dwellings should be restricted due to the visual impact that cars have on the street. Therefore, a maximum of 2 dwellings in a row will be permitted to provide parking in this way. Front gardens should be a minimum depth of 6m to allow movement around parked vehicles and also be well screened with hedgerows when providing parking space to the front of a dwelling;

- The inclusion of EV charging points into street furniture in Penn, Penn Street, Forty Green or Winchmore Hill will be difficult as there in no street lighting.

For further information regarding the parking standards within the parish, please consult the Penn Parish Neighbourhood Plan.

Figure 65: Typical example of on-plot parking in the parish.

Figure 66: Generous front courtyard with on-plot parking within the parish. Knotty Green.

Garage Parking

Parking being provided in a garage to the side of a dwelling should be in line with, or slightly set back from the frontage line of the existing dwelling, which is in keeping with the character of the existing parish and will reduce the visual impact of cars on the street. Garages should also provide sufficient room for cars to park inside them as well as providing some room for storage.

Figure 67: Garage built into modern property in Knotty Green.

Figure 68: Garage set in line with a building in the parish.

Parking courtyard

- This parking arrangement can be appropriate for a wide range of land uses. It is especially suitable for terraces fronting busier roads where it is impossible to provide direct access to individual parking spaces;

- Ideally all parking courts should benefit from natural surveillance;

- Parking courts should complement the public realm; hence it is important that high-quality design and materials, both for hard and soft landscaping elements, are used; and

- Parking bays must be arranged into clusters with groups of 4 spaces as a maximum. Parking clusters should be interspersed with trees and soft landscaping to provide shade, visual interest and to reduce both heat island effects and impervious surface areas.

Dwelling frontages should overlook the courtyard to provide surveillance.

Desirable landscape should be encouraged in the courtyard.
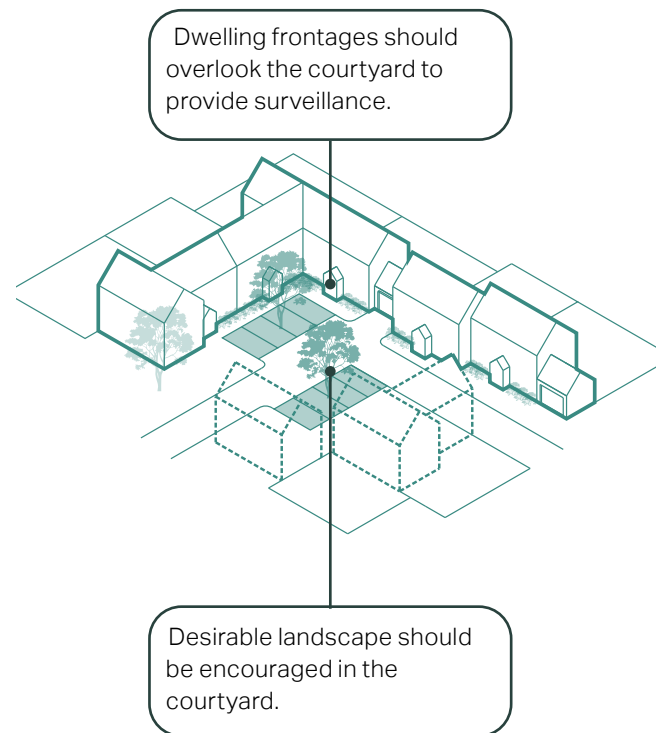
Figure 69: Illustrative diagram showing an indicative layout of parking courtyards

SP 03 SAFEGUARD TREES, LANDSCAPING AND VIEWS

The abundance of trees is one of the parish's greatest assets. They provide shading and cooling, absorb carbon dioxide, act as habitats and green links for species, reduce air pollution and assist water attenuation and humidity regulation. For people, they help alleviate stress and anxiety, help with recovery from ill-health and create a sense of positive mental health and well-being. In addition, they add life to the landscape and help shape and add character to open spaces.

There are several green spaces which need to be protected such as the Ancient woodland, 4 Commons/village greens and numerous pieces of Common, the Chilterns AONB. The playground, cricket pitch, the allotment space, the land adjacent to Forty Green Road and Penn Road as well as Throshers Wood in Knotty Green also need to be protected.

The following guidelines focus on the design aspects and appearance of planting and trees in private gardens as well as public open spaces and streets.

Figure 70: An indicative diagram showing green spaces and landscape planting

Planting standard

- Preserve existing native mature trees, incorporating them into the new landscape design and using them as accents and landmarks, where appropriate;

- Much of the parish is within the Chilterns AONB where there is woodland, chalk grassland, chalk streams, commonland and parkland. It appears even more heavily wooded because of the number of small copses, hedges, hedgerow and field trees and trees in gardens and villages. The 'hanging' beech woods on the upper slopes of the valley sides are particularly characteristic of the Chilterns. Any future development should preserve this characteristic.

- Consider canopy size when locating trees; reducing the overall number of trees but increasing the size of trees is likely to have the greatest positive long-term impact;

- Tree root zones should be protected to ensure that trees can grow to their mature size. Root barriers must be installed where there is a risk of damaging foundations, walls and underground utilities;

- New trees should be integrated into the design of new developments from the outset, especially within back gardens to help even 'leafy' suburban housing estates to mellow and blend into the Chilterns landscape.
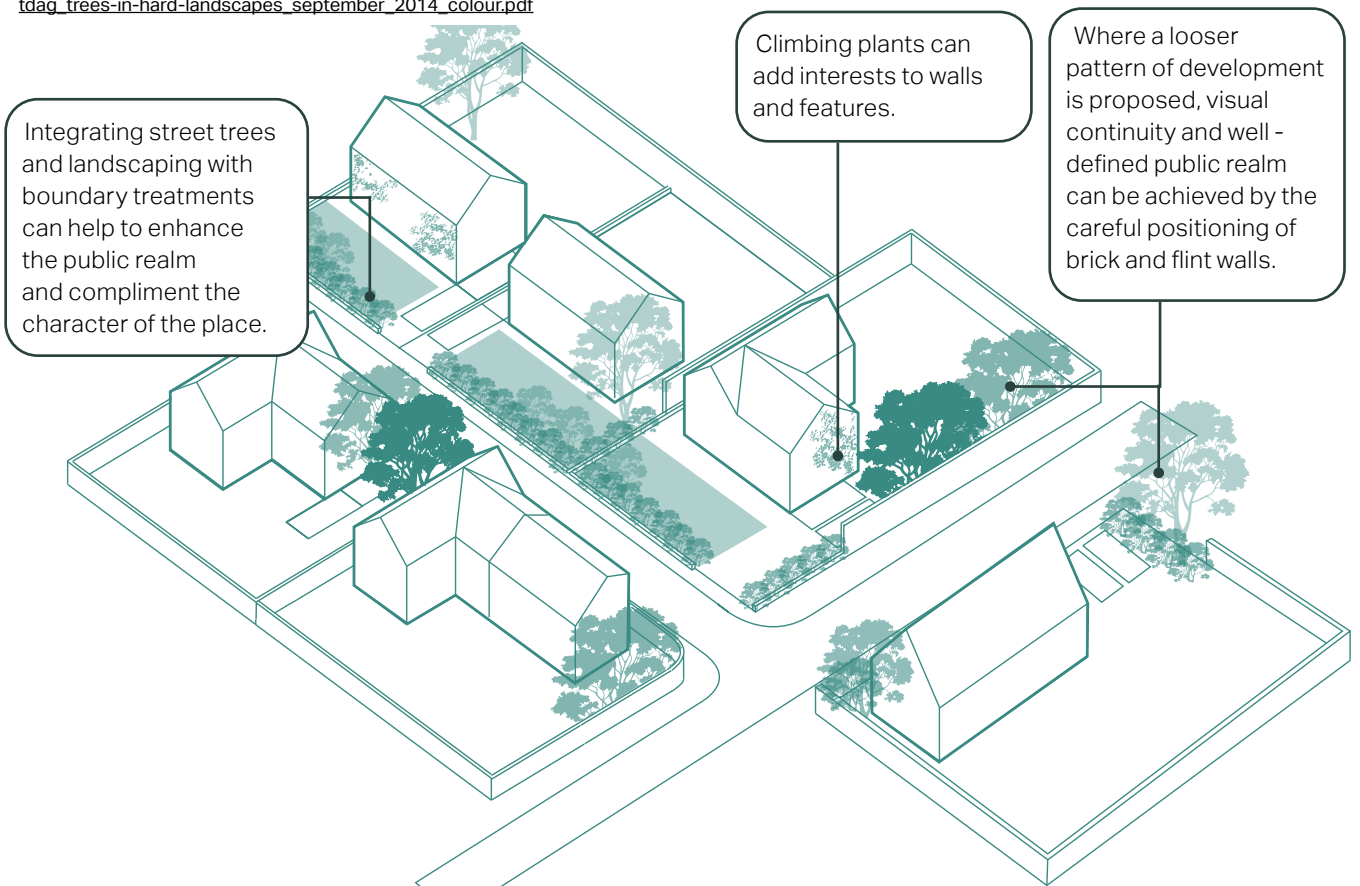
- To ensure resilience and increase visual interest, a variety of tree species is preferred over a single one. Tree species should be chosen to reflect the prevailing character of the landscape, soil conditions and the associated mix of native species, but should also have regard to climate change, environmental/habitat benefits, size at maturity and ornamental qualities;

- Regulations, standards, and guidelines relevant to the planting and maintenance of trees are listed below:

- Trees in Hard Landscapes: A Guide for Delivery;[1]

[1] Trees & Design Action Group (2012). *Trees in Hard Landscapes: A Guide for Delivery.* Available at: http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_trees-in-hard-landscapes_september_2014_colour.pdf

- Trees in the Townscape: A Guide for Decision Makers;[2] and

- Tree Species Selection for Green Infrastructure.

- Existing mature trees should be preserved as they contribute hugely to the character of the parish. Ancient woodland and tree protection orders within the parish support this.

[2] Trees & Design Action Group (2012). *Trees in the Townscape: A Guide for Decision Makers.* Available at: http://www.tdag.org.uk/uploads/4/2/8/0/4280686/tdag_treesinthetownscape.pdf

Integrating street trees and landscaping with boundary treatments can help to enhance the public realm and compliment the character of the place.

Climbing plants can add interests to walls and features.

Where a looser pattern of development is proposed, visual continuity and well - defined public realm can be achieved by the careful positioning of brick and flint walls.

Figure 71: Diagram showing trees and landscaping that complement the public realm and create a sense of enclosure

- BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations.[1]

Give spatial enclosure, provide screening and privacy

The use of hedges, hedgerows trees and walls contribute to the strong character of the area and create a sense of enclosure. To respect the existing context, both the building and the boundary treatment should be consistent with the prevailing character, although there should be some allowance for some variation to provide added visual interest.

- Existing hedgerows, trees and walls should, wherever appropriate, be retained to contribute to this sense of enclosure. Additional or replacement hedges and trees should be planted to maintain the continuity of existing hedges providing continuity of hedge and hedgerow tree cover; and

- Where appropriate and feasible, any new developments should have setbacks that allow for front gardens or else a small area to provide a planted buffer zone between the private space and public space. As well as this, native hedge boundaries should be a matter of course in front of all developments/ re-developments. Where trees are removed, a native replacement should be planted.

Complement public realm and enhance built environment and local identity

Planting can make an appreciable difference to the appearance of an area, as well as adding to the local identity.

- New development should use boundary features which are complementary to the street and enhance the character of the parish. The use of trees, hedges and planting in publicly visible areas, including edges and interfaces, should be encouraged;

- Climbing plants are good at screening features such as garages, blank walls and fences; and

- The village greens are a key feature to the settlements and are a big part of their history. Therefore, any development should seek to preserve and enhance the character of the village greens that are located in Winchmore Hill, Penn Street, Penn and Knotty Green.

Form focal points and frame views

In addition to the intrinsic value of trees, they can also have a practical use value. In a small-scale open space, trees provide a focal point of interest.

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[1] British Standards Institution (2014). *BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations.* Available at: https://shop.bsigroup.com/ProductDetail/?pid=000000000030219672

Character area street types that should be respected:

Winchmore Hill

Roads are of a width that can fit cars going both directions with grass verges on either side of the highway. These provide relief for pedestrians and create a leafy feel.

Penn Street

The road Penn Street is lined with vegetation and linear housing developments which give it its unique character which is protected by the Conservation Area legislation.

Penn

Church Road has a linear feel both inside and outside the Conservation Area. It is a lined with trees and a wide verge and pedestrian 'pavement' on the north side. Other streets that come off Church Road have a more rural feel and have no pavement on either side of the highway.

Knotty Green

In the Chiltern & South Bucks Townscape Character Study, the roads in Knotty Green are described as woodlands roads and green suburban roads. They are of a cul de sac typology and have footpaths either side of the road.

Forty Green

Forty Green's roads are typically narrow with no pavements. Grass verges and woodland lines the road, creating a rural sense of enclosure to the streetscape.

Figure 72: The view from the village green at Winchmore Hill showing how trees and other green infrastructure is used to frame the built environment in the parish.

Figure 73: Local example illustrating how trees in the area create enclosure.

SP 04 STREET LIGHTING AND DARK SKIES

The 'dark skies' character of the countryside should be protected. Dark skies benefit both people and wildlife.

Any new development should minimise impact on the existing 'dark skies' within the settlements and reduce light pollution that disrupts the natural habitat and human health.

The following guidelines aim to ensure there is enough consideration given at the design stage:

- Domestic and industrial external security lighting should be motion detected and/or timed to protect dark skies;

- Street lighting should be avoided within areas of public realm, in line with existing settlement character; and

- Any new developments and house extensions designs should encourage the use of natural light sources.

BF. Built Form

The following section outlines policies that should be considered by developers when creating new development within Penn Parish. Some of the following guidance is directed at development on existing plots, such as extensions, though many can be applied to both new and existing development.

In general, infill developments in all of the settlements have generous size plots with extensive external spaces. While this is appropriate when development or redevelopment occurs in those areas, other, newer, areas should be developed in a coherent form with modern best practice. That is, there should be a proportional relationship between size of plot, dwelling and spaces between the dwellings. In general however, Penn Parish exhibits a low density with heights averaging 2 storeys and a generous space between dwellings. The following illustrative diagrams show this intention and new proposals would need to demonstrate that this has been observed.

As well as this it is important to recognise that Penn, Penn Street and Winchmore Hill lie in GB4 and GB5 areas as per the Chiltern Local Plan. This impacts certain developments within these areas.

The structure of the following guidelines and codes generally starts with policies on a larger scale and subsequently moves to guidelines and codes related to specific built form details.

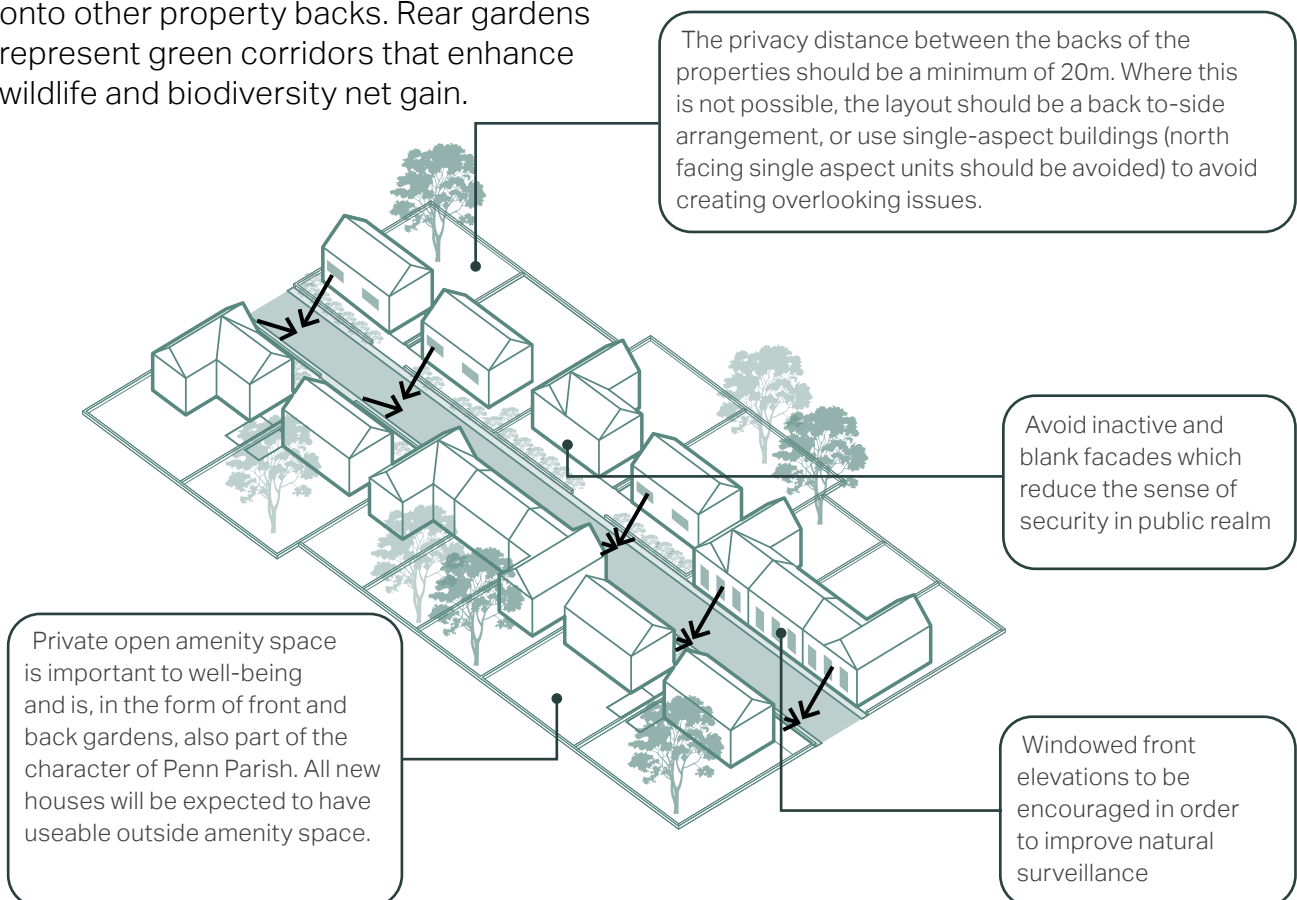**Figure 74:** 2 storey terraced housing located within the parish.

Figure 75: Detached flint house located in Penn Street.

BF 01- OVERLOOK PUBLIC SPACE

In order to provide a sense of security and natural surveillance, the windowed front elevation of a dwelling should face the street where this is in keeping with local character. The rear boundaries facing the street should be avoided as this has a negative impact on the character of a street and reduces levels of security and natural surveillance. Rear boundaries should provide a soft transition into the natural environment such as at the settlement edge in Knotty Green, or back onto other property backs. Rear gardens represent green corridors that enhance wildlife and biodiversity net gain.

The density and appropriate size of front and rear gardens should be commensurate with the surrounding properties, and enhance and fit in with the local vernacular and this should be demonstrated by future proposals.

The privacy distance between the backs of the properties should be a minimum of 20m. Where this is not possible, the layout should be a back to-side arrangement, or use single-aspect buildings (north facing single aspect units should be avoided) to avoid creating overlooking issues.

Avoid inactive and blank facades which reduce the sense of security in public realm

Private open amenity space is important to well-being and is, in the form of front and back gardens, also part of the character of Penn Parish. All new houses will be expected to have useable outside amenity space.

Windowed front elevations to be encouraged in order to improve natural surveillance

Figure 76:
Diagram to highlight the importance of natural surveillance to improve security and sense of safety

BF 02- DEFINE FRONT AND BACK GARDENS

The ratio of garden space to built form within the overall plot is exceptionally important to ensure that the sense of openness and green space within the parish is maintained.

Front garden sizes should be in keeping with the prevailing character of the surrounding buildings.

Back gardens sizes should corrolate with the size of the property.

North facing back gardens should exceed 10m in length to ensure sunlight is maximised.

BF 03- MAINTAIN A CONSISTENT BUILDING LINE

The use of continuous building lines and setback distances contribute to the overall character of the area and the sense of enclosure of the streets and public spaces. Continuous building lines with a minimum gap create a strong distinction between public and private spaces, and provide definition to the public realm. Where buildings are more generously set back from the carriageway, the threshold spaces should be well landscaped.

- Low to medium densities in residential areas can vary setbacks in order to respond to the landscape context and the more open character of the area; and

- Front gardens can be much deeper where the topography requires so or to respond to the existing character area. It also helps to create a softer transition between countryside, green spaces and built environment.

Figure 77: Subtle changes in building lines within Penn village.

Figure 78: Building lines align in the cul de sac in Penn Street.

BF 04- DESIRED HEIGHT PROFILE

- Development building heights should take cues from neighbouring development;

- Roofs in the parish tend to be generally traditionally pitched, with some hipped examples. New roof types and pitch should reflect this;

- Innovation which explores the integration of green roofs and solar tiles should be encouraged;

- Where they do not take away from the character of the settlements innovations such as solar panels and green roofs should be explored;

- The scale of the roof should always be in proportion to the dimensions of the building itself. Flat roofs for buildings, extensions, garages and dormer windows should be avoided;

- Chimneys should be encouraged within new developments to avoid bland roofscapes; and

- Chimney type and height should be congruent with the typical parish chimney precedent examples.

Figure 79: 2 storey semi-detached building with a pyramid hip roof style and a large chimney stack.

Figure 80: Scandinavian style 2 storey detached building located in Knotty Green.

BF 05- ESTABLISH A CONSISTENT PROPERTY BOUNDARY

- Buildings should ordinarily front onto streets. The building line can have subtle variations in the form of recesses and protrusions, but will generally follow a consistent line;

- Buildings should be designed to ensure that streets and/or public spaces have good levels of natural surveillance from adjacent buildings. This can be achieved by placing ground floor habitable rooms and upper floor windows facing the street; and

- Natural boundary treatments should reinforce the sense of continuity of the building line and help define the street, appropriate to the character of the area. Hedges should be preferred to fencing or boundary walls, which should be made of sustainable local materials, and front planted wherever possible.
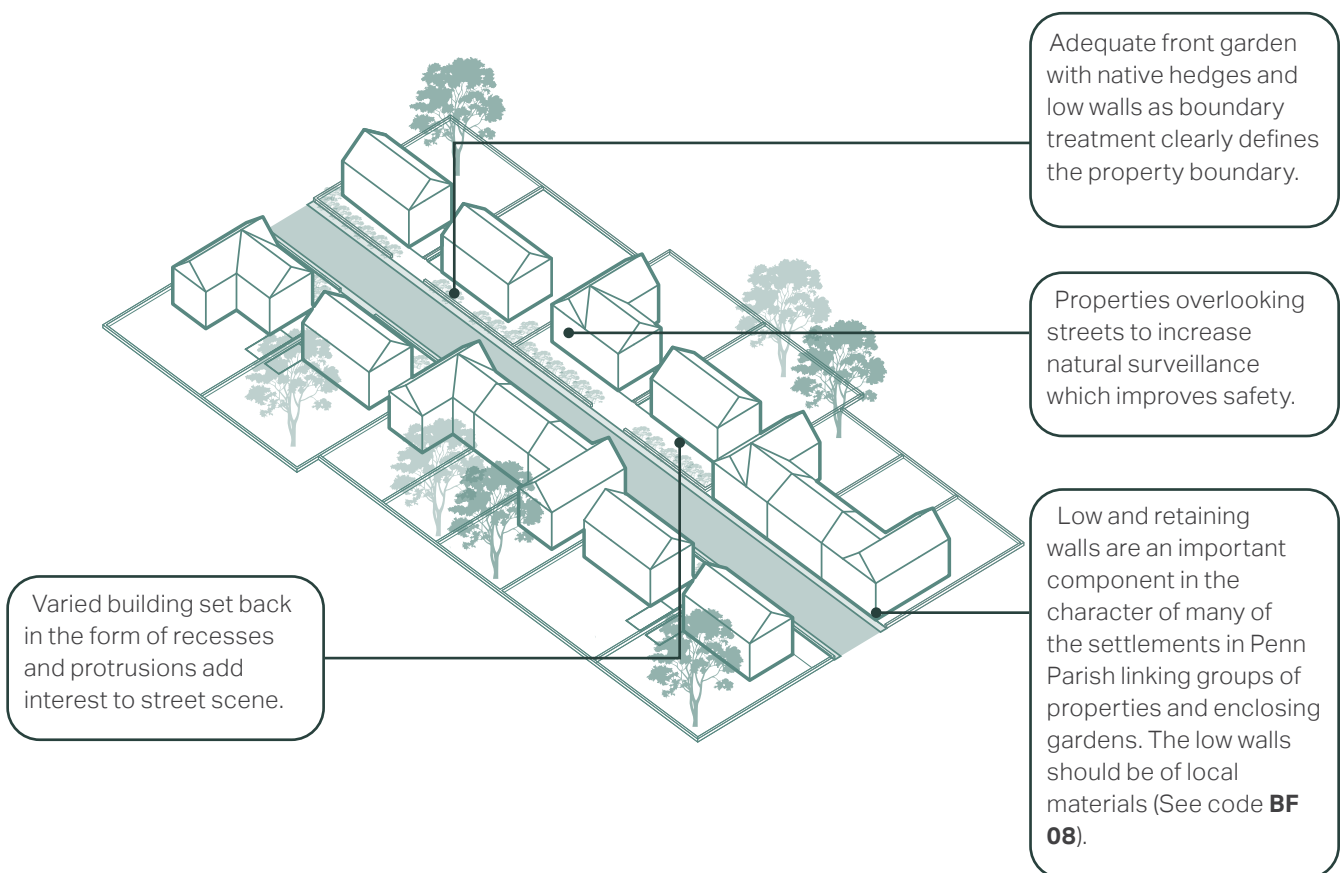
Adequate front garden with native hedges and low walls as boundary treatment clearly defines the property boundary.

Properties overlooking streets to increase natural surveillance which improves safety.

Low and retaining walls are an important component in the character of many of the settlements in Penn Parish linking groups of properties and enclosing gardens. The low walls should be of local materials (See code **BF 08**).

Varied building set back in the form of recesses and protrusions add interest to street scene.

Figure 81: Illustrative diagram showing boundary treatments

- Front gardens/soft planted shallow setbacks should be provided in most instances, although it is recognised that there are some parts of Penn Parish where the prevailing character and form is one where buildings sit to the back of the footway/ highway;

- If placed on the property boundary, waste storage should be integrated as part of the overall design of the property. Landscaping could also be used to minimise the visual impact of bins and recycling containers; and

- Locally distinctive landscape features and planting, such as low wall boundary and hedges of native species should be used in new development to define boundaries. Any material that is not in keeping with the local character should be avoided.

Figure 83: Vegetation is a common boundary in the parish and this is an example in Penn.

Figure 82: Low timber fencing creates a soft boundary to The Plough pub in Winchmore Hill.

Figure 84: A combination of a red brick wall, hedgerows and other vegetation within the parish.

BF 06- EXTENSIONS

There are a number of principles that residential extensions and conversions should follow to maintain character:

- Many household extensions are covered by permitted development rights and therefore do not need planning permission;

- The original building should remain the dominant element of the property regardless of the scale or number of extensions. The newly built extension should not overwhelm the building from any given viewpoint;

- Extensions should not result in a significant loss to the privacy of the surrounding dwellings for example from overlooking; and

- Designs that wrap around the existing building and involve overly complicated roof forms should be avoided.

Design treatment in case of loft conversion:

Loft conversion incorporating skylights.

Loft conversion incorporating gable 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 gable dormers.

Loft conversion incorporating gable dormers which are out of scale and do not consider existing window rhythm or frequency,

Good example for side extensions, respecting existing building scale, massing and building line.
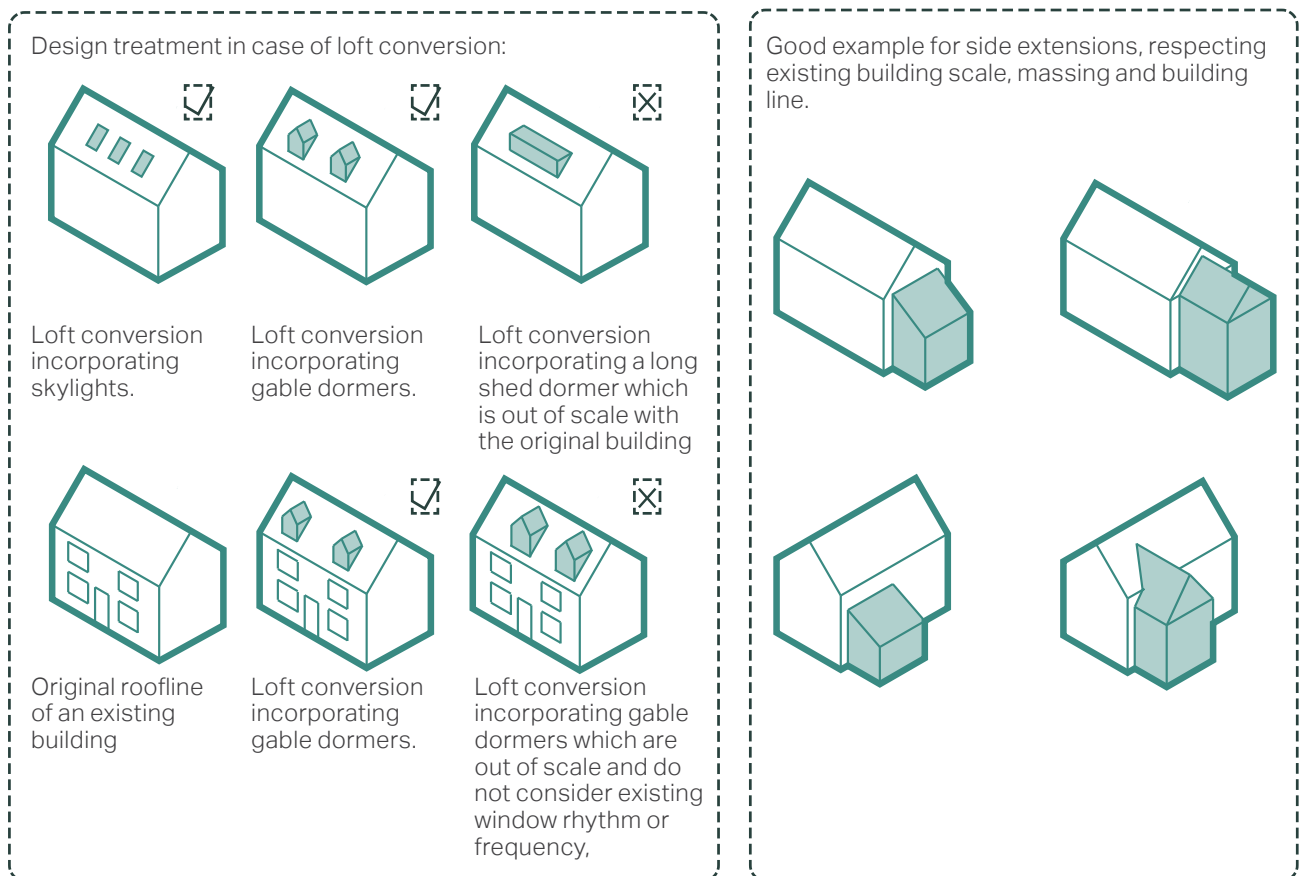
Figure 85: Some examples for different type of building extensions

BF 07- INFILL DEVELOPMENTS

Infill sites will vary in scale, context and location within a settlement. Any new infill can have significant impact on the character and appearance of the built environment. The following principles should be applied in any future infill site outside the Green Belt:

• Infill development should complement the street scene into which it will be inserted. It does not need to mimic the existing styles but its scale, massing and layout need to be in general conformity with the existing (this is particularly ridge/eave heights, especially for terraced or dense groupings of buildings);

• The building line of new development should be in conformity with the existing. Very often, with terraced or dense groupings, the building line will be exactly the same, but in other cases it might be acceptable that it closely aligns with the existing arrangement of buildings where there is an irregular, meandering building line;

• The density of any new infill development should reflect its context and its location in the village (centre or edge), or in a smaller settlement nestled in a wider landscape. The optimum density will respond to its surroundings.

• Where there are opportunities for infill development, proposals should demonstrate that existing views and vistas between buildings and along view corridors have been considered and the aim should be that they are retained, wherever possible. The sight lines, light and views between buildings is crucial to retaining character where infill development is proposed.

Penn, Penn Street and Winchmore Hill lie in GB4 and GB5 areas as per the Chiltern Local Plan which has the following ramifications on infill development:

• The width of the development site is closely similar to the widths of existing adjoining sites as assured along the row of dwellings and other substantial buildings;

• The curtilage for each dwelling is of a size and shape comparable to existing adjoining development; and

• The siting, scale and appearance of each dwelling is compatible with the character of existing dwellings in the vicinity of the development site.

BF 08- ARCHITECTURE DETAILS, MATERIALS AND COLOUR PALETTE

Whilst much of Penn Parish's housing stock was built in the 20th century, and there are numerous examples of earlier 17th and 18th century buildings. In particularly sensitive locations traditional materials should be employed in ways that are locally distinctive. These are especially important in the Conservation Areas in both Penn and Penn Street.

When deciding the type and colour of materials to use for a new building it will be important to study older buildings nearby. The aim should be to ensure that the new building complements the character of nearby buildings and integrates well into the landscape. This means that the design of new buildings in Knotty Green may be different to those in Penn Street.

Some buildings have modern extensions and alterations. New developments should respond to its surroundings and is sympathetic with its Chiltern village context while seeking opportunities to deliver decentralised energy systems powered by a renewable or low carbon source and associated infrastructure, including community-led initiatives.

Figure 86: Red brick house with grey tiles on the roof and red tiles on the facade.

Figure 87: New housing in Winchmore Hill using red brick and flint which are common materials throughout the Chilterns.

Figure 88: Semi-detached house with white render and red clay peg tiles.

New developments should strive for good quality design that meets climatic targets for CO2 emissions and that can be constructed sustainably, maximising opportunities for recycling.

The special character of buildings in the historic Penn, Penn Street and Winchmore Hill character areas arises from the mixture of red brick, lime render, flint and weatherboarding. This is supported by the Conservation Areas in Penn Street and Penn as well as the various special areas of character across the parish.

Informed by the local vernacular, the following pages illustrate acceptable materials and detailing for future housing developments in the parish. The use of traditional construction finishes should be specified for all new development

Figure 89: Traditional timber framed red brick building in the parish.

Figure 90: Black weatherboarding is used on Penn Street business park to try to create a barn aesthetic.

and repair work. Material specification, quality for repair, replacement and modern developments should be maintained. The requirement for additional housing in the parish should not trump architectural quality and character of the area.

Future developments should carefully apply this guidance to avoid creating a pastiche of the existing local vernacular. Detailing can be interpreted using contemporary methods to avoid this.

In the case of a conversion of an existing historic building into a residential use, this should look to preserve and enhance any existing heritage features, to maintain the integrity of the original building. Any new fenestration should be positioned carefully to maintain the character and balance of the building and reflect the existing design through use of complementary materials and finishes. These buildings create the opportunity to provide large single dwellings or can be split into a series of smaller dwellings.

Wall materials

For centuries, locally produced 'red' bricks were the basic building blocks used in the Chilterns. Flint has also been a building material for centuries but it was only towards the end of the eighteenth and into the nineteenth centuries, that it was much more commonly used. Within the parish wall materials used include: red brick, flint, white render, stone and timber cladding .

Fenestration materials

There are various materials and styles used for windows and doors in the parish such as sash, casement, wall dormer and bay windows, and apex pitched and flat porch roofs. In the Chilterns, windows are typically coloured white which matched well with the typical red brick and flint walling materials. Some windows have additional detailing. For example, above window detailing is a characteristic of Penn Street.

Poor examples of uPVC windows exist within the parish and it is important to match the profiles of historic windows as best as possible. For this reason inappropriate choice such as zinc cladding should not be permitted with new developments.

Roofs

Of those roof materials in the parish plain brown tile and clay tiles are more often used. The Chilterns Building Design Guide states that pitch of a roof should where practicable be chosen to complement local examples, although, as a general rule, a lower pitch will reduce the visual impact of a large modern building.

Ground surface materials

Generally gravel, grass and cement are used in majority of ground surfaces within the parish.

Boundary treatment materials

There are a wide variety of boundary treatments in the village such as hedgerows, mature trees, low walls with red brick, soft landscaping and fencing.

Colour palette
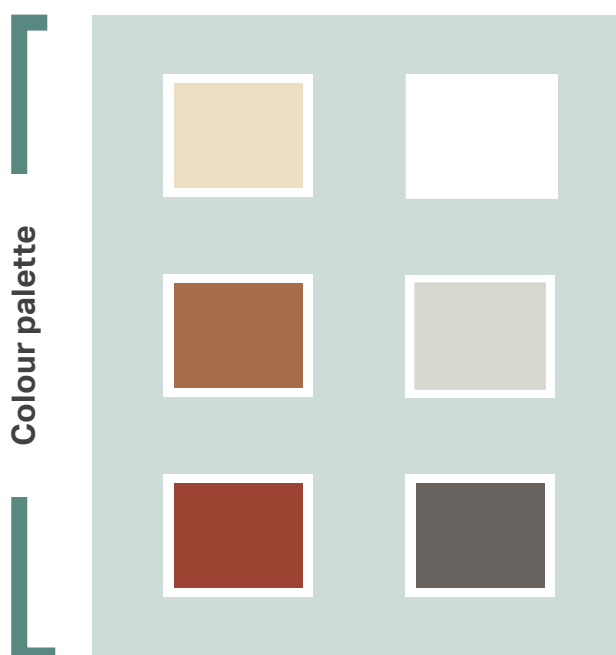
Wall

Red brick

Timber framed render

Light colours of render

Red brick and flint (found parish wide)

Timber/ weatherboarding

Yellow brick

Fenestration

Casement window

Bay window

Sash windows

Coloured windows

Muntin detailing

Roof dormer
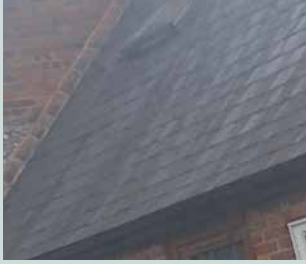

Apex porch

Flat door canopy

Roof

Thatched (scattered parish wide)

clay tile (parish wide)

Plain brown tile (parish wide)

Slate (parish wide)

Corrugated iron (employment sites)

Dutch brick work and red pantile (Penn)

Ground surface

Tarmac

Gravel

Grass verge

Mix of gravel and paving

Herringbone brick paving

Cobblestone

EE. Environmental and energy efficiency

Design guidelines and codes in the following section apply to the whole parish. They contain important policies that will help to reduce our collective impact on the planet while allowing the natural environment in and around Penn Parish to flourish.

They include general guidance that apply to both new and existing development as some of the policies can be used to modify existing dwellings to become more environmentally sustainable.

Owing to the area's rich green space character, it is hoped that more of these policies are adopted in the future to help preserve and sustain this distinct character.

EE 01- FEATURES IN DWELLINGS

The following section elaborates on energy efficient technologies that could be incorporated in buildings and at broader Parish scale as principles.

Use of such principles and design tools should be encouraged in order to contribute towards a more sustainable environment.

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 and electric charging points.

These features will contribute towards the Neighbourhood Plan policies on net zero.
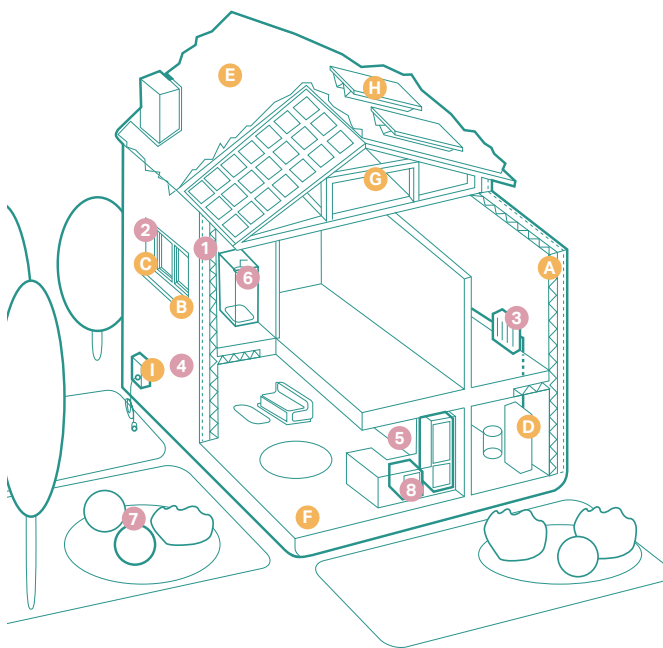
Figure 91: Diagram showing low-carbon homes in both existing and new build conditions.

Existing homes

1. **Insulation** in lofts and walls (cavity and solid)

2. **Double or triple glazing with shading** (e.g. tinted window film, blinds, curtains and trees outside)

3. **Low- carbon heating** with heat pumps or connections to district heat network

4. **Draught proofing** of floors, windows and doors

5. **Highly energy-efficient appliances** (e.g. A++ and A+++ rating)

6. **Highly waste-efficient devices** with low-flow showers and taps, insulated tanks and hot water thermostats

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

8. **Flood resilience and resistance** with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors

Existing and new build homes

A. **High levels of airtightness**

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

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

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

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

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

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

H. **Solar panels**

EE 02- WILDLIFE FRIENDLY FEATURES

Biodiversity and woodlands should be protected and enhanced where possible.

- Roadside verges, hedges, and trees should act as natural buffers and should be protected when planning new developments;

- Abrupt edges to development with little vegetation or landscape on the edge of the settlement should be avoided and, instead, comprehensive landscape buffering should be encouraged;

- New developments and building extensions should aim to strengthen biodiversity and the natural environment;

- Ensure habitats are buffered. Widths of buffer zones should be wide enough and based on specific ecological function;
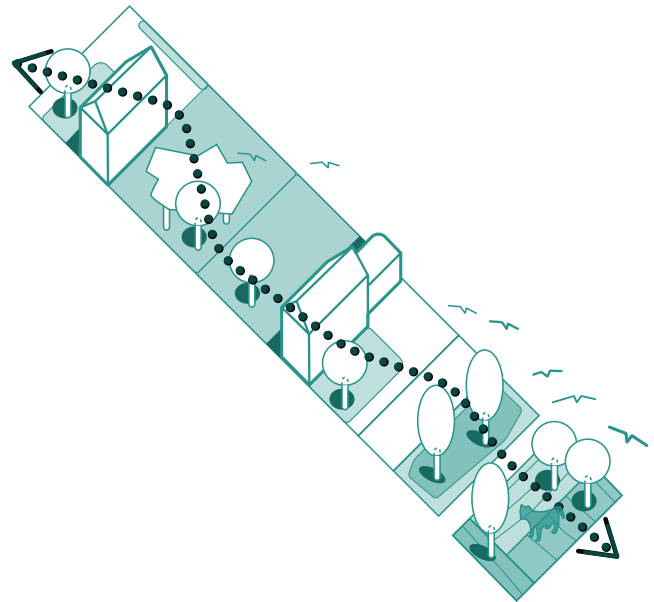
Figure 92: Diagram to highlight the importance of creating wildlife corridors.

Figure 93: Examples of a bughouse decorating rear gardens or public green spaces.

Figure 94: Examples of a frog habitat decorating rear gardens or public green spaces.

- New development proposals should include the creation of new habitats and wildlife corridors such as planting wildflowers and bulbs on the village green spaces, meadows and verges. This could be by aligning back and front gardens or installing bird boxes or bricks in walls and improve habitat at ponds. Wildlife corridors should be included to enable local wildlife to travel to and from foraging areas and their dwelling area;

- Avoid low maintenance gardens which are harmful to wildlife by reducing hard landscaping.; and

- The loss of any tree and garden should be discouraged. Encourage permeable pavement and gardens which is beneficial to biodiversity net gain.

Figure 95: The ancient woodland in the parish should be protected along with other important green spaces.

5.4 How to apply design guidelines and codes to character areas

This section illustrates how a selection of the guidelines and codes introduced above should be applied in each of the character areas presented in chapter 4. This does not mean that all of the guidelines and codes should not be considered throughout the parish. The guidelines and codes ensure that crucial characteristics of the settlements such as the village greens, listed buildings and ancient woodland are not harmed by any future development. These should be read jointly with the previous content.

Developers seeking to build in these areas should refer to these sections when considering the street layout, placemaking and architectural features of new development.
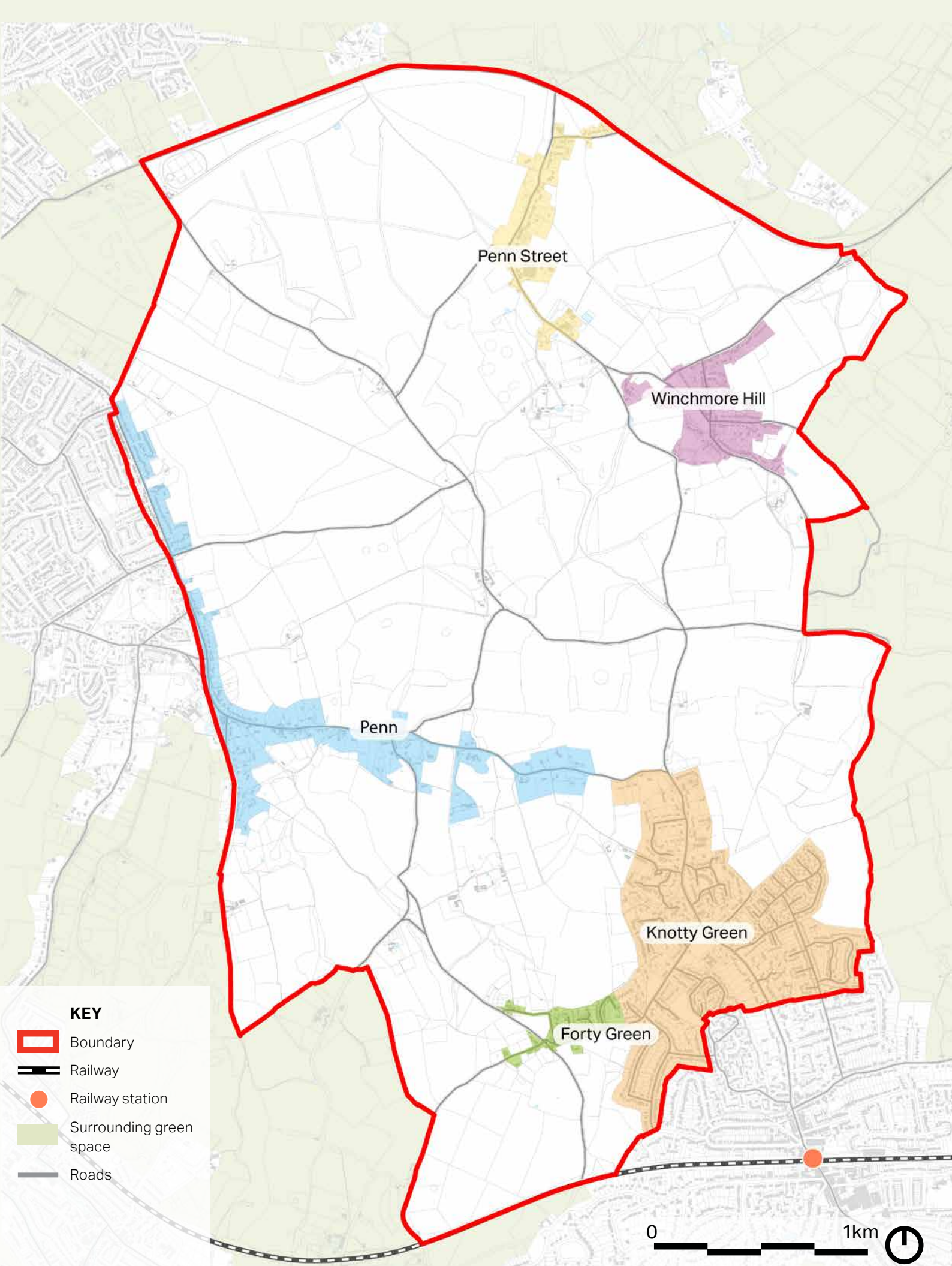
CA1- Winchmore Hill

CA2- Penn Street

CA3- Penn

CA4- Knotty Green

CA5- Forty Green

Figure 96: Map showing the character area boundaries in Penn Parish.

KEY

- Boundary
- Railway
- Railway station
- Surrounding green space
- Roads

CA1- Winchmore Hill

EXISTING CHARACTERISTICS

- Residential, community and leisure uses;

- A mix of permeable roads with some cul-de-sacs developments provide a compact layout with average front and back gardens, although some properties have wider gardens;

- Footpath provision is not continuous, limited and not level as a result resident tend to walk on the road or verges;

- The village common is the focal point where there are both pubs and low rise housing which creates an emphasis on the surrounding greeness;

- Grass verges are common on streets throughout the village which help create a rural feel; and

- Detached houses with generous set backs are a feature in this village.

PROPOSED CHARACTER

- Protect the local character and retain the history of properties through similar use of materials and colour palette. Use the array of red brick, flint, clay tiles, white rendering and wooden cladding. The use of just one material should be avoided if possible;

- Protecting the landscape features such as the village common, allotments, the pond and other green spaces to preserve the natural character of Winchmore Hill;

- Provision of the same boundary treatments such as hedges and verges. Low wall and fencing is acceptable when used in conjunction with green features; and

- Encourage active travel by proposing new footpaths which are layed out of permeable materials to connect the existing Public Rights of Way to different parts of the parish.

CA1- Winchmore Hill

Code	Applying the code to Winchmore Hill
SP.01 Active travel	• There are few examples of pavement within Winchmore Hill, instead there are grass verges which add to the rural character of the area. Therefore, grass verges should be respected by any future development in Winchmore Hill. • Footpaths that connect the village with the Green Belt and AONB countryside should be preserved and well linked up with the centre of the settlement.
SP.03 Trees and landscaping	• Hedgerows, trees and other forms of vegetation are present throughout Winchmore Hill. These help create a rural feel to the area while providing the predominantly detached properties with an element of privacy. Given this, any new development should provide a similar amount of landscaping in order for it to fit in with the character of the rest of the village. • Any development in the common area should mirror the low scale housing that surrounds it.
SL.02 Layout of buildings	• Buildings should be well set back with generous front gardens to allow the settlement to have a rural feel. As well as this the front garden space allows local people to do their own planting, which leads to a pleasant variety to look at from the street. • New buildings should respect the heights within Winchmore Hill to protect views towards the countryside and the open feel to the area.
BF.05 Establish a consistent boundary	• Given the rural feel of Winchmore Hill is partly down to the hedges and grass verges on the boundary of properties, its is crucial that any future development looks to implement hedges for boundary treatment. Where this is not possible, timber fences and low brick and flint walls may be acceptable.

SP 01 **Active travel**

Encourage active travel modes such as walking and cycling by proposing new footpaths which linking the existing PRoWs to other part of the parish and the wider countryside.

SP 03 **Trees and landscaping on streets**

Respect the existing landscape features such as the village common, verges, and integrate trees and vegetation in order to improve biodiversity net gain.
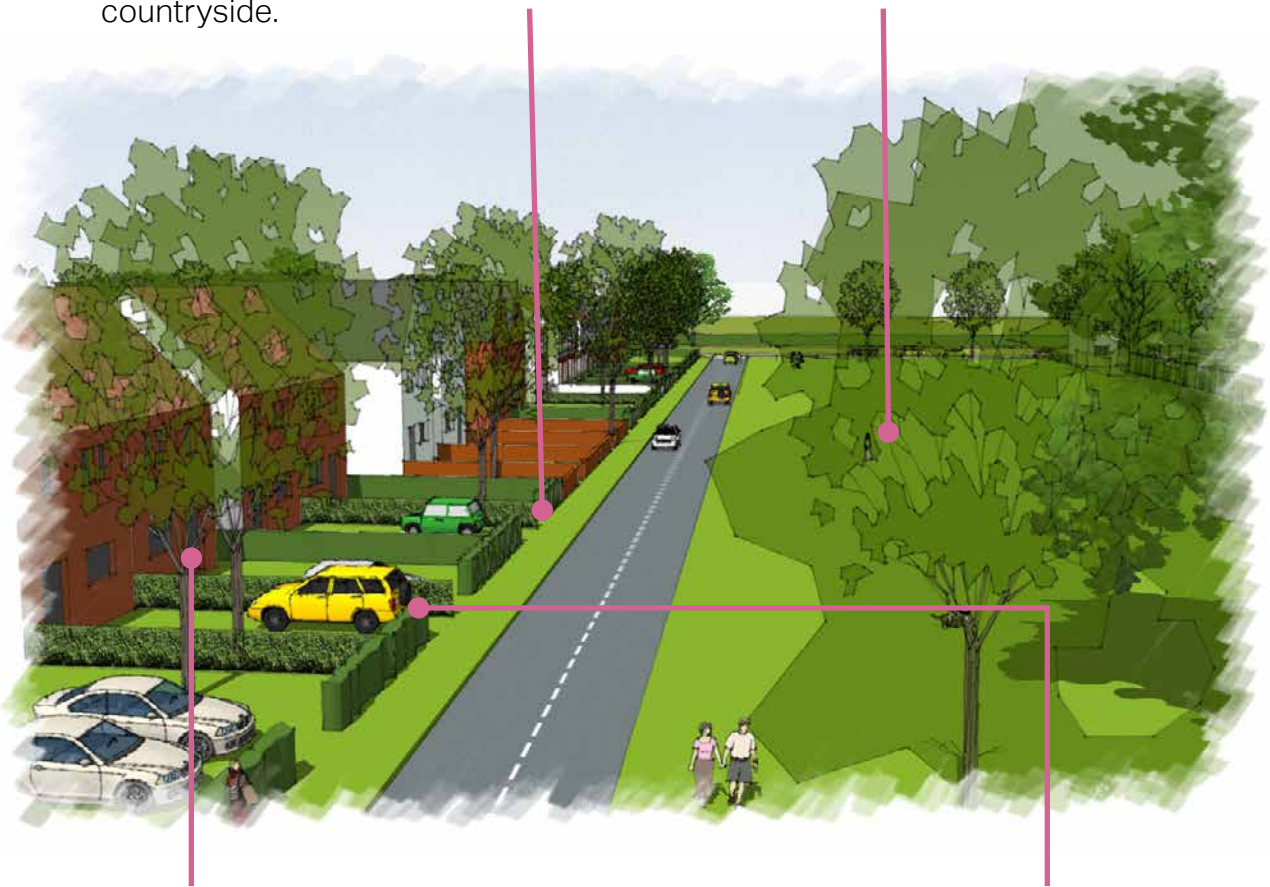
SL 02 **Layout of buildings**

Development should be at a comparable density to the surrounding area.

BF 05 **Establish a consistent boundary**

The boundary should be defined predominantly by vegetation with grass verges on the side of the road to retain the rural feel.

Figure 97: 3D model showing an ideal concept for the Winchmore Hill common area.

CA2- Penn Street

EXISTING CHARACTERISTICS

- Multiple uses such as residential, commercial and light industrial;

- Much of the settlement around the village green is engulfed by the Penn Street Conservation Area, highlighting its beauty and historic importance to the parish;

- Sections of continuous frontages along a linear road pattern (Penn Street);

- On-street car parking on Penn Street creates a chaotic street scene;

- Pavements on both or one side of the road;

- Low density throughout most of the settlement, although the Chancellors development is slightly higher density;

- The majority of properties are detached with generous front gardens and open space facing rear gardens. The density is slightly higher in the Chancellors cul-de-sac development.

- 1-2 storey properties in this character area; and

- Red brick, flint red pantiles and clay tiles are used in residential properties (in a Chiltern style) and wooden cladding, red brick, flint and corrugated metal roofs used in commercial and light industrial units.

PROPOSED CHARACTER

- Protect the local character such as the village green and retain the history of the commercial and residential areas using the same materials, especially within the Conservation Area;

- Respect the existing building line;

- Properties should face into the roads providing a natural surveillance;

- On-street car parking should be discouraged;

- Future development should normally not exceed 2 storeys in height;

- The roofs should be built in gabled or hipped roof styles; and

- Density of development existing in the village should be respected by any new development.

- Architectural detailing should resemble what is already existing in the character area, using brick, flint and other materials that are highlighted in the Chilterns Buildings Design Guide.

CA2- Penn Street

Code	Applying the code to Penn Street
BF.01 Overlook public space	• Any new development should reflect the density that is existing in the surrounding area and front onto the public realm. This creates an element of natural surveillance on public spaces such as the common. • Green spaces both large (the common) and small (grass verges) are located throughout Penn Street and this is something that should be replicated by any future development to preserve the rural Chilterns village feel to the character area.
BF.05 Establish a consistent property boundary	• Like many Chilterns villages, hedges and grass verges on the boundary of properties are very common. This is why it is crucial that any future development looks to implement hedges for boundary treatment to preserve the rural feel of the area. Where this is not possible, timber fences and low brick and flint walls may be acceptable.
SP.02 Car parking	• Penn Street is a linear settlement with much of the development happening along one street, therefore it is important that any future development has sufficient on-plot parking in order to limit on-street parking (which hinders accessibility).
SP.03 Safeguard trees, landscaping and views	• Ancient woodland surrounds the settlement of Penn Street and is a massive contributor to its secluded rural character. It is important that the woodland remains a focal point for the settlement and therefore views towards it from existing properties, the street and public spaces (such as the common) should be protected from any future development. • Landscape features such as grass verges and the common are typical for historic Chiltern villages located in the Ridge and Plateau area, therefore they should be retained and any development should not take away from the historic rural landscape of Penn Street.

BF 01 **Overlook public space**

Improve sense of security and natural surveillance by facing the front elevation of a dwelling to the street and utilise the village green.

BF 05 **Establish a consistent property boundary**

The use of well-kept front gardens, low wooden fencing, hedges and red brick walls as boundary treatment should be encouraged.

SP 02 **Car parking**

On-plot parking should be encouraged in this area and on-street parking should be avoided unless designed into the street layout.

SP 03 **Safeguard trees, landscaping and views**

The ancient woodland surrounding Penn Street should be protected as well as views towards it.

Figure 98: 3D model showing an ideal concept for the Penn Street built environment.

CA3- Penn

EXISTING CHARACTERISTICS

- The Penn Conservation Area runs down Elm Road and Church Road, including most of the settlement, thus highlighting the significance of the linear development that has happened.

- Tree lined streets creates a leafy feel to the area as well as a sense of enclosure when traveling down Church Road;

- Detached houses are the main typology;

- Spacious front and back gardens with big plot sizes;

- Narrow streetscape with pavement all the way along Elm Road and Church Road, however this is sometimes only on one side of the street;

- Thin verges along Church Road; and

- There are numerous footpaths connecting the villages together.

PROPOSED CHARACTER

- Retain and enhance the rural character and linear pattern of development, most importantly in the areas that fall within the Conservation Area where the character of Penn is heavily protected by policy;

- Architectural detailing should resemble what is already existing in the character area, using brick, flint and other materials that are highlighted in the Chilterns Buildings Design Guide.

- Establish a consistent boundary treatment such as low and well-manicured hedgerows. These provide a degree of privacy and visual interest;

- Look to prevent inappropriate development in the Green Belt and changes to residential curtilages which damage the Green Belt boundary, for example houses with large gardens annexing the Green Belt;

- Protect the views towards the arable land; and

- Respect the existing local character in terms of density, plot parcels and heights, especially within the Conservation Area.

CA3- Penn

Code	Applying the code to Penn
SL.01 Pattern of development	• Penn has a very linear feel to it and buildings almost always orientates inwards towards the main road and turn their backs towards the Green Belt countryside to the rear. Any new building should front onto the street, reinforcing the linear feel and back gardens should be generous, allowing for a buffer between the built environment and the open countryside. • The low density in Penn allows for gaps between properties, leading to views towards the countryside in places. This, the scale of housing and the typical plot arrangements in Penn should be respected by any future development.
BF.03 Maintain a consistent building line	• Buildings in Penn are typically well set back from the road with the boundary being dominated by hedges and other forms of vegetation. Any future development should not significantly stray from the building line as that would take away from the leafy Chiltern feel to the area.
EE.02 Wildlife friendly features	• Roadside verges, hedges and trees in Penn act as natural buffers and add to the green network. They also provide both habitats and shelter for wildlife. This is another reason why the natural features within Penn should be protected from any form of future development. • New developments or extensions in Penn should aim to strengthen biodiversity and the natural environment, especially in sensitive areas close to the Green Belt and Chilterns AONB border.
BF.08 Architectual details, materials and colour pallete	• Buildings in Penn are typically made from red brick and flint walls with pitched roofs. These are typical Chiltern materials and therefore any new development or extension should respect these materials to not take away from the character of the area. This is especially the case within the Conservation Area.

SL 01 **Pattern of development**

Preserve the linear pattern of the development. New buildings need to conform to the existing building line along The Green and protect the views toward the countryside.

BF 03 **Maintain a consistent building line**

The use of well-kept front gardens, low wooden fencing, hedges, brick and flint as boundary treatment should be encouraged.

EE 02 **Wildlife friendly features**

Comprehensive landscape buffering should be encouraged to define the edge of the settlement.

BF 08 **Architectural details, materials and colour pallete**

Development should use or be influenced by the local vernacular.

Figure 99: 3D model showing an ideal concept for the Penn built environment.

CA4- Knotty Green

EXISTING CHARACTERISTICS

- There is a defined village centre round the village green, and Cricket Club on Forty Green Road. As well as this there is a locally important allotment site with a further common to the rear;

- Mostly residential with a school and pub off Penn Road;

- The area is characterised by large houses on substantial plots;

- The 2017 Chiltern Townscape Study found that there are 4 different types of street characteristics in Knotty Green and these are: suburban roads, open plan suburban, green suburban roads and woodland roads.

- Boundaries should be hedged, in preference to fencing or brick walls;

- On several roads there are 2/2.5 (2 storey with dormers) storey homes and this is established.

- The Seeleys Estate and Mynchen Estate both have their own special character which should be respected. As well as this, any development should look to add to the good flow of connectivity in the area;

- The existing local materials are red brick, white rendering, clay ridged tiles and red pantiles; and

- Public footpaths that connect the area with both the countryside and the centre of Beaconsfield.

PROPOSED CHARACTER

- Protect the local character and retain the history of the character area through similar use of materials and colour palette. Use the array of red brick, flint , clay tiles, white rendering, wooden cladding and others which are highlighted within the Chilterns Buildings Design Guide;

- Respect the build form in terms of scale and massing in the 4 different areas of special character, the Mynchen Estate and the rest of Knotty Green;

- The Mynchen Estate which has distinctive architecture may merit Special Character designation.

- Follow the consistent building line and respect the portion of front and back gardens;

- Building heights should reflect those of the neighbouring buildings;

- Protect the rural character of the area and respect the views towards arable land.

CA4- Knotty Green

Code	Applying the code to Knotty Green
SP.01 Active travel	• Knotty Green is well connected by public footpaths which also provide good access to the centre of Beaconsfield. Any new development should look to preserve these whilst adding further pedestrian and cycle links of their own.
SP.03 Trees, landscaping and views	• Knotty Green has many trees: within public spaces, in peoples back gardens and lining the streets creating a sense of enclosure. As well as this it is home to Throsher's Wood. Development of any sort should protect existing trees while being considerate with its own landscaping so that it fits in with the character of the area. • Other than the common area, it does not have a large green space but lots of smaller green spaces which usually form the corners of the street. Furthermore, due to the lack of boundary treatments there is a less formal divide between front gardens and public space. The informal nature of these green spaces should be retained. • Penn Road provide routes from Beaconsfield to the surrounding countryside and the wooded character of the streets create a green transition from the countryside to the town. This green transitional area should be retained by ensuring mature trees, hedges and other planting both on the street and in front gardens are retained and enhanced.
BF.01 Overlook public space	• Like most of the other settlements within the parish, houses in Knotty Green often look out onto some form of green space or landscaping (such as the cricket club ground). This is a clear characteristic that is used throughout the parish and therefore any development should look to replicate this in its design.
BF.02 Define front and back gardens	• Knotty Green plots are typified by large front and back gardens with heavy vegetation. This gives it a rural feel as you move north from the centre of Beaconsfield towards the Green Belt. As well as this it allows for a good level of privacy. New developments should respect this characteristic in the case of any future infill. • Buildings should have a generous setback from the street in order to maintain high levels of openness along the street.

SP 01   **Active travel**

Encourage active travel mode such as walking and cycling by proposing a new footpath which connect this character area to the existing footpath network.

SP 03   **Trees, landscaping and views**

Retain existing native trees and integrate new trees into the design of new development. Preserve gaps and respect the views towards the countryside.
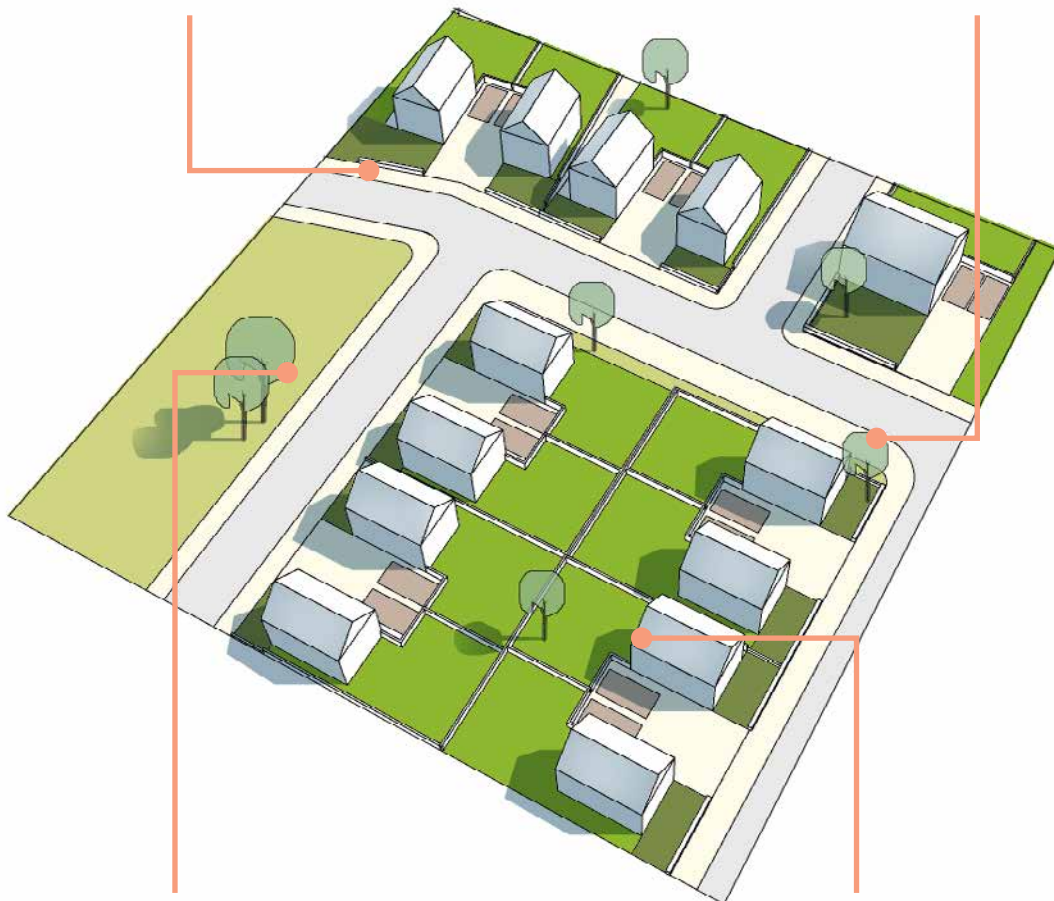
BF 01   **Overlook public space**

Use structural landscape, such as greens, to bring amenity and biodiversity to neighbourhoods.

BF 02   **Define front and back gardens**

Front and back gardens should reflect what is surrounding in the character area. Gardens on both sides should be generous enough to add to the wildlife and green corridors in Knotty Green.

Figure 100: 3D model showing an ideal concept for the Knotty Green built environment.

CA5- Forty Green

EXISTING CHARACTERISTICS

- Undulating landscape, predominantly agricultural;

- Narrow rural lanes run through this character area;

- Vegetation dominates the boundary line throughout the character area;

- Large setbacks from the rural lanes with generous front and back gardens;

- The majority of properties are two storey;

- Housing density is low, with exception to Gomms Wood Close which has a greater housing density than the rest of the settlement.

PROPOSED CHARACTER

- The future development should respect the local materials used in this area. Use the array of red brick, flint clay tiles, red pantiles, white rendering, wooden cladding and others which are highlighted within the Chilterns Buildings Design Guide;

- Propose local boundary treatments such as wooden fencing, low red brick walls and dense hedgerows which provide a very rural character;

- Retain and enhance the hedges, trees and other landscape features;

- Connect the existing footpaths to different parts of the parish; and

- Provision of wildlife friendly corridors to respect the biodiversity and existing habitats.

CA5- Forty Green

Code	Applying the code to Forty Green
BF.04 Desired height profile	• Buildings in Forty Green are typically between 1 and 2 storeys in height and at a low density. This allows for the treetops to dominate the skyline creating a rural feel when in the hamlet. As well as this, it means that houses are less visible from other parts of the parish and therefore Forty Green does not obstruct countryside views. For this reason, it is important that any development within the area sticks to existing height profiles of buildings that are there.
SP.03 Trees and landscaping	• Forty Green acts as a buffer between the suburban area of Knotty Green and the Green Belt. Heavy vegetation and wooded areas are a huge contributor to this characteristic. Given this, it is important that any future development looks to protect and enhance the hedgerows and woodland areas. • Native Woodland and hedgerows should be implemented on streets and in back gardens where possible to help strengthen the green networks between Forty Green, Knotty Green and the Green Belt.
BF.08 Architectural details, materials and colour pallete	• Like the other character areas, many of the older buildings in Forty Green are made in a Chiltern style and use materials such as red brick, flint, and pantiles. Any new builds or extensions should look to use these materials and be of an architectural style that is both sympathetic to the existing property as well as the surrounding properties.
EE.02 Wildlife friendly features	• Given its rural nature, Forty Green is the perfect place for wildlife and habitats to thrive, for example birds can nest in the woodland and feed on the various plants that grow on the hedgerows. Any form of development that poses a significant risk to wildlife will not be accepted.

SP 03 **Trees and landscaping**

Trees and hedgerows provide the opportunity for biodiversity to flourish by creating wildlife corridors.

BF 04 **Desired height profile**

Roof styles should be open-gabled or hipped roof. The building heights should not exceed 2 storey to ensure they are in keeping with the existing local character.
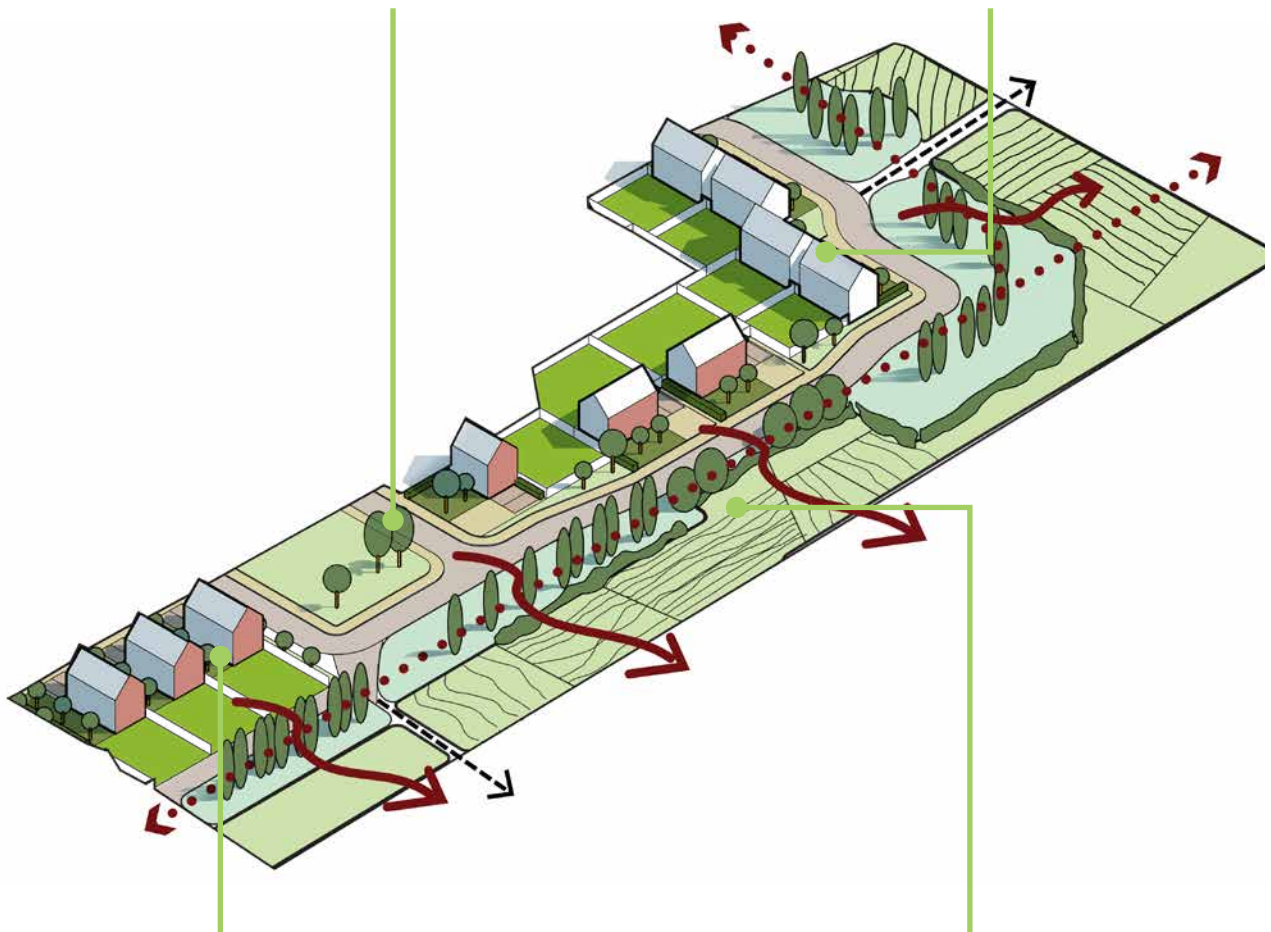
BF 08 **Architecture details, material and colour palette**

Preserve the history and architectural details of existing properties using materials such and brick, flint and other Chiltern architectural styles.

EE 02 **Wildlife friendly features**

Comprehensive landscape buffering should be encouraged to provide a buffer between development and the countryside.

5.5 Checklist

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

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

1

General design guidelines for new development:

- New development will integrate with existing paths, streets, circulation networks and patterns of activity;

- Reinforce or enhance the established settlement character of streets, greens, and other spaces;

- Harmonise with and enhance the existing settlement in terms of physical form, architecture and land use;

- Relate well to local topography and landscape features, including prominent vegetation and long-distance views;

- Reflect, respect, and reinforce local architecture and historic distinctiveness;

- Retain and incorporate important existing features into the development;

- Respect surrounding buildings in terms of scale, height, form and massing;

- Adopt contextually appropriate materials and details;

- Provide adequate open space for the development in terms of both quantity and quality;

- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;

- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;

- 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;

- Positively integrate energy efficient technologies;

- Adopt a similar housing density to surrounding properties, and sit well in the village context;

- Ensure that places are designed with management, maintenance and the upkeep of utilities in mind; and

- Seek to implement passive environmental design principles by, firstly, considering how the site layout can optimise beneficial solar gain and reduce energy demands (e.g. insulation), before specification of energy efficient building services and finally incorporate renewable energy sources.

2

Local green spaces, views & character:

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?

- Does the proposal maintain or enhance any identified views or views in general?

- How does the proposal affect the trees on or adjacent to the site?

- Can trees be used to provide natural shading from unwanted solar gain? i.e. deciduous trees can limit solar gains in summer, while maximising them in winter.

- Has the proposal been considered within its wider physical context?

- Has the impact on the landscape quality of the area been taken into account?

- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?

- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?

- Can any new views be created?

- Is there adequate amenity space for the development?

- Does the new development respect and enhance existing amenity space?

- Have opportunities for enhancing existing amenity spaces been explored?

- 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

Street grid and layout:

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

- Does it adopt a similar housing density to surrounding properties, and sit well in the village context?

- 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?

- Do the points of access conform to the statutory technical requirements?

- Is the development car dependent? What modes of public transport are available?

4

Gateway and access features:

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

- Does the proposal maintain or enhance the existing gaps between settlements?

- Does the proposal affect or change the setting of a listed building or listed landscape?

- Is the landscaping to be hard or soft?

5

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?

- 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?

- Is the low carbon energy source sufficiently quiet, in the context?

6

Building line and boundary treatment:

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

7

Building heights and roofline:

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

8

Household extensions:

- Does the proposed design respect the character of the area and the immediate neighbourhood?
- What is the impact of the proposed changes/extension on the surrounding environment, including green space and parking/pedestrian access?
- Is the roof form of the extension appropriate to the original dwelling?
- Do the proposed materials match those of the existing dwelling?
- In case of side extensions, does it retain important gaps within the street scene and avoid a 'terracing effect'?
- Are there any proposed dormer roof extensions set within the roof slope?
- Does the proposed extension respond to the existing pattern of window and door openings?
- Is the side extension set back from the front of the house?
- Does the extension offer the opportunity to retrofit energy efficiency measures to the existing building?
- Can any materials be re-used in situ to reduce waste and embodied carbon?
- What is the impact of the proposed changes/extension on the surrounding environment, including green space and parking/pedestrian access?

9

Building materials & surface treatment:

- What is the distinctive material in the area?

- Does the proposed material harmonise with the local materials?

- Does the proposal use high-quality materials?

- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?

- Does the new proposed materials respect or enhance the existing area or adversely change its character?

- Are recycled materials, or those with high recycled content proposed?

- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design? For example, wood structures and concrete alternatives.

- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

10

Car parking:

- What parking solutions have been considered?

- Is there sufficient off-street parking to meet the parking requirement standards ? One space per bedroom ?

- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?

- Has planting been considered to soften the presence of cars?

- Does the proposed car parking compromise the amenity of adjoining properties?

- Have the needs of wheelchair users been considered?

- Can electric vehicle charging points be provided?

- Can secure cycle storage be provided at an individual building level or through a central/ communal facility where appropriate?

- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels or a biodiverse roof in its design?

- Has adequate off road parking been provided for each dwelling?

- Does the proposed parking arrangement provide sufficient security and deter anti-social behaviour/crime?

- Is there sufficient off-street parking to meet the needs?

11

Architectural details and design:

- Does the proposal harmonise with the adjacent properties? This means that it follows the height massing and general proportions of adjacent buildings and how it takes cues from materials and other physical characteristics.

- Does the proposal maintain or enhance the existing landscape features?

- Has the local architectural character and precedent been demonstrated in the proposals?

- If the proposal is a contemporary design, are the details and materials of a sufficiently high enough quality and does it relate specifically to the architectural characteristics and scale of the site?

- Is it possible to incorporate passive environmental design features such as larger roof overhangs, deeper window reveals and/or external louvres/shutters to provide shading in hotter months?

- Can the building designs utilise thermal mass to minimise heat transfer and provide free cooling?

- Can any external structures such as balconies be fixed to the outside of the building, as opposed to cantilevering through the building fabric to reduce thermal bridge?

- Is the design compliant with the Chilterns Buildings Design Guide ?

Delivery

06

6. Delivery

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

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

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