

Ingham

Design Codes and Guidance Draft Report June 2023

Delivering a better world



Quality information

Prepared by	Checked by	Approved by
John-Michael Chidwick	Michael Holt	Name Surname
Graduate Urban Designer	Associate Director	Position

Revision History

lssue no.	Issue date	Details	Issued by	Position	Comments received	Approved by	Position
1	27 January 2023	Partial draft (s1-3)	John-Michael Chidwick	Graduate Urban Designer	25 February 2023	Michael Holt	Associate Director
2	3 May 2023	Full draft	John-Michael Chidwick	Graduate Urban Designer	16 June 2023	Michael Holt	Associate Director
3	23 June 2023	Revised full draft	John-Michael Chidwick	Graduate Urban Designer	XX.XX.XXXX	Michael Holt	Associate Director
4	XX.XX.XXXX	Final draft to Locality	Name Surname	Position	XX.XX.XXXX	Name Surname	Position
5	XX.XX.XXXX	Edited final draft	Name Surname	Position	XX.XX.XXXX	Name Surname	Position

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

Contents

1. Introduction

1.1 Aims
1.2 Objectives
1.3 Study area
1.4 Planning policy and design guidance
1.5 Site visits and engagement

5	
5	
6	
6	
9	
12	

4. Design guidance and codes

4.1 Introduction	62
4.2 Character and quality in new development	64
4.3 Responsive design for infill development	70
4.4 Development in the open countryside	74
4.5 Tree planting and green infrastructure	76
4.6 Sustainable design and climate resilience	80

2. Place analysis 2.1 Context and identity 2.2 Settlement origins and growth 2.3 Layout and urban grain 2.4 Movement networks 2.5 Landscape 2.6 Recreation and open space 2.7 Important views

2.8 Built form2.9 Allocations2.10 Characterisation study2.11 Typical house types

3. Character analysis463.1 Historic Core483.2 Lincoln Road523.3 Grange Lane, West End, Church Hill (North Side)56

5. Checklist



1. Introduction

The Ingham Neighbourhood Plan Steering Group has requested support through Locality to establish a design code and guidance document to influence the character and design of any new development within the neighbourhood area.

The group identified three character areas that all fall within the village of Ingham: Historic Core; Lincoln Road; and, Grange Lane, West End, Church Hill (North Side). The neighbourhood area also includes the Highcliffe Business Park which sits to the east of Ingham.

The housing requirement allocated to Ingham of 65 dwellings has already been exceeded and there is a desire to make further allocations in order to address affordable housing need. For current allocations, speak with a planning officer.

This document sets out design codes and guidance for the character areas across the neighbourhood area.

1.1 Aims

- To preserve the special character of the neighbourhood area, particularly within the Ingham Conservation Area.
- To enhance the existing settlement pattern, 'sense of place' and quality of the built and natural environments.
- To identify and protect the key views to, from and within the neighbourhood area.

- To ensure that development is of a high quality and conforms with the neighbourhood area's rural identity.
- To provide design guidance and clarity to ensure the highest quality sustainable development.
- To preserve and protect the neighbourhood area's green routes and spaces.



1.2 Objectives

To successfully achieve the aims of the design codes and guidance, several objectives were integral:

- understand the wider landscape character context of the neighbourhood area;
- implement a place analysis approach to assess the settlement pattern and urban form across the neighbourhood area;
- undertake characterisation work based on the analysis and Ingham's Neighbourhood Profile;
- review the special character of the Ingham Conservation Area;
- propose landscape and townscape character areas to which specific design codes can be applied; and
- produce design codes relating to specific character areas, locations and all types of new development.

1.3 Study area

Ingham has a strong rural identity representative of the wider county of Lincolnshire. The majority of the neighbourhood area is arable fields growing seasonal produce including wheat, barley and root vegetables. Ingham sits to the west of the Lincoln Cliff, a limestone escarpment which creates a dramatic backdrop to the village.

The surrounding area is also known for its numerous RAF bases, which take advantage of Lincolnshire's generally flat landscape. A notable example is the former RAF Scampton, the former home of the Red Arrows, which sits approximately 5 miles southeast of Ingham.

The Neighbourhood Plan boundary is a rectangular shape surrounded by arable land on all sides and bordered by the A15 to the east. The A15 is the main route connecting Lincoln, in the southeast, and the Humber Bridge and Yorkshire, in the north.

Most of the built environment is contained within the small village of Ingham. There are also numerous standalone farmstead buildings as well as the Highcliffe Business Park which sits to the southeast.



Figure 01: Ingham's village sign on Lincoln Road.



Using the design code and guidance

This document is a valuable tool in securing context-driven, high quality development. It will be used differently by different people in the planning and development process (see Table 01, opposite).

This document will be effective when used as part of a co-design process, actively involving key stakeholders, to establish local preferences and expectations of design quality. Through active participation and conversation, key stakeholders can use the guide to shape the key issues and ways to adequately respond to them in future development.

A design code and guidance alone will not automatically secure quality design outcomes, but it will help to prevent poor outcomes by creating a rigorous process that establishes expectations.

This document raises the standards and expectations for design quality.

Potential users	How they will use the design guidelines
Applicants, developers, and landowners	As a tool to the community and Local Planning Authority expectations on design, allowing a degree of certainty. They will be expected to follow this document as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, to help assess planning applications. This document should be discussed with applicants during any pre- application meetings.
Parish Council or Neighbourhood Plan steering group	As a tool to help structure comments on planning applications, ensuring that this document is complied with.
Community groups and local residents	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Table 01: Potential users.

1.4 Planning policy and design guidance

Several national and local planning policy and guidance documents were referred to in the development of this document. Most notably the National Design Guide and its 10 Characteristics of a Well-designed Place and Homes England's adoption of Building for a Healthy Life (formerly Building for Life), which helped to frame the requirements of good design for high quality places.

Ministry of Housing, Communities & Local Government

National Planning Policy Framework

1.4.1 National Planning Policy Framework (revised July 2021)

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

The policies within the NPPF apply to the preparation of local and neighbourhood plan areas, and act as a framework against which decisions are made on planning applications.

The NPPF states that a key objective of the planning system is to contribute to the achievement of sustainable development.

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

- **Part 2**: Achieving Sustainable Development;
- **Part 5**: Delivering a Sufficient Supply of Homes;
- **Part 8**: Promoting healthy and safe communities;
- **Part 12**: Achieving Well-designed Places;

- **Part 15:** Conserving and Enhancing the Natural Environment; and
- **Part 16**: Conserving and Enhancing the Historic Environment.

Part 12 (Achieving Well-designed Places) emphasises the need to create high-quality buildings and places as fundamental to what the planning and development process should achieve.

It sets out several principles that planning policies and decisions will consider ensuring that new developments are well-designed and focus on quality.

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

This is supported by the National Design Guide, which sets out the 10 characteristics of a well-designed place.

1.4.2 National Design Guide (2019)

The National Design Guide (NDG) sets the 10 characteristics of a well-designed place and demonstrates what good design is in practice. The characteristics are: Context; Identity; Built Form; Movement; Nature; Public Spaces; Uses; Homes & Buildings; Resources; and, Lifespan.

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

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

1.4.3 National Model Design Code (2021)

The National Model Design Code (NMDC) sets a baseline for quality and practice. It provides detailed guidance on the production of design codes and the outlining of character areas.

The NPPF is the foundation stone to good design and the NDG sets out the 10 characteristics of well-designed places. This is developed further by the NMDC, which creates the baseline for analysing and visioning places. Design codes help development achieve the requirements of good design and for community benefit.

1.4.4 Building for a Healthy Life (2020)

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

The BHL toolkit sets out principles to help guide discussions on planning applications and to help local planning authorities to assess the quality of proposed schemes, as well as useful prompts and questions for planning applicants to consider during the different stages of the design process.



1.4.5 Local Planning Policy & Guidance

The neighbourhood area falls within the local government district of West Lindsey. The following documents are the local policy and guidance that have informed this document.

1.4.6 Central Lincolnshire Local Plan 2023

The Central Lincolnshire Local Plan was formally adopted in April 2023, replacing the Central Lincolnshire Local Plan 2012-2036 (which itself replaced the previously separate Local Plans of the City of Lincoln, West Lindsey and North Kesteven). The Local Plan sets out the long term strategy in respect of new developments up to 2040.

1.4.7 Draft Ingham Neighbourhood Plan 2019-2036

The Ingham Neighbourhood Plan is being prepared concurrently with this document. The Neighbourhood Plan will become the neighbourhood area's statutory development plan used in determining planning applications.

CENTRAL LINCOLNSHIRE Local Plan Adopted **Central Lincolnshire April 2023** LOCAL PLAN

1.4.8 Draft Ingham Neighbourhood Profile

The Ingham Neighbourhood Profile is being prepared alongside the Neighbourhood Plan and includes the group's character and design assessment for the neighbourhood area.

1.4.9 Draft Green Infrastructure Report and Local Green Space Assessment

The Green Infrastructure Report is being prepared alongside the Neighbourhood Plan and includes the group's assessment of green space.

1.4.10 Other supplementary planning documents (SPDs)

There are several other SPDs providing additional guidance covering both thematic and site-specific issues, including:

- the Central Lincolnshire Developer Contributions SPD;
- the Central Lincolnshire Five Year Land Supply Report 2022;
- the Central Lincolnshire Housing Delivery Plan 2019-2024; and
- the Health Impact Assessment for Planning Applications.

1.5 Site visits and engagement

An inception call between AECOM and Ingham's Parish Clerk and RFO, Gavin Monks, was undertaken on 1 November 2022 to introduce the teams and to explore the group's key aims and objectives.

A full day's site visit was then conducted on 15 November 2022 led by Gavin Monks and the planning consultant, Steve Kemp, along with other parish councillors and local residents. This walking tour covered the whole neighbourhood area and allowed AECOM to gather an extensive photographic survey and undertake a place analysis.

The visit explored, analysed and reviewed the Historic Core; Lincoln Road; and, Grange Lane, West End, Church Hill (North Side) proposed character areas. Examples of recent developments, particularly along Lincoln Road, were visited.

Figure 03: Ingham and Cammeringham Village Hall, the meeting point for the site visit.

Figure 04: Exploring Grange Lane with the group.

Figure 05: The view from atop the Lincoln Cliff.









2. Place analysis

Ingham is a rural village in the heart of Lincolnshire. The wider area is known for its aviation connections and agricultural history. Its origins as a rural centre remain visible in its working farms, and farmhouse or barn conversions. The local coursed limestone rubble gives a visual identity that is characteristc of Lincolnshire.

2.1 Context and identity

The neighbourhood area is bordered by the A15 (a historically significant Roman road known locally as Ermine Street) to the east, Stow Lane and Ingham Lane to the south, a narrow stream separating fields to the east, and field boundaries to the north.

The neighbourhood area is located approximately 9 miles north of Lincoln city centre. Lincoln is the historic county town of Lincolnshire with a recorded population of 103,813 in the 2021 Census. The city is the main employment, retail and services hub for the neighbourhood area. The neighbourhood area also sits approximately 17 miles south of the M180 motorway, which links Scunthorpe, Immingham and Grimsby and key parts of the industrial Humber region.

The population of the village of Ingham is 979 in the 2021 Census. The nearest settlements include the small villages of Fillingham (approximately 2.5 miles to the north) and Cammeringham (approximately 1 mile to the south). The neighbourhood area also sits approximately 4.5 miles to the northwest of former RAF Scampton, one of several Royal Air Force stations in Lincolnshire.

Ingham is built around two focal points: the village green to the west and the Church of All Saints to the east. Numerous amenities surround the village green including the village's two pubs (the Inn on the village green and the Black Horse Inn), and a small convenience store. To the south of the village green sit the Ingham and Cammeringham Village Hall and Ingham Primary School. There is also a childrens' play area, playing fields, a tennis court and a bowling green nearby. There is a medical centre on Lincoln Road.

2.1.1 Demographics

The population of Ingham is predominantly white British and split roughly 50:50 between the retired and working population. Several new young families have recently moved to the village and generally commute into Lincoln for work and leisure.

The neighbourhood area falls within the 50% least deprived neighbourhoods in the country according to the 2019 Index of Multiple Deprivation.



Figure 06: Ingham Primary School's Grade II Listed school house.



2.2 Settlement origins and growth

Ingham is a historic agricultural village typical of Lincolnshire. The village was founded in 500AD and was one of a number of 'springline' villages found at points where springs rose from underneath the scarp slope of the Lincoln Cliff. Ingham was listed as "Ingeham" in the Domesday Book of 1086.

The village's oldest existing buildings generally consist of houses, inns and farmsteads built in the 18th and 19th Centuries. The landmark Church of All Saints was built in the 18th Century. These buildings are linked by Ingham's most historic streets including High Street, Church Hill and West End.

The areas surrounding the village green and the Church of All Saints form the Ingham Conservation Area which contains numerous historic buildings, notably six of Ingham's seven Grade II Listed buildings.

Figure 08: Arable farmland surrounding the village of Ingham.

Figure 09: A barn conversion on West End.

Figure 10: The Grade II Listed Church of All Saints.





2.2.1 Settlement pattern today

Ingham follows a nucleated form centred around two focal points: the village green which sits to the west of the village surrounded by numerous listed buildings as well as pubs, the village shop, the primary school and the village hall; and the Church of All Saints to the east of the village.

These are connected by West End, High Street and Church Hill.

Grange Lane forms a loop at the north of the village, historically connecting several farmsteads and now lined with detached and semi-detached 20th Century homes along with several offshoot cul-de-sacs.

There is a more linear form at the south of the village along the key entry point of Lincoln Road. Several cul-de-sacs surround Lincoln Road including the village's most recent development at Wessex Way which has extended the village boundary to the south east.

Figure 11: Inter-war house on the Grange Lane loop.Figure 12: Modern detached house on Wessex Way.Figure 13: 20th Century bungalows on Lincoln Road.







2.3 Layout and urban grain

Ingham is generally very low density with much of the housing stock consisting of detached homes. There are some examples of terraced houses such as the Grade II Listed Jubilee Terrace as well as small clusters of terraced houses on Lincoln Road and West End.

The historic centre of the village has grown organically based on its topography and there is little order to the layout of roads and lanes with several access-only routes radiating from the main streets. The linear Lincoln Road connects to several modern cul-de-sac developments.

Saxon Way is a typical example of late-20th Century housing with a dead-end curvilinear pattern. Such developments generally have a poor impact on legibility and fail to reflect the character of Ingham's more historic areas.

New homes on Wessex Way are generally built on a grid pattern with roads intended to connect to future developments.

Figure 14: Jubilee Terrace on High Street.Figure 15: Cul-de-sac arrangement on Saxon Way.Figure 16: Organic arrangements on West End.Figure 17: Linear arrangements on Lincoln Road.











2.4 Movement networks

2.4.1 Vehicular movement

Ingham sits approximately 1.5 miles to the west of the A15 which is the main route between Lincoln and the industrial towns of North Lincolnshire.

There are two main entry points to the village. Lincoln Road enters the south via the B1398. This is the most direct entry point from the A15 and is therefore the village's busiest road for traffic. The second main entry point is Church Hill to the east which provides a good view over the village from the Lincoln Cliff.

The other roads leading out of the village are Long Lane and Short Lane. These are access-only rural lanes used mainly for agricultural purposes but are also popular with walkers.

Together, West End, High Street and Church Hill form the key east to west route and are the most widely used roads for pedestrians due them connecting the village's main amenities.

There are numerous roads that cross over and around the village green. Some of these are access-only due to elevated positions on slopes atop grass verges. West End and Grange Lane are, at times, narrow due either to on-street parking or imposing boundaries. Church Hill is narrow around the Church of All Saints but widens at the sections lined by grass verges.

2.4.2 Non-vehicular movement

Most of the main roads include pedestrian footpaths, at times separated by grass verges. Some roads, including parts of Grange Lane and Church Hill, do not have pedestrian footpaths due to the narrow rural nature of the streets.

There are numerous Public Rights of Way leading from the village into the surrounding countryside. These are well-used by ramblers and dog-walkers.

2.4.3 Public transport

Bus services run down Lincoln Road and Church Hill between Lincoln in the south and Gainsborough and Kirton in Lindsey in the north. There is a notable lack of designated cycling facilities in both the village and the surrounding country roads.

Figure 19: The entry point of Church Hill looking west from the B1398.

Figure 20: A section of Grange Lane with no footpath.

Figure 21: Public right of way looking south from the village hall.









2.4.4 Legibility and wayfinding

Ingham's two main entry points are Lincoln Road from the south and Church Hill from the east. These roads connect at a key intersection in the centre of Ingham and create a main route through the village.

Several of the roads surrounding the village green are elevated and access-only which makes them feel separate to the main roads. However, the village green also contains the largest cluster of landmarks which help to ease legibility. These include the village hall, the primary school, the convenience store and one of the pubs.

Other landmarks include the Black Horse Inn, which has a prominent position on High Street due to its large boundary, and the Church of All Saints, which sits atop a hill at the key entry point of Church Hill. Several intersections are given prominence due to the orientation of historic buildings on corners.

Other than the entry points to the Public Rights of Way, the surrounding fields are separated from the village by hard borders including hedgerows, fences and limestone walls.



Figure 23: The landmark village shop on West End facing the village green.

Figure 24: The Church of All Saints in its elevated position on Church Hill.

Figure 25: The Inn on the Green, one of two pubs in Ingham







2.5 Landscape

2.5.1 Topography

The Lincoln Cliff is a straight and prominent limestone capped, scarp slope extending north-south across the centre of the county of Lincolnshire. It runs through the neighbourhood area and sits to the east of Ingham, from which there are several key views of the escarpment. Numerous Public Rights of Way extend up the Lincoln Cliff which is informally used by the local community for tobogganing in the winter.

The topography undulates within the village of Ingham meaning that several landmark buildings, such as the Church of All Saints and the School and Attached School House sit on elevated positions. The changes in topography are particularly apparent on the village green. Lincoln Road runs northsouth on a gentle slope. Grange Lane and Church Hill are also sloped and several houses sit atop steep driveways as a result.

Figure 27: View of the Lincoln Cliff from Church Hill.

Figure 28: A bungalow in an elevated position on Church Hill.





2.5.2 Flood

Only a small area of low-lying rural land in the southwest of the neighbourhood area falls within Flood Zone 2 and Flood Zone 3. The east of the neighbourhood area is at low risk due to its position atop the Lincoln Cliff.

The village of Ingham does not fall within a flood risk zone. However, surface water and pluvial flooding has been reported in areas such as Grange Lane when sewers are overwhelmed in a rainfall event. Many of the houses on Grange Lane are built on elevated positions which provides some protection against this.

There are small dykes separating some of the built up areas from the surrounding fields (for example, alongside Saxon Way) which give additional protection from flooding. There may be opportunities for such defences to be better utilised which will be further considered in Section 4 (Design guidelines and codes).

Figure 30: A stream alongside Saxon Way.

Figure 31: A house built on an elevated bank on Grange Lane.





2.5.3 Landscape character assessment

The East Midlands Regional Landscape Character Assessment (2010) splits the neighbourhood area between the "Unwooded Vale" landscape character area which covers the area to the west of the Lincoln Cliff (including Ingham) and the "Limestone Scarps and Dipslopes" landscape character area which covers the area to the east of the Lincoln Cliff.

Key characteristics of the "Unwooded Vale" landscape character area include: extensive, low lying rural landscapes underlain by Triassic and Jurassic mudstones and clays; expansive long distance and panoramic views; complex drainage patters of watercourses; limited woodland cover; and, regular patterns of medium sized fields enclosed by low hedgerows.

Key characteristics of the "Limestone Scarps and Dipslopes" landscape character area include: limestone escarpment ad dipslope with strong north-south alignment; diverse patterns of land use and regular spring line settlements along scarp, limestone villages retaining strong historic character; the A15 (Ermine Street), forming a significant feature of the landscape; and, evidence of declining landscape condition across intensively farmed areas.

EAST MIDLANDS REGIONAL LANDSCAPE CHARACTER ASSESSMENT

East Midlands Regional Landscape Character Assessment Incorporating the Peak District National Park and Lincolnshire Wolds AONB Shaping the Region's Future Landscape



Figure 33: Land in the "Unwooded Vale" landscape character area.

Figure 34: Land in the "Limestone Scarps and Dipslopes" landscape character area.







2.6 Recreation and open space

The village green is Ingham's most significant public green space designated as a Local Green Space. It is a large space surrounded by several of the village's main landmarks. The village green includes benches and mature trees and hosts numerous events throughout the year.

There is also a smaller village green adjacent to the churchyard of the Church of All Saints which includes a picnic bench and seating. The two greens are linked by a green infrastructure network including mature trees and generous grass verges.

There is a cluster of outdoor amenities to the south of the village hall and primary school which includes large playing fields along with a designated football pitch, tennis court and bowling green. A childrens' play area was completed in 2022 and has proven popular with families.

Figure 36: Seating on the village green.

Figure 37: The recently completed childrens' play area.

Figure 38: The churchyard of the Church of All Saints.

Figure 39: The bowling green.







2.7 Important views

The neighbourhood area is characterised by expansive long distance and panoramic views from the Lincoln Cliff escarpment (an Area of Great Landscape Value), facilitated by a limited woodland cover that makes shelterbelts and hedgerow trees quite prominent. The flatness and fertility of the vale promote the presence of medium-sized fields enclosed by low and generally wellmaintained hedgerows and ditches in low lying areas.

Within Ingham, several notable buildings are given particular prominence due to their elevated positions. Examples include the Grade II Listed Church of All Saints which sits on a hill in the east of the village, and the Grade II Listed School and Attached School House (now Ingham Primary School) which sits on a hill overlooking the village green in the west of the village.



Figure 41: Important view of Ingham from Church Hill.

Figure 42: Important view of the Lincoln Cliff Escarpment from Ingham.



2.8 Built form

There are seven Grade II Listed buildings within the built up part of the neighbourhood area. The 18th Century Church of All Saints is a major landmark due to its prominent position overlooking the east of the village acting as a gateway from Church Hill. The bell tower of Ingham's 19th Century primary School overlooks the village green. The 19th Century Generous Britain Public House remains in use as a pub. The other listed buildings were built in the 19th Century and include farmhouses and cottages, now mainly now used for residential purposes. Many listed and undesignated Georgian and Victorian buildings, are built from the local coursed limestone rubble.

In November 1969, two conservation areas were designated in Ingham under Section 1 of the Civic Amenities Act 1967. These were reviewed and consolidated over time and the current Ingham Conservation Area was assigned in January 1998.

Highcliffe Business Park sits to the east of the neighbourhood area consisting of a two-storey modern office building clad in red brick and pale blockwork with clerestorey windows. It is bounded by a 2m tall palisade fence hard to the boundary edge.











Figure 44: 33, The Green (19th Century).
Figure 45: Applegarth House (18th Century).
Figure 46: Church of All Saints (18th Century).
Figure 47: Jubilee Terrace Cottages (19th Century).
Figure 48: School and Attached School House (19th Century).


2.9 Allocations

The majority of Ingham's recent development has been on Wessex Way which has extended the village to the southeast parallel to Lincoln Road.

The Central Lincolnshire Local Plan 2023 allocates WL/ING/OO6 (The Old Scrapyard, Stow Lane) as suitable for development. The Ingham Neighbourhood Plan allocates WL/ ING/003(a), INP3 and INP14 as suitable for development.



Figure 50: Wessex Way looking towards open countryside.

Figure 51: Public right of way looking south towards WL/ING/006.

Figure 52: Long lane looking west.



2.10 Characterisation study

A primary purpose of this document is to enable well-designed buildings and spaces that are sensitive and responsive to local context, landscape setting, and character.

The characterisation study presents the variation in character across the neighbourhood area and informs the character areas in Section 3.

Establishing what are key features or distinctive attributes in these areas helps guide future development.

This analysis was cross-checked on site as part of the walking tour and photographic study, guided by residents of Ingham.

BLACK HORSE F.54 Ŧ F.55

Figure 54: The Black Horse Inn, built from coursed limestone rubble.

Figure 55: Buildings facing the village green.

Development period timeline





Inter-war



Late-20th Century





Victorian / Edwardian



Post-WWII



21st Century

2.11 Typical house types

Ingham's detached houses, built from the local coursed limestone rubble, form a clear aesthetic for the village. However, there are a variety of different house types, particularly in the character areas outside the Historic Core.

The images on the following pages show some of the types typically found in Ingham along with some general features associated with them. There are other house-types which are explored further in Section 3 (Character areas).



Terraced

- 1. Small or no setback / front garden.
- 2. Limestone rubble / red brick frontage.
- 3. Two-storey detached house.
- 4. Symmetrical fenestration / facade.
- 5. Sash or bay windows.
- 6. Red pantiles or grey slate tiles.
- 7. Low stone / brick wall boundary.
- 8. Chimney stack on both ends.
- 9. Medium back garden.
- 10. Pitched gable roof of varying heights.
- 11. Double pane timber door.

- 1. No setback .
- 2. Limestone rubble / red brick frontage.
- 3. Two-storey terraced houses.
- 4. Repetitive fenestration / facade.
- 5. Rows of 3-8 houses.
- 6. Sash windows.
- 7. Red pantiles or grey slate tiles.
- 8. Chimney stack per house.
- 9. Small to medium back gardens.
- 10. Pitched gable roof.
- 11. Double pane timber door.

5



- 1. Small to large front garden.
- 2. Limestone or red-brick frontage.
- 3. One-storey bungalow.
- 4. Asymmetric fenestration / facade
- 5. Casement or bay windows.
- 6. Red pantiles or grey slate tiles.
- 7. Stone or brick wall / hedgerow boundary.
- 8. Chimney stack on one end.
- 9. Medium to large back garden.
- 10. L-shaped pitched roof.
- 11. Various style of door.

- 1. Irregular shaped front garden.
- 2. Various colour brick frontage.
- 3. Two-storey detached house.
- 4. Asymmetrical fenestration / facade.
- 5. Built-in garage.
- 6. Neo-Georgian/Victorian features.
- 7. Various roof-tiles.
- 8. Driveway in front of house.
- 9. Medium to large back garden.
- 10. L-shaped pitched roof.
- 11. Georgian/Victorian style door.



- 1. Courtyard arrangement.
- 2. Coursed limestone rubble frontage.
- 3. Height ranging between 1 and 2 storeys.
- 4. Outbuildings / garages.
- 5. L-shaped building footprint.
- 6. Informal window arrangement.
- 7. Red pantiles or grey slate tiles.
- 8. Chimney stacks.
- 9. Stable entrances.
- 10. L-shaped pitched roof.
- 11. Wooden farmhouse doors.





3. Character analysis

Achieving quality outcomes is based on a thorough and comprehensive analysis of the place. It is important to conduct the analysis in response to an area's agreed character type.

Places have a clear and strong identity and character. Places are multi-layered and diverse environments generally understood through the following: Physical Form; Activity; and, Meaning.

A development proposal must demonstrate that a comprehensive analysis of the place has been completed. Understanding the broader context will influence place-specific responses to the location, siting and design of new developments.

A comprehensive analysis will correlate to the project brief and ensure design processes are fully informed by the places existing conditions and future aspirations.

The adjacent map illustrates Ingham's character areas as defined in the Neighbourhood Profile based on analysis of topography and landform, land use and built development.



Physical conditions of existing built development including layout, form, scale, appearance, landscape character, waterways and flood risk.

Use, vitality and diversity, including community facilities and local services.

How a place is perceived, including local heritage, views inwards and outwards and social histories.

1 Historic Core



2 Grange Lane, West End, Church Hill (North Side)



3 Lincoln Road







3.1 Historic Core

Ingham's historic buildings and important amenities are located in this character area surrounded by the focal points of the village green and the Church of All Saints.

Summary character:

- The Historic Core includes the centre of Ingham roughly surrounding the roads of West End, High Street and parts of Church Hill. This character area is bookended by the village green to the west and the Church of All Saints to the east.
- All roads in the Historic Core are narrow, and some are single track, in particular at the ends of Grange Lane and Church Hill, the roads around the village green and the roads towards West End.
- The style of roads causes congestion in the village around the village green, causing large vehicles to encroach on to the grass eroding the green and verges.

- There is an organic urban grain due to centuries of development and a slight undulating topography on and around the green spaces.
- The large village green to the west is linked to a smaller green alongside the Church of All Saints by a network of mature trees and wide grass verges.
- The Historic Core includes much of the the Ingham Conservation Area and contains six of Ingham's seven Grade II Listed buildings.
- The buildings are mainly constructed from the coarsed limestone rubble typical of Lincolnshire but there are some examples of red-brick and other styles.
- The roofs generally consists of red clay pantile typical of Lincolnshire along with some grey slate on key buildings such as the Church of All Saints and Ingham Primary School. There are also examples of tumble gable brickwork.

- The buildings generally date from the 19th Century with some, including the Church of All Saints, dating from the 18th Century. The land use is generally residential. However, there are a number of community amenities including two pubs, a convenience store, the primary school and the village hall. This makes the Historic Core the main focal point for the neighbourhood area.
- There are views of the landmark buildings surrounding the village green as well as the Church of All Saints on its elevated position to the east of the village. There are key views of the Lincoln Cliff escarpment from several points as well as the key view from the B1398 looking down Church Hill which takes in much of the Historic Core as well as the other character areas.
- There are Public Rights of Way that cross the village green and enter the surrounding countryside.





Figure 57: The Church of All Saints behind Ingham's smaller green to the east.

Figure 58: The Grade II Listed Jubilee Terrace Cottages on High Street.

Figure 59: A cottage on West End.

Figure 60: The village green to the west of the village.

Figure 61: The wall of Ingham House on Church Hill looking west.







Urban form	Historic nucleated form centred around two focal points: (1) the village green to the west of the village surrounded by numerous historic buildings and amenities; and (2) the Church of All Saints to the east of the village. These are connected by West End, High Street and Church Hill which run in a roughly linear form from east to west.
Movement networks	Together West End, High Street and Church Hill form the key east-west link. These are the village's most important roads in terms of architecture and amenities. There are numerous roads that criss-cross over and around the village green. Some of these are access only due to challenging positions on slopes atop grass verges.
Landmarks	The Historic Core includes six of Ingham's seven Grade II Listed buildings, in particular the Church of All Saints and the School and Attached School House. Other important landmarks include the village green and the unlisted Ingham House.
Public realm / open space	The village green is the village's main open space. This is surrounded by the village's most historic buildings and hosts fêtes and other community events. The village green is very well maintained and contains numerous benches and a historic red telephone box. There is a separate smaller green to the east of the village next to the Church of All Saints which contains benches and a picnic table.
Green and blue infrastructure	There are mature trees across the village green along with wide grass verges alongside several of the main roads which form a network between the two village greens.
Subdivision of land	The Historic Core is generally very low density although there is an example of terraced homes along the Grade II Listed Jubilee Terrace. The historic part of the village has grown organically based on topography so there is little logic to the layout of roads and lanes which spill in every direction
Boundary treatments and set-backs	The village's historic limestone cottages generally front directly onto the pavement with on-street parking but are often separated from the road by grass verges. Some of these have small front yards set back by stone walls. Some historic buildings are set back quite far from the road along long private driveways. Limestone walls and hedges are the most typical boundary types.
Building size, scale and type	Houses are generally one or two storey with no one building standing out as being particularly tall. The Historic Core mainly consists of large detached cottages along with some examples of historic row terraces. Some of these are converted farmstead buildings.

F.62 | Figure 62: Table of Historic Core settlement characteristics.

Key characteristics

Colours and materiality

Facade





Boundary treatments



Low-rise limestone wall.

Doorways



Grass verge extending to the road.



Low to medium-rise red brick wall.

Roofing





Wood panelled door with limestone decorative arch.





Georgian sash windows with timber framing.



Small open porch with red tile capping.



Stable entrance conversion.



Bay window with red tile capping. Barn window with red brick decorative arch.

Grey slate tile



3.2 Lincoln Road

Lincoln Road is the main entry point to Ingham and is the primary feature for this area providing a town-like feel The area is generally post-war, with modern residential development and cul-de-sac arrangements.

Summary character:

- The linear Lincoln Road runs from the B1398 to Ingham's Historic Core. There are several cul-de-sacs branching from Lincoln Road to the east and west including The Avenue, Glebe Close and Saxon Way, each dating from the 20th Century. Wessex Way dates from the 21st Century.
- The land-plots are larger than the other character areas and most houses and bungalows have front and rear gardens and driveways. The cul-de-sacs generally contain uniform housing styles. There is one block of flats for over 55s.

- Lincoln Road is a key route for the neighourhood area's bus services and there are 2 bus-stops along the street. This can lead to congestion at the north end of Lincoln Road caused by on-street parking for houses without garages or drives. This character area is well-served by footpaths on both sides of the roads. Residents use Lincoln Road for hiking, dog-walking and running as well as for walking and cycling to the amenities in the Historic Core. The buildings in this character area generally date from the 20th and 21st centuries although there are some 19th Century cottages on Lincoln Road and Fieldside.
- There is a strong network due to the mature trees and hedgerows lining Lincoln Road. There is a landmark row of trees on Stow Lane as well as a landmark triangle of trees at the crossroads at the southernmost point of Lincoln Road. There are wellestablished hedgerows on Lincoln Road and Stow Lane

- The land use is generally residential but there is a medical centre on Lincoln Road.
- There are also numerous sporting amenities to the south of the village hall including playing fields, a childrens' playground, a tennis court, a football pitch and a bowling green. Other open spaces include the paddocks to the north of Saxon Way. There is a tree nursery near the sewerage works and a small public green area with a bench along Lincoln Road.
- There are views of open countryside to the east, south, and west. The views to the east are particularly significant as they include the Lincoln Cliff escarpment.
- There are Public Rights of Way leading east towards the Lincoln Cliff along with the surrounding fields to the west and south.









Figure 63: Lincoln Road looking north.

Figure 64: 21st Century detached houses on Wessex Way.

Figure 65: The medical centre on Lincoln Road.

Figure 66: A mixture of building styles.

Figure 67: 20th Century detached houses on Saxon Way.



Urban form	Lincoln Road is a long linear street running north-south with several offshoot cul-de-sacs to the east and west that do not otherwise connect to each other.
Movement networks	Lincoln Road is the main entry point to the south of the village and the main connection from the important A15 road via Ingham Lane. The village's main bus routes pass through Lincoln Road which has two bus-stops. It is also well-used by pedestrians and cyclists.
Landmarks	Landmarks include the trees lining Stow Lane and the triangle of trees at the crossroads at the southernmost point of Lincoln Road. There are important views to the Lincoln Cliff escarpment.
Public realm / open space	Sporting amenities include playing fields, a childrens' playground, a tennis court, a football pitch and a bowling green. Other open spaces include the paddocks to the north of Saxon Way. There is a tree nursery near the sewerage works and a small public green area with a bench along Lincoln Road.
Green and blue infrastructure	There is a landmark row of trees on Stow Lane as well as a landmark triangle of trees at the crossroads at the southernmost point of Lincoln Road. There are well-established hedgerows on Lincoln Road and Stow Lane
Subdivision of land	The linear Lincoln Road connects to several twentieth and twenty-first Century cul-de-sac developments. Saxon Way is a typical example of late twentieth Century housing with a dead-end curvilinear pattern. The new homes on Wessex Way are generally being built on a grid pattern with roads intended to connect to future developments.
Boundary treatments and set-backs	The 20th Century homes generally have large front and back gardens with off-street parking bordered by fences, brick/stone walls or hedges. Some historic cottages have on-street parking. The 21st Century homes on Wessex Way have smaller front yards with frontage that interacts better with the pavement and driveways alongside the buildings.
Building size, scale and type	There is a mix of buildings on Lincoln Road include detached houses, bungalows and several semi-detached homes. The cul-de-sacs generally consist of detached and semi-detached houses in a uniform style.

F.68 | Figure 68: Table of Lincoln Road settlement characteristics.

Key characteristics

Colours and materiality



Boundary treatments



Medium to high-rise hedgerow.

Doorways



Low-rise limestone wall.



Wooden fencing.

Roofing





Open wooden pitched porch.



Enclosed pitched porch.



Wood panelled door with open porch cover.



Windows



Cottage window with red brick decorative arch.



Bow window with tiled capping.



Wide casement window.



Character Area 3: Grange Lane, West End, Church Hill (North Side)

3.3 Grange Lane, West End, Church Hill (North Side)

Characterised by a varied

architectural style from the Victorian period onwards, this area features a mix of housing types in a linear form often on elevated positions due to topographical change.

Summary character:

 This character area includes West End which is located at the west of the village leading to the rural roads of Long Lane and Short Lane. The area also includes Grange Lane which forms a half-loop between the village green and Church Hill. The area includes the 20th Century homes situated on the north side of Church Hill.

- West End is a very narrow road with the on-street parking outside of the cottages effectively making it a singletrack road. Grange Lane also has singletrack access in most areas. Church Hill is very narrow around the Church of All Saints.
- The layout of West End consists of houses and bungalows with front gardens and driveways along with some cottages with blank frontages along the street and on-street parking. Grange Lane mainly consist of houses with off-street parking along with a limited number of ex-council houses with onstreet parking. The north of Church Hill includes houses and bungalows with offstreet parking and front gardens.
- This character area mainly consists of residential homes but there is also a caravan park on West End. There are areas of agricultural land on West End, Grange Lane and Church Hill as well as riding stables on Grange Lane.

- This is an architecturally diverse character area with the houses on West End ranging from the 19th Century to the present day. The houses on Grange Lane are predominantly from the 1960s but with a number of properties from the 21st Century. The houses at the north of Church Hill are predominantly from the 1960s and 1970s.
- Key landmarks include the windmill on Long Lane and the paddocks and the Church of All Saints on Church Hill.
- West End has a strong relationship with the surrounding open countryside. Grange Lane has views of the paddocks and the Lincoln Hill escarpment. Church Hill also has views of the escarpment along with views of the Church of All Saints on its elevated position.
- There are Public Rights of Way leading to the surrounding countryside in every direction.









Figure 69: The landmark windmill (now a home) on Long Lane.

Figure 70: Eclectic 20th Century housing on Grange Lane.

Figure 71: 20th Century bungalows on West End.

Figure 72: A rural offshoot of Grange Lane.

Figure 73: Post-war housing on Grange Lane.

Urban form	Grange Lane forms a half-loop at the north of the village, historically connecting several farmsteads and now forming a link between the village green and the Church of All Saints. West End is a short linear road leading to the rural roads of Long Lane and Short Lane. Grange Close is an offshoot cul-de-sac north of Grange Lane.
Movement networks	Church Hill is the village's eastern entry point and, as with Grange Lane and West End, is generally residential. The other roads leading out of the village are Long Lane and Short Lane but these are very rural used mainly for agricultural purposes and by walkers.
Landmarks	This character area includes the Grade II Listed Grange Farmhouse off Grange Lane. Another landmark is the unlisted windmill (now a house) on Long Lane. There are important views of the paddocks to the south of Ingham House, the Church of All Saints on its elevated position and the Lincoln Cliff escarpment.
Public realm / open space	West End, Grange Lane and Church Hill each have a strong relationship with the surrounding open countryside due to the Public Rights of Way that connect to these roads.
Green and blue infrastructure	There are numerous hedgerows and mature trees as well as steep grass verges separating the houses from the pavements.
Subdivision of land	Many of the houses have medium front gardens and large back gardens. These generally back onto open countryside. Many of these houses are detached and density is low as a result.
Boundary treatments and set-backs	The homes on West End have front gardens and off-street parking along with some cottages with blank frontages along the street and on-street parking. Grange Lane mainly consist of houses with off-street parking along with a limited number of ex-council houses with on-street parking. The north of Church Hill includes houses and bungalows with off-street parking and front gardens.
Building size, scale and type	Houses are generally large and detached although there are numerous bungalows on West End, several semi-detached homes on Grange Lane, and static homes in the caravan park off Long Lane.

F.74 | Figure 74: Table of Grange Lane, West End, Church Hill settlement characteristics.

Key characteristics

Colours and materiality

Facade



Boundary treatments



Medium to high-rise hedgerow.

Doorways



Tiered boundary leading to elevated property.



Mix of wooden fencing and limestone wall.

Roofing





Glazed door.



Alternative door styles with red brick decorative arch.



Wood panelled door with small open porch cover.

Grey slate tile

Windows



Casement window with cottage styling.



Curved bay window with red tile decoration.



Floor to ceiling modern windows.



04

and entry

K, H

60

•

O



4. Design guidance and codes

This section outlines the expectations for future development. The codes prioritise the character and quality of new development, sustainable design approaches and several key topics of community importance.

4.1 Introduction

This section supports decision makers and designers when producing or reviewing planning applications in the neighbourhood area. This applies to major development sites or allocated sites, infill development and windfall development, with primary attention on residential areas as well as mixed-use development.

The codes are used across all character areas set out in Section 3 (Character analysis).

It is acknowledged that there is not always agreement on aesthetic issues and architectural taste. These codes are focused on topics that help designers and decision makers appropriately respond to context. New design proposals can use these codes to enable a clear design process to improve and enhance the setting and sustainability of the neighbourhood area while not detracting from its context and local character or sense of place.

The following topics are addressed by design codes in this section:

- A Character and quality in new development
- B Responsive design infill development
- C Development in the open countryside
- D Tree planting and green infrastructure
- E Sustainable design and climate resilience





Design Code A: Character and quality in new development

4.2 Character and quality in new development

Lincolnshire is one of England's most rural and traditional counties and, as such, the preservation of Ingham's character is of the utmost importance. The local pattern of streets and spaces, building traditions, materials and the natural environment should all help to determine the character and identity of a development. Responding to the context means recognising existing positive design solutions or using existing cues as inspiration.

Any new development should acknowledge, respect and enhance these features in order to create harmony and to ensure that future generations have the same level of admiration for their home.

The design codes in this section set out how to respond to the character areas set out in Section 3 (Character analysis). These responses help formulate and review design proposals in line with other local policy.

Figure 75: Modern development on Wessex Way



A1 - Response to character areas

- Designers must set out a clear and positive response to the character area in which development is sited or adjacent to.
- Designers are not required to mimic the existing design period of an identified character area in the form of pastiche (especially 'bolt-on' elements). However, this approach is not ruled out if done authentically to carefully respond to its context (this approach is likely to be expensive and most suitable for listed building development).



A2 - Preserve and enhance character features

- Development must be harmonious with local character features such as coursed limestone rubble and red brick walls, pantile and grey slate roofs, pitched gables and chimney stacks.
- These local character features must be preserved and enhanced wherever possible within the character areas by responding to the development's landscape context, street relationship and building materials.



- 1. Small or no setback / front garden.
- 2. Limestone rubble / red brick frontage.
- 3. Two-storey detached house.
- 4. Symmetrical fenestration / facade.
- 5. Sash or bay windows.
- 6. Red pantiles or grey slate tiles.
- 7. Low stone / brick wall boundary.
- 8. Chimney stack on both ends.
- 9. Medium back garden.
- 10. Pitched gable roof of varying heights.
- 11. Double pane timber door.



- 1. No setback .
- 2. Limestone rubble / red brick frontage.
- 3. Two-storey terraced houses.
- 4. Repetitive fenestration / facade.
- 5. Rows of 3-8 houses.
- 6. Sash windows.
- 7. Red pantiles or grey slate tiles.
- 8. Chimney stack per house.
- 9. Small to medium back gardens.
- 10. Pitched gable roof.
- 11. Double pane timber door.





Figure 77: Terraced housing built from coursed limestone rubble and fronted by a grass verge.

Figure 78: Rustic limestone homes with abundant gardens.

Figure 79: A traditional townhouse door with wooden framing painted in sensitive colours.

Figure 80: A Victorian limestone cottage with pantile topped bay windows.

Figure 81: A row of cottages in limestone and red brick adjcent to a mature tree network.







A3 - Design response

The designer must respond to the character area with one of the following three approaches, considered in the following order:

- 1. Harmonise clearly respond to existing characteristics within the character area, street and site, including scale, form and appearance.
- 2. Complement doing something slightly different that adds to the overall character and quality in a way that is nonetheless fitting, for example, additional high quality materials but harmonising in scale, form and positioning.
- 3. Innovate doing something of high design quality that is different but adds positively to the built-form and character and is considered an exemplar approach for others to follow. For example, developing innovative building form and use low embodied energy and high quality materials that add to the overall design quality, sustainability and richness of the area.



This barn to residential conversion maintains the building's original irregular window spacing framed in sensitive wood. The coursed limestone rubble has been carefully pointed and remains unobstructed. The red pantiles match those of adjacent buildings and the chimney stacks remain in use.





This detached house mirrors the Georgian and Victorian proportions of other townhouses surrounding the village green albeit in a more modern red brick. The roof is covered in traditional red pantiles and the short front garden boundary is also similar to nearby historic buildings.



Despite these buildings' contemporary windows, there are features that remain consistent with Ingham's more tradional buildings including the red brick facades, grey slate rooftiles, chimney stacks and the modest two storey height.









Design Code B: Responsive design for infill development

4.3 Responsive design for infill development

Development may take place within Ingham's existing urban area, so as not to intrude on the neighbourhood area's unique countryside and expansive views.

This means that infill development is likely. Infill development is smaller scale development typically fewer than ten homes within the following contexts:

- Gap site development within a street frontage.
- Backland development.
- Site redevelopment (for example, replacement of existing buildings).



B1 - Overarching aims

Infill development should be sensitive to its context and of a high quality design, including affordable housing within settlements. Good infill development will:

- 1. Protect residential amenity, both of new and existing occupiers.
- 2. Contribute to the creation of distinctive communities, places and spaces.
- 3. Be of good design and encompass sustainability principles.
- 4. Respond to the context and character of the area.
- 5. Make efficient use of brownfield land (previously developed).



B2 - Design principles

The following design principles apply to infill development that may come forward via applications on allocated or non-allocated sites within the neighbourhood area:

- Building scale and massing should be in keeping with the prevailing development pattern and not be overbearing on existing properties or deprive them of light, including over-looking or over-shadowing of both windows and amenity space.
- The building line should reflect the street and be set back no more than a maximum of 1.5m from adjacent buildings unless additional landscaping or treeplanting is being introduced to the street scene. Where buildings are set back from the pavement, boundary features should define the plot and link up to the adjacent buildings (for example, hedgerows or low masonry wall).
- Rear or side plot boundaries which face public spaces must be masonry walls of an appropriate material to match plots and add to the streetscene quality.

- Building scale and positioning on plot should help to define and enclose the space within the street corridor or square to an appropriate degree based on the existing street section (building to building) and level of enclosure (ratio of street width to building height).
- Materials should reflect positive local characteristics and harmonise with adjacent buildings with matching or complementary materials, subject to the degree of variety in the settlement, area or street.
- Building fenestration and pattern should be in keeping with the predominant positive buildings character on the street or harmonise with adjacent buildings of good character.
- Other than courtyard developments such as barn conversions and farmstead housing, building entrances will address the street with a main access and main fenestration. Corner buildings should address both streets with fenestration but the main entrance could be on either, subject to access requirements.

- Building facade design should respect the horizontal rhythm of plots and building subdivisions on the street in order to integrate and maintain visual continuity or add to the visual interest where required.
- Building heights should vary from 1.5-2.5 storeys depending on adjacent plots. A variable eves line and ridgeline is allowed to create interest but variation between adjacent buildings should be a maximum of 0.5 storeys in general.
- Front of plot areas and rear gardens should be of sufficient size and landscaped appropriately to fit in with prevailing planting pattern or to enhance to the green character of the area where it is lacking.
- Access and storage for bins should be provided and bin stores should be designed to be integrated with plot boundaries. Snickets / alleyways should be considered for terraced buildings with four or more units in order that bicycle and bin storage to the rear can be satisfactorily brought to the front.
- Parking should be integrated on plot and, where possible, with parking spaces set behind the building line, generally to the side of the plot being advisable. For narrow dwellings it is preferable to retain a small front garden with a boundary wall, as opposed to an open hard surface parking space. Where parking is required to the front of the plot it should be accorded sufficient space and should utilise hedgerows to screen cars laterally from the street. On-plot parking should always be preferred to on-street parking. The number of car parking spaces required should be proportional to the property's expected occupation.
- Porous surfaces and green parking spaces (for example, grasscrete) are preferable to impermeable parking spaces. Garages are likely to be used for storage rather than parking vehicles and should therefore be set behind the building line or to the rear of the plot.





Design Code C: Development in the open countryside

4.4 Development in the open countryside

Lincolnshire is a predominantly rural county with a large part of the neighbourhood area consisting of arable fields and open countryside. The Lincoln Cliff escarpment is an Area of Great Landscape Value and provides panoramic views across the neighbourhood area.

This code directly applies to any development proposals in the open countryside. Any development within the neighbourhood area will have a visual impact on the open countryside's rural character.

The adjacent codes seek to mitigate this, by ensuring contextual design-led development.

C1 - Design principles

- The conversion or re-use of existing buildings in the open countryside should be encouraged. External works to any conversion should be largely cosmetic and have a minimal visual impact on the landscape in which it relates.
- Proposals should be positioned behind natural screening (i.e. trees and other planting) so as not to obstruct views of the surrounding landscape. Additional screening should be incorporated into any given proposal where necessary.
- Agricultural or commercial proposals should refrain from using materials and colours that contrast with the surrounding landscape. Muted and contextual colour palettes are encouraged so as not to disturb the local landscape character.

- Sustainable-led proposals such as renewable energy infrastructure should be considered on the grounds of its positive legacy.
 Small-scale renewable energy sources should be encouraged for providing power to rural developments. However, such infrastructure should be screened or integrated within developments in order to mitigate visual impact on the open countryside.
- Innovative and sustainable screening methods include green roofs and plant walls. Such screening will help outbuildings to blend into natural surroundings such as a domestic garden or open space.

- Any lighting or illumination of a development must consider its necessity, as well as its impact on surrounding properties, particularly where powerful lighting is being proposed. Any lighting infrastructure must balance its necessity with that of the power, scale and orientation being proposed. This it to avoid overly powerful lighting that can impose on the amenity of other plots, as well as mitigate undue light pollution in the open countryside.
- Proposals showcasing exceptional and innovative architectural styling (i.e. contemporary) should be considered where they can provide harmony with the character of the surrounding open countryside, as well as showcasing high-quality sustainable design.



Figure 83: Examples of what high-quality development in the open countryside can look like. Referencing agricultural heritage as well as contemporary design via high-quality materials, windows, and size and scale.



Design Code D: Tree planting and green infrastructure

4.5 Tree planting and green infrastructure

Ingham's historic core has an extensive green infrastructure network running between its two village greens and connected by wide grass verges and mature trees. This proud tradition of sustainable green infrastructure must continue across any new development.

New development can create and integrate new green infrastructure networks, which add to the aesthetic appeal of the neighbourhood area whilst also addressing sustainability concerns.

The following codes set out how to consider the retention, provision, amount, type and locations for trees and other planting as a critical part of new developments.



Figure 84: Mature trees across Ingham's village green.

D1 - Retain, replace, improve

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

Retain

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

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

Replace

Ensuring trees removed from development land are proportionately replaced is important to maintaining current levels of canopy cover and green infrastructure. A common misconception is that replacing on a 1-for-1 basis is proportional. This is not the case. 1-for-1 replacement can reduce canopy cover, green infrastructure habitat and public amenity.

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

Improve

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

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





F.85

Figure 85: Replacing trees on a 1-for-1 basis is not proportional because of the reduction in the canopy cover, habitat and public amenity.

D2 - Right tree, right place

The overall aim should be to plant trees and other soft landscaping. This must form part of each development regardless of size. How appropriate a tree is for any given urban location must also be determined based on space requirements.

This may simply be stated as:

- Small to medium trees for small spaces such as front gardens and narrower streets.
- Larger trees for avenues and more open environments such as parks, grass verges and landscaped areas.
- Other native or suitable planting to soften the appearance of plots and buildings.

The climate emergency is the biggest challenge for species selection as we don't yet know the extent of this. We can assume greater variance from the form with greater hot, dry summers and greater wet and windy winters. Weather extremes tend to push native trees to the limit of what they can cope with genetically. As such, we should also look at trees more suitable to northern and central Europe. A significant challenge is finding species that provide similar habitats for native birds, bats and insects.

- For now, native UK trees should be preferred or non-native trees where a specific reason exists.
- Native UK trees are preferred but non-native types could be incorporated which are suitable for the biodiversity of our native species. The climate emergency will change the environment over the next 50-100 years and we may need further qualities of resilience that our native trees cannot provide.

LARGER TREES





F.86

Figure 86: Infographic about tree positioning depending on size.





Design Code E: Sustainable design and climate resilience

4.6 Sustainable design and climate resilience

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.

Sustainable design incorporates innovative practices at all scales of design to achieve less impactful development footprints, whilst future proofing homes, settlements and natural environments.

Reducing the use of limited natural resources whilst increasing utilisation of local resources and sustainable natural resources can help to achieve this.



Figure 87: Solar panels atop modern buildings on Wessex Way.

E1 - Resilience to the climate emergency

All new development should work to moderate extremes of temperature, wind, humidity, local flooding and pollution within the neighbourhood area:

- Avoid siting homes in high risk flood areas and mitigate increased risk of storms/flooding with sustainable drainage systems. These reduce the amount and rate at which surface water reaches sewers and watercourses. Often, the most sustainable option is collecting water for reuse, for example in a water butt or a rainwater harvesting system. This reduces pressure on valuable water sources.
- Eco-systems cannot adapt as fast as the climate is changing leading to loss of biodiversity. Protecting and enhancing woodlands, watercourses and green infrastructure can combat this. Aim to increase ecology through biodiversity net-gain on major development sites. Use street trees and planting to moderate and improve micro-climate for streets and spaces.



F.88

Figure 88: Sustainable drainage systems as set out in the National Model Design Code.

E2 - Assessing alternative energy sources

Key considerations in the assessment of alternative energy sources for development may include (but are not limited to):

- Optimising solar orientation of streets and buildings. Aim to increase the number of buildings on site that are oriented within 30° of south (both main fenestration and roof plane) for solar gain, solar energy (solar panels) and natural daylighting.
- Ground conditions to accommodate loops for ground source heat and space for air source heat pump units.
- Links to local estates for sustainable coppicing, harvesting or recycling of biomass fules.
- Local wind speed and direction for micro-generation wind turbines.
- Collaborating with utilities, highway authorities, telecoms companies and other stakeholders when designing and delivering projects to minimise energy usage and disruption during the construction stage.





F.90

Annual heating demand (kWh/m2 -yr)

20-

15-

ð

S

F.91

NE

Figure 89: Carefully angled solar panels that harness every moment of sun.

SE

ö

F

Main window orientation

Figure 90: Building orientation influences the annual heating demand.

Figure 91: Key alternative natural energy sources.

E3 - Electric vehicle charging

Current transition to electric vehicle technology and ownership comes with related issues that must be addressed by new development. Two key areas are explored below - public parking areas and private parking for homes.

Design issues to address for public parking:

- Provision of adequate new charging points and spaces, and retrofitting existing parking areas.
- Serving remote or isolated car parks (e.g. in woodland areas).
- Retrofitting existing public parking and upkeeping design quality of streets and spaces (attractiveness and ease of servicing and maintenance).
- Integrating charging infrastructure sensitively within streets and spaces, for example, by aligning with green infrastructure and street furniture.
- Sensitive integration of charging infrastructure within conservation areas.

Design issues to address for parking at the home

- Convenient on-plot parking and charging points close to homes.
- Potential to incorporate charging points under cover within car ports and garages.
- Integrate car parking sensitively within the streetscene. For example, parking set behind the building line or front of plot spaces lined with native hedgerow planting.
- Consider visitor parking and charging needs.
- Existing unallocated and onstreet parking areas and feasibility to provide electric charging infrastructure not linked to the home.
- Potential for providing secure, serviced communal parking areas for higher density homes.





Figure 92: Public electric vehicle charging point. Figure 93: Home electric vehicle charging point.

E4 - Energy efficiency measures towards net-zero carbon

It is paramount that new development adopts a fabric first approach in line with the Government's emerging Future Homes Standard and Part L of the UK Building Regulations in order to attain higher standards of insulation and energy conservation.

- Reducing energy demand further by employing passive design principles for homes is desirable and can make some forms of development more acceptable to the community (window orientation, solar gain, solar shading, increased insulation, ventilation with heat-recovery).
- Maximise on-site renewable energy generation (solar, ground source, air source and wind driven).
- 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 to ease acceptance for development.





Figure 94: Air source heat pump unit.

Figure 95: Air source heat pump housing covers the unit and harmonises with the building aesthetic.

Figure 96: Cut-through diagram of an energy efficient home and its features.



- 1. Mechanical ventilation system.
- 2. Integral solar tiles.
- 3. Solar panels.
- 4. Green roof.
- 5. Electric vehicle charging point.
- 6. Efficient utilities and appliances.
- 7. Wall insulation.





5. Checklist

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

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.
- 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?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?

3 (continued)

Local green spaces, views and character

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

4

Gateway and access features

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

5

Buildings layout and grouping

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the villagescape?
- 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)

Buildings 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?

Building heights and roof-line

- What are the characteristics of the roof-line?
- 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?

Building materials & surface treatment

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- Does the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?

9 (continued)

Building materials & 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?

Car parking

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?
- Have the needs of wheelchair users been considered?
- Can electric vehicle charging points be provided?

- Can secure cycle storage be provided at an individual building level or through a central/ communal facility where appropriate?
- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels or a biodiverse roof in its design?

About AECOM

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

4

Printed on recycled paper. ©2023 AECOM. All Rights Reserved.