locality



# Willington

Design Guide and Codes

Final report February, 2023

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## **1. Introduction**

The purpose of this report is to inform the discussion on village form and setting, based on a review of historic developments and constraints to growth, providing an analysis of the resultant built form and prevailing design elements and hence, the development of design codes which will assist the community in ensuring that any new development is in tune with both settlement form and design.

## 1.1 Background

The Willington Neighbourhood Plan steering group have been allocated AECOM's support by Locality to establish an area wide design guidance document including design codes to influence the character and design of new development within the neighbourhood area.

As part of Local Plan 1 and 2, South Derbyshire District Council (SDDC) have allocated a plot off Kingfisher Lane for 50 houses to meet SDDC housing allocation, identified in policy 23I.

This design guide covers the whole plan area. The design codes are also specific to allocated or windfall sites. The guidance and codes are underpinned by a baseline assessment for the character across the neighbourhood area.

The analysis also addresses development constraints in relation to the Trent and Mersey Conservation Area, issues relating to flooding and the concentration of listed buildings within the village.

The design guidance should help unlock the development potential of the area by ensuring high quality, contextually responsive development on allocated and windfall sites.



## 1.2 Aims and objectives

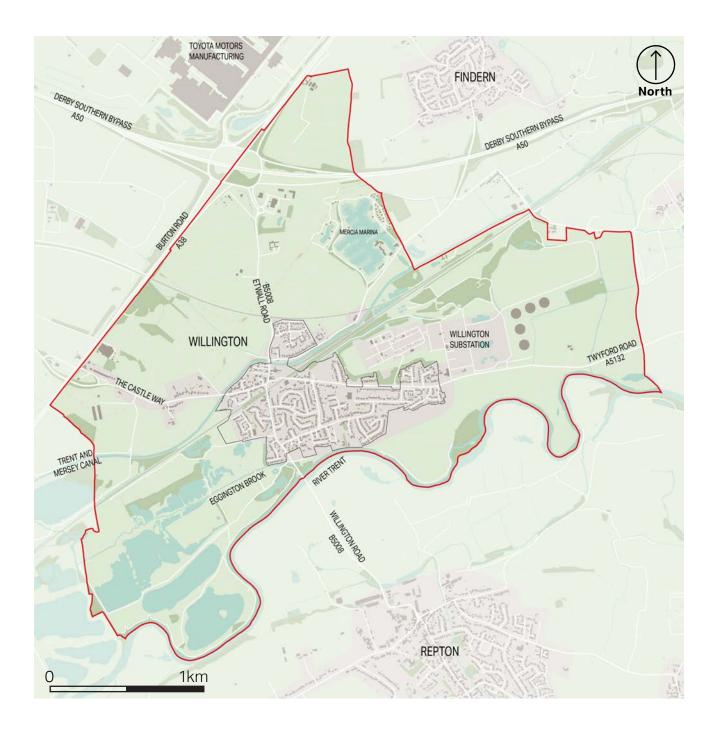
- Ensure that future development is of a high-quality, enhances the overall character of the area and conforms with the rural identity of the village;
- Identification and protection of key views to and from the village;
- Protect and enhance the wider landscape setting;
- Characterisation work is required across the whole neighbourhood area also to support and protect the green gaps between settlement areas;
- Highlight the importance of the Trent and Mersey Canal which is a conservation area, movement route, green-blue link, heritage and leisure asset and important to the identity of Willington;
- Enhance the village and marina as a tourism asset; and
- Conclude with design codes for new housing development coming forward on existing site allocations/ windfall sites.

## 1.3 Area of study

Willington is a village and civil parish in South Derbyshire. It lies on the northern banks of the river Trent, approximately 6 miles south-west of Derby and 5 miles north-east of Burton-on-Trent. The neighbourhood area is approximately 7km2.

Willington is designated as a Key Service Village. A site (land off Kingfisher Way) has been identified in the South Derbyshire Local Plan, Part II, Policy 23I as a suitable site to deliver the 50 new homes.

Much of the area is in Flood Zone 3 (high flood risk) as it lies just north of the River Trent and its large floodplain. Willington Power Station, a former coal fired power station, is located to the east of the village and is now derelict. There is a high possibility that there are contamination and remediation issues relating to its former use.



KEY

Neighbourhood Area

Settlement Boundary

Figure 02: Context Plan

## 1.4 Who will use the guide?

This Design Code should be a valuable tool in securing context driven, high quality development in Willington. It will be used in different ways by different people in the planning and development process, as summarised in the table below.

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

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



Figure 03: Willington Bridge

Potential users	How they will use the design guidelines
Applicants, developers, & landowners	As a guide to community and Local Planning Authority expectations on design, allowing a degree of certainty – they will be expected to follow the Guidelines as planning consent is sought.
Local planning authority	As a reference point, embedded in policy, against which to assess planning applications. The Design Guidelines should be discussed with applicants during any pre- application discussions.
Parish council or neighbourhood plan group	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.
Community groups & 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: User groups and how they will use the guidance

## 1.5 Planning policy and guidance

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

#### 1.5.1 National Planning Policy

#### **National Planning Policy Framework**

The National Planning Policy Framework (NPPF) was first published on 27 March 2012 and updated on 24 July 2018, 19 February 2019 and 20 July 2021. It sets out the government's planning policies for England and how these are expected to be applied. The NPPF outlines the Government's overarching economic, environmental and social planning policies for England. These policies apply to the preparation of local and neighbourhood plans, and act as a framework against which decisions are made on planning applications.

The sections of the updated NPPF which are of most relevance to design and this design code are:

- Part 1: Achieving Sustainable Development
- Part 8: Promoting Healthy and Safe Communities
- Part 11: Conserving and Enhancing the Natural Environment
- Part 12: Achieving Well-Designed Places
- Part 16: Conserving and Enhancing the Historic Environment

• Part 12 Stresses high-quality buildings and places. It sets several principles that planning policies and decisions should consider ensuring new development is well-designed and sufficient 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 and local design guidance and supplementary planning documents such as design codes.

The NPPF makes clear that all local planning authorities should prepare design guides or codes consistent with the principles set out in the National Design Guide and National and Model Design Code, and which reflect local character and design preferences.

The lineage between policy and outcomes begins with the NPPF. Design has a central role to play in resolving the complexity of change. Good design is both a process and an outcome. Good design creates useable, user-friendly, enjoyable and attractive places and spaces. Good process develops clarity, builds consensus, and creates certainty for authorities, professionals, and communities. Good process is based around the NMDC core stages of Analysis, Vision, and Code.

#### 1.5.2 National Guidance on Design

## National Design Guide (2019) and National Model Design Code (2021)

These companion documents set out characteristics of well-designed places. They support the ambitions of the NPPF to utilise the planning and development process in the creation of high-quality places. The National Design Guide states that 'specific, detailed and measurable criteria for good design are most appropriately set at the local level'. The guides are expected to be used by local authorities, applicants and local communities to establish further design codes (such as this) and guides that can deliver this in line with local preferences.

#### National Design Guide (2019)

The National Design Guide (NDG) sets the 10 characteristics of a well-designed place and demonstrates what good design is in practice.

The 10 characteristics are:

- Context enhances the surroundings
- Identity attractive and distinctive
- Built form a coherent pattern of development
- Movement accessible and easy to move around
- Nature enhanced and optimised
- Public spaces safe, social and inclusive
- Uses mixed and integrated

- Homes and buildings functional, healthy and sustainable
- Resources efficient and resilient
- Lifespan made to last

#### National Model Design Code (2021)

The National Model Design Code (NMDC) sets a baseline standards of quality and practice.

The NMDC provides detailed guidance on the production of design codes, guides and policies to promote successful design. It expands on 10 characteristics of good design set out in the National Design Guide.

#### 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.

#### 1.5.3 Local policy and guidance

The Development Plan for Willington comprises the South Derbyshire Local Plan, which has been prepared in two parts. Part 1 which was adopted by the Council in 2016 whereas Part 2 was adopted in 2017.

#### South Derbyshire Local Plan Part 1 (2016)

The Adopted Local Plan Part 1 covers the period 2011 to 2028 and is the strategic element of the Local Plan.

It sets the long-term vision, objectives and strategy for the spatial development of South Derbyshire. The plan sets the amount of housing and employment development required within the District over the plan period, allocates strategic housing and employment sites and contains policies used in the determination of planning applications.

#### South Derbyshire Local Plan Part 2 (2017)

The Local Plan Part 2 proposes nonstrategic housing allocations and detailed development management policies.

#### **Supplementary Planning Documents**

South Derbyshire Council have produced a number of Supplementary Planning Documents (SPDs) which offer additional guidance of a more specialised nature which covers a range of issues, both thematic and site-specific in scope. South Derbyshire's portfolio of SPDs positively address a number of local planning matters, complementing a number of policies in its Local Plan. Relevant SPDs include:

- Affordable Housing
- Display of Advertisements

- South Derbyshire Design Guide House Extensions
- South Derbyshire Design Guide
- Trees and Development
- Cycling Strategy

## South Derbyshire Design Guide SPD (2017)

South Derbyshire adopted the South Derbyshire Design Guide in 2017 seeking to improve the design quality of new development in the Borough. It also adds further information on design principles set out in Local Plan Part 1 policy BNE1 Design Excellence.

The guide seeks to cover all types of development, from new residential and commercial schemes, to conversions and extensions.

## 1.6 Consultation & engagement

An inception phone call was conducted between the group and AECOM consultants on 12th May which was followed by a walk around the neighbourhood area on June 7th 2022 to assess character and key features that inform the sense of place. A meeting with members of the Neighbourhood Plan steering group was undertaken shortly after the site visit.

These meetings provided valuable perspectives on the current and historic issues, constraints and opportunities, focused on the areas and sites in and around Willington.

A series of design guide topic priorities were identified following these discussions:

- Housing right type/ right location affordable housing need. Design quality, affordability and lack of specialist housing for older people are key concerns
- Civilised streets traffic calming on long, straight streets and consideration for cyclists. Potential to add green infrastructure, SuDS and street tree planting

- Central space needs rationalisation and rebalancing in terms of pedestrian and cyclist comfort and safety. Street furniture, lighting and signage is distracting and dangerous. Potential for resurfacing, decluttering that makes safer and more attractive for all users/ businesses (signage / safety measures on bridges also)
- Energy / sustainability potential reuse of power station site (solar, less wind potential due to flight path?). Nuclear energy site potential – less popular?
- Green infrastructure retaining landscape wedges / donut around village and canal basin development that maintains rural character and identity, supporting tourism employment. 5 mile circular walk and footbridge over Egginton Brook
- Biodiversity (Derbyshire Wildlife Trust site) and reintroduction of beavers locally to manage an area of wetlands. Dams can mitigate flooding from Egginton Brook
- Flood risk and issue with drain to north and backfilling from River Trent
- Parking off-street for safety of cyclists, congestion and visual reasons

## Neighbourhood Area Context Analysis

02

## 2. Neighbourhood Area Context Analysis

## 2.1 Location & Context

Willington lies approximately 6 miles southwest of Derby and 5 miles north-east of Burton-on-Trent. The neighbourhood area is approximately 7km2.

The village is at the crossroads of the north–south B5008 road, and the east– west A5132 road. The A5132 carried a lot of Nottingham to Stoke-on-Trent traffic before the A50 road was opened in September 1997.

As illustrated on the plan (over page), Willington's built-up area is divided by the canal and railway into three parts. The bulk of the village area sits between the river Trent (to the south) and the Trent and Mersey Canal (to the north). The modern centre of the village lies between the canal and the railway line. A ribbon of residential development extends beyond the established settlement boundary to the west along The Castle Way towards the A38.A cluster of new housing is located north of the canal at James Clarke Road.

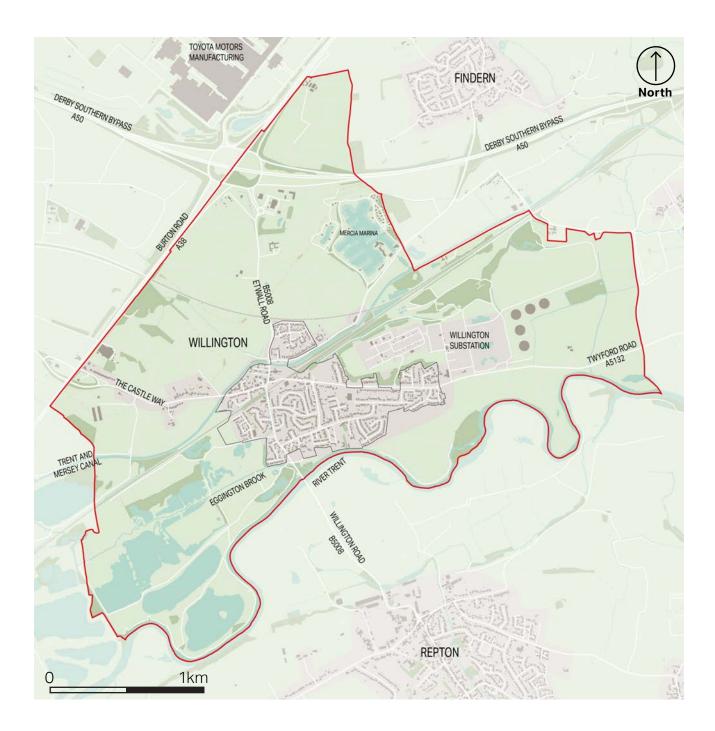
The former Willington Power Station is located to the east of the village and its five cooling towers dominate the skyline to the east of the village. The site was decommissioned in the mid-1990s and was earmarked for residential development but was refused by the Local Planning Authority. To the west of the village is the site of a former quarry which is now the Willington Wetland Nature Reserve.



Figure 04: Historic Signpost



Figure 05: Mercia Marina



KEY

Neighbourhood Area

Settlement Boundary

Figure 06: Context Plan

## 2.2 Topography

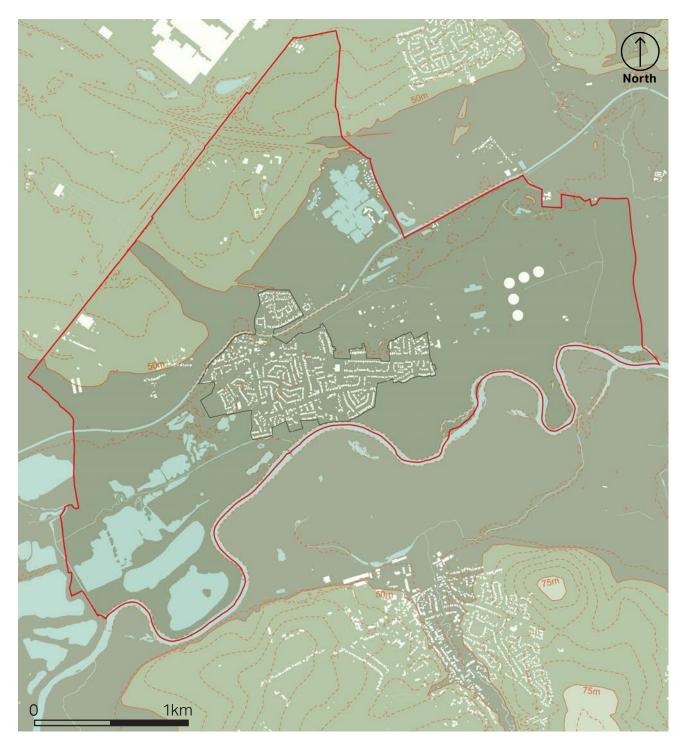
The topography of the neighbourhood area is low-lying alongside the river Trent to the south-east and gently rising to the north-west. The village is built on very gently sloping land consistent with the floodplain landscape character. The built area of Willington sits between 40-50m AOD (Above Ordnance Datum) extending east to west along the valley bottom.



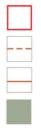
Figure 07: Public Right of Way access to the countryside



Figure 08: Broadly flat landscape allowing for long distance views



#### KEY



Neighbourhood Area	
5m Contour Lines	
25m Index Contour Lines	
25m - 50m AOD	

50m - 75m AOD 75m - 100m AOD Watercourse Settlement Boundary

#### Figure 09: Topography

## 2.3 Settlement form

Willington, is barely referenced in the Domesday Book of 1086, being a couple of dwellings and agricultural holding, but grew, as the highest point of navigation on the River Trent into a small village and over time establishing itself as the "key village" that it is today.

The parish boundary that is the effective boundary of the NDP area, is bounded to the south by the River Trent, to the East by the A38, the North by the A50 and to the East by the power station and thence open grazing land beyond. This provides a distinct rural setting, with clear settlement boundaries which contributes to the experience of being a village settlement, shown quite vividly in an aerial photo of the village taken in 2017. However, despite being quite well defined the village has an organic relationship with the surrounding rural landscape.

The southern edge to the village is marked by the River Trent. The tree lined banks with low density riverside housing, open fields and wetlands are a response to the major flood risk which is an annual occurrence as the River Trent is swelled by run off from its up river catchment which sees the low lying land between Willington and Repton underwater for weeks on end, and on occasions rising to threaten development in the village. This vast floodplain, whilst mainly outside the parish is non the less a major visual element, providing not only views along the river but a 270\* panorama across the flood plain.



Figure 10: Rural setting



Figure 11: Panorama of flood plain

The entrance to the village at this point is over the river bridge, built in 1836, and thence north to the village. This provides a green entrance to the village, with initially enclosed fields, a brook, new housing (set back from the road and raised against flood risk) and thence to the church which marks the start of the village.



Figure 12: View towards Repton



Figure 13: View North from River Trent bridge



Figure 14: South entrance to village

From the north the village is approached along the B5008 from the A38/A50 junction through open farmland. Crossing the railway level crossing is considered to mark the entrance to the village, as the road continues south with housing development to the left and open fields to the right. The canal bridge marks the point of arrival, with the village centre ahead, the canal stretching out to left and right, allowing significant views of the canal, village as well as a glimpse of open countryside.

Traveling north from this point the canal again provides views to left and right, along with the more significant view to the east and north east of open farmland which continues as one leaves the village, crosses over the level crossing and north to the A38/A50 junction.



Figure 17: View from canal bridge towards village centre



Figure 15: B5008 travelling south



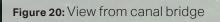
Figure 18: View from canal bridge



Figure 16: Village approach from level crossing



Figure 19: View from canal bridge N/NE



The entrance to the village from the West along the A5132 is a soft transition from rural open fields into ribbon development with large houses set back from the road with gaps between. The road eventually rises to the bridge over the canal with views ahead of the more compact development within the village centre and left and right along the canal and open fields.

Likewise the route out of the village from this point emphasises the transition from village centre through the softer ribbon development and the open fields beyond.

The eastern approach to the village, along the A5132 is very different. As one approaches the village the open grazing landscape of the Trent Valley is overshadowed by the cooling towers of the decommissioned (1996) coal fired power station to the north of the road with associated land holdings and infrastructure to the South. The village starts immediately as the power station land finishes, marking a very abrupt entrance to the village, but one that is softened by the set back of the development from the road with wide grass verges to the south and well spaced ribbon development to the north, along with large areas of trees planted to obscure the view of the major National Grid infrastructure. There is a gradual increase in development densities as one approaches the village centre, which is marked by the railway bridge across the road.



Figure 21: View approaching Willington from the West fields



Figure 22: View approaching Willington from canal bridge



Figure 23: View approaching Willington from the West housing



Figure 24: View N/NE from canal bridge



Figure 26: Appraoch from the East towards Power Station



Figure 25: Leaving Willington, heading west



**Figure 27:** View approaching from the east from the Village entrance



Figure 28: View approachong Willington from the East along Twyford Road

The fifth entrance to the village is again through open farmland from the neighbouring village of Findern, crossing the A50 and thence towards Willington passing the Mercia Marina on the right with glimpsed views of shops, café, boats and waterscape, before crossing the level crossing and passing Railway Cottages which marks the outer edge of the village. Proceeding to the village with open fields to the right and canal to the left the right hand side of the road gives way to housing, set back from the road with large front gardens and eventually joins with the B5008 just to the north of the canal bridge at the centre of the village.

Whilst each entrance to the village is different and varies between hard edge to soft gradual approach all are marked by a transition from built up area to open farmland with each providing their own significant experiences and views, on both entering and leaving the village. The overall impression is one of a village which has an organic relationship with its surrounding which is a characteristic which must be retained in any future development. The river to the south defining the village edge and influencing the village form and possible development opportunities, the hard edge to the village the East, softened by the build form along Twyford Road, the soft transition from open fields to loose ribbon development from the West, revealing the village centre as one crosses the canal, the more dramatic arrival at the village centre from the north through open farmland to arrive at the canal bridge and the soft approach from the West along Findern Lane with the canal to the left and ribbon development to the right.

This organic edge is further emphasised by the fact that the village enjoys a closer link with the open countryside in its NW quadrant where the open farmland is within yards of the canal bridge (at the centre of the village) as well as the canal bridge at the Castleway, providing extensive views out of the village centre onto open countryside. This image of the rural setting is further enhanced by views to the south as one leaves the village along the B5008 across the River Trent with the whole of the flood plain (270\* panorama) open to view.



Figure 29: Passing the marina



Figure 30: Level crossing



Figure 31: Findern Lane

## 2.4 Flood Risk

The neighbourhood area includes a major river, a canal and marina, several brooks and numerous ponds associated with former quarrying. The village lies on the northern banks of the river Trent which forms the neighbourhood area's southern boundary. The Trent and Mersey Canal, to the north of the settlement boundary, bisects the neighbourhood area in an East/West direction and is listed as a Conservation Area. Mercia Marina, the largest inland marina in Europe, is located to the north of the neighbourhood area and has direct access to the Canal network.

To the west of the main urban area is the Willington Wetland Nature Reserve. This large wetland area was once a sand and gravel quarry. The flooded gravel pits now form an important wetland habitat from open water to reed beds. There is a rill that runs along Repton Road which channels water from the brook to the north to the wetland area.

Due to its proximity to the river Trent, a large area to the south of the neighbourhood area, including a sizeable portion of the main urban area, are within flood zones 2 and 3.

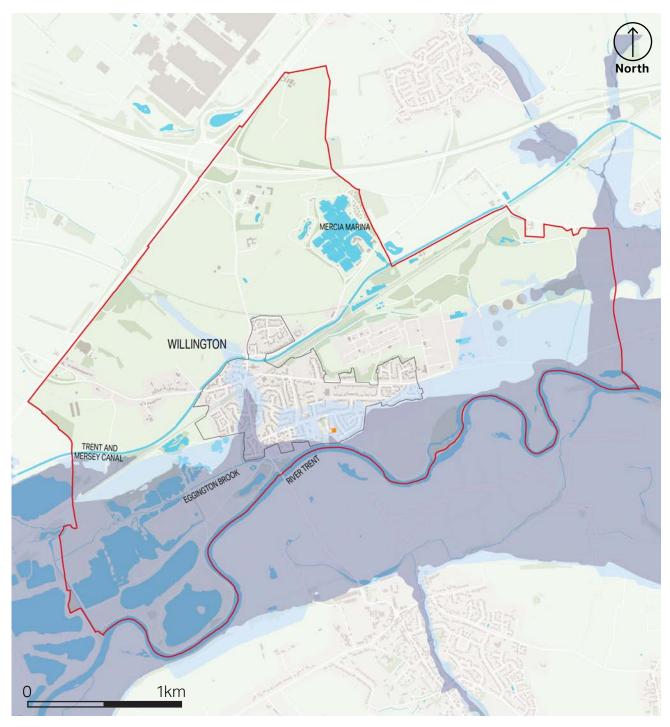
There is also flood risk from surface water to be considered. This collects on areas of hardstanding such as road surfaces and parking areas in dips or flows along escape routes after periods of heavy rainfall. This type of flood risk is distributed in pockets throughout the settlement.



Figure 32: Trent and Mersey Canal



Figure 33: Wetland Area



KEY



Neighbourhood Area Settlement Boundary Flood Zone 2 (from rivers and sea) Flood Zone 3 (from rivers and sea) Flood Defense Main Water Course

Figure 34: Flood Map

## 2.5 Heritage Assets

There are 9 Grade II listed buildings within the neighbourhood area, 7 of which are located within the settlement boundary. Notable buildings include Willington Bridge, Church of St. Michael, and Trentside Cottage (see next map for list and location).

The Trent and Mersey Canal is an extensive linear conservation area which was designated in 1988. It was the first of the major inland waterways which were to form the main arteries of Britain's canal network, acting as the nation's principal transport and communications system in late C18/ early C19. The canal had a dramatic effect on the development and prosperity of trade and industry in the country.

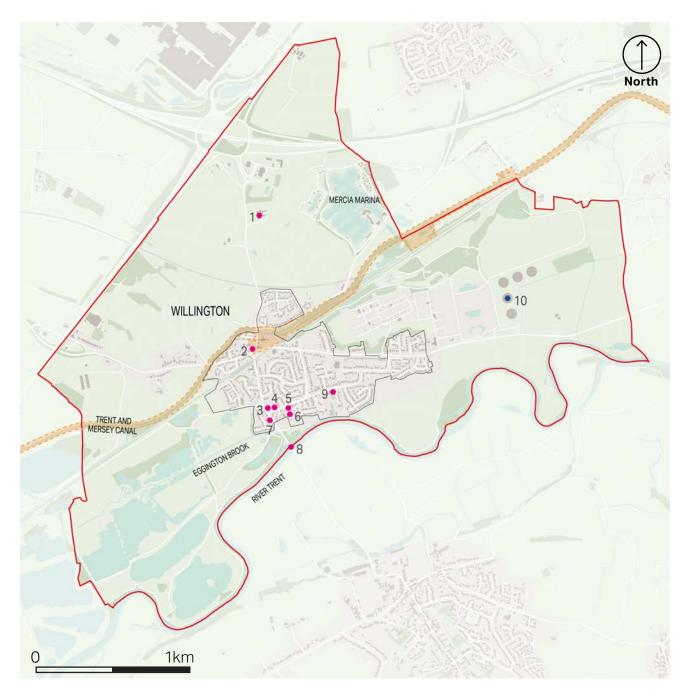
The cooling towers of the former Willington Power Station are subject to a Certificate of Immunity (COI) which guarantees that the structure will not be listed until 2025. The Cooling Towers may be listed for protection after 2025.



Figure 35: Bargate Lane

GRADE	HERITAGE ASSET	MAP REFERENCE
	Willington Hill Farmhouse	1
	The Green Man	2
	Church of St. Michael	3
	3 and 5 Bargate Lane	4
Grade II Listed	Pilsbury House	5
	Trentside Cottage	6
	44 Repton Road	7
	Willington Bridge	8
	Hall Cottages and the Hall	9

Table 02: Listed Building List



#### KEY



Neighbourhood Area

Settlement Boundary

Grade II Listed Building / Structure

Certificate of Immunity until 12/01/2025 Trent and Mersey Canal Conservation Area

Figure 36: Heritage Map

## 2.6 Legibility and Identity

The neighbourhood area sits within an attractive rural setting with the cooling towers at Willington Power Station and St.Wystan's church spire at Repton forming key landmarks in the landscape. Views towards these features are available at a number of locations within the neighbourhood area. Mercia Marina also constitutes and important feature in the rural landscape.

There are several barriers to movement within the neighbourhood area – they include the river Trent, the canal, and the railways. Notwithstanding this, several routes, bridges, and underpasses ensure that the neighbourhood area, including the village, is permeable for both pedestrians and vehicles.

Three of these bridges form gateways to the village. The most notable is Willington Bridge which was constructed in 1839 as a toll bridge. This bridge is a memorable gateway due to its attractive architecture, views to and from Willington/Repton and towards the cooling towers and their wooded setting. The other two gateways are canal bridges which provide vehicle access to the village across the Trent and Mersey Canal. They also provide the views across the village and towards the cooling towers and their wooded setting.

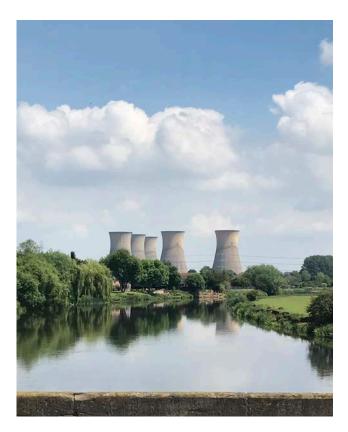
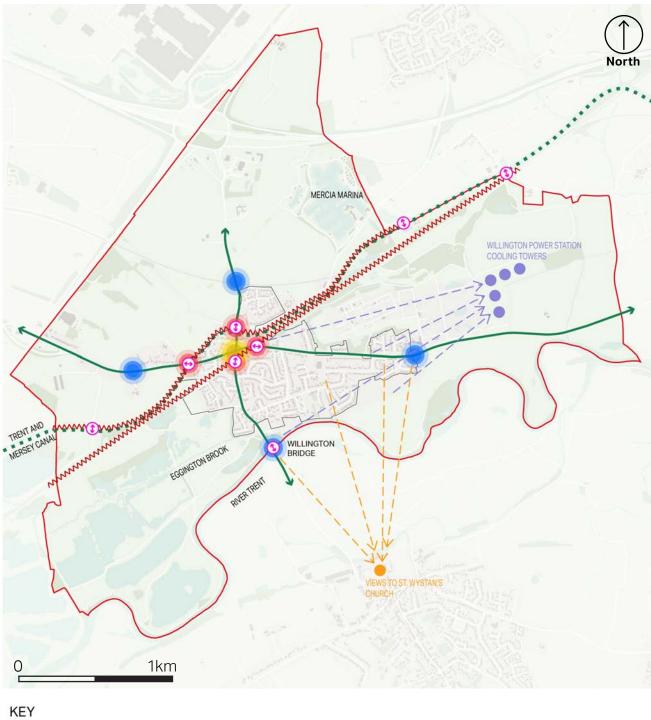


Figure 37: Willington Power Station



Figure 38: Tunnel under railway line







Neighbourhood Area	
Key Views	
Landmarks	
Key Routes	Î
Bridges and Underpasses	ſ

Settlement Gateway Village Centre Gateway Barriers to Movement Focal Point Settlement Boundary

#### Figure 39: Legibility and Identity

## 2.7 Green Infrastructure Concept Plan

#### 2.7.1 Green and Blue Infrastructure

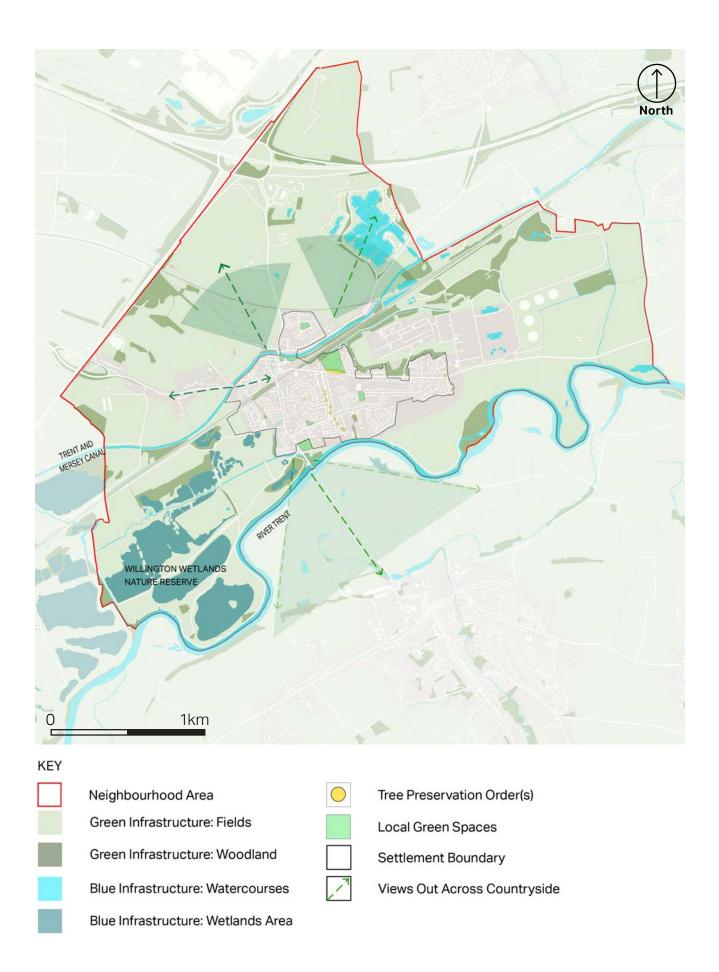
As illustrated on the adjacent plan, the village of Willington is surrounded by agricultural fields, wetlands, woodlands, and water that gives the village a rural identity and setting that is key to its attraction for leisure activity, tourism, and biodiversity. Most notably are the two water courses, the River Trent and the Trent and Mersey Canal form key green-blue corridors for leisure and wildlife. To the west are a series of ponds and brooks which comprise the Willington Wetlands Nature Reserve where beavers have been reintroduced and are helping to reinstate natural processes that ease flooding by creating dams. The countryside to the north is made up of small clusters of woodland and agricultural fields that present a rural approach to the village from the strategic road network.



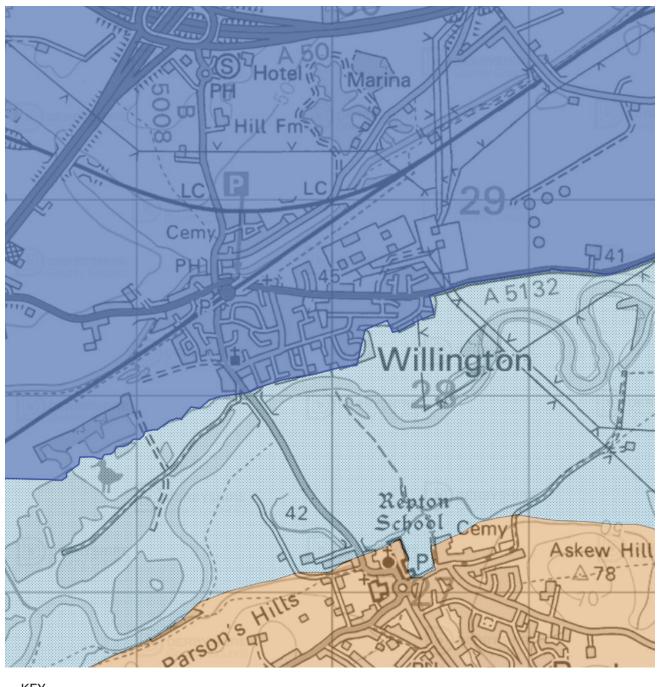
Figure 40: Wetland Area



Figure 41: Public Footpath



#### 2.7.2 Landscape Character



#### KEY



Estate Farmlands

**Figure 43:** Landscape Character Area Plan: The neighbourhood area falls within National Landscape Character Area 69, Trent Valley Washlands, which is made up of the Lowland Village Farmlands, Riverside Meadows, and Estate Farmlands landscape character types. The Trent Valley Washlands National Character Area (NCA) comprises the river flood plain corridors of the River Trent's catchment. It is a distinctly narrow, linear and low-lying landscape, clearly delineated at its edges by higher ground, and it is largely comprised of the flat flood plains and gravel terraces of the rivers.

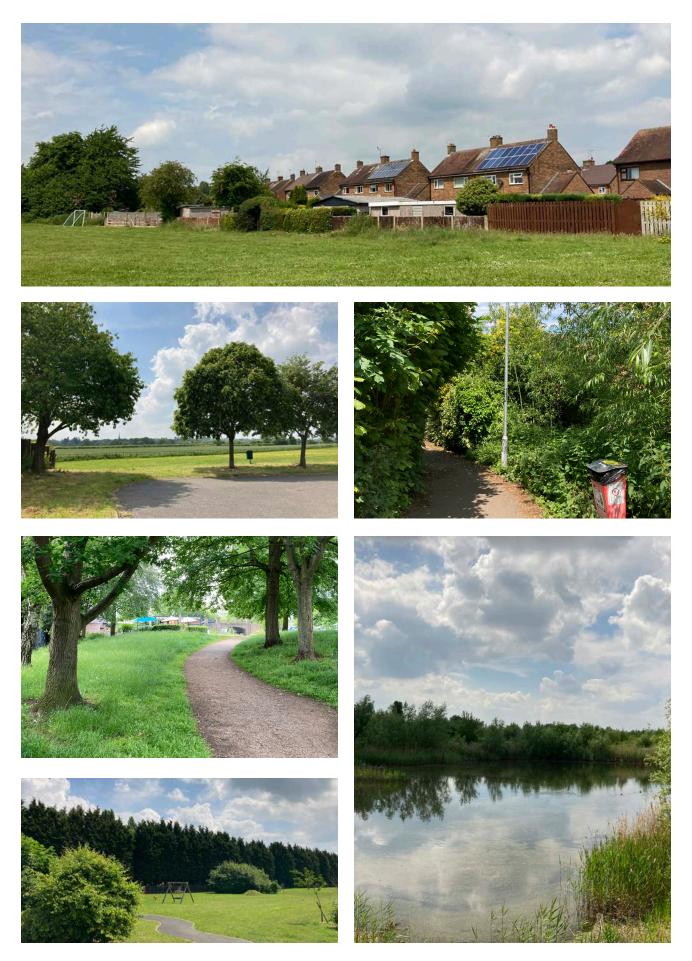


Figure 44: Green infrastructure assets within the neighbourhood area

### 2.8 Movement Routes

#### 2.8.1 Active Travel

There are several Public Rights of Way's across the neighbourhood area which connect the village to the wider countryside. They principally follow the neighbourhood area's key corridors including the Canal, River, and Railway.

These corridors also include cycle paths which form part of the regional cycle network. There is also an ambition to propose additional network improvements which will see new routes through Willington as part of the 'Greenway' cycle network.

As illustrated on the plan (overleaf), Willington is on the V3 bus route which provides access to the wider region.

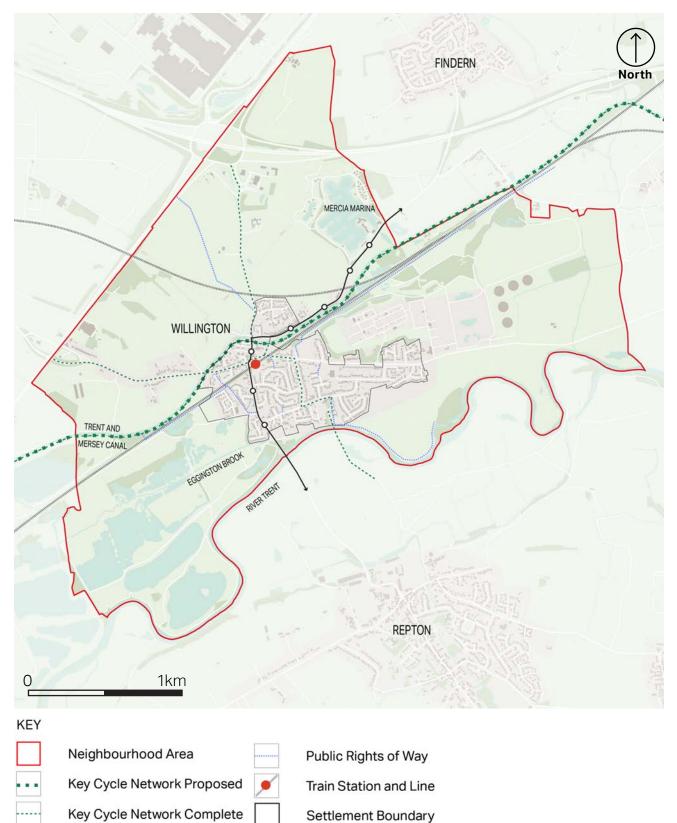
The village has access to the train network with the mainline Cross Country service running through both Derby and Burton upon Trent. However, the service is limited and there are no regular train services. There is a demand for more frequent stops. There is a second train line to the north of the settlement however there is no train station to access this train line.



Figure 45: Canal Side Area



Figure 46: Canal Towpath



Settlement Boundary

Bus Routes and Stops

ø

#### 2.8.2 Streets and access

The neighbourhood area is bounded to the north and west by the A38 and A50. These strategic vehicle routes provide access to the wider region including Burton, Derby, and the M1 motorway. Access to the strategic road network is provided at The Castle Way junction to the west and Toyota Island to the north of the village.

The A5132 is a primary arterial route running east-west which bisects the neighbourhood area and provides access to residential developments within the village. It passes through the village centre where it forms an offset junction with the B5008. The B5008 is a secondary arterial route which runs in a north-south direction providing access from the Toyota Island junction to the north and Repton village to the south, over the River Trent via Willington Bridge. It also provides access to the village centre from surrounding. Whilst it is designated as a 'B Road', the B5008 is the busiest road in the neighbourhood area with over 22,000 vehicle movements per day.

The remaining streets comprise a series of tertiary streets providing residential access and minor streets (e.g., cul-de-sacs) and lanes that serve a limited number of homes. Residential properties are accessed via all these routes, and together with the footpaths and public rights of way they contribute to a permeable neighbourhood area.

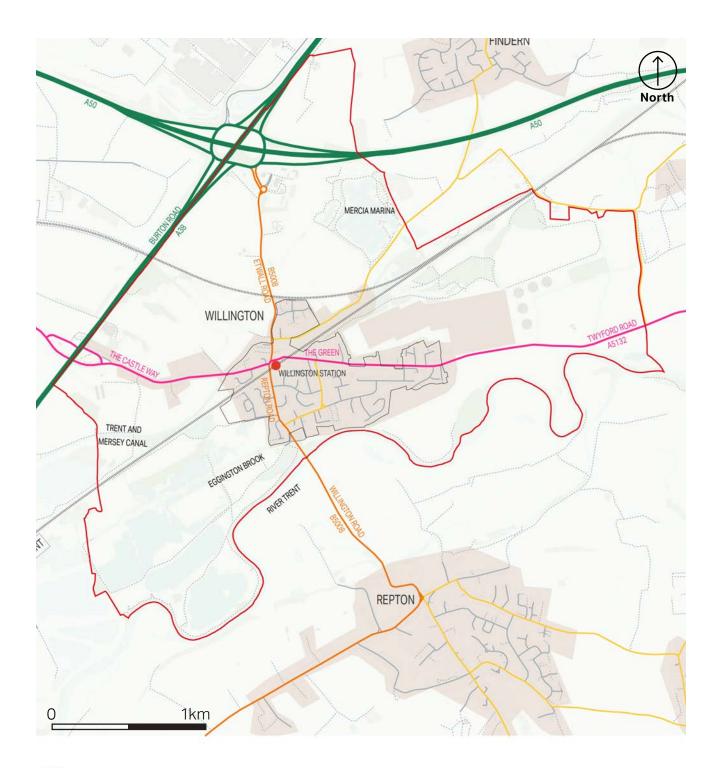
Willington Train Station lies between Burton-on-Trent and Derby, on the Cardiff to Nottingham main line. Daily services from Willington are available to stations including Derby and Birmingham New Street. The station is situated near the centre of the village close to the offset cross-roads and focus of amenities. There is no disabled access to the station concourse.



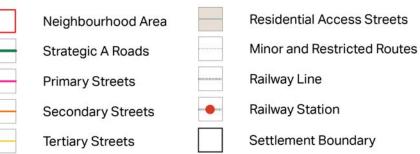
Figure 48: Repton Road (looking south)



Figure 49: Repton Road (looking north towards railway)



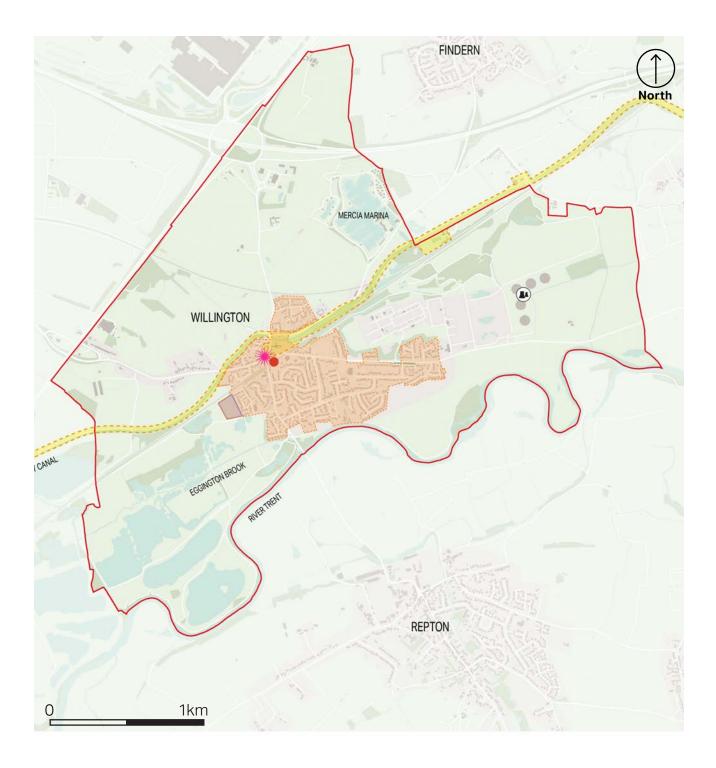
KEY



## **2.9 Spatial Policy**

Willington is identified as a Local Service Centre in the South Derbyshire Local Plan. The entire length of the Trent and Mersey Canal through the neighbourhood area is identified as a Conservation Area. The remaining gravel pits at the southern edge of the village adjacent to the river Trent have been flooded to becomes the Willington Wetlands Nature Reserve. It is designated as a Nature Reserve.

Land off Kingfisher Way, illustrated in purple on the adjacent plan, is identified in Local Plan part 2 policy H23 to deliver around 50 dwellings. Land at the former Willington Power Station has been identified in Local Plan policy part 2 BNE12 to support energy related development and any other uses considered appropriate to contribute to the regeneration of the previously developed land.



#### KEY



Neighbourhood AreaSettlement Boundary (SDT1)LuxConservation Area Boundary

Local Service Village

Railway Station Former Power Station Land (BNE12) Housing Allocation (H231)

#### Figure 51: Policy Designation Plan



# 3. Code Areas

# **3.1 Introduction**

This chapter presents a series of code areas derived from the previous analysis of the neighbourhood area based on character, use, building types, heritage, corridors and infrastructure.

The areas are not completely homogenous or without exceptions as true character areas based strictly on periods of development might be but they provide useful groupings to propose design aims and highlight issues without overcomplication.

A characterisation study is included for each code area as well as a more detailed character study of two focus areas the Village & Station Hub and St. Michaels / Hall Lane to highlight examples of what makes these areas distinctly important. The attributes identified in this exercise will be used to inform future development across the neighbourhood area and will serve as lessons (good and bad) to guide proposed developments on allocated and speculative sites.



Figure 52: Hall Lane



Figure 53: Bargate Lane



Figure 54: Trent and Mersey Canal

## 3.2 Code Areas

Through detailed analysis of townscape and landscape characteristics, we have identified the following 9 code areas:

### 01. Mercia Marina

Mercia Marina is Europe's largest inland marina and contains a number of modern buildings within an attractive landscape setting. It is considered to be an important asset by the community.

#### 02. Canal & Railway Corridor

This Code Area is defined by the canal and railway corridor running from east to west through the heart of Willington. They restrict vehicle and pedestrian movement and comprise important features in the townscape.

#### 03. Village Centre and Station (Focus Area)

The village centre is a hub of activity and contains majority of the village's shops and services. It forms the heart of the neighbourhood area and a multi-modal crossroad for vehicles, the railway and the canal.

## 04. River Trent flood plain

The River Trent Flood Plain Code Area is defined by the area of wetland to the west and south of the Willington. It includes the Willington Wetlands Nature Reserve and the northern banks of the River Trent.

#### 05. Findern Lane

The Findern Lane Code Area contains the residential development adjacent to Dale Farm, to the north of the canal.

#### 06. St. Michaels / Hall Lane (Focus Area)

The St. Michaels Code Area contains the majority of Willington's listed and historic buildings. It comprises the historic core of Willington and includes a range architectural styles.

#### 07. Suburban expansion

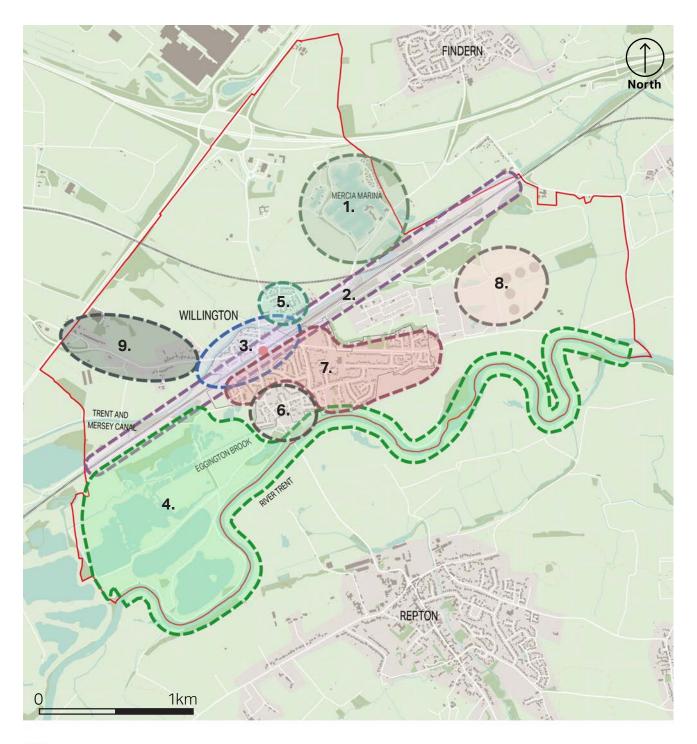
This code area is characterised predominantly by mid to late 20th century residential development that extends east from the village centre along Twyford Road and Beech Avenue.

#### **08. Willington East**

The Willington East code area is defined by the former coal powered power station and its associated infrastructure including the cooling towers which form an important feature in wider landscape.

#### 09. The Castle Way

Extending westward from the village centre, this Code Area comprises the ribbon of residential development along The Castle Way.



#### KEY



1. Mercia Marina Code Area
2. Canal and Railway Corridor Code Area
3. Village Centre and Station Focus Area
4. River Trent Flood Plan Code Area

5. Findern Lane Code Area

6. St. Michaels and Hall Lane Focus Area
7. Suburban Expansion Code Area
8. Willington East Code Area
9. The Castle Way Code Area

Figure 55: Code Area Plan



## 3.3 Mercia Marina

#### Summary

Mercia Marina is the largest inland marina in Europe and is connected to the wider canal network by the Trent and Mersey Canal. It is located between Findern Lane and the Derby Southern Bypass. It is bounded by agricultural fields and pockets of woodland.

The marina is an important asset to the Willington community as it attracts visitors and tourists from across the country. There are several associated tourist amenities around the edges including camping facilities, restaurants and shops.



Figure 56: Attractive canal side setting



Figure 57: Art installation



Figure 58: High quality modern buildings containing a number of amenities

#### **Key characteristics**

- Attractive, man-made waterside setting with high quality hard and soft landscaping
- Planting and mature trees on marina edges allows the facility to sit comfortably within the wider landscape setting
- Encompassed by a green wedge to separate the marina from the rest of Willington
- Planting contributes to a strong sylvan character
- Exhibiting natural materials and sail-like roof forms
- Highly accessible by vehicles and pedestrians and the public transport network
- Several other tourist attractions and amenities within close proximity

#### **Design aims**

- Encourage additional links to Willington Village Centre
- Soft landscape and boundary planting to assimilate proposals with the wider landscape
- Promote high quality development that reflects the character of the marina
- Reflect the scale of existing built form
- Contribute to the Sylvan character of the wider Marina site



Figure 59: High quality materials and orientation



Figure 60: Sylvan character enhanced by mature planting to assimilate development



**Code Area 2** 

# 3.4 Canal and railway corridor

#### Summary

The canal and railway are strong features in the wider landscape and bisects the neighbourhood area in an east west direction. They restrict north/south movement through two pinch points in the village centre, constraining traffic flow through Willington.

### **Key characteristics**

- Major infrastructure assets which improve strategic movement across the region and contribute to the local economy
- Barrier to movement restricting vehicle and pedestrian flow through the village centre
- Attractive views along the canal towpath and from the canal bridge
- Footpaths and canal towpaths providing access to the wider countryside
- Key landscape corridors, ideal for wildlife and increasing biodiversity



Figure 61: One of two routes under the railway



Figure 62: Pinch points for both pedestrians and vehicles



Figure 63: Trent and Mersey Canal

#### **Design aims**

- Retain canalside and immediate context as landscape corridor for bio-diversity and recreation
- Development, where allowed, should present a positive frontage to the canalside
- Development in proximity to the railway line should mitigate noise and retain a green landscape/ garden buffer



Figure 64: Willington train station



**Figure 66:** Pinch point potentially causes congestion due to slow moving traffic



Figure 65: Vehicle and pedestrian gateway through pinch point



## Code Area 3 Focus Area

Focus areas are highlighted as they contain key elements of built form and character relating to the identity and heritage of the village.

# 3.5 Village Centre and Station

## Summary

Willington village centre is the heart of the neighbourhood area, containing the majority of its retail and community uses. It is where the major routes convene making it an important junction space for all modes, including pedestrians and cyclists. It is often congested at busy times and this is exacerbated by the constrained routes under the railway.

There is significant street clutter including signage that has accrued over time and which negatively impact the streetscene. There is a need for the rationalisation of the junctions, signage, vehicles, cycle and pedestrian routes to make a place for people and one which allows steady flow of traffic through this key space within the village. There is a great opportunity for improvement that could benefit local businesses and residents by creating an attractive central space and setting to the unlisted heritage buildings in this area.



Figure 68: Heavily trafficked village centre



Figure 67: Heavily trafficked village centre

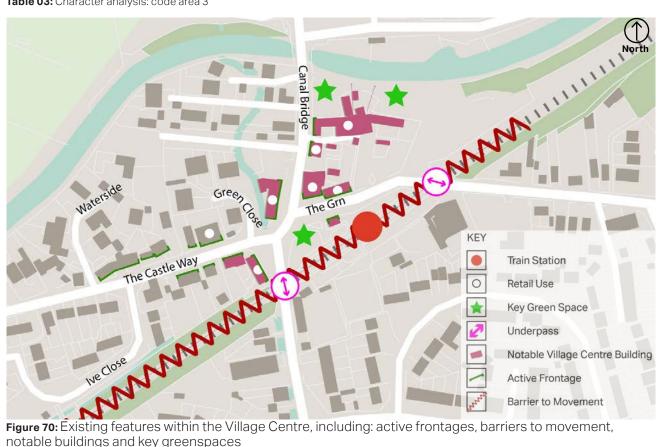


Figure 69: Willington Train Station

## **Character analysis**

Street pattern & layout	Organic street pattern based on its position at a key crossroads and multi modal intersection. Buildings provide appropriate natural surveillance through enclosure and fronting key routes and spaces.
Density & scale	Medium density with predominantly detached properties with large footprints. Buildings are typically two storey in scale however ancillary buildings provide articulation in the roofscape
Townscape & views	A combination of flat topography and built form limits long views to certain streets however, focal points and key corners are terminated by notable buildings such as pubs, the station and properties with architectural detailing contributing to legibility.
Styles / Local vernacular	Mix of architectural styles ranging from Victorian to post-war housing, Many examples of retained farm holdings converted or subdivided into smaller residential or retail properties. Red brick is the dominant elevation treatment with a few examples of white render
Statutory Designations	The Trent and Mersey Canal (in its entirety) is designated as a Conservation Area. The Green Man is designated as a Grade II listed building.
Diversity & quality	There is a strong character and high-quality overall in the built environment and particularly in the conservation area which is very attractive. There is some later mixed infill development.

Table 03: Character analysis: code area 3



notable buildings and key greenspaces

#### **Design aims**

- Improve attractiveness and safety of the bridges and arches as gateways and important entry points to the settlement and areas within
- Facilities, landscaping and heritage elements such as at the station entrance should be retained and enhanced
- Improvements to the public realm should facilitate easy access from the station through the village centre
- Improvements to traffic management to encourage slow vehicle speeds and improve the pedestrian environment
- Materials and planting should create a 'sense of arrival' for vehicles and pedestrians
- Encourage the de-cluttering of Willington's public realm of excessive signage and street paraphernalia



Figure 71: Focal point overlooking the village centre



Figure 72: Public realm and local landmark



**Code Area 4** 

# 3.6 River Trent Floodplain

#### **Summary**

This code area is defined by the area of wetland to the west and south of Willington. It includes the Willington Wetlands Nature Reserve and is characterised by several ponds, brooks and the River Trent. The area is predominantly in flood zone 2 and 3.

### **Key characteristics**

- The River Trent and its embankment forms an important blue and green infrastructure corridor through the neighbourhood area
- Predominantly a wetlands habitat
- Mature planting along several formal and informal footpaths provide perfect habitats for birds
- Defines the southern boundary of the neighbourhood area

#### Landscape character analysis



Figure 73: River Trent looking south

#### **Design aims**

- Retain landscape buffer
- Maintain views across landscaoe
- Enhance habitat & ecology
- Do not develop in flood plain

(See also design code E)

Landscape character	Riverside Meadows landscape character area which comprises part of the wider Trent Valley Washlands NCA.
Landform & topography	Flat, low-lying topography (approx. 25m - 50m AOD) allowing for long distance views across the river corridor and valley.
Sensitivity & capacity	Sensitive environment given the wider biodiversity opportunities and the views across to both Willington and Repton.
Key features	The River Trent and its embankment, long distance views, and several footpaths connecting Willington with the wider countryside.

Table 04: Landscape character analysis: code area 4



**Code Area 5** 

# 3.7 Findern Lane

#### Summary

This code area is characterised by the mix of residential development that is located between the railway to the north and the canal to the south, It has a mix of housetypes, predominantly late 20th to early 21st century, which is accessed off Findern Lane and James Clarke Road.

Dale Farm provides a notable feature in the landscape. It is an attractive collection of farm building and associated ancillary structures that has retained its rural character.

The code area has a positive relationship with the canal with properties fronting on to a strip of greenspace providing an appropriate buffer between the blue infrastructure asset and the built form.

## **Key characteristics**

- Mix of architectural styles and house types from different periods ranging from detached to terraced properties
- Red and orange brick is the dominant elevation material palette
- Several areas of greenspace both public and private including amenity greenspace, allotments, and a cemetery
- Strong boundary treatments including brick walls and tall hedgerow
- Appropriate orientation of properties to assimilate the built form into the wider landscape setting



Figure 74: Wider countryside



Figure 75: Dale Farm behind tall hedgerow boundary treatment



Figure 76: a mix of roof and boundary types

#### **Design aims**

- Continue development quality from phase 1 (materials and details)
- Respect the setting Dale Farm
- Provide attractive, green frontages to Findern Lane
- Provide pedestrian/cycle links to Mercia Marina, phase 1 and Village Centre
- Setback homes from railway to mitigate potential impact from noise
- Provide appropriate planting, scale and orientation to assimilate development into wider landscape setting
- Orientate properties to face the canal conservation area

## **Typical features**



 Vegetated front boundary treatment with frontage overlooking key routes and spaces



Parking dominating the streetscene on site edges and not contributing to assimilation into wider landscape setting



Figure 77: Aerial image of phase 1 boundary



Focus areas are highlighted as they contain key elements of built form and character relating to the identity and heritage of the village.

## 3.8 St. Michaels/ Hall Lane Summary

The Hall Lane focus area is defined by the concentration of listed buildings and forms the historic core of the settlement. A prominent feature in the townscape is St. Michaels church and its bell tower which is designated as a Grade II listed asset.

Green infrastructure and setback of properties creates a physical and visual link between the concentration of listed buildings at the Repton Road / Hall Lane intersection and Willington Hall to the east of Hall Lane.



Figure 78: St. Michaels Church



Figure 79: Willington Hall



**Figure 80:** Mature trees, grass verges and setback providing visual relief

## **Character analysis**

Street pattern & layout	Linear street pattern bounded by a mix of boundary treatments ranging from vegetated to brick. Buildings to the south of Hall Lane front directly on to the street whereas properties along the northern edge are setback.
Density & scale	The density and scale within this focus area varies depending on the age and style of the properties. Buildings of Georgian style and the retained farm and stable buildings are three storeys with large footprints whereas post-war properties are primarily two storeys in height and are at a medium density.
Townscape & views	There are limited views within this code area however, key corners, specifically at the Repton and Hall Lane junction is articulated by St. Michaels church which provides a unique feature in the wider landscape.
Styles / Local vernacular	There is an eclectic mix of housetypes and architectural styles along Hall Lane ranging from Victorian to Georgian and post-war to 21st century properties.
Statutory Designations	This code are contains the vast majority of the neighbourhood area's listed buildings (6 of the 9) and forms the historic core of Willington. It contains listed buildings 3, 4, 5, 6, 7, and 9 of those identified in section 2.
Diversity & quality	There is a strong character and high-quality overall in the built environment and particularly in the conservation area which is very attractive. There is some later mixed infill development.

Table 05: Character analysis: code area 6



Figure 81: Design principles in the St. Michael / Hall Lane Focus Area

## **Design aims**

- Extend tree planting and green infrastructure further on Hall Lane.
- Setback development behind soft boundary treatments.
- Ensure new properties overlook the street to provide a degree of overlooking and natural surveillance.
- Avoid parking to the front of properties
- Use complementary materials and harmonise with traditional design approaches and listed buildings.



Figure 82: Street trees and grass verges



Figure 83: Hedgerow boundary treatment



Figure 84: Mix of architectural styles and material palette



Code Area 7

# 3.9 Suburban expansion

#### Summary

This code area is characterised predominantly by mid-late 20th century residential development which radiates eastward from the village centre. A mix of house types from several periods has created a mixed character overall.

Residential properties are accessed of a series of secondary and tertiary streets that are served by both Repton Road and Twyford Road.

Housetypes range from detached, semi detached properties that are primarily two storeys in height. Boundary treatment also vary significantly with examples of soft and hard landscaping treatments setback from the highway.

#### **Key characteristics**

- Varied material palette with brown and red brick being the predominant evaluational material
- Grass verges and mature trees provide visual relief within the streetscene
- Intermittent views of the cooling towers at Willington Power Station
- Cars dominating the streetscene due to an excessive use of front of plot parking
- Limited detailing on residential properties



Figure 85: Parking dominating the streetscene



Figure 86: Green verges and green infrastructure provide visual relief in the streetscene



Figure 87: Definition in the street hierarchy

#### **Design aims**

- Encourage additional planting and street trees to provide visual relief on the streetscene
- Retain existing planting including hedgerow features
- Ensure front boundary feature consistency

- SuDS and permable paving to the front of properties
- Pedestrian-cycle friendly on main route east



• Tree planting and grass verges providing visual relief on the streetscene



 Lack of boundary treatments and front of plot parking detracting from the streetscene



• SuDS and drainage to the front of properties assisting with sustainable drainage and creating an informal green and blue corridor along key streets



- Parking dominating the streetscene
- Poor orientation and lack of openings on the streetscene not contributing to natural surveillance



**Code Area 8** 

## 3.10 Willington East

#### Summary

The Power Station code area is defined by the former coal powered power station and its associated infrastructure including the cooling towers which form an important feature in wider landscape.

The site was decommissioned in the mid-1990s however it is anticipated that there are significant contamination issues requiring remediation given its former use.

### **Key characteristics**

- 5 retained cooling towers forming a key feature in the wider townscape and landscape
- A large previously developed site
- Likely to have contamination and requires significant remediation

#### **Design aims**

- Renewable energy potential, e.g solar farm
- Development that reflects the scale of existing properties ensuring that respects its rural identity
- Do not negatively impact the scale and character of the existing character in Willington
- Provide frontage to Twyford Road
- Provide appropriate boundary to the National Grid site and the railway



Figure 88: View of the cooling towers from Willington Bridge



Figure 89: View of the cooling towers from Twyford Road



Figure 90: Dominant feature in the townscape



**Code Area 9** 

# 3.11 The Castle Way

#### Summary

This code area is defined by the ribbon of residential development that extends west along The Castle Way from Willington village to Burton Road.

Development comprises two small pockets of linear development that has no prevailing character due to the significantly varying architectural styles, detailing and housetypes.

### **Key characteristics**

- Predominantly residential in use with a few retail and employment uses at the Burton Road junction
- Green wedge comprising agricultural fields separating two areas of built form
- Mix of architectural styles and material palettes
- Tall hedgerow and grass verges provide visual relief along The Castle Way
- Buildings setback from the road with primarily vegetated front boundaries

#### **Design aims**

- Encourage a low density, arcadian landscape approach.
- Include gaps and green between buildings
- No cramming of development on plot
- Maintain and enhance hedgerow and planting



Figure 91: Properties on large plots and gaps between built form



Figure 92: Mix of boundary treatments but predominantly vegetated



Figure 93: Green infrastructure providing visual relief on the streetscene

Figure 94: Access to the Willington Wetlands Nature Reserve

# **Design Guidance & Codes**

04

# 4. Design guidance & codes

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

## 4.1 Introduction

This section provides guidance on the design of new development, setting out requirements that relevant planning applications in the neighbourhood area will be expected to address. This document is expected to inform development proposals on both allocated and speculative sites.

The guidelines developed in this section focus on residential environments however, new housing development should not be viewed in isolation and mixed uses are encouraged, particularly provision of social infrastructure. First and foremost, the design and layout of new buildings and places must respond to the wider urban pattern and landscape context.

The design codes and guidance set out in this section, alongside the design principles in section 3, will provide that context and direction for major development sites, infill and back land development and provide detailed guidance of topics of local concern.

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. It is important for any proposal that full account is taken of the local context and that the new design embodies the 'sense of place', both in terms of local character and distinctive features such as listed buildings and conservation areas.

Responding to the context means recognising existing positive design solutions or using existing cues as inspiration [see also chapters 2 and 3].

Proposals for a new scheme could adopt a traditional approach or a contemporary design that 'innovates with purpose', whilst being in harmony with the landscape. It is acknowledged that there is not always agreement on aesthetic issues and architectural taste but using appropriate design precedents and a clear design process will give results that are less subjective and do represent good design, process (including local engagement) and product (attractive, sustainable places).

## 4.2 Code topic areas

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

#### A. Identity and Character

- A1. Landscape setting and rural settlement identity
- A2. Character and quality of development
- A3. Responding to heritage

#### B. Housing, design, and quality

- B1. Quality, type, and scale
- B2. Appearance
- B3. Development type

#### C. Sustainability and energy

- C1. Willington power station
- C2. Micro-climate and resilience
- C3. Building orientation and passive design
- C4. Future homes standard towards zero carbon

#### D. Streets and spaces

- D1. Civilised streets
- D2. High quality spaces
- D3. Car Parking

#### E. Green and Blue infrastructure

- E1. Biodiversity and habitat
- E2. Landscape and Green Infrastructure
- E3. Flood mitigation and sustainable drainage





## **Design Code A: Identity and character**

# 4.3 Identity and character

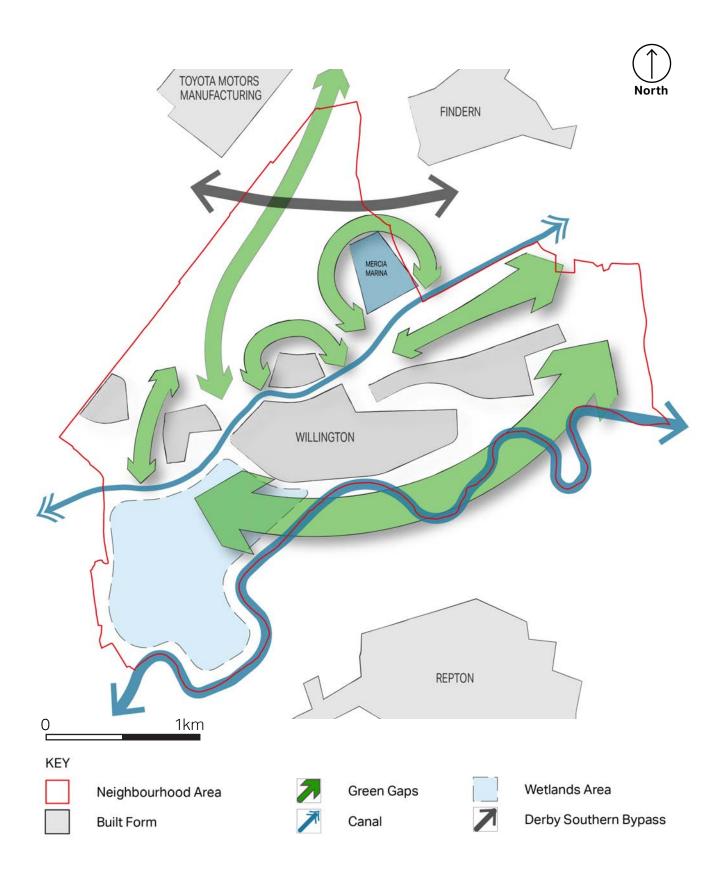
Willington has a strong relationship with its surrounding landscape. Several landscape gaps and wedges between built areas maintains the rural character and identity of the village and enhances the setting of other key assets such as the marina and the river.

This is clearly illustrated on the Green Infrastructure Plan (figure 96) and the Green Infrastructure Concept Plan (below). As shown on the below diagram, these wedges and gaps encompass the neighbourhood area, resembling a 'green' donut around Willington, where no development obstructs the long views across the landscape.

# A1 -Landscape Setting and rural settlement identity

Guidelines for green gaps and links are as follows:

- Maintain green infrastructure or green space uses and avoid closing or narrowing the green gaps with built development.
- Retain the visual quality of the identified landscape wedges and gaps by reducing the scale of development on site edges. Dwellings should not exceed 2 storeys in this location.
- Ensure dwelling frontages are orientated outwards and avoid rear boundaries facing green gaps - unless suitably screened by planting.
- Soften the boundary between built form and the wider landscape by encouraging soft landscape planting such as hedgerow, wildflower, and tree planting
- On green gap edges proposals should be outward facing with soft boundary treatments including hedgerow and planting to assimilate development into the wider landscape setting.



**Figure 96:** Green Infrastructure Concept Plan: The above plan seeks to illustrate the aspiration of preserving the rural setting of the village with a series of green and blue corridors and edges. This will ensure the landscape character of the village and the natural setting of the marina is retained.

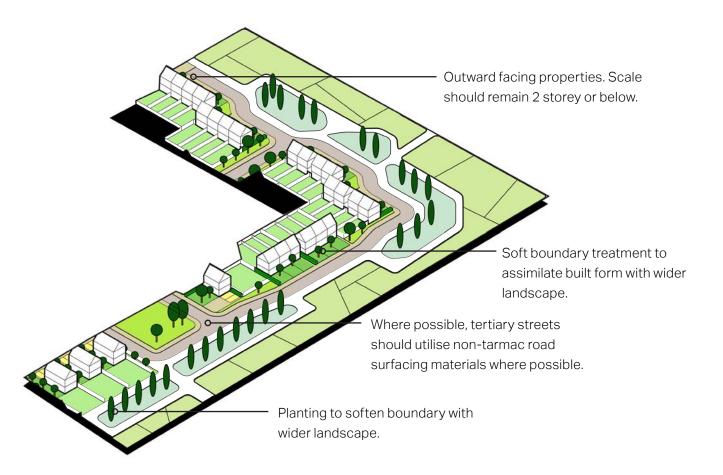


Figure 99: Site / settlement edge and the interface between the urban and natural environment



Figure 97: Avoid rear and side boundaries facing outwards (photo: precedent imagery)



**Figure 98:** Outward facing properties with soft front boundary treatments (photo: James Clarke Road)

# A2 - Character and quality of development

A core objective of the Design Guide and Codes document is to retain the character and quality of Willington through encouraging contextually responsive design proposals. This can be achieved by following the below codes:

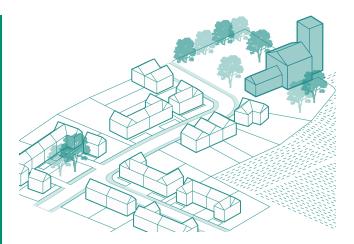
- Plot boundary treatments must be provided to define public and private space and add to the definition and sense of ownership along streets.
   Boundaries of low stone walls or hedgerow planting should be used on primary access streets (open boundary typologies or closed board fence should not face public spaces).
- Materials and style of home should be responsive to local character in conception with consideration for local styles and the materials.
- Innovation in materials and construction techniques may be appropriate if achieving considerable sustainability credentials but must be attractive and sympathetic to local styles.

- Sympathetic styles of architecture should be presented when facing existing traditional properties of the village and rural edges.
- Building facades should provide enclosure and an active frontage along the street.
- Standardised suburban street designs without local character features or scale are not appropriate, and streets and paths should use rolled stone in any tarmac areas to improve visual appeal of public spaces; large expanses of tarmac undermine the public realm of many new developments.
- Requirements for parking should not undermine the attractiveness of the streetscene. Cars should be integrated sensitively into the street scene and screened from view by buildings and property boundaries and soft landscaping.
- Parking on both commercial and residential proposals should be fully integrated within the plot or where appropriate, within car parks to avoid impacting the quality of the streetscene and public realm.
- Parking on street in new developments should be managed carefully to provide visitor parking in defined areas.

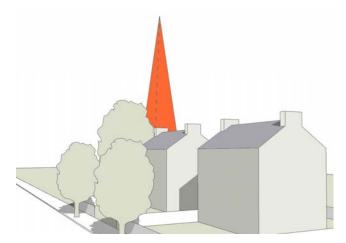
#### A3- Heritage: General

Willington has several important historical assets within the neighbourhood area which all contribute to creating an attractive environment. This section will focus on ensuring future development proposals will contribute positively to the many listed buildings and conservation area.

- Respond to heritage features, such as reflecting materials, detailing and openings whilst avoiding pastiche design which detracts from the appearance of the historical character.
- Respond appropriately by respecting scale, massing, and height, especially where visible from public routes and spaces (particularly the main routes through the village).
- Retain and frame key views of listed assets and notable buildings.
- New buildings should be orientated and sited where it does not impact the setting of a listed asset.



**Figure 100:** Views to local landmarks should be retained, acting as visual links to aid orientation and retain area characteristics



**Figure 101:** New developments should respect the existing shape and rhythm of skylines and designers should make sure that new buildings do not obstruct views to local landmarks such as Church Spires (such as St Wystan's Church at Repton - outside the neighbourhood boundary) or Bell Towers (St. Michael's Church Bell Tower) as illustrated above.

### A4 – Heritage: Conservation Areas

- The design of development should maintain the special characteristics of the conservation area. There is a presumption against development that would result in the loss or alteration of features which contribute positively to the character of the conservation area.
- Any development must retain areas of positive character by retaining as much historic fabric as possible, including built form, floorscape, landscape and mature planting.
- Any development should respect the historic layout and pattern of the conservation area, responding to positive characteristics in terms of street pattern, density and layout, plot series and boundary treatments.

## A5 - Heritage: Listed Buildings

- There is a presumption against development that would result in the harm to or loss of designated heritage assets such as listed buildings.
- Proposals which involve the substantial harm to (or significant loss of) Listed Buildings, including demolition, will not be permitted unless it can be demonstrated that the substantial harm or loss is necessary to achieve overriding public benefits which outweigh that harm or loss.
- Materials and architectural styles applied by new developments or alterations to existing buildings must respond to local character and the significance of the listed building and its setting.
- Development within the setting of listed buildings should relate appropriately in terms of siting, scale, storeys heights and massing.



Figure 102: Trent and Mersey canal conservation area



Figure 103: Bargate Lane (containing listed buildings)



**Figure 104:** Inappropriate housetype and scale within historical context detracts form historical character



**Figure 105:** Front of property parking detracts from prevailing character in this location.



**Figure 106:** Extending landscape treatment and boundary typologies extends the historical character



**Figure 107:** Boundary wall material reflecting the materiality and boundary treatment of St. Michael's.





## 4.4 Housing, design, and quality

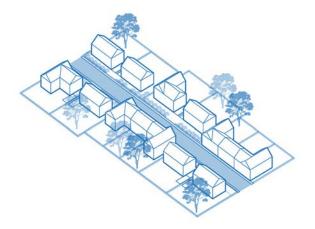
New residential development within Willington should seek to achieve high quality design whether it is on small developments such as infill or back land sites, or major development including allocated strategic sites. This section will provide design guidance and codes to ensure proposals are in-keeping with the prevailing local character and assimilate with the wider villagescape and landscape with regards to building type, scale, and appearance.

## B1 - Quality, type, and scale

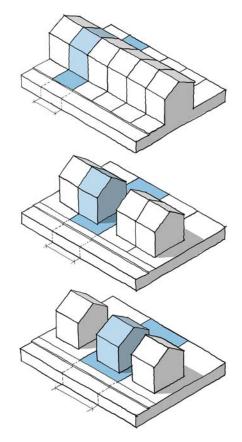
- Building scale and massing should be in keeping with the prevailing village pattern and not be overbearing on existing properties or deprive them of light, including overlooking or over-shadowing of both windows and amenity space.
- Building scale and position on plot should help to define and enclose the space within the street corridor 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);
- Building height should vary from 1.5

   2 storeys. Within the village centre (as set out in focus area 3) and at key corners, scale can increase to 2.5 to create focal points. Within residential neighbourhoods and at development edges building scale should not exceed 2 storeys to assimilate the development with the wider surroundings.
- A variable eaves and ridge line should be encouraged to provide variation in the roofscape and streetscene but should not significantly depart from the prevailing local character. Typically, variation between adjacent buildings should be a maximum of 0.5 storeys.

- Default building line should be setback from the pavement and be in-keeping with adjacent plots and should be behind an appropriate boundary treatment that is also reflective of the adjacent plots. Tree and hedgerow planting within residential curtilages should be encouraged where appropriate.
- 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.
- Rear or side plot boundaries which face public spaces must be masonry walls of an appropriate material to match adjacent plots and add to the streetscene quality.
- Access and storage for bins should be provided and bin stores should be designed to be integrated with plot boundaries or ginnels should be considered for terraced buildings with 4 or more units in order that bicycle and bin storage to the rear can be satisfactorily brought to the front.
- A mix of properties should be constructed to promote a Lifetime Homes standard of build, or designed flexibly for disabled use and wider generational use.
- New affordable housing should be 'pepper-potted' across new development sites and should be indistinguishable from market housing in terms of sale, quality, and appearance.



**Figure 109:** The default building line should be setback from the pavement behind an appropriate boundary.



**Figure 110:** Building scale should be in-keeping with adjacent properties and not detract from the prevailing character

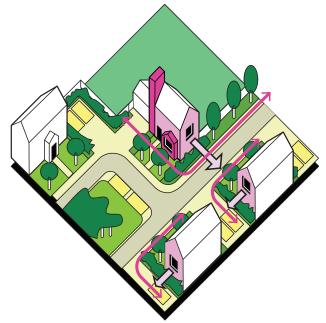
#### **B2 - Appearance**

- Buildings should be orientated to face the street to provide a degree of overlooking and natural surveillance to streets and the public realm.
   Building on key corners should seek to provide an active frontage (doors / fenestration) on both sides to improve site and village legibility.
- 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.
- Building façade design should respect the horizontal rhythm of plots and building subdivisions on the street to integrate and maintain visual continuity or add to the visual interest where required.
- Schemes should consider the materials and colours set out in section 2 and 3 to ascertain what materials are appropriate within each character area.
- Materials should reflect positive local characteristics and harmonise with adjacent buildings with matching or complementary materials, subject to the degree of variety in the village / area / street.
- Fenestration proportions (i.e., ration of solid to void and verticality) to respond to existing character buildings.
- Car parking should be located onplot, preferably to the side of units or behind landscaping / boundaries to avoid diminishing the streetscene.

with vehicles. Parking to the front of properties should be avoided on main streets. On-street parking will only be considered appropriate on minor streets in short runs.



**Figure 111:** Consideration of character includes features such as chimneys, fenestration, doorways, and porches



**Figure 112:** Properties should provide an active frontage on two sides to turn the corner at key focal points

## Strong character



**Figure 113:** Parking to the side of properties successfully hides their impact on the streetscene.

**Figure 114:** Example of good symmetry and detailing on building frontage.

Uncharacteristic

## **B3 - Development type**

This section will focus on providing guidance and codes to development sites within Willington. This includes major and minor development proposals within the neighbourhood area. Notwithstanding the principles set out below, proposals should meet the design criteria set out in Design Code A above.

#### B3 (a) Infill development

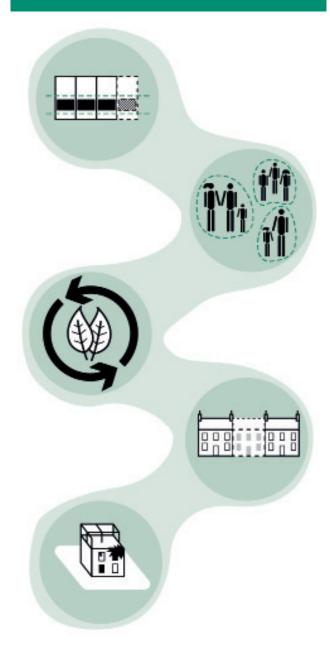
The definition of infill development is typically set out in the Local Plan but usually comprises smaller scale development (less than 10 dwellings) within an existing urban/developed context. This type of development commonly consists of three main types:

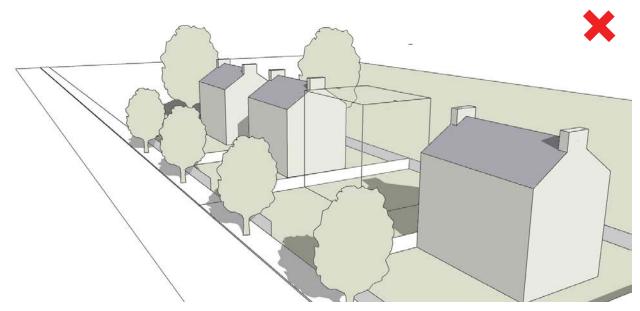
- Gap site development within street frontage
- Back land development
- Site redevelopment (i.e. replacement of existing buildings)

The overarching aim of these guidelines is to promote context sensitive infill housing of a high quality, including affordable housing within settlements. This should improve the street scene and locate new homes close to and in support of existing amenities. The following are key aims of the guidance:

- Protect residential amenity, both of new and existing occupiers.
- Contribute to the creation of distinctive communities, places and spaces.

- Be of good design and encompass sustainability principles.
- Responds to the context and character of the area; and
- Make efficient use of brownfield land (previously developed).





**Figure 115:** Here, the new infill development is not sympathetic with the surrounding pattern of buildings. The height and style of the roof breaks up the continuity of the street, the building materials are unrelated and stand out starkly, and the setback disrupts the building line.



**Figure 116:** Along this street, the repetition of certain building elements such as the openings, porches and building line, creates a visual rhythm. Some variation is acceptable - for example larger windows, roof lights to an attic room, and similar materials but with subtly different detailing. This creates individuality and interest, whilst fitting in well with the surrounding buildings.

#### B3 (b) Major sites

Major development sites are typically those attributed to strategic allocations however in this context, they are proposals that are 10 dwellings or more. Proposals within this context also include the layout of streets and spaces as well as properties.

- Proposals should meet the codes set out in Design Code B (above) in terms of quality, type, scale and appearance.
- Proposals should also meet the design codes set out in Design Code A (above) in terms of landscape setting and rural character, and character and quality of development.
- Streets should be arranged on a hierarchy of primary, secondary, and tertiary streets.
- Ensure adequate space for pedestrians and cyclists for ease of movement.
- Design in a general consideration of dynamic views that consider streetscenes, building arrangements and landscape unfolding from a pedestrian perspective in and out of the site.

#### **B4 - Affordable housing**

- Proposals for affordable housing should be in-keeping with the prevailing character of the neighbourhood by reflecting the materiality, colour, scale, form, and massing of adjacent properties.
- Affordable units that comprise a part of major development sites should be integrated or 'pepper potted' throughout the scheme to avoid creating cluster development.
- Encourage sympathetic boundary treatments that is in-keeping with adjacent plots.
- Promote a Lifetime Homes standard of build, or specifically built for disabled use.
- Parking should be provided on-plot or nearby as set out in the South Derbyshire affordable housing SPD.



## Design Code 3: Sustainability and energy

## 4.5 Sustainability and energy

## C1 - Micro-climate and resilience

All new development should work to moderate extremes of temperature, wind, humidity, local flooding, and pollution within the village. Development must also respond to the combined effects on local micro-climate of the following:

- Identify areas of sites that would be most usable for outdoor amenity space and activity.
- Use trees and boundaries to mitigate and improve micro-climate for outdoor spaces and the public realm.
- Understand solar orientation and exposure (via sun/shade study) - public spaces and gardens should have direct sun over a significant portion of the day (year-round).
- Prevailing winds, direction and speed need assessing- avoiding local wind tunnel effects or capitalising on windpower via micro-turbines.
- Understanding topography and distribution of buildings to avoid lowlying contained spaces (damp/cold spaces).
- Does not cumulatively exacerbate local flooding issues for neighbouring properties or compromise amenity. Furthermore, creating more flexible and adaptable homes that have a long-life and loose fit will make them resilient in terms of a built form that can be re-purposed, adapted and reused over time.

## C2 - Building orientation & passive design

The orientation of buildings and roof pitches should incorporate passive solar design principles and allow for efficient solar energy collection. Ideally, one of the main glazed elevations of dwellings should be oriented within 30° of south.

This applies to future dwellings whether solar panels are proposed or not to allow for retrospective implementation. This must of course be balanced with other siting needs and recognition that buildings knit into the village urban fabric to create a coherent pattern of streets and spaces that fits with local character.

The 'long' sides of buildings, terraces or barns will benefit most from this orientation. Similarly, as far as possible, orient buildings across to prevailing winds to generate cross ventilation in buildings. In Willington prevailing winds tend to be from west-south-west so orientation for both wind and solar access can combine in particular circumstances.

For those looking to 'push the envelope', there are a further 5 factors (from Passive House design and construction principles):

- Super-insulated envelopes.
- Airtight construction.
- High-performance glazing.
- Thermal-bridge-free detailing; and
- Heat recovery ventilation.

### C3 - Future Homes Standard-Towards Zero Carbon

- All new developments in Willington must demonstrate that they are responding to climate change and reducing carbon dependency. The government's forthcoming Future Homes Standard, including changes to Part L and Part F of the Building Regulations, will aim to cut carbon emissions by 80% in all new homes by 2025.
- For new homes this likely means a 'fabric-first' approach with the highest standards of insulation and energy conservation - roof, wall and under floor insulation, efficient double or triple glazing and airtightness.
- Ventilation with heat recovery, solar panels, ground, and air source heat pumps must be considered alongside smart meters. New housing will demonstrate how rainwater will be stored and reused as grey water to reduce demand on mains supplies.

### C4 - Assessing Alternative Energy Sources

The key considerations for an assessment of alternative energy sources for development may include (but are not limited to):

- Solar orientation of sites and buildings: Ensure majority of buildings on site are oriented (main façade & roof plane) within 30' of south for solar gain / energy
- Ground conditions and sufficient space to accommodate ground loops for ground source heat.

- Availability of locally sourced wood fuel for biomass heating.
- Local wind speed and direction, WSW is the prevailing wind direction for Willington.

#### **C4 - Willington Power Station**

The Willington Power Station site, located to the east of Willington, was a former coal powered station which was decommissioned in the mid-1990s. There is an ambition to utilise the site to promote sustainable energy development.

- Encourage renewable energy development on this site, specifically the potential of harnessing solar energy.
- Creating links and improving connectivity between the site and the village centre.
- Avoid significant residential or employment development that will overwhelm the existing village.



Figure 117: Air heat pump

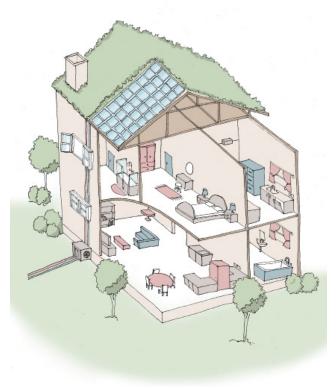


Figure 119: Zero carbon home



Figure 118: EV charging point



Figure 120: Integrated PV panels on roof



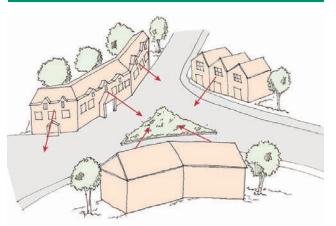
## **Design Code D: Streets and spaces**

## 4.6 Streets and spaces

### **D1 – Civilised streets**

- Schemes should follow a simple but well-defined street hierarchy and a strategy of how this will be interpreted 'on the ground'. Elements of the street hierarchy should be defined through a narrowing of street widths, use of different materials and planting strategies.
- The arrangement of streets, routes and spaces must be permeable for pedestrians and cyclists – with focus on access to services and facilities, public transport, and existing routes. The proposed development must demonstrate how it promotes connectivity and access to the parts of Willington adjacent to it.
- The legibility of schemes should be secured through careful use of features such as vistas, header buildings and a hierarchy of streets and spaces.
- Street trees are to be included within adequate verges, alongside the carriageway, on plot or in open spaces and street lighting and other infrastructure must be designed in combination
- Cycling routes should generally be provided on off-carriageway routes within the green infrastructure network where possible and connect to key destinations/ onward routes.

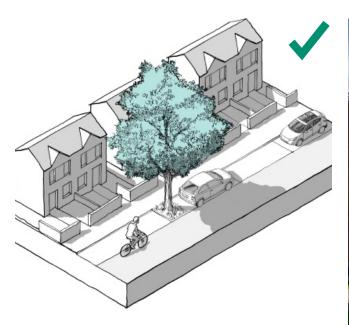
- Design in a general consideration of dynamic views that consider streetscenes, building arrangements and landscape unfolding from a pedestrian perspective in and out of the site.
- Change in materiality, raised tables and alternative widths in line with street hierarchy will encourage slowvehicle speeds as well as improve legibility and permeability through Willington and new neighbourhoods.



**Figure 121:** Overlooking and enclosure also provides a degree of natural surveillance and safety



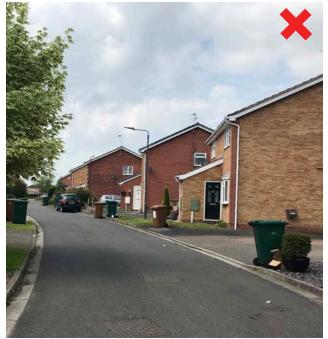
**Figure 122:** Focal points and terminating buildings can improve site legibility and permeability



**Figure 123:** Street tree planting can provide visual relief along the streetscene.



Figure 124: Change in materiality can indicate change in route hierarchy.



**Figure 125:** Blank gables can detract from the visual quality of the streetscene



**Figure 126:** Corner turning properties or dwellings that front both sides aid in site legibility

#### **D2 - High-quality spaces**

- Promote the use of appropriate street lighting, furniture, and signage to contribute to creating a high-quality environment.
- Rationalising and rebalancing pedestrian and cycle comfort and safety within the public realm by providing the correct facilities and space to encourage sustainable modes of transport.
- Encourage the decluttering of Willington's public realm of excessive signage and street paraphernalia.



**Figure 127:** Streets and spaces should have a degree of overlooking to promote natural surveillance



**Figure 128:** Density and enclosure on key public spaces will also promote a degree of natural surveillance and safety.



**Figure 129:** High quality materials, enclosure, tree planting and lack of street clutter all contribute to an attractive public realm. Photo: Poynton High Street.



Figure 130: Example of high quality public realm with high volumes of traffic . Volume of traffic is similar to that of Willington. Photo: Poynton Town Centre



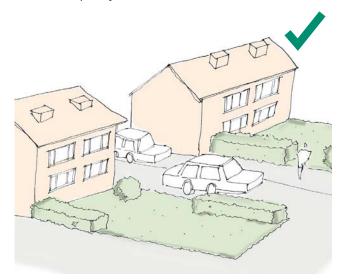
Figure 131: Public realm washed over with street clutter relating to traffic management

### **Car Parking**

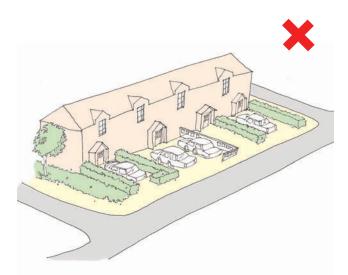
- Parking should be integrated on plot where possible with parking spaces set behind the building line, generally to the side of plot being preferable. For narrow dwellings it is preferred to retain a small front garden with a boundary wall as opposed to an open hard surface parking space. Where parking is required to the front of the plot it should be accorded sufficient space and utilise hedgerows to screen cars laterally from the street. 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 surface and green parking spaces (for example grass-crete) are preferable to impermeable parking spaces. Garages are likely to be used for storage rather than parking vehicles and should be set behind the building line or to the rear of the plot.



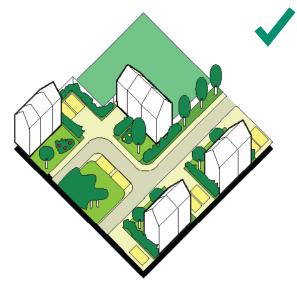
Figure 132: Avoid on-street car parking to not diminish the visual quality of the street



**Figure 133:** Side of property parking will hide vehicles from sight, improving the visual quality of the street



**Figure 134:** Avoid front of plot parking where possible. If implemented, avoid long runs to mitigate its impact on the streetscene



**Figure 135:** A variety of parking methods is acceptable where appropriate

## Electric Vehicle charging (marina too)

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/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 residential parking:

- Convenient on plot parking and charging points close to homes.
- Potential to incorporate charging points under cover within car ports and garages.
- Still need to 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.

- Need to consider visitor parking / charging needs.
- Existing unallocated / on-street 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.

## Design issues to address for Mercia Marina:

- Provision of adequate new charging points and spaces and retrofitting existing parking areas.
- Charging points should assimilate into the wider character and should not detract from the appearance of the marina nor the wider landscape.



**Figure 136:** EV Parking should not be intrusive and should not detract from the character of the area.



## Design Code E: Green and blue infrastructure

## 4.7 Green and Blue Infrastructure

### **Co-dwelling with nature**

Willington Parish Council are supportive of the reintroduction of Beavers in the neighbourhood area. In autumn 2021 the Derbyshire Wildlife Trust released two pairs of adult beavers to the Willington Wetlands Nature Reserve, marking the return of the species to Derbyshire for the first time in 800 years. By supporting their habitats, it is considered that the reintroduction of beavers to the area may assist in the mitigation of flooding, specifically from drains to the west of Willington, such as Egginton Brook, through natural damming.

## F1 - Biodiversity

- The loss of trees, hedgerows and native planting should be avoided and instead these features should be incorporated into the design of proposed development. All major development should be accompanied by a landscape layout which prioritises the use or and incorporation of native species and promotes overall biodiversity net gain
- Aim to develop a multifunctional green infrastructure network made up of a variety of elements: including hedgerow, private gardens, tree planting, grass verges, SuDs, amenity green space, watercourses, cemetery, allotments, orchards, meadows, and playing fields

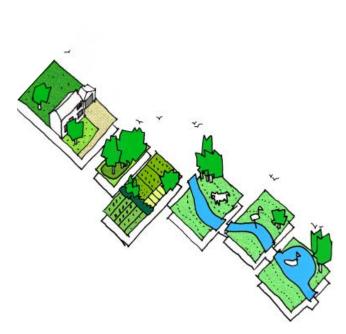
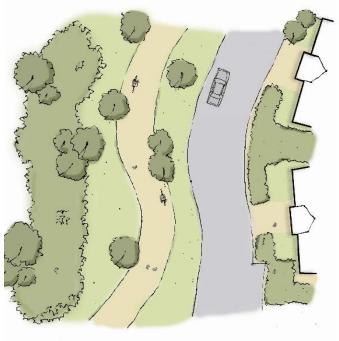


Figure 137: Promoting a positive relationship with the wider countryside



**Figure 138:** Promoting a multifunctional green infrastructure network including verges, hedgerow, gardens, trees and planting

### F2 – Landscape and Green Infrastructure

- Retain existing trees and hedgerows of good quality on the site within verges and in open spaces within the layout of new development.
- Where a new settlement edge is being created, proposals must demonstrate how the built form will transition between the settlements and the wider landscape. Schemes should be designed to avoid a hard edge and instead use reduced building heights, planting and lower densities to achieve a sensitive transition
- Include generous offsets to boundary vegetation such as hedgerows and provide additional planting on sensitive landscape edges – screen planting may be required on some sites and should be designed in conjunction with results of any landscape and visual impact surveys.
- The appearance, massing and scale of development should be filtered and broken-up by green infrastructure such as open spaces, trees, hedges, and planting.

- Green infrastructure elements should be combined to form a multi-functional green network. Existing and new planting should knit together within this network at a range of scales, with minimal breaks to create connected habitats and routes for wildlife.
- It must be demonstrated that proposed development has been designed to take account of the character of the landscape around and adjacent to it, where relevant, utilising the Landscape Character evidence work available. This may be in terms of the colours and textures used in materials and certainly an influence in the proposed landscape scheme, for example, when proposing vegetative boundary treatments



**Figure 140:** Avoid designing streets with no vegetation or tree planting



**Figure 139:** Encourage planting a variety of species including hedgerows and trees. Grass verges also provide visual relief on the streetscene.

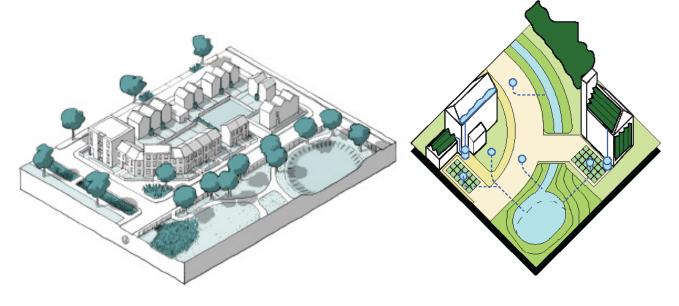
## F3 - Flood mitigation and sustainable drainage

Significant areas of the neighbourhood area are at risk from watercourse flooding from the River Trent and Egginton Brook and flood risk from surface water. As a standard, proposals should avoid locating new homes in high-risk flood areas and should promote methods to mitigate increased risk of storms/flooding with sustainable drainage systems.

Development proposals should seek to:

 Proposals should seek to integrate sustainable drainage systems to assist with flood alleviation from rivers and drains and surface water runoff and Incorporate surface features such as planted raingardens to express this function.

- On major development sites / urban extensions circa 40% of the site should be retained as green infrastructure, 10% of which may be required for SuDS detention or attenuation features dependent on drainage character.
- The location of SuDS features will naturally be determined by topography (working towards the lower end of the site) and must be outside of the key flood risk areas.
- Often, the most sustainable option is collecting this water for reuse, for example in a water butt or rainwater harvesting system. This has the added benefit of reducing pressure on valuable water sources.



**Figure 141:** SuDS can be integrated into the wider landscape scheme as attractive soft landscape assets

**Figure 142:** Flood mitigation can be in the form of swales, raingardens, and attenuation ponds. A combination of these is preferable.



## 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.

## 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;
- 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.

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

#### 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?

#### 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?

#### 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 unrivaled 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.



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