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Watlington Neighbourhood Plan

Design Guidance and Codes

Final report
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Quality information

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Introduction

01

1. Introduction

This section provides context and general information to introduce the project and its location.

1.1 Introduction

Through the Department for Levelling Up, Housing and Communities (DLUCH) Neighbourhood Planning Programme led by Locality, AECOM has been commissioned to provide design support to Watlington Parish Council.

The Watlington Neighbourhood Plan Area was designated in 2020 and the Neighbourhood Plan Steering Group is making good progress in the production of the Watlington Neighbourhood Plan. Watlington Parish Council has requested to access professional advice on design guidance and codes to influence the design of any potential new development and conversions in the Neighbourhood Plan Area. The objective is to ensure that they remain sympathetic to the character of the Parish's historic areas.

The recommendations made in this report are based on observations on the Neighbourhood Plan Area as a whole, but they may be more relevant in some areas of the neighbourhood area than others. The

elements that are more general are referred to as design guidelines. Other elements that are more prescriptive or set out parameters are the design codes.

It must be noted that the Neighbourhood Plan Steering Group has recently commissioned a housing needs assessment study to better understand local housing issues, which will be covered in a separate report.

1.2 Objectives

This report's main objective is to develop design guidelines and codes for the Neighbourhood Plan to inform the design of future planning applications and developments in Watlington. In particular, it elaborates on key design elements that were agreed with the Neighbourhood Plan Steering Group, namely:

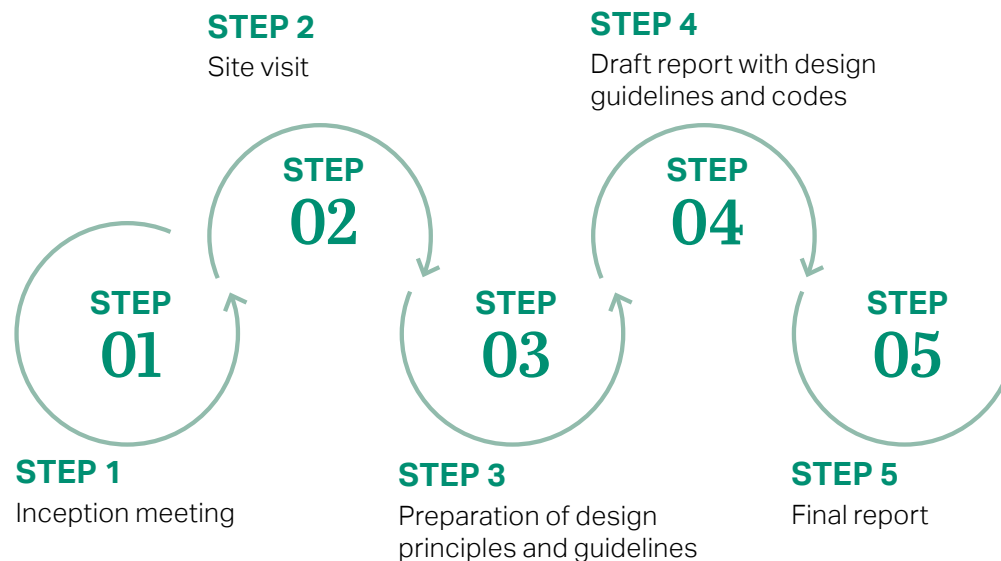
- Ensuring that new development and modifications respects the character of the historic areas of Watlington;

- Preserving and enhancing green and open spaces;
- Providing sustainable traffic and parking solutions;
- Delivering sustainable drainage and flood alleviation methods; and
- Providing eco-housing solutions.

1.3 Process

Following an inception meeting and a site visit with members of the Neighbourhood Plan Steering Group, AECOM carried out a high-level assessment of the Neighbourhood Plan Area.

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





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F.3



F.2



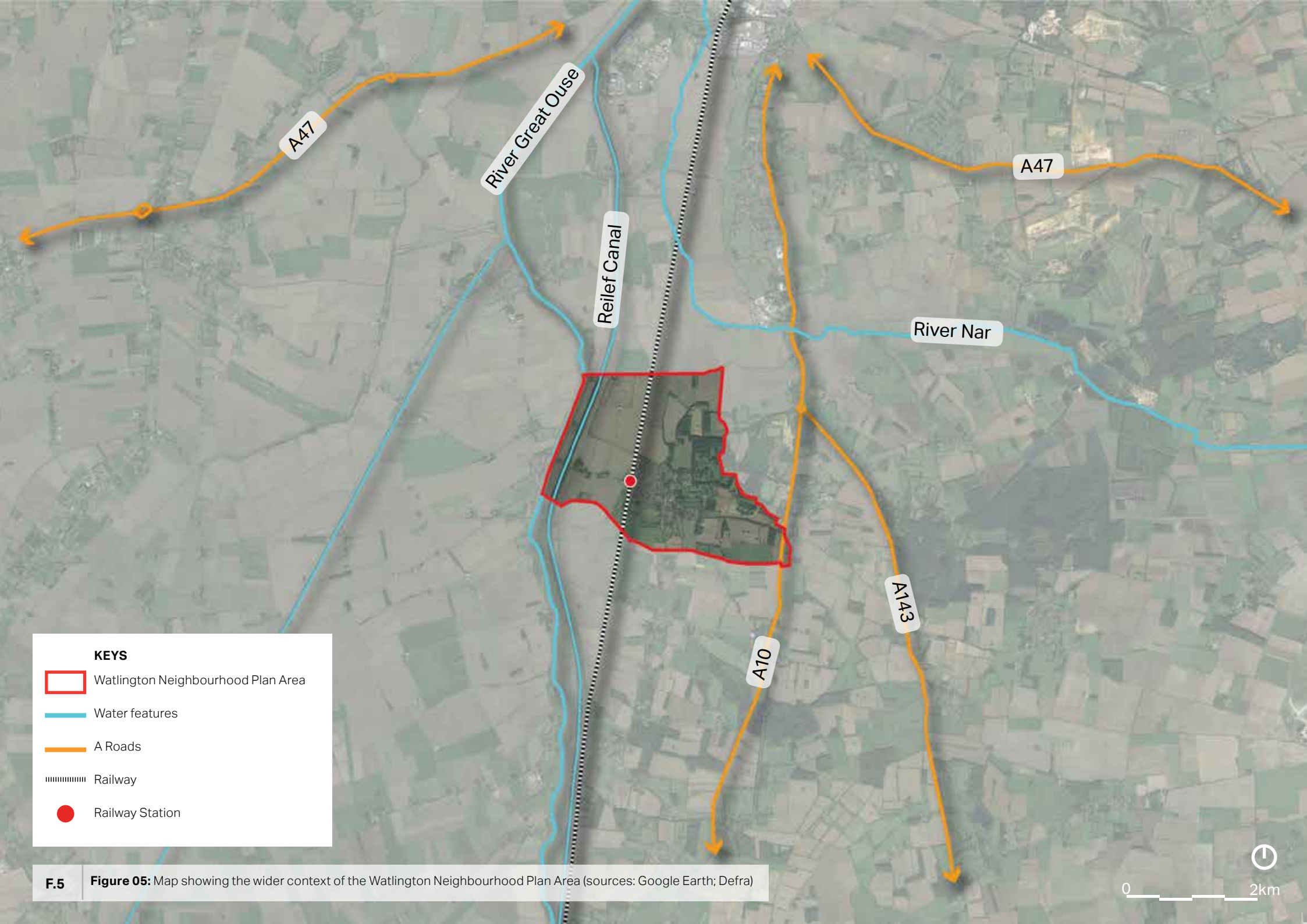
F.4

Figure 01: Village sign located in the historic core of the settlement






Figure 02: Traditional red brick and carston boundary wall with galletting

Figure 03: Listed property wall and building with different colours of clay pantiles

Figure 04: Local road framed by a combination of mature trees, landscaped hedges, and natural timber fencing



KEYS

-  Watlington Neighbourhood Plan Area
-  Water features
-  A Roads
-  Railway
-  Railway Station

F.5 **Figure 05:** Map showing the wider context of the Watlington Neighbourhood Plan Area (sources: Google Earth; Defra)

0  2km 

1.4 Area of study

The Neighbourhood Plan Area is the Parish of Watlington, located in the District and Borough of King's Lynn and West Norfolk. Large parts of Watlington consist of low-lying fields bordered by the river Great Ouse located about 1.5 km west of the village centre. It is located approximately 8 km south of King's Lynn, 7 km north of Downham Market, 60 km west of Norwich, and 45 km east of Peterborough. It is bordered to the north by the parish of West Winch as well as the town of King's Lynn; to the east by Tottenhill; to the south by Runcton Holme; and to the west by Wiggshall St Germans and Wiggshall St Mary Magdalen. The river Great Ouse and its relief channel constitute a natural western boundary. At the 2011 census the population was 2,455.

Although Watlington does not have a Conservation Area, it contains a noteworthy architectural legacy that must be respected, with several historic buildings that are representative of the Norfolk vernacular.

It contains seven listed buildings and structures, including the Grade I St Peter and St Paul's Church (NHLE 1077890), as well as one Scheduled Monument, the moat at the Old Rectory (NHLE 1464092).

In addition to a parish church at St Peter and St Paul's, amenities in Watlington include a village hall, a post office, a medical centre, a pharmacy, and a primary school, Watlington Community Primary School. It also has a pub, the Angel, on School Road. Watatunga Wildlife Reserve is the area's main attraction and straddles Watlington and the neighbouring parish of Tottenhill.

Watlington railway station is served by the Fen line and has direct services to King's Lynn, Cambridge, and London King's Cross and Liverpool Street. The village has several bus stops located on Station Road, Downham Road, and Church Road, with infrequent services to King's Lynn and Downham Market. There is direct access at Lynn Road in the easternmost part of the Neighbourhood Plan Area to the A10,

which connects Watlington to King's Lynn to the north and Downham Market, Ely, and Cambridge to the south. St Peters Road and Downham Road form part of National Cycle Network (NCN) Route 11.

1.5 How to use the guide

The Design Guidance and Codes will be a valuable tool in securing context driven, high-quality development in Watlington. They will be used in different ways by different actors in the planning and development process, as summarised in the table. A valuable way they can be used is as part of a process of codesign and involvement that takes account of local preferences and expectations of design quality. In this way the guidance and codes can help to facilitate conversations on the various topics that should help to align expectations and help understand the balancing of key issues. A design code alone will not automatically secure optimum design outcomes.

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

Table 01: delivery

1.6 Planning policy and guidance

This section summarises the relevant design policy and guidance produced at national and local levels which have informed this design guidance and codes document. It specifies how the relevant policies and guidelines have been incorporated in the production of the design codes included in this document. Any new development application should be familiar with those documents.

1.6.1 National Planning Policy and guidance

The following section summarises key relevant policy and guidance documents at the national level.

2021 National Model Design Code

DLUCH

This report provides detailed guidance on the production of design codes, guides and policies to promote successful design. It expands on 10 characteristics of good design set out in the National Design Guide. This guide should be used as reference for new development.



2020 - Building for a Healthy Life

Homes England

Building for a Healthy Life (BHL) is the new (2020) name for Building for Life, the government-endorsed industry standard for well-designed homes and neighbourhoods. The new name reflects the crucial 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 (and completed) developments, but can also provide useful prompts and questions for planning applicants to consider during the different stages of the design process.



2019 - National Planning Policy Framework

DLUCH

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



2019 - National Design Guide

DLUCH

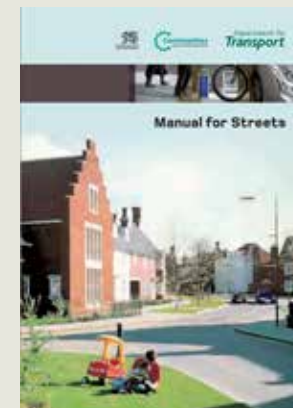
The National Design Guide (Department for Levelling Up, Housing and Communities, 2019) illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice.



2007 - Manual for Streets

Department for Transport

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



1.6.2 Local planning policy context

The following section summarises key relevant policy and guidance documents at the local level.

2011 - Local Development Framework – Core Strategy

Borough Council of King’s Lynn & West Norfolk (BCKLWN)

The settlement hierarchy (Policy CS02) classifies Watlington as a key rural service centre, which provides “a range of services that can meet basic day-to-day needs, and a level of public transport that can enable access to and from the settlement” and where “local development will be concentrated in Key Rural Services Centres [which] will include new housing, employment and retail development.”

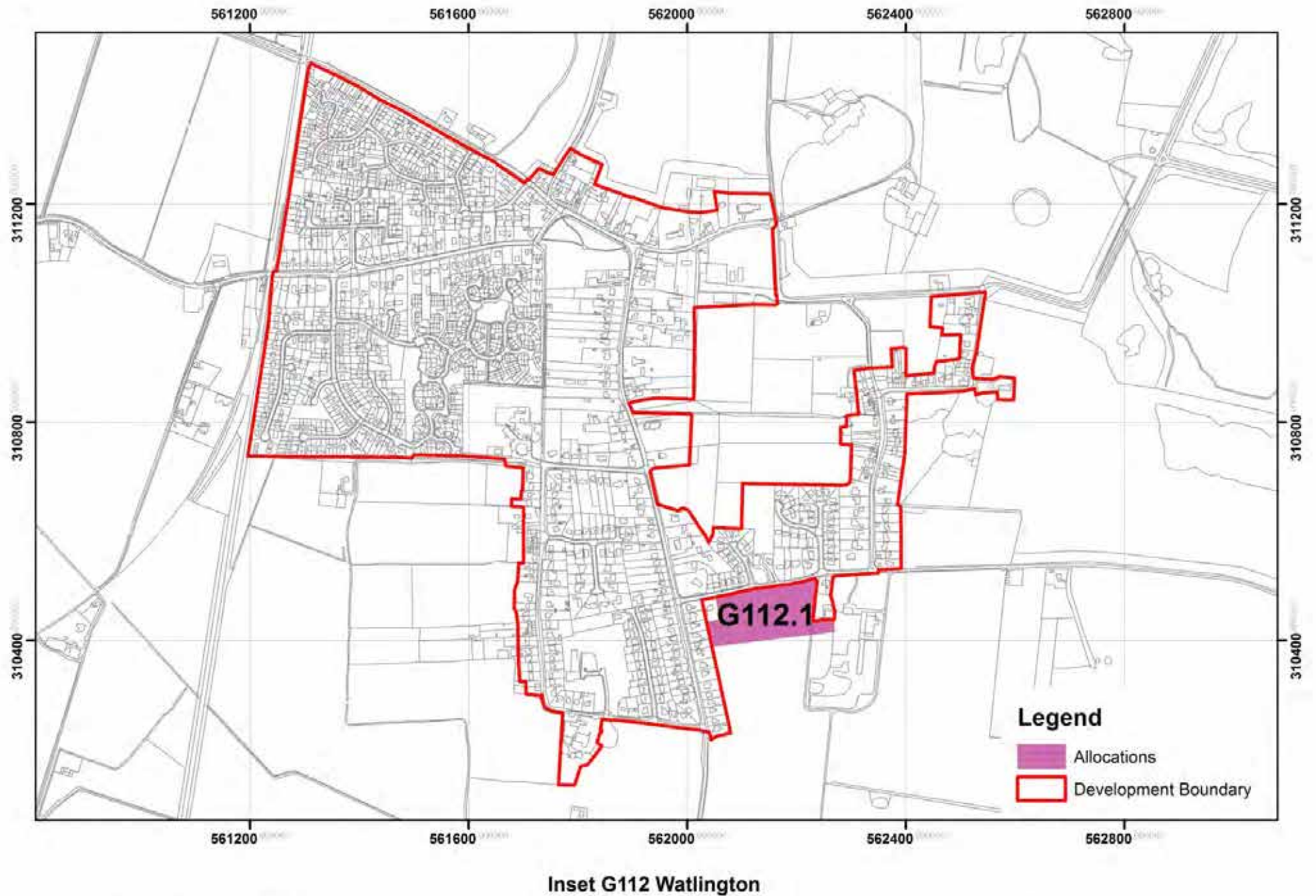


2016 - Site Allocation and Development Management Policies Plan

Borough Council of King’s Lynn & West Norfolk (BCKLWN)

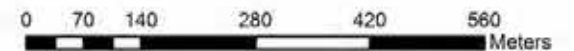
Policy G112.1 allocates the Land south of Thieves Bridge Road (1.8 hectares) for a development of at least 32 dwellings. Development will be subject to the demonstration of safe highway access and provision of affordable housing “at a density consistent with its surroundings and without detriment to the form and character of the locality.”





Inset G112 Watlington

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1.7 Consultation

Watlington Parish Council conducted a survey of residents in 2021 for the Watlington Neighbourhood Plan. The survey indicates the following views among respondents:

- The Medical Centre, safe neighbourhoods, and green spaces are considered the most important components of the village;
- Top sources of concern are speeding through the village, litter, and dog fouling;
- A small number of eco homes, affordable homes, and two-bedroom dwellings are needed;
- Green spaces, footpaths, cycle tracks, and flood protection measures should be incorporated in any new development;
- Watlington's natural features, woodland and wildlife sites should be protected and enhanced, accesses to current footpaths should be improved, and wildlife habitats should be created;
- The most needed transport and infrastructure improvements are more footpaths, speed restrictions, and better water supply and pressure; and
- Most respondents would like all of the village's existing green spaces to be kept undeveloped and protected as green spaces or community asset. The football field/playing field and the meadow between Mill Road and Downham Road are particularly popular open spaces that residents seek to preserve.



**Neighbourhood area
context analysis**

02

2. Neighbourhood area context analysis

This section outlines the broad physical, historic and contextual characteristics of the Neighbourhood Plan Area.

2.1 Settlement pattern

The Neighbourhood Plan Area is dominated by open fields. The only built-up area is the village of Watlington, outside of which only dispersed small clusters of buildings can be found. Overall settlement patterns in Watlington are low in density and scale, with most properties equipped with front and back gardens and buildings having typically one or two storeys. Watlington station is located at the far west of the built-up area, and the railway line forms a neat development boundary on the western edge of the village.

The most ancient parts of the village developed around two separate nuclei: the first one along School Road and Church Road, and the second one along Mill Road and Plough Lane. These areas concentrate most of the village's pre-20th century buildings. The settlement pattern follows the organic layout of the roads, with gentle meandering and variations of road widths. There is a wide variety of parcel shapes and sizes as well as building setbacks.

Many buildings in these areas are placed directly at the edge of the road without front gardens, creating a higher level of enclosure than in more recent parts of the village.

20th and 21st century developments occupy most of the built-up area, with St Peters Road, Station Road, Fen Road, and Downham Road providing the main development axes. Ribbon development fronts most of these roads. It is typically characterised by a succession of parcels with regular shapes and deep back gardens. Although there are many variations in building arrangements and architecture from one parcel to the next, buildings are typically oriented to face the road. Buildings from later development, in contrast, are arranged in clusters accessed by meandering cul-de-sac and loop roads. Although the orientation of buildings is more varied, their architectural features and materials tends to be uniform within each cluster.

Built-up areas within the village are interrupted by green spaces and open fields, the largest cluster of which is located between Downham Road, Lynn Road, and Mill Road. As a result, many properties either face or back onto fields or small areas of woodland. Outside the village, buildings are few and dispersed. They mainly consist of small clusters of agricultural buildings that overlook open fields or woodland.



Figure 07: Low-density bungalows arranged on a building line that follows the road



Figure 09: Tree-lined residential street with properties fronting onto the street, Mill Road



Figure 08: New housing developments located on Britton Close



Figure 10: Farmlands and fields interspersed with residential clusters - view from Jackson Close



KEY

- Watlington Neighbourhood Plan Area
- Watlington Settlement Area
- Roads
- Water features

F.11 Figure 11: Map showing the Watlington Neighbourhood Plan Area (sources: Google Earth; Defra).

0 1km

2.2 Landscape and ecology

2.2.1 Landscape character

According to the National Character Area Assessment, the west of the Neighbourhood Plan Area is located in National Character Area (NCA) 46 – the Fens, while the east is located in NCA 76 – North West Norfolk.

NCA 46 – the Fens is described as a large, low-lying, flat landscape with extensive vistas to level horizons and many drainage ditches, dikes and rivers. It has valuable soils providing ideal conditions for large-scale cultivation of arable and horticultural crops, with fertile fields that have been historically drained and managed to make them viable for agriculture. Evidence of large-scale human intervention is visible in the strong rectilinear drainage patterns.

The open, rolling topography of NCA 76 – North West Norfolk contrasts with the flat landscape of the Fens. Located on a gently sloping plateau, it has large-scale arable and grassland landscape with dispersed settlement patterns often centred on greens or ponds. Local vernacular materials include carstone and chalk.

The Neighbourhood Plan Area falls within the “Settled Farmland with Plantation” area the King’s Lynn and West Norfolk Borough Landscape Character Assessment. This area forms the transition between the low-lying flat landscape of the Fens and the more elevated, variable landforms of the Brecks. The landscape is formed by medium to large fields interspersed by areas of woodland in a generally flat but gradually ascending topography. Settlements are small-scale, low-density,

and dispersed throughout the landscape. Areas of woodland offer semi-enclosure in a landscape that otherwise provides long views across the Fens. The overall strategy for the area should be “to conserve the relatively regular landscape pattern of arable farmland, interspersed with plantations, scattered farm dwellings and small-scale settlements, and enhance field margins and field boundaries.”



F.12



F.14



F.13



F.15

Figure 12: Wooded area behind Downham Road

Figure 13: Woodland behind Mill Road

Figure 14: View of open fields along Thieves Bridge Road on the edge of Watlington

Figure 15: Farmland adjacent to houses along Fen Road



Figure 18: Wigenhall St Peter Church Ruin and Great River Ouse

Figure 19: Great River Ouse from Magdalen

Figure 20: Great River Ouse Channel looking towards Watlington

Figure 21: View of Wigenhall St Peter Church Ruin from across River Ouse

2.2.3 Open spaces

The village contains several green and open spaces serving a variety of needs. Angel Field, due to its central location and the location of the village sign at its entrance, is the focal point of the settlement. Local islands of greenery are dispersed across the village, including play areas at Warren Close and Stone Close, the church yard of St Peter and St Paul's, the grounds of the Primary School, and the sport pitches north of the Village Hall. Due to its sparse settlement patterns, many properties also overlook open fields and small woodland areas, and open fields remain within the village between Downham Road, Lynn Road, and Mill Road. The largest areas of open space in the Neighbourhood Plan Area are the grounds of Watlington Hall and Watatunga Wildlife Reserve, both located outside the built-up area.

2.2.4 Designations

Watlington does not have a Conservation Area but contains seven listed buildings and structures as well as one Scheduled Monument.

The Neighbourhood Plan Area does not contain any land-based designations. Significant areas are however listed in the Priority Habitat Inventory as areas of deciduous woodland, coastal and floodplain grazing marsh, and traditional orchard. Many of these areas are also included in the National Forest Inventory.



F.22
Figure 22: Angel Fields Millenium Green - a recreational garden located in the heart of Watlington, Church Road



F.23
Figure 23: Watlington Village Hall playing fields, accessible via public footpaths, Mill Road and Chuch Road



KEY

- ▭ Watlington Neighbourhood Plan Area
- - - Watlington village settlement boundary
- ▭ Play Areas
- ▭ Playing Fields
- ▭ Recreational Spaces
- ▭ Deciduous Woodlands
- ▨ Setchey SSSI

- ① Angel Fields Millenium Green
- ② St. Peter and St. Paul Churchyard
- ③ Watlington Bowling Green
- ④ Watlington Village Hall Playing fields/ Play Area
- ⑤ Stone Close Play Area
- ⑥ Warren Close Play Area
- ⑦ Watlington Community Primary School fields
- ⑧ Paige Close Allotments



F.24 **Figure 24:** Map showing the open spaces and designations in Watlington (sources: Google Earth; Defra).



2.3 Movement pattern

2.3.1 Road network

Watlington has a sparse network of roads composed mainly of local and rural roads. St Peters Road, Station Road, and Downham Road form the main road armature of the village and connect Watlington with neighbouring settlements. The only major road is a short section of the A10 which can be accessed from the far east of the Neighbourhood Plan Area via Thieves Bridge Road and Lynn Road. Due to the rural character of Watlington, road markings and traffic calming features are uncommon. Only the vicinity of Watlington Primary School and Angel Field have high-visibility crosswalks, and traffic across the railway is regulated by a level crossing.

The historic areas of Watlington evolved from a small network of rural roads comprising sections of Church Road, School Road, St Peters Road, Mill Road, and Plough Lane. These roads are characterised by organic paths with gentle bends as well as variable widths and levels of enclosure.

Due to their narrowness, some sections either lack pavements or only have them on one side. The westernmost and more recent section of Station Road, however, is wide enough to accommodate grass verges on its north side.

This sparse structuring network is completed by a larger number of cul-de-sac and loop roads serving more recent residential development. They are recognisable from their more regular width, wider corner radii, and more consistent presence of pavements.



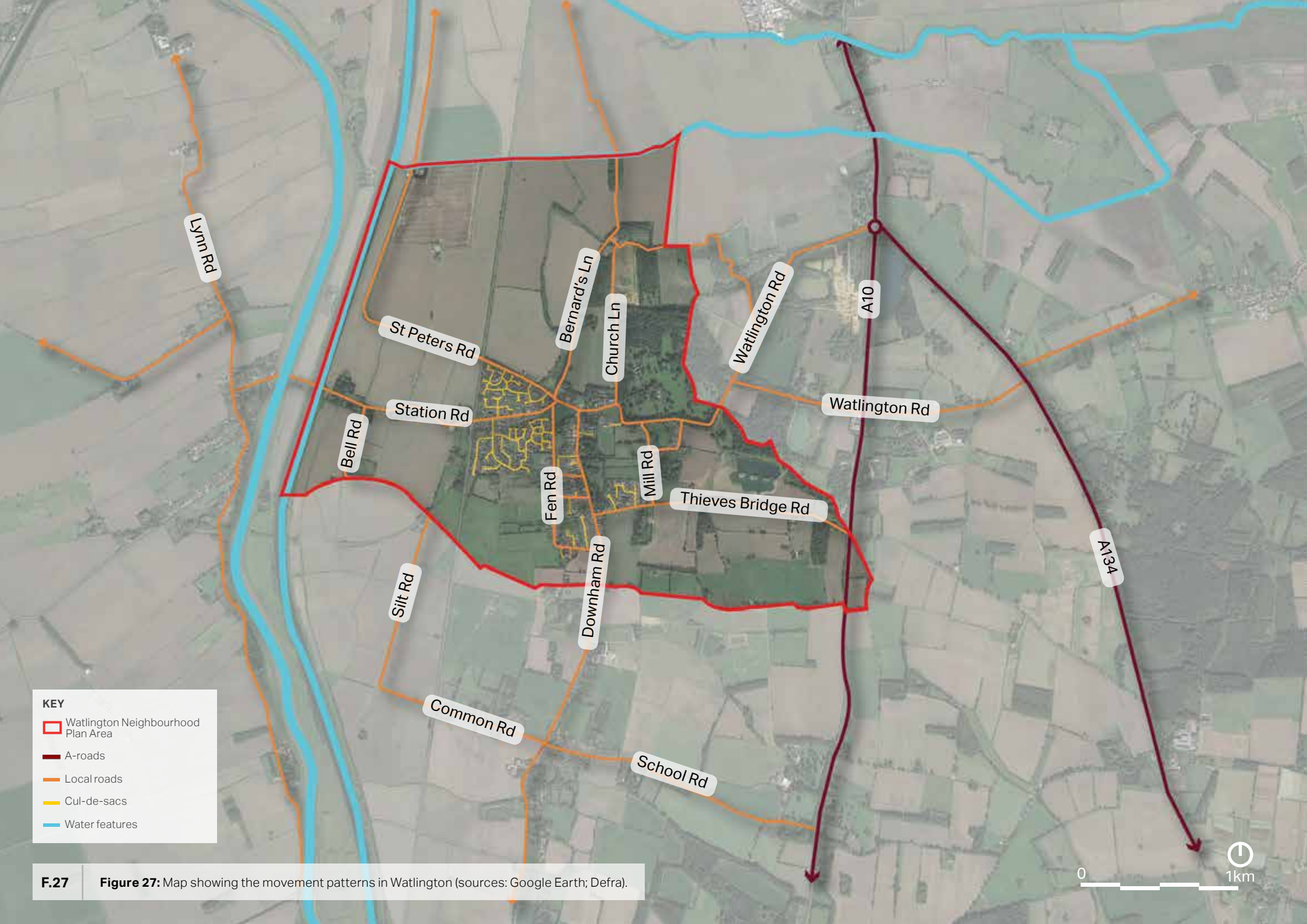
F.25

Figure 25: Narrow road with no pavement in the historic parts of Watlington, Mill Road



F.26

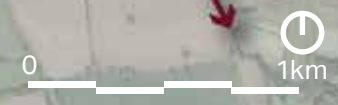
Figure 26: Multi-pronged cul-de-sac roads serving more recent developments, Stone Close



KEY

- ▭ Watlington Neighbourhood Plan Area
- A-roads
- Local roads
- Cul-de-sacs
- Water features

F.27 **Figure 27:** Map showing the movement patterns in Watlington (sources: Google Earth; Defra).



2.3.2 Pedestrian and cycle connectivity

An array of footpaths and public rights of way link some cul-de-sacs with other roads, providing additional pedestrian and cycling connectivity within the village. For instance, important east-west pedestrian connections include the footpaths connecting Fendley Close to the Primary School, and the one linking the Rectory to Mill Road. Outside of the built-up area, the network of public rights of way is very sparse and offers limited access to the countryside or neighbouring settlements. The village does not have any dedicated cycling infrastructure but is on the designated route of National Cycle Network (NCN) Route 11.

2.3.3 Key infrastructure

The only major Road in Watlington is the A10 which crosses the easternmost part of the Parish. The village has a railway station at the western edge of the built-up area, with services to King's Lynn, Cambridge, and London. Two bridges on Station Road cross the Great Ouse and its relief channel, the main waterways in Watlington, and link the village to neighbouring Wickenhall St Mary Magdalen. The waterways are complemented by a complex network of drains and ditches on the west side of the Neighbourhood Plan Area.



F.28

Figure 28: Footpath and cycle lane leading to Watlington Station



F.29

Figure 29: Public footpath linking Mill Road and Downham Road



KEY

- Watlington Neighbourhood Plan Area
- Roads
- Water features
- Railway
- Railway station
- } } Bridges/footbridges
- Cycle**
- National Cycleway (NCN Route 1)
- Regional Cycleway (NCN Regional Route 30)
- Local Cycleway (K6)
- Public rights of way**
- Footpath
- Bridleway

F.30 Figure 30: Map showing the key infrastructure in Watlington (sources: Google Earth; Defra).



2.4 Built form and built heritage

Due to the rural nature of Watlington, most buildings are detached or semi-detached houses. Terraces and adjoining buildings are few and mainly limited to the older parts of the village on School Road and Mill Road. Houses typically have one or two storeys.

Traditional buildings in Watlington are characterised by a high level of architectural variety rather than being dominated by a particular style or building material. Most 20th and 21st century tract developments, in contrast, are typically uniform both in shape and materials. The Neighbourhood Plan Area does not have a Conservation Area but is home to seven listed buildings and structures as well as one Scheduled Monument, the moat at the Old Rectory. A greater number of buildings are not listed but are important in showcasing materials characteristic of the local vernacular. These include carstone with galletting, bricks of various colours, clay pantiles, and coloured render.



Figure 31:
Manor Farmhouse (NHLE 1304658) - Grade II-listed house on Church Road (Source: Historic England)



Figure 32:
View of Grade I-listed St Peter and St Paul's Church (NHLE 1077890) from Church Road



Figure 33:
The Old Rectory (NHLE 1077890) Grade II-listed house on Downham Road, with a moat classified as a Scheduled Monument (NHLE 1464092) (Source: Sheridan Sales & Letting)



KEY

- Watlington Village settlement boundary
- Roads
- Scheduled monument
- Listed buildings**
- Grade I
- Grade II

F.34 Figure 34: Map showing the heritage assets of Watlington (sources: Google Earth; Defra).





Character area study

03

3. Character area study

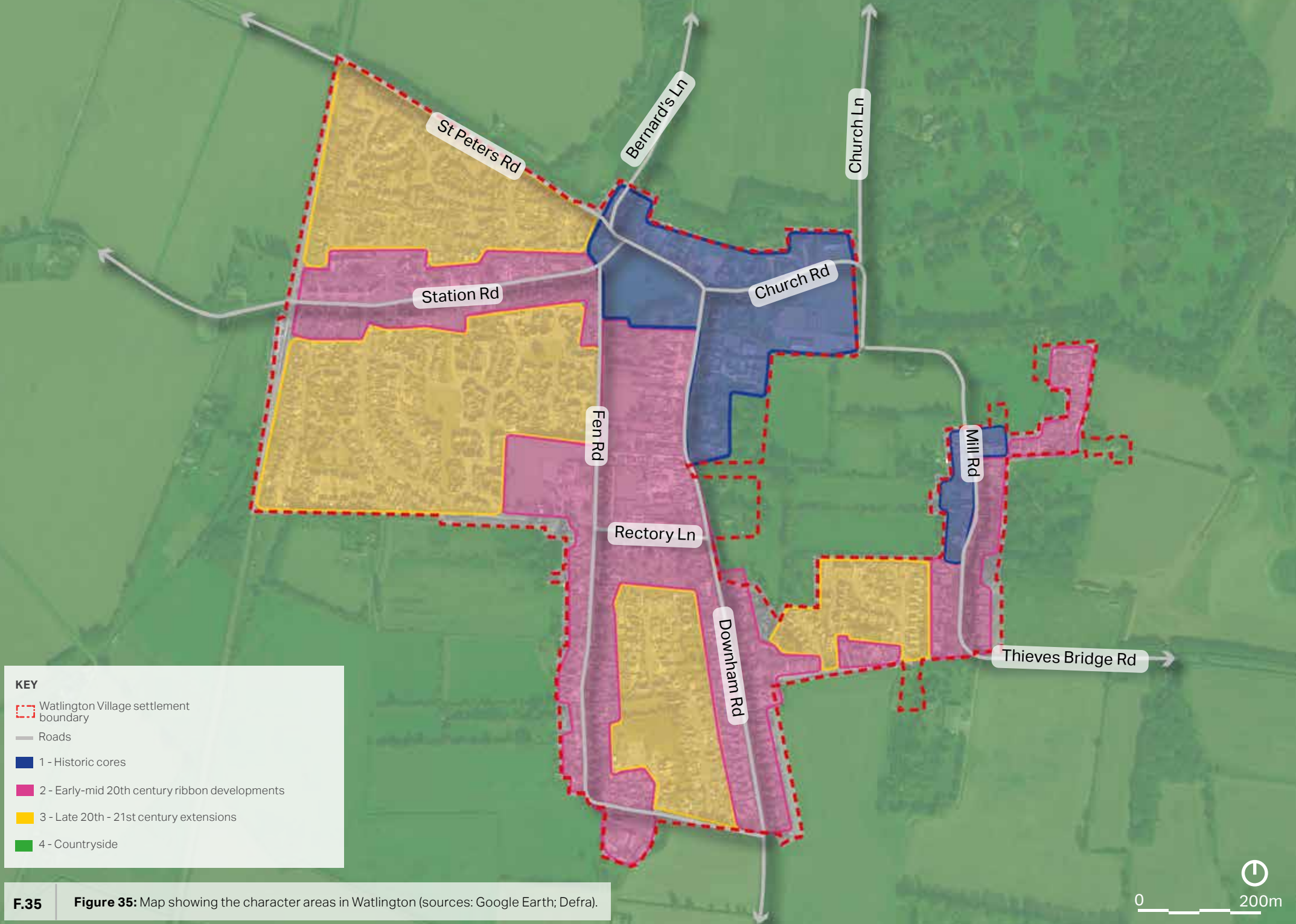
This chapter analyses the different character areas that compose the Watlington Neighbourhood Plan Area.

3.1 Character areas overview

This chapter focuses on the different character areas within the Watlington Neighbourhood Plan Area. These different areas are characterised, among other things, by variations in settlement patterns, land uses, street patterns, building forms, and architecture.

While some of the character areas have clearly distinguishable boundaries and are well defined, there may be overlaps and elements of mixing. The character areas identified within the Neighbourhood Plan Area are shown hereby:

- 1 Historic cores
- 2 Early-mid 20th-century ribbon development
- 3 Late 20th-21st century extensions
- 4 Countryside



KEY

- Watlington Village settlement boundary
- Roads
- 1 - Historic cores
- 2 - Early-mid 20th century ribbon developments
- 3 - Late 20th - 21st century extensions
- 4 - Countryside

F.35 **Figure 35:** Map showing the character areas in Watlington (sources: Google Earth; Defra).

0 200m



F.36



F.38



F.37



F.39

Figure 36: Traditional terraced houses in the historic core of Watlington along Mill Road (CA1)

Figure 37: Recent developments built as extensions to Watlington in early C21 - John Davis Way (CA3)

Figure 38: View of open fields from Thieves Bridge Road (CA4)

Figure 39: Houses typical of early-mid C20 ribbon developments (CA2)

3.2 Character Area 1: Historic cores

The oldest parts of Watlington, these two small areas concentrate most of the Neighbourhood Plan Area's historic assets. Watlington has two historic cores that were later integrated into a continuous built-up area. The primary core centres around School Road, Church Road, and the north of Downham Road. This larger historic core frames three sides of Angel Field and constitutes the focal point of the village. A smaller secondary historic core encompasses the north of Mill Road and the south of Plough Lane, originally a distinct settlement from the primary core. Properties exhibit a high level of architectural diversity and display construction materials and architectural features that are typical of the region.



F.40

Figure 40: Historic buildings facing Angel Field show a dynamic roofline with different roof materials and orientations



F.41

Figure 41: Buildings on Mill Road placed at the edge of a narrow road with no pavements or front gardens on the west side



F.42

Figure 42: Map showing the location of Character Area 1: Historic cores (sources: Google Earth; Defra)

Land use	Although mostly residential, the historic cores concentrate most of the village's non-residential uses such as the pub, the post office, and the parish church.
Development patterns	Settlement patterns are concentrated around Angel Field and along a small number of roads. Development follows organic patterns, with irregular plot widths, depths, and sizes. There is a variety of building shapes and typologies. Most buildings are either adjoining or spaced closely with one another, creating a rich and dynamic streetscape.
Building line/plot arrangement	Most buildings form a coherent street frontage. Some are placed directly at the back of the pavement without front gardens, creating a highly enclosed streetscape. Property entrances and windows consistently face the road, creating an active street scene.
Boundary treatment	Front gardens, when present, are delineated by landscaped hedges and attractive brick walls. In some properties, houses are placed directly at the back of the pavement with no setbacks.
Heights & roofline	Most buildings are two storeys in height. There is a variety of roof shapes and orientations, and the roofline is often punctuated by prominent gable end chimney stacks. This creates a dynamic and evolving roofline rather than a uniform one.
Public realm	Roads are laid out in an organic pattern, with gentle bends and variations in width. Some sections are not equipped with pavements. Public and private spaces are clearly defined by attractive property boundaries in the form of brick walls or landscaped hedges, or even buildings themselves where properties have no front gardens. As the main green, Angels Field constitutes the village's focal point. Elsewhere, the high level of enclosure creates an intimate village atmosphere. The street furniture and paving are unremarkable, but the green verges found along some unbuilt road sections help retain an attractive rural character.

3.3 Character Area 2: Early-mid 20th century ribbon development

Large areas of the village follow by ribbon development patterns characterised by one-plot deep development along a road. Plots are typically narrow and deep, with front and back gardens. Such areas include the frontages of Station Road, Fen Road, most of Downham Road, as well as sections of Mill Road and Plough Lane outside the historic cores. Most buildings date from the early- to mid-20th century, although these areas may also incorporate previously isolated older properties. Buildings usually display a high level of architectural heterogeneity despite featuring many non-traditional materials and architectural features.



F.43

Figure 43: A variety of boundary treatments (timber fencing, soft landscaping, and masonry) along Downham Road



F.44

Figure 44: A pair of bungalows showing different choices in roof materials, façade treatments, and fenestration



F.45

Figure 45: Map showing the location of Character Area 2: Early-mid 20th century ribbon development (sources: Google Earth; Defra)

Land use	Ribbon development is almost exclusively composed of single-family residential properties.
Development patterns	Development follows a one-plot deep pattern along the roads, with buildings facing the public realm and set back from the property line. Plots have a regular deep and narrow shape. Houses are predominantly detached and form an architecturally heterogeneous mix.
Building line/plot arrangement	There is no unified building line. Houses, most of which are detached, are set back from the property line with gentle variations. Most plots have both front and back gardens of varying depths, as well as off-street parking in front or at the side of the house.
Boundary treatment	Front garden boundaries are treated in a variety of ways, usually soft landscaping, low masonry wall, and timber fencing. Some boundaries incorporate mature trees, especially along Downham Road.
Heights & roofline	Roofs display an array of shapes and materials. There is a mix of two-storey houses and bungalows with no unified roofline.
Public realm	Road layouts are regular, with consistent widths and few bends. Some sections lack pavements and others have grass verges, contributing to the informal character of the settlement. On earlier properties, mature trees create a higher sense of enclosure and help decrease the built-up character of the place.

3.4 Character Area 3: Late 20th-21st century extensions

These areas are characteristic of post-war suburban development, with houses arranged around multi-pronged cul-de-sac roads. Houses within each development cluster exhibit a high degree of architectural homogeneity, with a standardised palette of materials and house layouts. They are largely located in the west of the village between the train station and Fairfield Lane, with complex networks of cul-de-sac roads that branch off from Station Road and St Peters Road. There are also smaller cul-de-sac infills at the back of Chestnut Close, Fen Road, and Thieves Bridge Road.



F.46

Figure 46: Developments on Lark Road showing a higher degree of architectural homogeneity in materials and shapes



F.47

Figure 47: Houses arranged around winding cul-de-sac and loop roads on John Davis Way



F.48

Figure 48: Map showing the location of Character Area 3: Late 20th-21st century extensions (sources: Google Earth; Defra)

Land use	Developments are almost exclusively composed of residential properties. They also include small pockets of green spaces.
Development patterns	Houses are clustered around a network of cul-de-sac and loop roads, often with multiple ramifications. Semi-detached two-storey houses predominate, but there are also detached houses, bungalows, and a few terraces.
Building line/plot arrangement	The vast majority of properties have both front and back gardens, as well as off-street parking in front or at the side of the building. Due to frequent bends in the layout of the roads, buildings are often oriented to face roads at an angle, leaving many windowless side façades exposed and often preventing the formation of a legible building line.
Boundary treatment	A mix of soft landscaping, masonry walls, and timber fencing is used to delineate property boundaries. Due to their more recent construction, boundary treatments within a given cluster are more homogeneous than in earlier developments, and there are fewer trees in front gardens. Smaller front gardens are often less effective at screening parked cars with sparser planting. Many front gardens do not have any delineation from the public realm.
Heights & roofline	Most buildings are two-storeys, with a sizeable minority of bungalows. Buildings over three storeys are exceptional. Due to a standardised palette in roof shapes, heights, and materials, clusters have homogeneous rooflines; the haphazard building orientation and road layouts, however, often do not produce a unified roofline.
Public realm	Access roads are usually equipped with pavements, while some less trafficked cul-de-sac ends are designed to be shared between pedestrians and vehicles. Due to their car-oriented design most roads have a tarmac-dominated appearance, while traffic calming features are highlighted with clay pavers.

3.5 Character Area 4: Countryside

Countryside still covers most of the Neighbourhood Plan Area. Most of it consists of open fields separated by hedges or ditches. The latter form a complex network in land reclaimed from the Fens west of the village, often in geometrical patterns. There are also smaller areas of woodland that are mostly found east of the village. The road network is sparse and, excluding a small section of the A10, composed mainly of rural lanes.



Figure 49: View from Watlington station showing large open fields on a flat topography that enables uninterrupted views



Figure 51: Map showing the location of Character Area 4: Countryside (sources: Google Earth; Defra)



Figure 50: Fields east of the village have a more enclosed character, with more mature trees and woodland

Land use	Land use is overwhelmingly agricultural, with large open fields. The area also includes smaller areas of woodland to the east. Houses and agricultural buildings are dispersed through the landscape.
Development patterns	Development is sparse and dispersed, consisting mostly of isolated properties or small agricultural clusters.
Building line/plot arrangement	Buildings are spaced too sparsely to form an identifiable building line. Most properties are equipped with front and back gardens.
Boundary treatment	Fields are typically delineated with hedges and/or ditches. The sparsity of tall vegetation west of the village, along with the flat topography, often enables long-distance views. Properties are bound by landscaped hedges that may include mature trees, allowing them to be screened and to blend into the rural landscape.
Heights & roofline	Constructions are no higher than two storeys and are too dispersed to form an identifiable roofline. Buildings are lower than the canopy of mature trees and therefore mostly screened from external views.
Public realm	Outside the village roads are few and often not equipped with pavements. They are typically bordered by a combination of hedges and ditches, occasionally with mature trees.

Design guidance and codes

04

4. Design guidance and codes

This section sets out the principles that will influence the design of potential new development and inform the retrofit of existing properties in the Neighbourhood Plan Area. Where possible, local images are used to exemplify the design guidelines and codes. Where these images are not available, best practice examples from elsewhere are used.

4.1 Introduction

The design guidelines and codes listed hereby are organised under five principles that are particularly relevant to Watlington. They have been generated based on discussions with members of the Neighbourhood Plan Steering Group, the virtual site visit, the area analysis included in Chapter 2 of this report, and on good practice relevant to the physical context of the Neighbourhood Plan Area. Some of these are more general and could be used as design guidance within the neighbourhood plan. Other elements that are more prescriptive or set out parameters could form design codes. This section also describes how guidelines and codes may be applied differently in the village's respective character areas identified in the previous chapter.

4.2 General design principles for Watlington

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

The guidelines and codes developed in this part focus on residential developments. New housing development should not be viewed in isolation; rather, considerations of design and layout must be informed by the wider context. The local pattern of roads and spaces, building traditions, materials, and the natural environment should all help to determine the character and identity of a development. It is important with any proposal that full account is taken of the local context and that the new design embodies the 'sense of place'.

Reference to context means using what is around, shown in Chapter 2, as inspiration and influence. Sensibility to the context should by no means restrict architectural

innovation; in fact, the solution could be a contemporary design that is in harmony with the surroundings. Proposals should also take account of their respective Character Area and seek to enhance and reflect its existing features.

The set of design principles shown on the next pages are based on the analysis of the character of Watlington and discussions with members of the Neighbourhood Plan Steering Group.

The main themes to be mentioned are summarised hereafter:

SL **Site layout**

BC **Built character**

SD **Sustainable drainage**

OS **Open spaces and sustainability**

TC **Traffic calming and parking**

4.3 When to use the codes

The table on this page identifies when each of the codes should be used. A prefix has been created for each code to allow simple application and referencing of the design codes when writing policies for the Neighbourhood Plan.

Code	Prefix	When to use the code
Site layout	SL.01	Code to be applied where a development could impact its physical context.
	SL.02	Code to be applied when determining the placement of buildings.
	SL.03	Code to be applied when a proposed development has the potential to restrict views to local landmarks and/or the surrounding landscape.
Built character	BC.01	Code to be applied when determining the height and scale of future developments.
	BC.02	Code to be applied when determining the height and scale of future developments.
	BC.03	Code to be applied when selecting the boundary treatments to be used when determining building setbacks and garden depths.
	BC.04	Code to be applied when selecting the boundary treatments to be used within future housing developments.
	BC.05	Code to be applied when designing building extensions, modifications, and plot infills.
	BC.06	Code to be applied when determining the material and detailing palette to be used in a development.
Sustainable drainage	SD.01	Code to be applied when determining the type of sustainable drainage features.
	SD.02	Code to be applied when applying permeable pavements.
	SD.03	Code to be applied when applying storage and slow release systems.
	SD.04	Code to be applied when applying bioretention systems.

Table 02: Example of design codes based on group priorities and where they apply.

Code	Prefix	When to use the code
Open spaces and sustainability	OS.01	Code to be applied when designing green fingers and corridors.
	OS.02	Code to be applied when designing or modifying a site with trees and/or hedgerows.
	OS.03	Code to be applied when designing or retrofitting buildings for energy efficiency.
	OS.04	Code to be applied when designing servicing.
Traffic calming and parking	TC.01	Code to be applied when designing pedestrian connections.
	TC.02	Code to be applied when designing or renovating roads.
	TC.03	Code to be applied when designing how vehicle and cycle parking will be provided within housing developments.
	TC.04	
	TC.05	
	TC.06	

4.4 Site layout

SL.01. Consider the context

Each development must demonstrate an understanding of its relationship to the larger physical context of Watlington:

- New development must demonstrate an understanding of the landscape sensitivities and designations of the area, especially the listed buildings. Any design proposal must be a good fit in the surrounding context and respects the existing character.
- New development must respect the existing road patterns and evaluate any traffic issues in the area. New designs should improve connectivity and minimise traffic pressure on the existing road network.
- New development should support a connected green system. New designs should propose new links to the surrounding countryside to integrate the existing green spaces, improving

pedestrian connectivity, and support active travel. The preservation of some green gaps between developed areas in the village should be encouraged to preserve direct access to larger areas of open space from the village centre.

- New development should respect the character of each area within the village in terms of scale, building orientation, enclosure, façade rhythm, and architectural details. This includes taking account of the Character Area as described in Chapter 3.
- Development should respect the historic grain of the village. Proposals need to consider existing building patterns and the relationship between buildings and plot sizes. The use of a repeating type of dwelling along the entirety of a street frontage should be avoided for visual interest and to reflect the architectural diversity of a village that developed over time.

- Boundaries using a combination of low brick walls, landscaped hedges, and grass verges, depending on the immediate context, should enclose and define each road along the back edge of the pavement. They should contribute to a clear property line with minor variations for each development group. In areas where properties are set back from the edge of the road with small gardens, consideration should be given to the most appropriate site boundaries.
- Interfaces between the edges of existing properties and new developments must be carefully designed to guarantee a successful visual integration. This is particularly important for any development located at the edge of the existing settlement, especially at the western and southern edges of the village as they are exposed to long-distance views from the open countryside.

SL.02. Pattern of growth and layout of buildings

The internal arrangement of each development should demonstrate an appreciation of the existing character and building patterns of Watlington:

- Properties within each new development should be clustered in small pockets showing a variety of housing types. Variations in architectural details as well as building heights, widths, and depths should be sought to create variety and reflect the informal and rural character of Watlington.
- Where appropriate, new properties should provide rear and front gardens. Where the provision of a front garden is not possible, small buffers against the public realm such as planting strips are encouraged.

- The arrangement of buildings should seek to optimise daylighting and passive solar gains to reduce energy consumption.
- The placement and orientation of buildings should form an identifiable building line for each development group. The extent and depth of building setbacks must be sympathetic to the immediate context. For example, building setbacks may be shorter and show more variations in historic areas of Watlington to match the arrangement of neighbouring properties.
- New developments should seek opportunities to integrate areas of accessible open space or greenery. In smaller developments, this could take the form of green verges, sustainable drainage features, tree pits, or soft landscaping.



F.52

Figure 52: Positive local example of housing with adequate setback that is buffered from the road by fencing and grass verges



F.53

Figure 53: Housing that addresses the road with their fronts and follows a consistent building line along the road

SL.03. Views and landmarks

Landmarks, views, and focal points create mental images of places that are easy to read and memorise, thus helping users to easily orientate themselves. Creating short-distance views punctuated by buildings, trees, or landmarks helps to create memorable routes and allows easily usable links between places. To maintain or where possible enhance key views and vistas, designers should:

- Position new houses to maximise the opportunities for memorable views towards green and open spaces, the open fenland, and the tower of St Peter and St Paul's;
- New roads, should any be built, must aid orientation by having simple layouts that incorporate memorable landmarks, gateway treatments, and/or vistas.

- Limit the height of new buildings and extensions to retain Watlington's character as a low-lying village that remains embedded in its landscape at the edge of the Fens;
- Retain open spaces in the middle of the village that visually connect the centre of Watlington to areas of open space and the countryside; and
- Retain and where possible enhance the belts of mature trees that partially screens the settlement from inward views. Any new development on the southern or western edge of the village, in particular, should be screened from long-distance views across the open and flat landscape of the west and south of the Neighbourhood Plan Area.



Figure 54: Houses along School Road that frames a view of Angel Field in the heart of Watlington



Figure 55: Row of houses along Thieves Bridge Road, facing a view of nearby farmland and screened by hedgerows to minimise impact on the landscape

4.5 Built character

BC.01. Building scale and massing

- Buildings in Watlington are usually one or two storeys in height. New buildings and modifications in the Neighbourhood Plan Area should therefore be sympathetic in mass, height, and scale to the existing context. For example, development should respect the more built-up character of the historic areas of Watlington, which has more variations in building massing and scale.
- Subtle variation in massing and height is encouraged elsewhere to add visual interest and respect Watlington's architectural diversity that characterise the village. The bulk and pitch of roofs must remain sympathetic to the tree canopy, the local vernacular, and the low-lying character of the settlement.

- Another way to achieve visual interest in the building scale and massing could be by varying frontage widths and plan forms. The repetition of an identical plan form along a street frontage should be avoided to respect the informal character of Watlington.
- The massing of new buildings should ensure a sufficient level of privacy and access to natural light for their occupants and avoid overshadowing existing buildings. This is particularly important near buildings of historic character.
- The scale and massing of buildings should also seek to maximise energy efficiency by reducing energy consumption and optimising passive solar gains.



F.56

Figure 56: Positive local example of the use of variation in massing and plan forms to add visual interest along the road



F.57

Figure 57: Variety in roofline, roof profiles and orientation of buildings along Mill Road

BC.02. Building height and roofline

Creating a good variety in the roofline is a significant element of designing attractive places. The following elements are guidelines to achieving a good variety of roofs in Watlington:

- Buildings should generally be one or two storeys in height. Three-storeys may be permitted if the context is appropriate.
- The scale of the roof should always be in proportion with the dimensions of the building itself. The shape and orientation may be chosen to optimise lighting, energy use, solar gains, and rainwater management;
- Variations in the roofline should reflect the existing variety in roof shapes, orientations, and materials of the local vernacular. The repetition of a standardised set of roof shapes and materials across a development should be avoided;

- Local traditional roof shapes, materials, and detailing should be considered and implemented where possible in cases of new development;
- Where appropriate, dormers and chimney stacks may be used as design elements to add variety and interest to roofs; and
- The design of the roofline must respond to the natural environment of the site and its surroundings in relation to the topography and key views. In particular, roofs should avoid obstructing important views towards the tower of St Peter and St Paul, remain below the level of the tree canopy, and take into account the flat topography of Watlington.



F.58

Figure 58: Use of traditional clay pantiles on a new building, paired with dormer windows and porch



F.59

Figure 59: Gentle variations in roof pitches, colour, and texture punctuated by brick chimney stacks

BC.03. Enclosure

The level of enclosure of a road or public space is determined by its relationship with the vertical elements on its edges such as buildings, walls, and trees. Development can achieve a good sense of enclosure by creating clearly defined spaces that produce a cohesive and attractive built form, for example by determining focal points, appropriate building heights, and well-defined edges. These considerations must however be balanced with the retention of the character of Watlington and views.

The following principles are general guidelines that should be considered when seeking to achieve a satisfactory sense of enclosure in Watlington:

- In case of building setbacks, façades should achieve an appropriate ratio between the width of the road and the building height;

- Buildings should be designed to turn corners and terminate views;
- Generally, building façades should face the road, and variation to the building line can be introduced to reinforce Watlington's rural and informal character;
- In most new developments, a variety of plot widths and façade depths should be considered during the design process to create an attractive rural character and avoid a monotonous street frontage, and;
- Trees, hedges, and other landscaping elements can help create a desirable level of enclosure without creating an over-built environment. They also play an important role in providing shading and protection from heat, wind, and rain.



F.60

Figure 60: Continuous frontage of houses that addresses the road with appropriate set back, along with hedgerows, provide a good sense of enclosure for pedestrians on Station Road



F.61

Figure 61: Level of enclosure heightened due to little setback of houses from the road, Mill Road

BC.04. Building line and boundary treatment

- Boundary treatments should reinforce the sense of continuity of the building line and help define the public realm, appropriate to the character of the area. The use of appropriate forms of boundary treatments contributes to the rural and historic character of Watlington. They should be mainly continuous hedges and low brick walls, made of traditional materials found elsewhere in Watlington. The use of either panel fencing or metal or concrete walls in these publicly visible boundaries should be avoided because they conflict with the rural character.
- Boundary treatments should offer privacy and screen parked vehicles while offering a satisfactory level of natural surveillance.
- Buildings should be oriented to face roads. The building line should have subtle variations in the form of recesses and protrusions but should generally form a legible line.
- Buildings should be designed to ensure that roads and/or public spaces have good levels of natural surveillance from buildings. This can be ensured by placing ground floor habitable rooms and upper floor windows facing the street.
- Front gardens should be provided in all but exceptional circumstances.
- If placed on the property boundary, waste storage should be integrated as part of the overall design of the property. Landscaping could also be used to minimise the visual impact of bins and recycling containers.
- New development should reuse and integrate existing boundaries in the form of hedges where possible.



Figure 62: Property with a front garden that makes an elegant use of the small setback between the house and the road



Figure 63: Houses sensibly setback from the road and buffered by green verges and hedgerows form a building line that follows the road

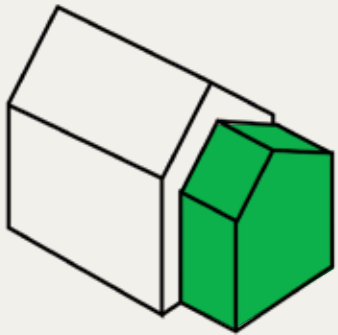
BC.05. Building extensions, modifications, and plot infills

Extensions to dwellings can have a significant impact not only on the character and appearance of a building, but also on the street scene within which it sits. A well-designed extension can enhance the appearance of its immediate environment, whereas an unsympathetic extension can have a harmful impact, create problems for neighbouring residents, and affect the overall character of the area.

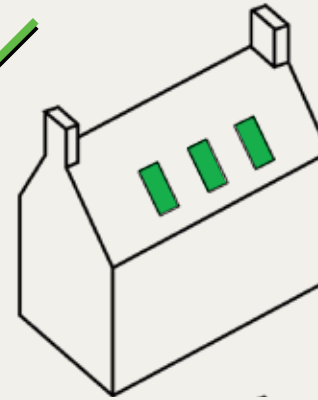
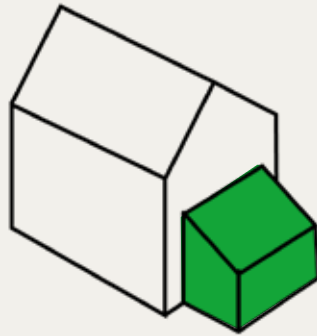
Many household extensions are covered by permitted development rights, and so do not need planning permission. There are however a number of principles that residential extensions and conversions must follow to maintain the local character:

- The original building must remain the dominant element of the property regardless of the number of extensions. The extension shall not overwhelm the building from any given point.

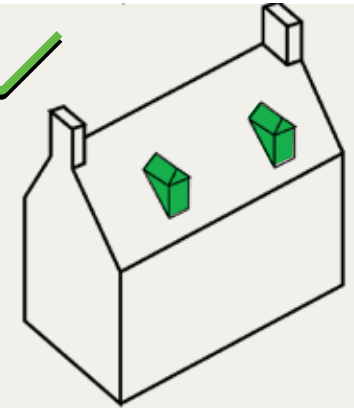
- Extensions shall not result in a significant loss to the private amenity area of the dwelling.
- Designs that wrap around the existing building and involve overly complicated roof forms shall be avoided.
- In case of side extensions, the new part may be set back from the front of the main building and retain the proportions of the original building. This is in order to reduce any visual impact of the articulation between existing and new.
- In case of rear extensions, the new part must not have a harmful effect on neighbouring properties in terms of overshadowing, overbearing, or privacy.
- Any housing conversions must respect and preserve the buildings' original form and character.
- Where possible, reuse as much of the original materials as possible, or alternatively, use like-for-like materials. Any new materials must be sustainable and be used on less prominent building parts.
- The pitch and form of the roof used on the building adds to its character and extensions shall respond to this where appropriate.
- Extensions must consider the materials, architectural features, window sizes, and proportions of the existing building and recreate this style to design an extension that matches and complements the existing building.
- Any modifications should not reduce the number of parking spaces on the site.
- It must be noted that permitted development rights do not apply to extensions, modifications, and infills of buildings that are listed. In such places a planning permission is needed.



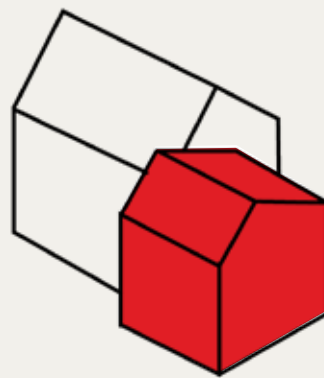
Good examples for side extensions, respecting existing building scale, massing and building line.



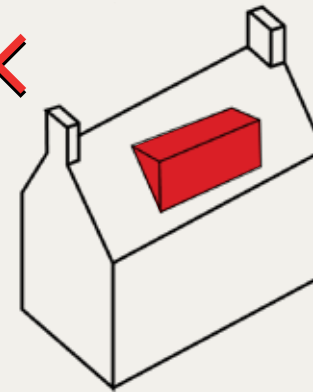
Loft conversion incorporating skylights.



Loft conversion incorporating gabled dormers.



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



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

BC.06. Materials and architectural details

New development or any change to the built environment should provide a sympathetic response to the existing character and architectural details found in the Neighbourhood Plan Area, especially when located within or near buildings of historic character. They should demonstrate an intelligent understanding of the historic building details without resulting in low-quality imitations of past styles. This page includes examples of building material that contribute to the local vernacular of Watlington and that could be used to inform future development.



Carstone with red brick dressing



Red brick



Coloured render



White Gault brick



Clay pantiles



Slate tiles



Black glazed pantiles



Landscaped hedges



Red brick wall



Red brick and carstone boundary wall with galletting

4.6 Sustainable drainage

SD.01. Sustainable drainage - introduction

Sustainable drainage solutions (SuDS) work by reducing the amount and rate at which surface water reaches a waterway or combined sewer system. Usually, the most sustainable option is collecting this water for reuse, for example in a water butt or rainwater harvesting system, as this has the added benefit of reducing pressure on important water sources.

Where reuse is not possible there are two alternative approaches using SuDS:

- Infiltration, which allows water to percolate into the ground and eventually restore groundwater; or
- Attenuation and controlled release, which holds back the water and slowly releases it into the sewer network. Attenuation and controlled release options are suitable when either infiltration is not possible (for example where the water table is high or

soils are clay) or where infiltration could be polluting (such as on contaminated sites).

The most effective type or design of SuDS would depend on site-specific conditions such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. A number of overarching principles should however be applied:

- Water supply and disposal should be guaranteed before development to ensure that SuDS have been considered and implemented;
- Manage surface water as close to where it originates as possible;
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow down;
- Improve water quality by filtering pollutants to help avoid environmental contamination;

- Form a 'SuDS train' of two or three different surface water management approaches;
- Integrate into development and improve amenity through early consideration in the development process and good design practices;
- Some of the most effective SuDS are vegetated, using natural processes to slow and clean the water whilst increasing the biodiversity value of the area;
- Best practice SuDS schemes link the water cycle to make the most efficient use of water resources by reusing surface water; and
- SuDS must be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.

SD.02. Permeable pavements

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

Permeable paving can be used where appropriate on footpaths, public squares, private access roads, driveways, and private areas within the individual development boundaries. In addition, permeable pavement must also conform with:

- [Flood and Water Management Act 2010, Schedule 3](#)
- [The Building Regulations Part H – Drainage and Waste Disposal](#); and

- [Town and Country Planning \(General Permitted Development\) \(England\) Order 2015](#).

Regulations, standards, and guidelines relevant to permeable paving and sustainable drainage are listed below:

- [Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems](#);
- The SuDS Manual (C753).¹
- [BS 8582:2013 Code of practice for surface water management for development sites](#);
- [BS 7533-13:2009 Pavements constructed with clay, natural stone or concrete pavers](#); and
- [Guidance on the Permeable Surfacing of Front Gardens](#).

¹ CIRIA (2015). The SuDS Manual (C753).

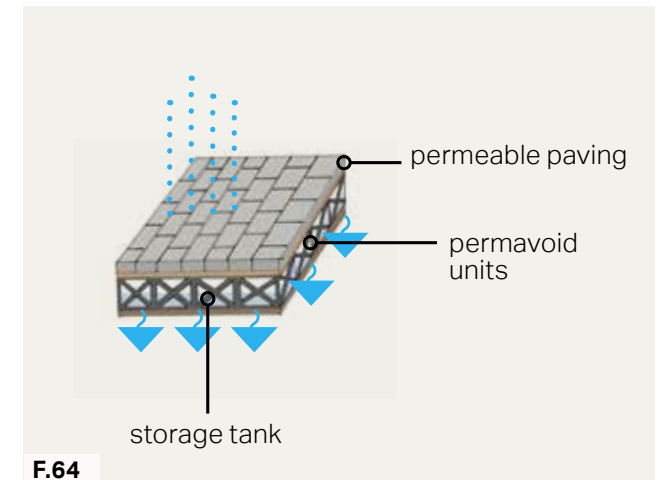


Figure 64: Diagram illustrating the functioning of a soak away with permavoid units

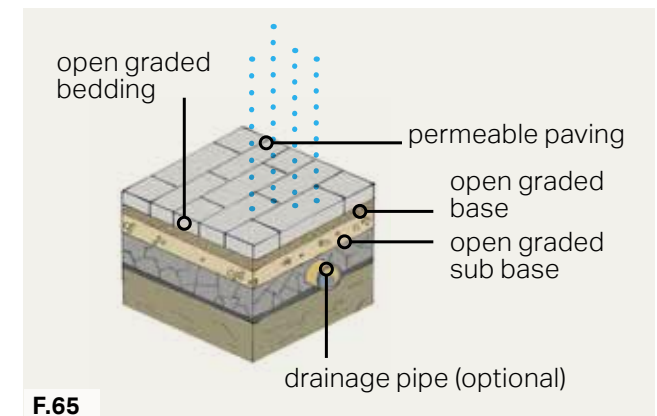


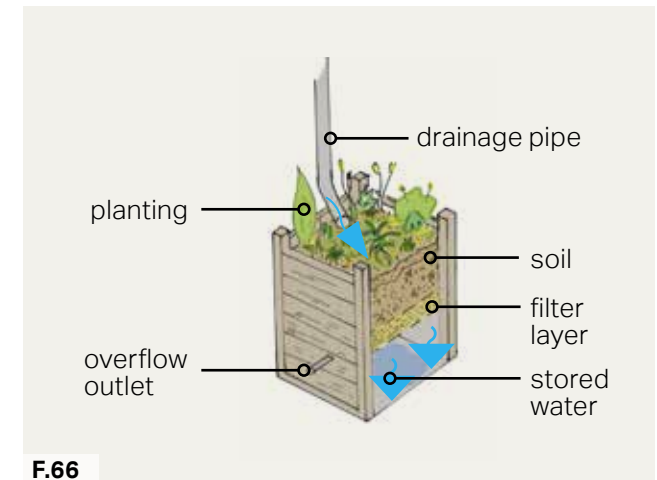
Figure 65: Diagram illustrating the construction of a permeable paving area

SD.03. Storage and slow release

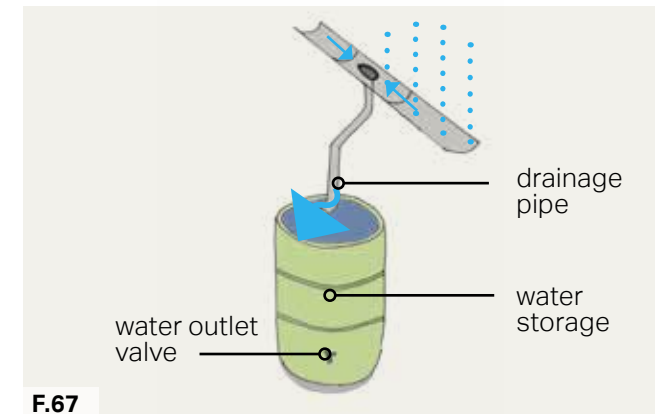
Rainwater harvesting refers to the systems allowing the capture and storage of rainwater as well as those enabling the reuse in-site of grey water to reduce use of mains water, for example for flushing toilets, washing laundry, or watering gardens. The capture and reuse of grey water should form an integral part of house design. Simple storage solutions, such as water butts, can be used. There has to be some headroom within the storage solution. If water is not reused, a slow-release valve allows water from the storage to trickle out, recreating capacity for future rainfall events. New digital technologies that predict rainfall events can enable stored water to be released when the sewer has greatest capacity to accept it. In addition, some space should be also reserved for composters in order to encourage home composting.

These systems involve pipes and storage devices that could be unsightly if added without an integral vision for design. Therefore, some design recommendations are to:

- Conceal tanks by cladding them in complementary materials;
- Use attractive materials or finishing for pipes;
- Combine planters with water capture systems;
- Underground tanks; and
- Utilise water bodies for storage.



F.66 Diagram illustrating the functioning of a stormwater planter



F.67 Diagram illustrating the functioning of a water butt

SD.04. Bioretention systems

Bioretention systems, including soak away and rain gardens, can be used within each development, along verges, and in semi-natural green spaces. They must be designed to sit cohesively with the surrounding landscape, reflecting the natural character of the Parish. Vegetation must reflect that of the surrounding environment.

They can be used at varying scales, from small-scale rain gardens serving individual properties, to long green-blue corridors incorporating bioretention swales, tree pits and mini-wetlands, serving roads or extensive built-up areas.

These planted spaces are designed to enable water to infiltrate into the ground. Cutting of downpipes and enabling roof water to flow into rain gardens can significantly reduce the runoff into the sewer system. [The UK Rain Garden Design Guidelines](#) provides more detailed guidance

on their feasibility and suggests planting to help improve water quality as well as attract biodiversity.

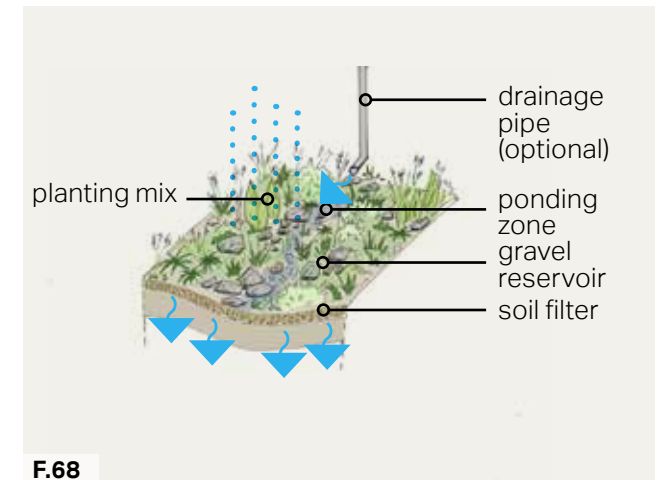


Figure 68: Diagram illustrating the functioning of a rain garden

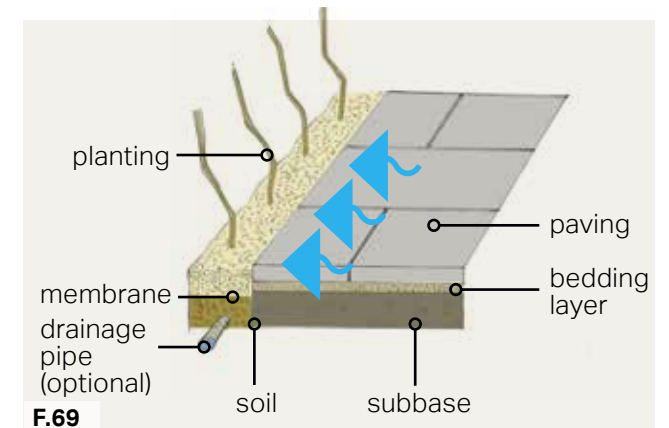


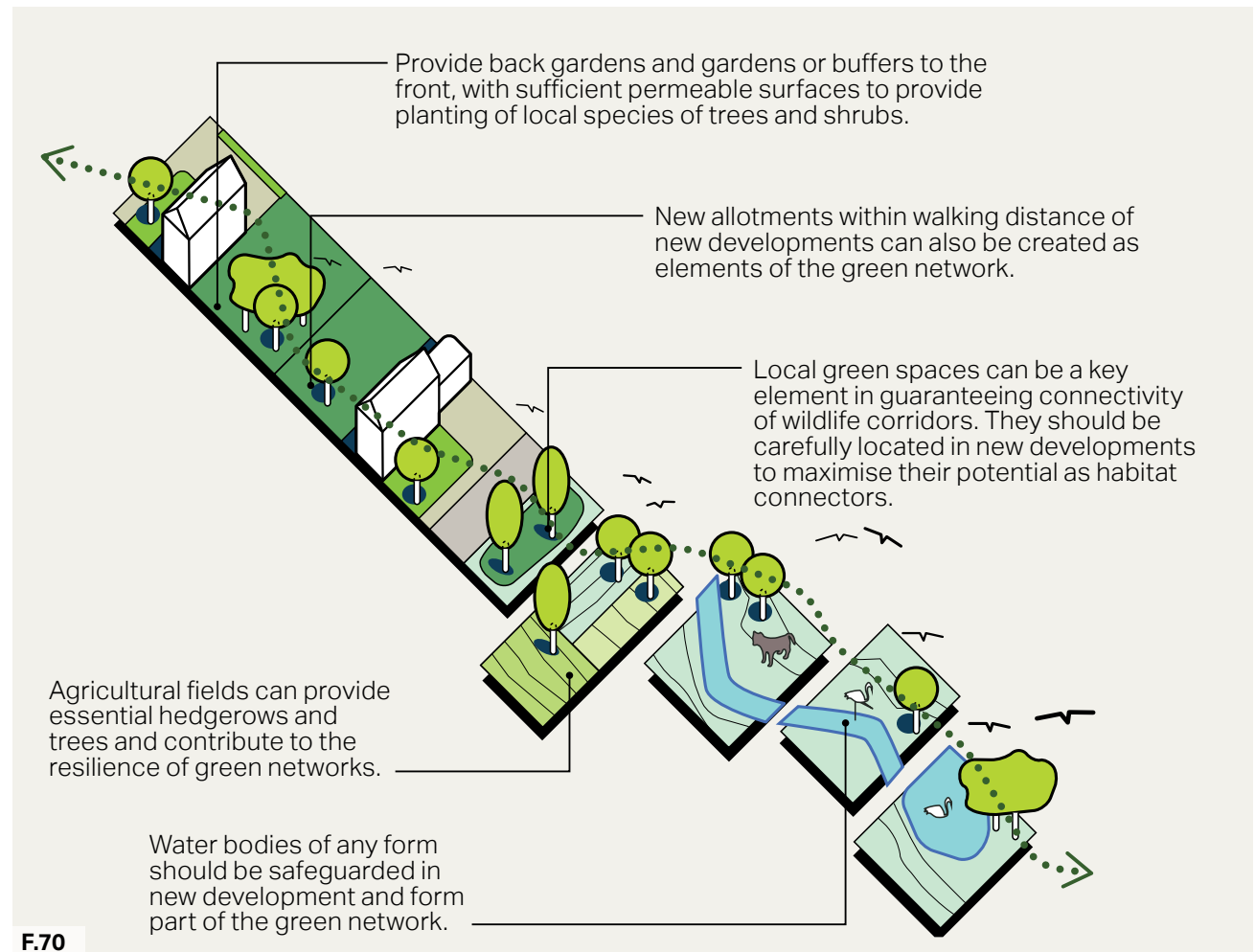
Figure 69: Diagram illustrating the construction of a soak away garden

4.7 Open spaces and sustainability

OS.01. Green fingers and green corridors

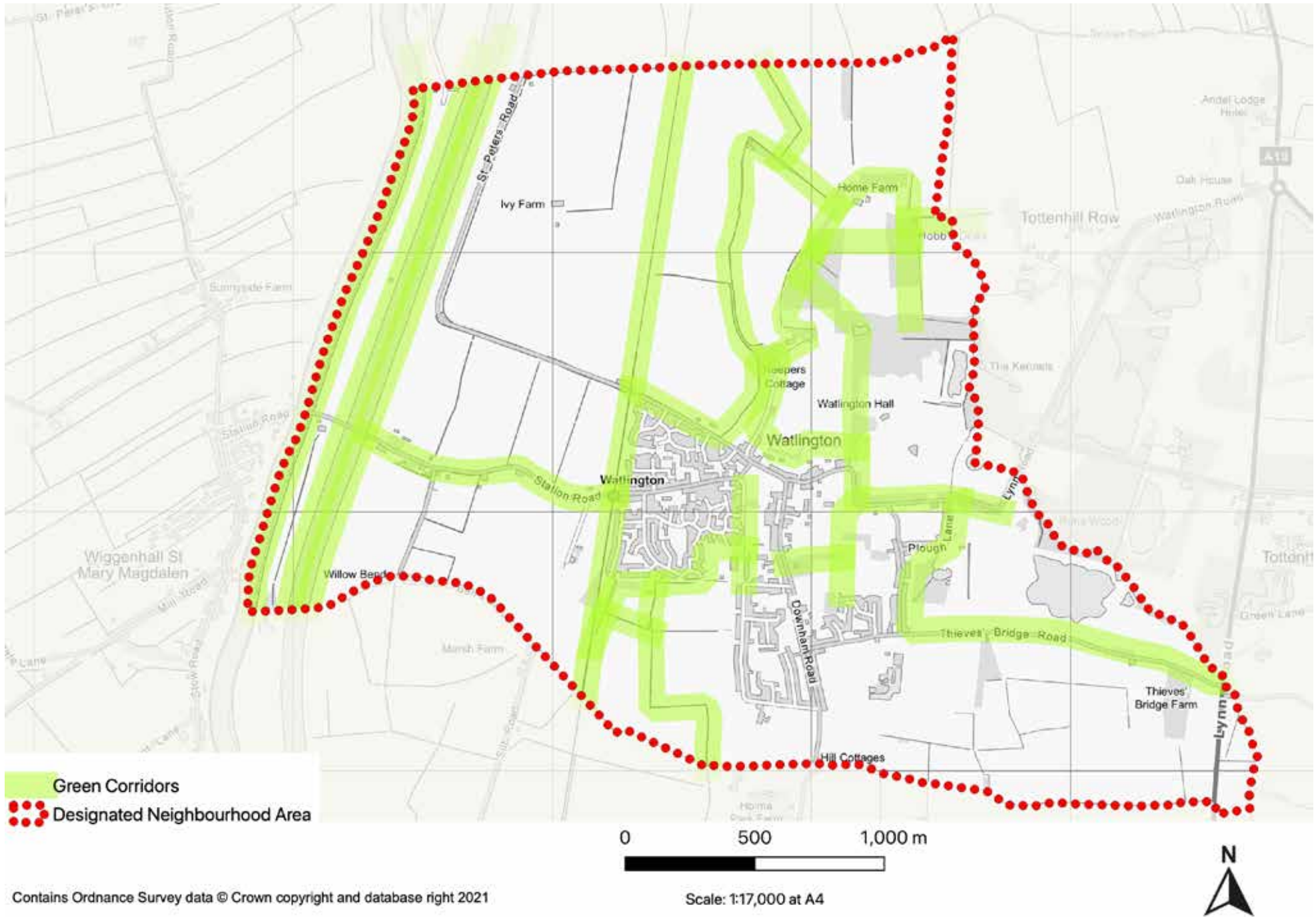
Green fingers and corridors are important features in Watlington and the spaces between them. The village centre retains large areas of green and open space with unbroken connections with the countryside. The consultation conducted among residents of Watlington indicate a strong desire to protect these areas from development as community assets.

Opportunities to connect the areas of open space in the centre of Watlington to the network of woodland to the north and east should be sought. This would create a continuous green corridor that could be integrated with footpaths and public rights of way that link the village centre with the surrounding countryside.



F.70

Figure 70: Diagram illustrating some principles related to green fingers and corridors



F.71 | Figure 71: Draft map showing indicative green corridors in Watlington (source: Collective Community Planning)

OS.02. Woodland, trees, and hedgerows

Trees are crucial to the integration of Watlington into its physical context. They also support fauna. Trees may not all benefit from the protection of a tree preservation order (TPO). Therefore, new developments and any change in the physical environment must:

- Incorporate existing native trees and shrubs and avoid unnecessary loss of flora.
- Replace any tree or woodland lost to new development. Native trees and shrubs should be used to reinforce the more rural character of the area.
- Promote rich vegetation in front and rear gardens to improve the visual impact and mitigate air pollution. New and retained vegetation at the edges of new developments are particularly important for their successful integration into the wider landscape.

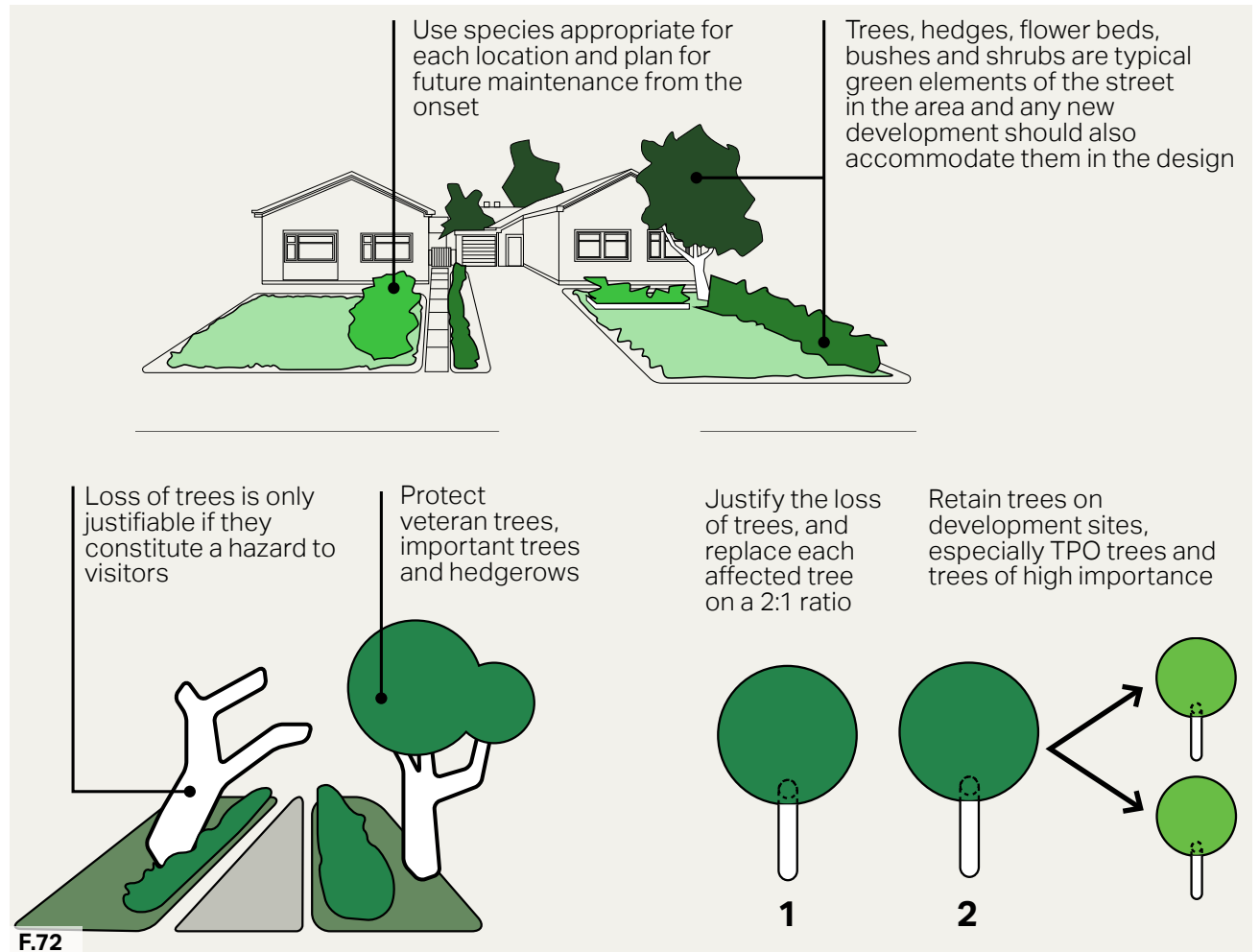


Figure 72: Diagram highlighting some guidelines related to tree preservation

OS.03. Carbon neutral homes

Energy efficient technologies could be incorporated in buildings and at broader Parish design scale.

Energy efficient or eco design combines all around energy efficient appliances and lighting with commercially available renewable energy systems, such as solar electricity and/or solar/ water heating.

Starting from the design stage there are strategies that can be incorporated to include technologies such as passive solar heating, cooling and energy efficient landscaping which are determined by local climate and site conditions.

It should be noted that eco design can be adapted to a wide variety of architectural styles. Historic buildings can also be retrofitted in a way that respects both the environment and their historic features.

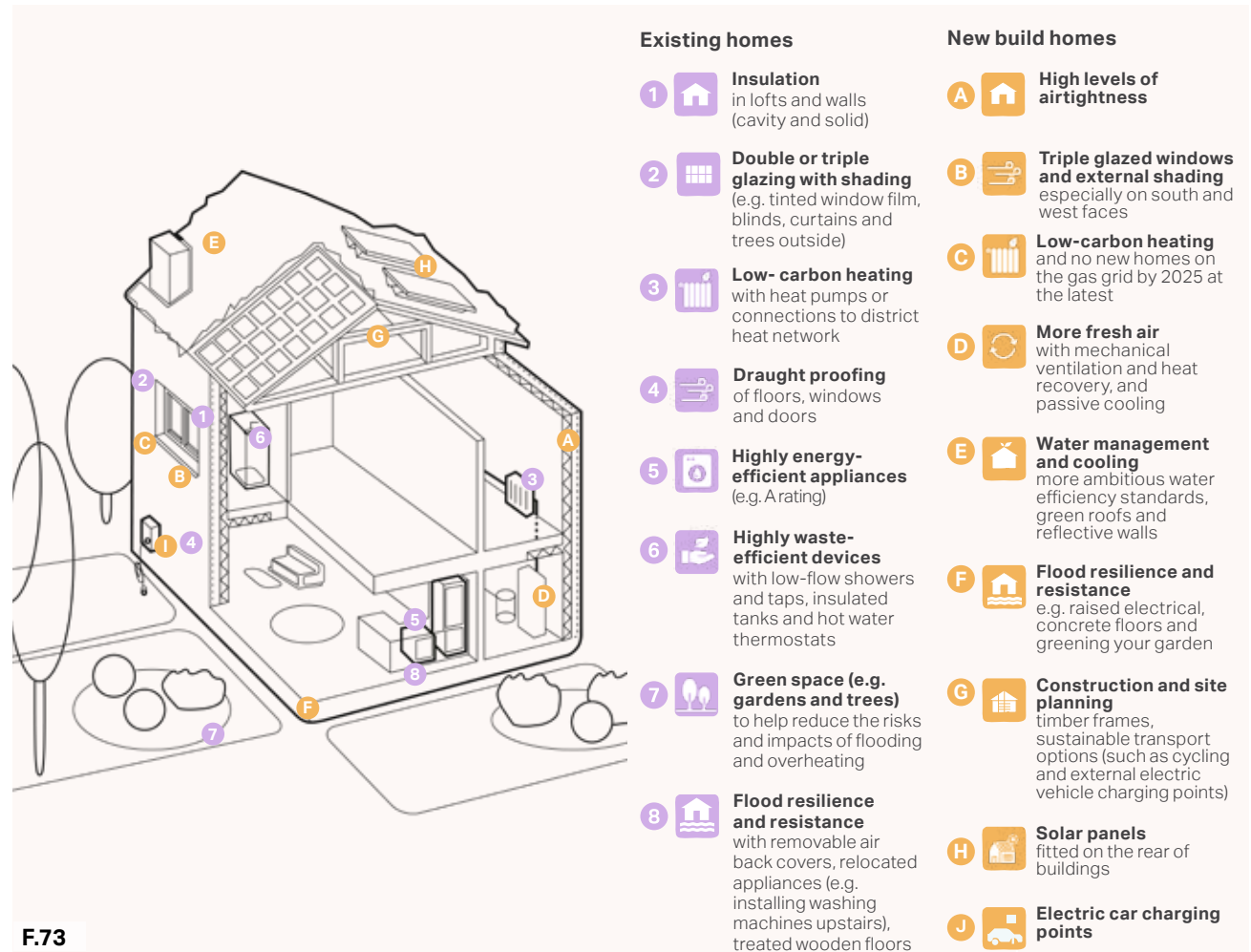


Figure 73: Diagram showing low-carbon homes in both existing and new build conditions

OS.04. Servicing

With modern requirements for waste separation and recycling, the number and size of household bins has increased. This poses a problem with the aesthetics of the property. The following measures are recommended:

- Servicing arrangements and site conditions should be considered when choosing waste storage solutions; in some cases waste management should be from the front of the building and in others, from the rear. Bins should be located away from areas used as amenity space;
- Create a specific enclosure of sufficient size for all the necessary bins;
- Bins should be placed as close to the dwelling's boundary and the public highway, such as against a wall, fence, or hedge, but not in a way as to obstruct the shared surface for pedestrian and vehicle movements;

- Place bins within easy access from the road and, where possible, with the ability to open on the pavement side (if any) to ease retrieval;
- Bin storage design should be discrete and not cause any negative visual impact;
- Refer to the materials palette to analyse what would be a complementary material;
- Add to the environmentally sustainable design by incorporating a green roof element to it; the structure could also combine waste and cycle storage.



F.74

Figure 74: Bin storage design solution

4.8 Traffic calming and parking

TC.01. Pedestrian connectivity

Roads should be connected with each other to offer a choice of travel routes not only by car but also by foot and bicycle. A more connected pattern creates a 'walkable' village, a place where routes link meaningful places together. Although new development in Watlington will be small in scale and may not require new roads, there are still opportunities to improve connections. The network can be improved by:

- Forming a permeable pattern that allows for multiple connections and choice of routes, particularly on foot. Any cul-de-sac should be relatively short and provide legible onward walking and cycling links;
- Proposing short and walkable distances which are usually defined to be within a 10-minute walk or a five-mile trip by bicycle. If the design proposal calls for a new road or cycle/pedestrian link, it must connect destinations and origins;

- Creating a well-signposted and integrated pedestrian network. This network should complete the currently fragmented array of footpaths and public rights of way by connecting them with one another, both in the village and in the countryside; and
- Avoiding features such as pedestrian barriers or gated developments. Instead, convenient pedestrian connections through new development should be encouraged. Footpaths between high fences should also be avoided due to poor visibility and lighting.



Figure 75: Public footpath providing a pedestrian and cyclist friendly shortcut between Downham Road with Mill Road



Figure 76: Footpath connecting Watlington Community Primary School with the rest of the neighbourhood

TC.02. Traffic calming

The design of roads should consider the safety and accessibility of vulnerable users such as pedestrians and cyclists. Because vehicle speed is a major determinant in the likelihood and severity of collisions, one key measure is to deter speeding. Watlington has already put in place measures such as a 30-mph speed limit in the built-up area as well as measures to improve visibility at the entrance of the Primary School. The following should be considered when designing new roads or retrofitting existing ones:

- The organic layout of many residential areas in Watlington and variations road width and enclosure act as a natural deterrent to speeding. Should any new development require new roads, they should be designed with self-enforcing traffic calming through the layout of buildings and variations in the level of enclosure before resorting to more engineered solutions.

- As most collisions happen at junctions, the latter must be designed or retrofitted to prioritise safety over speed or capacity. Tighter junction corners should be used to prevent vehicles from turning at high speed.
- Local residential roads with lighter traffic presents additional opportunities to introduce traffic safety features such as raised tables and kerb extensions at junctions and pedestrian crossings.
- On-street kerbside parking may be used for informal traffic calming, however it must neither impede visibility at key locations nor create a car-dominated streetscape.



F.77

Figure 77: Kerb build-out used to tighten the junction near the school entrance



F.78

Figure 78: Opportunities should be sought to tighten corners at wide junctions such as the entrance of Orchard Close

TC.03. Car and cycle parking

Although the demand for private cars is expected to remain high in Watlington, measures can be taken to integrate parking areas into the fabric of the village. A good mix of parking typologies should be deployed, depending on, and influenced by location and market demand.

The main types of parking to be considered are shown on the next pages.

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

- For family homes, cars should be placed at the front or side of the property. For small pockets of housing, a front or rear court may be acceptable.
- Parking areas and driveways should be designed to minimise impervious surfaces through the use of permeable paving and soft landscaping.
- Garage structures, where required, should be designed to be subservient to the main building, for example with a setback from the main building line and a roof lower than that of the main building.
- Cycle parking should be integrated into all new housing.
- Long-term strategies to manage parking demand, such as cycling infrastructure and parking, car sharing, and carpooling schemes should also be explored.



F.79

Figure 79: Property using soft landscaping to screen parking spaces and a garage structure built with attractive materials



F.80

Figure 80: Sheltered cycle parking at Watlington station

TC.04. On-plot front or side parking

- On-plot parking can be visually attractive when combined with high-quality and well-designed soft landscaping.
- Boundary treatment is the key element to avoid a car-dominated character. This can be achieved by using elements such as hedges, horticultural shrub, native trees, flower beds, low walls built with local materials, and high-quality paving between the private and public space.
- Areas of hard standing and driveways must be kept to a minimum to avoid a car-dominated character and reduce heat island effects. Where they are necessary, they must be constructed from porous materials to minimise surface water run-off and incorporate soft landscaping.

- Garage structures, where they are needed, should be of sufficient size to store vehicles but should neither overwhelm nor visually clash with the buildings that they serve. The provision of electric vehicle charging points and bicycle storage space should also be included in their design.

1. Front parking with part of the surface reserved for soft landscaping. Permeable pavement to be used whenever possible.
2. Side parking set back from the main building line. Permeable pavement to be used whenever possible.
3. Boundary hedges to screen vehicles and parking spaces.

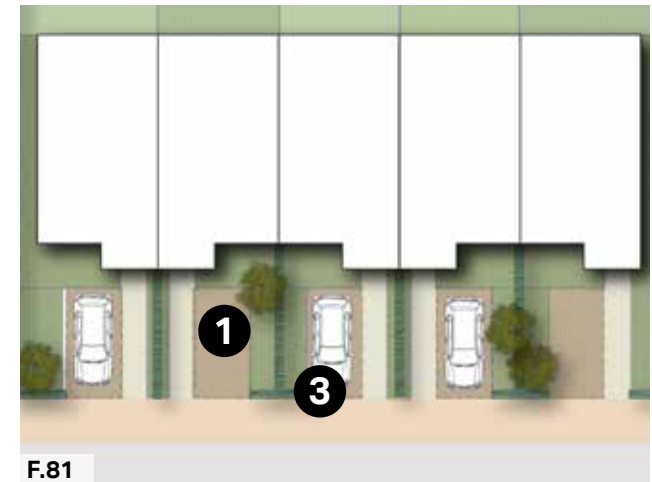


Figure 81: Illustrative diagram showing an indicative layout of on-plot front parking

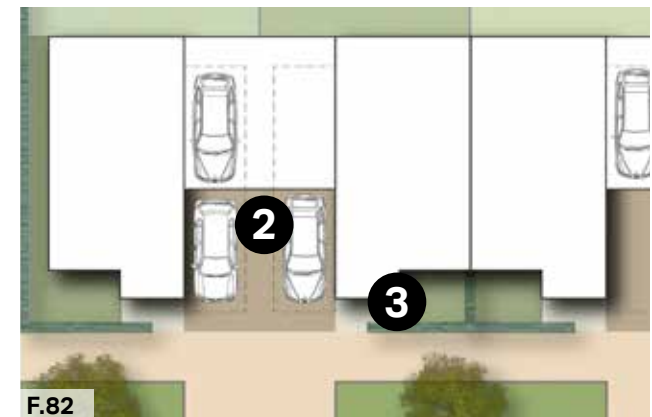


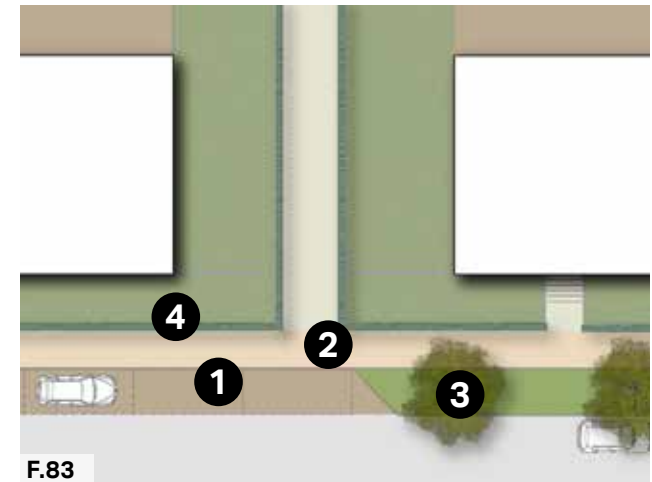
Figure 82: Illustrative diagram showing an indicative layout of on-plot side parking

TC.05. On-street vehicle parking

- The streetscape should not be dominated by continuous on-street parking spaces. Where possible, tree planting and other gaps between parking bays should be incorporated.
- On-street parking can be in parallel, perpendicular or echelon in relation with the traffic speed and volume.
- On-street parking must be designed to avoid impeding the flow of pedestrians, cyclists, and other vehicles, and may play an informal traffic calming role.
- On low-traffic residential streets or lanes, changes in paving materials instead of markings may be used to provide drivers with an indication of where to park. The street must be sufficiently wide so that parked vehicles do not impede motor vehicles or pedestrians.

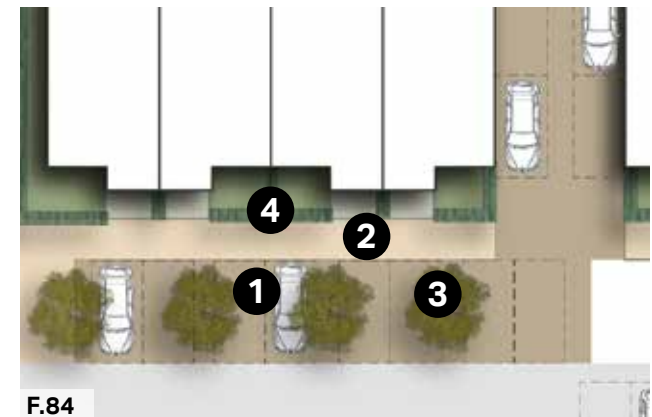
- Opportunities must be created for car parking spaces to include electric vehicle charging points. Such provision must be located conveniently in the village and designed to minimise street clutter.
- Parking over dropped kerbs and pavements can be discouraged with strategically placed soft landscaping, trees, street furniture, or boulders. Bollards, "no parking" signs, and yellow kerbside lines should only be used as a last resort because they add visual clutter and distract from the rural character.

1. On-street parking bays. To be inset between kerb extensions in the case of inset bays.
2. Pavement. Additional green verge if street width permits in the case of inset bays.
3. Planted kerb extensions - width to be sufficient to fully shelter parking bay. Tree planting used to define car parking spaces
4. Boundary hedges.



F.83

Figure 83: Illustrative diagram showing an indicative layout of on-street inset parking



F.84

Figure 84: Illustrative diagram showing an indicative layout of on-street perpendicular echelon parking

TC.06. Cycle parking

A straightforward way to encourage cycling is to provide secured covered cycle parking within all new residential developments and publicly available cycle parking in the public realm.

Houses without garages

- For residential units, where there is no on-plot garage, covered and secured cycle parking should be provided within the domestic curtilage.
- Cycle storage must be provided at a convenient location with an easy access.
- When provided within the footprint of the dwelling or as a free-standing shed, cycle parking should be accessed by means of a door at least 900mm and the structure should be at least 2m deep.

- Parking should be secure, covered and it should be well integrated into the streetscape if it is allocated at the front of the house.
- The use of planting and smaller trees alongside cycle parking can be used to mitigate any visual impact on adjacent spaces or buildings.

Houses with garages

- The minimum garage size should be 7mx3m to allow space for cycle storage.
- Where possible, cycle parking should be accessed from the front of the building either in a specially constructed enclosure or easily accessible garage.
- The design of any enclosure should integrate well with the surroundings.
- The bicycle must be removed easily without having to move the vehicle.

Public realm

- New development should promote cycling by providing more cycle routes and monitor the condition of the existing ones.
- Bicycle stands in the public realm should be sited in locations that are convenient and that benefit from adequate natural surveillance. They should be placed in locations that do not impede pedestrian mobility or kerbside activities.
- The chosen materials must be appropriate to its surroundings and follow the dimensions as illustrated on the next page.

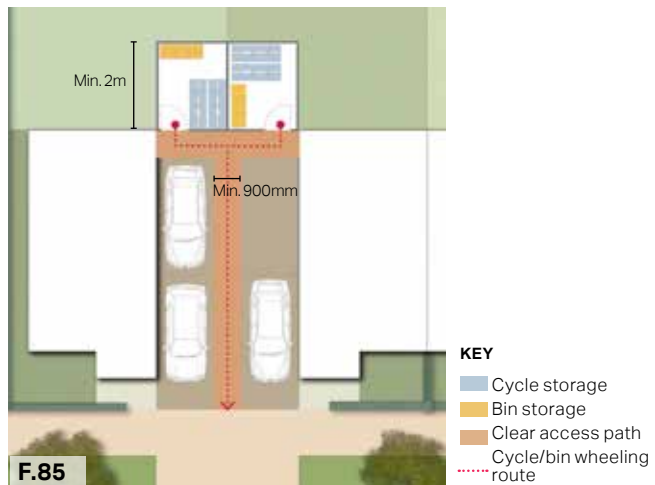


Figure 85: Illustrative layout of a bicycle and bin storage area at the back of semi-detached properties

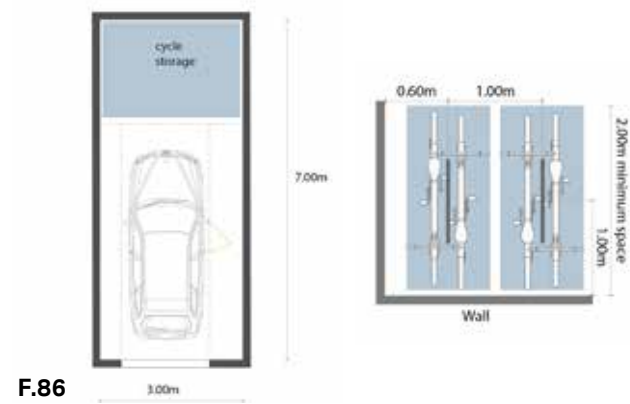


Figure 86: Illustrative layout of a garage with a cycle storage area (left), and illustrative layout for Sheffield cycle stands for visitors (right)

4.9 Checklist

Because the design guidelines and codes in this chapter cannot cover all design eventualities, this concluding section provides a number of questions based on established good practice against which the design proposal should be evaluated.

The checklist can be used to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has taken into account the context and provided an adequate design solution.

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



Figure 87: Village sign reinforcing the role of the village green as the focal point of Watlington



Figure 88: A pleasant level of enclosure is provided by landscaped hedges (left) and a mature tree (right)



Figure 89: Railway building serving as an informal landmark and gateway at the edge of the settlement



Figure 90: Contemporary building using traditional local materials - carstone, red bricks, and clay pantiles

1

General design guidelines for new development:

- Integrate with existing paths, streets, circulation networks and patterns of activity;
- Reinforce or enhance the established settlement character of streets, greens, and other spaces;
- Harmonise and enhance existing settlement in terms of physical form, architecture and land use;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- 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

Street grid and layout:

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

3

Local green spaces, views and character:

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- How does the proposal affect the trees on or adjacent to the site?
- Can trees be used to provide natural shading from unwanted solar gain? i.e. deciduous trees can limit solar gains in summer, while maximising them in winter.
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?

3 (continued)

Local green spaces, views and character:

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

4

Gateway and access features:

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between settlements?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

5

Building 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?

5 (continued)

Building layout and grouping:

- Subject to topography and the clustering of existing buildings, are new buildings oriented to incorporate passive solar design principles, with, for example, one of the main glazed elevations within 30° due south, whilst also minimising overheating risk?
- Can buildings with complementary energy profiles be clustered together such that a communal low carbon energy source could be used to supply multiple buildings that might require energy at different times of day or night? This is to reduce peak loads. And/or can waste heat from one building be extracted to provide cooling to that building as well as heat to another building?

6

Building line and boundary treatment:

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

7

Building heights and roofline:

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

8

Household extensions:

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

9

Building materials and surface treatment:

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- 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?

9 (continued)

Building materials and surface treatment:

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

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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