

Bretherton

Design Codes

October 2024

Quality information

Prepared by	Check by	Approved by
Tom Royles - Senior Urban Designer	Davide Colombo - Consultant Urban Designer	Lee Saxelby - Regional Design Director

Revision History

Issue no.	Issue date	Details	Issued by	Approved
1	16 May 2023	Review - chapters 1-3	Tom Royles	Bretherton Steering Group
2	27 July 2023	Review full document	Tom Royles	Bretherton Steering Group
3	31 July 2023	Final draft	Tom Royles	Barbara Farbon (Bretherton Steering Group) & Lee Saxelby (AECOM)
4	11 August 2023	Submission draft	Tom Royles	Barbara Farbon (Bretherton Steering Group) & Lee Saxelby (AECOM)
5	25 October 2024	Submission draft	Davide Colombo	Barbara Farbon (Bretherton Steering Group) & Becky Mather (AECOM)

Mapping licenses

OS - © Crown copyright and database rights 2022 Ordnance Survey 797791_1024913

OS MasterMap Topography Layer - © Crown copyright and database rights 2023 Ordnance Survey 797791_1024910

Flood Map for Planning - © Crown copyright and database rights 2023 OS 220629

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

Contents

1	1. Introduction	5	
	1.1 Background and objectives	5	
	1.2 Methodology	5	
	1.3 Design vision	6	
	1.4 Vision	8	
	1.5 Objectives	8	
	1.6 Who will use the guide?	9	
	1.7 Area of study	10	
	1.8 Application	11	
2	2. Policy Context	14	
	2.1 Planning policy and guidance	15	
	2.1.1 National Planning Policy & Guidance	15	
	2.1.2 Local Policy Context	17	
	2.1.3 Supplementary Planning Documents (SPDs)	23	
3	3. Analysis and Design Codes	26	
	3.1 Introduction	26	
	3.2 Place Design	27	
	3.2.1 Character and density	27	
	3.2.2 Built form and houstypes	28	
	3.2.3 Scale and roofscape	29	
	3.2.4 Materials and detailing	30	
	3.2.5 Boundaries and setbacks	31	
	3.2.6 Extensions and alterations	31	
	3.2.7 Design Code 01: Appearance, character and built form	33	
	3.2.8 Design Code 02: Materials and detailing	34	
	3.2.9 Design Code 03: Parking	35	
	3.2.10 Design Code 04: Extensions and alterations	36	
	3.2.11 Design Code 05: Conversion of agricultural buildings	36	
	3.2.12 Design Code 06: Boundary treatments on new development	37	
	3.3 Heritage	39	
	3.3.1 Listed Assets	39	
	3.3.2 Conservation Area	39	
	3.3.3 Design Code 07: Responding to heritage	42	
	3.4 Sustainability	43	
	3.4.1 Flood mitigation	43	
	3.4.2 Design Code 08: Sustainable Drainage	44	
	3.4.3 Green Infrastructure	45	
	3.4.4 Design Code 09: Biodiversity	45	
	3.4.5 Energy	46	
	3.4.6 Design Code 10: Electric Vehicle charging	47	
	3.4.7 Design Code 11 - Building Orientation and Passive Design	47	
4	4. Checklist	50	



Introduction

01

1. Introduction

The aim of this Neighbourhood Plan design code document is to empower the local community to influence the design and character of the local area and to deliver attractive, sustainable development that meets the needs of local people.

1.1 Background and objectives

The parish of Bretherton in the Borough of Chorley has established a Neighbourhood Group (NG) who are in the process of preparing a Neighbourhood Plan to shape and influence development within their area.

Through the Department of Levelling Up, Housing and Communities (DLUHC) Neighbourhood Planning Programme led by Locality, AECOM has been appointed to provide design support to the Bretherton NG by preparing this Design Code document.

The NG would like the Design Codes set out within this document to cover the entire Neighbourhood Plan Area (NPA), the extent of which is illustrated on figure 01 (page 07).

The purpose of the document is to preserve the character of the village and its surroundings, particularly the Conservation Area. To do this, the codes contained within this report cover design issues such as materials to be used, the scale of new buildings in proportion to neighbours, energy efficiency, and sustainable drainage (SuDS).

This will help to ensure that as any new development comes forward, it responds to its context and supports and enhances the quality of the existing local character.

1.2 Methodology

The process that was undertaken to produce this Design Code document is as follows:

- Step 1: On the 3rd March 2023, an inception call was held between AECOM representatives and the NG to understand the aims of the group and confirm the brief.
- Step 2: On the 24th March 2023, AECOM representatives met with the NG to conduct a site visit in order to appreciate the local character and photograph the area.
- Step 3: On 17th May, 2023, AECOM shared a draft Design Code document with the NG for review.
- Step 4: After capturing the feedback from the NG, AECOM issued the final Design Code document in August 2023.

1.3 Design vision

The following design vision headings were informed by conversations between the NG and AECOM representatives at both the inception meeting and the site visit. They contain the following design codes:

Place Design

- Appearance, character and built form
- Materials and detailing
- Parking
- Extensions and alterations
- Conversion of agricultural buildings
- Boundary treatments in new development

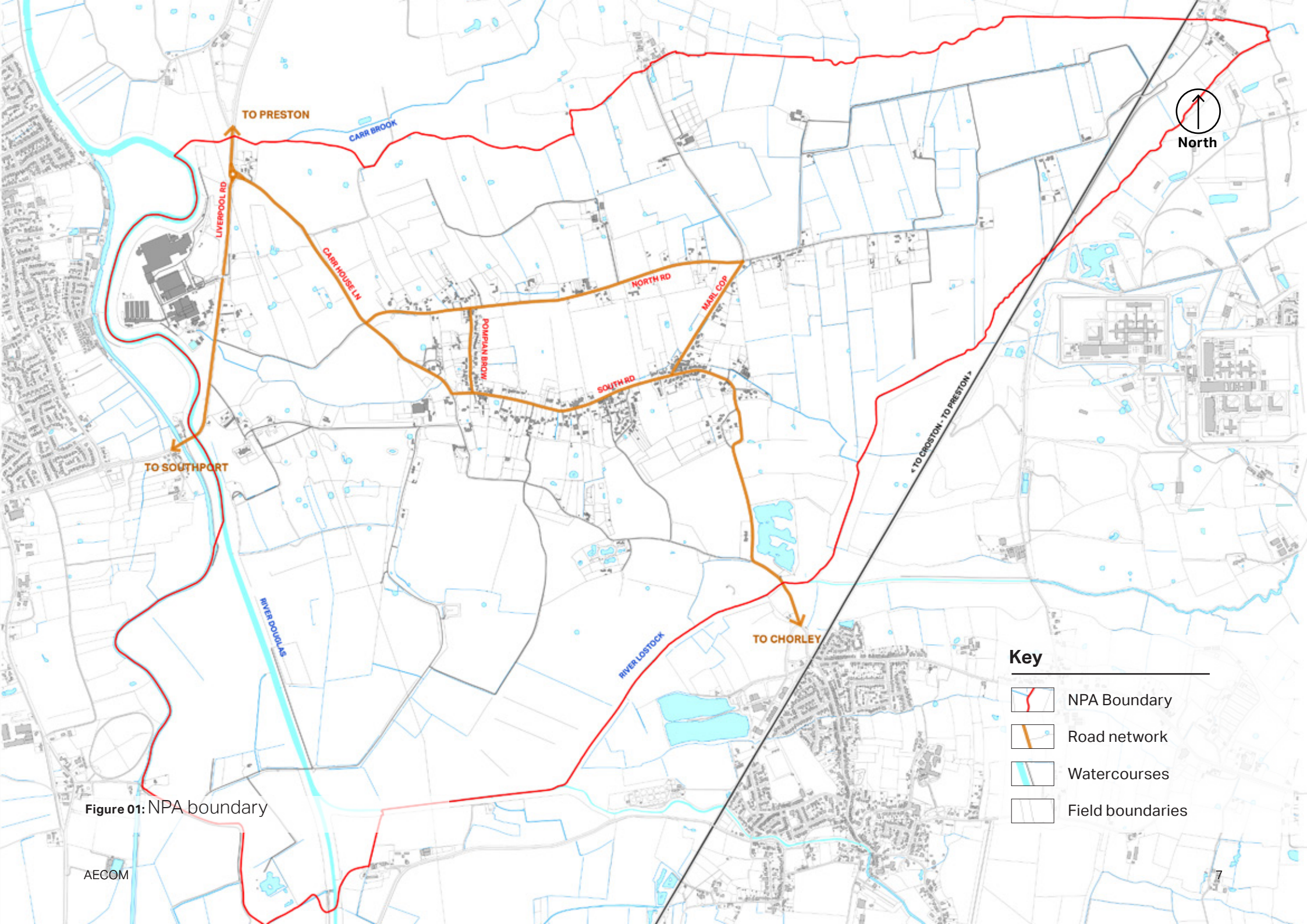
Heritage

- Responding to heritage

Sustainability

- Biodiversity
- EV charging
- Building orientation and passive design
- Sustainable drainage





North

TO PRESTON

LIVERPOOL RD

CARR HOUSE LN

CARR BROOK

NORTH RD

MAIN COP

POPPLTON BROW

SOUTH RD

TO SOUTHPORT

RIVER DOUGLAS

RIVER LOSTOCK

TO CHORLEY

TO CROSTON - TO PRESTON

Key



NPA Boundary



Road network



Watercourses



Field boundaries

Figure 01: NPA boundary

1.4 Vision

The following vision and objectives, taken from the emerging Neighbourhood Plan, have informed the Codes and Guidance set out within this document:

‘As a place to live and work, Bretherton is valued for its quiet, rural village character. This Neighbourhood Plan recognises the special character of the Parish and will take opportunities to sustain and improve the quality of its environment.

The importance of responding to the threats posed by the climate emergency and the need to support the recovery of biodiversity and wildlife is recognised. Bretherton will be a safe, secure and accessible place which supports healthy lifestyles and the environment. Quality design should be sympathetic to the rural heritage and landscape.’

1.5 Objectives

1. To protect and enhance the rural character of Bretherton, particularly in relation to its Conservation Area, Local Green Space, lanes, Public Rights of Way, bridleways, and the open countryside.
2. To support and encourage new and existing businesses and local economic growth opportunities.
3. To support the provision of quality housing which is appropriate in scale and offers a choice of tenure to respond to identified local needs, particularly affordable homes and specialist units.
4. To reverse the decline in Bretherton's wildlife and biodiversity, and enhance these through appropriate actions including the provision of additional open space and habitats, ponds, tree planting and protection of its soils.
5. To work with the appropriate authorities to reduce the impact of traffic passing through the village in terms of noise, safety and roadside parking. To promote sustainable modes of local transport, that offer more choice and reduce car dependency.
6. To identify and encourage sustainable energy options including community assets, that support residents and businesses to transition to net zero carbon solutions.
7. To identify waste management options that encourage recycling to reduce landfill dependency.
8. To work with relevant stakeholders to build climate resilience in water management to reduce the impact of flooding..
9. To identify and promote community facilities, amenities, and infrastructure that will ensure that Bretherton continues to thrive.

1.6 Who will use the guide?

This document will become a valuable tool in securing context driven, high-quality development in Bretherton. It will be used in different ways by different people in the planning and development process, as summarised in table 01 (right).

Developed through a process of co-design and engagement, the document provides an important contextual analysis of the area and sets out expectations of design quality.

This document alone will not automatically secure optimum design outcomes but will help to prevent poor quality development.

Potential users	How they will use the design guidelines
Applicants, developers, & landowners	As a guide to assist applicants, developers and landowners when developing planning proposals in Bretherton, ensuring engagement with the community and the Local Planning Authority and ensuring new development is contextually responsive.
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 or neighbourhood plan group	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.
Community groups & local residents	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: User groups and how they will use the guidance

1.7 Area of study

Bretherton is a small village and parish in the Borough of Chorley. The village is situated 5.3 miles to the southwest of Leyland and 2.2 miles east of Tarleton.

Census data from 2021 indicated a population of 680 within the Neighbourhood Area with a higher proportion of older people compared to the national average. The Neighbourhood Plan Area (NPA) is approximately 981 hectares in size resulting in a density of 0.7 persons per hectare.

Bretherton is situated within the Green Belt which has helped the village retain its rural character. Many of its buildings are residential in use alongside an antiques shop and a cafe.

The village is predominantly arranged across four streets, the B5247 (comprising Flag Lane, South Road and Carr House Lane), Pompian Brow, Marl Cop and the B5248 (comprising North Road). Smaller, rural lanes provide access to outlying farmsteads within the wider landscape.

There are 20 listed buildings and assets within the NPA, including 2 that are listed as Grade II*. The Bretherton Conservation Area was designated in 1990. The boundary extends from the war memorial at the

junction of Carr House Lane and South Road to the west of the main residential area, along South Road to Bamfords Fold to the east.

The wider landscape is characterised by agricultural fields which are often bounded by hedgerow and copses of trees.



Figure 02: Bretherton has a strong relationship with the wider countryside



Figure 03: Significant setback of properties from South Road is a key feature of the Conservation Area



Figure 04: Detached properties on Bamfords Fold

1.8 Application

The code establishes the principles for design considerations in the residential environment of Bretherton within the settlement boundary, as well as for traditional and historic agricultural buildings, and residential properties in the wider parish.

In the parish area, there are farms and businesses that comprise a mix of both traditional farm buildings, mainly of brick construction, and modern buildings, often steel-framed and clad. To the west of the parish is a significant industrial site, GA Petfood Partners, which has a range of large, purpose-built buildings accommodating the manufacturing operations and servicing of the business.

This design code does not specify a design approach for modern agricultural or industrial buildings, which may be appropriate to meet the needs of farms and industrial operations in the parish. Nevertheless, all developments should achieve a high quality of design in accordance with the Local Development Plan policies, Supplementary Planning Design guidance, and best practice guidance.



Figure 05: GA Petfood Partners site looking north



Figure 06: Longfold Farm



Figure 07: Manor House Farm



Figure 08: Major streets across Bretherton's main settlement area



Policy Context

02

2. Policy Context

This section outlines the national and local planning policy and guidance documents that have influenced this design codes and guidance.

The Development Plan for Bretherton comprises:

- The National Planning Policy Framework
- The National Design Guide
- The National Modal Design Code
- Building for a Healthy Life 12
- Central Lancashire Adopted Core Strategy
- Chorley Local Plan
- Supplementary Planning Documents

The following chapter will identify the relevant planning policies from the documents set out above. In all instances, planning applications should make reference to these policies including the codes within this document .

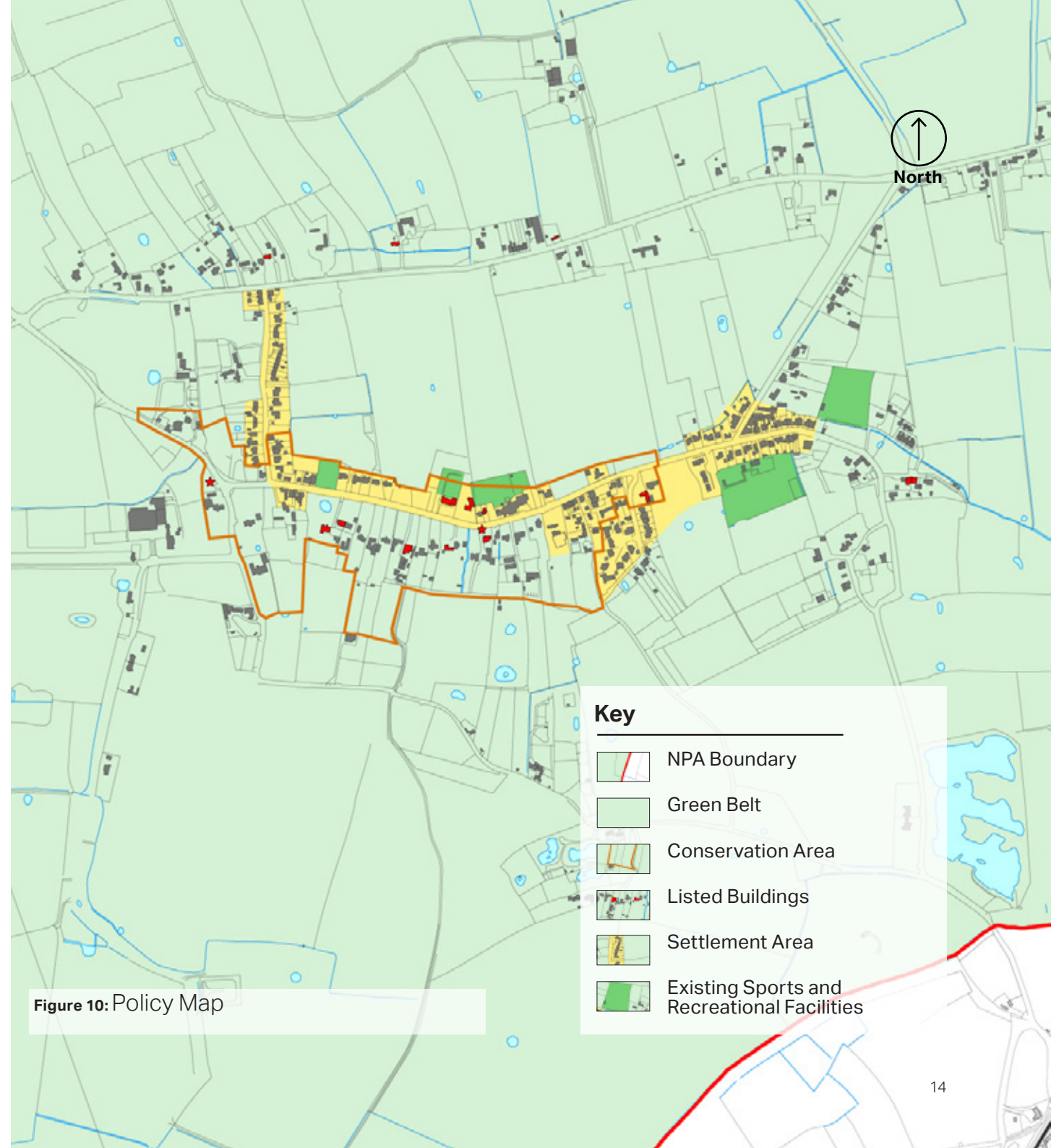


Figure 10: Policy Map

2.1 Planning policy and guidance

This section outlines the national and local planning policy and guidance documents that have influenced the design codes set out in chapter 03.

2.1.1 National Planning Policy & Guidance

This section provides an overview of the relevant policies within the National Planning Policy Framework and highlights recent government initiatives such as the National Design Guide, National Model Design Code, and Homes England adoption of Building for a Healthy Life (formerly Building for Life 12).

National Planning Policy Framework (updated 2021)

The National Planning Policy Framework (NPPF) outlines the Government's overarching economic, environmental, and social planning policies for England. The policies within the NPPF apply to the preparation of Local and Neighbourhood plan areas, and act as a framework against which decisions are made on planning applications.

The parts of the NPPF which are of relevance to this document are:

- Part 1: Achieving Sustainable Development
- Part 5: Delivering a sufficient supply of homes
- Part 8: Promoting Healthy and Safe Communities
- Part 11: Conserving and Enhancing the Natural Environment
- Part 12: Achieving Well-Designed Places
- Part 13: Protecting Green Belt land
- Part 14: Meeting the challenge of climate change, flooding and coastal change
- Part 16: Conserving and Enhancing the Historic Environment

The NPPF notes that development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design, considering local design guidance and supplementary planning documents such as design codes.

The NPPF makes clear that all local planning authorities should prepare design guides or codes consistent with the principles set out in the National Design Guide (NDG) and National and Model Design Code (NMDC) which reflect local character and design preferences.

The lineage between policy and outcomes begins with the NPPF. Design has a central role to play in resolving the complexity of change. Good design is both a process and an outcome. Good design creates useable, user-friendly, enjoyable, and attractive places and spaces. Good process develops clarity, builds consensus, and creates certainty for authorities, professionals, and communities. Good process is based around the National Model Design Code (NMDC) core stages of Vision, Analysis, and Code.

National Design Guide (2019) & National Model Design Code (2021)

These companion documents set out characteristics of well-designed places. They support the ambitions of the NPPF to utilise the planning and development process in the creation of high-quality places. The National Design Guide (NDG) states that 'specific, detailed and measurable criteria for good design are most appropriately set at the local level'. The guides are expected to be used by local authorities, applicants, and local communities to establish further design codes (such as this) and guides that can deliver this in line with local preferences.

National Design Guide (2019)

The National Design Guide (NDG) sets the 10 characteristics of a well-designed place and demonstrates what good design is in practice.

The 10 characteristics are:

- **Context** – enhances the surroundings.
- **Identity** – attractive and distinctive.
- **Built form** – a coherent pattern of development.
- **Movement** – accessible and easy to move around.
- **Nature** – enhanced and optimised.
- **Public spaces** – safe, social and inclusive.
- **Uses** – mixed and integrated.
- **Homes and buildings** – functional, healthy, and sustainable.
- **Resources** – efficient and resilient.
- **Lifespan** – made to last.

National Model Design Code (2021)

The National Model Design Code (NMDC) sets a baseline standard of quality and practice.

The NMDC provides detailed guidance on the production of design codes, guides, and policies to promote successful design. It expands on 10 characteristics of good design set out in the NDG.

Building for a Healthy Life (2020)

Building for a Healthy Life (BHL) is the new name for Building for Life, the government-endorsed industry standard for well-designed homes and neighbourhoods. The new name reflects the key role that the built environment has in promoting wellbeing.

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 schemes, as well as useful prompts and questions for planning applicants to consider during the different stages of the design process.

2.1.2 Local Policy Context

The Bretherton NPA is located within the Chorley Borough Council Local Authority, which itself is located within the Central Lancashire County Council administrative area.

The following documents are essential references to local policy and guidance that have informed the design codes:

- The Central Lancashire Core Strategy (adopted 2012) - this document is used to guide planning decisions. It sets out the vision, objectives and spatial strategy for Central Lancashire to 2026.
- The Chorley Local Plan 2012-2026 (adopted 2015) sets out how planning applications should be decided, and identifies areas for development and areas which should be protected from development.
- The Joint Lancashire Minerals and Waste Local Plan prepared by Lancashire County Council consists of an adopted Minerals and Waste Core Strategy and an adopted Minerals and Waste Site Allocations Development Plan Document.
- Relevant Supplementary Planning Documents

(1) Central Lancashire Adopted Core Strategy (2012)

The Central Lancashire Core Strategy has been produced by the Central Lancashire authorities of Preston, South Ribble and Chorley, with assistance from Lancashire County Council.

The Core Strategy is a key document in Central Lancashire's Local Development Framework. Its purpose is to help coordinate development in the area and contribute to boosting investment and employment. Above all it is a strategic policy document and will encourage sustainable managed growth, whilst protecting and enhancing green spaces and access to open countryside.

The Central Lancashire Core Strategy is supported by the individual local plans, which were produced by each respective council in 2015.

The relevant Core strategy policies to the design codes within this document include:

Policy 5: Housing Density

This policy seeks to secure densities of development which are in keeping with local areas and which will have no detrimental impact on the amenity, character, appearance, distinctiveness, and environmental quality of an area.

Policy 16: Heritage Assets

This policy seeks to protect and seek opportunities to enhance the historic environment, heritage assets and their settings by:

- a) Safeguarding heritage assets from inappropriate development that would cause harm to their significances.
- b) Supporting development or other initiatives where they protect and enhance the local character, setting, management and historic significance of heritage assets, with particular support for initiatives that will improve any assets that are recognised as being in poor condition, or at risk.

Policy 17: Design of New Buildings

The design of new buildings will be expected to take account of the character and appearance of the local area, including the following:

- Siting, layout, massing, scale, design, materials, building to plot ratio and landscaping.
- Safeguarding and enhancing the built and historic environment.
- Being sympathetic to surrounding land uses and occupiers and avoiding demonstrable harm to the amenities of the local area.
- Ensuring that the amenities of occupiers of the new development will not be adversely affected by neighbouring uses and vice versa.
- Linking in with surrounding movement patterns and not prejudicing the development of neighbouring land, including the creation of landlocked sites.
- Minimising opportunity for crime, and maximising natural surveillance.
- Providing landscaping as an integral part of the development, protecting existing landscape features and natural assets, habitat creation, providing open space, and enhancing the public realm.
- Making provision for the needs of special groups in the community such as the elderly and those with disabilities.
- Promoting designs that will be adaptable to climate change, and adopting principles of sustainable construction including Sustainable Drainage Systems (SuDS); and
- Achieving Building for Life rating of 'Silver' or 'Gold' for new residential developments.



(2) Chorley Local Plan (2015)

The Chorley Local Plan 2012 – 2026 (2015) sets out specific policies for planning applications to consider. The Local Plan policies relevant to the design codes within this document include:

ST4 Parking Standards

Policy ST4 provides guidance on parking across all types of development in the Borough. The policy, alongside the guidance set out in Appendix A, sets out that residential development must provide the following:

- 1 bedroom = 1 vehicle space with the allocation of 1 bicycle parking spaces
- 2/3 bedrooms = 2 vehicle spaces with the allocation of 2 bicycle parking spaces
- 4+ bedrooms = 3 vehicle spaces with the allocation of 4 bicycle parking

HS5 House Extensions

Policy HS5 sets out the following criteria for housing extensions in the Borough:

- The extension must respect the existing house and the surrounding buildings in terms of scale, size, design and facing

materials, without innovative and original design features being stifled.

- There is no unacceptable adverse effect on the amenity of neighbouring properties through overlooking, loss of privacy or reduction of daylight.
- The proposal does not have an unacceptable adverse impact on highway safety.
- And in the case of the Green Belt, the proposed extension should not result in a disproportionate increase in the volume of the original dwelling. Increases of up to 50% (volume) are not considered disproportionate.

HS6 Replacement Dwellings

Policy HS6 provides guidance on replacement dwellings across the Borough. It sets the following criteria:

- The proposed replacement dwelling respects the surrounding buildings in terms of scale, size, design and facing materials, without innovative and original design features being stifled.

- There is no unacceptable adverse effect on the amenity of neighbouring properties through overlooking, loss of privacy or reduction of daylight.
- Safe and suitable access to the site can be achieved. And in the Case of the Green Belt, Safeguarded Land or Area of Other Open Countryside:
- The proposed replacement dwelling would not detract from the openness to a greater extent than the original dwelling. and
- The proposed replacement dwelling would not be materially larger than the dwelling it replaces nor involves enlarging the residential curtilage. Increases of up to 30% (volume) are not considered to be materially larger.

HS7 Rural Infilling

Policy HS7 provides guidance on limited infilling for housing in smaller villages. Infill development is described as the filling of a small gap in an otherwise built-up street frontage, e.g. typically a gap which could be filled by one or possibly two houses of a type in keeping with the character of the street frontage. When assessing

applications for rural infill sites, the Council will also have regard to site sustainability, including access to public transport, schools, businesses and local services and facilities.

Proposals must also address the following criteria:

- The existing buildings form a clearly identifiable built-up frontage.
- The site lies within the frontage, with buildings on either side, and its development does not extend the frontage.
- The proposal would complement the character and setting of the existing buildings.

HS9 Conversion of Rural Buildings in the Green Belt and Other Designated Areas

The re-use of existing buildings in the Green Belt, will be allowed providing all of the following criteria are met:

- The proposal does not have a materially greater impact on the openness of the Green Belt and the purposes of including land in it.

- The proposal would not harm the character or quality of the countryside or landscape.
- The re-use of the building must not be likely to result in additional farm buildings which would have a harmful effect on the openness of the Green Belt.
- If an agricultural building, it is not one substantially completed within ten years of the date of the application.
- The building is of permanent and substantial construction and capable of conversion without more than 30% reconstruction.
- The building must be capable of conversion without the need for additions or alterations which would change its existing form and character. Particular attention will be given to curtilage formation which should be drawn tightly around the building footprint and the requirement for outbuildings, which should be minimal.
- The building must already have, or there exists the capability of creating, a reasonable vehicular access to a public highway that is available for use without

creating traffic hazards and without the need for road improvements which would have an undue environmental impact.

- The development would not result in the loss of or damage to any important wildlife habitat or protected species.

BNE1 Design Criteria for New Development

Policy BNE1 provides design guidance on new development, including extensions, conversion and free-standing structures on matters pertaining to scale, massing, and character together with materials and building proportions. The policy sets out the following guidance for new development:

- The proposal does not have a significantly detrimental impact on the surrounding area by virtue of its density, siting, layout, building to plot ratio, height, scale and massing, design, orientation, and use of materials.
- The development would not cause harm to any neighbouring property by virtue of overlooking, overshadowing, or overbearing.

- The layout, design, and landscaping of all elements of the proposal, including any internal roads, car parking, footpaths and open spaces, are of a high quality and respect the character of the site and local area.
- The residual cumulative highways impact of the development is not severe, and it would not prejudice highway safety, pedestrian safety, the free flow of traffic, and would not reduce the number of on-site parking spaces to below the standards stated in Site Allocations Policy – Parking Standards, unless there are other material considerations which justify the reduction.
- The proposal would not adversely affect the character or setting of a listed building and/or the character of a conservation area and/or any heritage asset including locally important areas.
- The proposal would not have a detrimental impact on important natural habitats and landscape features such as historic landscapes, mature trees, hedgerows, ponds, and watercourses. In some circumstances where on balance it is considered acceptable to

remove one or more of these features then mitigation measures to replace the feature/s will be required either on or off-site.

- The proposal would not cause an unacceptable degree of noise disturbance to surrounding land uses.
- The proposal includes measures to help to prevent crime and promote community safety.

BNE8 Protection and Enhancement of Heritage Asset

Policy BNE8 states that development affecting listed assets or conservation areas must sustain, conserve and, where appropriate, enhance the significance, appearance, character and setting of the heritage asset itself and the surrounding historic environment and where they show consideration for the following:

- The conservation of features and elements that contribute to the heritage asset's significance and character. This may include chimneys, windows and doors, boundary treatments, original roof coverings, earthworks or buried remains, shop fronts or elements of shop fronts

in conservation areas, as well as internal features such as fireplaces, plaster cornices, doors, architraves, paneling and any walls in listed buildings.

- The reinstatement of features and elements that contribute to the heritage asset's significance which have been lost or damaged.
- The conservation and, where appropriate, the enhancement of the setting of heritage assets.
- The removal of additions or modifications that are considered harmful to the significance of any heritage asset. This may include the removal of pebbledash, paint from brickwork, non-original style windows, doors, satellite dishes or other equipment.
- The use of the Heritage Asset should be compatible with the conservation of its significance. Whilst the original use of a building is usually the most appropriate one it is recognised that continuance of this use is not always possible. Sensitive and creative adaptation to enable an alternative use can be achieved and innovative design solutions will be positively encouraged.

Local Planning Policy & Guidance	Relevant Policies
Central Lancashire Core Strategy	Policy 5: Housing Density Policy 6: Housing Quality Policy 7: Affordable and Special Needs Housing Policy 16: Heritage Assets Policy 17: Design of New Buildings Policy 18: Green Infrastructure Policy 21: Landscape Character Areas Policy 22: Biodiversity and Geodiversity
Chorley Local Plan	ST1 Provision or Improvement of Footpaths, Cycleways, Bridleways and their Associated Facilities in Existing Networks and New Development ST4 Parking Standards HS3 Private Residential Garden Development HS4A Open Space Requirements in New Housing Developments HS5 House Extensions HS6 Replacement Dwellings HS7 Rural Infilling HS8 Rural Affordable Housing – Rural Exception Sites HS9 Conversion of Rural Buildings in the Green Belt and Other Designated Areas HS10 Agricultural Workers Dwellings in the Countryside EP3 Development Criteria for Business and Industrial Development EP4 Employment Development in Residential Areas BNE1 Design Criteria for New Development BNE5 Redevelopment of Previously Developed Sites in the Green Belt BNE6 Light Pollution BNE7 Unstable Land BNE8 Protection and Enhancement of Heritage Asset BNE9 Biodiversity and Nature Conservation BNE10 Trees HW2 Protection of Existing Open Space, Sport, and Recreation Facilities HW6 Community Facilities

Table 02: Relevant local planning policies



Figure 11: Detached property off Flag Lane

2.1.3 Supplementary Planning Documents (SPDs)

Chorley Borough Council have produced several Supplementary Planning Documents (SPDs) which offer additional guidance of a more specialised nature that cover a range of issues, both thematic and site-specific in scope. Chorley's portfolio of SPDs positively address several local planning matters, complementing several policies in its Local Plan. Relevant adopted SPDs include:

- Affordable Housing (Central Lancashire): provides advice on how Policy 7 (Affordable Housing) is to be implemented. It includes guidance on the range of approaches, standards and mechanisms required to deliver a range of affordable housing to meet local needs
- Rural Development (Central Lancashire): sets out the approach to development in rural areas
- Design Guide (Central Lancashire) provides an overview of the design principles the Council will employ when considering planning proposals.

The Design Guide provides guidance on the following design principles; movement and legibility, space and enclosure, mixed uses and tenures, adaptability and resilience, resources and efficiency and architecture and townscape.

- Biodiversity and Nature Conservation (Central Lancashire) provides guidance on biodiversity and nature conservation.
- Renewable and Low Carbon Energy (Chorley Council) provides further guidance on Core Strategy Policies 27 (Sustainable Resources and New Developments) and 28 (Renewable and Low Carbon Energy Schemes)
- Householder Design Guidance (Chorley Council) relates to the design standards set within Core Strategy Policy 17 on Design of New Buildings. Local Plan Policy HS5 on House Extensions. Local Plan Policy BNE1 on Design Criteria for New Development and the Central Lancashire Design SPD (2012). It sets out the general principles which should be

considered when designing an extension and gives specific advice on particular types of extensions and alterations which should be addressed as part of any planning application

- Appendix 2 of the Design Guidance Supplementary Planning Guidance (Chorley Council 2004) refers to guidelines for new housing developments.



Figure 12: Images of the NPA

A photograph of a modern brick house with a dark roof and a large green circle overlay containing text. The house has a red brick facade, a black door, and a black garage door. A small skylight is visible on the roof. The background shows a clear blue sky with some clouds and bare trees. A large green circle is overlaid on the right side of the image, containing the text 'Analysis and Design Codes' and the number '03' in white.

**Analysis and
Design Codes**

03

3. Analysis and Design Codes

This chapter presents an analysis of the neighbourhood area according to a series of themes. These help to understand the variation in character across the area and inform a series of design codes that will shape and influence future development across Bretherton.

3.1 Introduction (See also 1.8)

This chapter provides analysis on a number of key themes including built form, character, heritage and sustainability among others. These themes were identified through engagement with the NG with the aim of meeting the vision and objectives set out by the Neighbourhood Plan.

It is important for any planning proposal that full account is taken of the local context and that the proposed design embodies the 'sense of place', both in terms of local character and distinctive features such as listed buildings and conservation areas.

This study informs a series of design codes that will guide future development proposals in Bretherton.

Bretherton's location in the Green Belt limits potential development opportunities to the provisions set out in chapter 13 of the NPPF (para 149) including infill proposals, the redevelopment of previously developed

land, replacement dwellings and extensions and alterations to existing buildings. In all cases, proposals must meet the criteria set out in para 149 of the NPPF.

The guidelines developed in this section will focus on residential environments however, new housing development should not be viewed in isolation and mixed uses are encouraged where appropriate, particularly the provision of social infrastructure. First and foremost, the design and layout of new buildings and places must respond to the wider character and landscape context.

Future planning proposals must reference the design codes within this chapter including the policies and guidance set out in chapter 02 to ensure compliance with the Development Plan. Upon adoption, proposals must also comply with the policies set out in the Bretherton Neighbourhood Plan.



3.2 Place Design

3.2.1 Character and density

The NPA is rural in character with its built form arranged across several streets comprising a rectangle ribbon of development surrounding several fields.

Due to the linear and ribbon-like development pattern of the village, building density is comparatively low with the average density ranging between 5-15dph (dwellings per hectare).

Beyond the four streets which comprise the main settlement area of Bretherton, there are several agricultural holdings, many of which are still operating as working farms.

Notwithstanding the conservation area, which has a distinctive character when compared to the remainder of Bretherton, there is an eclectic mix of characteristics with many architectural features and materials reflected across the entire NPA. However, this study has identified four broad character areas:

1. The Conservation Area.
2. South Road and Marl Cop.
3. North Road.
4. Pompian Brow.

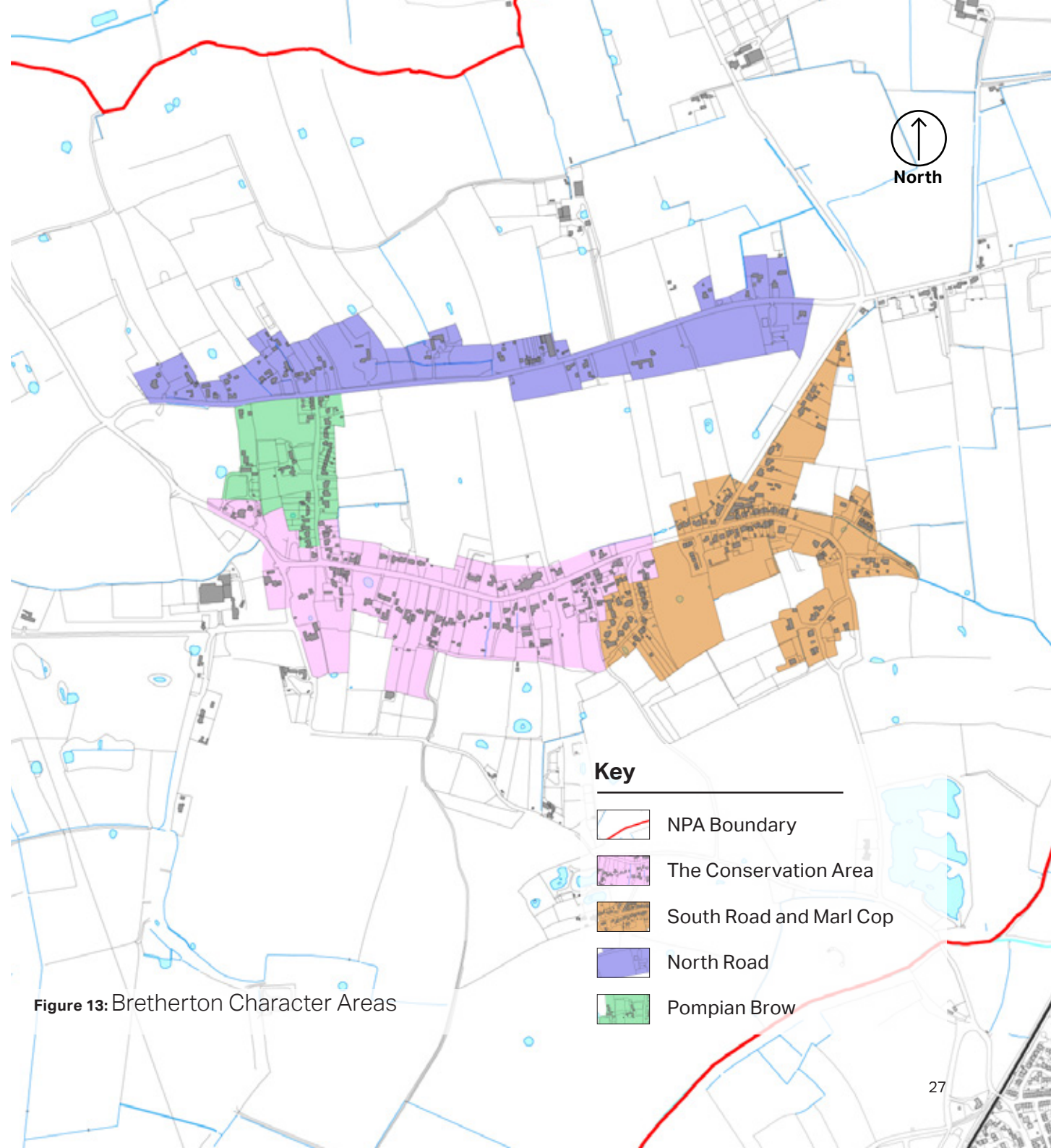


Figure 13: Bretherton Character Areas

3.2.2 Built form and housetypes

Property types vary significantly with a mix of terraced properties, semi-detached and detached dwellings spread throughout the village. According to the latest Census data, there are approximately 280 dwellings within the NPA, comprising:

- Detached (including bungalows): 155 (55%)
- Semi-detached: 73 (26%)
- Terraced: 50 (18%)
- Flats: 2 (0.7%)

The built form varies with:

- South Road and Marl Cop comprising a mix of terraced, semi-detached and detached properties with a strong and uniform building line.
- The Conservation Area comprising a mix of housetypes with buildings significantly setback from the road with long front gardens.
- North Road with some larger properties within larger plots.
- Pompian Brow comprising a slightly higher dwelling density and a mix of detached and semi-detached properties.



Figure 15: Semi-detached properties on South Road



Figure 16: Terraced properties off Flag Lane



Figure 14: Larger detached properties with ancillary buildings, setback from the road



Figure 17: Bungalows on The Apiary



Figure 18: Detached properties with varying scale and roof type



Figure 19: Converted and extended agricultural buildings

3.2.3 Scale and roofscape

Bretherton's buildings are predominantly two storeys in scale with several examples of single storey dwellings along South Road and three storey buildings such as the Rectory adjacent to St Johns' Church. St John's Church and the Congregational Church also exceed two storeys in height and are notable features in the skyline.

Whilst a degree of uniformity and rhythm is created by several terraced and semi-detached properties, roofscape across the NPA varies significantly, as illustrated on the adjacent imagery.

Properties of varying scale and roof profile adjacent to one another create variety and interest along the streetscene.

Roofing material treatment across the NPA also varies with several examples of grey slate and concrete pantile tiling. Chimneys also appear to be a common roofline feature.



Figure 20: Varying roofscapes and types



Figure 21: Uniform eaves and ridge height



Figure 22: Varying heights and orientation of gables



Figure 23: Mix of concrete pantile and slate roof tiling

3.2.4 Materials and detailing

Red brick is the dominant elevational material across Bretherton, arranged predominantly in a stretcher bond.

There are also several instances of white render, mottle brick and pebbledashed properties which provide visual articulation along the streetscene.

Detailing is rather limited across the NPA however many properties, particularly semi-detached and terraced properties along South Road, include dentilation beneath the eaves. This is a particularly strong characteristic, and alongside roofscape, help create a uniformity and rhythm along the streetscene.

Window openings are typically surrounded by light stone sills and lintels. Stone banding delineating between storeys is also a common feature across the NPA.

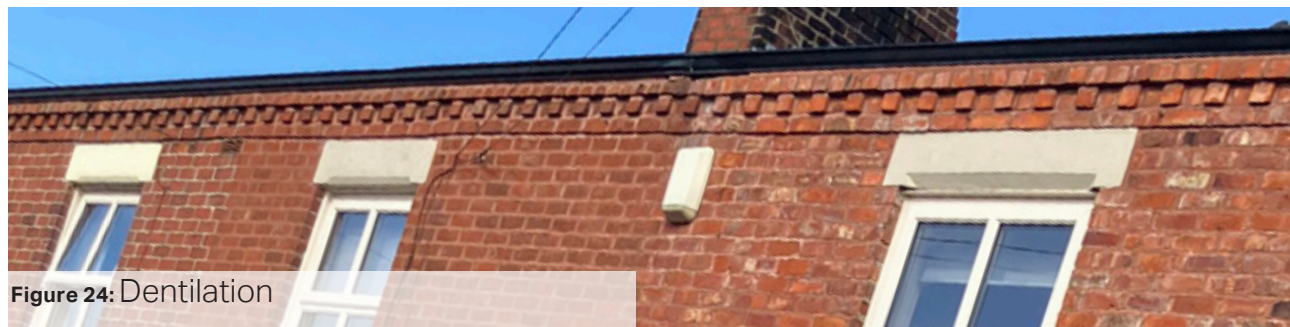


Figure 24: Dentilation



Figure 26: Stone sills and lintels



Figure 27: White render



Figure 25: Stone banding delineating storeys

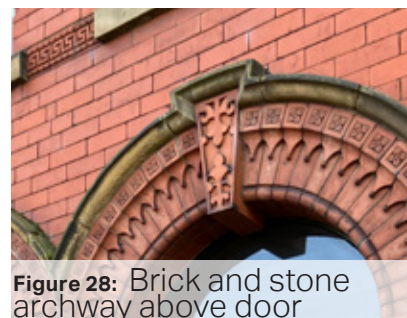


Figure 28: Brick and stone archway above door



Figure 29: Mottled brickwork

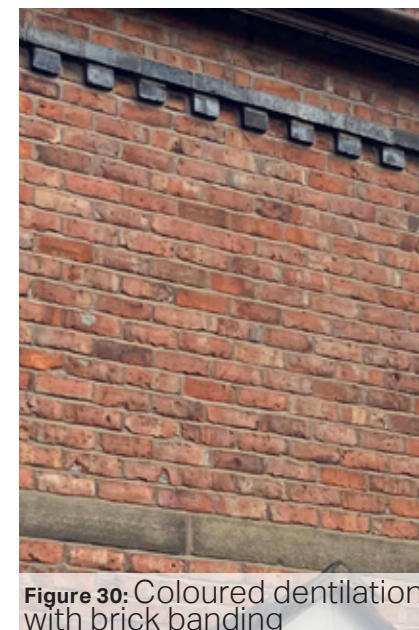


Figure 30: Coloured dentilation with brick banding

3.2.5 Boundaries and setbacks

Boundary treatments across the NPA vary significantly. Hedgerow and low masonry walls are the dominant boundary treatment as illustrated on the adjacent imagery. Where open front boundaries are common, hedgerow side boundaries help delineate between property boundaries.

A strong characteristic of the larger detached properties within the conservation area are the significant setback of the property behind a hedgerow from the road. Terraced properties however, appear to be set closer to the back of the pavement.



Figure 32: Open front boundaries



Figure 33: Low masonry walls



Figure 34: Masonry walls with hedgerow



Figure 35: Significant setback from the road

3.2.6 Extensions and alterations

There are many cases of extensions to existing properties across the NPA. Side and rear extensions are typically subservient to the original dwelling and utilise the same or similar materials. This allows the extension to contribute rather than detract from the visual qualities of the streetscene whilst also enhancing the appearance of the original dwelling.



Figure 36: Side extension



Figure 37: Side extension



Figure 38: Rear extension



Figure 39: Marl Cop

3.2.7 Design Code 01: Appearance, character and built form

1. Density

The density of new developments must be sympathetic to its context and comprise a dwellings per hectare (dph) of no more than 15 dph.

2. Character

New development, redevelopment, or alterations to existing properties, must reflect the materials and colours set out in Design Code 02 and must not detract from the visual qualities of the streetscene and neighbourhood in which it resides.

3. Over-development

New buildings, replacement buildings, and alterations to existing properties must not detract from the scale, bulk and form of adjacent properties on the street and should seek to reflect that of adjacent properties to ensure character compliance.

4. Orientation

New buildings must:

- a. Be orientated to provide a degree of overlooking and natural surveillance to streets.

- b. On key corners provide an active frontage (doors / fenestration) on both sides to improve site and village legibility.

- c. Define the streets and spaces between them, not the other way around.

5. Building line

New buildings must reflect the building line of adjacent properties. A variation of +/- 1m will be acceptable to provide visual interest on the streetscene.

6. Facade

Building façade design should respect the horizontal rhythm of plots and building subdivisions on the street to integrate and maintain visual continuity or add to the visual interest where required.

7. Fenestration

The fenestration (windows) and emphasis of existing properties should be taken into account when designing new properties.

Where appropriate, stone sills and lintels should surround openings.

Fenestration proportions (i.e., ratio of solid to void and verticality) must respond to the existing character of adjacent buildings.

8. Roofscape

Building heights should vary between 1 and 2 storeys depending on adjacent plots. A variable eaves line and ridgeline is allowed to create interest but variation between adjacent buildings should be a maximum of +/- 0.5 storeys in general.

New and replacement buildings, including alterations to existing properties, should not exceed 2.5 storeys.

9. Ancillary

Integrate bin/ cycle storage into the design of the building, so that it is easily usable and doesn't detract from the visual aesthetics of the street.

Relevant Development Plan policies (see chapter 02)

CLCS policies 5 Housing Density, 17 Design of New Buildings

CLP policies HS5 House Extensions, HS6 Replacement Dwellings, HS7 Rural Infilling, HS9 Conversion of Rural Buildings in the Green Belt and Other Designated Areas, BNE1 Design Criteria for New Development

Rural Development SPD, Design Guide SPD, Householder Design Guidance SPD.

3.2.8 Design Code 02: Materials and detailing

There are dominant materials and architectural styles across Bretherton that can be referenced in any development. This is vital to upholding Bretherton’s distinct identity, which is strongly featured in the detailing of its built form.

1. Materials and colours

- a. Red brick is the most prevalent material across Bretherton and development should seek to utilise this material as often as possible.
- b. The use of mottled brick and pale/white render is encouraged on certain facades to provide contrast and interest along the streetscene.
- c. Materials should be natural in appearance and preferably locally sourced as this will contribute to a cohesive material and colour palette across Bretherton.
- d. Muted or darker tones of material are encouraged where appropriate to minimise visibility of development from the surrounding landscape.

- e. Grey slate tiles and concrete pantile tiling are encouraged for roofs. Reference should be made to adjacent properties where appropriate.

2. Detailing

- a. Decorative brick and stone detailing is encouraged. Where infill proposals are proposed, the extension of existing detailing, such as dentilation, is preferable.
- b. At key junctions, corners and focal points, architectural detailing must be used to articulate the building. This includes creating an active frontage on two sides of the building to effectively turn the corner.

Designers of any future development should positively respond to the material palette of adjacent buildings. Contemporary designs featuring high quality and sustainable alternative materials may be acceptable.

Deviating from traditional materials and aesthetics may be considered where innovative design and sustainability is demonstrated. The use of red brick and pale render is encouraged to provide contrast and interest along the streetscene.

Relevant Development Plan policies (see chapter 02)

CLCS policies 5 Housing Density, 17 Design of New Buildings

CLP policies HS5 House Extensions, BNE1 Design Criteria for New Development

Colour palette



Materials and details



3.2.9 Design Code 03: Parking

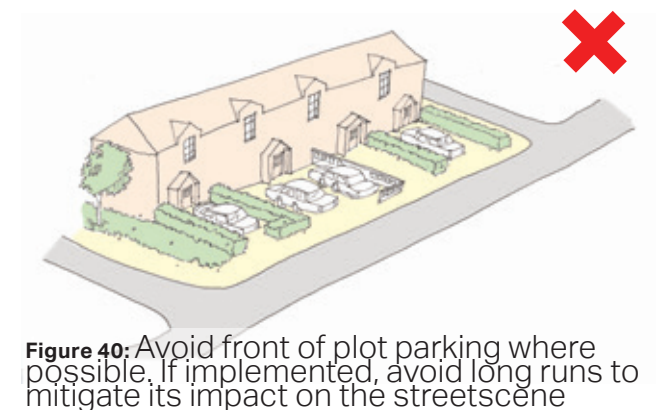
New development that proposes, or impacts the existing provision of, car parking must apply the following design considerations:

- a. The number of car parking spaces required should be proportional to the property's expected occupation. Reference should be made to Chorley Local Plan policy ST4.
- b. New parking spaces should be integrated on plot with parking spaces set behind the building line, generally to the side or rear of the property.
- c. For narrow dwellings it is preferred to retain a small front garden with a boundary wall as opposed to an open hard surface parking space. This will require the provision of a separate parking court.
- d. Where parking is required to the front of the plot it should be afforded sufficient space and utilise native hedgerows to screen cars laterally from the street. Front of property parking shall not be in a run of in excess of 5 properties to avoid detracting from the visual qualities of the streetscene.

- e. To contribute towards an effective drainage strategy, porous surfaces and green parking spaces (for example grass-crete) must be considered at the planning stage. See Design Code 11.
- f. New buildings must provide a strong degree of overlooking and natural surveillance where parking courts are proposed.
- g. Carefully consider the location of visitor parking provision. Visitor parking shall not occupy spaces that lie adjacent to the site edge.
- h. Extensions or alterations to existing properties will not result in the loss of on-plot parking provision, thus leading to an increase of on-street parking

Relevant Development Plan policies (see chapter 02)

CLP policies ST4 Parking standards



3.2.10 Design Code 04: Extensions and alterations

- a. Extensions to existing properties must be subservient to the original building, or of an appropriate scale.
- b. Extensions to the front of the property should be avoided as this may compromise visual cohesion with the street frontage.
- c. Extensions to historic buildings, or within the setting of listed assets, should be sympathetic and respond sensitively to the original character of the building or nearby listed assets.
- d. Material palettes and style of the extension should be carefully chosen to blend cohesively with the original form and features.
- e. Extensions must not exceed a 45 degree splay from the centre of the window of the nearest habitable window of an adjacent window to avoid a reduction in daylight.

Relevant Development Plan policies (see chapter 02)

CLP policies HS5 House Extensions

3.2.11 Design Code 05: Conversion of agricultural buildings

Conversion of existing agricultural buildings must:

- a. Preserve the agricultural character of the building.
- b. Have a minimal visual impact on the landscape in which it relates.
- c. Be fit for purpose but also designed to be sensitive to their surroundings, integrating into the wider landscape setting.
- d. Ensure that new openings for windows and doors complement originals in size, form and location.
- e. Retain, reuse and repair wherever possible traditional outbuildings and existing boundaries.
- f. Ensure that new boundaries follow existing boundary lines and incorporate existing natural features such as hedgerows, walls or footpaths.

Relevant Development Plan policies (see chapter 02)

CLP policies HS6 Replacement Dwellings, HS9 Conversion of Rural Buildings in the Green Belt, BNE1 Design Criteria for New Development



Figure 43: Converted farm building on South Road

3.2.12 Design Code 06: Boundary treatments on new development

Boundary treatments in new development must:

- a. Reflect and reinforce local character by demonstrating typical Bretherton boundary treatments. These include:
 1. Native hedgerow
 2. Low masonry walls (red brick)
- b. Avoid ambiguous plot boundaries by providing clear visual and physical boundaries between public and private spaces, as well as between dwellings.
- c. Avoid long stretches of property boundary that face public areas being made of wooden fencing.
- d. Where wooden fencing is used its colour should be muted or of darker tones so not to look out of place. Low-quality wooden fencing is discouraged.
- e. The size and scale of boundary treatments should respond to both its positioning (i.e. whether its a front, side or rear boundary) and adjacent properties.
- f. Employ soft boundary treatment through native hedgerow and tree planting on site edges to promote a cohesive transition between the built and natural environment.
- g. The planting of a diverse range of native hedgerow species such as hawthorn is encouraged on all new developments. The implementation of laurel hedging will not be supported on new developments.

Relevant Development Plan policies (see chapter 02)

CLP policies BNE1 Design Criteria for New Development



Figure 44: Marl Cop

■ Good and ■ bad practice:



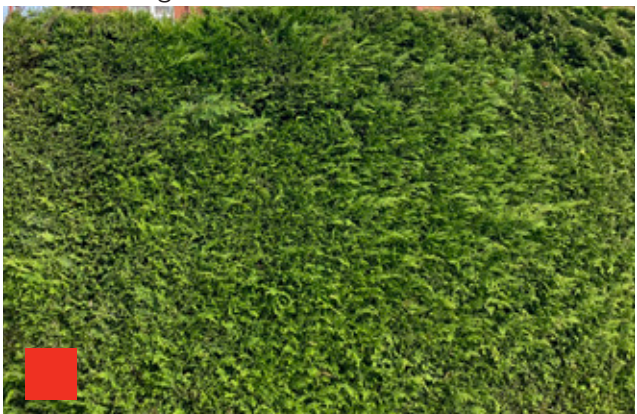
Hedgerow is a strong and common front boundary treatment across the NPA. The planting of a diverse range of native species is encouraged.



Low hedgerow boundaries can also encourage a positive relationship with the street and the adjacent property.



A combination of low masonry walls and hedgerow provides both a strong and soft boundary feature along the streetscene.



Leylandii, laurel, conifer and any non-native hedging will not be supported on new and redevelopment buildings and alterations.



Close boarded / fencing delineating front boundaries facing the street (and that are visible from the street) are not acceptable due to its negative visual impact on the streetscene.



Boundary fencing to the side or rear of the property (not visible from the street) is acceptable to provide security to the plot.

3.3 Heritage

3.3.1 Listed Assets

There are 20 listed buildings and assets within the Neighbourhood Area, including 2 that are listed as Grade II*. A comprehensive list is provided overleaf.

3.3.2 Conservation Area

The Bretherton Conservation Area was designated in 1990 and includes 11 of the 20 listed buildings and assets in Bretherton.

It extends from the war memorial at the junction of Carr House Lane and South Road to the west of the main residential area, along South Road to Bamfords Fold to the east.

A strong characteristic of the Conservation Area is the significant setback of properties behind long front gardens. This is particularly prevalent on properties to the south of South Road where buildings have a setback of 10-15m. Front gardens typically comprise of soft landscaping and have significant vegetation within the boundary including hedgerow, orchards and tree planting.

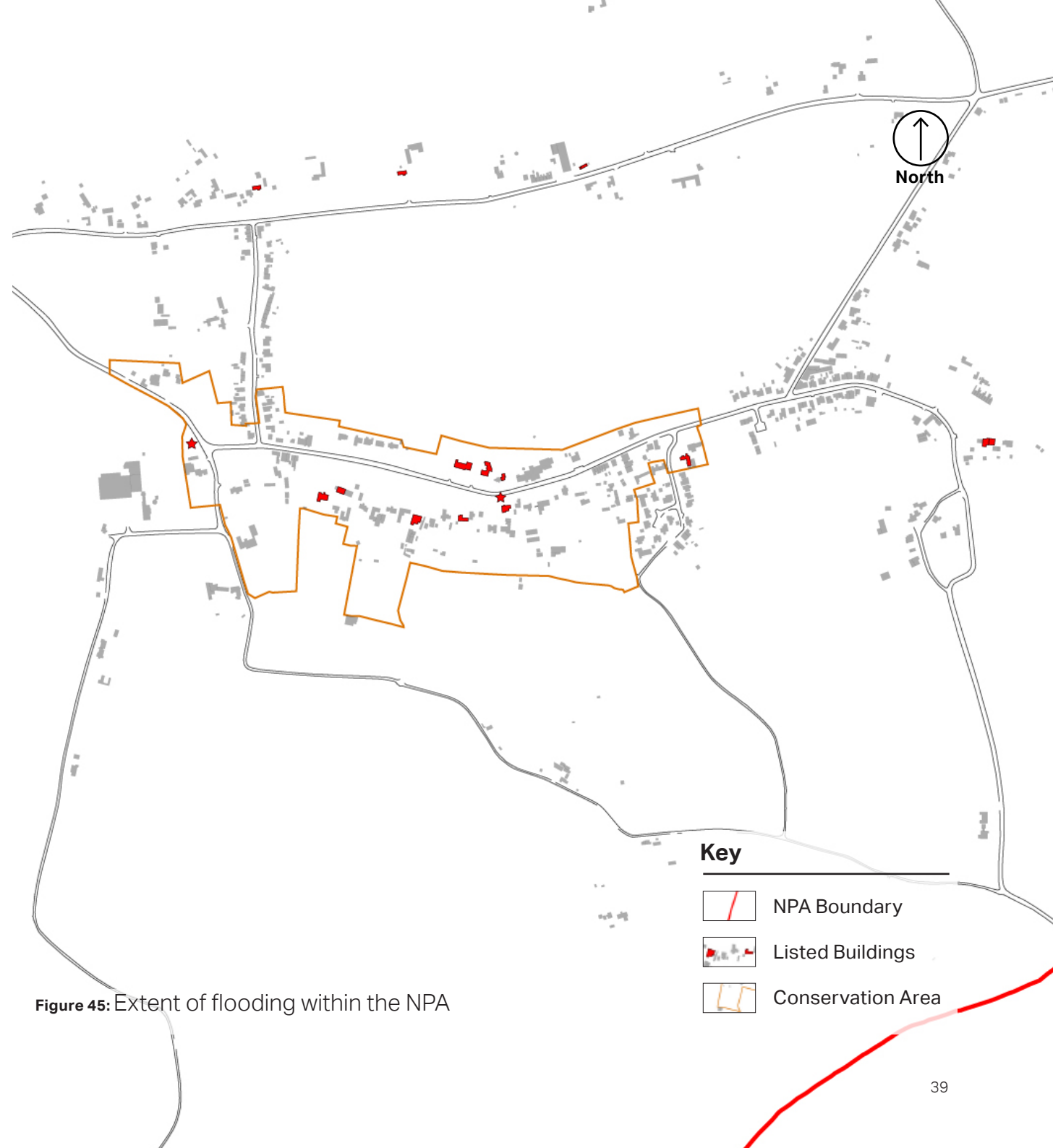


Figure 45: Extent of flooding within the NPA

Grade II*

1. Bank Hall (Grade II*)
2. Carr House (Grade II*)

Grade II

3. Farmhouse c. 20m east of Watson Cottage (Grade II)
4. White House Farmhouse (Grade II)
5. Smithy Cottage (Grade II)
6. Bretherton War Memorial (Grade II)
7. Blackamoor Hall (Grade II)
8. Barn c. 30m northeast of Blackamoor Hall (Grade II)
9. Holly Farmhouse (Grade II)
10. Martinside Farmhouse (Grade II)
11. Church of St. John the Baptists (Grade II)
12. Rectory (Grade II)
13. 152 & 154, South Road (Grade II)
14. Base of Cross on south side of road at corner of drive to Church House Farmhouse (Grade II)
15. Church House Farmhouse (Grade II)
16. Iron Barn Farmhouse (Grade II)
17. Owl Barn and Copeland Lodge (Grade II)
18. Farm Building, the southern of 2 parallel ranges c. 100m west of Bank Hall Farmhouse (Grade II)
19. The Old Windmill near Bank Hall (Grade II)
20. Tarleton Bridge (Grade II)



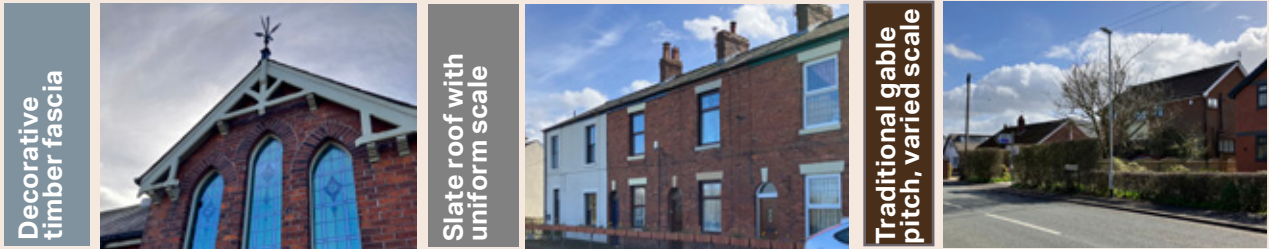
Colour palette

Red / Orange	Mottled Brown	Grey
Brown	Blue / Green	Pale

Materials and details



Roofscape



Boundary treatments



3.3.3 Design Code 07: Responding to heritage

All development proposals within, or adjacent to, the conservation area, or affecting a listed asset, must:

- a. Respond to heritage features, such as reflecting materials, detailing and openings whilst avoiding pastiche design which detracts from the appearance of the historical character.
- b. Respect the historic layout and pattern of the Conservation Area, responding to positive characteristics in terms of street pattern, density and layout, plot series and boundary treatments. Particular consideration should be applied to the setback and front boundary treatments of new developments.
- c. On infill plots within the boundary of the Conservation Area, new buildings must respect and align with the building line of adjacent properties.
- d. Respond appropriately by respecting scale, massing, and height, especially where visible from public routes and spaces (particularly the main routes through the village).

- e. Retain and frame key views of listed assets and notable buildings.
- f. Be orientated and sited where it does not impact the setting of a listed asset.
- g. Avoid dormers that significantly alter the roofline.
- h. Ensuring that windows and door design are proportioned and designed to reflect the style/age of the surrounding heritage buildings.
- i. Reuse appropriate materials especially when carrying out alterations and extensions.

Relevant Development Plan policies (see chapter 02)

CLCS policy 7 Design of New Buildings, 16 Heritage Assets

CLP policies HS5 House Extensions, HS6 Replacement Dwellings, HS7 Rural Infilling, HS9 Conversion of Rural Buildings in the Green Belt and Other Designated Areas, BNE1 Design Criteria for New Development, BNE8 Protection and Enhancement of Heritage Assets.

Rural Development SPD, Design Guide SPD, Householder Design Guidance SPD.



3.4 Sustainability

3.4.1 Flood mitigation

The risk of flooding from rivers across Bretherton is limited to the edges of the NPA boundary, along the River Douglas to the west, Carr Brook to the north, the River Yarrow to the south and the River Lostock to the east. Therefore the majority of Bretherton's built environment lies outside both Flood Zone 2 and 3.

Surface water flooding across Bretherton typically follows field boundaries and streets. Particularly high risk areas are located to the east of the main residential area and along front boundaries of properties along South Road and south view.

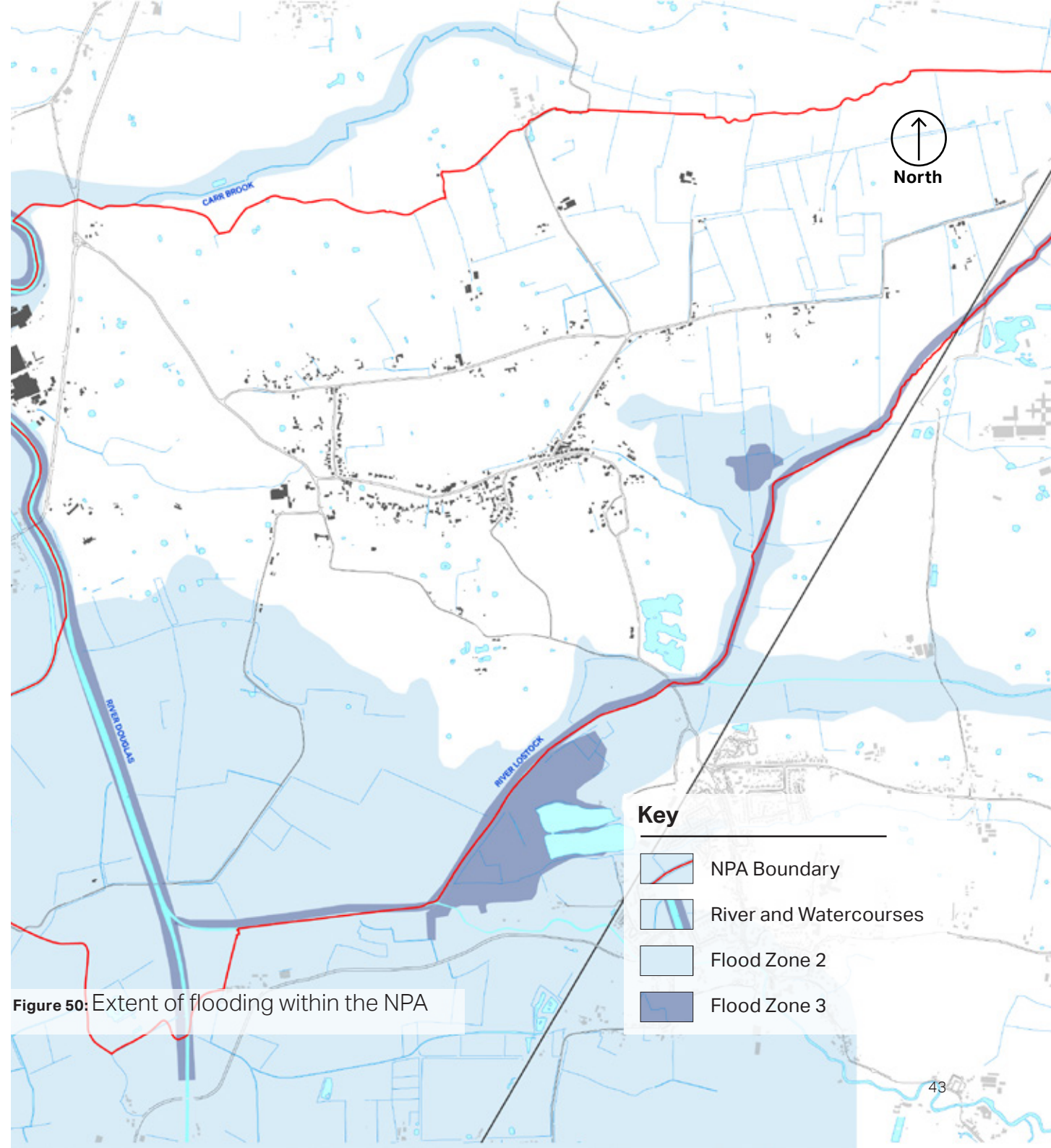


Figure 50: Extent of flooding within the NPA

3.4.2 Design Code 08: Sustainable drainage

As a standard, proposals must promote methods to mitigate increased risk of storms/flooding with sustainable drainage systems.

Development proposals should seek to:

- a. Integrate sustainable drainage systems to assist with flood alleviation from rivers and drains and surface water runoff and incorporate surface features such as planted raingardens to express this function.
- b. On minor development sites, proposals must integrate bio-swales and/or rain gardens and/or permeable surfacing in their design to assist with surface water drainage.
- c. Natural barriers (e.g. planting) and appropriate side slopes should be introduced to help manage perceived safety risks.
- d. The location of SuDS features will naturally be determined by topography (working towards the lower end of the site) and must be outside of the key flood risk areas.

- e. Proposals must adopt the use of permeable paving or porous surfaces (e.g. gravel) in hard landscaped areas.
- f. Opportunities to integrate green roofs /walls should be explored where appropriate, which will assist in reducing water run-off volumes.
- g. Gardens and parking areas should have the majority of their area landscaped, with permeable surfacing used on hard landscaped areas to enable rainwater absorption and reduce the rate of run off caused by development.
- h. The installation of water butts within new residential developments is encouraged to collect rainwater from roofs and reduce the overall rainwater run off impact of any development.
- i. New housing should demonstrate how rainwater and greywater will be stored and reused to reduce demand on mains supplies.

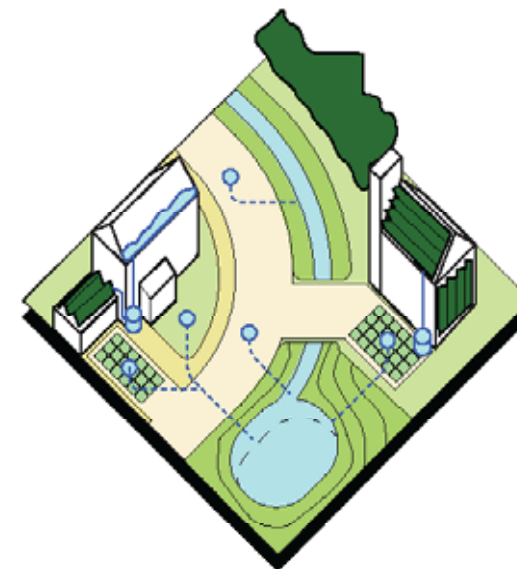


Figure 51: Flood mitigation can be in the form of swales, raingardens, and attenuation ponds. A combination of these are preferable. SuDS can be integrated into the wider landscape scheme as attractive soft landscape assets

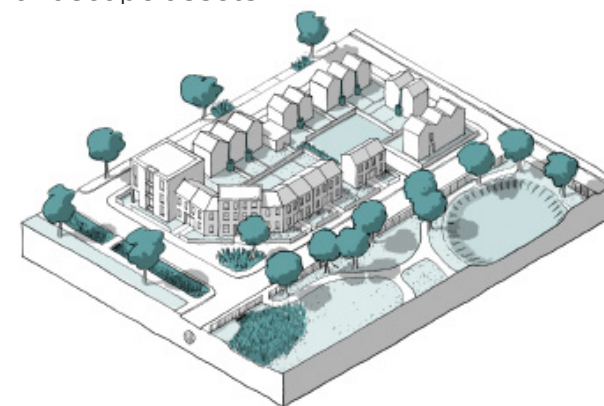


Figure 52: SuDS can be integrated into the wider landscape scheme as attractive soft landscape assets

3.4.3 Green infrastructure

Bretherton is rural in character and has a strong relationship with the wider landscape. As set out in paragraph 3.2.5 hedgerow comprises the dominant boundary treatment, which both physically and visually integrates the wider landscape into the more residential areas of the NPA.

Field boundaries are often marked by hedgerow and trees which significantly enhance the green infrastructure network across the NPA.

There are no street trees along residential streets, however mature trees within residential curtilages provide visual relief along the streetscene and significantly enhance the sylvan character of the NPA.

Due to the NPA's flat topography, there are a number of long distance views across Bretherton, visually integrating the built-up areas of South Road and North Road.

3.4.4 Design Code 09: Biodiversity

Planning applications in Bretherton must be supported by proposals for the incorporation of features for biodiversity enhancement, in addition to what may be required to address any adverse impacts resulting from the development. Appropriate features include:

- a. Features for nesting birds associated with the built environment such as swifts and house sparrows.
- b. Features for roosting bats.
- c. Mixed native species hedgerows.
- d. Creation of new wildlife ponds and the re-creation of historically lost ponds.
- e. Native scrub and tree planting.
- f. Orchard/fruit trees.
- g. Creation of species rich grassland.
- h. Creation of rough grassland suitable for foraging barn owls and provision of barn owl nest boxes.
- i. Log piles and compost heaps.
- j. Provision of gaps in boundary fences to allow access by hedgehogs and provision of hedgehog domes. Hedgehog Highways should be marked out on site to ensure they are not blocked up by future landowners.

- k. The loss of trees, hedgerows and native planting should be avoided and instead these features should be incorporated into the design of proposed development. All major development should be accompanied by a landscape layout which prioritises the use or and incorporation of native species and promotes overall biodiversity net gain.

- l. Aim to develop a multifunctional green infrastructure network made up of a variety of elements: including hedgerow, private gardens, tree planting, grass verges, SuDs, amenity green space, watercourses, cemetery, allotments, orchards, meadows, and playing fields.



Figure 53: Promoting a multifunctional green infrastructure network including verges, hedgerow, gardens, trees and planting

3.4.5 Energy

As Bretherton moves towards low-carbon-zero energy, more homes will use electric heat pumps instead of gas, oil, or solid fuels to heat them, and more cars will be electric instead of using diesel or petrol.

As part of its Neighbourhood Planning process, the NG (alongside GA Pet Food Partners) issued a questionnaire which asked residents about the environment and how they use and get their energy.

The survey revealed that:

- 92% of respondents would support action to explore renewable energy projects in Bretherton
- 79% would support action to explore locally owned/produced energy supply

During initial engagement, the NG expressed the view that climate resilient homes and matters pertaining to sustainability should be a core objective for the Neighbourhood Plan, and these design codes, to address.



Figure 54: Solar panels on a pair of bungalows at the Apiary



Figure 55: Solar panels on a property at Bamfords Fold



Figure 56: Solar panels on a modern property along South Road



Figure 57: Solar panels on a converted farm building along South Road

3.4.6 Design Code 10: Electric Vehicle charging

Current transition to electric vehicle technology and ownership is becoming commonplace in development. EV charging points must:

- Be convenient and close to the property.
- (where appropriate) Incorporate charging points that are under cover within car ports and garages.
- Integrate sensitively within the streetscene. For example, set behind the building line to the side of the property or within garages where possible.



Figure 58: EV charging point

3.4.7 Design Code 11 - Building Orientation and Passive Design

1. Solar Energy

All new development must install, or allow for, the retrospective installation of solar panels.

New buildings must be orientated to provide a degree of overlooking and natural surveillance while maximising the benefit of passive solar gain. They should incorporate passive solar design principles and allow for efficient solar energy collection.

One of the main glazed elevations of dwellings should be orientated within 30° of south. The 'long' sides of buildings, terraces or barns will benefit most from this orientation.

The installation of solar panels must be sympathetic to the character of adjacent properties and the neighbourhood in which it resides. This must of course be balanced with other siting needs and recognition that buildings knit into the village fabric to create a coherent pattern of streets and spaces that fits with local character.

Where technologies could potentially impact on sensitive areas (within the Conservation Area or close to the setting of a heritage asset) they should be

designed in from the start of the scheme. Designs should aim to conceal wiring and infrastructure and use carefully chosen technologies including roof integrated PV panels (slate/tile format) and PV integrated into glazing (for orangeries/conservatories) to minimise visual impacts.

2. Passive Design

Encourage cross ventilation in buildings through orientating new dwellings to utilise the prevailing winds. In Bretherton prevailing winds tend to be from west-south-west so orientation for both wind and solar access can combine in particular circumstances.

For those looking to 'forge ahead', there are a further 5 factors (from Passive House design and construction principles):

- Super-insulated envelopes.
- Airtight construction.
- High-performance glazing.
- Thermal-bridge-free detailing.
- Heat recovery ventilation.



04

4. Checklist

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

1

General design guidelines for new development, redevelopment and alterations:

- 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;
- Positively integrate energy efficient technologies;
- Make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation, and minimisation where appropriate) without adverse impact on the street scene, the local landscape or the amenities of neighbours;
- Ensure that places are designed with management, maintenance and the upkeep of utilities in mind; and
- Seek to implement passive environmental design principles by, firstly, considering how the site layout can optimise beneficial solar gain and reduce energy demands (e.g. insulation), before specification of energy efficient building services and finally incorporate renewable energy sources.

2

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?
- 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?
- 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?

4

Buildings layout and grouping:

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the townscape?
- What effect would the proposal have on the streetscape?
- Does the proposal maintain the character of dwelling clusters stemming from the main road?
- Does the proposal overlook any adjacent properties or gardens? How is this mitigated?
- Subject to topography and the clustering of existing buildings, are new buildings oriented to incorporate passive solar design principles, with, for example, one of the main glazed elevations within 30° due south, whilst also minimising overheating risk?
- Can buildings with complementary energy profiles be clustered together such that a communal low carbon energy source could be used to supply multiple buildings that might require energy at different times of day or night? This is to reduce peak loads. And/or can waste heat from one building be extracted to provide cooling to that building as well as heat to another building?

5

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?

6

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?
- Do the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?
- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

7

Household extensions:

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

8

Building 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?

9

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?

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?

About AECOM

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