Hellesdon

Design Codes and Guidance

October 2024

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Quality information

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Revision History

Issue no.	Issue date	Details	Issued by	Position
3	01.10.2024	Final report issued to NP Steering Group	Holly MacMahon	Consultant Urban Designer
2	19.09.2024	Review and comments	Samantha Banks	Neighbourhood Planning Programme Manager, Locality
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1	27.08.2024	Review and comments	Chris Bennett	Senior Heritage and Design Officer to Broadland District Council
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	14.06.2024	First draft sent to NP Steering Group	Holly MacMahon	Consultant Urban Designer
	07.06.2024	Proof read	Megan Bradshaw	Graduate Planning Consultant
	14.03.2024	Site visit	Holly MacMahon Jasper den Boeft	Consultant Urban Designer Associate Director Urban Design

Contents

Introduction

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1. Introduction

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

1.1 Purpose of this document

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

The Hellesdon Neighbourhood Area was designated in 2016 by Broadland District Council. A Neighbourhood Plan was adopted in 2017 and the Neighbourhood Plan Group are now in the process of updating the plan.

The design recommendations made in this report are based on observations on the Neighbourhood Area as a whole, with some additional, more specific design guidance based on analysis of the different character areas in the parish.

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 Hellesdon Neighbourhood Area, including infilling and extensions. The main objective is to ensure that they remain sympathetic to the character of the parish. In particular, it elaborates on key design elements, namely:

- Ensuring that new development and modifications respect and enhance the existing character of Hellesdon and create a sense of place;
- Preserving and enhancing green and open spaces both surrounding and within the residential areas; and
- Improving connectivity and movement through the parish and into neighbouring areas, including encouraging active travel.

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

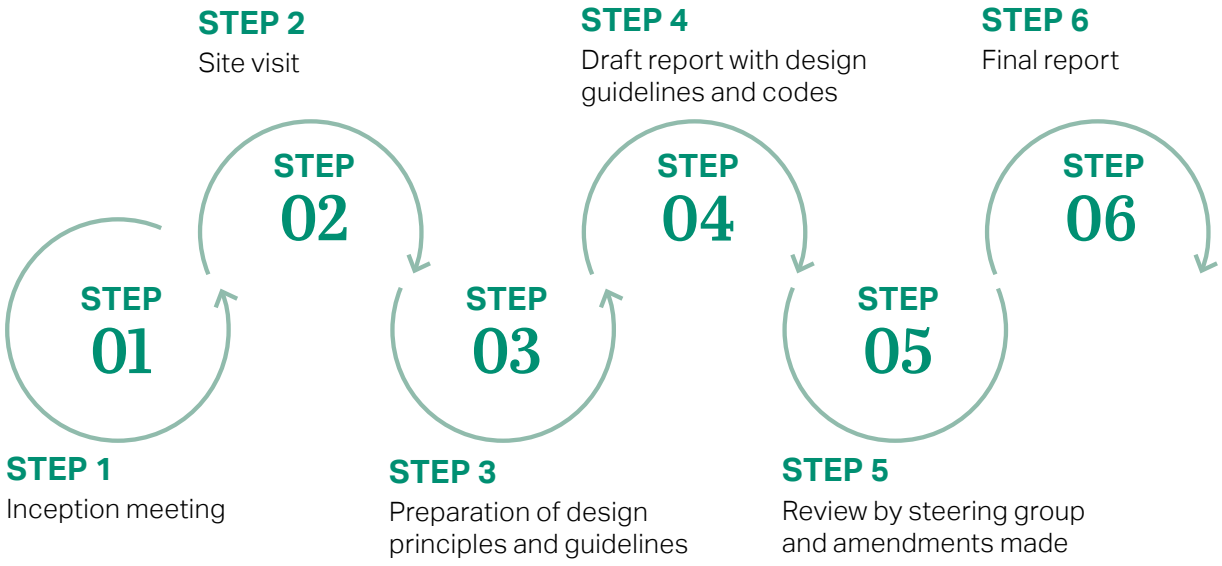


Figure 01: View down Middletons Lane, in the centre of the parish.

Figure 02: View of Drayton High Road, A1067, which runs along the west side of the built up area of Hellesdon.

1.4 Area of study

The Neighbourhood Area is Hellesdon Parish in the district of Broadland, in the county of Norfolk. The parish adjoins Norwich and is located approximately 5km from the city centre. The parish is well connected with the nearest train station being Norwich, an extensive bus service and Norwich Airport bordering the east of the parish.

There are signs of a very early settlement in Hellesdon due to ancient flint instruments which have been unearthed in and around the parish. The village of Old Hellesdon, the original settlement of Hellesdon, is located just sout-west of the parish boundary within the city of Norwich. The surrounding arable fieldland since developed into the Hellesdon parish seen today, which is home to approximately 11,126 residents according to the 2021 Census[1].

The parish is dominated by residential areas. There are some areas of open landscape to the north and west, as well as the stretch of green space bordering the River Wensum which flows along the parish's western boundary.

The parish has a good provision of amenities including an ASDA supermarket, Tesco Express supermarket, local shops and services, The Bull pub, Hellesdon community centre, two churches, Hellesdon hospital, a doctors surgery, light industrial/ employment areas, a hotel, two dentists, three infant schools, two junior schools and one secondary school.

Figure 03: River Wensum south of Hellesdon in Norwich. The River flows along the western boundary of Hellesdon Parish south-east into Norwich city centre.

Figure 04: The Bull pub, in the centre of Hellesdon.

1 https://www.citypopulation.de/en/uk/eastofengland/admin/broadland/E04006227__hellesdon/

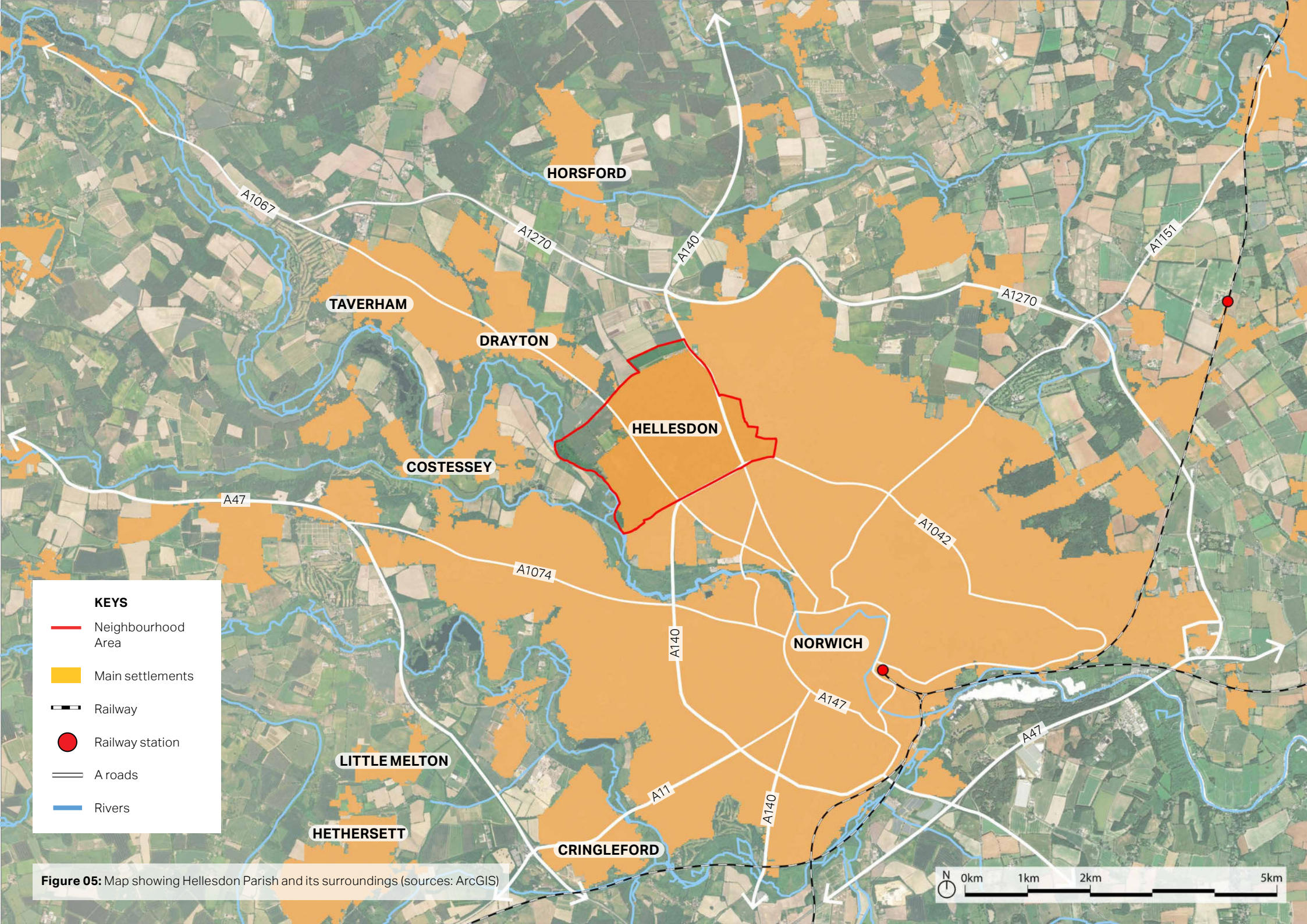


Figure 05: Map showing Hellesdon Parish and its surroundings (sources: ArcGIS)

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 Hellesdon Parish. 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 co-design 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 Design Codes as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The Design Codes should be discussed with applicants during any pre-application discussions.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Codes are complied with.
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Table 01: Table summarising how different actors will use the design guidelines.

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.

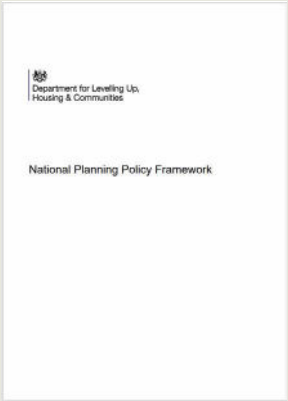
1.6.1 National Planning Policy and guidance

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

2023 - National Planning Policy Framework

MHCLG

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.



2021 National Model Design Code

MHCLG

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

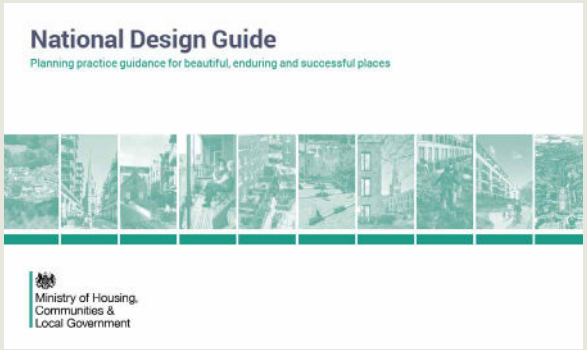
Homes England

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 Design Guide

MHCLG

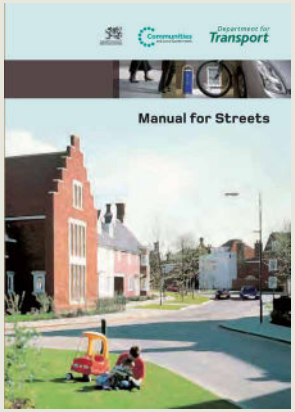
The National Design Guide (Department for Levelling Up, Housing and Communities, 2019) illustrates how well-designed places that are beautiful, enduring, and successful can be achieved in practice.



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.

2024 - The Greater Norwich Local Plan (2018-2038)

Broadland, Norwich and South Norfolk district Councils with Norfolk County Council

The Greater Norwich Local Plan (GNLP) was adopted by Broadland District Council in March 2024, forming part of the council's Local Plan and superseeds the former Joint Core Strategy for Broadland, Norwich and South Norfolk (2008-2026). The GNLP includes strategy planning policies and allocates individual site for development. The plan has six core objectives:

- Environment
- Homes
- Infrastructure
- Communities
- Delivery
- Economy

2022 - Parking Guidelines for new developments in Norfolk

Norfolk County Council

This document provides parking guidelines for application within new developments throughout Norfolk County. The guidelines cover the most commonly used vehicular transport modes e.g. bicycles, powered two wheelers, cars, buses, coaches, serving vehicles and electric vehicles. These guidelines are intended to read in addition to parking guidelines within the Local Plan where guidelines are refined to reflect local circumstances.

2016 - Recreation Provision in Residential Development Supplementary Planning Document

Broadland District Council

This supplementary planning document enables landowners, developers and applicants to calculate the requirements for making provision for recreational space in new developments.

2013 - Landscape Character Assessment Supplementary Planning Document

Broadland District Council

This Landscape Character Assessment was commissioned by Broadland District Council to provide a baseline inventory of variations in landscape character across the District. The assessment includes outlines for conserving, enhancing and/or restoring locally distinctive landscape characteristics. Relevant to Hellesdon the open landscape of the parish is categorised into two different areas: 1-Wensum River Valley and E3-Spixworth Wooded Estatelands. There are also additional maps showing land materials, national character areas, county landscape typologies and ecological network.

2012 - Place shaping, a guide to undertaking development in Broadland

Broadland District Council

This guide was produced by Building Research Establishment (BRE) for Broadland District Council and is a reference document that provides advice on new development in terms of sustainability, good design and cost-effectiveness.

Neighbourhood area context analysis

02

2. Neighbourhood area context analysis

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

2.1 Access and Movement

2.1.1 Road network

The main roads in the parish are the A roads of A140 and A1067 with Boundary Road, the A140 forming the border between Hellesdon and Norwich. The secondary roads in the parish are long, straight roads and tertiary roads are cul-de-sacs and perimeter roads between the larger roads.

The main arrival points into the area include two primary points on the A140 one from the north and the other from the south at the junction on Boundary Road with Reepham Road and Cromer Road. The secondary arrival points include on the A1067 from the north and from the south at the junction of Boundary Road with Drayton High Road. Additionally from the east on Fifers Lane and from the north on Reppham Road.

The key nodes highlight important areas of activity, both local pedestrian and cycle, as well as vehicular, movement. There is a node in the centre of the parish where Middleton Lane and Reepham Road intersect at Bull Inn roundabout. The location of key local services in the parish are nodes including on the northern end of Reepham Road and on Holt Road near the junction with Fifers Lane.

2.1.2 Public transport

There are many bus routes which operate from a total of 63 bus stops in the parish. These include services using electric buses, as part of the initiative to reduce emissions and air pollution.

The nearest train station is Norwich Railway Station, located about 7km from the centre of Hellesdon and accessible by bus. Norwich Railway Station is served by the Greater Anglia trainline and provides direct connections to London Liverpool Street, Stansted Airport, Cambridge and Stratford.

2.1.3 Pedestrian and cycling

There are limited public rights of way in the parish consisting of only a few categorised footpaths. There are additionally some informal pedestrian routes through the built up area and limited cycle lanes, such as the bus and bike lane along Cromer Road (A140). In the parish, especially at the arrival points into the parish from the south, there are places where large areas of road infrastructure and car dominance create poor pedestrian and cycling environments.

Figure 06: Bull Inn roundabout at the key node in the centre of Hellesdon at the junction of Middletons Lane and Reepham Road.

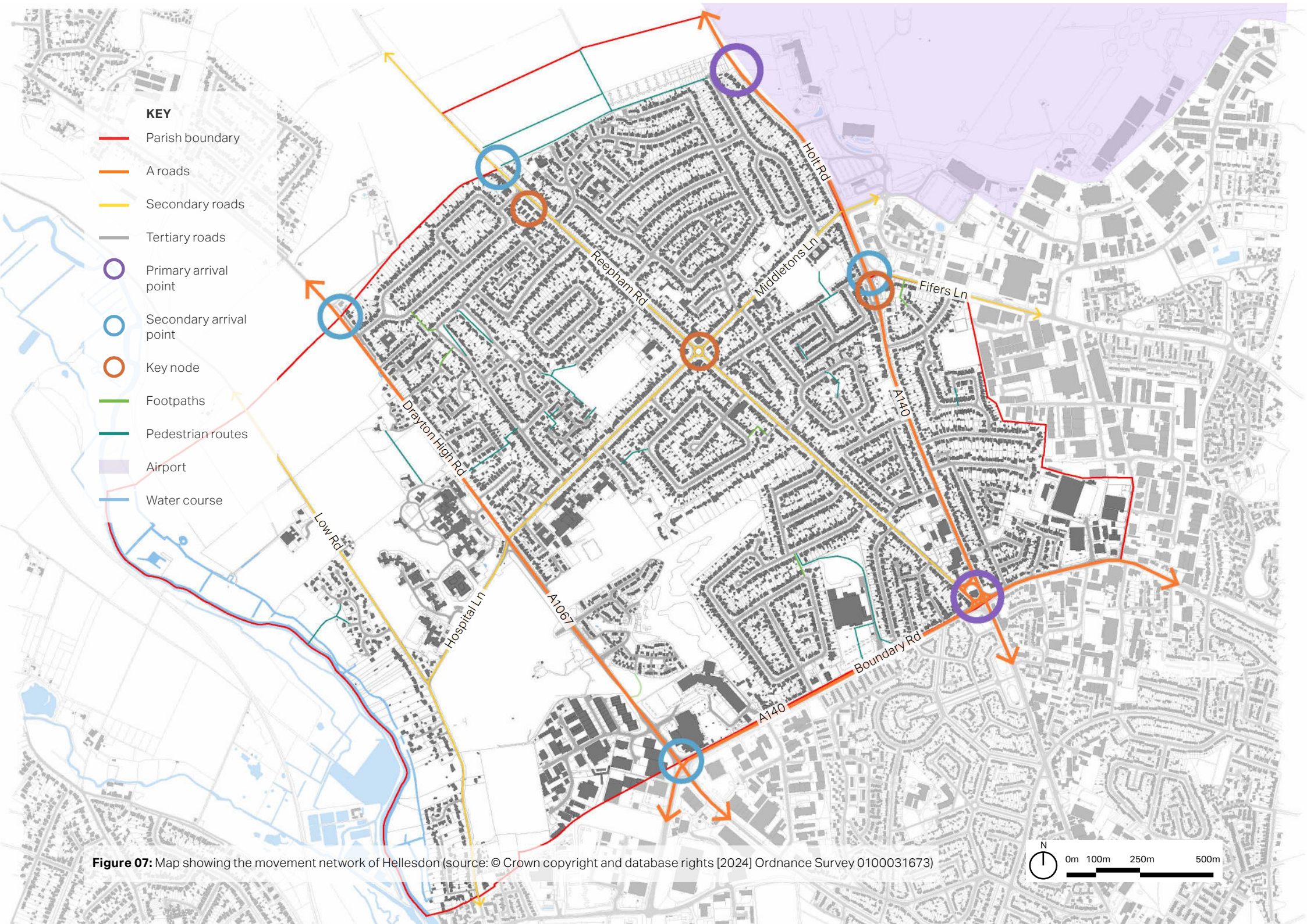


Figure 07: Map showing the movement network of Hellesdon (source: © Crown copyright and database rights [2024] Ordnance Survey 0100031673)

2.2 Landscape features

2.2.1 Heritage designations

Listed buildings

There are only two listed buildings in Hellesdon, located in the south-west of the parish. These are the Grade II* listed Parish Church of St Mary and the Grade II listed Hellesdon War Memorial.

Scheduled monuments

There are two scheduled monuments in the parish: the Wayside cross at the junction of Boundary Road and Drayton High Road and the Cross in St Mary's churchyard.

Apart from the designated heritage assets there are some buildings of local significance which include St Paul's Church, older parts of the Hellesdon Hospital complex, and the Bull Public House.

Old Hellesdon Village conservation area

The conservation area for Old Hellesdon Village borders the parish boundary and covers part of the churchyard of the Parish Church of St Mary. The neighbouring area within the parish is therefore sensitive to any development as it could impact the adjacent conservation area.

2.2.2 Landscape character

The majority of the parish is comprised of built-up areas. There are small areas of landscape which are categorised in the South Norfolk and Broadland landscape assessment as A1-Wensum River Valley to the west and E3-Spixworth Wooded Estatelands.

A1-Wensum River Valley is characterised by the floodplains which follow the meandering course of the River Wensum. The landscape is composed of blocks of woodland, mature trees, intact hedgerows, meadow, and marsh habitats. There is a sense of openness and in places long views along the valley floor.

E3-Spixworth Wooded Estatelands are part of the wooded estatelands in Norfolk. The landscape is gently rolling and comprised predominantly of arable farmland, Meadow Way Recreation Ground, St Mary Churchyard,

2.2.3 Open spaces

There are some open spaces within the built up area of Hellesdon which include Mountfield Park, Hellesdon Recreation Ground, Meadow Way Recreation Ground, Cottinghams Park and the allotments. The open space between Hospital Lane and A1067, formerly a golf course, is currently vacant to be potentially developed on in the future. Overall, there is a lack of public green spaces and a desire from Hellesdon Parish Council to improve open space provision.

2.2.4 Landscape designations

There is only one designated landscape area within the parish, which is the Special Area of Conservation (SAC) on the banks of the River Wensum. This area is highly sensitive and provides habitats for many different animal and plants.

2.2.5 Topography and flood risk

The topography of most of the built-up area of Hellesdon is relatively flat whilst the land falls away to the west with quite steep contours. There is also an area of higher land around the ASDA.

The flood risk zones in the parish are related to the River Wensum along the western boundary. There are large areas of flood risk zone 3, which affect some properties in this part of Hellesdon; however most of the residential area is unaffected by these zones of flooding.

Figure 08: Map showing the landscape designations in Hellesdon (source: © Crown copyright and database rights [2024] Ordnance Survey) 0100031673)

General design guidance and codes

03

3. General 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 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.

3.1 Introduction

This first set of design guidelines and codes are general design considerations appropriate to the whole Neighbourhood Area. They have been generated based on discussions with members of the Neighbourhood Plan Steering Group, the site visit, the area analysis included in Chapter 2 of this report, and on good practice relevant to the physical context of the Neighbourhood Area. More specific guidance and codes which are relevant to the different character areas in the parish are detailed in the next chapter.

The guidelines and codes developed in this part focus on residential developments. New housing development and modifications 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 the individual characteristics of each settlement in the parish and seek to enhance and reflect its distinctive features.

This chapter includes both guidance and codes. Guidance is advisory and is indicated by the use of the words "should" and "could". Codes, which use the word "must", are mandatory.

The design guidelines and codes are grouped into five overarching themes:

- **Community**
- **Green infrastructure and landscape**
- **Mobility**
- **Built form**
- **Sustainability**

COMMUNITY

3.2 Community

Community provision is important for Hellesdon, including retainment and improvement of existing community assets as well as encouraging new community infrastructure. Design guidelines relating to community assets include:

- Any new development, either large or small, should respect any existing heritage assets and non-designated heritage assets and make sure actions are taken to mitigate any impact. For example, should any new development takes place in close proximity to a heritage asset, then careful consideration needs to be taken in terms of views, landmarks, massing, density, enclosure, and architectural details.
- Existing and proposed social and community infrastructure should be sympathetic with the existing architectural style of the surrounding buildings, unless the existing place has limited or few positive architectural qualities. In these circumstances innovative new development is encouraged to enhance the existing character. In addition, the possibility of retaining existing buildings which make positive contributions to the character of the area should be considered, if viable.
- Any new social and community infrastructure must be designed to high standards and should act as a focal point and landmark for the area and improve the civic pride and the character of Hellesdon.
- New social and community facilities should be well connected with the existing network of footpaths and pedestrian routes to encourage walking and cycling within the area, see **Section 3.4.1** for more details on designing to improve the pedestrian and cycling network in the parish.
- In terms of parking provision, new facilities should not create additional congestion in the area and parking dominance should be avoided. Ideas like sharing parking areas with existing facilities in the local centre should be considered.
- Signage and wayfinding should be used to highlight options for sustainable transport modes and promote walking and cycling to access community facilities. This could potentially increase movement and activity in the streets enhancing natural surveillance and therefore, minimising any possibility of antisocial behaviour.
- Active frontages must be used to add to the vitality and vibrancy of the streets and public realm, whilst enhancing the pedestrian experience of the parish.
- The public realm should provide high quality paving that is of a cohesive design using a palette of sustainable and durable materials. Permeable paving should be preferred to contribute to rain water infiltration.
- Within the public realm large unbroken areas of a particular surface material should be avoided, especially tarmac. Areas can be made distinctive by using

COMMUNITY

materials of a similar colour but with different textures.

- Traffic calming measures could be used to improve pedestrian flow in Hellesdon. They aim to encourage safer, more responsible driving and potentially reduce traffic flow. Examples of traffic calming measures are speed bumps / humps and cushions, speed tables, or raised pedestrian crossings. These must be well integrated within the context and overuse of speed bumps should be avoided. For new development especially well designed road layouts which naturally reduce speed, negating the use of speed tables, are preferred.

Figure 09: Hellesdon community centre, an existing community asset.

Figure 10: St Mary's Church, a Grade II* listed building and important heritage and community asset in Hellesdon.

Figure 11: St Pauls Church, an existing community asset and locally important heritage building.

Figure 12: Examples of quality materials and visually pleasing layout patterns that could be considered for public realm surfacing.

Figure 13: Example of a speed cushion.

GREEN INFRASTRUCTURE AND LANDSCAPE

3.3 Green infrastructure and landscape

There is a desire to increase the provision of green open spaces in the parish and green infrastructure should be provided with any new development. The requirements for recreational space provision for new developments are detailed in Broadland District Council's Recreation Provision in Residential Development Supplementary Planning Document. Further design guidelines and codes for green infrastructure and landscape in Hellesdon include:

- Adequate open space must be provided both in quantity and quality. Adequate private/communal amenity space should be proposed to meet the needs of the population.
- Existing ecological assets within the parish must not be threatened.
- New development should identify existing biodiversity corridors and contribute to their preservation and enhancement.
- New development should promote walking and cycling within Hellesdon by improving access to the countryside and offering more opportunities for walking or cycling.
- New development should promote green links (cycle ways, footpaths, tree lined and grass verge-lined streets) into new development (if any) to connect with existing neighbourhoods within the parish and surrounding settlements.
- Sustainable Drainage Systems (SuDS) should be part of the overall landscape infrastructure and improve the environment.
- The location of new open spaces within new development should be decided based on the location of the existing ones considering the needs of the existing and new population.
- Landscape should not be used as a divisive measure between new and existing development, however, green buffer zones between older and new development are acceptable. This can be achieved by procuring a landscape consultant early on in the design process.
- Recreational space should be provided to include woodland walks and play areas to cater for the needs of the existing and new population. In addition, all recreational spaces should be designed to link up with each other and also link up with existing adjoining sites taking particular note of enhancing the green network.
- Surrounding buildings should overlook play areas and public green spaces to encourage movement, activity, and natural surveillance.
- Open spaces should be equipped with good quality of street furniture to create pleasant seating areas, shaded spaces avoiding hidden spots.

MOBILITY

3.4 Mobility

3.4.1 New streets

It is essential that the design of any new streets in Hellesdon meets both the technical highway requirements and incorporates the needs of pedestrians and cyclists. Some design guidelines for future development are:

- New developments must employ street typologies appropriate to the existing character.
- Streets should not be built to maximise vehicle speed or capacity. There should be a focus instead on safety for all users, in particular pedestrians and cyclists to encourage walking and cycling in Hellesdon. For that reason, lower speed limits and traffic calming measures should be implemented.
- Although the prevailing parking typology is on-plot parking, it is important that where on-street parking is introduced, it does not impede the access for pedestrians and other vehicles (including emergency vehicles), and it is well-landscaped.
- Streets and footways should be laid out in a permeable pattern, allowing for multiple choices of routes, particularly on foot and bike.

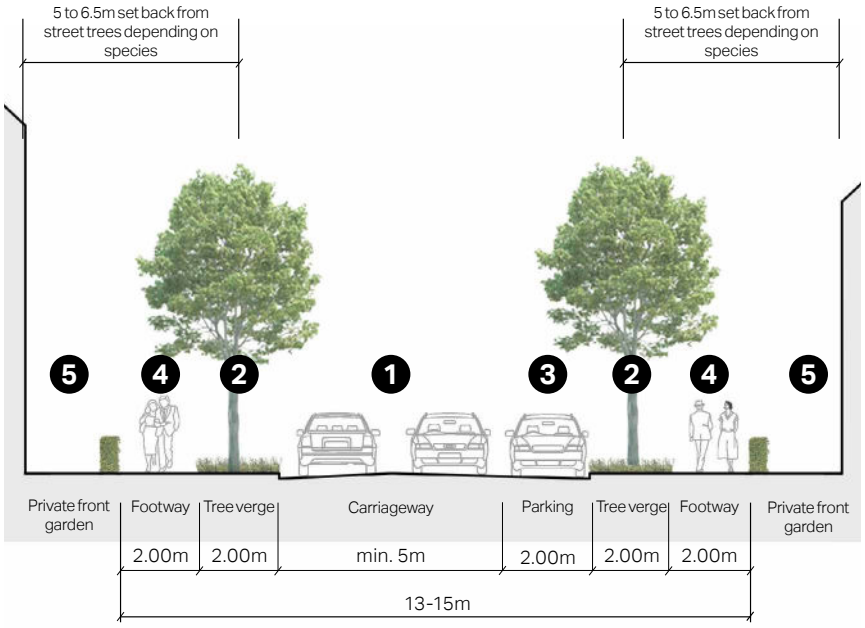
A hierarchy of streets within a new development helps create well-connected streets of varied character that filter traffic and speed.

The suggested street hierarchy, based on the existing street typologies in Hellesdon, is shown over the next pages.

Figure 14: Reepham Road through Hellesdon with traffic lights and pedestrian crossing.

Residential street 1 (Primary & secondary roads)

- The width of the carriageway must reflect the context of the street. For instance, it should be approximately 4.8m if it serves only a cluster of houses, whilst if it connects neighbourhoods or carries public transport traffic it should be approximately 5.5m.
- Parking should be provided on-plot. On-street parking as the only means of parking must not be used wherever possible; however visitor parking and spaces for delivery vehicles can be provided through the use of dedicated on-street parking to reduce overfill parking cluttering the street, or parking on grass verges, see **Section 3.4.3** for more details on car parking design.
- Carriageways should be designed to be shared between motor vehicles and cyclists. Vertical traffic calming features, such as raised tables, may be introduced.
- Where possible, streets should be tree-lined on both sides to create enclosure. The level of enclosure should be decided depending on the surrounding context.



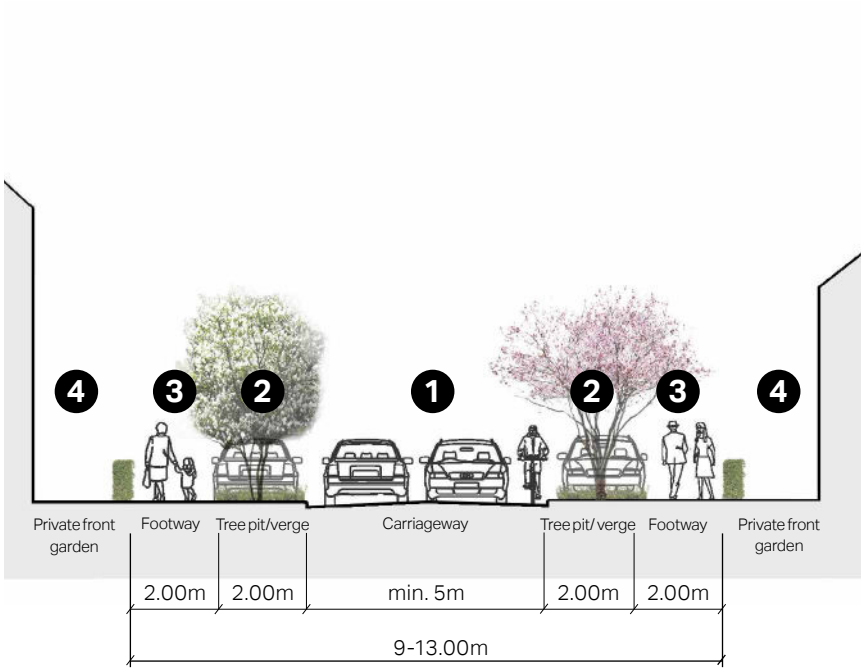
1. Shared carriageway (neighbourhood traffic). Traffic calming measures may be introduced at key locations if needed.
2. Green verge with medium trees. The latter are optional but would be positive additions.
3. Parking bay (may also be inset into verges).
4. Footway - utilities typically located underneath.
5. Residential frontage with boundary hedges and front gardens.

Figure 15: Cross-section to illustrate some guidelines for secondary streets.

MOBILITY

Residential streets 2 (tertiary & cul-de-sacs)

- Residential streets should be designed for low traffic volumes and low speeds, ideally 20 mph.
- These streets must be designed for cyclists to mix with motor vehicles. Traffic calming features such as raised tables can be used to prevent speeding.
- Residential streets should be formed with a high degree of built form enclosure, with consistent building lines and setbacks.
- Street trees should be used, where possible, to provide enclosure. Green boundaries are encouraged.



1. Carriageway should accommodate both vehicles and cyclists (local access). Traffic calming measures may be introduced at key locations.
2. Tree verge or pit with small trees. The latter are optional but would be positive additions. Parking bays on both sides of the carriageway to alternate with trees to avoid impeding moving traffic or pedestrians.
3. Footway.
4. Residential frontage with boundary hedges and front gardens.

Figure 16: Cross-section to illustrate some guidelines for tertiary roads.

MOBILITY

3.4.2 Footpaths and cycle networks

This section offers guidance and codes on the design of footpaths, as well as the relationship between residential developments with pedestrian and cycle networks:

- Good connectivity is key to the promotion of walking and cycling. New development must therefore retain or provide direct and attractive footpaths between neighbouring streets and local facilities and amenities.
- Footpath networks must be in place before the first houses are occupied. Walking/ cycle routes within new communities should be a first consideration, to ensure new development prioritise pedestrian and cyclist movement and avoid car dominance.
- Pedestrian and cycle links within residential areas should always be overlooked by properties to create natural surveillance and offer good sightlines.
- Design features such as gates to new developments or footpaths between high fences must be avoided.
- Cycle parking should be installed in both private and public spaces and next to amenities. This includes in front of local shops where cycle parking should be provided in well surveyed areas, close to shop entrances and ideally covered. There could be provision of parking for cargo bikes to encourage and enable cycling in place of driving to the shops.
- Paving used along pedestrian and cycle links should, where possible, be permeable to help absorb surface water and mitigate flooding.
- Footpaths should be at least 2 metres wide. Shared lanes may be acceptable within residential streets, however they must be accompanied with appropriate traffic calming measures.
- Strategically placed signage should offer guidance and help with navigation. The materials and design of the signage should be of good design quality and appropriate to the character and local context. Signs should be non-illuminated and avoid the use of garish or day-glow colours.

Figure 17: Pedestrian path on Wensum Valley Close overlooked by houses and with green areas between the path and the road.

Figure 18: Footpath integrated within residential development offering alternative walking and cycling routes, Great Kneighton, Cambridge.

MOBILITY

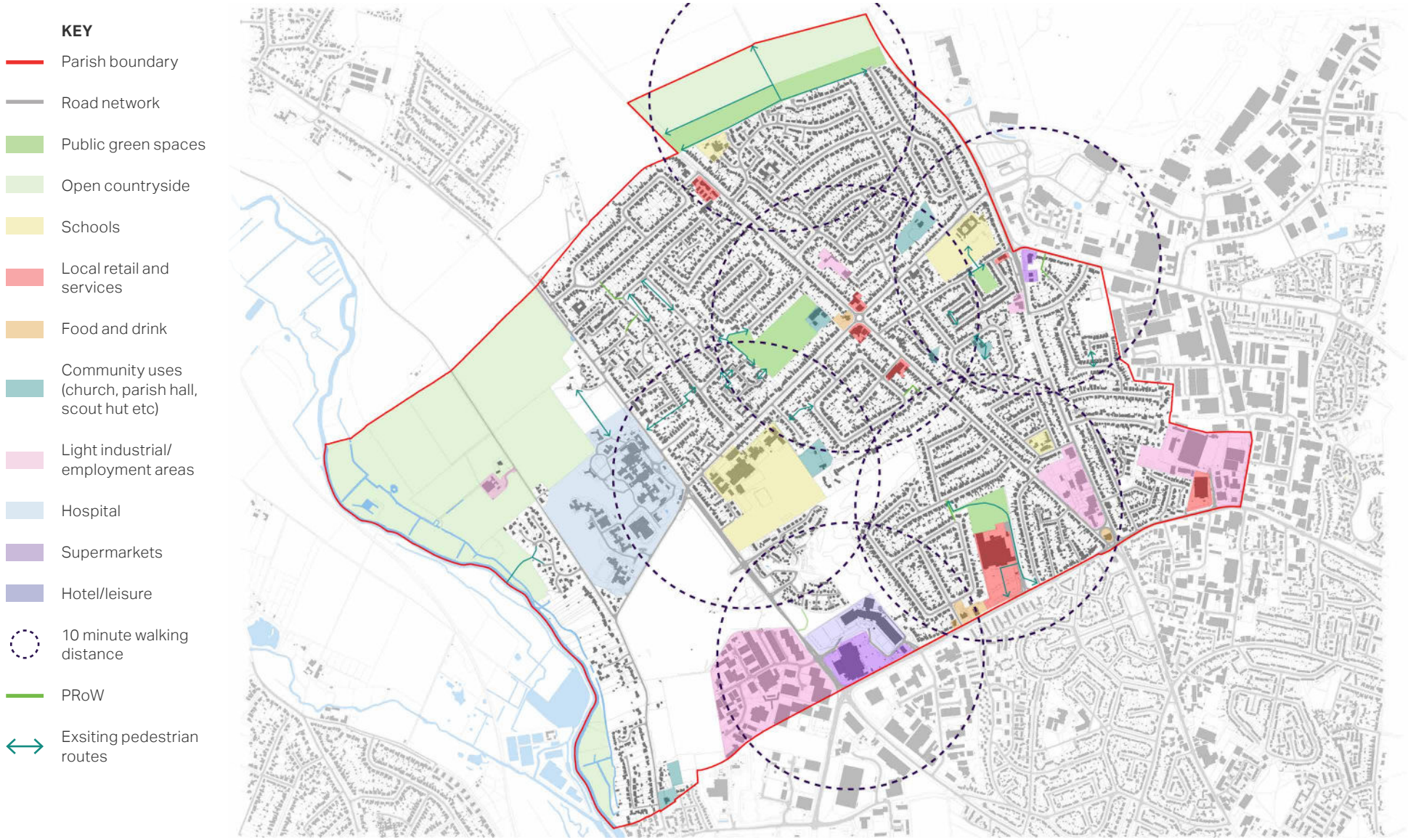


Figure 19: Map showing the different land uses in Hellesdon and circles with 10 minute walking distance radius to indicate the walkability between different parts of the parish (source: © Crown copyright and database rights [2024] Ordnance Survey) 0100031673).

3.4.3 Car parking

Parking areas should make a positive contribution to the design and setting of a development. A good mix of parking typologies should be deployed, depending on, and influenced by; location, topography and market demand.

- Parking areas and driveways should be designed to minimise impervious surfaces, for example through the use of permeable paving.
- When placing parking at the front, the area should be designed to minimise 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 the use of differentiated quality paving materials.
- Cycle parking should be integrated into all new development to encourage active travel. Cycle racks should be provided in public spaces and key destination hubs such as key community facilities, train stations, bus stops, and local centres.

On-plot side or front parking

- Parking provided on driveways directly in front of dwellings should use vegetation and hedgerow to screen vehicles and front gardens should be a minimum depth of 6m to allow for movement around parked vehicles.
- Parking being provided on a driveway to the side of a dwelling should be of sufficient length (5m minimum) so that a car can park behind the frontage line of the dwelling. This will reduce the visual impact that cars will have on the street scene.
- For on-plot side parking the set back distance between the driveway and the pavement combined with the width of the pavement should be kept to dimensions small enough to ensure cars cannot be parked in this space and a maximum of 0.5m set-back with a pavement of 2m is recommended. An alternative solution which can also be applied is to have larger set-backs with marked parking restrictions on the road.
- Driveways must be constructed from porous materials to minimise surface water run-off and help mitigate potential flooding.
- Electric vehicle charging points must be incorporated into on-plot parking in new developments to promote more sustainable modes of transport.
- Long rows of frontage parking must be avoided and should be limited to six spaces. In addition screening should be used in form of hedgerow, vegetation and trees.

Figure 20: Local example of front parking screened by a hedge.

MOBILITY

- Front on-plot parking where cars are parked perpendicular to the property and face/back directly onto the road should be avoided on primary roads and roads with separate pedestrian and cycling links to avoid both poor visual street scene and safety issues.

On street parking

On-street parking is not a common typology in Hellesdon and the use of on-street parking as the only parking typology must be avoided in future development wherever possible. There are existing issues where cars parked on the street impede traffic and pedestrian flow. There are also instances where cars park on the green verges. Therefore there is a need to consider how to mitigate the negative affect of overfill parking on the street, for example visitor parking and spaces for delivery vehicles. This could be provided through use of dedicated on-street parking using the following design guidance and codes:

- On-street parking must be designed to avoid impeding the flow of pedestrians, cyclists, and other vehicles, and can serve a useful informal traffic calming function. Limited on-street parking can have a traffic calming function but too much will impede the flow of pedestrians, cyclists and vehicles.

- On low-traffic residential streets or lanes that are shared between vehicles and pedestrians, parking bays integrated with trees can be clearly marked using changes in paving materials instead of road markings.

- Opportunities must be created for new public car parking spaces to include electric vehicle charging points. Given the move towards electric vehicles, every opportunity must be taken to integrate charging technologies into the fabric of the road and street furniture in the public and private realm.

- Long stretches of on-street parking should be avoided to prevent dominance of cars on the street. On-street parking bays should be broken up with green verges, vegetation and street trees. Existing green verges should be preserved wherever possible with any new development.

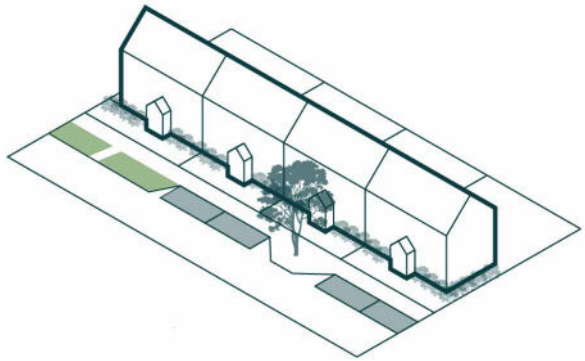


Figure 21: Illustrative diagram showing an indicative layout of on-street parking broken up with trees and green verges.

Figure 22: Dedicated on-street parking example, elsewhere in the UK.

MOBILITY

Garage parking

Garage parking is not a common parking typology in the Neighbourhood Area and therefore other parking typologies are preferred.

Additionally garages tend to be used for storage instead of a parking space, which means an allocated car parking space for a dwelling is not used and this car may then have to be parked on the street.

- Therefore, if a garage is intended to serve as a parking space, the minimum internal dimensions of a single garage should be 7m x 3.6m. Garages must be ancillary to the main house and soft boundary treatments should be used to ensure that garages are not prominent streetscape features.

Parking courtyard

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

- All parking courts must incorporate natural surveillance with frontages overlooking the parking area.
- Parking courts should complement the public realm; hence it is important that high-quality design and materials, both for hard and soft landscaping elements are used.
- Parking bays must be arranged into clusters with groups of 4 spaces as a maximum. Parking clusters should be interspersed with trees and soft landscaping to provide shade, visual interest and to reduce both heat island effects and impervious surface areas.

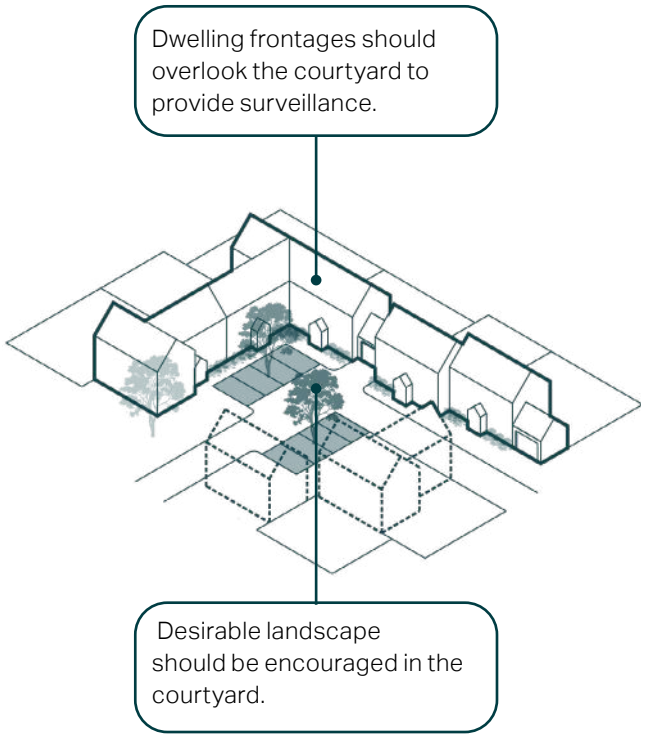


Figure 23: Illustrative diagram showing an indicative layout of parking courtyards.

MOBILITY

Electric vehicle charging points

New development should cater for electric vehicles on both on-street and off-street car parking spaces. Some guidelines for each typology are:

On-street car parking

- Car charging points should be provided next to public open spaces.
- Where charging points are located on the footpath, there must be a clear footway width of 1.5m next to the charging point, to be sufficient for a wheelchair user and a pedestrian to pass side-by-side.
- Charging points should be located in a way that are not blocked by petrol or diesel vehicles.

Off-street car parking

- Mounted charging points and associated services should be integrated into the design of new developments.
- Cluttered elevations, especially main façades and front elevations, should be avoided.

Figure 24: Examples of on-street car charging points.

Figure 25: Examples of off-street mounted car charging points.

MOBILITY

Residential Cycle Parking

Houses without garages

- Cycle storage must be provided at a convenient location with easy access to get the bikes in and out.
- The parking should be secure, covered, and preferably constructed from the same materials as the main structure.
- As a minimum requirement, doors should be secured by mortice locks. Where more than two bicycle spaces are required some form of stand should be provided. Cycle 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 alongside cycle parking could be used to mitigate any visual impact on adjacent spaces or buildings.

Houses with garages

- 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 bike must be removed easily without having to move the vehicle.

These features also apply for small blocks of apartments.

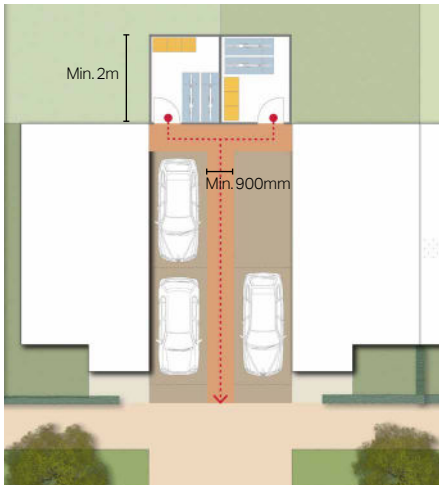


Figure 26: Indicative layout of a bicycle and bin storage area at the back of semi-detached properties.

Figure 27: Example of cycle storage in the front garden.

BUILT FORM

3.5 Built form

3.5.1 Materials and design

- New development must gain a good understanding of the local context to make sure any new design reflects the diversity of the parish. The local palette of materials and architectural details are detailed over the following pages.
- The massing, height and scale of the new structures should match the surrounding context. In general, heights of residential buildings are restrained to 1-2 storeys with some 3 storey developments in certain areas. Different character areas within Hellesdon can accommodate differing massing and heights, which should be reflected by any new development.
- New development should retain any existing trees, hedges, hedgerows and woodlands, and incorporate them into the new design. For example, existing green features could be part of green spaces or gardens within the new development or green buffers along the development edges to allow for a smooth transition into any surrounding open fields.
- New development should propose a mix of housing to include a range of house types and sizes to allow for a variety of options and thus, meet the needs of a wider group of people.
- Infill development must complement the street scene into which it will be built. Thus, building lines, boundary treatments, massing, heights should all be appropriate to the surrounding context.
- Buildings should have an active frontage towards the street and this should in most cases also be the principal elevation.
- Buildings, where possible, should overlook green spaces, open fields and nature in general.
- New development should prioritise boundary treatments (brick walls, trees, green verges, hedges etc.) that respect the character of the parish.
- New development must use high quality materials and architectural design which meet climatic targets for CO_2 emissions and should be constructed sustainably, maximising opportunities for recycling.
- Detailing can be used in new development to add interest to the streetscene. Development involving multiple houses should ensure a variety of detailing is used across the development to provide visual interest and avoid monotonous design.

BUILT FORM

Building walls

Red brick

White render

Combination of brick and render

Cream/yellow brick

Off white render

Coloured render

Dark weatherboarding

Roofs

Red-brown clay pantiles

Dark clay pantiles

Clay plain tiles

Slate tiles

Modern slate tiles

BUILT FORM

Boundary treatments

Low red brick wall and landscaped hedge

Low red brick wall with concrete detailing

Landscaped hedge

Picket fencing

Fenestration

Casement window

Bay windows

Double bay window

Dormer window

Details

Canopy porches

Arch doorway with red brick dressings

Timber panelling

Brick dental course in roof eaves.

Pitched roof porch

BUILT FORM

3.5.2 Extensions

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 unless significantly remodelled, with exception of listed buildings where planning permission is required.

There are a number of guidelines and codes for residential extensions and conversions to 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 must not overwhelm the building from any given point.
- Extensions must not result in a significant loss to the private amenity area of the dwelling.
- Consideration should be taken of the local context and surrounding density, extensions should avoid significantly increasing built density in sensitive areas. For example where plot sizes are small, extensions to buildings can lead to a cramped and overwhelmed built pattern.
- Designs that wrap around the existing building and involve overly complicated roof forms must be avoided.
- In case of side extensions, the new part should be set back from the front of the main building and retain the proportions of the original building. This is in order to reduce any visual impact of the articulation between existing and new.
- In the case of rear extensions, the new part must not have a harmful effect on neighbouring properties in terms of overshadowing, overbearing, or privacy. The scale and form of the rear extension must be appropriate for the original building and plot size.
- Any housing conversions must respect and preserve the buildings' original form and character unless the alterations are considered an enhancement.
- Extensions and conversions should use materials which complement the existing, this could be through use of like-for-like materials or new materials where these can add character and a pleasing contrast. Any new materials must be sustainable, of high quality and should be used on less prominent building parts.
- The pitch and form of the roof used on the building adds to its character and extensions should respond to this where appropriate.
- Extensions must consider the materials, architectural features, window sizes, and proportions of the existing building. Extensions should be designed to complement the existing building, and could recreate the existing style to

match the existing building. Well thought out and high quality contemporary extension designs can also be acceptable, provided they do not detract from any existing architectural character and can provide a pleasing contrast.

- Any modifications should not reduce the number of parking spaces on the site.

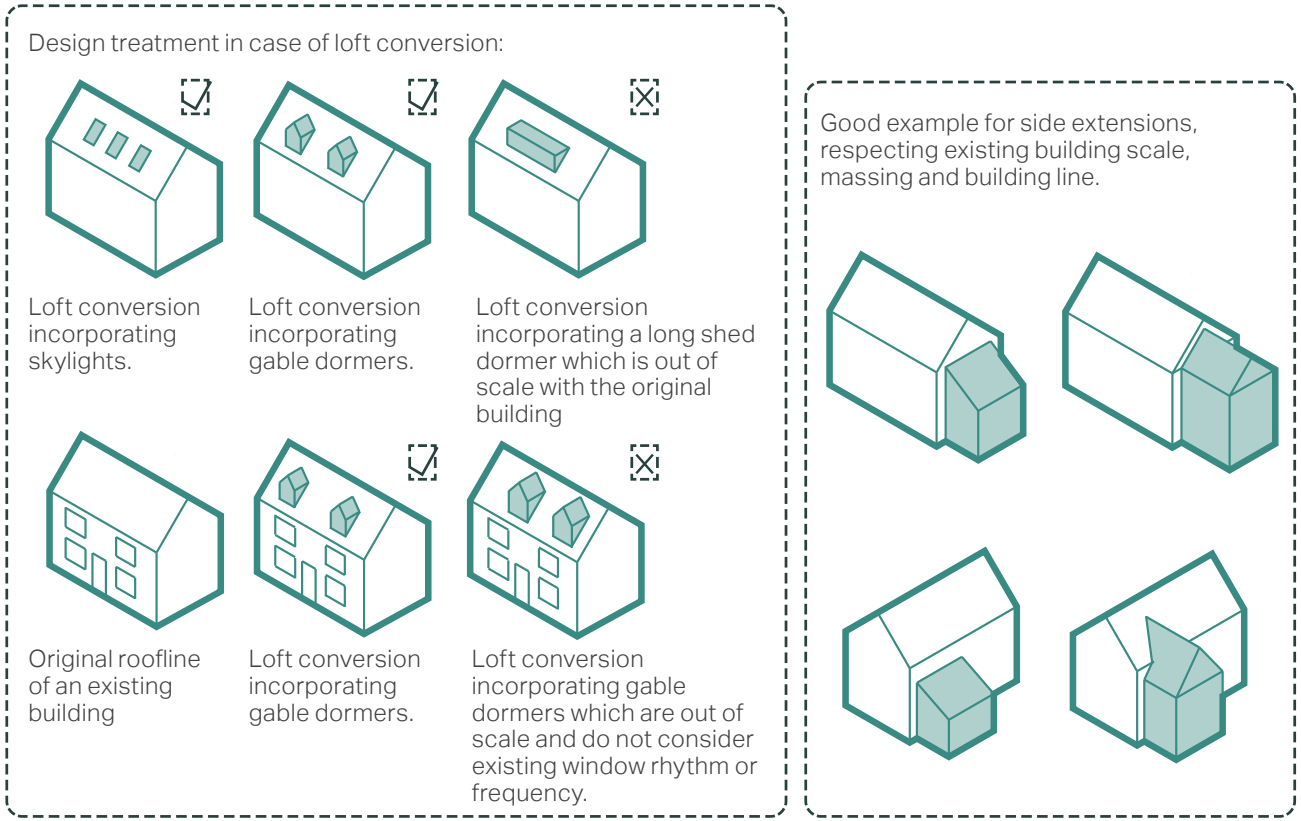


Figure 28: Some examples for different type of building extensions.

Figure 29: Example of an extension (left) that uses similar materials as the main building (right), elsewhere in the UK.

Figure 30: Example of an extension (right) subservient to the mass of the main building (left), elsewhere in the UK.

3.6 Sustainability

3.6.1 Biodiversity

- New developments must demonstrate a 10% increase in biodiversity on or near development sites in alignment with national legislation on Biodiversity Net Gain.
- New developments should prioritise tree planting, identify existing biodiversity corridors, and contribute to their preservation and enhancement.
- Provision should be made for new open spaces and wildlife rich streets that connect communities with nature from the doorstep to key green infrastructure.
- Any existing hedges, trees and green verges must be protected and enhanced, where possible. Initiatives in Hellesdon, such as the green verges planted with wildflowers should be encouraged in any new developments to promote biodiversity increase and also attractive green spaces.
- Developments should incorporate wildlife friendly features that support movement and habitat. Bird or bat boxes, bee bricks and bug hotels, as shown in **Figures 31-33**, can be installed to enhance biodiversity and wildlife.
- A comprehensive landscape buffer should be implemented at the development edge to create a soft edge. Hard or abrupt edges with little vegetation or landscaping must be avoided.
- Back gardens should be aligned to ensure a continuous wildlife corridor.

Figure 31: Example of a swift brick under an eave.

Figure 32: Example of a hedgehog corridor within in a garden fence.

Figure 33: Example of a bug hotel that could be placed in the front or rear garden of a property.

SUSTAINABILITY

3.6.2 Green network

The green network is formed of residential gardens and green open spaces within the parish, such as the recreation ground, Meadow Way, Mountfield Park and Cottinghams Park, which link to the surrounding countryside of agricultural land and the valley of the River Wensum.

- New developments must respect existing green spaces in Hellesdon as well as proposing new open green spaces to connect into the green and blue infrastructure network.
- This green network should connect habitats to improve biodiversity and incorporate water management features such as SuDS.

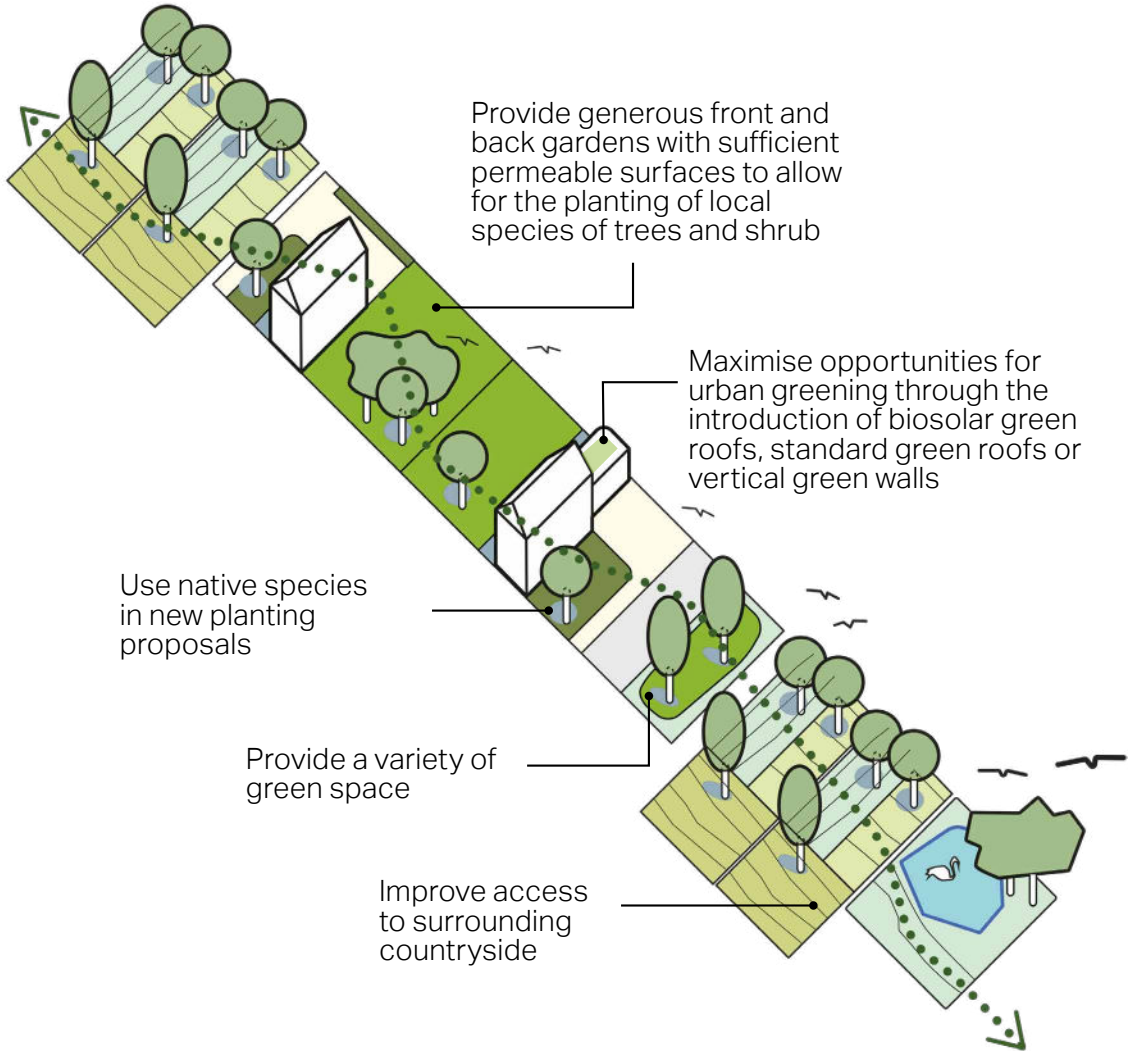


Figure 34: Illustrative diagram showing a green and blue network.

3.6.3 Eco-design and infrastructure

The climate emergency has created the need to decrease our carbon footprint towards net-zero by providing innovative solutions to transportation (electrification) and the energy use of buildings, as buildings contribute almost half (46%) of carbon dioxide (CO2) emissions in the UK. The government has set rigorous targets for the reduction of CO2 emissions and minimising fossil fuel energy use.

- Reducing energy calls for passive design principles for homes (window orientation, solar gain, solar shading, high-performance insulation, ventilation with heat-recovery).
- Development should maximise on-site renewable energy generation (solar, ground source, air source and wind driven).
- Development must consider building form and thermal efficiency: point-block / terraced / semi-detached / detached all have different energy efficiency profiles. This must be balanced with local design preference and character considerations for development.
- Net Zero aims should be integrated, and development should adopt low energy and energy generative technologies within the development at the start of the design process. Nature positive and biodiversity net gains should be a priority as well.
- New development should adopt contextually appropriate materials and architectural details should be a guide to material specification.
- New development should demonstrate strong design rationale, quality material specification and good detailing appropriate for the local climatic conditions of the Neighbourhood Area.
- Building performance in terms of 'conservation of heat and fuel' over-and-above building regulations, should be a key design driver for new development.

Eco-design features

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.

Eco design can also be adapted to a wide variety of architectural styles. Historic buildings can be retrofitted in a way that respects both the environment and their historic features. It is important that any eco-design features are incorporated without visually damaging the environment.[1]

Some guidelines and codes for eco-design features are as follows:

- The design of solar panel features should be incorporated from the outset of new development design to form part of the design concept. Some attractive options are shingles and photovoltaic slates. For retrofits the proportions of

1 Further guidance on eco-design adaptations of historic buildings can be found in Historic England draft guidance: 'Climate Change and Historic Building Adaptations' (November 2023).

SUSTAINABILITY

the building and roof surface should be analysed to identify the best location and sizing of the panels.

- Solar panel design should consider the colour of the panels and how these will complement the colour of the roof. Use of black solar panels with black mounting systems and frames can be an appealing alternative to blue panels.
- Heat pumps should be placed to the side or rear of properties, ideally in a concealed location, to avoid visually damaging the street scene and the main, front elevation of a building. However the pump must remain accessible for maintenance.
- Heat pumps must be placed so that they are protected from heavy snowfall or flooding. They can be mounted on the wall with anti-vibration dampers, to mitigate noise impact to the interior of the property, or on anti-vibration mounts on the ground

Figure 35: Use of shingle-like solar panels on a slate roof, with the design and colour of the solar panels matching those of the adjacent slate tiles, elsewhere in the UK.

Figure 36: Positive example of implementing solar panels since the design stage, elsewhere in the UK.

The illustration overleaf sets out the an example of a low carbon home.

SUSTAINABILITY

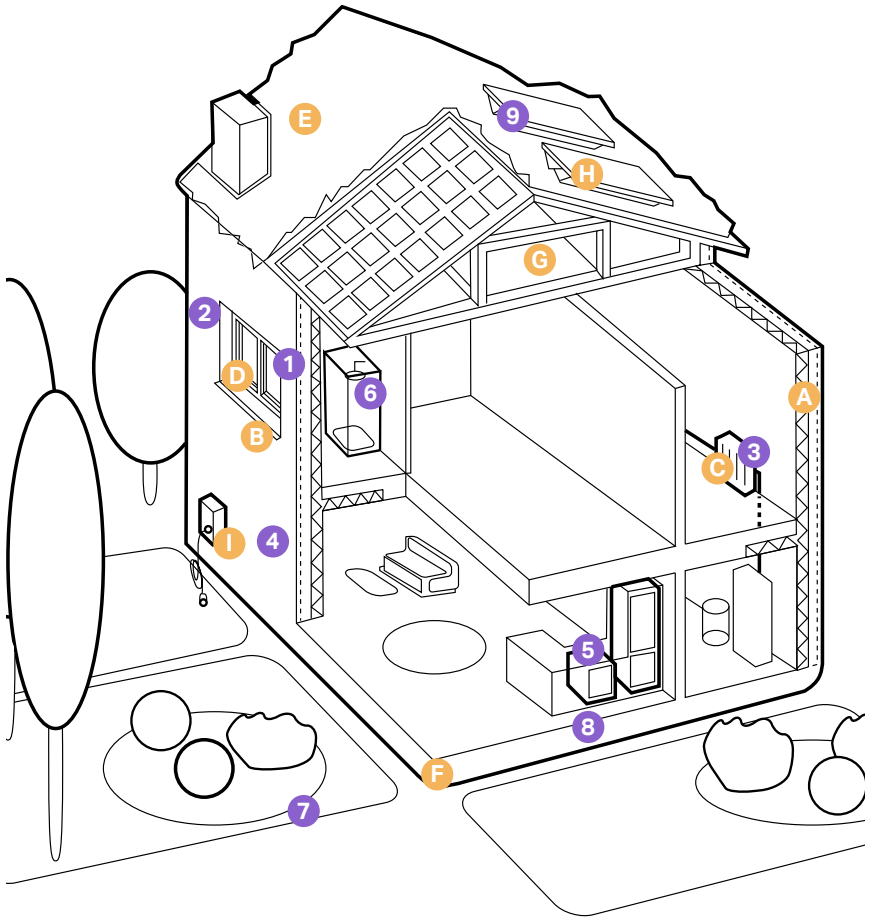


Figure 37: Diagram showing low-carbon homes in both existing homes and new builds.

Existing homes

1. **Insulation** in lofts and walls (cavity and solid)
2. **Double or triple glazing with shading** (e.g. tinted window film, blinds, curtains and trees outside)
3. **Low- carbon heating** with heat pumps or connections to district heat network
4. **Draught proofing** of floors, windows and doors
5. **Highly energy-efficient appliances** (e.g. A++ and A+++ rating)
6. **Highly water-efficient devices** with low-flow showers and taps, insulated tanks and hot water thermostats
7. **Green space (e.g. gardens and trees)** to help reduce the risks and impacts of flooding and overheating
8. **Flood resilience and resistance** with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors
9. **Solar panel** through retrofitting

Additional features for new build homes

A. **High levels of airtightness**

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

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

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

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

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

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

H. **Solar panel**

I. **Electric car charging point**

Character area appraisal and specific design codes

04

4. Character areas appraisal and specific design codes

This chapter presents a focused analysis of the character areas within the Hellesdon Neighbourhood Area.

4.1 Introduction

Within the Neighbourhood Area there are six character areas which have been identified, based on the character areas in the Hellesdon Neighbourhood Plan:

- Core residential area and local centres
- Outer ring road city fringe
- Light industrial area
- Leafy, spacious housing
- Open agricultural/ river valley
- School, hospital and golf course area

The boundaries for these areas are shown on the map opposite. This chapter builds on the overall analysis in the previous chapter and goes into more detailed analysis of the elements in each character area which are distinct from other parts of the parish.

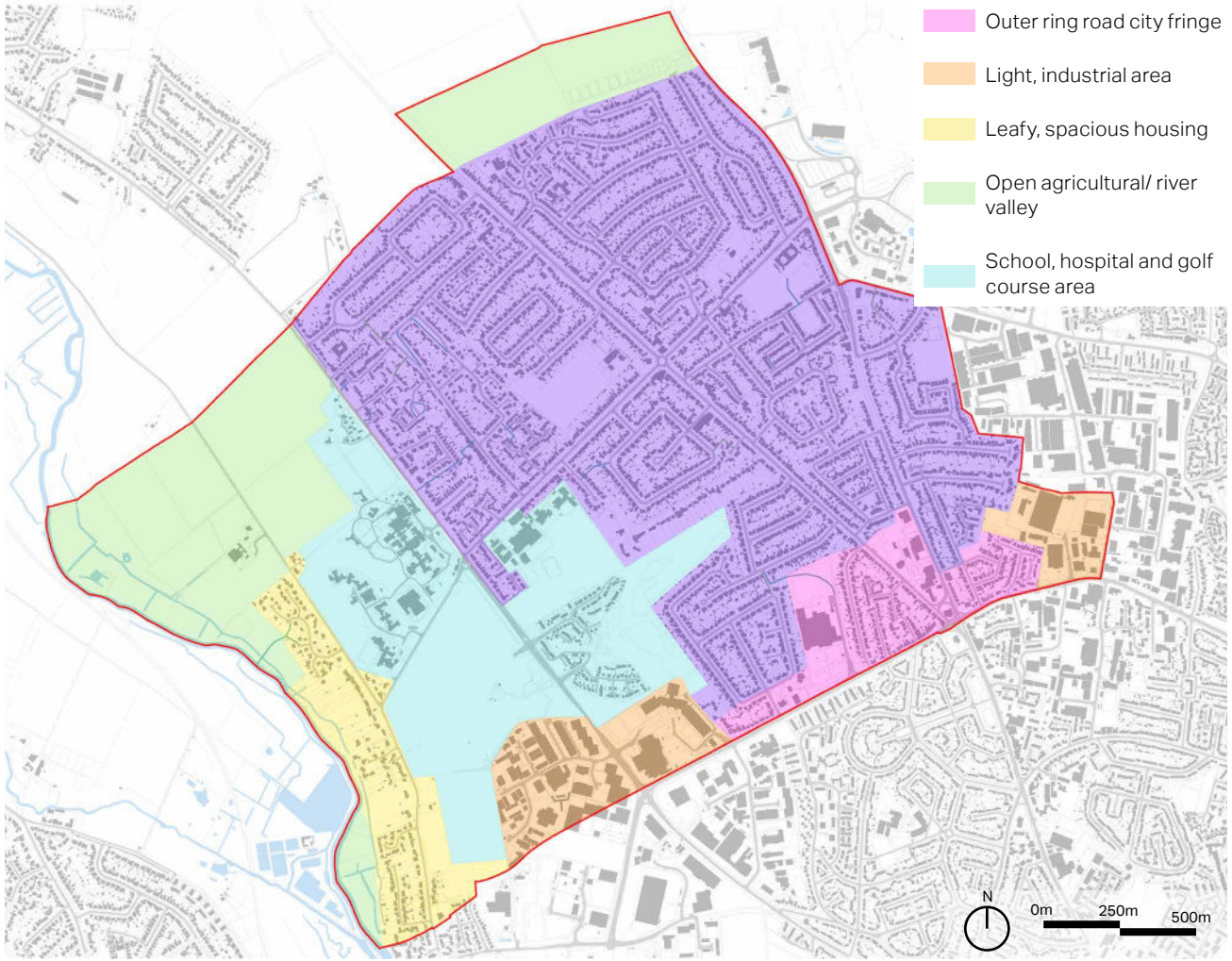


Figure 38: Character areas in Hellesdon Parish.

4.2 Core residential and local centre

Figure 39: Map showing the core residential and local centres character area.

This character area comprises the dominant area of the parish, formed of primarily typical 20th century suburban residential development, with some local shops, services and community uses.

Settlement pattern:

Development is formed of cul-de-sacs radiating from the main roads of the A140, A1067, Middleton Lane and Reepham Road.

Building typologies, materials and design:

Building typologies include semi-detached, detached, and terraced houses. Materials vary and include varying shades of brick, predominantly red brick, render in white and muted colours and in smooth and pebble dashed finishes.

Roofs are hipped or pitched in clay pan and plain tiles. The rooflines and housing form is very uniform across different cul-de-sacs, with the exception of extensions and modifications to properties, which are sometimes ill-fitting with the original buildings due to scale and form.

Density, scale and massing:

There is relatively low density across the residential area with low building heights. There are a high proportion of bungalows and across the area heights are constrained to two storeys. Enclosure is low, often there are wide pavements with grass verges and all house have front gardens. There are frequent building gaps and massing is quite consistent with buildings of a modest scale.

Building line and boundary treatment:

The building line is very consistent across the residential area, with similarly sized front gardens and set back. Boundary treatments include mostly low brick walls with hedges and planting.

Movement and parking:

The main roads of the A140 and A1067 are wide and formal roads with high levels of traffic. Middletons Lane and Reepham Road are smaller, more local roads, but are still wide and straight, with high levels of traffic. There is a key node at the centre of the residential area of the roundabout at the junction between Middleton Lane and Reepham Road.

The remaining road network is formed of cul-de-sacs which have a more residential character - narrow and meandering with lower speed traffic flow.

Green spaces and views:

Green spaces in the area include allotments, Hellesdon recreation ground, and Mountfield Park. The area though is

dominated by the built form and no large areas of green spaces. There are long distance views over the open countryside to the west where the built form transitions to the countryside and the topography falls away.

Figure 40: Semi-detached hipped roof houses along Middletons Lane.

Code	Rationale	Implementation
1. Settlement pattern and street scene	*Plots are relatively consistent in size across the whole character area, generally orientated towards the road and altogether create a uniform built pattern.*	• Any new development should fit with the existing street scene, orientated towards the road and propose generally consistent plot sizes.
2. Building typologies, material and design	*Typologies vary, though generally are consistent across areas of development/ a cul-de-sac. Roofs are either pitched or hipped and the original roofline is also often consistent within development areas.*	• Typologies should reflect the existing housing mix. • Any new development should propose pitched or hipped rooflines to be consistent with surrounding development. Ridge heights should be consistent.
3. Extensions and conversions	*Extensions are commonly seen in this character area. In particular there are upward extensions to bungalows in the form of flat and pitched roof dormers, rear extensions and side extensions to semi-detached two-storey houses. Loft extensions are sometimes out of scale to the original building and examples of semi-detached bungalows where dormers on either side of the roof do not complement each other, negatively impacting the roofline and overall street scene of the development.*	• Extensions must complement the street scene and surrounding roofline. Loft extensions on semi-detached or terraced properties should aim to use complementary forms and materials to maintain a harmonious roofline. • Side extensions should complement the original building roofline, flat roof side extensions should generally be avoided. • Parking provision must be considered with any extensions that increase the number of bedrooms in a property. Development must refer to local standards provided in Parking Guidelines for new developments in Norfolk (2022).

Code	Rationale	Implementation
4. Density and scale	*Consistent density level, relatively small scale and low building heights are seen across the character area.*	• Heights should be restrained to one-two-storeys. • The existing density should be maintained with any developments.
5. Building line and boundary treatment	*A consistent building line is seen along streets with low boundary walls or hedges that define private and public realm, whilst maintaining natural surveillance on the street.*	• Building lines should remain consistent with the existing to maintain the strong building line. • Boundary treatments should use low walls or hedges to reflect existing boundaries.
6. Mobility and parking	*There are informal pedestrian routes through the area which can link to amenities and green spaces. Street parking creates issues for pedestrian flow where they are sometimes parked half on the pavement and also on the green verges.*	• New pedestrian and cycle routes should be encouraged and should link to the existing network of routes, amenities in the character area and green spaces. • Sufficient parking should be provided on plot for dwellings to avoid cars being parked on the street. • Allocated on-street parking could be designed into streets to provide for visitors or services vehicles to avoid current parking issues and stretches of street parking should interspersed with green verges.

Figure 41: Semi-detached properties overlooking green space on Woodland Road.

Figure 42: Semi-detached house with low brick wall boundary on Bush Road.

Code	Rationale	Implementation
7. Green spaces and biodiversity	*There are a limited number of green spaces in the area. Green verges are an attractive part of the streetscape and form part of biodiversity schemes through wildflower planting,*	• New trees and planting should be encouraged along the street and in gardens to promote a greener environment. Where street trees are impractical, front gardens could incorporate trees and planting. • Green verges should be preserved and enhanced where possible to promote biodiversity net gain through use of wildflower patches.
8. Shop fronts	*There are clusters of local shops within this character area. Good quality shop fronts can improve the visual environment, contribute to the streetscape and help create local centres to promote a feeling of community.*	• Shop fronts should be integrated with the established streetscape through use of appropriate materials, scale and proportion. • Street elements and furniture should be considered in the design of new shops and improvement of the existing. This will help to improve the pedestrian experience of the retail clusters in the neighbourhood. • Incorporation of traditional elements should be considered, such as fascia boards, cornices, pilasters, appropriately sized uninterrupted stall risers. Large expanses of unbroken glazing should be avoided. Use of traditional elements create an appropriate architectural frame that results in a well proportioned shopfront.

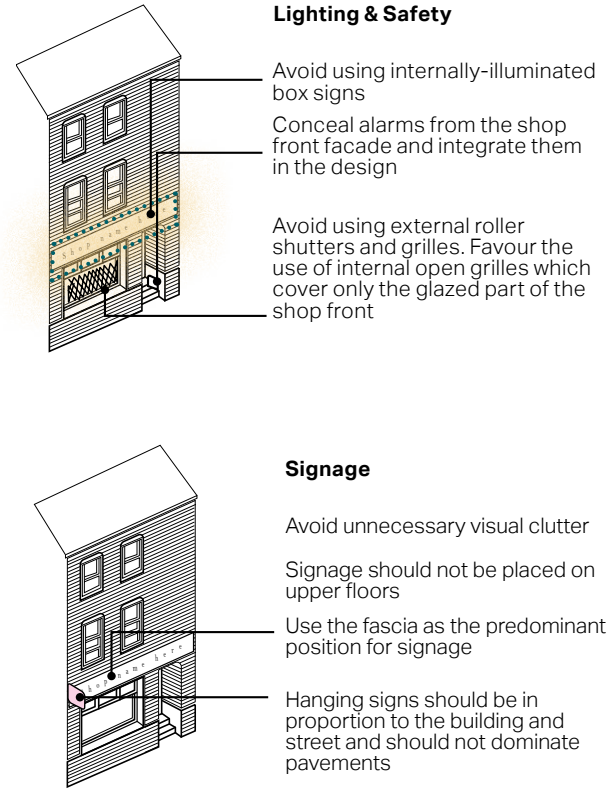


Figure 43: Diagram illustrating well-designed shopfronts.

4.3 Outer ring road city fringe

Figure 44: Map to show the outer ring road city fringe character area.

This area borders Norwich and acts as the transitional space between the city centre and Hellesdon. It is comprised of residential properties mixed with large scale infrastructure, including a B&Q and car dealer businesses. The area includes the primary arrival point into Hellesdon at the junction on Boundary Road. Road infrastructure is a particularly dominating part of this area.

Settlement pattern:

The character area has a mixed settlement pattern with residential cul-de-sacs between significant road infrastructure and the larger development footprints of the business and commercial sites.

Building typologies, materials and design:

Residential typologies reflect those used in the core residential and local centres character area.

Business and commercial buildings use varying forms and materials, with usually a large, but relatively low form and flat roofs.

Density, scale and massing:

Density, scale and massing of the residential buildings reflects that seen in the core residential and local centres character area. Density of the area is reduced around the business and commercial buildings which have large plots of car parking surrounding them. The massing of these buildings is large, though building heights remain low, restrained to 2-3 storeys. The business and commercial development is generally of similar heights to the surrounding residential development.

Building line and boundary treatment:

There is a consistent, set back building line for residential properties. The central pocket of business and commercial units between Cromer Road and Reepham Road have varying building lines and informal layouts, with some fronting directly onto the pavement and others set back with the associated car park fronting the pavement. Boundary treatments for residential properties include use of low walls, fences and green boundaries. For the business and commercial uses there is some low level planting and occasional use of trees.

Movement and parking:

This is a car dominated area with large road infrastructure. As the entrance to Hellesdon it is not a pleasant or easily navigable experience for pedestrians. Parking is provided on plot for all residential properties and in courtyards/ car parks for the employment uses here. There are large

areas of hard standing surfaces around these buildings.

Green spaces and views:

There is limited public green space in this area. There is a small green area just south east of B&Q, though it is adjacent to the busy A road and not well overlooked. The area sits on higher, flatter land and very much within the urban environment so therefore long distance views to the countryside are not seen.

Figure 45: Boundary Grill at the corner of the junction on the boundary of Hellesdon Parish which forms the main arrival point into Hellesdon from Norwich.

Code	Rationale	Implementation
1. Density and scale	*Residential density levels remain consistent, though overall the density varies across the character area due to the area's mixed use, with lower density in the commercial and business areas. Building heights remain low, with commercial and business units of larger scale, but not significantly higher than the residential development.*	• Residential development should generally keep to 1-2 storeys, with a maximum height of 3 storeys, to match the existing heights. • Commercial development should remain low height, of a maximum of 3 storeys and sensitive to the surrounding residential development.
2. Movement and parking	*This is a significant point of arrival into the parish, which is currently overwhelmed by road infrastructure. There is a need to focus on improving pedestrian and cycling connections in this area.*	• Pedestrian and cycle routes and new/ improved pedestrian crossings should be proposed where possible. These routes should aim to follow desire lines and link residential areas to the amenities. • Active ground floors and natural surveillance onto the streets in the commercial areas should be encouraged to promote an increased sense of safety for pedestrians.
3. Green spaces and views	*There are limited green spaces in the area and many hard standing car parks associated with the business and commercial buildings.*	• Trees and vegetation should screen car parks, especially where car parks are place in front of the building facing onto the pavement. • Both new and existing green spaces should be overlooked where possible.

4.4 Light industrial areas

Figure 46: Map to show the light industrial character area.

There are two areas of light industrial land use. One located in the eastern corner of the parish, consisting of a B&M home store and primarily vehicle repair service. The other is located between the residential and city fringe area and the leafy and countryside character area to the south west of Hellesdon and includes a David Lloyd, Holiday Inn, ASDA, metal and electrics store, wholesalers, warehouses, and legal offices.

Settlement pattern:

These areas are characterised by large scale infrastructure, a simple road network and informal building layout with differing building orientations, often grouped together. Both industrial areas within Hellesdon are part of larger areas which extend outside of the parish boundary.

Building typologies, materials and design:

Buildings are typical industrial typologies, using red brick, yellow brick, plastic, and metal cladding. There are both detached and adjoining warehouses. For adjoining warehouses the roofline is either continuous or stepped flat roofs or repeated front facing gabled. Designs are typical to the industrial typology. Within the Hellesdon Hall Industrial Estate there are areas of more consistent materials and designs with large presence of red brick.

Density, scale and massing:

Density is low with large building gaps of car parking and wide road infrastructure that creates low enclosure. Though building scale is large with large building footprints, heights remain low, restrained to two storeys and in general buildings are not significantly higher than surrounding residential areas. Massing in this area is wholly made up of the large building footprints of industrial or commercial buildings without any smaller grain.

Building line and boundary treatment:

Car parking is normally situated in front of industrial buildings, so the warehouses are set back on their plot. Enclosure, therefore, is low. There are some grass verges and street trees and hedges which help to enclose streets and along Boundary road trees between the pavement and road help to separate pedestrians. There are also examples of unattractive wire and iron fence boundaries, particularly in the industrial area to the west.

Movement and parking:

Movement is dominated by vehicular traffic. There is large, road infrastructure made up of the A1067 and A140 (Boundary

Road). The junction of these roads at the south-west industrial area is the secondary arrival point into Hellesdon from Norwich town centre and is a large, car dominated junction. Notably there is a scheduled monument, the cross at this junction.

Green spaces and views:

There are no green spaces in this area, with any green areas limited to grass verges at the side of the pavement. There are significant areas of trees in the industrial area to the south-west, predominantly at the northern and western boundaries, screening the areas from the surrounding open landscape.

There are no significant views in this area, though topography falls away at the south-west industrial area, the dense treescape which surrounds it limits views.

Code	Rationale	Implementation
1. Settlement pattern	*Industrial areas are often arranged in groups with large car parking areas.*	• A consistent set back should be established within groups of buildings to create a cohesive street character and remove the need for fences. • Yard and loading spaces should be located away from the street edge and towards the middle or rear of the site. • Active uses or operating main areas should be positioned on the ground floor, along the street, to provide natural surveillance and increase the feeling of safety for pedestrians in these areas. • Ground floor uses adjacent to the street should have higher levels of visual permeability.
2. Building typologies, material and design	*Industrial areas use materials typical to the building typologies.*	• Materials in the industrial areas can deviate from the material palette of the rest of the parish. However materials should be sustainable, high quality and sympathetic to the surrounding context.
3. Density and scale	*There are larger building footprints in this character area than the rest of the parish; however building heights are generally low and not higher than surrounding residential areas.*	• Massing and heights should be sympathetic and unobtrusive. Building footprints should reflect the existing massing in the industrial areas Building heights should remain low, reflecting existing heights.

Code	Rationale	Implementation
4. Mobility and parking	*There are large areas of parking and hard standing yards and servicing areas. The area is dominated by vehicular movement.*	• HGV routes should connect to the strategic road network as efficiently as possible to reduce conflict between HGVs and other road users. • The impact on traffic levels should be considered, as well as the need for separation of traffic. • Consideration should be given to pedestrians and cyclists when designing employment both in terms of movement, but also access and parking. • Businesses should work together to consolidate deliveries where possible, to reduce HGV movements. • Active travel should be promoted. Dedicated pedestrian entrances directly from the street should be provided, and servicing and pedestrian routes should be segregated. • Parking should be integrated within buildings away from the street edge and separate yard-space, employee parking and visitor parking. • A shared service yard could be used to optimise space on smaller sites.
5. Green spaces	*There are currently no green spaces in this area.*	• Well designed public spaces and meeting places should be created, avoiding unusable green space at the edge of a site. • Landscaping should be used as a buffer between residential and employment and employment and parking.

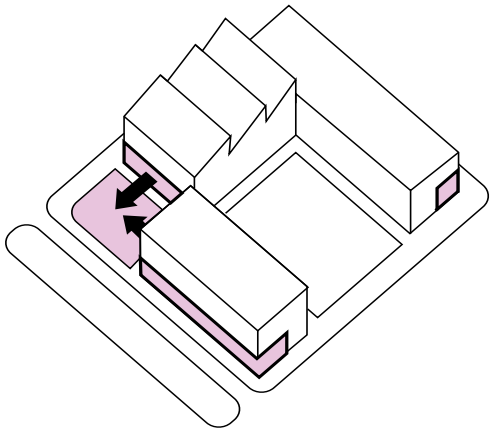


Figure 47: Diagram showing active uses on the ground floor fronting the street and increasing visual permeability.

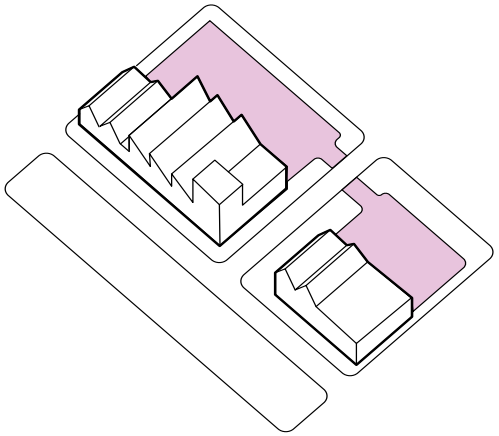


Figure 48: Diagram showing yard and loading space located to the rear.

4.5 Leafy, spacious housing

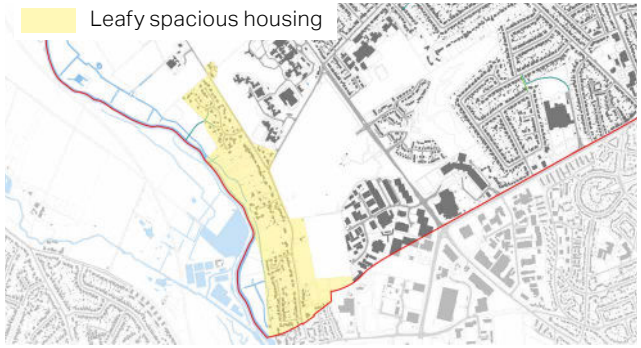


Figure 49: Map to show leafy, spacious housing character area.

This area of primarily residential development has a significantly different character to the main built up areas of Hellesdon and maintains a more rural character. Within the area there is the Grade II* listed Parish Church of Saint Mary Hellesdon and, next to it, the Hellesdon Parish Hall. The character area borders The village of Old Hellesdon and its associated conservation area.

Settlement pattern:

There is linear development along Low Road made up of narrow, long plots with back gardens extending to the bank of the River Wensum. There are also cul-de-sacs branching off Low Road, with varying plot sizes. The layout of this area is more informal than the uniformly set out primary residential area and has developed more organically.

Building typologies, materials and design:

Building typologies include semi-detached and detached housing of both one and two storeys. Building design varies with use of red brick, yellow brick, white and off-white render and exposed timber panelling. Roofs are hipped, pitched and cross-gabled and use clay plaintiles and pantiles and slate tiles.

The Parish Church dates to the 15th century and is a flint building with stone dressings and roofs of slate and lead.

Linear development along Low Road is formed of individual building designs, cul-de-sacs have pairs or small clusters of repeated designs. In general there is more variation in design and form between neighbouring buildings than in the primary residential area.

Density, scale and massing:

Density is low in this area. Linear plots along Low Road especially have large gardens and building gaps. Building scale is modest with low heights restrained to two storeys. Low density contributes to the area's rural edge character. The setting of the conservation area immediately south is sensitive to increases in density, scale and massing in the character area.

Building line and boundary treatment:

Boundaries are predominantly green, made up of hedges, trees and planting. There is also use of low walls. Set backs vary, to the south of Low Road set-backs are smaller, though all buildings still have front gardens. There is additionally a small amount of development on the east side of the road, as well as the west creating a greater built form presence in this part of the area. The middle and northern stretches of Low Road has mostly development

only on the western side, with larger set-backs and more comprehensive landscape boundaries, creating a lower built form presence.

Movement and parking:

Parking is provided on plot for all properties with cars screened with vegetation on many plots. Low Road is the only serving road and has a rural character with trees and hedges lining both side. The north stretch of the road has a more informal character, narrower and without road markings. There is a 30mph speed limit which starts just before the entrance of Wensum Valley close and covers the full stretch of Low Road south where there is residential development. There is mostly only pavement on the western side of the road and this is quite narrow.

Green spaces and views:

The only public green space in the area is the churchyard of the Parish Church. Within the churchyard there is a Grade II listed Hellesdon War memorial. This is a pleasant space surrounded by trees.

Code	Rationale	Implementation
1. Settlement pattern	*The settlement pattern differs from the primary residential area with more informal and organic layouts.*	• Any plots backing onto the Wensum Valley should incorporate mature landscaping as green buffering. • The more organic settlement pattern should be retained and any new development should respond appropriately to the topography in this area.
2. Building typologies, material and design	*Buildings demonstrate a variety of designs, materials and typologies.*	• New development should propose high quality designs with use of detailing to add interest. • Any development involving multiple houses should avoid homogenous building designs and incorporate variety of detailing, materials and form.
3. Density and scale	*Lower density levels in this area create a transition into surrounding countryside and protect the setting of the bordering conservation immediately south of the parish.*	• New developments must respect the surrounding density, higher densities will not be accepted. • Plots should incorporate front and back garden sizes which reflect surrounding plots. In general generous garden space is appropriate.
4. Building line and boundary treatment	*The area is defined by its relationship to the surrounding landscape, which is enriched by broad views and soft planted boundary treatments.*	• New developments should have low and natural boundary treatments such as trees and hedges. • Building lines should be set back from the road with green front gardens and landscaping.

Figure 50: Detached houses on Wensum Valley Close in yellow brick with clay tile, pitched roofs.

Figure 51: Linear development of houses on the west side of Low Road and opposite the Parish Church of Saint Mary.

Figure 52: Red brick detached houses on Wensum Valley Close.

Figure 53: Semi-detached hipped roof houses along Low Road.

Figure 54: Low Road with pavement on one side and bordered by trees, creating a green, leafy character.

Figure 55: Entrance into Princes Beatrice Close with red brick and rendered detached houses and low hedge boundary.

4.6 Open agricultural/ river valley

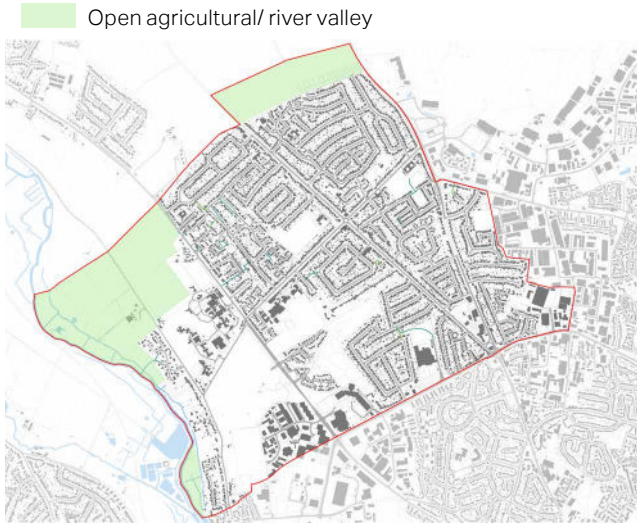


Figure 56: Map to show open agricultural/ river valley character area.

This area encompasses the surrounding countryside of Hellesdon. Since most of the parish is urban, countryside areas are relatively small. The most significant are the banks and landscape surrounding the River Wensum. There is also open agricultural land to the north of residential development in the north of the parish.

Settlement pattern, building typologies, density and scale:

Development in this area is very limited and density very low, with only the Wensum business centre, a small courtyard of a few business units and a couple of farmsteads, set off Low Road. These use red brick and gabled clay or corrugated metal roofs and are low in height, restrained to two storeys.

Building line and boundary treatment:

The small amount of development is well set back from Low Road with green boundaries. The business centre has an entrance bounded by a low brick wall. Low Road is bordered on both sides by hedges.

Movement and parking:

Low Road travels through the countryside area in the west of the parish. There are limited public rights of way from the built up areas into the Wensum Valley countryside. The landscape to the north is inaccessible, situated between Reepham Road and Holt Road and bordering Hellesdon Allotments and Cottinghams Park.

Green spaces and views:

The landscape character of the countryside in Hellesdon is detailed in Section 2.2. Overall there is an open character to with woodland following the course of the Wensum River at the bottom of the valley.

Low Road has substantial green boundaries on either side; however where there are gaps in the hedges long distance views are afforded over the open landscape, especially to the west over the Wensum Valley.

Code	Rationale	Implementation
5. Green spaces and views	*It is important to conserve the landscape character of the area and protect the habitats and biodiversity that these support.*	• Any new development should be constrained to the current settlement boundary to conserve Hellesdon surrounding countryside and low density of development in these areas. • Any new development which backs onto these areas could utilise mature landscaping as green buffering. • New pedestrian and cycle routes into the Wensum Valley which link into the pedestrian and cycle network in the parish should be encouraged.

Figure 57: Trees and open green space around the Wensum Valley.

Figure 58: Meadow that adjoins the Wensum.

4.7 School, hospital and golf course area

Figure 59: Map to show school, hospital and golf course character area.

This area borders the leafy, spacious housing to the west, the industrial area to the south, the primary residential area to the east and countryside to the north. It is comprised of a mixture of uses: Hellesdon hospital and grounds, Hellesdon High School, disused golf course, eco-housing development, Carrowbeck Meadow and Carrowbeck House, the location of Broadland Council Training services and new development, which is ongoing.

Settlement pattern:

The main road through this area is Drayton High Road (A1067). There is a node at the junction of this road with Middletons Lane, one of the main serving roads of the primary residential area. The settlement pattern is varied with the areas of housing, the hospital and school in distinct and separate areas.

The hospital is set off Drayton High Road, adjacent to this junction and is formed of a number of buildings set along informal access roads and interspersed with green spaces.

New development in the south is formed of cul-de-sacs developed on the former golf course land and based on the perimeter road, Birchwood Road. Carrowbeck Meadow is informally arranged within a wooded setting and next to Carrowbeck House.

Building typologies, materials and design:

Building typologies vary. Residential typologies include 2-4 bed semi-detached and detached houses in Carrowbeck Meadow and a mixture of semi-detached, detached, terraced and apartments in the new development.

Carrowbeck meadow is based on a Norfolk style historic barn vernacular, additionally designed sensitively to Carrowbeck House in terms of materiality. The development has also been designed to Pavishaus standard, using contemporary construction and technologies. Materials include white render, black stained timber cladding and pitched tiled slate roofs.

The new development to the south uses a range of materials including red brick, yellow brick, painted render from white and off white with a few more colourful facades. Roofs are manufactured tiles of either grey or light red. There are many pitched and flat roof canopy porches.

The main hospital building is an important building in the parish and, though unlisted, contributes to the architectural character. Designed by Richard Phipson, the building has a grand form of 2.5 storeys, constructed

in red brick with yellow brick dressings, a highly decorative porch entrance and a hipped slate roof. Particularly distinctive is the front facade which is largely covered by ivy and climbing plants.

Density, scale and massing:

Density levels vary across different parts of the area, with overall a lower density due to the incomplete development and presence of the dis-used golf course which is a large open, green space in the area. The scale of the development varies, building heights are 1-3 storeys. Larger building footprints are seen in the hospital sites.

Building line and boundary treatment:

Building line of the new development varies, though set-bacs are generally small and there are very small or no front gardens. Boundary treatments in this area are minimal with grass verges or minimal planting.

The hospital site has a low wall and trees at the edge of the site which create a pleasant street scene along Drayton High Road.

Movement and parking:

There is on-plot parking for all the developments in the area. The new development has both front and side parking and courtyard parking. Movement through the area for pedestrians and cyclists is quite disjointed with difficult connections.

Drayton High Road is the main road through the area, which is larger with multiple lanes to the south near to the new development and is narrower, more residential in character to the north.

Green spaces and views:

Hellesdon High School benefits from a large green area and sports pitches and Hellesdon hospital sits in a pleasant green environment. However currently there are no dedicated public green spaces in this area.

Figure 60: Drayton High Road with Hellesdon hospital site on the west side and trees at its boundary.

Figure 61: Carrowbeck Meadow development.

Code	Rationale	Implementation
1. Density and scale	*Density is overall relatively low with a building scale of 1-3 storeys.*	• New developments must respect the surrounding density and propose building heights which are sensitive to the surroundings, of 1-3 storeys.
2. Movement and parking	*The A1067 is a wide, busy road adjoining the new development. Improving pedestrian and cycling connections is important to integrate any new development to the main residential area and local amenities.*	• New developments should propose pedestrian and cycle routes to link to surrounding residential areas and amenities. Safe and pleasant routes from any new development should be made to link residential areas to Hellesdon High School and the Hospital.
3. Building line and boundary treatment	*Existing boundaries and building line varies through the area. Parts of the area could benefit from use of low boundary treatment to better define the public and private realm.*	• New development should utilise boundary treatments such as low walls, hedges, native vegetation and trees to define the public and private realm. • Front gardens with trees and planting should be encouraged to promote a greener environment in any new development. This helps to green streets where street trees are impractical.

Figure 62: View of Drayton High Road past new development to the left side.

Figure 63: Detached two storey houses in the new development, with white render, coloured render and red brick facades.

4.8 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.

Figure 64: Green space and trees on Westwood Drive in Hellesdon.

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 will this 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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