South Leverton

Design Codes and Guidance

December 2023

AECOM

locality
the power of community

Delivering a better world

Quality information

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Revision History

Issue no.	Issue date	Details	Issued by	Position	Comments received	Approved by	Position
1	22 August 2023	Draft Report	Tom Royles	Senior Urban Designer	15 August 2023	Michael Holt	Associate Director
2	19 September 2023	Draft Full Report	Tom Royles	Senior Urban Designer	29 September 2023	Will Wilson Andy Hardie	Bassetlaw District Council Neighbourhood area Council
3	17 October 2023	Draft Full Report	Tom Royles	Senior Urban Designer	02 October 2023	Will Wilson Andy Hardie	Bassetlaw District Council Neighbourhood Area Council
4	20 November 2023	Full Report	Tom Royles	Senior Urban Designer	17 November 2023	Will Wilson	Bassetlaw District Council
5	29 November 2023	Full Report	Tom Royles	Senior Urban Designer	17 November 2023	Andy Hardie	Neighbourhood Area Council
6	13 December 2023	Full Report	Tom Royles	Senior Urban Designer	13 December 2023	Samantha Banks	Locality

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Contents

Introduction

01

1. Introduction

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

1.1 Background

Through the Department of Leveling Up, Housing and Communities (DLUHC) Neighbourhood Planning Programme led by Locality, AECOM has been appointed to provide design support to the South Leverton Parish Council (PC) by preparing this Design Code document.

The PC seek to establish a design guide including design codes to influence the character and design of new development across the entire Neighbourhood area, the extent of which is illustrated in figure 06 (overleaf).

The purpose of this design guidance and codes document is to preserve the character of the village and its surroundings.

To do this, the codes contained within this report will cover design issues such as:

- Local character and design quality
- Landscape setting and green edges
- Green and blue infrastructure
- Biodiversity
- Boundary treatments
- Homes and buildings
- Conversions
- Materials and appearance.

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.

Figure 01: Finger-post on Church Street

Figure 02: Diamond House

1.2 Who will use the guide and codes?

This document should be a valuable tool in securing context driven, high-quality development in South Leverton. It will be used in different ways by different people in the planning and development process, as summarised in Table 01.

A valuable way it can be used is as part of a process of co-design and involvement that further understands and takes account of local preferences and expectations of design quality.

In this way, this document can help to facilitate conversations on the various topics that should help to align expectations and help understand the balancing of key issues. This document alone will not automatically secure optimum design outcomes but should help to prevent poor quality development.

Potential users	How they will use the design guidelines and codes
Applicants, developers, and landowners	As a guide to assist applicants, developers and landowners when developing planning proposals in South Leverton, 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. This document should be discussed with applicants during any pre-application discussions.
Neighbourhood area Council or Neighbourhood Plan steering group	As a guide when commenting on planning applications, ensuring that the design codes are complied with.
Community groups and 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: Potential users.

1.3 Study area

South Leverton is a village and neighbourhood area in Bassetlaw, north Nottinghamshire. It is situated in the Trent Valley and is some 5 miles east of the market town of Retford.

It has a population of around 480 (Census, 2011) the majority of whom commute to Retford, Lincoln, and other towns in the area. The neighbourhood area extends to 1,024 hectares (ha) and is predominantly a rural area, resulting in a population density of 0.47 persons per hectare.

The neighbourhood area is predominately flat, with long views across the countryside - Lincoln Cathedral can be clearly seen from the village. The area is predominantly agricultural in character with little industry apart from two adjacent large power stations.

The village has a range of services including Orchard private school, two care homes, The Plough public house, a village hall, the Memorial Institute, a garage, a haulage contractor, and several farms.

1.4 Document purpose

This document ensures that new development, including alterations and extensions to existing properties, within the South Leverton Neighbourhood area is in-keeping with the historic and rural character of the village. Characteristics of which will be set out in chapter 3 of this document.

The Codes within this document have been produced by AECOM and the PC following extensive engagement and consultation. They are underpinned by an analysis on built form including matters pertaining to character, layout, materiality, boundaries, and landscape.

The emerging Bassetlaw Local Plan sets a housing requirement figure of 11 dwellings for South Leverton to 2038, with a residual figure of 6 dwellings as of August 2023 when existing completions and permissions are factored-in. The Local Plan does not propose housing allocations in South Leverton, and it does not identify a definitive development (or settlement) boundary for the village (this is further illustrated in chapter 02).

Therefore, new development across the Neighbourhood area will likely comprise alterations and extensions to existing properties, conversion of agricultural buildings, or small-scale infill and backland development. Notwithstanding this however, the design codes and guidance should be flexible so that they can apply to both large sites and smaller infill development sites.

Figure 03: Planting along Town Street

Figure 04: Rural landscape surrounding South Leverton
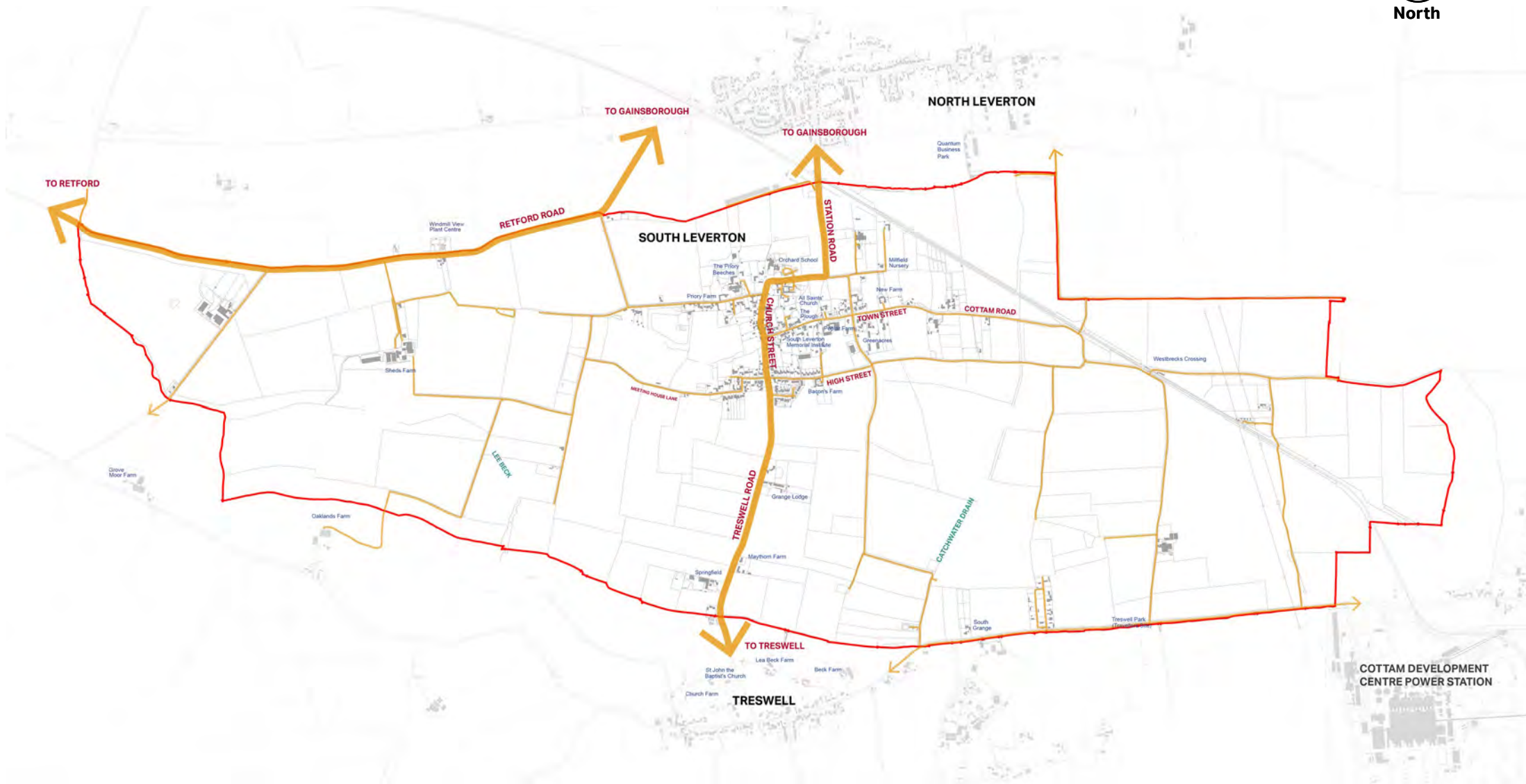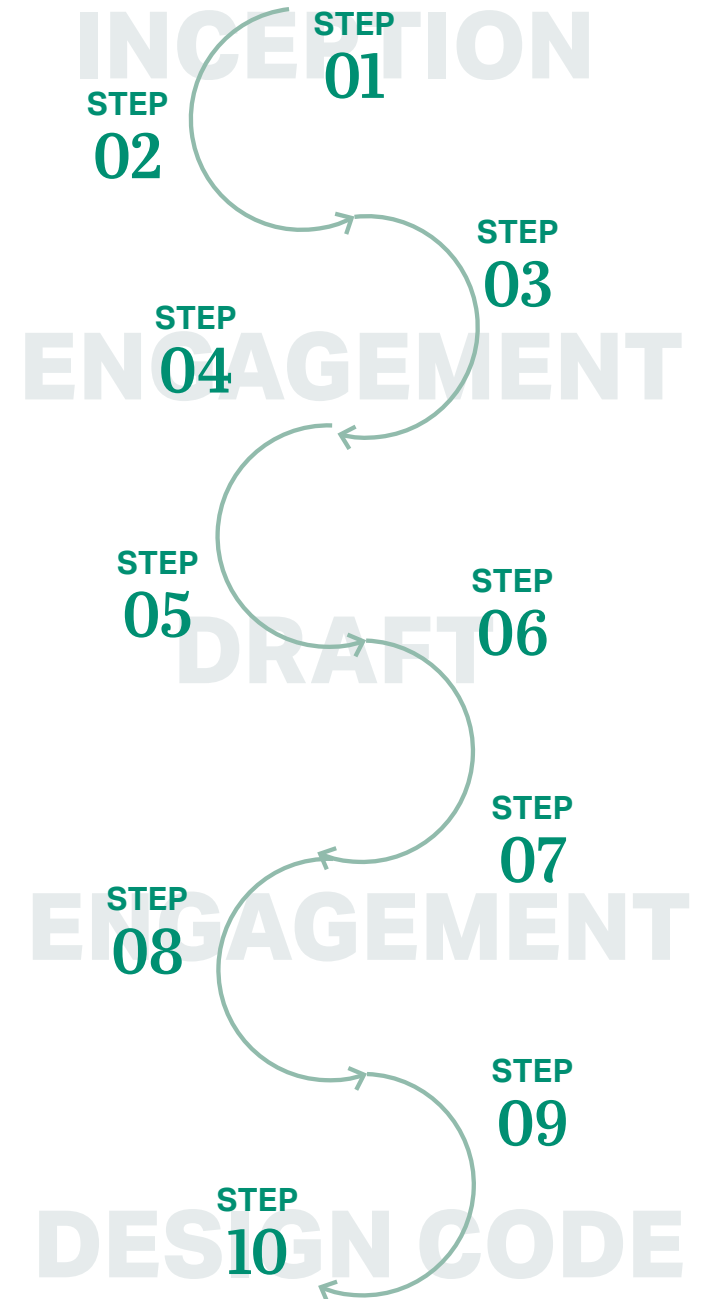

Figure 05: Town Street streetscape

Figure 06: Neighbourhood area study area

1.5 Methodology

The following steps have underpinned the understanding of place and engagement with the PC:

- Step 1: An inception call was held between AECOM representatives and the PC to understand the aims of the group and confirm the brief.

- Step 2: An initial questionnaire was distributed to the PC to establish the characteristics of South Leverton that are relevant to local people.

- Step 3: A public survey was issued on the 17th of April, 2023 to the residents of South Leverton. The survey was produced to better understand the special characteristics of the Neighbourhood area.

- Step 4: Following the initial engagement, AECOM progressed with a comprehensive planning policy review and a desktop study which was signed off by the PC.

- Step 5: On the 18th April 2023, AECOM representatives met with the PC to conduct a site visit in order to assess the local character and photograph the area.

- Step 6: A public engagement workshop was conducted to identify the issues and opportunities in South Leverton .

- Step 7: On 17th August 2023, AECOM shared a draft Design Code document with the PC for review. A second survey seeking to identify code items was issued on 21st August and ran until 01 September.

- Step 8: Two Know Your Place events were held on 18th and 21st of October 2023, where local people were consulted on the full draft document ahead of sign-off, with a unanimously positive voicing of opinion. Some refinements to codes were also actioned, based on comments made by attendees as part of other activities at the events.

- Step 9: AECOM draft the final document including design codes based on the conclusions of the engagement process.

- Step 10: After capturing the feedback from the PC, AECOM issued the final Design Code document 20th November 2023.

INCEPTION

STEP 01

STEP 02

STEP 03

ENGAGEMENT

STEP 04

STEP 05

DRAFT

STEP 06

STEP 07

STEP 08

ENGAGEMENT

STEP 09

DESIGN CODE

STEP 10

1.6 Engagement

1.6.1 Site Visit

Representatives from AECOM, Bassetlaw District Council and the South Leverton PC undertook a site visit on the 18th April 2023. Prior to the site visit, an initial desktop study was undertaken to provide a high level analysis of South Levertons built form, looking at matters pertaining to character, density, materials, streets, landscape and boundary treatments. The study was used to underpin public engagement and survey questions as well as guide the site visit.

The site visit comprised a walking tour and photographic survey of the Neighbourhood area, which, alongside representatives from the PC was used to better understand the characteristics, issues and opportunities in South Leverton and to build upon the analysis undertaken in the initial desktop survey.

The group met at The Plough Inn and progressed in an anti-clockwise direction, beginning at Meeting House Lane, moving westwards to High Street and Cottam Road, northwards to Station Road and Orchard Lane, and concluding the site visit at Retford Road and Church Street.

Figure 07: The group discuss retrospective installation of Solar Panels looking at existing examples on properties at Glover Close

Figure 08: The group walk along a footpath connecting Glover Close and High Street.

Figure 09: Heading south along Church Street to Meeting House Lane

Figure 10: At the Orchard School / Whites Farm junction heading to Retford Road

1.6.2 First public survey

A public survey was made available to complete between 17 April and 19 May 2023, establishing what residents thought about South Leverton and helped people describe the aspects they find appealing.

The survey was set up online in order to reach as many respondents as possible and creating greater transparency on the design code process. As illustrated in Figure 11 (right), respondents were tasked with placing pins on an illustrative map of the Neighbourhood area indicating opportunities, challenges and observations.

The answers were collected and the data helped to identify 'code items'. Code items are the topics that became the codes set out in chapter 3 of this document.

The survey concluded that:

- Residents noted the importance of the surrounding countryside and green space, trees, planting, and wildlife and the area's history and heritage.

- Most people described the Neighbourhood area as pleasant, safe, and beautiful, set within an agricultural context in a quaint village. It is characterised by mature trees, wildlife, heritage buildings, and waterways. However, local people feel that there is a lack of green space and a lack of civic space.

- Many respondents live in a detached house with a private garden, notably valuing parking space, privacy, natural light, homeworking space and location. Buildings are identifiable through their distinctive roof shapes, boundary treatments, plot sizes, red bricks, clay pantiles, and chimneys.

- Car use is the predominant modal choice with very few people using public transport, such as Dial-a-Bus or the train.

- While respondents do not currently consider rainwater tanks, green roofs, walls or sustainable drainage as significant features, people did note future needs may include rainwater collection, solar panels, electric vehicle charging points and heat pumps.
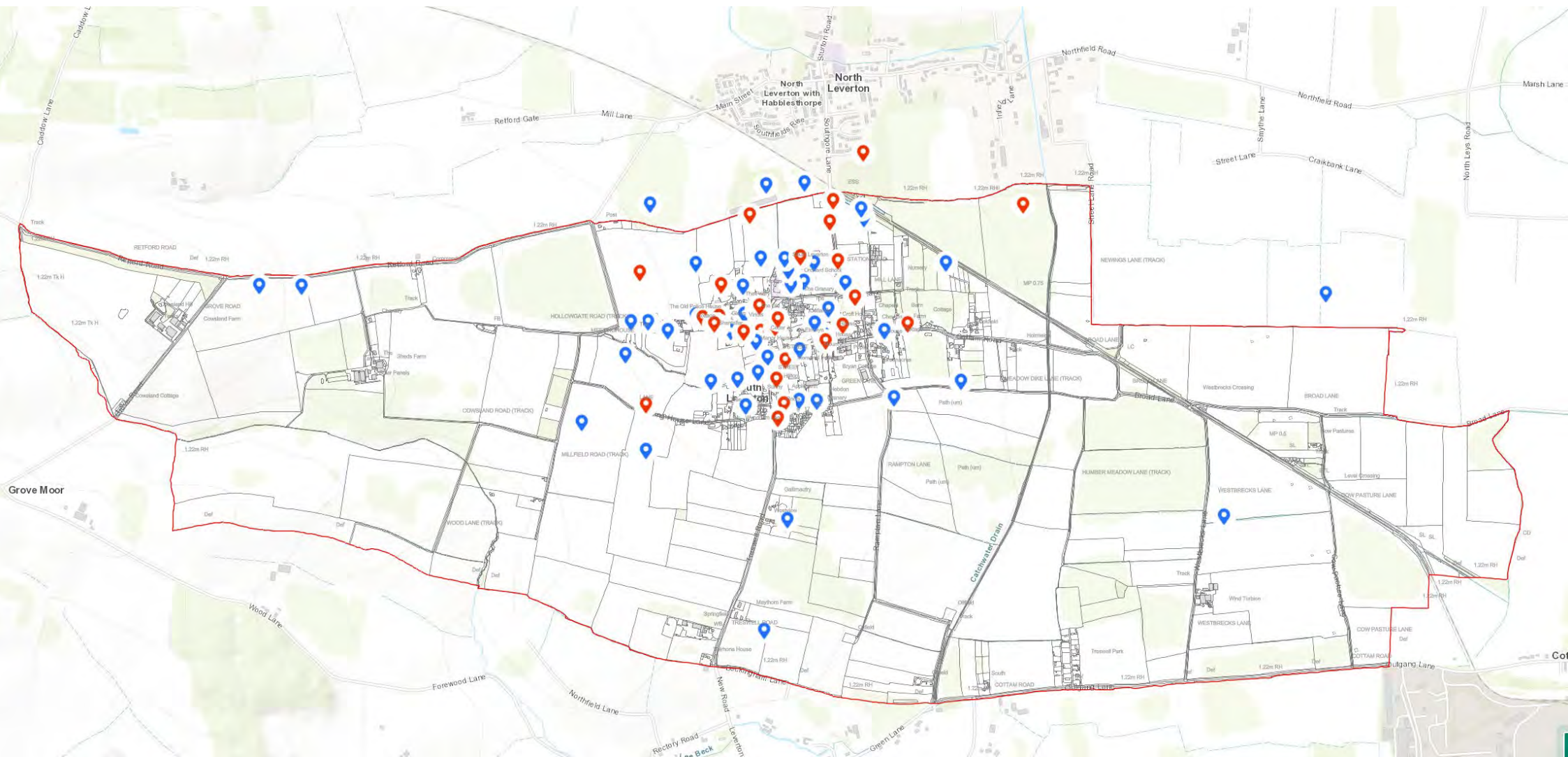
Figure 11: Screen shot of online survey map. The coloured pins indicate the challenges (red) and opportunities (blue) facing South Leverton.

1.6.3 Community Engagement Workshop

The community engagement workshop (held on 25 May 2023) required attendees to identify the key issues and opportunities across the Neighbourhood area.

Attendees placed a pin in on a map to identify the location of the particular issue and/or opportunity. The aim was to create focused discussions with local people. AECOM also made the map available digitally in order to allow for more responses.

The workshop identified the following issues:

- Housing
- Landscape
- Materiality
- Transport
- Scale
- Boundary treatments
- Amenities and services

The following opportunities were identified:

- Landscape
- Settlement edge
- Public open spaces
- Biodiversity
- Integrated development
- Blue infrastructure
- Active travel

Figure 12: Attendees discussing opportunities across the Neighbourhood area

Figure 13: Attendees mapping potential issues across the Neighbourhood area

1.6.4 Key findings

First public survey findings

- Local people note the importance of the surrounding countryside and green space (95%). They also value the landscape, trees, planting, and wildlife (71%) and its history and heritage (61%).

- To be part of a community, local people think that knowing neighbours (68%), having a local pub (58%), and having things close by such as local shops (32%) are important.

- Most people would describe the area as: surrounded by pleasant countryside (87%) and set within an agricultural context (63%), and is a safe (82%), quaint (71%) and beautiful (42%) village.

- Many characterise the area by its established / mature trees (87%), wildlife (68%), flowers and colours (53%), and its soft landscaping (32%). Other notable features included benches, grassed area/verges, community buildings, natural waterways, and monuments.

- Many respondents live in a detached house (63%) with a private garden (95%). Other important features for homes included parking space, privacy, natural light, homeworking space and location.

- Roof shapes (47%), boundary treatments (45%), plot sizes, red bricks, clay pantiles, and chimneys provide local character. Notable buildings include the pub, church, and memorial hall.

- People feel safe because roads are not too busy (53%) and footpaths are wide enough (34%) and there are places for people to stop and rest (32%). Interestingly, 95% of respondents say they drive their own car as a mode of transport. There is very little use of public transport – only 5% of respondents use Dial-a-Bus and 8% use the train.

- Local people feel that there is a lack of green space (8% village green) and a lack of civic space. This is evident in only 16% identifying public open spaces as an item that characterises South Leverton.

- Respondents also note a severe lack of shops, play space, public toilets, and shade structures. Streets are noted as lacking cycle lanes/stores and EV charging. Other sustainable features such as rainwater tanks, green roofs, walls or sustainable drainage are not noted as significant features. However, people did note that future needs may include Rainwater collection (66%), Solar panels (61%), Electric charging points for a car (39%) and heat pumps (34%).

What are the findings from the engagement?

Analysing the workshop data and the first survey data alongside AECOM's baseline analysis created key findings. These are presented as potential design codes below:

- Local character and design quality

- Landscape setting and green edges

- Green and blue infrastructure

- Biodiversity and wildlife habitats

- Boundary treatments

- Homes and buildings

- Conversions

- Materials and appearance.

1.6.5 Second public survey

A second public survey went live on August 21 and concluded on September 1. The intent of this survey was to build upon the engagement undertaken thus far and explore possible code items ahead of drafting the design codes to be included in this document.

The survey included a series of questions (indicating code topics) to which respondents were asked to answer with 'entirely agree', 'somewhat agree', 'neutral', 'somewhat disagree', and 'entirely disagree' to their inclusion in the document.

The number of respondents agreeing to each question indicated public support on each code topic.

1.6.6 Key findings:

The code topic which received full support from respondents (100% entirely agree) include:

- Any new development should not be overbearing on existing properties or deprive them of light.

- Building scale should be part of the design code.

- Mitigating risk from flooding with sustainable drainage systems.

Code topics that received high levels of support (80-99% entirely agree) include:

- Trees on streets, within residential curtilages and in public spaces.

- The importance of materials, detailing and appearance of heritage features in determining local character.

- New buildings should be consistent with the look and feel of existing assets.

- Materials and architectural style should be responsive to local character and reference local styles.

- Local character should be a major part of the design code.

Code topics that received the lowest levels of support (0-19%):

- A future-oriented design code is important, and it should outline Passive House design.

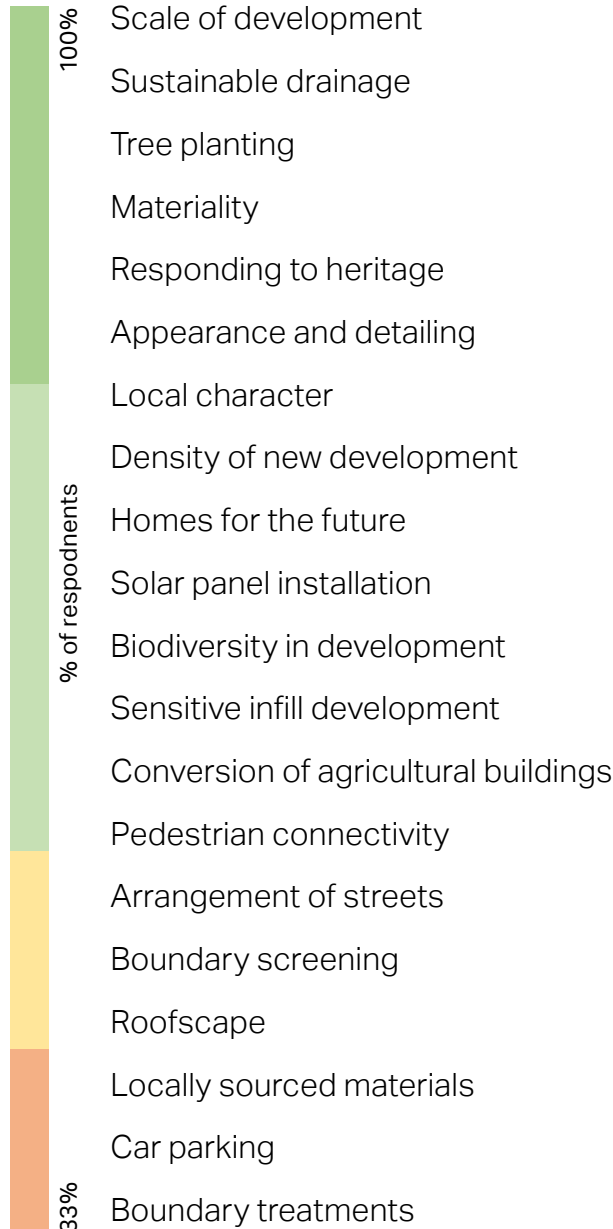- Signage is a significant feature that should be included in the design code.

A screenshot of the results are available overleaf.

1.6.7 Know Your Place

The District Council hosted two community-led planning events in South Leverton on the 18th and 21st of October 2023 as part of its Know Your Place initiative.

The events encouraged attendees to share their views on a range of place-based themes, with a view to informing a potential Neighbourhood Priorities Statement or Neighbourhood Plan. Draft copies of the Design Guidance and Codes were also made available for comment, with a unanimously positive response voiced from those in attendance. The contributions made at the event on wider topics also provided a useful means to validate and add to the work already undertaken on the code topics.

Code topics to be included in the South Leverton Design Code document

% of respondents (100% → 33%)

- Scale of development
- Sustainable drainage
- Tree planting
- Materiality
- Responding to heritage
- Appearance and detailing
- Local character
- Density of new development
- Homes for the future
- Solar panel installation
- Biodiversity in development
- Sensitive infill development
- Conversion of agricultural buildings
- Pedestrian connectivity
- Arrangement of streets
- Boundary screening
- Roofscape
- Locally sourced materials
- Car parking
- Boundary treatments

QUESTION	ENTIRELY AGREE		SOMEWHAT AGREE		NEUTRAL		SOMEWHAT DISAGREE		ENTIRELY DISAGREE	
A design code should explain how the arrangement of streets, routes and bridleways will be safe and easily useable for pedestrians and cyclists.	5	56%	1	11%	2	22%	0	0%	1	11%
The position of trees on streets, within property boundaries, and in public spaces needs to be part of a design code.	8	89%	1	11%	0	0%	0	0%	0	0%
Designing the street to support slow-vehicle speeds (e.g. 20mph zones) should be described in the design code.	5	56%	2	22%	1	11%	0	0%	1	11%
A design code should reflect the need for cycleways, pedestrian routes, bridleways, and access to public transport.	6	67%	1	11%	1	11%	1	11%	0	0%
The location of new parking spaces should be generally to the side of a property.	3	33%	3	33%	2	22%	1	11%	0	0%
It is better to keep a small front garden with a boundary wall as opposed to a provide a hard surface parking space.	3	33%	1	11%	4	44%	1	11%	0	0%
If parking is required to the front of the property, it should use hedgerows to screen cars from the street.	3	33%	3	33%	3	33%	0	0%	0	0%
Green spaces are an important visual quality of the landscape and development should not negatively impact on it.	8	89%	1	11%	0	0%	0	0%	0	0%
The rear boundaries of new housing should avoid facing green gaps (countryside) unless suitably screened by planting, such as hedgerow, wildflower, and tree planting.	4	44%	3	33%	1	11%	1	11%	0	0%
Mitigating risk of storms/flooding with sustainable drainage systems are important to the village.	9	100%	0	0%	0	0%	0	0%	0	0%
Biodiversity enhancement should be described in the design code, for example features for nesting birds, hedgerows, ponds, or tree planting	6	67%	3	33%	0	0%	0	0%	0	0%
The loss of trees, hedgerows and planting should be avoided. Support for incorporating native species and biodiversity net gain should feature in the design code.	6	67%	3	33%	0	0%	0	0%	0	0%
Responding to climate change and reducing carbon dependency should be part of South Leverton's design code.	3	33%	5	56%	1	11%	0	0%	0	0%
Properly insulating homes and conserving energy through the roof, wall and floor insulation should feature in the design code.	7	78%	2	22%	0	0%	0	0%	0	0%
Advice on solar panels, ground and air source heat pumps, smart meters, rainwater storage and reuse, and sustainable surface drainage systems should feature in the design code.	7	78%	2	22%	0	0%	0	0%	0	0%
A future-oriented design code is important, and it should outline Passive House design (https://passivehouseaccelerator.com/passive-house/passive-house-design) and construction principles.	1	11%	3	33%	5	56%	0	0%	0	0%
Heritage features such as materials, detailing and appearance play a big role in the local character and explaining their importance should feature in the design code.	8	89%	0	0%	1	11%	0	0%	0	0%

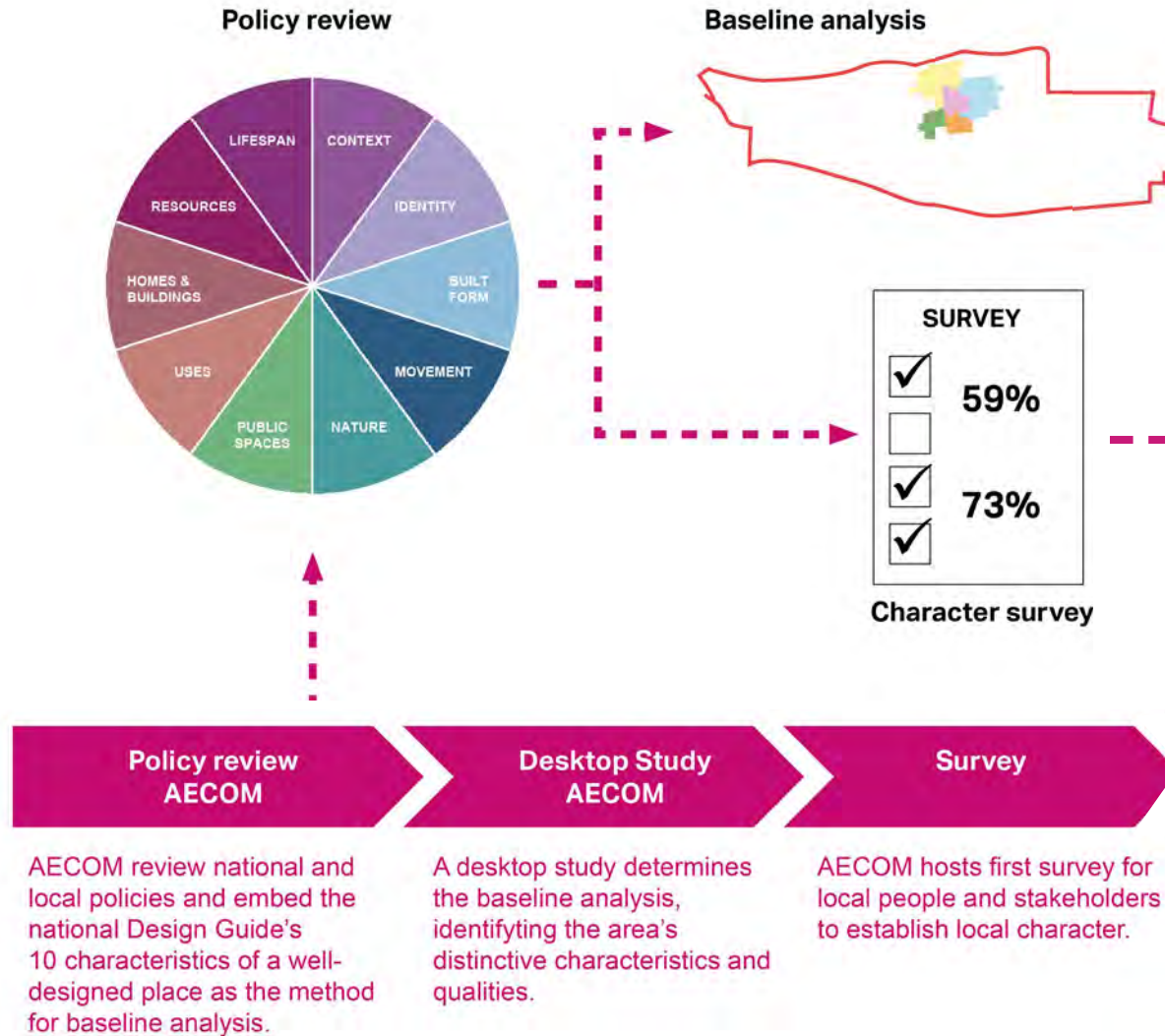| QUESTION	ENTIRELY AGREE		SOMEWHAT AGREE		NEUTRAL		SOMEWHAT DISAGREE		ENTIRELY DISAGREE	
Materials and architectural style should be responsive to local character and reference local styles. Local character should be a major part of the design code.	8	89%	0	0%	1	11%	0	0%	0	0%
Making sure any development of a relatively small gap between existing buildings is consistent and sympathetic to its context should be part of the design code.	6	67%	1	11%	2	22%	0	0%	0	0%
Providing links for pedestrians and cyclists to the wider countryside, and where possible, connect to the Public Right of Way and bridleway network is important.	6	67%	2	22%	0	0%	0	0%	1	11%
The conversion of existing traditional, agricultural buildings must preserve the agricultural character of the building, have a minimal visual impact, and be sensitive to its context.	6	67%	2	22%	1	11%	0	0%	0	0%
The quality of a building or spaces materials, design and detailing are an important consideration for the future of South Leverton.	5	56%	3	33%	1	11%	0	0%	0	0%
Signage is a significant feature that should be included in the design code.	2	22%	4	44%	3	33%	0	0%	0	0%
The boundary of a property is a key feature for South Leverton, as such the design of boundary treatments should be in the design code.	3	33%	4	44%	2	22%	0	0%	0	0%
Planted front gardens are a defining feature of South Leverton and should be included in the design code.	5	56%	1	11%	3	33%	0	0%	0	0%
The provision, quality and design of public spaces should be encouraged in the design code.	6	67%	3	33%	0	0%	0	0%	0	0%
Trees within a property or along streets should be encouraged, with a design code reinforcing the need to retain or replace trees.	6	67%	3	33%	0	0%	0	0%	0	0%
Developing land efficiently, that meets local needs, and promotes a mix of uses and types of housing (e.g. social or affordable housing) is key to the future of South Leverton.	3	33%	2	22%	2	22%	1	11%	1	11%
High-density housing is not contextually appropriate within any area of South Leverton, as such issues relating to density should be part of a design code.	7	78%	2	22%	0	0%	0	0%	0	0%
Any new development should not be overbearing on existing properties or deprive them of light. Building scale should be part of the design code.	9	100%	0	0%	0	0%	0	0%	0	0%
New developments should reflect the roof pitch of neighbouring properties.	4	44%	4	44%	1	11%	0	0%	0	0%
New buildings or spaces should be consistent with the look and feel of the existing assets.	8	89%	1	11%	0	0%	0	0%	0	0%
Materials should be natural and locally sourced as this will contribute to a cohesive materiality and colour palette across South Leverton.	5	56%	1	11%	2	22%	1	11%	0	0%

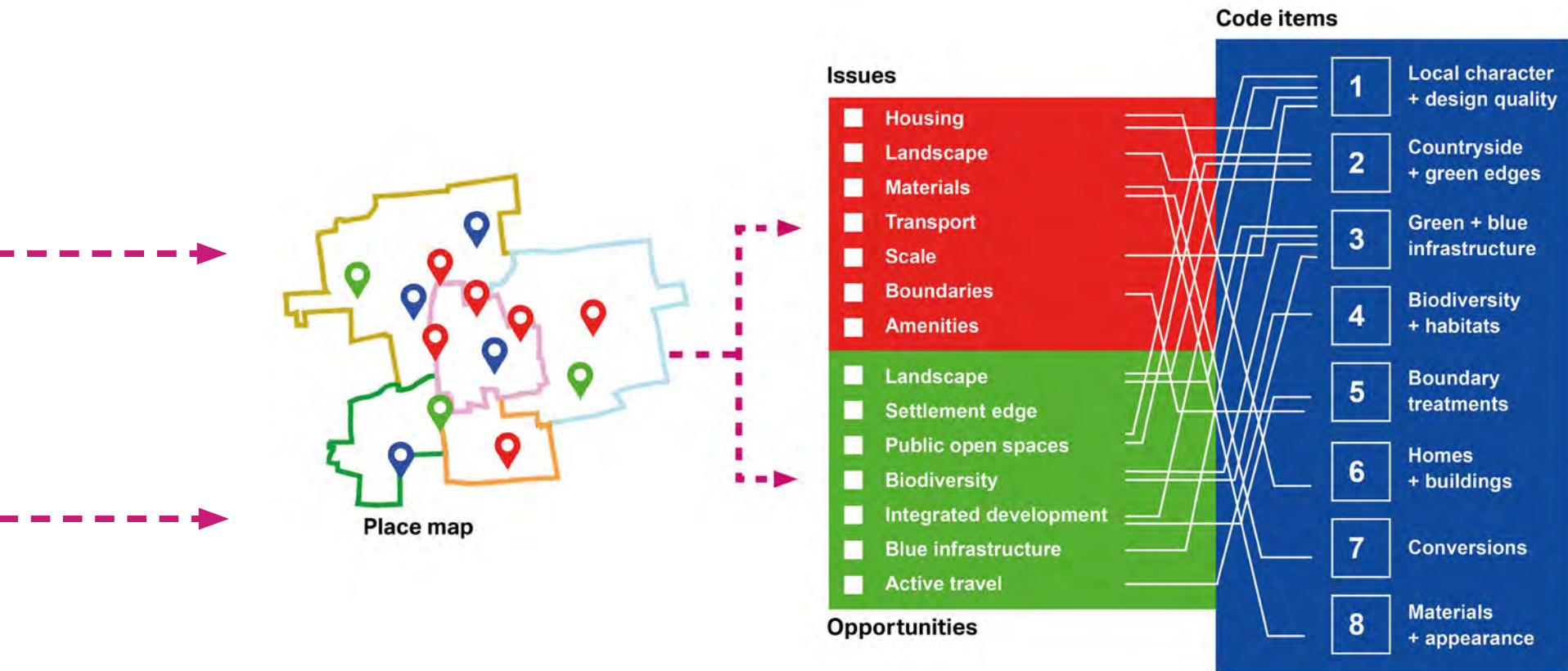**KEY**

- 80-100%
- 60-79%
- 40-59%
- 20-39%
- 0-19%
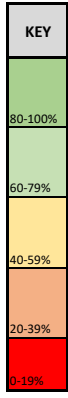
1.6.8 The Co-Design Process

This diagram shows the process for achieving this design code. It describes the role of national policy, the analysis of the area and the role local people and community played in delivering the codes by partaking in public surveys and workshops. The findings from these were categorised into issues and opportunities, which became the basis for the codes and guidance in this document.

THE CO-DESIGN PROCESS

Policy review

LIFESPAN
CONTEXT
IDENTITY
RESOURCES
BUILT FORM
HOMES & BUILDINGS
MOVEMENT
USES
PUBLIC SPACES
NATURE

Baseline analysis

SURVEY

59%

73%

Character survey

Policy review
AECOM

AECOM review national and local policies and embed the national Design Guide's 10 characteristics of a well-designed place as the method for baseline analysis.

Desktop Study
AECOM

A desktop study determines the baseline analysis, identifying the area's distinctive characteristics and qualities.

Survey

AECOM hosts first survey for local people and stakeholders to establish local character.

Code items

Issues

Issues	
■	Housing
■	Landscape
■	Materials
■	Transport
■	Scale
■	Boundaries
■	Amenities

Opportunities	
■	Landscape
■	Settlement edge
■	Public open spaces
■	Biodiversity
■	Integrated development
■	Blue infrastructure
■	Active travel

Opportunities

Place map

1	Local character + design quality
2	Countryside + green edges
3	Green + blue infrastructure
4	Biodiversity + habitats
5	Boundary treatments
6	Homes + buildings
7	Conversions
8	Materials + appearance

Site Visit AECOM

AECOM undertakes site visit to test desktop study, establish draft Character Areas, Area-wide or character-based topics. Place Analysis documented photos.

Engagement Workshop

AECOM hosts a community engagment workshop, inviting all local people to identify on the Place Map South Leverton's Issues and Opportunties.

Survey

AECOM hosts a second survey and a 'Know Your Place' event for all local people an stakeholders to establish the most relevant codes to be used in the final document.

Design Code AECOM

SECTIONS:
1. Introduction
2. Policy Review
3. Analysis and Design Codes
4. Checklist

Policy Context

02

2. Policy context

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

The Development Plan for South Leverton comprises:

- The National Planning Policy Framework

- The National Design Guide

- The National Model Design Code

- Building for a Healthy Life 12

- Bassetlaw Core Strategy and Development Management Policies DPD

- Supplementary Planning Documents

- The emerging Draft Bassetlaw Local Plan

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 14: Images of South Leverton

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 and guidance

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

Ministry of Housing, Communities & Local Government

National Planning Policy Framework
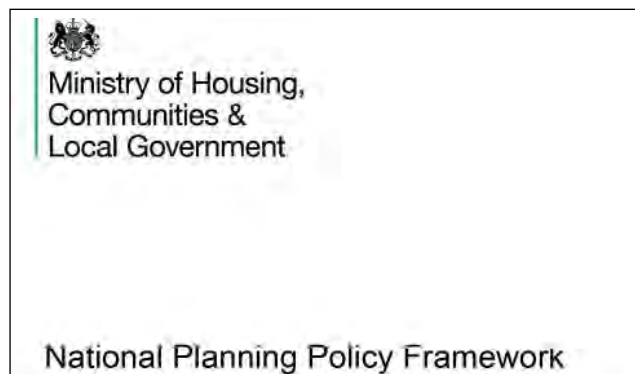
National Planning Policy Framework (revised July 2023)

The National Planning Policy Framework (NPPF) outlines the UK Government's overarching economic, environmental and social planning policies for England. It is a high-level document that attempts to make good design pivotal and to put communities at the heart of planning.

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 NPPF states that a key objective of the planning system is to contribute to the achievement of sustainable development. The relevant parts to this document are:

- **Part 1:** Achieving Sustainable Development

- **Part 5.** Delivering a sufficient supply of homes

- **Part 7:** Ensuring the vitality of village centres

- **Part 8:** Promoting Healthy and Safe Communities

- **Part 11:** Conserving and Enhancing the Natural Environment

- **Part 12:** Achieving Well-Designed Places

- **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 Model Design Code (NMDC), and 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.

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.

This document should be used as an overarching reference for new development where topics are not covered in local guidance. The NDG characteristics were used in the initial analysis to understand local demands and challenges.

The NDG notes that a well-designed place is unlikely to be achieved by focusing only on the appearance, materials and detailing of buildings.

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

A Local Plan forms part of the statutory Development Plan for the borough and informs decisions on planning applications. The following documents are essential references to local policy and guidance that have informed the design guidelines and codes:

- Bassetlaw Core Strategy and Development Management Policies DPD (adopted 2011)

- The Emerging Bassetlaw Local Plan (draft August 2021)

Furthermore, there are several planning policy background documents, studies and evidence relating to the following policy themes:

- Affordable housing SPD

- Residential Parking Standards SPD

- Shopfront and Signage SPD

- Residential Design SPD (Successful Places)

- Bassetlaw Vision 2040

Bassetlaw Core Strategy and Development Management Policies DPD (adopted 2011)

Policy CS1 Settlement Hierarchy

This policy identifies South Leverton within the All-Other Settlements category within the settlement hierarchy. These rural settlements have limited or no services and facilities or access to public transport and which are unsuitable for growth (Policy CS9).

Policy CS9 All Other Settlements

As illustrated in policy CS1, and reinforced here in policy CS9, South Leverton is identified in the list of 'All Other Settlements'. Proposals for the development of housing within these settlements will not supported other than for conversions or replacements.

Policy DM2 Conversion of agricultural buildings

This policy seeks to ensure that the conversion of rural buildings make a positive contribution to the streetscene, its wider landscape setting and respects the buildings historic value. Proposals will be required to demonstrate the retention of historic or positive architectural features, the use of appropriate design and detailing of new elements, the use of appropriate

materials (to the building and location) and positive landscape approached including the retention of original walls and hedgerows.

Policy DM3 General development in the countryside

Policy DM3 applies to any development outside a Development Boundary including those settlements identified covered by policy CS9. The policy provides guidance for replacement buildings, the reuse of previously developed land in rural areas and agricultural/forestry buildings and domestic equine facilities.

Policy DM4 Design and character

Policy DM4 provides guidance for all new major and minor development in Bassetlaw. Section (a) sets out several criteria to ensure that all new major development complements and enhances the character of the built, natural, and historic environment. Whereas, section (b) provides general design principles for individual development proposals, including single buildings, changes of use or extensions to existing buildings, on matters pertaining to local character and distinctiveness, architectural quality, public realm, accessibility, and carbon reduction.

Policy DM5 Housing mix and density

Proposals for new housing development will be expected to deliver housing of a size, type, and tenure appropriate to the site and locality. Section (b) of policy DM5 elaborates on the requirements for new development of both high and low density.

Other Supplementary Planning Documents (SPDs)

Bassetlaw District Council have produced several other SPDs which offer additional guidance of a more specialised nature which covers a range of issues, both thematic and site-specific in scope. Bassetlaw's portfolio of SPDs positively address several local planning matters, complementing several policies in its Core Strategy. Relevant SPDs include:

- Affordable housing SPD

- Residential Parking Standards SPD

- Shopfront and Signage SPD

- Residential Design SPD (Successful Places)

Successful Places SPD

This SPD was prepared jointly by Chesterfield Borough, Bolsover District, Northeast Derbyshire District and Bassetlaw District Councils. This residential Design SPD:

- Identifies the standards of design expected by the four local authorities.

- Provides direction on the principles of good design within residential developments; and

- Provides information and guidance on the design process.

This design code aims to add place specific detail and depth to the design principles of the SPD without retreading the same ground.

The Draft Bassetlaw Local Plan (2020 – 2038) August 2021

Bassetlaw District Council submitted the Bassetlaw Local Plan (2020-2038: Publication Version) to the Secretary of State on 18 July 2022 for independent examination, in line with the Town and Country Planning (Local Planning) (England) Regulations 2012 - Regulation 22.

It is anticipated that the Local Plan will be adopted in late 2023 where it will replace the existing policies set out in the adopted Core Strategy .

The following 'emerging' policies were considered when developing the design codes within this document:

Policy ST2 Housing Growth in Rural Bassetlaw

Policy ST2, upon adoption, will replace policies CS1, CS6 and DM3 from the Core Strategy. The policy states that South Leverton will be expected to accommodate a 5% growth requirement comprising 11 new dwellings across the plan period (2020 - 2038).

Policy ST35 Design Quality

Policy ST35, upon adoption, will replace Core Strategy policies CS6, DM2, and DM4.

Policy ST35 sets out a series of criteria to ensure that all development achieves high quality design.

Policy ST37 Landscape Character

Policy ST37, upon adoption, will replace Core Strategy policies DM2, DM4, DM5 and DM9. This policy seeks to ensure that planning proposals contribute to the nature and quality of the local landscape.

Policy ST42 The Historic Environment

This policy, upon the adoption of the Core Strategy, will replace Core Strategy policies CS6, DM2, and DM8. This policy seeks to conserve and enhance the historic environment across Bassetlaw. The policy gives great weight to the conservation and reuse of heritage assets (both designated and non-designated) and their setting. Proposals must also make a positive contribution to the character and local distinctiveness of the historic environment, and maintain, conserve, sustain or return to beneficial use designated and non designated assets.

Policy ST43 Designated and Non-Designated Heritage Assets

This policy, upon the adoption of the Core Strategy, will replace Core Strategy policies CS6, DM2, and DM8. Proposals for development, including change of use, that involve a designated heritage asset, or the setting of a designated heritage asset will be expected to conserve, enhance or better reveal the characteristics which contribute to the heritage significance and/or its setting, respect any features of special or historic interest and be sympathetic in terms of its siting, size, scale, height, alignment, proportion, design and form, material and detailing, boundary treatments. Proposals must also ensure significant views away from, though, towards and associates with the heritage asset(s) are conserved and enhanced.

Local Planning Policy & Guidance	Relevant Policies and Guidance Notes
Bassetlaw District Core Strategy	Policy CS8 Rural Service Centres Policy DM1 Economic development in the countryside Policy DM3 General development in the countryside Policy DM4Design and character Policy DM5 Housing mix and density Policy DM8 The historic environment Policy DM9 Green infrastructure, biodiversity and geodiversity, landscape, open space, and sports facilities Policy DM12 Flood risk, sewerage, and drainage Policy DM13 Sustainable transport
Successful Places SPD (2011)	02 Delivering Quality – the Design Process 03 Place Making Principles - Good Urban Design Practice 04 Management and Maintenance – Enduring Quality
The emerging Bassetlaw Local Plan	Policy ST1: Bassetlaw's Spatial Strategy Policy ST2 Housing Growth In Rural Bassetlaw Policy ST15: Provision Of Land For Housing Policy ST29: Affordable Housing Policy ST30: Housing Mix Policy ST35: Design Quality Policy ST37: Landscape Character Policy ST39: Green And Blue infrastructure Policy ST40: Biodiversity And Geodiversity Policy 41: Trees, Woodlands And Hedgerows Policy ST42: The Historic Environment Policy 43: Designated and Non-Designated Heritage Assets Policy 48: Protecting Amenity Policy ST52: Flood Risk And Drainage

Table 02: Relevant policies in the Development Plan

2.1.3 Key findings

The Bassetlaw Core Strategy currently comprises the Development Plan for South Leverton however, upon adoption, the policies contained within the Bassetlaw Local Plan, will replace the Core Strategy policies.

The most notable conclusion from the policy review is the lack of a definitive settlement boundary. Development in South Leverton, therefore, will likely come in the form of infill and backland proposals as well as extensions, alterations and conversions to existing properties.

To reinforce this point, policy CS9 identifies South Leverton as an 'All Other Settlement', which does not support housing proposals unless they comprise conversions or replacements. This is reflected in adopted policies DM2, DM3 and DM4 and emerging policies ST35.

Analysis and Design Codes

03

3. Analysis and Design Codes

This chapter presents 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 South Leverton.

3.1 Introduction

This chapter provides analysis on a number of key themes including heritage, built form, character, and landscape among others.

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 the conservation area.

This study informs a series of design codes that must underpin all future development proposals in South Leverton.

The codes 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 urban pattern 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 unsure compliance with the Development Plan. Upon adoption, proposals must also comply with the policies set out in the South Leverton Neighbourhood Plan.

Following an extensive analysis of South Leverton's built and natural environment, and engagement with the community, the following design codes have been produced:

Context

- Responding to heritage

- Key views and skyline

- Infill development

- Landscape setting and rural identity

Built Form

- Scale

- Density

- Appearance

- Materials

- Conversions

- Alterations and extensions

Layout

- Boundaries

Movement

- Streets

- Connectivity

- Parking

Sustainability

- Water Sensitive Urban Design

- Assessing Renewable Energy Sources

- Energy efficient measures to Net Zero Carbon

- Sustainable Building Materials and Construction

Landscape

- Landscape setting and rural identity

- Biodiversity

- Trees

Figure 15: General images of the neighbourhood area

3.2 Context

3.2.1 Characterisation study

The following pages presents analysis on the identified character areas across South Leverton. These character areas have been informed via a detailed analysis on several themes including urban grain, housetypes, character, density among others including the study set out in the South Leverton Neighbourhood Plan. The character areas include:

1. Retford Road / Station Road

2. Town Street

3. Cottam Road

4. Meeting House Lane

5. High Street / Glover Close

6. Wider Countryside

Key

- Neighbourhood area
- 1. Retford Road / Station Road
- 2. Town Street
- 3. Cottam Road
- 4. Meeting House Lane
- 5. High Street / Glover Close
- 6. Wider Countryside

North
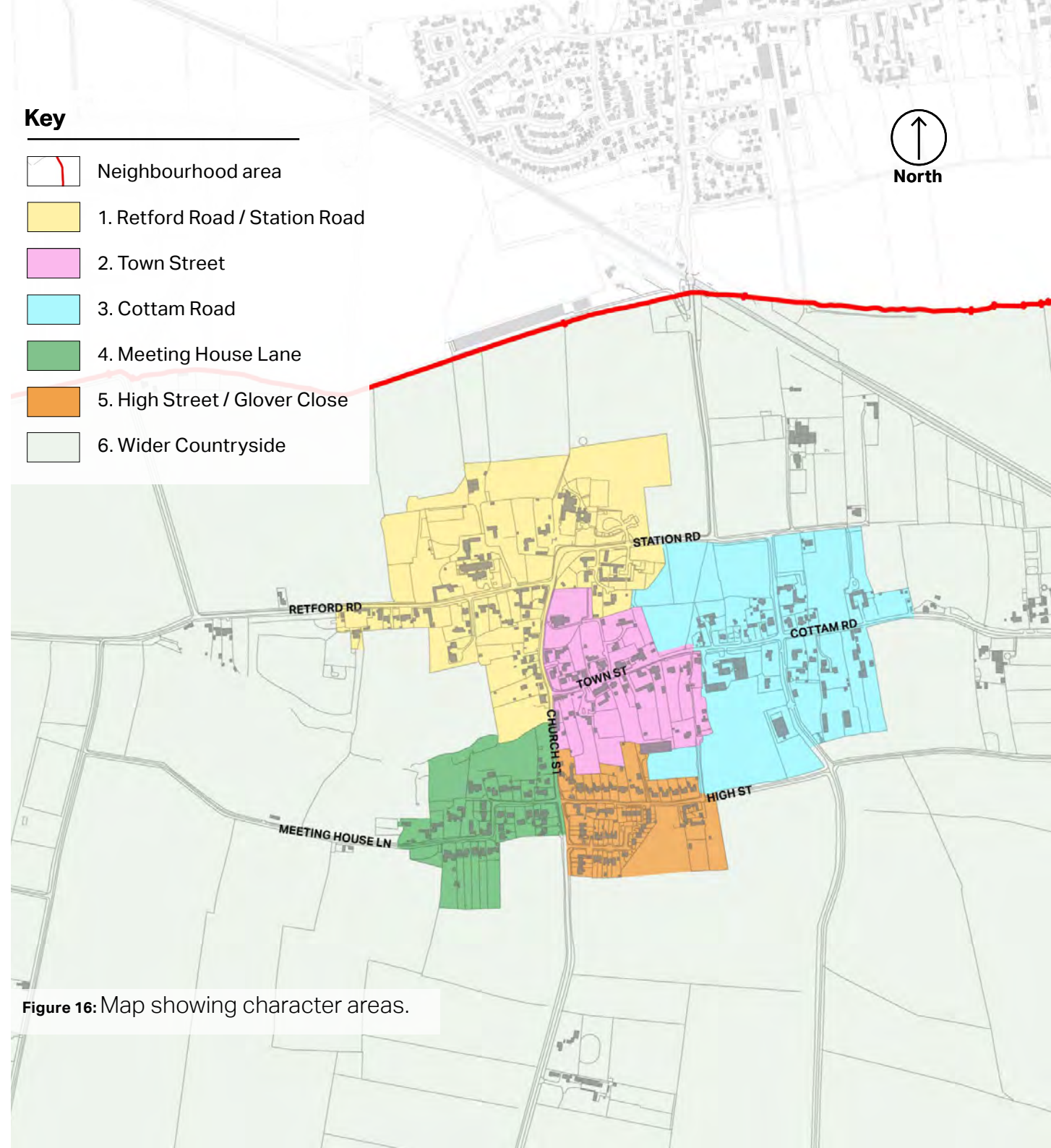
Figure 16: Map showing character areas.

3.2.2 Retford Road / Station Road Character Area

This character area includes both Retford Road and Station Road and comprises predominantly of residential uses.

Residential dwellings are typically larger in this character area and reside within larger plots. There are many examples of converted and subdivided farmsteads and associated ancillary buildings from agricultural to residential use. These property types have retained their form and layout and is usually arranged around a courtyard / yard that is now an area of high quality hard landscape and car parking.

Notable assets within the character area include the Millennium Structure, the Orchard School and All Saints' Church.

3.2.3 Town Street Character Area

The Town Street character area comprises the Town Street and Church Street axis.

It is predominantly residential in use however, it also includes All Saints' Church, the Memorial Institute and the Plough Inn.

Church Street comprises an important arterial route through the village. Buildings along Church Street have minimal setback creating a strong sense of enclosure

along the street. Planting within residential curtilages however, does provide visual relief along the streetscene.

Buildings are typically two storeys in height, red brick with a mix of red clay and brown pantile roof tiling. Properties sit within long, narrow, plots.

3.2.4 Cottam Road Character Area

The Cottam Road character area adjoins the Town Street character area and comprises the eastern edge of the village.

Properties within this character area are typically larger and reside within larger plots. They are often significantly setback from the road behind strong boundary features such as masonry walls or hedgerow.

Cottam Road is more rural in character when compared to Town Street and other character areas in South Leverton, predominantly due significant gaps between buildings (allowing for outward views across the countryside) and converted agricultural buildings that have retained their form and layout.

Properties here are typically red brick with brick banding detailing features with red pantile roofs. Buildings are mainly two storeys in scale with some 1 and 3 storey elements providing variety to the roofscape.

3.2.5 Meeting House Lane Character Area

The Meeting House Lane character area includes Meeting House Lane with the listed Meeting House (and associated barn) comprising the core of the character area. It is bounded on three sides (east, north and south) by countryside.

It has a wide range of more modern type properties complimented by single storey bungalows, larger detached two storey properties and converted historic barn type buildings.

Streets are comparatively narrower when compared to other streets in the Neighbourhood area. They are bounded by tall hedgerow, grass verges and, in places, low masonry walls. Parking is often on-plot and therefore does not detract from the visual qualities of the streetscene.

Red brick is the dominant elevational material, with a number of properties comprising white paint or brown brick providing variety on the streetscene.

3.2.6 High Street / Glover Close Character Area

The High Street and Glover Close character area comprises the neighbourhood with the highest density of dwellings. This is predominantly due to the terraced housetype however there is a range of single storey detached bungalows, terraced bungalows and two storey detached properties and semi-detached properties.

Materiality varies significantly with brown and red brick being the dominant elevational material with white render providing variety on the streetscene.

Roofing materials also vary with red clay and brown pantile tiling. Open gables, traditional pitches and link dormers create an attractive roofscape.

3.2.7 Wider Countryside Character Area

This character area comprises the countryside beyond the settlement area of South Leverton. There is no definitive boundary for South Leverton's urban area, therefore the character area boundary is defined by the character area plan (Figure 15) on page 34 of this document.

The character area is characterised by several farmsteads, farm houses and ancillary structures relating to agricultural uses. They are often accessed via a long driveway or buildings front directly onto the road. Surrounding the farms are a series of irregular shaped fields bounded by strong boundaries and drainage ditches.

The topography is predominantly flat allowing for long distance views across the landscape.

Strong boundary features assimilate South Leverton's built form into the wider landscape.

Notable characteristics include:

- Predominantly uniform scale of two storey buildings. Barn structures are the exception, often exceeding this scale

- Curtilages often bounded by mature hedgerow and tree planting

- Predominantly residential and agricultural uses. There are some cases of commercial operations, such as at Windmill View Plant Centre,

3.2.8 Listed Buildings

Table 03 (overleaf) sets out South Levertons listed buildings. There are 12 listed buildings and assets in South Leverton, 11 of which are Grade II with the Church of All Saints listed as Grade II*.

3.2.9 Non-designated heritage assets

There are approximately 30 additional buildings across South Leverton that are identified as 'non-designated' heritage assets due to their contribution to the historic fabric of the village and the setting of the designated heritage assets.

Figure 17: Methodist chapel from Town Street
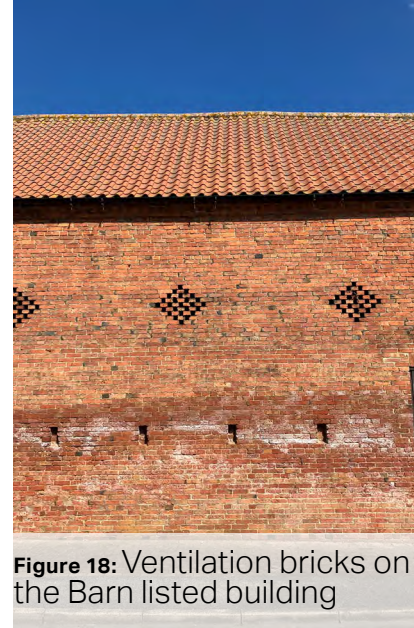
Figure 18: Ventilation bricks on the Barn listed building

Figure 19: Meeting House on Meeting House Lane

Figure 20: New Farm House and the Stables from Cottam Road.

Figure 21: The Barn on Meeting House Lane

Figure 22: Green Cottage from Town Street

HERITAGE ASSET		
1.	Outbuilding 20 Metres North Of The Priory	Grade II
2.	The Priory	Grade II
3.	The Old Dovecote	Grade II
4.	Church Of All Saints	Grade II*
5.	Diamond House	Grade II
6.	Methodist Chapel	Grade II
7.	Green Cottage	Grade II
8.	Holly Farm House	Grade II
9.	Two Centuries Barn	Grade II
10.	New Farm House And The Stables	Grade II
11.	The Barn	Grade II
12.	Meeting House	Grade II

Table 03: Listed buildings and assets in South Leverton

Figure 23: Church of All Saints

Figure 24: Methodist Chapel

Key

Neighbourhood area

Listed Buildings (red)

Non-designated (yellow)

North
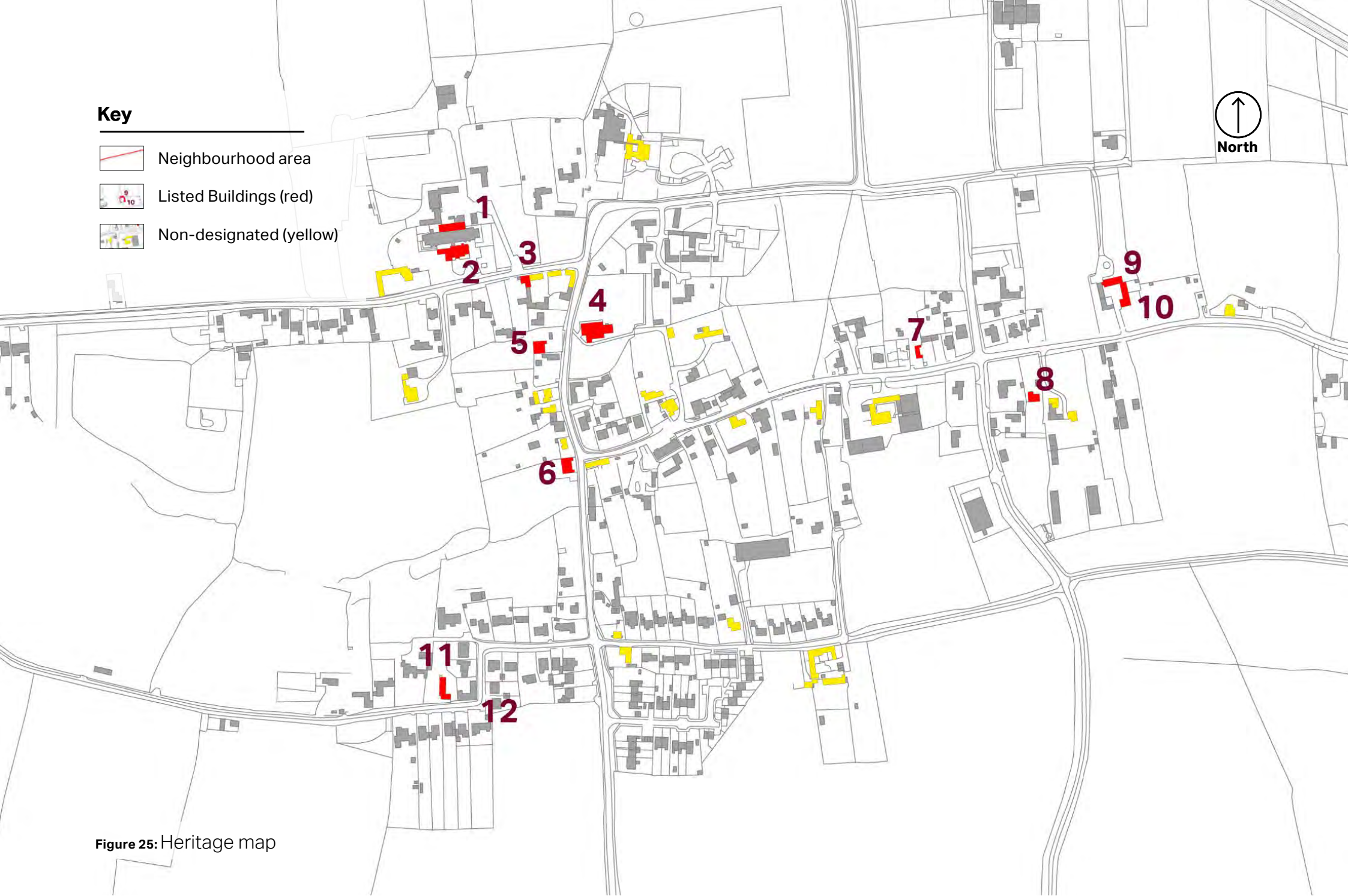
Figure 25: Heritage map

Colour palette

RED	BROWN	GREY / BLUE

RED / ORANGE	PALE / WHITE	GREY

Materials and details

Red brick | Mottled red/brown brick | Flemish bond | Paned sashed windows

Roofscape

Brown pantile tiling | Taditional pitch | Red clay pantile tiling

Boundary treatments

Small vegetated boundary with little setback | Herringbone masonry boundary walls | Masonry wall with hedgerow

Table 04: Colours, materials/detailing, roofscape and boundaries of listed and historic buildings across South Leverton

Design Code 01: Responding to heritage

Development proposals within proximity to a listed asset, or non-designated assets (as identified on figure 24) including alterations and extensions must:

a. Respond to the heritage features, such as characteristics, materiality and detailing set out in table 04.

b. Respect the historic layout and pattern, responding to positive characteristics in terms of street pattern, density and layout, plot series and boundary treatments.

c. Respond appropriately by respecting scale, massing, and height, especially where visible from public routes and spaces (particularly the main routes through the village).

d. Retain and frame key views of listed assets and notable buildings.

e. Be orientated and sited where it does not impact the setting of a listed asset.

f. Avoid dormers that significantly alter the roofline.

g. Ensuring that windows and door design are proportioned and designed to reflect the style/age of the surrounding heritage buildings.

Design Code 02: Views and skyline

A. General

New development, or extensions and alterations to existing properties, must not obstruct or lead to a detrimental impact to views of listed assets or the wider countryside.

New development should respect the existing shape and rhythm of skylines and roofscape.

B. Edge of settlement

On site, or settlement edges, development must protect and reinforce views out towards the countryside. This includes consideration on scale, the narrowing of gaps between properties and strategic planting of trees and hedgerows.

Proposals must reference Design Code 12 in this report for further criteria.

C. Gateways

Development within the setting of South Leverton's gateways (Treswell Road, Retford Road, and Station Road), must contribute to the setting of the gateway through building orientation, planting and scale and should seek to enhance the 'sense of arrival' into the village.

The immediate setting of a listed asset contributes significantly towards the visual qualities of the listed asset.

Views towards listed assets must be retained and framed

Trees and green infrastructure in the streetscene and in residential curtilages aid in significantly enhancing views across the landscape and townscape.

Streets can help to reinforce a visual and physical link to a listed asset.

New buildings should retain and/or compliment the form of adjacent properties including scale, materiality and detailing.

Figure 26: Views to local landmarks should be retained, acting as visual links to aid orientation and retain area characteristics

3.2.10 Minor development in the village

South Leverton, as identified in the Development Plan, is not expected to deliver a significant amount of growth. Development, therefore, will likely be in the form of minor development, which is generally smaller scale (between 1-9 dwellings).

Proposals will typically comprise infill, backland or small scale development on previously developed land. Design Code 03 will set out a series of criteria for minor development across South Leverton.

Design Code 03: Infill and backland development

Development proposals on infill and/or backland plots across South Leverton must:

- Infill development should be small in scale (typically 1-2 dwellings between 2 existing properties), subject to the character area in which it resides, to ensure that it reflects the urban grain and character of that character area.

- Materials should reflect the character area and harmonise with adjacent homes (see Design Code 06 and 07 for more information).

- Fenestration and facades should be in keeping with the predominant positive buildings character on the street or harmonise with adjacent buildings of good character.

- Dwelling entrances should front the street with a main access and main fenestration. On corner plots, openings and building articulation should allow the property to provide frontage to both streets.

- The building line should reflect the street and not be setback more than 2m from adjacent buildings. Where buildings are setback from the pavement a masonry boundary wall (usually low-rise) should define the plot and link to adjacent. Buildings should have a size, scale, and positioning within a plot, that helps to define and enclose the streetscape.

- Building heights should be in-keeping with adjacent plots (see Design Code 04 for more information).

- Rear and side plot boundaries which face public spaces must be masonry walls (materials to match adjacent plots).

- The use of innovative materials, construction techniques, and style may be appropriate where considerable levels of sustainability can be demonstrated.

Figure 28: Infill should emulate the building line of surrounding development

Figure 27: Infill should also be of a similar size and scale to surrounding development
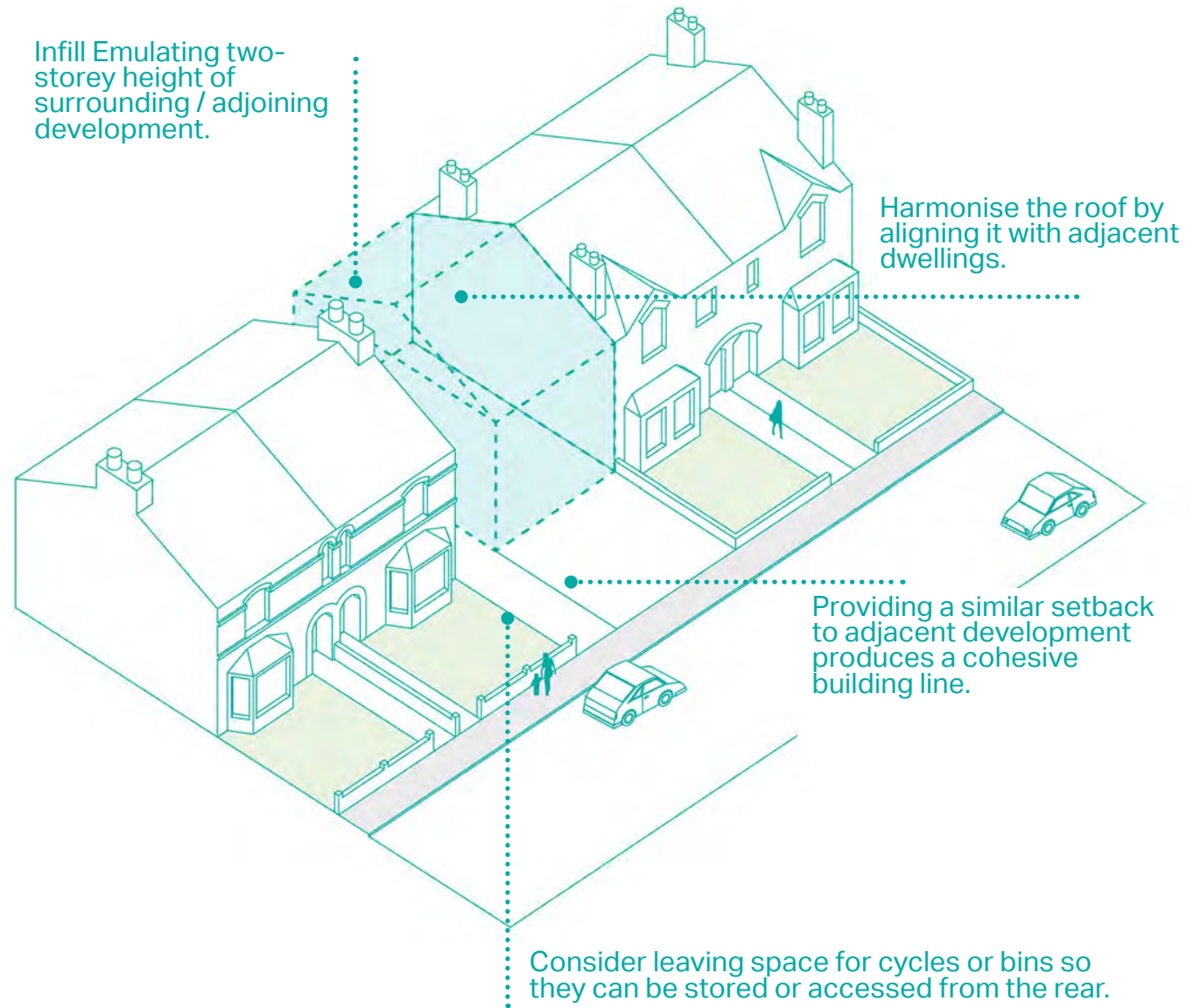
Infill Emulating two-storey height of surrounding / adjoining development.

Harmonise the roof by aligning it with adjacent dwellings.

Providing a similar setback to adjacent development produces a cohesive building line.

Consider leaving space for cycles or bins so they can be stored or accessed from the rear.

3.3 Built Form

3.3.1 Layout, built form and urban grain

South Leverton's settlement area is predominantly arranged across an organic street pattern. Principally arranged along Retford Road, Station Road and Church Street. South Leverton's built form reflects ribbon development along these main streets, with modern infill and backland development extending the built form.

Many of South Leverton's historic buildings, farm buildings and other buildings associated with agricultural use have been converted to residential use. These buildings have retained their original features and building form, which is evident at the Old Dovecote and Orchard Lane where buildings are arranged to enclose a small courtyard with a minimal setback from the road.

As illustrated on the adjacent plan, notable characteristics include:

- Building footprints corresponding with the organic growth of the town. Larger buildings within larger plots (reflecting the rural character) are located to the north of the village, along Station Road, Retford Road and Church Street.

- Smaller, modern, dwellings within small plots consistent with semi-detached, detached bungalows and terraced property types arranged along 'planned' street types such as at Meeting House Lane and Glover Close.

- A small number of large footprints associated with industrial and community uses, principally along Town Street and at the Orchard School.

- Clusters of buildings across the Neighbourhood area comprising a variety of footprint sizes (relating to agricultural uses) which break up the mainly domestic scale of building footprints.

3.3.2 Housetypes and scale

The Census 2011 data (latest available data) indicates that South Leverton has 216 households across the neighbourhood area. Housetypes comprise the following:

- Detached: 152,

- Semi-detached: 39,

- Terraced: 23,

- Flats: 2.

Detached properties comprise 70% of South Levertons total housing stock, semi-detached comprising 18%, terraced properties comprising 11%, flats comprising 1%.

The majority of properties across South Leverton are 2 storeys in scale. However, there are a range of single storey bungalows and larger 3 storey properties providing variance to the roofscape.

Figure 29: Housetypes across the Neighbourhood Area

Design Code 04: Scale

New buildings must comply with the following criteria:

- Building height should vary between 1.5 and 2.5 storeys. At key corners, taller buildings should help create focal points.

- Building scale and massing should be in keeping with the prevailing village pattern and not be overbearing on existing properties or deprive them of light, including overlooking or over-shadowing of both windows and amenity space.

- Building scale and position on plot should help to define and enclose the space within the street corridor to an appropriate degree based on the existing street section (building to building) and level of enclosure (ratio of street width to building height).

- At the settlement edge new buildings will be required to meet the criteria set out in Design Code 12 .

- A variable eaves and ridge line should be encouraged to provide variation in the roofscape and streetscene. Typically, variation between adjacent buildings should be a maximum of 0.5 storeys.

3.3.3 Density

Building density across the South Leverton Neighbourhood area reflects its rural character. As illustrated on the adjacent plan (figure 30) and in table 05 (right), building density ranges between 8-15 dwellings per hectare (dph).

The density of dwellings across South Leverton typically reflects building age and form. Older buildings, including converted farm buildings, are of predominantly lower density. This is presented on the adjacent plan where (1.) Orchard Lane (a collection of converted dwellings retained in their agricultural form) and (2.) Retford Road (2) comprising 10 and 11 dph respectively. Alternatively, (5) Glover Close and (6) Meeting House Lane, both comprise more modern housing developments with a higher dwelling density of 15 and 14 dph respectively.

This equates to an average dph of 11 across South Leverton.
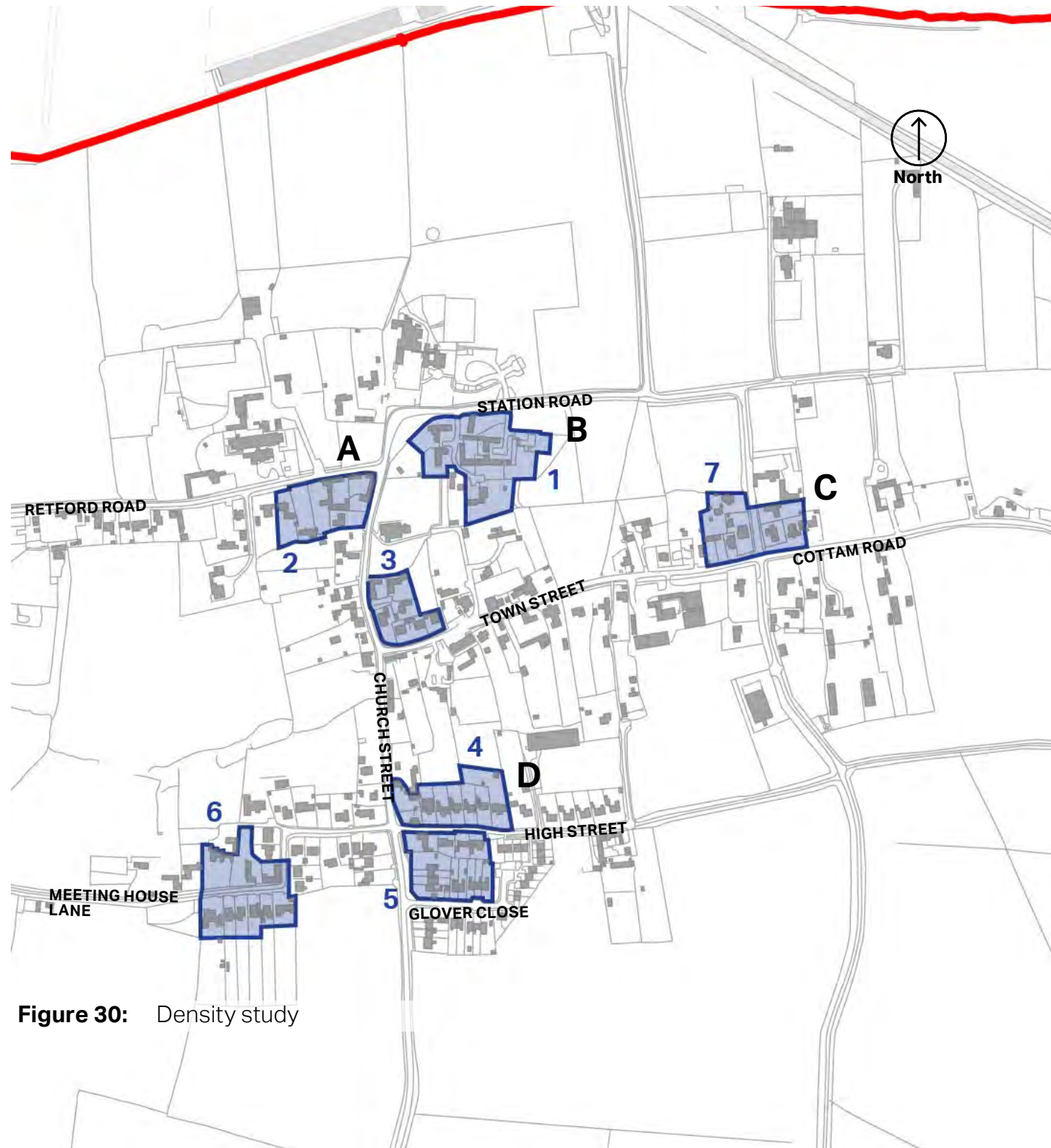
Figure 30: Density study

A

B

C

D
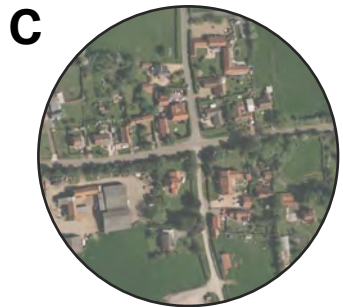
Character area	Average Net Dwellings per Hectare (DpH)
1. Orchard Lane	10
2. Retford Road	11
3. Church Street / Town Street	10
4. High Street	8
5. Church Street / Glover Close	15
6. Meeting House Lane	14
7 . Cottam Road	8

Table 05: Dwellings per hectare (DpH) across South Leverton.

Design Code 05: Density

Table 05 (left) lists the dwellings per hectare (dph) average across South Leverton Guidelines for density are as follows:

- New development should respond to the specific dph of whichever character area it falls within.

- Gentle density may be contextually appropriate for South Leverton provided this does not adversely affect the village's character.

- Terraced or townhouse housing typologies reflect the highest density housing typologies that should be used.

- Higher density housing typologies (i.e. terraces; townhouses) are more appropriate within the High Street / Glover Close character area.

- Similarly, lower density housing typologies should be used on the edge of the village.

- The proposed DpH of any development site should reflect local housing needs.

3.3.4 Appearance and detailing

Red brick is the dominant elevational treatment across the majority of South Leverton's residential area. Variety on the streetscene is often provided by mottled/brown brick or white/pale rendered properties. There are some cases of buff bricked properties which are evident along Meeting House Lane.

As illustrated on the adjacent imagery, roofing materials predominantly comprise red clay pantile tiling with few examples of brown pantile tiling and natural slate with a traditional gable roof orientation. In some cases, roof profiles are punctuated by gable and link dormers that face the street. There is one example of a Dutch gable along Church Street, occupying a dominant position along the street, creating a focal point.

Detailing on properties include:

- Ventilation brickwork,

- Brick and stone banding to delineate between storeys,

- Stone and brick sills and lintels,

- Dentilation underneath roof eaves.

Colour palette

RED	BROWN	GREY / BLUE
RED / ORANGE	PALE / WHITE	GREY

Materials and details

Red brick | White render | Brown mottled brick

Roofscape

Natural slate | Red clay pantile | Brown tiling and hipped roofs

Boundary treatments

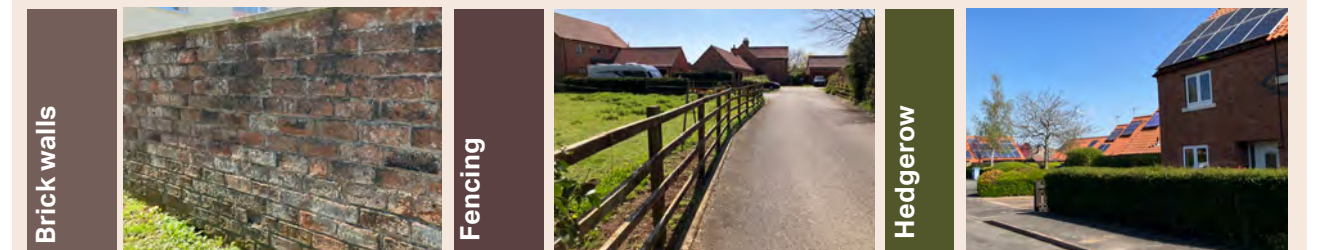
Brick walls | Fencing | Hedgerow
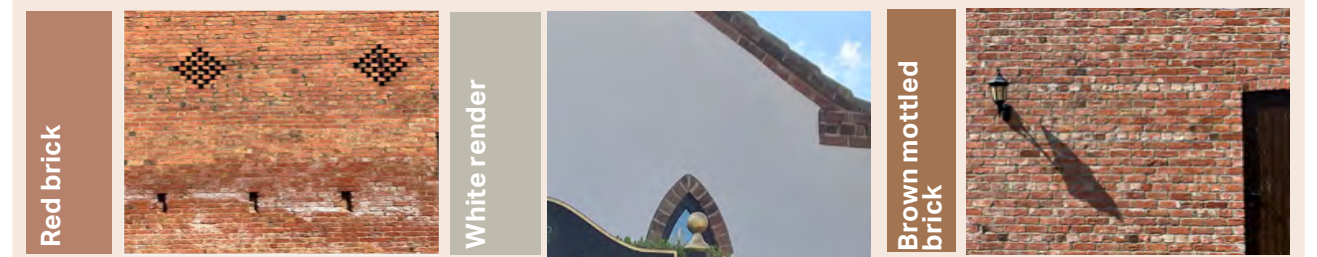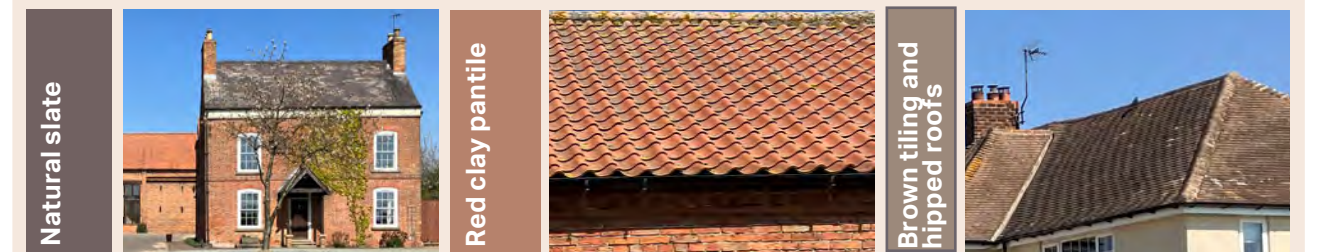
Table 06: General characteristics including colours, materials/detailing, roofscape and boundaries of properties across South Leverton

Design Code 06: Appearance

- At the outset, development proposals must identify the relevant character area in which they reside.

- Development must be respectful of local character features, including; the use of local materials for walls and roofs, fenestration, doorways, roof detailing, boundary treatment, set-backs, varied brick bonds (e.g. Flemish bond), chimneys and car park provision.

- Reflect local identity by using materials that make a valuable contribution to the character of the town (as set out in 3.3.4 and Design Code 07).

- The above should also apply to the colour of door and window frames.

- Design of details and features must respond to the area of the village in which it is sited or adjacent to (including the surrounding landscape) to enhance the positive qualities of the area.

- Integrate car parking sensitively within the streetscene. For example, parking set behind the building line inside internal courtyards or front of plot spaces lined with native hedgerows.

Design Code 07: Materials

- New buildings must use red brick as the dominant elevational material palette and should seek to utilise this material as often as possible. Reference should be made to the features set out in table 06.

- The use of brown brick or white render is encouraged on certain facades to provide contrast and interest along the streetscene.

- Red pantile tiling should be used on roofs. Brown pantile and natural slate tiling may be used in some circumstances. Reference should be made to the appropriate character area.

- Materials should be natural and locally sourced as this will contribute to a cohesive materiality and colour palette across South Leverton. Synthetic materials are often not as long-lasting or aesthetically comparable to natural materials.

- Decorative brick and stone detailing is encouraged. Detailing across all of South Leverton's character areas is set out in 3.3.4.

- Muted or darker tones of material are encouraged to minimise visibility of development from the surrounding landscape. The choice of colour and finish is an important design consideration in mitigating adverse impacts on the surrounding landscape.

- Deviating from traditional materials and aesthetics should be considered where innovative design and sustainability is demonstrated.
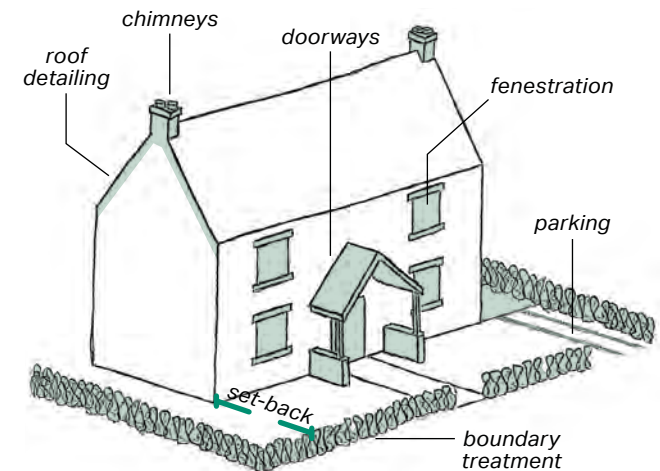

Figure 31: Building-scale local features to be considered

Design Code 08: Conversion of agricultural buildings

Conversion of existing agricultural buildings must:

a. Preserve the agricultural character of the building.

b. Preserve the original form of agrictural buildings including central courtyards. Courtyards should be used as amenity space and/or to accomodate on-plot car parking.

c. Have a minimal visual impact on the landscape in which it relates.

d. Be fit for purpose but also designed to be sensitive to their surroundings, integrating into the wider landscape setting

e. Ensure that new openings for windows and doors complement originals in size, form and location.

f. Retain, reuse and repair wherever possible traditional outbuildings and barns including existing boundaries.

g. Ensure that new boundaries follow existing boundary lines and incorporate existing natural features such as hedgerows, walls or footpaths.

Figure 32: Examples of sustainable and contemporary development that reference vernacular architecture in the open countryside.

Figure 33: Example of dwellings and outbuildings that are partially screened by trees and planting.

Design Code 09: Extensions and alterations

a. Extensions to existing properties must be subservient or of an appropriate scale in relation to the original building.

b. Extension 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.

In all cases, proposals that seek to extend or alter an existing building must consult the Local Planning Authority to determine compliance with the Local Plan and the General Permitted Development Order.
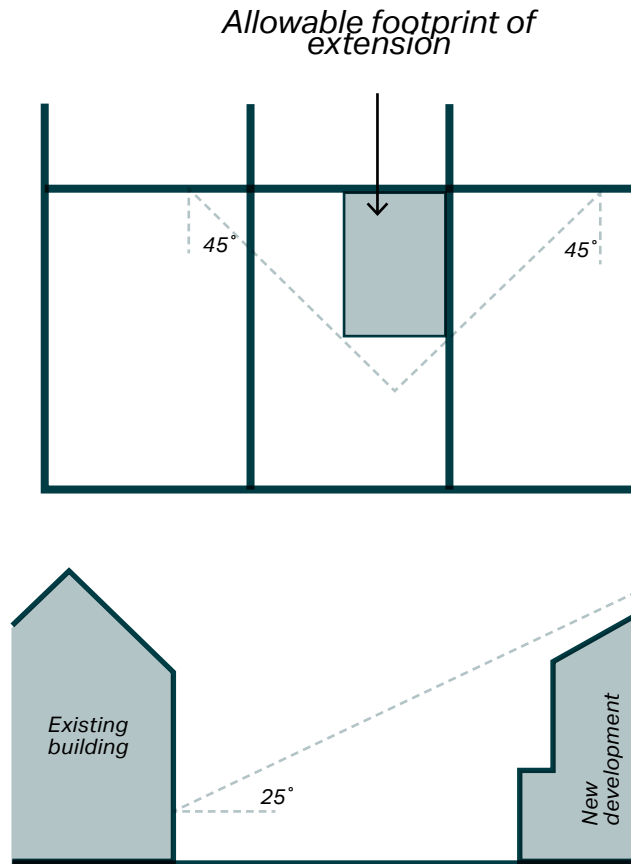
Allowable footprint of extension

45°   45°

Existing building

25°

New development

Figure 34: 25˚ / 45˚ rule

3.4 Layout

3.4.1 Boundaries

Boundary treatments (front, side and rear) contribute to the visual qualities of the streetscene and help delineate between the private and public realm. Positive boundary treatments integrate into the wider hard and soft landscape, including the green infrastructure network, as well as provide enclosure to the street. Boundary treatment across the Neighbourhood area include:

Open Boundaries

- Open boundaries (no edge) encourages a positive relationship between the street and the property.

- Open boundaries do not provide a defensible edge and do not delineate public and private spaces well.

- They are particularly prevalent at Orchard Lane.

Vegetated Boundaries

- Vegetated boundaries predominantly come in the form of hedgerow.

- Tree planting also contributes towards vegetated boundaries.

- Vegetated boundaries are favourable on site edges where the property overlooks the wider countryside.

- Hedgerow boundary treatments can integrate into the wider green infrastructure network.

- They can be used as important corridors for local wildlife.

- They provide visual relief along the streetscene.

- They are particularly prevalent along Retford Road and Meeting House Lane.

Masonry Boundaries

- Stone/brick walls are a common form of boundary treatment across the Neighbourhood area.

- They are a strong visual feature in the streetscene and establishes a strong boundary between the public and private realm.

- They are particularly common along Church Street.

Fenced Boundaries

- Fencing is a common boundary treatment for both side and rear boundaries.

- They help provide privacy however fencing as a front boundary treatment is discouraged.

- They are notable features at Glover Close.

Design Code 10: Boundaries

Guidelines for boundary treatments are as follows:

- Reflect and reinforce local character by demonstrating typical South Leverton boundary treatments such as

  - Masonry walls.,

  - Post and rail fencing.

  - Hedgerow (and tree) planting.

- Avoid ambiguous plot boundaries by providing clear visual and physical boundaries between public and private spaces, as well as between dwellings.

- Employ vegetated boundary treatment on the settlement/site edges to promote a cohesive transition between the built and natural environment

- The size and scale of boundary treatments should respond to both its positioning (i.e. whether its a front, side or rear boundary) and surroundings.

- When planting hedgerow boundaries, the use of native species must be employed. The planting of non-native (leylandii, laurel and conifer, among others) are not acceptable.

Good practice █ Bad practice:

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

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

Post and rail fencing is a strong characteristic across South Leverton. They are suitable for both rear and side boundaries.
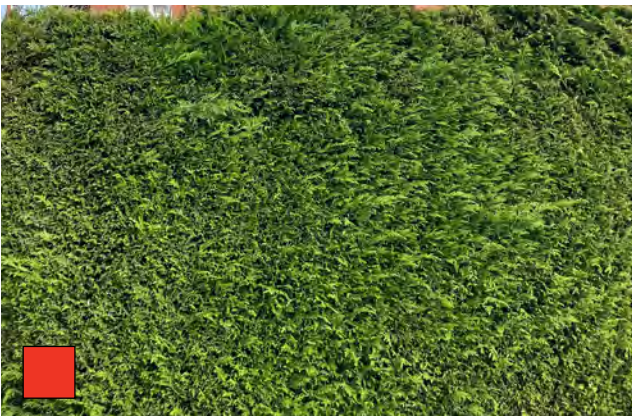
Leylandii, laurel, conifer and any non-native hedging will not be supported on new developments.

Figure 35: Masonry walls are appropriate to clearly delineate between public and private space.

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.

3.5 Landscape

3.5.1 Green infrastructure

South Leverton is rural in character and has a strong relationship with the wider landscape. The settlement area comprises less than 10% of the total Neighbourhood area. The remaining area is comprised of agricultural fields, bounded by mature hedgerow and trees, copses of trees, small ponds and land drains.

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

There are limited street trees along residential streets, however mature trees residing within residential curtilages, or hedgerow and trees which demarcate field boundaries, provide visual relief along South Leverton's streets, significantly enhancing the sylvan character of the Neighbourhood area.

Figure 36: Open fields
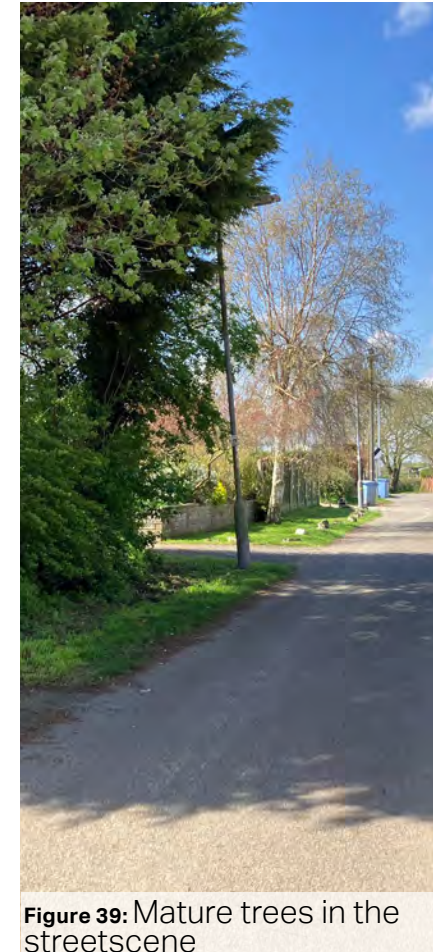

Figure 37: Small pockets of greenspace

Figure 39: Mature trees in the streetscene

Figure 38: Flat landscape allowing for long distance views across the landscape
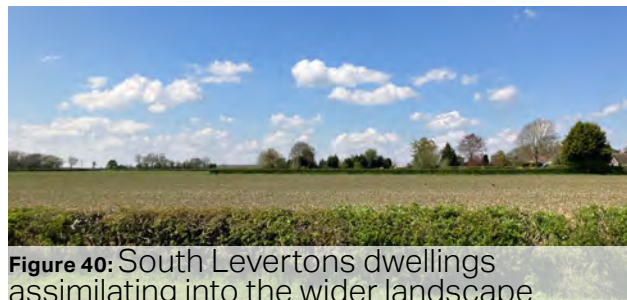

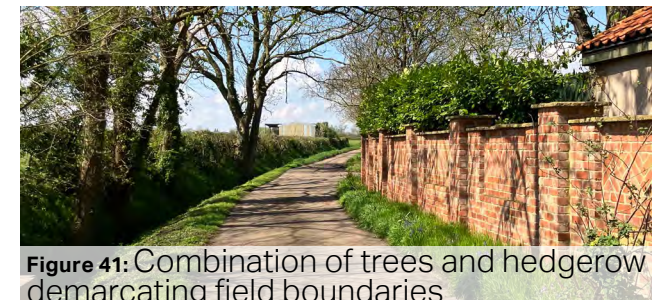**Figure 40:** South Levertons dwellings assimilating into the wider landscape

Figure 41: Combination of trees and hedgerow demarcating field boundaries

3.5.2 Topography

The urban area of South Leverton is predominantly flat with some undulating terrain creating gentle hills when entering and exiting the village. This allows for generous long range views across the wider countryside.

These views however, are sometimes obstructed by tall hedgerow, a dominant feature in the landscape, and mature trees. Notwithstanding this however, there are notable views towards the River Trent and the cooling towers at Cottam Power Station.

3.5.3 Landscape Character

The Neighbourhood area falls within Local Landscape Character Area 05 Mid-Nottinghamshire Farmlands.

It is defined as having a landform that is predominantly flat becoming more undulating in the west and sloping down towards the Trent valley in the east. Other features include:

- Intensive arable farmland with small pastoral areas adjacent to the becks and villages.

- A network of becks flanked by vegetation stretching east to west.

- Generally well managed hedgerow field boundaries with occasional hedgerow trees.

- Predominantly vernacular settlement though some newer and older non-vernacular development is evident.

- Isolated farmsteads.

The features and characteristics of both of the above will inform the Design Codes in this section.

Design Code 11: Landscape setting and rural identity

All development proposals that are located on settlement edges must:

- Ensure dwelling frontages are orientated outwards and avoid rear boundaries facing the landscape - unless suitably screened by planting.

- Retain the visual quality of the landscape by reducing the scale of development; Dwellings should not exceed 2 storeys in these locations.

- Soften the boundary between built form and the wider landscape by encouraging soft landscape planting such as hedgerow, wildflower, and tree planting.

- Provide access links for both pedestrians and cyclists to the wider countryside, and where possible, connect to the Public Right of Way network.

- Avoid designing a street hierarchy that arranges primary roads and over-engineered turning heads to abut the wider landscape.

- Be of a low density with buildings interspersed with tree planting to visually soften the impact on the surrounding countryside.

Figure 42: Vegetated boundaries allow buildings to assimilate to the wider landscape.

Figure 43: The domestic scale of buildings combined with vegetated screening soften the transition between the built and natural environment.

Figure 44: Fenced boundaries are not appropriate on the settlement edge.

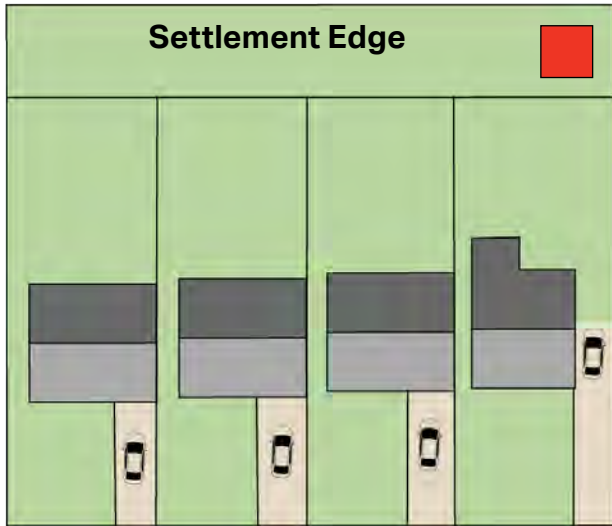**Figure 45:** New buildings must be orientated outwards to avoid blank gables facing the landscape.

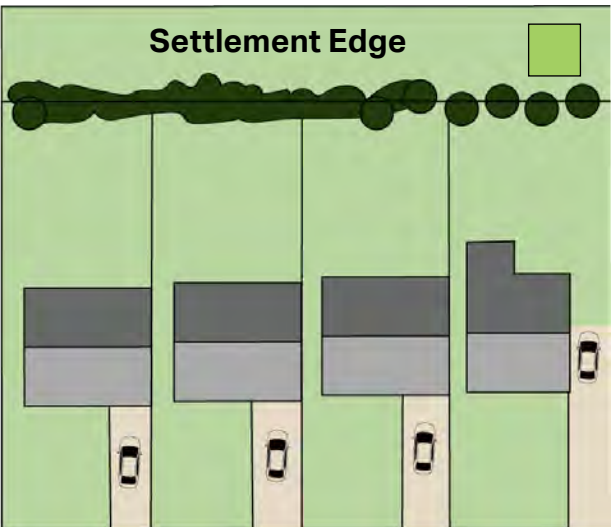**Figure 47:** Village separation diagram

Figure 48: Settlement edge planting diagram

Views out into open countryside down side roads aiding legibility and permeability.

Development naturally screened by trees.

Frontages oriented towards the open countryside (outward facing).

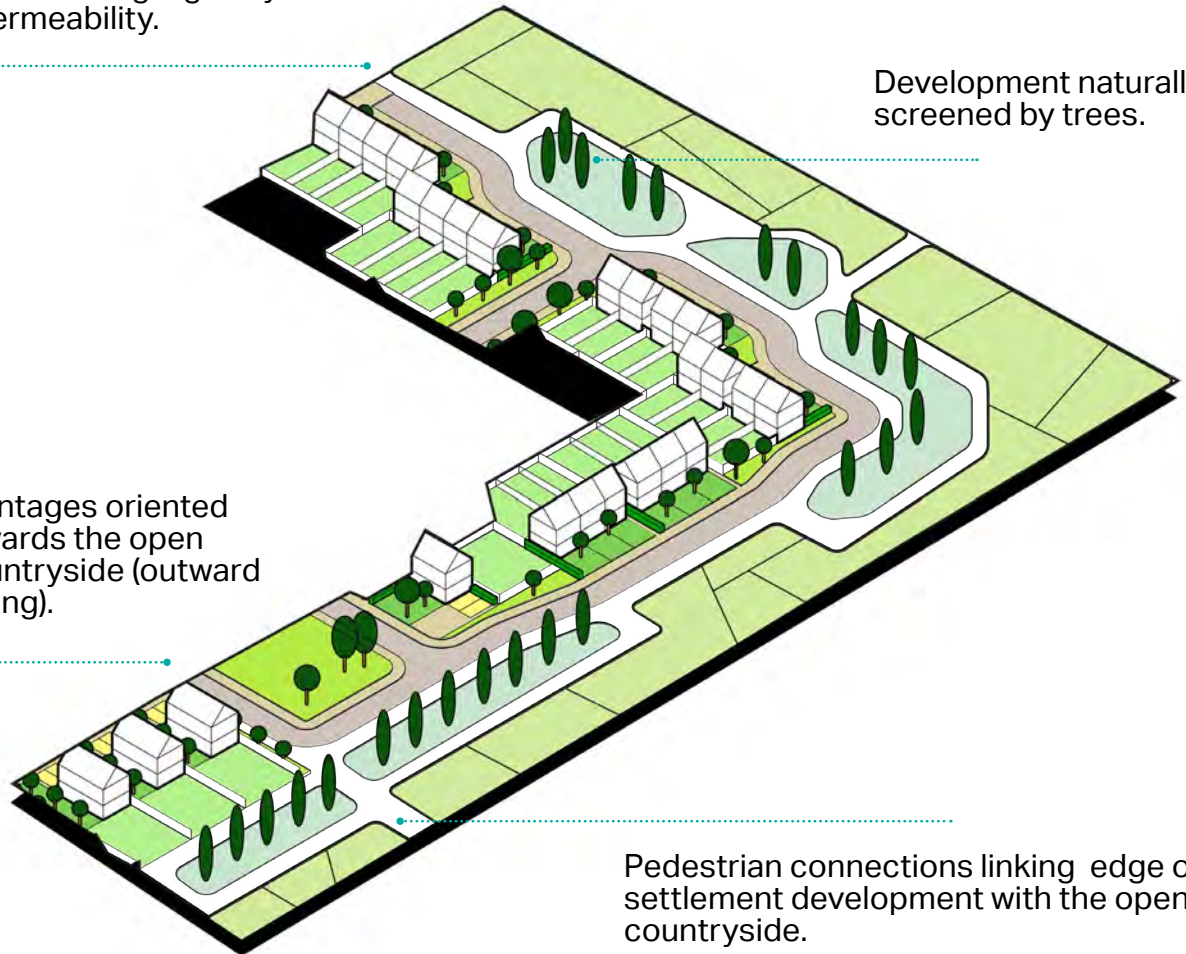Pedestrian connections linking edge of settlement development with the open countryside.

Figure 46: Landscape sensitive edge of settlement development diagram.

Design Code 12: Biodiversity

Planning applications in South Leverton 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:

- Features for nesting birds associated with the built environment such as swifts and house sparrows.

- Features for roosting bats.

- Green walls and green/brown roofs.

- Mixed native species hedgerows.

- Creation of new wildlife ponds and the re-creation of historically lost ponds.

- Native scrub and tree planting.

- Orchard/fruit trees.

- Creation of species rich grassland.

- Creation of rough grassland suitable for foraging barn owls and provision of barn owl nest boxes.

- Log piles and compost heaps.

- 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.

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.

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.
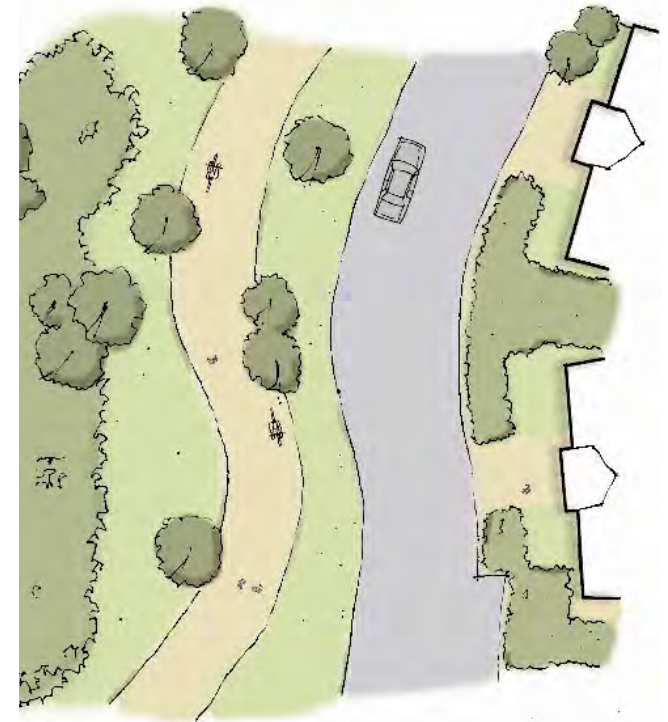

Figure 49: Promoting a multifunctional green infrastructure network including verges, hedgerow, gardens, trees and planting

Design Code 13: Tree planting

The National Design Guide and National Planning Policy Framework (NPPF) put great emphasis on tree-lined streets and integrated green infrastructure design to provide 'green islands' and connected corridors which contribute to localised cooling and provide habitats and public amenity.

Retain

Tree surveys and impact assessments should be provided which highlight the trees on a site which are to be retained and those which are to be removed. It is preferable to retain a good quality tree than to replace it.

Where significant trees are located on site, independent surveys to assess the development impact must be completed. This should inform the local community and could lead to objections where significant trees are impacted.

Replace

Ensuring trees removed from development land are proportionately replaced is important to maintaining current levels of canopy cover and green infrastructure.

A common misconception is that replacing on a 1-for-1 basis is proportional. This is not the case. 1-for-1 replacement can reduce canopy cover, green infrastructure habitat and public amenity.

Where trees are to be replaced, consider using a proportionate scale to determine numbers of replacement trees required based on the size of tree removed.

Improve

To just replace removed trees or do nothing if trees are not removed is commonly misunderstood to be acceptable. However, the NPPF requires 'improvement', 'enhancement' and 'net gain'. These are not words that aim to maintain a status quo on trees.

For major development sites, an area of development land could be dedicated for tree planting in the form of a multi-functional community woodland. Relative population density and designated land use types put pressure on a greater density of development and often results in side-lining tree planting and biodiverse green infrastructure design.
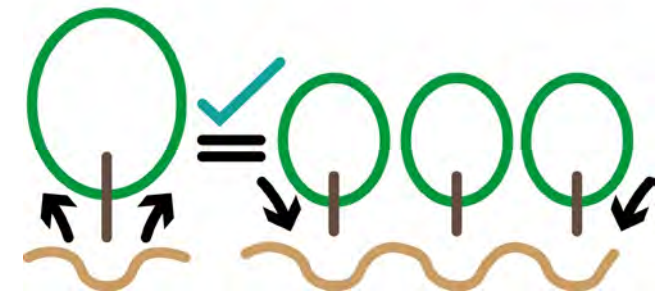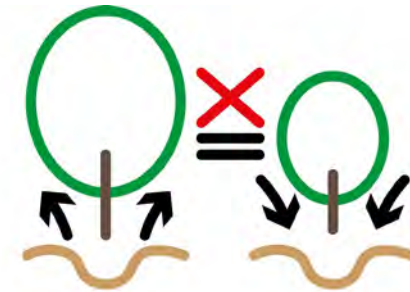

Figure 50: Replacing trees on a 1-for-1 basis is not proportional because of the reduction in the canopy cover, habitat and public amenity.

3.6 Movement

3.6.1 Characterising the street network

Characterising the street network South Leverton's road network comprises several key routes, these include:

• Retford Road - connecting South Leverton to the larger settlement of Retford.

• Station Road - connecting South Leverton to the nearby settlement of North Leverton.

• Town Street, High Street, Church Street, and Meetinghouse Lane - comprising the core of the neighbourhood area providing access to residential streets.

3.6.2 Describing the street

The majority of these routes are curvilinear and interconnect with one another. There are limited cul-de-sacs across the neighbourhood area, with the majority serving higher density residential areas such as at Glover Close, Orchard Lane, and Plough Hill.

As demonstrated on the adjacent imagery, South Leverton's streets are sylvan in character as a result of mature trees within residential curtilages and hedgerow front boundaries forming strong linear features in the streetscape.

Figure 51: Town Street

Figure 52: Meeting House Lane

Figure 53: Retford Road

Figure 54: Church Street

Road	Setback (average)	Footpath (average)	Carriageway	Enclosure ratio (building to building)
1. Church Street	3.5m	1.6m	5.6m	1:2.5
2. Town Street	5m	2m	8m	1:3
3. Retford Road	1m	1.8m	4.7m	n/a*
4. Meeting House Lane	8m	1.4m	4.2m	1:4

*Development on one side does not allow for enclosure ratio

Figure 55: Road and footpath map

NORTH LEVERTON

SOUTH LEVERTON

TO GAINSBOROUGH

TO GAINSBOROUGH

RETFORD ROAD

STATION ROAD

TOWN STREET

COTTAM ROAD

CHURCH STREET

MEETING HOUSE LANE

HIGH STREET

LEE BECK

TRESWELL ROAD

CATCHWATER DRAIN

TO TRESWELL

TRESWELL
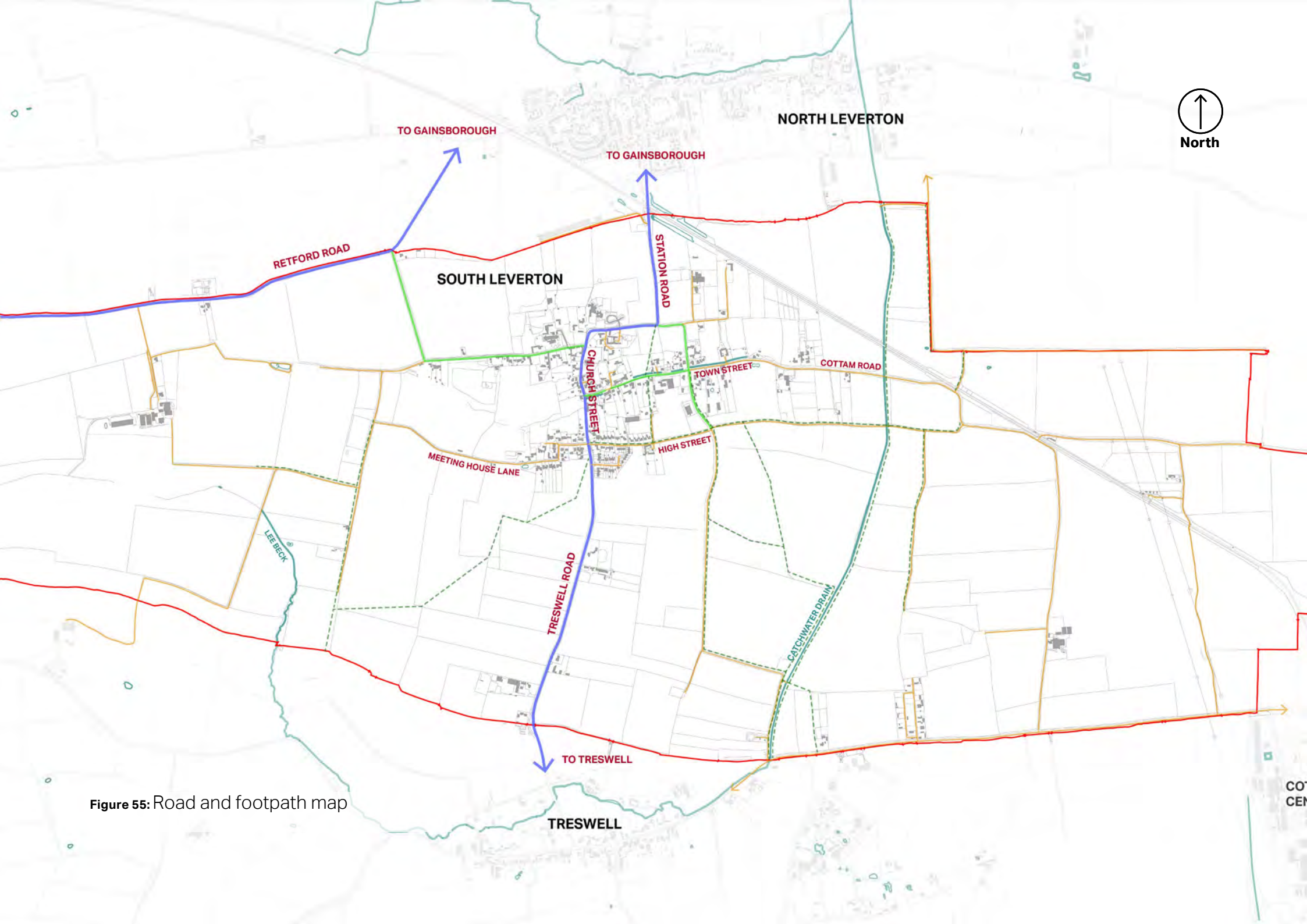
North

3.6.3 Pedestrian links

The village of South Leverton has extensive links with the wider countryside with many footpaths integrating the built environment with the natural environment.

As demonstrated on figure 55, there are several public footpaths crossing the village connecting South Leverton with adjacent settlements. These footpaths range from:

- Narrow hard-landscaped paths between properties connecting adjacent neighbourhoods.

- Wide informal paths crossing meadows and fields.

- Formal footpaths along landscape features such as field boundaries and the Catchwater Drain.

The majority of the Neighbourhood area's streets include wide footpaths on either side of the street allowing for easy movement across the village. However, several roads (such as Town Street on figure 58) do not include footpaths. These streets are typically wider than average streets and combined with the limited traffic movement through the village, are comparitively easy to walk along.

Figure 56: Public Right of Way connecting two adjacent streets.

Figure 57: Narrow footpaths between two existing properties.

Figure 58: Town Street with no footpath.

Figure 59: Narrow, paved, footpath connecting two neighbourhoods.

Design Code 14: Streets

Development proposals that propose new street must:

- Follow a simple but well-defined street hierarchy and a strategy of how this will be interpreted 'on the ground'. Elements of the street hierarchy should be defined through a narrowing of street widths, use of different materials and planting strategies.

- Place street trees within adequate verges, alongside the carriageway, on plot or in open spaces and street lighting and other infrastructure must be designed in combination.

- Promote methods to encourage slow-vehicle speeds as well as improve legibility and permeability through a change in materiality, raised tables and alternative widths in line with the street hierarchy.

- Propose shorter streets of less than 70m (from Manual for Streets) to help to keep speeds down. Also horizontal speed calming measures, including visual narrowing of carriageway, on street parking bays, and landscaping may also be appropriate.

Design Code 15: Connectivity

Development proposals must provide:

- Designated pedestrian and cycle lanes which form the basis for the movement network, around which vehicle traffic can be managed.

- Cycling routes should generally be provided on off-carriageway routes within the green infrastructure network where possible and connect to key destinations/ onward routes.

- Footways should generally be on both sides of the carriageway but can be single-sided if development is also one-sided.

- Design interesting street scenes and building arrangements from a pedestrian perspective, including key views to the surrounding landscape.

- Development proposals must integrate with the Public Right of Way network when schemes are located within proximity to a footpath.

- Arrange streets, routes and spaces to ensure permeability for pedestrians and cyclists – with focus on access to services and facilities, public transport, and existing routes.
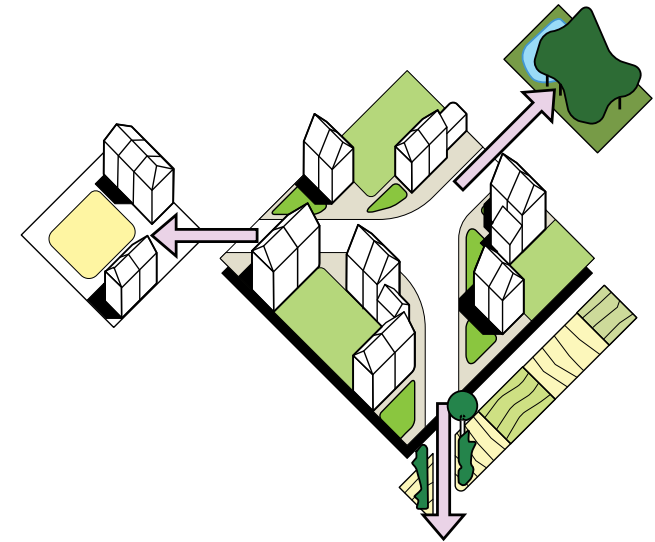

Figure 60: Making connections diagram.

3.6.4 Car Parking

Parking provision across South Leverton is predominantly provided on-plot, either to the side or front of properties, or on an area of hardstanding within the domestic curtilage of the dwelling (in cases of converted farm-type buildings).

There are limited cases of front of property parking however, and this can lead to a negative impact on the streetscene when used in a run of 5 or more properties. However this is limited and is often associated with non-residential uses or visitor parking. Typically, residential parking is provided off-street.

Figure 61: Parking within an area of hardstanding.

Figure 62: Parking to the rear of a property within a courtyard.

Figure 63: Front of property parking with hedgerow screening.

Figure 64: Rear of property parking visible from the streetscene

Design Code 16: 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.

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.

d. Where parking is required to the front of the plot it should be accorded sufficient space and utilise 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 gravel) must be considered at the planning stage.

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

Figure 66: Improve on street parking by designing bays that are broken up by planting, rain gardens and streets trees.
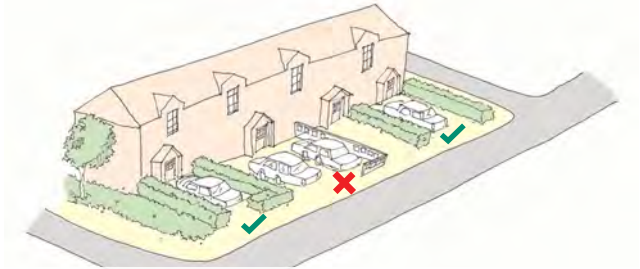

Figure 65: Avoid front of plot parking on main streets in the village or in larger developments. On minor streets / courtyards avoid runs of more than 6 parking spaces and mitigate with hedgerow and tree planting.
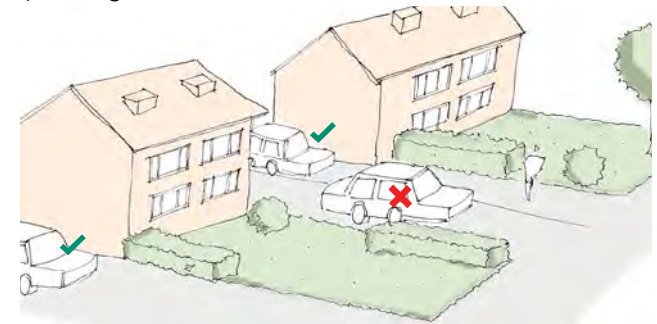

Figure 67: Side of property parking will hide vehicles from sight, improving the visual quality of the street

3.7 Sustainability and energy

3.7.1 Blue Infrastructure

Flooding from rivers and waterways across the Neighbourhood area is limited to the area to the east of teh Catchwater Drain.

However, as illustrated on the adjacent plan (fig 68), there are many areas of the Neighbourhood area that are at risk from surface water flooding.

This collects on areas of hardstanding such as road surfaces and parking areas in dips or flows along escape routes after periods of heavy rainfall. This type of flood risk is distributed in pockets throughout the settlement.
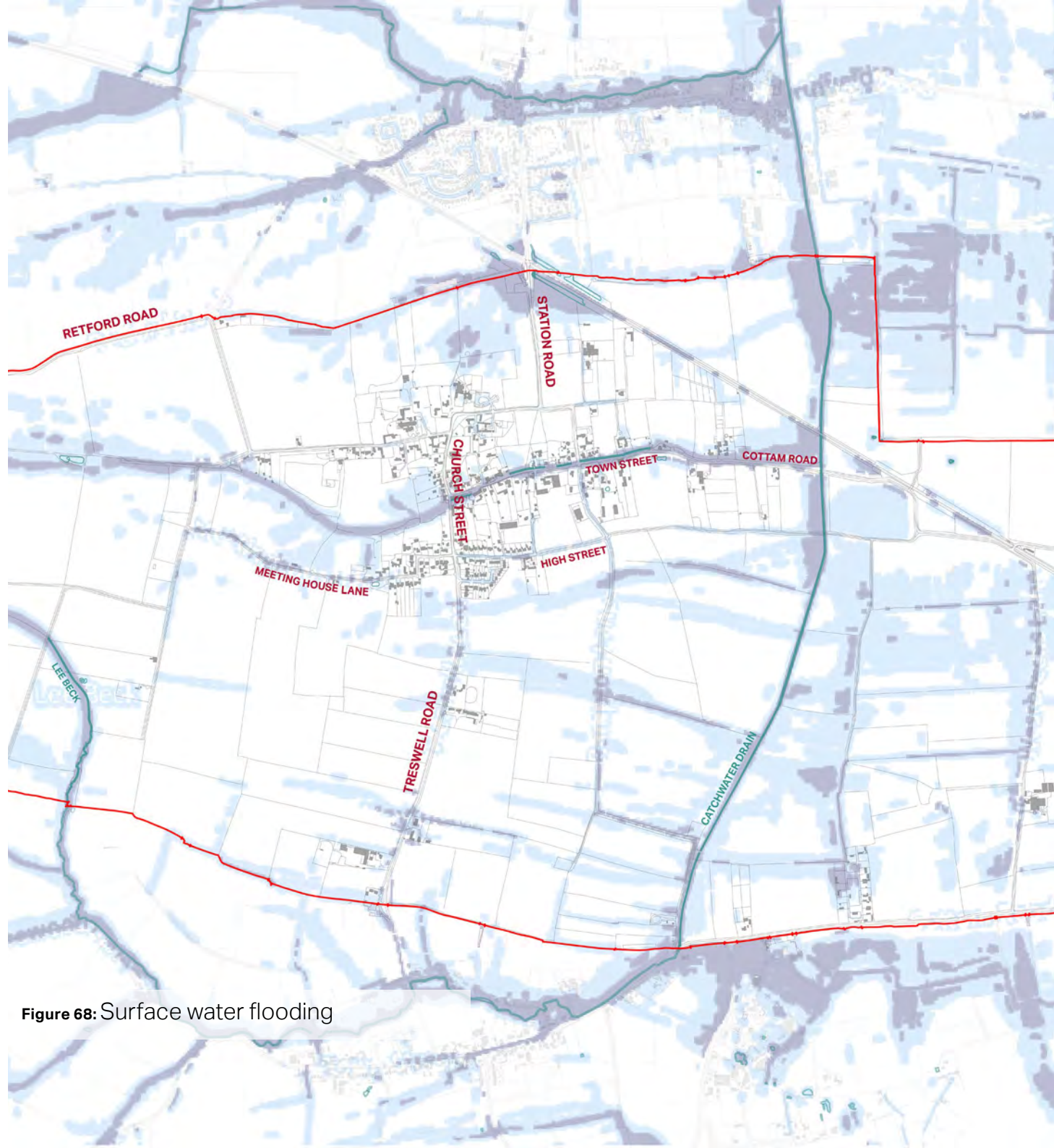

Figure 68: Surface water flooding

Design Code 17: Water Sensitive Design

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

Development proposals should seek to:

1. 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.

2. 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.

3. On schemes that propose 10 or more dwellings, proposals must integrate bio-swales and/or attenuation basins in their design. These must be planted with wildflower planting to assist achieving a biodiversity net gain.

4. Natural barriers (e.g. planting) and appropriate side slopes should be introduced to help manage perceived safety risks.

5. 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.

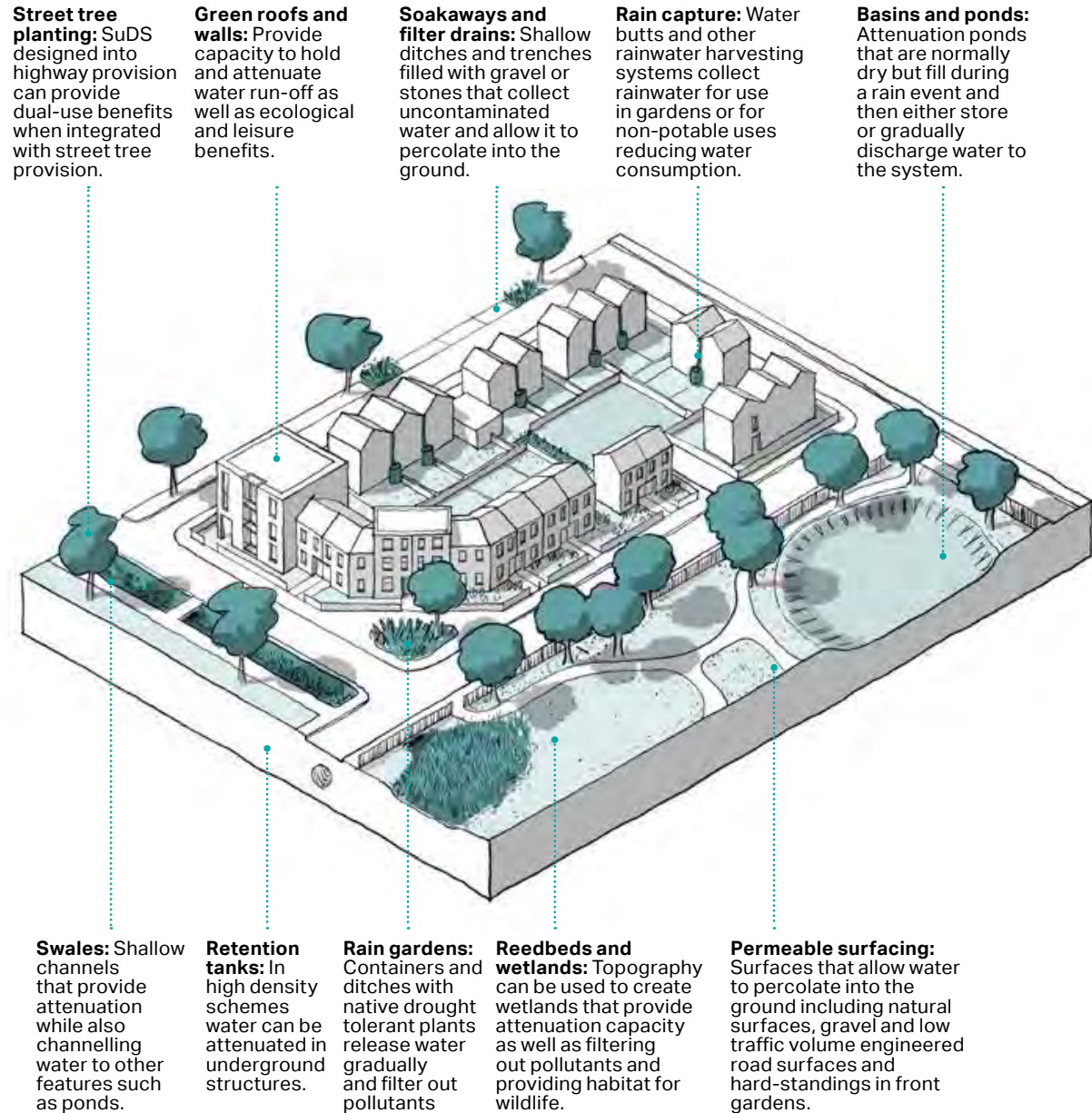6. Proposals must adopt the use of permeable paving in hard landscaped areas.

Street tree planting: SuDS designed into highway provision can provide dual-use benefits when integrated with street tree provision.

Green roofs and walls: Provide capacity to hold and attenuate water run-off as well as ecological and leisure benefits.

Soakaways and filter drains: Shallow ditches and trenches filled with gravel or stones that collect uncontaminated water and allow it to percolate into the ground.

Rain capture: Water butts and other rainwater harvesting systems collect rainwater for use in gardens or for non-potable uses reducing water consumption.

Basins and ponds: Attenuation ponds that are normally dry but fill during a rain event and then either store or gradually discharge water to the system.

Swales: Shallow channels that provide attenuation while also channelling water to other features such as ponds.

Retention tanks: In high density schemes water can be attenuated in underground structures.

Rain gardens: Containers and ditches with native drought tolerant plants release water gradually and filter out pollutants

Reedbeds and wetlands: Topography can be used to create wetlands that provide attenuation capacity as well as filtering out pollutants and providing habitat for wildlife.

Permeable surfacing: Surfaces that allow water to percolate into the ground including natural surfaces, gravel and low traffic volume engineered road surfaces and hard-standings in front gardens.

Figure 69: Sustainable drainage systems as set out in the National Model Design Code.

3.7.2 Renewable energy

The public survey identified that there was an interest to promote and encourage renewable energy and energy efficiency in new developments in South Leverton. 61% of respondents stated that solar panels will likely be a future need for residents of the Neighbourhood area.

As illustrated on the adjacent imagery, there are already a significant amount of solar panels on properties across the Neighbourhood area, forming an important characteristic of South Levertons built environment.

The following Design Codes seek to provide guidance on how new developments can encourage the use of renewable energy sources and promote energy efficiency across the Neighbourhood area.

Figure 70: Solar panels on properties across the Neighbourhood area

Design Code 18: Assessing Renewable Energy Sources

Key considerations in the assessment of renewable energy sources for development to be net zero for power generation may include (but are not limited to):

- Optimising solar orientation of streets and buildings. Aim to increase the number of buildings on site that are oriented within 30° of south (both main fenestration and roof plane) for solar gain, solar energy (solar panels) and natural daylighting.

- A heat network for any new development.

- Ground conditions to accommodate loops for ground source heat and space for air source heat pump units.

- Links to local estates for sustainable coppicing, harvesting or recycling of biomass fules.

- Local wind speed and direction for micro-generation wind turbines.

- Collaborating with utilities, highway authorities, telecoms companies and other stakeholders when designing and delivering projects to minimise energy usage and disruption during the construction stage and reinforcement of the electricity grid for additional electric vehicles and renewables.
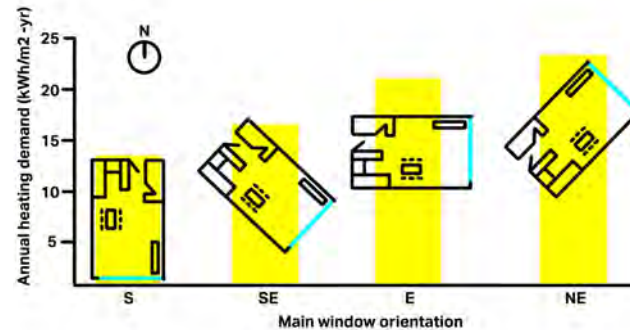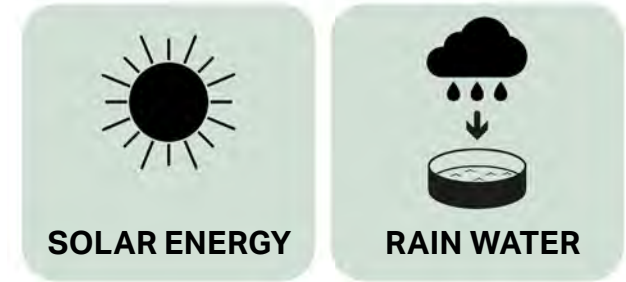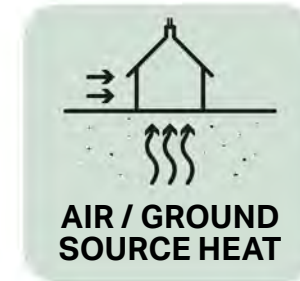

Figure 71: Integrated solar panels on slate roof.

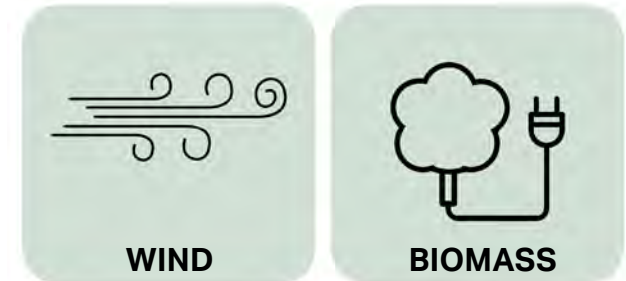**Figure 72:** Building orientation influences the annual heating demand.

SOLAR ENERGY

RAIN WATER

AIR / GROUND SOURCE HEAT

WIND

BIOMASS

Figure 73: Key alternative natural energy sources.

Design Code 19: Energy Efficiency Measures to Net Zero Carbon

For all building stock to be carbon neutral by 2050, all new buildings need to be carbon neutral from now on so that they do not need costly retrofitting. It is paramount that new development adopts a fabric first approach in line with the Government's emerging Future Homes Standard and Part L of the UK Building Regulations in order to attain higher standards of insulation and energy conservation.

- All new residential buildings must be sustainably constructed to achieve zero operational emissions by reducing heat and power demand and supplying all energy demand through on-site renewables. This includes limits on space heating and total energy use, taking an energy-based approach to energy usage applying to both regulated and non-regulated energy use.

- Reducing energy demand further by employing passive design principles for homes is desirable and can make development more acceptable to the community (window orientation, solar gain, solar shading, increased insulation, ventilation with heat-recovery).

- Maximise on-site renewable energy generation (solar, ground source, air source and wind driven).

- Incorporate domestic batteries (to store excess electricity) or other energy storage (i.e. large hot water tanks) to enable intermittent renewable electricity supply (e.g. from solar panels) to be stored to match demand and maximise renewable energy potential. Grid balancing and managing periods when it is cold, not sunny and not windy is going to be a big challenge of the 2030s and something new homes should be adapted for.

- Consider building form and thermal efficiency: point-block / terraced / semi-detached / detached all have different energy efficiency profiles. Local design preference and character considerations could ease acceptance for development.

- Ensure that there is sufficient and appropriate outside space for a washing line to enable energy efficient clothes drying.

- All new development must be well designed to be resilient to heat stress and overheating using the Good Homes Alliance toolkit.

- All new residential developments need dual aspect and adequate windows and openings to allow for cross ventilation, light colour or green surroundings, high thermal mass and useful external shading.

- Tree planting / landscaping to manage heat stress should include small deciduous species around new and existing residential areas to provide shade in the summer but not block daylight in the winter. This will also help manage flood risk and provide habitat. Green roofs and walls provide similar benefits.

- All development should incorporate sustainable drainage systems (SuDS) to manage flooding, to provide habitats for wildlife and to deliver cooling effects.

- All homes should be designed with the flexibility to be used for homeworking.

Design Code 20: Sustainable Building Materials and Construction

Sustainable design and construction in development is needed:

- Reduce the embodied carbon of the design by minimising the use of energy and carbon intensive materials (e.g. use wood structures and concrete alternatives instead of steel and concrete).

- Reuse materials.

- Use recycled materials.

- Use local, sustainable materials and/or responsibly sourced (e.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems)

- Prevent loss or damage to topsoil.

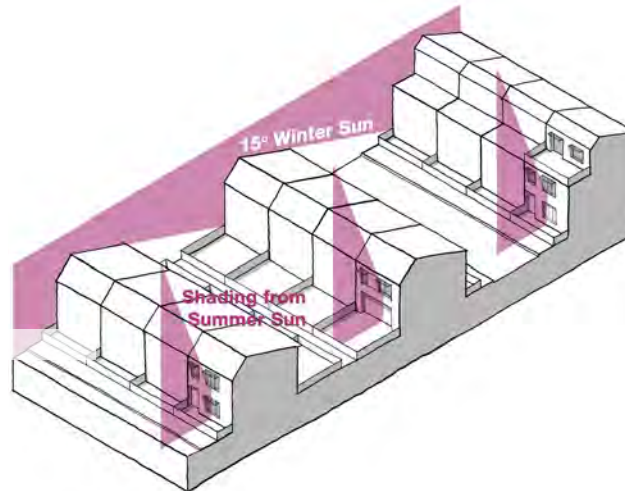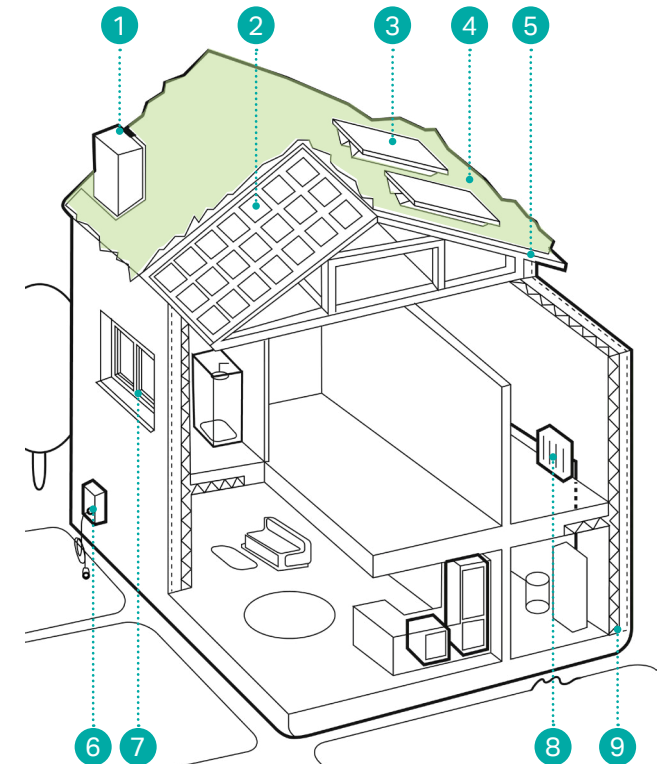**Figure 74:** Carbon negative affordable homes in Derbyshire.

Figure 75: The layout and orientation of new buildings contributes to reducing their energy needs by avoiding overshadowing, maximising passive solar gain, internal daylight levels and ventilation (source: National Model Design Code).

1. Mechanical ventilation system.

2. Integral solar tiles.

3. Solar panels.

4. Green roof.

5. Roof insulation.

6. Electric vehicle charging point.

7. Insulated windows and doors.

8. Efficient utilities and appliances.

9. Wall insulation.

Figure 76: Cut-through diagram of an energy efficient home and its features.

Checklist

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 considerations 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;

- 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?
- 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?

- 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?

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