



BARTON MILLS

Barton Mills

Design guidance and codes

Final Report

August 2024

Quality information

Prepared by	Check by	Approved by
Daniel Mather	Ben Castell	Ben Castell
Consultant Urban Designer	Director	Director
Holly MacMahon		
Consultant Urban Designer		

Revision History

Issue no.	Issue date	Details	Issued by	Position
3	23.08.2024	Final report submitted to Neighbourhood Plan Steering Group	Holly MacMahon	Consultant Urban Designer
2	23.08.2024	Locality review	Samantha Banks	Neighbourhood Planning Programme Manager - Locality
	14.08.2024	Final draft submitted to Locality	Holly MacMahon	Consultant Urban Designer
1	08.08.2024	Comments on first draft	Ian Poole	Barton Mills Neighbourhood Plan Working Group
	02.05.2024	First draft submitted to Neighbourhood Plan Steering Group	Daniel Mather	Consultant Urban Designer
	02.05.2024	Research, drawings	Daniel Mather Holly MacMahon	Consultant Urban Designer Consultant Urban Designer
	07.03.2024	Site visit	Daniel Mather Holly MacMahon	Consultant Urban Designer Consultant Urban Designer

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

CONTENTS

1	1. INTRODUCTION	5	4	4. DESIGN GUIDANCE AND CODES	44
	1.1 Purpose	5		4.1 Introduction	44
	1.2 Process to prepare this design guide	5		LA01.Local Architecture	45
	1.3 Area of study	6		RV02.Rural Village	53
	1.4 How to use this design guide	8		LD03.Landscape Design	57
	1.5 Planning policy and guidance	9		SU04.Sustainability	60
2	2. NEIGHBOURHOOD AREA CONTEXT	12	5	5. CHECKLIST	64
	2.1 Heritage	12			
	2.2 Green infrastructure and views	14			
	2.3 Movement network	16			
	2.4 Built form and land use	18			
3	3. DESIGN OBJECTIVES	41			
	3.1 Integrate development with the historical architecture	41			
	3.2 Contribute to the rural village character and lifestyle	42			
	3.3 Protect and enhance the landscape setting	42			

The background image shows St. Mary's Church, a stone building with a prominent square tower on the left. The tower has a crenellated top and a clock face. A large teal circle is superimposed over the center of the image, containing the text 'INTRODUCTION' and '01'. In the foreground, there is a stone wall and a wooden fence. A signpost with two signs is visible near the church entrance. The sky is overcast.

INTRODUCTION

01

1. INTRODUCTION

1.1 PURPOSE

This design guide supports the design policies of the Neighbourhood Plan. It contains contextual information and guidance and codes, which demonstrate how development may reflect the design policies of the Neighbourhood Plan.

The guidance and codes should be considered when designing development alongside other national and local policies and guidance.

1.2 PROCESS TO PREPARE THIS DESIGN GUIDE

The Barton Mills Parish Council is preparing a Neighbourhood Plan for the parish. Through

Through the Ministry for Housing, Communities and Local Government (MHCLG) Neighbourhood Planning Programme led by Locality, AECOM was commissioned to provide design guidance to support the Parish Council.

To ensure this design guide accurately reflects Barton Mills community aspirations, the Barton Mills Neighbourhood Plan Working Group (BMNPWG) provided AECOM with guidance and local knowledge. **Figure 1** provides a brief overview of the key milestones for the design guides preparation.



Figure 01: Diagram illustrating the process to preparing this design guide

1.3 AREA OF STUDY

Barton Mills is a small village and civil parish located in West Suffolk. It is set on the River Lark, which is a huge contributor to the character of the landscape of the area.

Nearby settlements include Bury St Edmunds and Newmarket, however Mildenhall directly borders the neighbourhood area and its facilities serves the community of Barton Mills. As well as this, in recent years there have been two large residential developments on Worlington Road.

In the south of the parish is the A11 which is a major road linking the area with Thetford to the northeast and Cambridge to the southwest. Other nearby key routes include the A14 and the A1065. Newmarket, Kennett and Thetford are the nearest railway stations with trains towards Cambridge, Ipswich, Norwich, Peterborough and Stansted Airport.

There are a moderate amount of facilities in Barton Mills including: The Bull hotel, The Bell Inn, the Village Hall, the recreation ground, three fast-food outlets and a budget hotel.



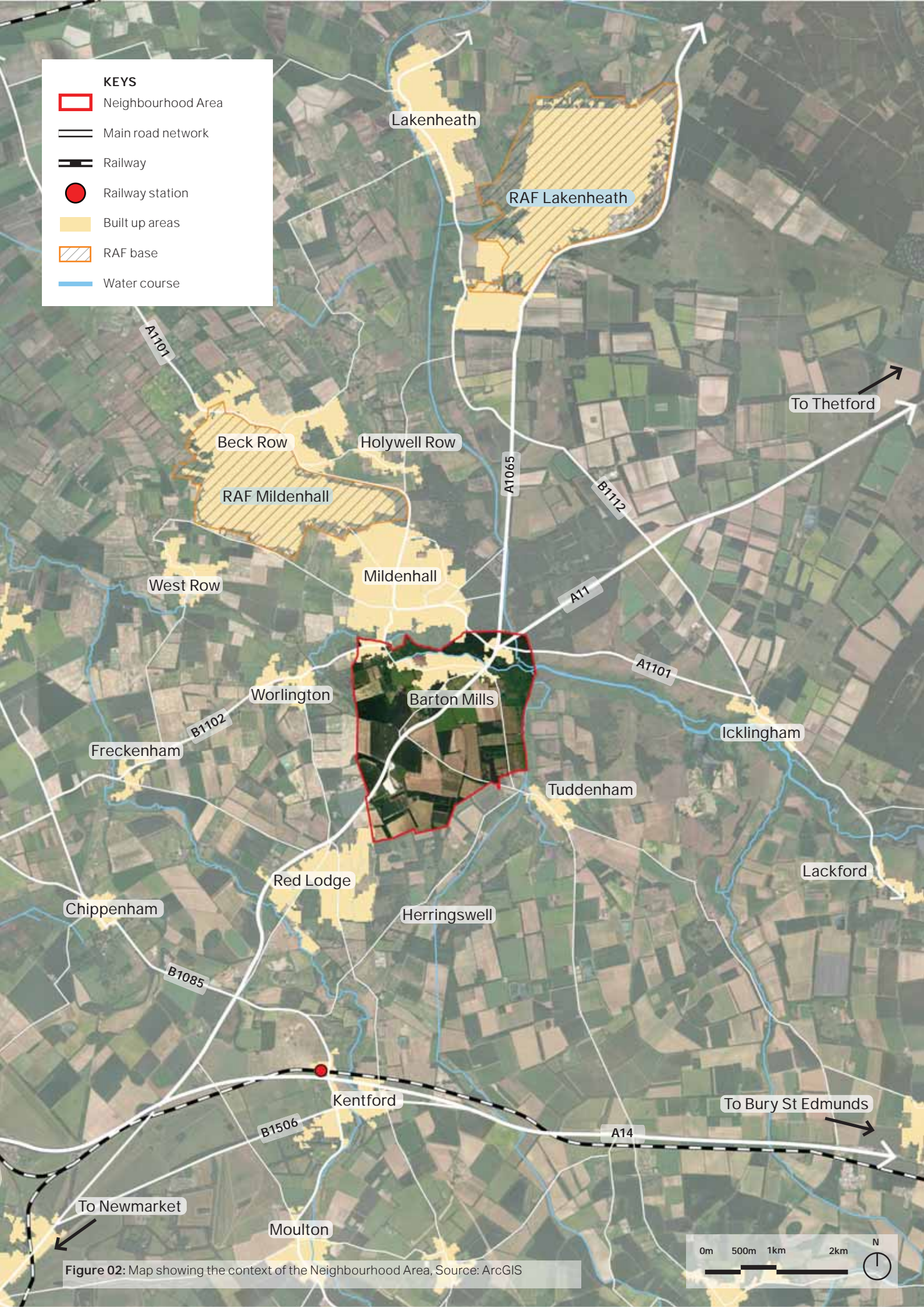
1,298
RESIDENTS
2021 CENSUS



9
Listed Buildings



22 miles
FROM
CAMBRIDGE



KEYS

- Neighbourhood Area
- Main road network
- Railway
- Railway station
- Built up areas
- RAF base
- Water course

Figure 02: Map showing the context of the Neighbourhood Area, Source: ArcGIS

1.4 HOW TO USE THIS DESIGN GUIDE

This design guide should be a valuable tool in securing locally distinctive, high quality development in Barton Mills. It may be used differently by various stakeholders in the planning and development process, as summarised in **Table 1**.

A valuable way the design guide can be used is as part of a process of co-design and involvement that seeks to understand and take account of local preferences and expectation for design quality. As such, the design guidelines and codes (refer to **Section 4**) can help to facilitate conversations on the various topics to align expectation and aid understanding on key local issues. The design guide is an evidence based document informing the Neighbourhood Plan and providing further detail for the policies contained therein.

Stakeholders	How they may use this design guide
Applicants, developers and 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 Design Guidance and Codes as planning consent is sought.
Local Planning Authority	As a guide when assessing whether the design of planning applications reflect Neighbourhood Plan policies. The Design Guidance and Codes should be discussed with applicants during any pre-application engagement.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines and Codes are complied with.
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Table 01: How stakeholders may use this design guide

1.5 PLANNING POLICY AND GUIDANCE

This section outlines the national and local planning policy and guidance documents that have informed, and should be read in conjunction with, this design guide.

1.5.1 NATIONAL POLICY AND GUIDANCE

2023 - National Planning Policy Framework

MHCLG

Development should comply with national level planning policy guidance as set out in the National Planning Policy Framework 2023 (NPPF) and the associated Planning Practice Guidance (PPG). In particular, the NPPF Chapter 12: Achieving well-designed places stresses the creation of high-quality buildings and places as being fundamental to what the planning and development process should achieve. It sets out a number of principles that planning policies and decisions should consider ensuring that new developments are well-designed and focus on quality.

2021 - National Model Design Code

MHCLG

The National Model Design Code 2021 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. This guide should be used as reference for new development.

2019-2024 - National Planning Practice Guidance

MHCLG

Development needs to consider national level planning guidance as set out in the National Planning Practice Guidance. This is a collection of planning practice guidance which sets out

national guidance for a range of categories within planning including biodiversity net gain, climate change, first homes, the Green Belt and historic environment.

2020 - Building for a Healthy Life Homes England

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

BHL is supported by Streets for a Healthy Life, which demonstrates what can be achieved in creating streets as places for people.

2007 - Manual for Streets

Department for Transport

Development is expected to respond positively to the Manual for Streets 2007 and subsequent updates, the Government's guidance on how to design, construct, adopt and maintain new and existing residential streets. It promotes streets and wider development that avoid car dominated layouts but that do place the needs of pedestrians and cyclists first.

1.5.2 WEST SUFFOLK COUNCIL POLICY AND GUIDANCE

West Suffolk is a relatively new local authority and the Local plan is emerging at the moment. The existing plan that is relevant to Barton Mills is the former St Edmundsbury area Local Plan.

Emerging West Suffolk Local Plan

West Suffolk Council

West Suffolk Council has commenced work on the preparation of a new Local Plan for the area. The Plan will cover the period up to 2040 and the Draft Local Plan has been submitted to the Secretary of State and its examination had commenced at the time the Design Guidance and Codes were prepared. Barton Mills is designated as a Type-A village, noting that 'these settlements have a more limited range of services and facilities than local service centres but can still meet some of the day to day needs of their residents. Some villages have existing provision and opportunities for sustainable access to higher order settlements'. The draft Local Plan allocates a site of 0.4 hectares east of Church Lane for around 12 homes.

2022 - Suffolk Streets Design Guide

Suffolk County Council

The purpose of this guide is to assist the delivery of well-designed places in line with the National Design Guide as well as the National Model Design Code, and as part of the Suffolk Design initiative, enabling a positive contribution to the spaces and places of Suffolk.

This document focuses on providing design guidance for streets, particularly for new residential developments, but also to inform works within existing streets where constraints are greater. In addition it can also act as a reference for commercial developments and urban regeneration schemes.

2019 - Single Issue Review of Core Strategy Policy CS7

West Suffolk

In 2019 a Single Issue Review of Core Strategy Policy CS7 was adopted. The review addressed the overall housing provision and its distribution across the former Forest Heath district. It did not impact on Barton Mills' position in the local plan settlement hierarchy or make provision for the type of development proposed for Secondary Villages.

2019 - Forest Heath Site Allocations Local Plan

Forest Heath District Council

The former Forest Heath District Council adopted this Site Allocations Local Plan in 2019. It identified the allocations required to deliver the overall housing requirement identified in the Core Strategy. In accordance with the Core Strategy Settlement Hierarchy, the document did not allocate any sites in Barton Mills.

2019 - West Suffolk Affordable Housing SPD

West Suffolk Council

It is a material consideration when making planning decisions. This SPD has been produced to expand on policies set out in the core strategies of the former Forest Heath (CS5) and former St Edmundsbury (CS9) and to provide clear policy advice to ensure the delivery of affordable homes in West Suffolk. The SPD gives guidance on the amount of affordable housing contributions sought from housing developments; affordable housing providers; affordable housing provided through on and off site contributions; development viability impacts; rural exception sites; S106 agreements for affordable housing and management and occupancy arrangements.

2015 - West Suffolk shop front and advertisement design guidance SPD

West Suffolk Council

This supplementary planning document provides guidance to improve the general standard of shop front design and advertisements throughout West Suffolk. It aims to provide an understanding of the design of shop fronts and advertisements that the local planning authorities in West Suffolk will support when reaching a decision on any planning application or application for advertisement consent.

2015 - Joint Development Management Policies Local Plan

West Suffolk

This document contains a comprehensive suite of detailed planning policies by which planning applications across West Suffolk will be determined on a day-to-day basis. The neighbourhood plan does not repeat these policies but, where appropriate, adds value and detail to them from a local perspective.

2010 - Forest Heath Core Strategy

Forest Heath District Council

The former Local Plan which covered Barton Mills Parish was Forest Heath Core Strategy (2010). This identified Barton Mills as a 'Secondary Village' in the district's Settlement Hierarchy, where such settlements would only 'accommodate a very limited amount of new minor development'. The Core Strategy set out how the housing requirements for the district to 2031 would be delivered.

2008 Barton Mills Conservation Area Appraisal

Forest Heath District Council

The Barton Mills Conservation Area Appraisal was produced to assess the important characteristics of the conservation area. The document includes key characteristics; special interest of the character area; the historic development; spatial and character analysis; key buildings; details and materials; summary of issues and management proposals and local generic guidance.



NEIGHBOURHOOD
AREA CONTEXT

02

2. NEIGHBOURHOOD AREA CONTEXT

This section presents a snapshot of the Neighbourhood Area today to inform the design objectives of the design guidance and codes. It provides an overview of Barton Mills' heritage, landscape, movement network and built form.

2.1 HERITAGE

2.1.1 HISTORIC ORIGINS AND PATTERN OF SETTLEMENT

Barton Mills is an area which is rich in history, a lot of which has been well preserved and plays a big part in the settlements character today.

The Romans established a large settlement at what is now Ickingham, building a road linking it in one direction to the Icknield Way, an ancient trackway that connected Norfolk to Wiltshire, and in the other to the nearby River Lark. This made the ensuing bridge a strategic point at what is now Barton Mills, facilitating trade and communication between travellers which enhanced the importance of the developing settlement here.

After the downfall of the Romans, Barton Mills remained to be inhabited and managed to retain in agricultural rural character throughout the industrial revolution.

In the modern era, Barton Mills has experienced growth, spurred by its proximity to larger settlements such as Mildenhall. However, efforts have been made to

preserve its historic charm and rural character such as the listing of 9 buildings and the introduction of the Conservation Area, which was adopted in May 2008.

The Barton Mills Conservation Area Appraisal details the special character of the Conservation Area. As well as the historic buildings the settlement layout is an important feature, with characteristics including: a 'linear plan and enclosed space with attractive serial views', 'low density, landscape dominated' and 'attractive variation in space between buildings'.



Figure 03: The Mill House, Grade II listed.



Figure 04: The vicarage frontage.

2.1.2 DESIGNATED HERITAGE ASSETS

As before mentioned, much of the village is designated as a Conservation Area, thus supporting its historic importance. The Barton Mills Conservation Area is centred on The Street from St Mary's Church to Old Mill Lane and includes the land and river between the north bank of the River Lark to Newmarket Road. The 9 listed buildings in the parish are:

- Church of St Mary (Grade II* listed)
- Paradise Farmhouse (Grade II* listed)
- Il Barton Hall (Grade II listed)
- Grange Farmhouse (Grade II listed)
- Lord Mayors Cottage (Grade II listed)
- Pedlars Patch (Grade II listed)
- The Bull Inn (Grade II listed)
- The Manor (Grade II listed)
- The Mill House (Grade II listed)



Figure 05: The Bull Inn.



Figure 06: Church of St Mary.

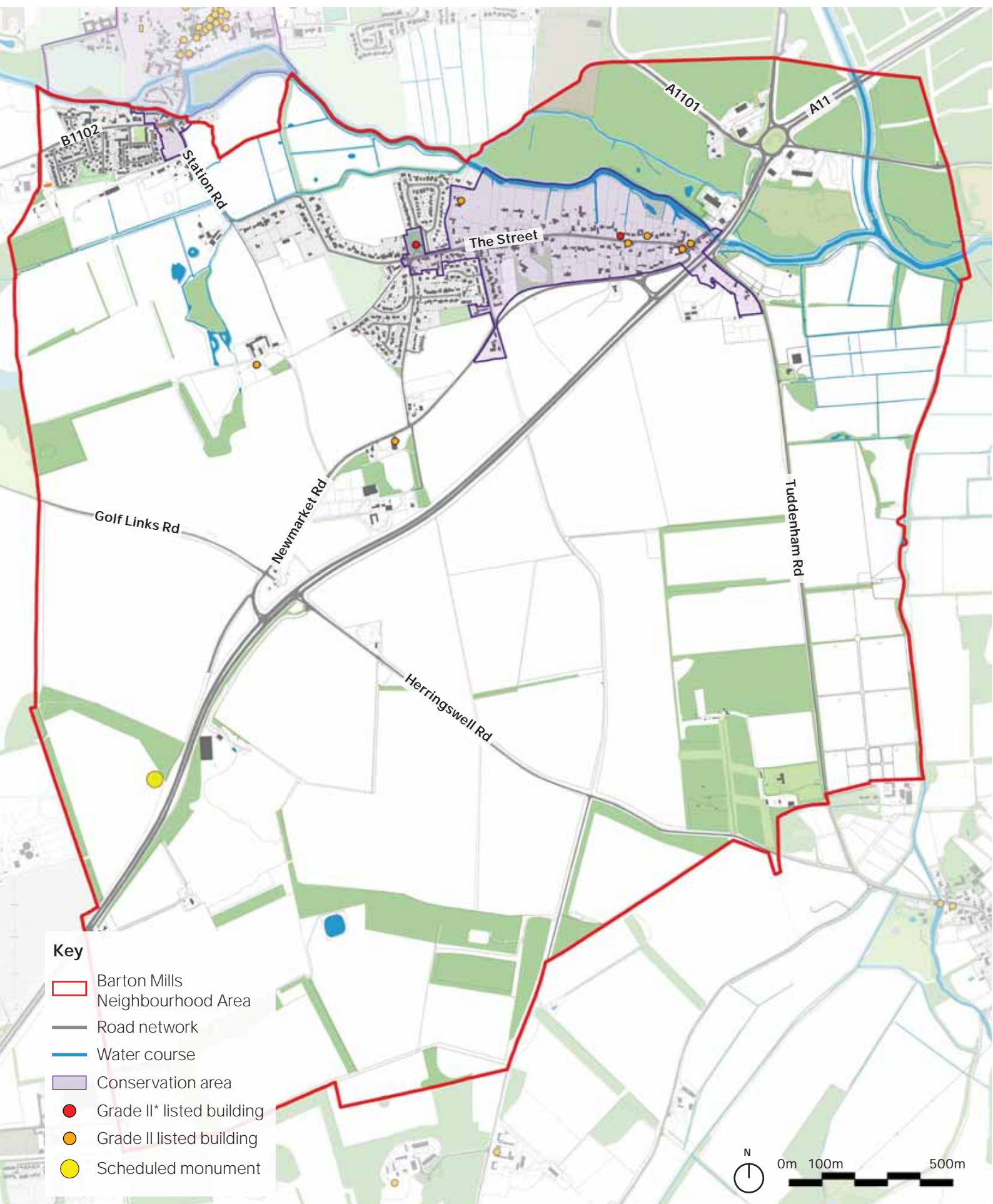


Figure 07: Map showing the heritage features of the parish .

2.2 GREEN AND BLUE INFRASTRUCTURE

2.2.1 GREEN INFRASTRUCTURE

Barton Mills is largely a rural area with much of the countryside surrounding the village and to the south of the village being agricultural land. This as well as the trees and other vegetation that is integrated into the street scene creates a rural feel, despite its close proximity to Mildenhall.

There are large areas of deciduous woodland scattered throughout the neighbourhood area, which add interest to the landscape.

As well as this there is the Norah Hanbury-Kelk Meadows County Wildlife Site which is located just to the north of the village centre and a path alongside it is well used as a link to Mildenhall town centre via a bridge crossing the River Lark.

The Breckland Special Protection Area (SPA) is in the north-east part of the parish and it is a major constraint to development with much of the built-up area of the village within the 1.5km SPA buffer zone.

2.2.2 BLUE INFRASTRUCTURE

The River Lark runs to the north of the village between Barton Mills and Mildenhall. The river and the river walks are a huge asset to the neighbourhood area and is a large contributor to the landscape character of the area.

However, the River Lark does present the northern part of the parish with a flood risk, with the nature reserve and Jubilee

Fields opposite flooding fairly often. For this reason, sustainable drainage should be integrated with new development.



Figure 08: View into the countryside from the west of the village.



Figure 09: Norah Hanbury-Kelk Meadows.



Figure 10: Public footpath running along the River Lark.

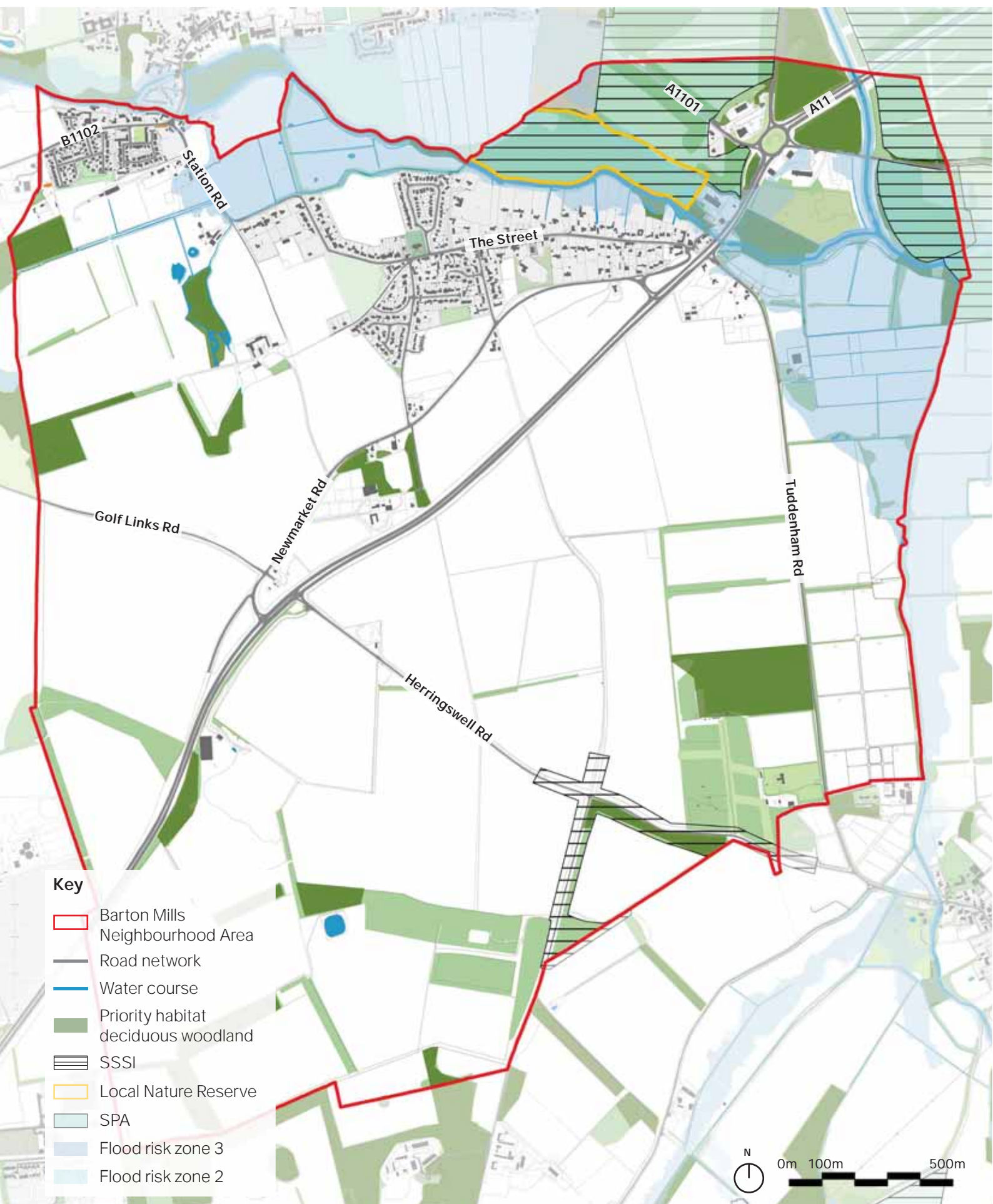


Figure 11: Map showing the landscape features of the parish.

2.3 MOVEMENT NETWORK

The busiest road in the neighbourhood area by some distance is the A11 and it is how most people access the village, via Newmarket Road. The A11 therefore creates a large barrier between the village and the predominantly agricultural land to the south of the parish.

Within the village itself, the most active route is The Street which becomes Mildenhall Road and Station Road as you move further north-west. Several smaller tertiary roads and cul-de-sacs spill off from these streets in the main village creating a rural residential feel to the area.

The area has a good number of public footpaths which provides the community with access to the countryside. The most notable of these is the 'river walk' which runs along the River Lark connecting Barton Mills with Mildenhall to the north and Icklingham to the east. The river walk is an asset which is valued highly by local people and therefore should be protected and enhanced in the future where possible.



Figure 12: Public footpath connecting the village with the river.



Figure 13: Westwards view along The Street, the main route through Barton Mills.

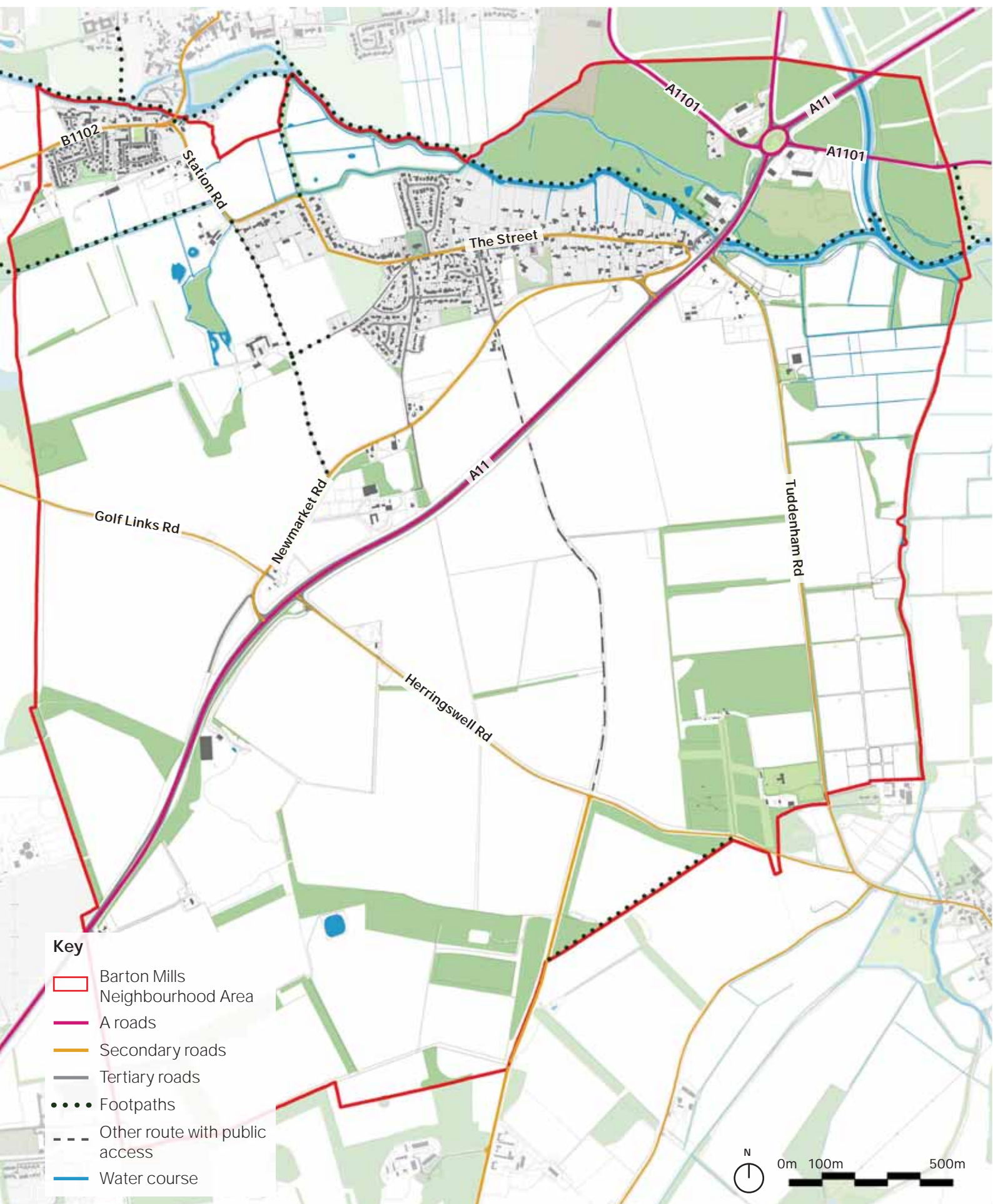


Figure 14: Map showing the movement network of the parish.

2.4 BUILT FORM AND LAND USE

2.4.1 LAND USE, FACILITIES AND SERVICES

Development takes the form of clusters, estates, cul-de-sacs, and linear development along roads such as The Street. However, there is a scattering of other uses throughout the parish, mostly along or near to The Street. Some of these include: The Bull hotel, The Bell Inn, the Village Hall and the recreation ground,

Other facilities such as the local supermarket and schools are located in Mildenhall which is just a 5 minute drive from the centre of Barton Mills.

2.4.2 BUILT FORM

Barton Mills built form varies significantly depending on the era of the development. It ranges from a linear streets lined with historic properties with varying setbacks on The Street, to higher density estate style development in the Mace Road development. Properties are typically either detached or semi-detached and 2 storeys in height. The exception to this is the recently developed Bridge Farm Close development which hosts terraced and apartment typologies that reach up to 3 storeys.



Figure 15: Streetscape and build form within the Mace Road development.



Figure 16: The Bell Inn, located in the historic core of Barton Mills.



Key

- Barton Mills Neighbourhood Area
- Road network
- Water course
- Detached houses
- Semi-detached houses
- Terraced houses
- Flats

Community uses

- ① Recreation ground
- ② Village Hall
- ③ Saint Mary's Church
- ④ Barton Mills Allotments
- ⑤ The Bell pub
- ⑥ Barton Mills Baptist Church
- ⑦ The Bull Inn

Figure 17: Map showing the building typologies within the parish.
Prepared for: Barton Mills Parish Council



DESIGN OBJECTIVES

03

3. DESIGN OBJECTIVES

This section outlines the design objectives, which were influenced by the contextual analysis, character study and community engagement process.

The four design objectives provide holistic and high level guidance and apply to development in the whole Neighbourhood Area. The design codes in the next chapter, are classified into the design objectives and set out more specific design guidance.

3.1 INTEGRATE DEVELOPMENT WITH THE HISTORICAL ARCHITECTURE

The historic features of Barton Mills built character, including roof lines, windows and doors, are varied, contributing to a quaint village feel. This variation also provides architectural interest along The Street. There are certain unifying elements, such as the consistent material palette, roofline and building scale, which combine to create a varied but complementary built character. Some newer developments consist of uniform buildings with a limited architectural material palette, which is not characteristic of Barton Mills as a whole.



3.2 CONTRIBUTE TO THE RURAL VILLAGE CHARACTER AND LIFESTYLE

The historic, rural settlement layout of Barton Mills is defined by narrow and deep plots with varied building types along The Street, Mildenhall Road and Newmarket Road. The Street has continuous frontages creating an enclosed built form, which becomes dispersed when it becomes Mildenhall Road creating a rural sense of character when approaching the village edge. The edges of the settlement are more dispersed, where buildings behind hedgerows, hedges and trees blend in with the surrounding landscape.

The village expanded off these original routes, where cul-de-sac developments were introduced from the 1930's.

With the exception of the River Lark to the north, farmland surrounds the village. Access to the open countryside via the Public Rights of Way, is a part of the Barton Mills lifestyle.



3.3 PROTECT AND ENHANCE THE LANDSCAPE SETTING

Barton Mills landscape setting is formed by open countryside, mature trees, hedgerows, the River Lark and the river walks which provide a sense of rural character.

Views and accessibility to these open spaces and landscape features make an important contribution to the landscape setting of Barton Mills.

The landscape of Barton Mills provides a wide variety of important habitats and any development must minimise recreational disturbance in particular on the designated sites of nature conservation interest. This includes the SPA and its associated buffer zone, as well as the areas of deciduous woodland, the SSSI and the Local Nature Reserve.



3.4 PRIORITISE SUSTAINABLE DESIGN

The climate emergency has created the need to decrease our carbon footprint towards net-zero by providing innovative solutions to the energy use of buildings, as buildings contribute almost half (46%) of carbon dioxide (CO₂) emissions in the UK. Therefore sustainable design is a priority for Barton Mills parish.





DESIGN GUIDANCE
AND CODES

04

4. DESIGN GUIDANCE AND CODES

This section sets out the design guidance and codes that should be used to improve the design quality of development coming forwards in the Neighbourhood Area. This design guide supplements the Neighbourhood Plan, local and national planning policy and guidance on design.

Design Principle: development in the Neighbourhood Area should demonstrate how best practice design guidance contained in national and local policy and guidance documents, including this design guide, has been considered in the layout, architectural and landscape design.

4.1 INTRODUCTION

This section identifies design guidance and codes for development in the Neighbourhood Area to have regard to. They are organised under the four design objectives for the Neighbourhood Area:

- **LA:** Local Architecture - *Design objective: Integrate development with the historic architecture*
- **RV:** Rural Village - *Design objective: contribute to the rural village character and lifestyle*
- **LD:** Landscape Design - *Design objective: protect and enhance the landscape setting*
- **SU:** Sustainable Design - *Design objective: prioritise sustainable design*

The design guidance and codes apply to the whole Neighbourhood Area. In some instances, guidance and codes may be more relevant to certain character areas.

4.1.1 WHEN TO USE THE CODES

The table overleaf identifies when guidance and codes for each theme should be considered by those promoting development. A prefix has been created for each theme to allow simple application and referencing of the design guidance and codes.

Code	Prefix	When to use the code
Local Architecture (LA)	LA1	Building height, scale and roofscape. Code to be applied when determining the height and roofscape of development in the Neighbourhood Area.
	LA2	Fenestration and architectural details. Code to be applied when determining the fenestration and architectural details of development in the Neighbourhood Area.
	LA3	Architectural materials and colour palette. Code to be applied when determining the architectural materials and colour palette of development in the Neighbourhood Area.
	LA4	Building modifications, extensions, and plot infills. Code to be applied when determining the building of infills, modifications and extensions in the Neighbourhood Area.
Rural Village (RV)	RV1	Village streets. Code to be applied to development that proposes new streets in the Neighbourhood Area.
	RV2	Site layout. Code to be applied to development that proposes multiple new buildings.
	RV3	Plot and building layout. Code to be applied to development that proposes new plots, new buildings or extensions in the Neighbourhood Area.
	RV4	Vehicle parking. Code to be applied to when designing vehicle parking for new development.
Landscape Design (LD)	LD1	Landscaping. Code to be applied to development in the Neighbourhood Area to ensure locally distinctive and wildlife friendly landscape design.
	LD2	Boundary treatments. Code to be applied to development in the Neighbourhood Area to ensure locally distinctive boundary treatments.
Sustainability (SU)	SU1	Building fabric thermal mass. Code to be applied when determining the thermal mass of development in the Neighbourhood Area.
	SU2	Insulation. Code to be applied when determining the insulation of development in the Neighbourhood Area.
	SU3	Airtightness. Code to be applied to ensure airtightness of development in the Neighbourhood Area.
	SU4	Permeable pavement. Code to be applied to ensure permeable pavement for development in the Neighbourhood Area.

Table 02: Application of design guidance and codes to development

LA - LOCAL ARCHITECTURE

Design Objectives:

- 1. Development, whether traditional or contemporary, should integrate well with Barton Mills' historical architectural character areas. All designs should be of a high-quality and sustainable.**
- 2. Development proposals should provide specification on the architectural design, including materials, fenestration and detailing. Proposals should also demonstrate how the character of the local context, as defined by this design guide, has been considered.**

LA1 BUILDING HEIGHT, SCALE AND ROOFSCAPE

Creating variety and interest in the roofscape is an important element in the design of attractive buildings and places.

Rooflines in Barton Mills are varied, with maximum two storeys and a mix of gable and hipped roofs. The exception to this is the flats on Bridge Farm Close. There are some small clusters of consistent roofline, but this is not commonplace.

Roof materials and detailing features are also varied, and include slate tiles, clay and concrete pantiles. Chimneys create a consistent feature of the skyline, but they are simple in form.

The varied building height and roof elements make an important contribution to defining the character of the Neighbourhood Area. Guiding principles for development to consider in order to achieve a well-designed roofscape include:

01. Ensure the height of development responds to the surrounding buildings, street width and sense of enclosure, topography and mature vegetation;
02. The heights of buildings should follow the existing heights and be lower than the mature tall trees;
03. Ensure the roof design integrates with the surrounding development or creates a new roofscape;
04. Design the scale and pitch of the roof to be in proportion with the dimensions of the building.

05. Deliver a locally distinctive roof design by including:
- 05.01. Variety in form along the street, including hipped and front facing gable roofs, and dormers;
 - 05.02. Simple chimneys and decorative features for visual interest;
 - 05.03. Subtle changes in rooflines, avoiding stark transitions; and
 - 05.04. Locally distinctive roof materials (refer to **Figure 27**).



Figure 18: Example of a traditional hip roof.



Figure 20: Example of variety in heights along Bell Lane.



Figure 19: Example of a house with dormer windows and tall chimney stacks breaking up the roofline.

LA2 FENESTRATION AND ARCHITECTURAL DETAILS

There are a range of architectural features and detailing in the Neighbourhood Area. For example, sash and casements windows, decorative flint work and porches.

The intricacies of the architectural features and detailing in the Neighbourhood Area are locally distinctive. They provide visual interest and reduce the scale and bulk of buildings. The use of architectural features and detailing is of particular importance given the discrete architectural material palette that is distinctive of the Neighbourhood Area.

Guiding principles for development to consider to achieve locally distinctive design include:

01. Locally distinctive fenestration and detailing in the design of new development, drawing on examples of listed buildings within the Neighbourhood Area. However, avoid mixing historic styles;
02. Development involving multiple houses should ensure a variety of detailing is utilised across the development to provide visual interest along the street and avoid homogeneous building designs; and
03. Detailing on roofs and facades to minimise the bulk and scale of buildings, for example ornate brickwork around fenestration and across walls.



Figure 21: Flint frontage of the vicarage on The Street.



Figure 22: Historic thatched cottage with tall chimney stacks.

LA3 ARCHITECTURAL MATERIALS AND COLOUR PALETTE

There are a range of materials used within the Neighbourhood Area. However, the historical palette is fairly restrained, with strong roots in the typical Suffolk architectural vernacular.

Common wall materials in the Neighbourhood Area are red and buff brick, Suffolk pink and creamy-white render, some of which have exposed timber frames. More recent development utilises a creamy-white render, which has less visual glare in the sunlight compared to white render. Some timber weatherboard, usually white, yellow or light grey, is also notable in the parish, particularly in development from the 70s and 80s (such as Church Meadows).

Fenestration is generally timber painted white. However, there are examples of black, light grey, red, yellow and olive green accents.

The discrete material palette, alongside locally distinctive landscape designs that employ hedgerows and open countryside, is locally distinctive.

Guiding principles for development to respond to the local character include:

01. Demonstrate that the material palette reflects the local character of the Neighbourhood Area.



Figure 23: Paradise Farmhouse.



Figure 24: House painted in Suffolk Pink.



Figure 25: The Mill, which has been retrofitted with yellow painted timber panels.

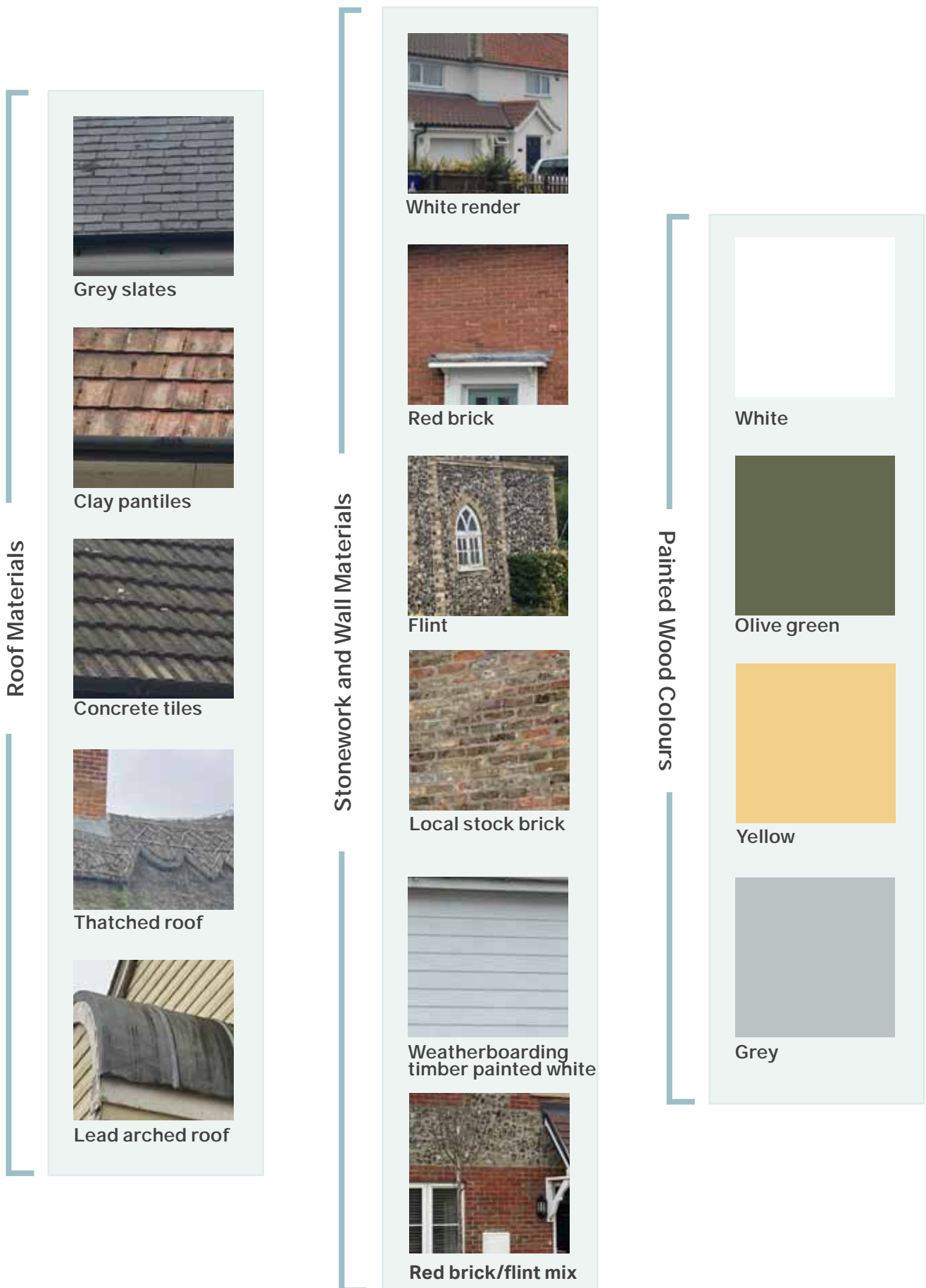


Figure 26: Locally distinctive materials and colour palette

LA4 BUILDING MODIFICATIONS, EXTENSIONS, AND PLOT INFILLS

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

01. Certain additions and/or alterations can sometimes be carried out without needing to obtain formal planning permission. They benefit from deemed consent, more commonly known as permitted development.
02. 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;
03. Extensions should not result in a significant loss to the private amenity area of the dwelling or neighbouring dwellings;
04. Designs that wrap around the existing building and involve overly complicated roof forms should be avoided;
05. The pitch and form of the roof used on the building adds to its character and extensions should respond to this where appropriate.

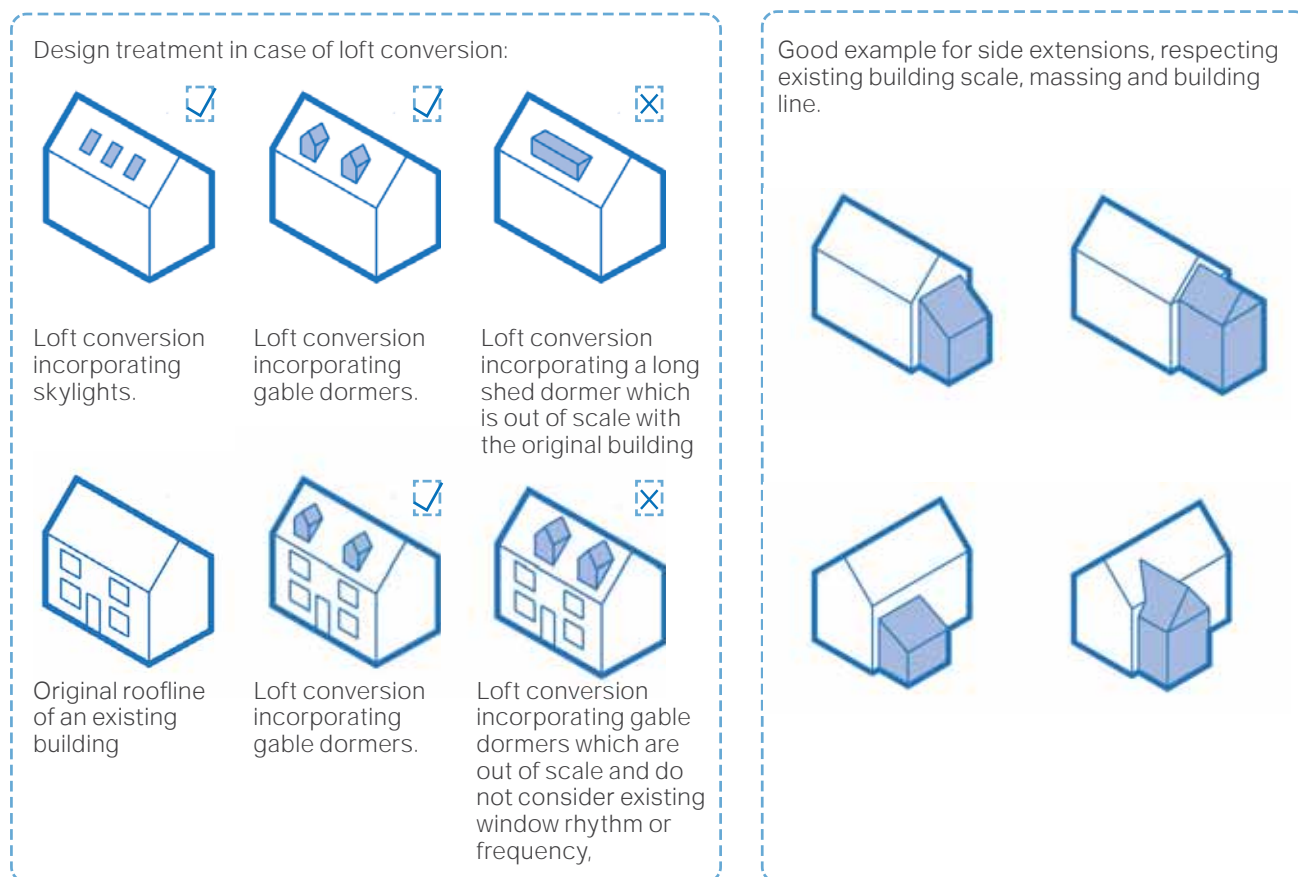


Figure 27: Some examples for different type of building extensions

06. Extensions should consider the materials, architectural features, window sizes and proportions of the existing building and respect these elements to design an extension that matches and complements the existing building;
07. In the case of side extensions, the new part should be set back from the front of the main building and retain the proportions of the original building. This is in order to reduce any visual impact of the join between existing and new;
08. In the case of rear extensions, the new part should not have a harmful effect on neighbouring properties in terms of overshadowing, overlooking or privacy issues;
09. Any housing conversions should respect and preserve the building's original form and character;
10. Where possible, reuse as much of the original materials as possible, or alternatively, use like-for-like materials. Any new materials should be sustainable and be used on less prominent building parts;
11. Any new infill development should ensure that the spacing requirements set out within this code are met and that the density, scale and appearance of the development reflects its immediate context and reduces impacts to the amenity of existing properties;

RV - RURAL VILLAGE

Design Objectives:

- 1. The layout of new development should maintain the rural character of Barton Mills, which contributes to its leafy village feel.**
- 2. Connection and access to the rural landscape, particularly Barton Mills' open countryside and the Public Rights of Ways, are an important and highly valued part of the village setting and lifestyle.**



Figure 28: View down The Street.

RV1 VILLAGE STREETS

Safe, attractive and integrated movement networks are based on streets that are permeable, legible, accessible and comfortable. Development should deliver a street network that demonstrates best practice design principles in addition to considering how to enhance Barton Mills' rural lifestyle.

Worlington Road is more urban in nature, incorporating footpath(s), raised kerbs, road markings and tarmac surface material. On the other hand The Street is narrow with trees overhanging and only one narrow footpath on the south side of the road. This creates a much more quaint feel to the streetscape.

The following principles should be considered by development to ensure streets are locally distinctive:

01. Ensure streets are laid out to encourage connectivity, including direct access to key destinations such as The Street and recreation ground. Designers should collaborate with adjacent landowners and provide connections to existing and future development areas, particularly via walking and cycling routes;

02. Encourage public access to community facilities, green space and the Public Rights of Way by ensuring publicly accessible streets are adjacent, and provide direct access and views, to these places;
03. Design streets to have the appearance of a rural village by incorporating:
 - 03.01. Gently, curving network of streets rather than rigid layouts;
 - 03.02. Narrow geometric street layouts that encourage active frontages, slow traffic and avoid large impervious areas;
 - 03.03. Minimal street furniture and road markings. The limited use of timber bollards and wayfinding signs that are already present in the Neighbourhood Area may be appropriate;
04. Landscaping along streets in the Neighbourhood Area, particularly with woodland, hedges and hedgerows, is a defining characteristic. Refer to Section LD Landscaping for guidance.
05. Suffolk Design: Streets Guide must be complied with by any new development.



Figure 29: Green open space included as part of the Mace Road new development.



Figure 30: Properties overlooking the recreation ground.



Figure 31: Overhanging mature trees adding to the enclosed feel of The Street.

RV2 SITE LAYOUT

New development must consider the overall site layout in relation to Barton Mills' rural context. The existing character in different parts of the parish must be appreciated when considering potential new development.

The following principles should be considered by development to ensure the layout of plots and buildings are locally distinctive:

01. New development should reflect the diversity and informality of the village taking inspiration from the surrounding areas avoiding pastiche and replica. In new developments, the use of a repeating type of dwelling within the same cluster of housing or along the same street frontage should be avoided. Instead variations in building design should be sought to create variety and interest in the streetscape.
02. New development should reflect existing density levels in the local context. There are varying density levels across the village with lower density seen in the conservation area and at the edges of development.
03. The impact of new development on adjoining areas of the village must be considered. In particular any development near to the conservation area must be sympathetic and be of appropriate scale and density to not erode the setting of the conservation area.

04. New development should be contemporary and sympathetic to the character of the village in terms of scale, density, form, siting and proportion.
05. The layout of new development should optimise the benefit of daylighting and passive solar gains as this can significantly reduce energy consumption.



Figure 32: Properties overlooking the recreation ground.



Figure 33: Overhanging mature trees adding to the enclosed feel of The Street.

RV3 PLOT AND BUILDING LAYOUT

Part of Barton Mills unique charm is the varied plot size and building types, creating a diverse street scene. Barton Mills presents quite distinct and varied character throughout the parish. The Conservation Area has sections of continuous, active frontages with narrow plot widths and enclosed layout. Mildenhall Road encompasses large front gardens with buildings set back and deep back gardens. Similarly, Church Lane and Church Lane Close are defined by semi and detached houses with generous front gardens and medium to deep back gardens.

The edges of the settlement are more dispersed, where buildings behind hedgerows, hedges and trees blend in with the surrounding landscape. Open countryside separate areas of development, which dilutes the density of the Neighbourhood Area. Views to these open spaces and landscape features make an important contribution to the sense of place.

The following principles should be considered by development to ensure the layout of plots and buildings are locally distinctive:

01. Layout plots and buildings to reinforce the small scale, historic character that provides the village feel of Barton Mills;
02. Vary plot widths to allow for a mix of housing types along the street, which encourages a diverse community and creates visual interest;
03. Orientate buildings generally parallel to and overlooking the street and/or public space;
04. Establish a consistent building line, with subtle variations for visual interest. Infill development should be consistent with the existing prevailing building line of the street;
05. Maintain gaps between buildings for areas of landscaping and views to the rural landscape. These important green spaces maintain the balance between the rural areas and village;
06. New development should reflect the diversity and informality of the village taking inspiration from the surrounding areas avoiding pastiche and replica;
07. New development should incorporate open views from and to the countryside and local landmarks;
08. Soft edges should be incorporated at the interface with the countryside;
09. Buildings should follow the alignment typical of the surrounding character they are located within.

RV4 VEHICLE PARKING

Car ownership levels in Barton Mills are high when compared to West Suffolk and it is important for new housing development to provide sufficient parking space so that there is not overspill of parking on the streets, impacting the rest of the village. However the rural character must also be maintained and parked cars should not become the dominant visual features in front of properties.

The following principles, therefore, should be considered by development to ensure the design of vehicle parking is sympathetic to the public realm:

01. Residential car parking should reflect existing car park typologies in the parish. This includes side and front on-plot parking and courtyard parking. Car parking standards must adhere to national guidance including the 2007 Manual for Streets¹ and local guidance including Suffolk Guidance for Parking, Technical Guidance².
02. Parking areas and driveways should use permeable materials to facilitate water drainage. Where provided, garages should reflect or complement the architectural style of the main building rather than forming a distinctive mismatched unit or dominate the facade. Car barns are

seen in the parish and could be used in new developments, reflecting the rural character of the parish.

03. Parking at the front of the properties should be designed to minimise the visual impact of vehicles 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
04. All new dwellings should have at least one electric vehicle charging point.



Figure 34: Example of use of car barn in Barton Mills.



Figure 35: Local example of use of permeable gravel driveway.

1 <https://www.gov.uk/government/publications/manual-for-streets>

2 <https://www.suffolk.gov.uk/planning-waste-and-environment/planning-and-development-advice/parking-guidance?nodeId=f6337b00-a555-5036-aab9-fb4e313452fc&entryId=81cf05da-6eba-5ab9-85ba-92d4431e6165>

LD - LANDSCAPE DESIGN

Design Objective:

1. Barton Mills landscape setting, which is formed by open countryside, the River Lark, mature trees, hedges and hedgerows, provides a sense of enclosure and a rural character to the Neighbourhood Area which must be protected and enhanced where possible.

The relationship between the village and the countryside is of a great value for the community and it is based on the following main aspects:

- The views to the countryside from the west of the village as well as into the nature reserve to the north;
- The River Lark and the river walk which doesn't just provide the community with the opportunity to enjoy the surrounding countryside but is also a good link into Mildenhall;
- The presence of tall mature trees, hedgerows and planting within the built environment of the village, specifically within the Conservation Area along The Street;

The landscape setting has an important visual relationship with the built environment and help the transition from the village to the countryside.

LD1 LANDSCAPING

Landscaping should be considered at the outset of development to ensure planting areas and species achieve good development outcomes.

The following principles are recommended for the landscape design of development:

01. Provide landscape areas of a sufficient size to support the establishment and growth of healthy vegetation. Avoid an over reliance on planting strips;
02. New developments should provide Biodiversity Net Gain to meet national and local requirements through landscaping schemes on-site as a priority, and if this is not possible, within the parish.
03. Utilise landscaping to mitigate impacts of development (i.e. visual, noise, urban heat island) on adjacent areas;
04. Encourage planting of new large trees and hedgerows in new development to contribute to the richness of the rural village;
05. Preserve existing vegetation (i.e. mature tall trees, hedges and hedgerows) as part of the landscape design to reinforce Barton Mills rural landscape character. If any trees are removed they should be replaced within new development;
06. Incorporate wildlife friendly features that support movement and habitat, particularly for hedgehogs. For example, holes in fencings/walls, gaps beneath gates, temporary houses and native planting;
07. Limit light pollution and protect night darkness, especially at the fringes of the built up area and areas bordering the nature reserve;

08. Consider how the development layout can create wildlife corridors. For example, the layout of roads, ditches, front and back gardens, and green spaces. This is particularly important in the areas bordering the River Lark and the Norah Hanbury-Kelk Meadows;
09. Enhance road verges within residential areas by planting native tree species and hedgerows;
10. Encourage the use of native species of trees, hedgerows and shrubs to frame a soft transition between the built environment and the open countryside;
11. Consider climate change and promote use of local species to ensure that new trees are selected to be resilient in a long term;
12. Protect and enhance the existing views from within the village to the open countryside (refer to 'Barton Mills Important Views Appraisal' produced by Places4People for more details);

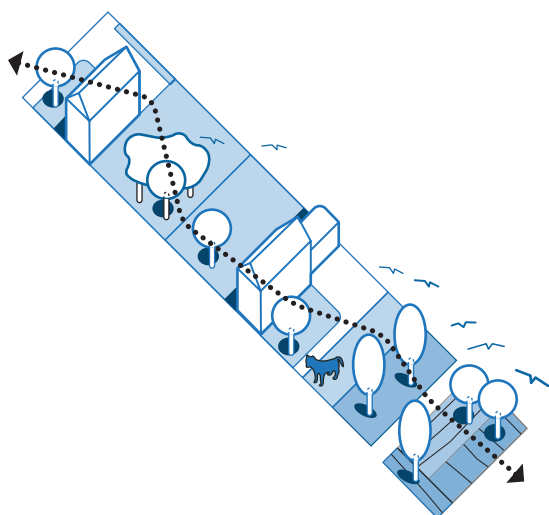


Figure 36: Diagram demonstrating how connected front and back gardens can enhance ecological connectivity for wildlife. Accompanying layout considerations with wildlife friendly features supports wildlife movement and habitat creation
Prepared for: Barton Mills Parish Council



Figure 37: Grass verges incorporated into the street scene.



Figure 38: Man made timber and chicken wire footpath alongside the nature reserve providing access to Mildenhall and River Lark.



Figure 39: Example of a local public footpath providing access towards the surrounding countryside.

LD2 BOUNDARY TREATMENTS

Hedgerow, brick walls and timber fencing boundary treatments are a significant feature in Barton Mills. Mature hedgerows provide spatial enclosure and screening as well as enhance privacy. They vary from tall to medium heights. For example where front gardens are smaller there are examples of smaller hedgerows and landscaping and where front gardens are large enough, such as on some properties on The Street, large mature trees form part of the boundary treatment.

The following principles are recommended for the boundary treatment of development:

01. Boundary treatments should primarily consist of hedgerow, low brick walls and timber fences;
02. Landscaping of front and back gardens should be in accordance with the area:

02.01. The Street has an enclosed feel due to brick walls, heavy

vegetation and overhanging mature trees. Many buildings front directly onto the road which adds further to the enclosed historic character of the area.

02.02. The small cul-de-sac residential development, Church Meadow, off The Street has a more open feel with low boundary treatments, generous front gardens and on-plot parking provision.

02.03. The more recent developments Worlington Road contain small landscaped areas and red brick walls on the boundary.



Figure 40: Traditional brick wall with vegetation behind, on The Street.



Figure 41: Small landscaped area example in the Mace Road development.

SU - SUSTAINABILITY

Design Objective:

1. New developments must prioritise high quality designs with energy saving measures incorporated.

The following section elaborates on energy efficient technologies that could be incorporated in buildings. Some measures will be required by the Building Regulations but, where not, the use of such principles and design tools is 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.










Figure 42: Diagram showing low-carbon homes in both existing and new build conditions.

SU1 BUILDING FABRIC THERMAL MASS









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

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

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 water- 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**
- I  **Electric car charging point**

SU2 INSULATION

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

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

SU3 AIRTIGHTNESS

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

ventilation. Simplicity is key for airtight design. The fewer junctions the simpler and more efficient the airtightness design will be.

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

The diagram below illustrates some of these key considerations.

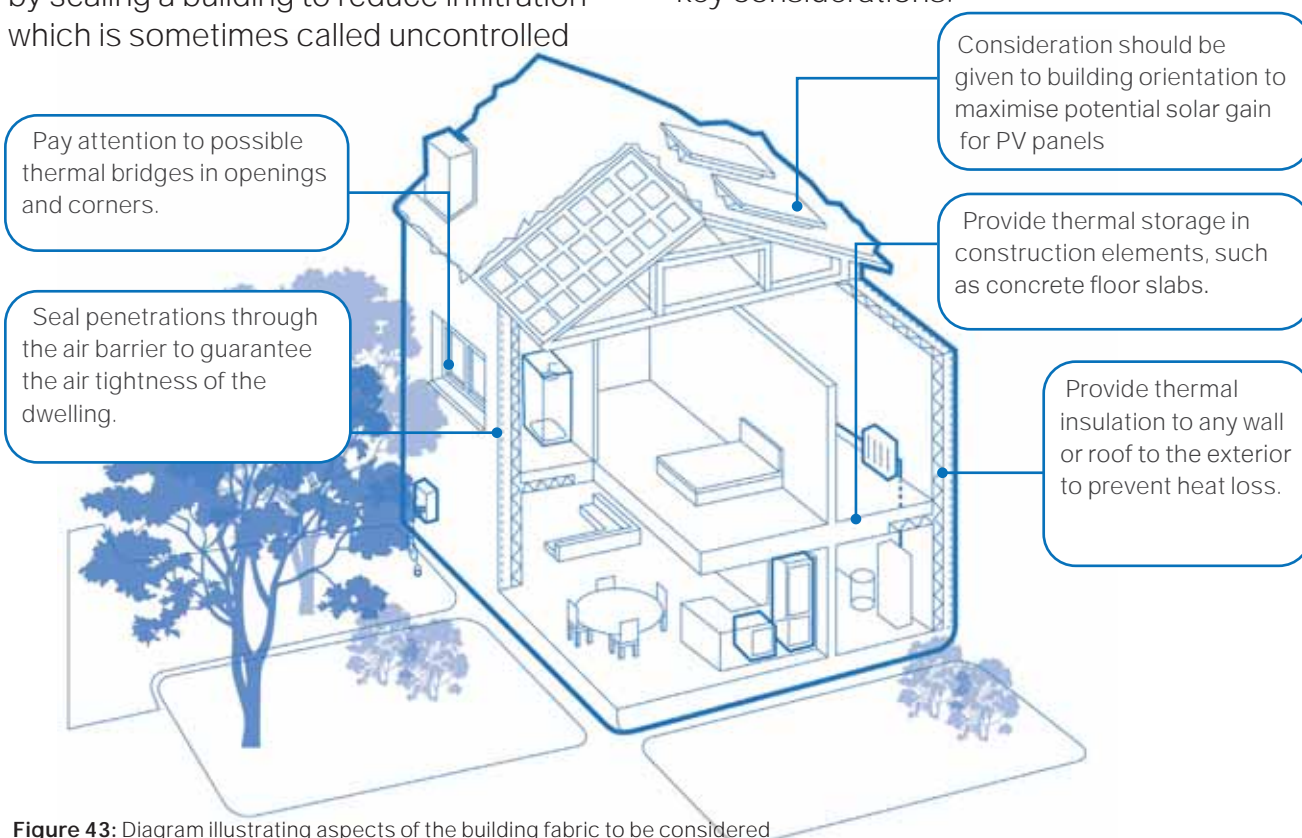


Figure 43: Diagram illustrating aspects of the building fabric to be considered

SU4 PERMEABLE PAVEMENTS

Most built-up areas, including roads and driveways, increase impervious surfaces and reduce the capacity of the ground to absorb runoff water. This in turn increases the risks of surface water flooding. Permeable pavements offer a solution to maintain soil permeability while performing the function of conventional paving. The choice of permeable paving units must be made depending on the local context; the units may take the form of unbound gravel, clay pavers, or stone setts.

Permeable paving can be used where appropriate on footpaths, public squares, private access roads, driveways, and private areas within the individual development boundaries.

It is recommended that the majority of the unbuilt areas in the plot (i.e. gardens) are permeable by means of landscape such as grass or earth as well as permeable and filtrating pavements. As a rule of thumb the % permeable area should be between 30% to 70% of the unbuilt areas.

In addition, permeable pavement must also comply with:

- i. Flood and Water Management Act 2010, Schedule 3;
- ii. The Building Regulations Part H – Drainage and Waste Disposal;
- iii. Town and Country Planning (General Permitted Development) (England) Order 2015;

Regulations, standards, and guidelines relevant to permeable paving and

sustainable drainage are listed below:

- iv. Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems;
- v. The SuDS Manual (C753);
- vi. BS 8582:2013 Code of practice for surface water management for development sites;
- vii. BS 7533-13:2009 Pavements constructed with clay, natural stone or concrete pavers; and
- viii. Guidance on the Permeable Surfacing of Front Gardens.

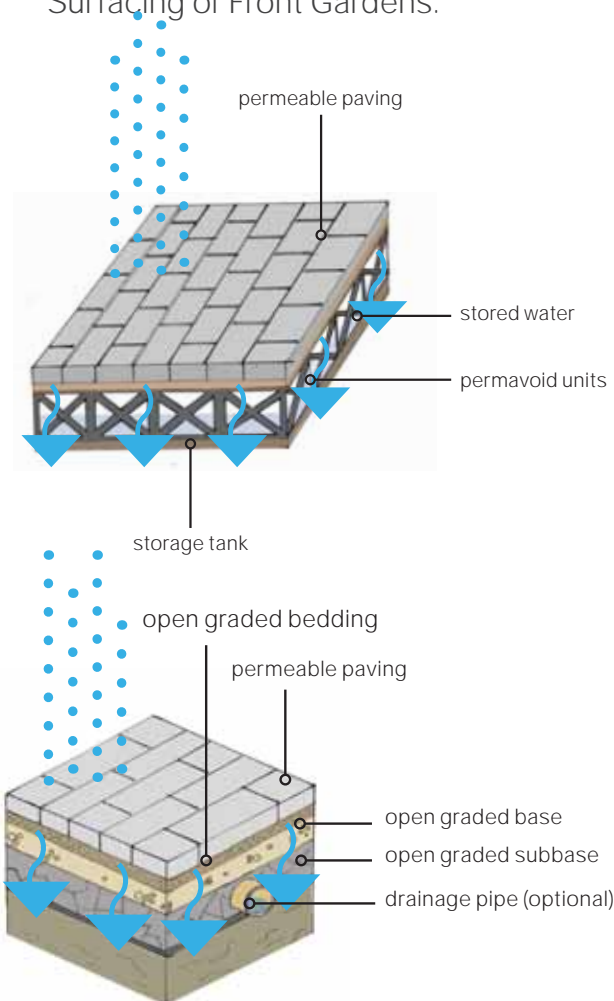


Figure 44: Diagrams illustrating the functioning of a soak away

5. CHECKLIST

As the design Guidelines and Codes in this section cannot cover all development scenarios, this concluding section provides a number of questions based on established good practice against which the design proposal should be evaluated.

The checklist can be used 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 taken into account 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 guidelines for new development'. Following these ideas and principles, a number of questions are listed for more specific topics.

1

General design guidelines for new development:

- 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 and enhance existing settlement in terms of physical form, architecture and land use;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- 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;
- Positively integrate green infrastructure in accordance with national design guidance to positively contribute to liveability, biodiversity and climate change resilience;
- Ensure that places are designed with management, maintenance and the upkeep of utilities in mind; and
- Seek to implement passive environmental design principles by, firstly, considering how the site layout can optimise beneficial solar gain and reduce energy demands (e.g. insulation), before specification of energy efficient building services and finally incorporate renewable energy sources.

2

Street grid and layout:

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

3

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?

3

Local green spaces, views & character:

- 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?

3

Local green spaces, views & character:

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

4

Gateway and access features:

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between 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 is the typical built pattern 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?

6

Building line and boundary treatment:

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

7

Building heights and roofline:

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

8

Household extensions:

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

9

Building materials & surface treatment:

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- Does the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?
- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design? For example, wood structures and concrete alternatives.
- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

10

Car parking:

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

6. GLOSSARY

Building line: The line formed by the frontages of buildings along a street.

Built form: Buildings and structures.

Enclosure: The use of buildings and structures to create a sense of defined space.

Gateway: The design of a building, site or landscape to symbolise an entrance or arrival to a specific location.

Land Cover: The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.

Land Use: What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry.

Landscape: An area, as perceived by people, the character of which is the result of the action and interaction of natural and/or human factors.

Landscape Character: A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

Listed Building: A listed building is one that has been placed on the Statutory List of Buildings of Special Architectural or Historic Interest. There are three categories of listed buildings in the United Kingdom:

Grade I buildings, which are of exceptional interest and make up 2.5% of all listed buildings in the United Kingdom.

Grade II* buildings, which are particularly important buildings of more than special interest and make up 5.5% of all listed buildings in the United Kingdom.

Grade II buildings, which are of special interest and make up 92% of all listed buildings in the United Kingdom.

Rural: Relating to, or characteristic of the countryside rather than the town.

Setting: The context or environment in which something sits.

SuDS: Sustainable urban drainage. Used to slowdown the passage of water and often improve water quality.

Vernacular: The way in which ordinary buildings were built in a particular place, making use of local styles, techniques and materials and responding to local economic and social conditions.

Views: Views that can be seen from an observation point to an object (s) particularly a landscape or building.

Permeability: The permeable and interconnected street network provides people with a choice of different routes allowing traffic to be distributed more evenly across the network. A permeable layout generates a higher level of pedestrian activity, which makes social interactions more likely, and increases the level of security.

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

About AECOM

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

