

# WIEXHAM

Design guidance and codes

**Final Report** 

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#### **Quality information**

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### **1. Introduction**

### **1.1 PURPOSE**

This design guide supports the design policies of the Neighbourhood Plan. It contains contextual information and guidance and codes, which demonstrate how development may reflect the design policies of the Neighbourhood Plan.

The guidance and codes should be considered when designing development alongside other national and local policies and guidance.

### 1.2 PROCESS TO PREPARE THIS DESIGN GUIDE

The Wexham Neighbourhood Plan Steering Committee (**WNPSC**) are preparing the Neighbourhood Plan for Wexham.

Through the Ministry for Housing, Communities and Local Governmrnt (MHCLG) Neighbourhood Planning Programme led by Locality, AECOM was commissioned to provide design guidance to support the WNPSC.

To ensure this design guide accurately reflects Wexham's community aspirations, the WNPSC provided AECOM with guidance and local knowledge. **Figure 1** provides a brief overview of the key milestones for the design guides. preparation.



### 1.3 AREA OF STUDY

Wexham is a group of 3 main settlements (George Green, Middle Green and Wexham Street) and civil parish on the edge of Slough and straddles the ceremonial counties of Berkshire and Buckinghamshire. Other nearby towns include Maidenhead, Gerrards Cross, Beaconsfield, High Wycombe and Windsor, making Wexham a very attractive place to live.

Wexham's history can be traced to the Saxon era, with its name likely derived from "Waec's homestead," indicating early settlement. In the post medieval era the area saw the construction of notable buildings such as St. Mary's Church, which dates back to the 12th century and is a significant historical and architectural landmark in the village. In the modern era, Wexham has experienced suburban growth, largely due to its proximity to Slough.

Today, Wexham is a blend of historical heritage and modern suburban life. It benefits from its proximity to Slough's amenities while offering a quieter, more rural environment. The village's history is still evident in its landscape, architecture, and community structures.

The M4, M40 and M25 are the nearby major roads providing connections to London, Reading and other parts of the UK. Slough railway station, which is just a 10 minute drive from Wexham, provides services to Reading, Didcot, Windsor, Maidenhead and London through both the Elizabeth Line and Great Western Railway. This makes the parish a strategic place to live for commuters. Finally, Heathrow, the UK's largest and busiest airport, is just a half an hour drive from Wexham.

There are a range of amenities within the parish. These include: The Harvey Memorial Hall, Harvey Hall Playground, Langley Hall Primary School, Black Park Country Park, Teikyo School, Sikh Heritage Girls School, St Mary's Church and church hall, Go Ape Black Park and Wexham Golf Course.





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Figure 1: Area of Study map.

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# 1.4 How to use this design guide

This design guide will be a valuable tool in securing locally distinctive, high quality development in Wexham. It may be used differently by various stakeholders in the planning and development process, as summarised in **Table 1**.

A valuable way the design guide can be used is as part of a process of co-design and involvement that seeks to understand and take account of local preferences and expectation for design quality. As such, the design guidelines and codes (refer to **Section 3**) can help to facilitate conversations on the various topics to align expectation and aid understanding on key local issues. The design guide is an evidence based document informing the Neighbourhood Plan and providing further detail for the policies contained therein. The design guidance in this document is a formal part of the Wexham Neighbourhood Plan.

Stakeholders	How they may use this design guide
Applicants, developers and 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 Guidance and Codes as planning consent is sought.
Local Planning Authority	As a guide when assessing whether the design of planning applications reflect Neighbourhood Plan policies. The Design Guidance and Codes should be discussed with applicants during any pre-application engagement.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines and Codes are complied with.
Local Community	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.

### 1.5 PLANNING POLICY AND GUIDANCE

This section outlines the national and local planning policy and guidance documents that have informed, and should be read in conjunction with, this design guide.

### 1.5.1 National Policy and Guidance

#### 2023 - National Planning Policy Framework

Development should comply with national level planning policy guidance as set out in the National Planning Policy Framework 2023 (NPPF) and the associated Planning Practice Guidance (PPG). In particular, the NPPF Chapter 12: Achieving well-designed and beautiful places stresses the creation of highquality 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

The National Model Design Code 2021 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

Building for a Healthy Life (BHL) is the Government-endorsed industry standard for well-designed homes and neighbourhoods. 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.

BHL is supported by Streets for a Healthy Life, which demonstrates what can be achieved in creating streets as places for people.

### 2007 - Manual for Streets

Development is expected to respond positively to the Manual for Streets 2007 and subsequent updates, the Government's guidance on how to design, construct, adopt and maintain new and existing residential streets.

### 1.5.2 Buckingham Council Policy and Guidance

Wexham Parish lies within Buckinghamshire Council which was formed in 2020 and the new local planning authority has started the process of creating a new Local Plan for the area. The Chiltern and South Bucks Local Plan 2036 was withdrawn on 21st October 2020. Since then, four district councils have merged creating the new Buckinghamshire Council. Whilst the new Local Plan for Buckinghamshire is still in development, the South Buckinghamshire Local Plan and Core Strategy still applies.

### Neighbourhood Area context



### 2. NEIGHBOURHOOD AREA CONTEXT

This section presents a snapshot of the Neighbourhood Area today to inform the design objectives of the design guidance and codes. It provides an overview of Wexham's heritage, landscape, movement network and built form.

### 2.1 GREEN AND BLUE INFRASTRUCTURE

Wexham Parish features a mix of green and blue infrastructure that contributes to its ecological health, recreational opportunities, and overall quality of life for residents.

Much of the landscape throughout the parish is agricultural land which both supports local farming as well as maintaining the rural feel of the area. Wexham Woods including Black and Langley Country Parks , hedgerows and tree lines also help generate the rural character as well as providing ecological benefits. A good amount of this woodland is characterised as ancient woodland, further highlighting the historic rural identity of the area.

Scattered throughout the parish there are public gardens and playgrounds which offer spaces for children to play and for community gatherings. The most notable public open spaces are Langley Park and Black Park Country Parks which covers over 500 acres of woodland, heathland and open space. Black Park has a rich filming history and is often used as a location for both big and small productions including Harry Potter and James Bond. It also has a Go Ape which is well used. Wexham also has an area of an Alder Carr Site of Special Scientific Interest (SSSI) and a local nature reserve. There is also a range of faunan in the parish including eighteen species of butterfly including the Purple Hairstreak, Silver-washed Fritillary, White Admiral, and Purple Emperor, birds including hobbies and nightjars, and snakes, such as adders, slow-worm and grass snakes and lizards, badgers, roe and muntjac deer, fox and various bats.

There are minor waterways in and around Wexham contribute to the parish's blue infrastructure, supporting local biodiversity and helping with flood management. The Grand Union Canal and towpath are within the parish at the southern boundary. There are several ponds and other small water bodies which provide habitats for amphibians and insects such as Starfruit Damasonium alisma, a critically endangered aquatic plant, the great crested newts, dragon flies as well as pike, perch, carp, roach, rudd, bream, and tench. The lakes and ponds also add a great deal of natural beauty to the area and make it somewhere where people like to visit.

As well as these designations a lot of the land within the parish is wholly within the Green Belt which is designed to prevent local towns such as Slough and London from sprawling into the valuable countryside.



### 2.2 MOVEMENT NETWORK

The A412 is the primary route which cuts through the middle of the parish and connects the area with Slough and Uxbridge. The secondary routes that join up the settlement areas within the parish such as Black Park Road, Rowley Lane and Wexham Park Lane are characterised by overhanging trees and heavy vegetation which creates a rural sense of enclosure to the streetscape. The settlements themselves are typically populated by small cul-de-sacs which are by nature quiet roads making for a tranquil residential feel.

The area is also served by several bus services which connect the community with places such as Slough, Uxbridge and Langley. As well as this Slough Railway Station is just a 10 minute drive from George Green and not much further for the rest of the parish. In addition The Orchards (210 homes) is only 5 minutes away from Langley Railway Station.

There is an extensive public rights of way network within the parish connecting the various settlements to each other as well as the surrounding countryside. There are also shared cycle paths in the south of the parish where Wexham meets Slough. This encourages active transport in the neighbourhood area. Having said that, crossing the A412 is a barrier to all movement within the parish and therefore the enhancement of local movement routes between the country parks and other areas on either sides of the A412 will be hugely beneficial to the movement network within the parish.



Figure 3: A412 junction at George Green.



*Figure 4*: Example of the winding rural lanes which are typical of the parish.



### 2.3 HERITAGE

Wexham is an area which is rich in history. The Domesday Book of 1086, which recorded the great survey of England, mentions Wexham, highlighting its existence and significance during the Norman period. The growth of nearby Slough transformed Wexham from an agricultural village characterised by open fields to a much more residential settlement, however it has still retained its historic charm.

This historic character is supported by the 35 listed buildings which are designated within the parish. Most of these are Grade II listed however there are two that are Grade II\*, namely the Parish Church of St Mary and Langley Park including quadrant walls, corner towers, pavilions, and orangery. As well as this Langley Park is designated as a Grade II Park and Garden. There are a small number of non-designated heritage assets in the parish, which are not nationally significant enough to be listed, but which contribute to local history and architecture.



Figure 6: St Mary's Church Wexham.



*Figure 7*: The village hall and old school, both of which are Grade II listed.



### Design Guidance and Codes



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### **3. DESIGN GUIDANCE AND CODES**

This section sets out the design guidance and codes that should be used to improve the design quality of development coming forwards in the Neigbourhood Area. This design guide supplements the Neighbourhood Plan, local and national planning policy and guidance on design.

Development in the Neighbourhood Area should demonstrate how best practice design guidance contained in national and local policy and guidance documents, including this design guide, has been considered in the layout, architectural and landscape design.

### **3.1 INTRODUCTION**

This section identifies design guidance and codes for development in the Neighbourhood Area to have regard to. They are organised under the four design objectives for the Neighbourhood Area.

- LA: Local Architecture
- RV: Rural Village
- LD: Landscape Design
- SU: Sustainable Design

The design guidance and codes apply to the whole Neighbourhood Area. In some instances, guidance and codes may be more relevant to certain parts of the parish.

Due to the unknown nature of future development the following codes have been written so that they can apply to both large scale development and smaller scale infill developments.

### **3.1.2.1 WHEN TO USE THE CODES**

The table overleaf identifies when guidance and codes for each theme should be considered by those promoting development. A prefix has been created for each theme to allow simple application and referencing of the design guidance and

Code	Prefix	When to use the code
Built Form (BF)	BF1	<b>Building height, scale and roofscape.</b> Code to be applied when determining the height and roofscape of development in the Neighbourhood Area.
	BF2	<b>Fenestration and architectural details.</b> Code to be applied when determining the fenestration and architectural details of development in the Neighbourhood Area.
	BF3	<b>Architectural materials and colour palette.</b> Code to be applied when determining the architectural materials and colour palette of development in the Neighbourhood Area.
	BF4	<b>Building modifications, extensions, and plot infills.</b> Code to be applied when determining the building of infills, modifications and extensions in the Neighbourhood Area.
Rural Village (RV)	RV1	<b>Village streets.</b> Code to be applied to development that proposes new streets in the Neighbourhood Area.
	RV2	<b>Plot and building layout.</b> Code to be applied to development that proposes new plots, new buildings or extensions in the Neighbourhood Area.
Landscape Design (LD)	LD1	<b>Landscaping.</b> Code to be applied to development in the Neighbourhood Area to ensure locally distinctive and wildlife friendly landscape design.
	LD2	<b>Boundary treatments.</b> Code to be applied to development in the Neighbourhood Area to ensure locally distinctive boundary treatments.
	LD3	<b>Country Parks.</b> Code to be applied to development in the Neighbourhood Area to ensure that the Country Parks and the character that they impose onto the parish is retained.
Sustainability (SU04)	SU1	<b>Building fabric thermal mass</b> . Code to be applied when determining the thermal mass of development in the Neighbourhood Area.
	SU2	<b>Insulation.</b> Code to be applied when determining the insulation of development in the Neighbourhood Area.
	SU3	<b>Airtightness.</b> Code to be applied to ensure airtightness of development in the Neighbourhood Area.
	SU4	<b>Permeable pavement.</b> Code to be applied to ensure permeable pavement for development in the Neighbourhood Area.
	SU5	<b>EV Parking.</b> Code to be applied to encourage electric vehicle parking in the Neighbourhood Area.

### LA. LOCAL ARCHITECTURE AND SCALE

Development, whether traditional or contemporary, should integrate well with Wexham's historical architectural character and replicate the scale of the existing development in the three settlements. All designs should be high-quality and sustainable.

Development proposals should provide specification on the architectural design, including materials, fenestration and detailing. Proposals should also demonstrate how the character of the local context, as defined by this design guide, has been considered.



Figure 9: Whitby Farms farmhouse.

### LA.1 BUILDING HEIGHT, SCALE AND ROOFSCAPE

Creating variety and interest in the roofscape is an important element in the design of attractive buildings and places.

Rooflines in Wexham are varied, with maximum two storeys and a mix of gable and hipped roofs. There are some examples of consistant roofline particularly in the 1970s and later estates in the centre of George Green.

Roof materials and detailing features are also varied, and include stone tiles, clay and concrete pantiles. Chimneys create a consistent feature of the skyline, but they are simple in form.

The varied building height and roof elements make an important contribution to defining the character of the Neighbourhood Area. Guiding principles for development to consider in order to achieve a welldesigned roofscape include:

- 01. Ensure the height of development responds to the surrounding buildings, street width and sense of enclosure, topography and mature vegetation;
- 02. The heights of buildings should follow the existing heights, be a maximum of 3 storeys tall, and be lower than the mature tall trees;
- 03. Ensure the roof design integrates with the surrounding development or creates a new roofscape;
- 04. Design the scale and pitch of the roof to be in proportion with the dimensions

of the building.

- 05. Deliver a locally distinctive roof design by including:
  - 05.01. Variety in form along the street, including hipped and front facing gable roofs, and dormers;
  - 05.02. Simple chimneys and decorative features for visual interest;
  - 05.03. Subtle changes in rooflines, avoiding stark transitions; and

05.04. Use locally distinctive roof materials.



*Figure 10*: Consistant roofline in George Green.



*Figure 11*: More varied roofline on Wexham Road with tall chimneys.

### LA.2 FENESTRATION AND ARCHITECTURAL DETAILS

There are a range of architectural features and detailing in the Neighbourhood Area. For example, sash and casements windows, hung tiles, porches and dormer windows.

The intricacies of the architectural features and detailing in the Neighbourhood Area are locally distinctive. They provide visual interest and mitigate the scale and bulk of buildings. The use of architectural features and detailing is of particular importance given the discrete architectural material palette that is distinctive of the Neighbourhood Area.

Guiding principles for development to consider to achieve locally distinctive design include:

- 01. Locally distinctive fenestration and detailing in the design of new development, drawing on examples of listed buildings within the Neighbourhood Area. However, avoid mixing historic styles;
- 02. Development involving multiple houses should ensure a variety of detailing is utilised across the development to provide visual interest along the street and avoid homogeneous building designs; and
- 03. Detailing on roofs and facades to minimise the bulk and scale of buildings, for example ornate brickwork around fenestration and across walls.



*Figure 12*: Dormers, hung tiles and built out porches in George Green.



*Figure 13*: 1970s style house with shutters to add interest to the windows.



Figure 14: Timber mixed with red brick.



Figure 17: Hung tiles on a detached house.



Figure 15: Large windows overlooking.



*Figure 16*: Terraced houses with bay windows.



Figure 18: White painted render houses.

### LA.3 ARCHITECTURAL MATERIALS AND COLOUR PALETTE

There are a range of materials used within the Neighbourhood Area. However, the historical palette is fairly restrained, with strong roots in the typical Buckinghamshire architectural vernacular.

Common wall materials in the Neighbourhood Area are red and buff brick, white, light grey and creamy-white render, some of which have exposed timber frames. Some hung tiles, usually brown, is also notable in the parish, particularly in development from the 70s and 80s.

Fenestration is generally timber painted white. However, there are examples of black and brown accents.

The discrete material palette, alongside locally distinctive landscape designs that employ hedgerows and open countryside, is locally distinctive.

Guiding principles for development to respond to the local character include:

- 01. Demonstrate that the material palette reflects the local character of the Neighbourhood Area.
- 02. Use building materials and colours that work well with the colour tones of the surrounding countryside.
- 03. The use of English or Flemish bond in the bricklaying should be encouraged as this is in keeping with many of the traditional buildings in Wexham.



Figure 19: Manor House, Middle Green.



Figure 20: Arched windows on the old school.



*Figure 21*: Yellow brick building with sharply pitched roof with detailing and a tall chimney stack.





**Stonework and Wall Materials** 



### LA.4 BUILDING MODIFICATIONS, EXTENSIONS, AND PLOT INFILLS

There are a number of principles that residential extensions and conversions should follow to maintain character:

- 01. Certain additions and/or alterations can be carried out without needing to obtain formal planning permission. They benefit from deemed consent, more commonly known as permitted development.
- 02. The original building should remain the dominant element of the property regardless of the scale or number of

extensions. The newly built extension should not overwhelm the building from any given viewpoint;

- 03. Extensions should not result in a significant loss to the private amenity area of the dwelling or neighbouring dwellings;
- 04. Designs that wrap around the existing building and involve overly complicated roof forms should be avoided;
- 05. The pitch and form of the roof used on the building adds to its character and extensions should respond to this where appropriate.



Figure 22: Some examples for different type of building extensions.

- 06. Extensions should consider the materials, architectural features, window sizes and proportions of the existing building and respect these elements to design an extension that matches and complements the existing building;
- 07. In the 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 join between existing and new;
- 08. In the case of rear extensions, the new part should not have a harmful effect on neighbouring properties in terms of overshadowing, overlooking or privacy issues;
- 09. Any housing conversions should respect and preserve the building's original form and character;
- Where possible, reuse as much of the original materials as possible, or alternatively, use like-for-like materials. Any new materials should be sustainable and be used on less prominent building parts;
- 11. Any new infill development should ensure that the spacing requirements set out within this code are met and that the density, scale and appearance of the development reflects its immediate context and reduces impacts to the amenity of existing properties;

### Conversion of comercial/agricultural types to residential

- 12. 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;
- 13. In the case of commercial buildings being converted into residential uses, adequate window provision should be provided to allow for natural light and natural surveillance onto the street;
- 14. 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;
- 15. Where possible, commercial to residential developments should take influence from best practice development throughout the parish.

### **RV. RURAL VILLAGE**

The layout of new development should maintain the rural character of George Green, Wexham Street, Middle Green and the other dispersed settlements.

Connection and access to the rural landscape, particularly the country park, open countryside and the Public Rights of Ways, are an important and highly valued part of the Wexham setting and lifestyle.



*Figure 23*: Example of one of the public footpaths in Black Park Country Park.

### **RV.1 VILLAGE STREETS**

Safe, attractive and integrated movement networks are based on streets that are permeable, legible, accessible and comfortable. Development should deliver a street network that demonstrates best practice design principles in addition to considering how to enhance Wexham's rural lifestyle.

The A412 is the primary road through the centre of the parish and acts as a barrier between those living on either side of it.

Streets and lanes within the settlements vary from more informal layout with open drains and swales, and tarmac surface treatments. Overhanging trees and other forms of vegetation often create a rural sense of enclosure such as on Black Park Road.

The following principles should be considered by development to ensure streets are locally distinctive:

01. Ensure streets are laid out to encourage connectivity, including direct access to key destinations such as the village hall, Country Parks, school or recreation ground. Designers should collaborate with adjacent landowners and provide connections to existing and future development areas, particularly via walking and cycling routes;

- 02. Encourage public access to community facilities, green space and the countryside by ensuring publicly accessible streets are adjacent, and provide direct access and views, to these places;
- 03. Design streets to have the appearance of a rural village by incorporating:
  - 03.01. Gently, curving network of streets rather than rigid layouts;
  - 03.02. Narrow geometric street layouts that encourage active frontages, slow traffic and avoid large impervious areas;
  - 03.03. Minimal street furniture and road markings. The limited use of timber bollards and wayfinding signs that are already present in the Neighbourhood Area may be appropriate;
- 04. Landscaping along streets in the Neighbourhood Area, particularly with woodland, hedges and hedgerows, is a defining characteristic particularly in George Green and Middle Green.
- 05. Any new development where possible should look to provide amenity space for local people to congregate at.
- 06. Pavements should be wide enough to safely allow people to travel alongside the street while talking to one another.



Figure 24: Example of the street scene in one of the estates in George Green.



*Figure 25*: Grass verges, trees and hedgerows help create a leafy feel to the streetscape in the parish.

### **RV.2 PLOT AND BUILDING LAYOUT**

Part of the parish's unique charm is the varied plot size, deep front gardens and building types, creating a diverse street scene. Wexham parish presents quite distinct and varied settlement characters. The George Green has sections of continuous, active frontages with narrow plot widths and enclosed layout. Wexham Road encompasses large front gardens with buildings set back and deep back gardens. It is an area with a much more linear feel to the streetscape. The density is lower in this area with the majority of houses being detached while there are a mix of semi-detached and terraced housing within the George Green estates.

Middle Green is more rural and dispersed, where buildings behind hedgerows, hedges and trees blend in with the surrounding landscape. Open countrysides separate areas of development, which dilutes the density of the Neighbourhood Area. Views to these open spaces and landscape features make an important contribution to the sense of place.

The following principles should be considered by development to ensure the layout of plots and buildings are locally distinctive:

- 01. Layout plots and buildings to reinforce the small scale, historic character that provides the village feel of the settlements in Wexham parish;
- 02. Vary plot widths to allow for a mix of housing types along the street, which encourages a diverse community and

creates visual interest;

- 03. Orientate buildings generally parallel to and overlooking the street and/or public space;
- 04. Establish a consistent building line, with subtle variations for visual interest. Infill development should be consistent with the existing prevailing building line of the street;
- 05. Maintain gaps between buildings for areas of landscaping and views to the rural landscape. These important green spaces maintain the balance between the rural areas and village;
- 06. Plot and building layouts should provide deep front and back gardens. Front gardens should be of a depth that can support mature, large hedgerows while maintaining the solar access and visual aspect of the dwellings;
- 07. Plot and building layouts should allow for large spacious gardens that feature mature landscaping to filter buildings and car parking;
- 08. New development should be contemporary and sympathetic to the character of the village in terms of scale, density, form, siting and proportion;
- 09. New development should incorporate open views from and to the countryside and local landmarks;
- 10. Soft edges should be incorporated at the interface with the countryside;
- 11. Front gardens should include tall trees, hedgerows and boundary treatment.

### LD LANDSCAPE DESIGN

Wexham's landscape setting is formed by open countryside, mature trees, hedges and hedgerows, which provide a sense of enclosure and a rural character to the Neighbourhood Area.

The relationship between the village and the countryside is of a great value for the community and it is based on the following main aspects:

- The connectivity from the settlements to the country parks is important for the communities to make the most of the rich landscape features within the parish.
- The landscape setting of Wexham gives it a rural feel desipite its close proximity to Slough. Wexham is surrounded by the open countryside and the majority of it sits in the Green Belt.
- The presence of tall mature trees, hedgerows and planting within the built environment of the village.
- The landscape setting has an important visual relationship with the built environment and helps the transition from the village to the countryside.

### LD.1 LANDSCAPING

Landscaping should be considered at the outset of development to ensure planting areas and species achieve good development outcomes.

The following principles are recommended for the landscape design of development:

- 01. Provide landscape areas of a sufficient size to support the establishment and growth of healthy vegetation. Avoid an over reliance on planting strips;
- 02. Utilise landscaping to mitigate impacts of development (i.e. visual, noise, urban heat island) on adjacent areas;
- 03. Encourage planting of new large trees and hedgerows in new development to contribute to the richness of the rural village;
- 04. Preserve existing vegetation (i.e. mature tall trees, hedges and hedgerows) as part of the landscape design to reinforce Wexham's rural landscape character. If any trees are removed they should be replaced within new development;
- 05. Incorporate wildlife friendly features that support movement and habitat, particularly for hedgehogs. For example, holes in fencings/walls, gaps beneath gates, temporary houses and native planting;
- 06. Limit night pollution and protect night darkness, especially at the fringes of

the built up area as well as within the Green Belt to protect wildlife;

- 07. Consider how the development layout can create wildlife corridors. For example, the layout of roads, ditches, front and back gardens, and green spaces;
- 08. Enhance road verges within residential areas by planting large tree species and hedgerows;
- 09. Encourage the use of trees, hedgerows and rural shrubs to frame a soft transition between the built environment and the open countryside;
- Consider climate change and promote use of local species to ensure that new trees are selected to be resilient in a long term;
- Protect and enhance the existing views from within the village to the open countryside;
- 12. New development should retain existing boundary ditches, hedgerows and trees and include a buffer area around the existing development to ensure the countryside feeling is maintained.

**Figure 27**: Diagram demonstrating how connected front and back gardens can enhance ecological connectivity for wildlife. Accompanying layout considerations with wildlife friendly features supports wildlife movement and habitat.



*Figure 26*: Image displaying the rural streetscape in George Green.



### LD.2 BOUNDARY TREATMENTS

Hedgerow boundary treatments are a significant feature in Wexham parish. Mature hedgerows provide spatial enclosure and screening as well as enhance privacy. They vary from tall to medium heights. The rural landscapes of the Neighbourhood Area incorporate hedgerows alongside the front gardens of some of the property as well as large mature trees where the front gardens are wide enough to incorporate them.

The following principles are recommended for the boundary treatment of development:

- 01. Boundary treatments should primarily consist of hedgerows. Some brick low walls, timber and metal fences with hedges as boundary treatments may be acceptable if they align with the prevailing character of the street;
- 02. Landscaping of front and back gardens should be in accordance with the surrounding existing development.



Figure 28: Brick wall boundary treatment.



Figure 29: Hedgerow boundary treatment.

### LD.3 COUNTRY PARKS

A key part of the character of the parish and the landscape that it sits within is the Black Park Country Park and Langley Country Park which are both located in the east of the Neighbourhood Area.

It is important that development within the parish considers the following guidance:

- 01. Pedestrian and cycle connections between the country parks and the 3 settlements should be protected and enhanced;
- 02. Much of the parish is woodland, grassland, streams, commonland and parkland. It appears even more heavily wooded because of the number of small copses, hedges, hedgerow and field trees and trees in gardens and villages. Any future development should preserve this characteristic;

- 03. New trees should be integrated into the design of new developments from the outset, especially within back gardens to help even 'leafy' suburban housing estates to mellow and blend into the wooded landscape;
- 04. Existing mature trees should be preserved as they contribute hugely to the character of the parish. Ancient woodland and tree protection orders within the parish support this;



Figure 30: Black Park Lake.



Figure 31: Langley Park Country Park.

### SU SUSTAINABILITY

The following section elaborates on energy efficient technologies that could be incorporated in buildings. Use of such principles and design tools should be encouraged in order to contribute towards a more sustainable environment.

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

### SU.1 BUILDING FABRIC THERMAL MASS

Thermal mass describes the ability of a material to absorb, store and release heat energy. Thermal mass can be used to even out variations in internal and external



*Figure 32*: Diagram showing low-carbon homes in both existing and new build conditions.

conditions, absorbing heat as temperatures rise and releasing it as they fall. Thermal mass can be used to store high thermal loads by absorbing heat introduced by external conditions, such as solar radiation, or by internal sources such as appliances and lighting, to be released when conditions are cooler. This can be beneficial both during the summer and the winter.

Thermal storage in construction elements can be provided, such as a trombe wall placed in front of a south facing window or concrete floor slabs that will absorb solar radiation and then slowly re-release it into the enclosed space. Mass can be combined with suitable ventilation strategies.

#### **Existing homes**

#### Existing and new build homes



### **SU.2 INSULATION**

Thermal insulation can be provided for any wall or roof on the exterior of a building to prevent heat loss. Particular attention should be paid to heat bridges around corners and openings at the design stage.

Provide acoustic insulation to prevent the transmission of sound between active (i.e. living room) and passive spaces (i.e. bedroom). Provide insulation and electrical insulation to prevent the passage of fire between spaces or components and to contain and separate electrical conductors.

### **SU.3 AIRTIGHTNESS**

Airtight constructions help reduce heat loss, improving comfort and protecting the building fabric. Airtightness is achieved by sealing a building to reduce infiltrationwhich is sometimes called uncontrolled ventilation. Simplicity is key for airtight design. The fewer junctions the simpler and more efficient the airtightness design will be.

An airtight layer should be formed in the floor, walls and roof. Doors, windows and roof lights to the adjacent walls or roof should be sealed. Interfaces between walls and floor and between walls and roof, including around the perimeter of any intermediate floor should be linked. Water pipes and soil pipes, ventilation ducts, incoming water, gas, oil, electricity, data and district heating, chimneys and flues, including air supplies to wood burning stoves, connections to external services, such as entry phones, outside lights, external taps and sockets, security cameras and satellite dishes should be considered.

The diagram below illustrates some of these key considerations.



Figure 33: Diagram illustrating aspects of the building fabric to be considered.

### SU.4 PERMEABLE PAVEMENTS

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

Permeable paving can be used where appropriate on footpaths, public squares, private access roads, driveways, and private areas within the individual development boundaries.

It is recommended that the majority of the unbuilt areas in the plot (i.e. gardens) are permeable by means of landscape such as grass or earth as well as permeable and filtrating pavements. As a rule of thumb the % permeable area should be between 30% to 70% of the unbuilt areas.

In addition, permeable pavement must also comply with:

- i. Flood and Water Management Act 2010, Schedule 3;
- ii. The Building Regulations Part H Drainage and Waste Disposal;
- iii. Town and Country Planning (General Permitted Development) (England) Order 2015;

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

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

### SU.4 PERMEABLE PAVEMENTS

Wexham Parish strongly supports proposals for in private transport using electrically and other non fossil fuel powered vehicles. Those can be integrated both on and off street. Some design guidelines on how new development should design for electric vehicle charging points are:

#### On-street car parking or parking courts

- 01. Car charging points should always be provided adjacent public open spaces. Street trees and vegetation is also supported to minimise any visual contact with the charging points;
- 02. Where charging points are located on the footpath, a clear footway width of 1.5m is required next to the charging point to avoid obstructing pedestrian flow; and
- 03. Car charging points within parking courts are highly supported, since they can serve more than one vehicles.

### Off-street car parking

- 04. Mounted charging points and associated services should be integrated into the design of new developments, if possible with each house that provides off-street parking; and
- 05. Cluttering elevations, especially main façades and front elevations, should be avoided.



*Figure 34*: Example of on-street electric vehicle charging points.



*Figure 35*: Example of electric vehicle charging points in a parking court.



*Figure 36*: *Example of off-street electric* vehicle charging points.

### **4. CHECKLIST**

As the design Guidelines and Codes in this section cannot cover all development scenarios, this concluding section provides a number of questions based on established good practice against which the design proposal should be evaluated.

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

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

# 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;
- 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;
- Positively integrate energy efficient technologies;
- Positively integrate green infrastructure in accordance with national design guidance to positively contribute to liveability, biodiversity and climate change resilience;
- 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 & 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?

# 3

### Local green spaces, views & character:

- 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?
- Have opportunities for enhancing existing amenity spaces been explored?

### Local green spaces, views & character:

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

# 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 & 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?
- 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?

### **5. GLOSSARY**

**Building line:** The line formed by the frontages of buildings along a street.

Built form: Buildings and structures.

**Enclosure:** The use of buildings and structures to create a sense of defined space.

**Gateway:** The design of a building, site or landscape to symbolise an entrance or arrival to a specific location.

Land Cover: The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.

Land Use: What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry.

**Landscape**: An area, as perceived by people, the character of which is the result of the action and interaction of natural and/ or human factors.

Landscape Character: A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

**Listed Building:** A listed building is one that has been placed on the Statutory List of Buildings of Special Architectural or Historic Interest. There are three categories of listed buildings in the United Kingdom:

Grade I buildings, which are of exceptional interest and make up 2.5% of all listed buildings in the United Kingdom.

Grade II\* buildings, which are particularly important buildings of more than special interest and make up 5.5% of all listed buildings in the United Kingdom.

Grade II buildings, which are of special interest and make up 92% of all listed buildings in the United Kingdom.

**Rural:** Relating to, or characteristic of the countryside rather than the town.

**Setting:** The context or environment in which something sits.

**SuDS:** Sustainable urban drainage. Used to slowdown the passage of water and often improve water quality.

**Vernacular:** The way in which ordinary buildings were built in a particular place, making use of local styles, techniques and materials and responding to local economic and social conditions.

**Views:** Views that can be seen from an observation point to an object (s) particularly a landscape or building.

**Permeability:** The permeable and interconnected street network provides people with a choice of different routes allowing traffic to be distributed more evenly across the network. A permeable layout generates a higher level of pedestrian activity, which makes social interactions more likely, and increases the level of security.

**Legibility:** legible and well signposted places are easier for the public to understand, therefore likely to both function well and be pleasant to live in or visit. It is easier for people to orient themselves when the routes are direct with visual landmarks.

#### About AECOM

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