



ARUrbanism

Worlington Parish Council

Parish Analysis & Design Guidance

October 2022

This report has been produced by AR Urbanism on behalf of Worlington Parish Council, to support the production of the Worlington Neighbourhood Plan.

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Figure 1. Worlington Aerial View



Key:-



Neighbourhood Area Plan Boundary



Figure 2. Worlington village sign depicting a horse drawn barge

Introduction

This report provides a parish analysis and design codes for the Worlington Neighbourhood Plan area. This work will support the Worlington Neighbourhood Plan (WNP) by promoting high-quality, sustainable design that reflects the distinctive characteristics of the parish.

The developing WNP is a community led document which expands on the emerging West Suffolk Council Local Plan.

The WNP gives local people a greater say over what happens in their area. On 20th July 2021, Worlington Parish Council submitted a request to West Suffolk Council (WSC) for the parish to be designated as a Neighbourhood Area for the purposes of developing a Neighbourhood Plan. WSC confirmed the designation on 30th July 2021. A Neighbourhood Plan Group, led by the Parish Council, was established to oversee the production of the WNP.

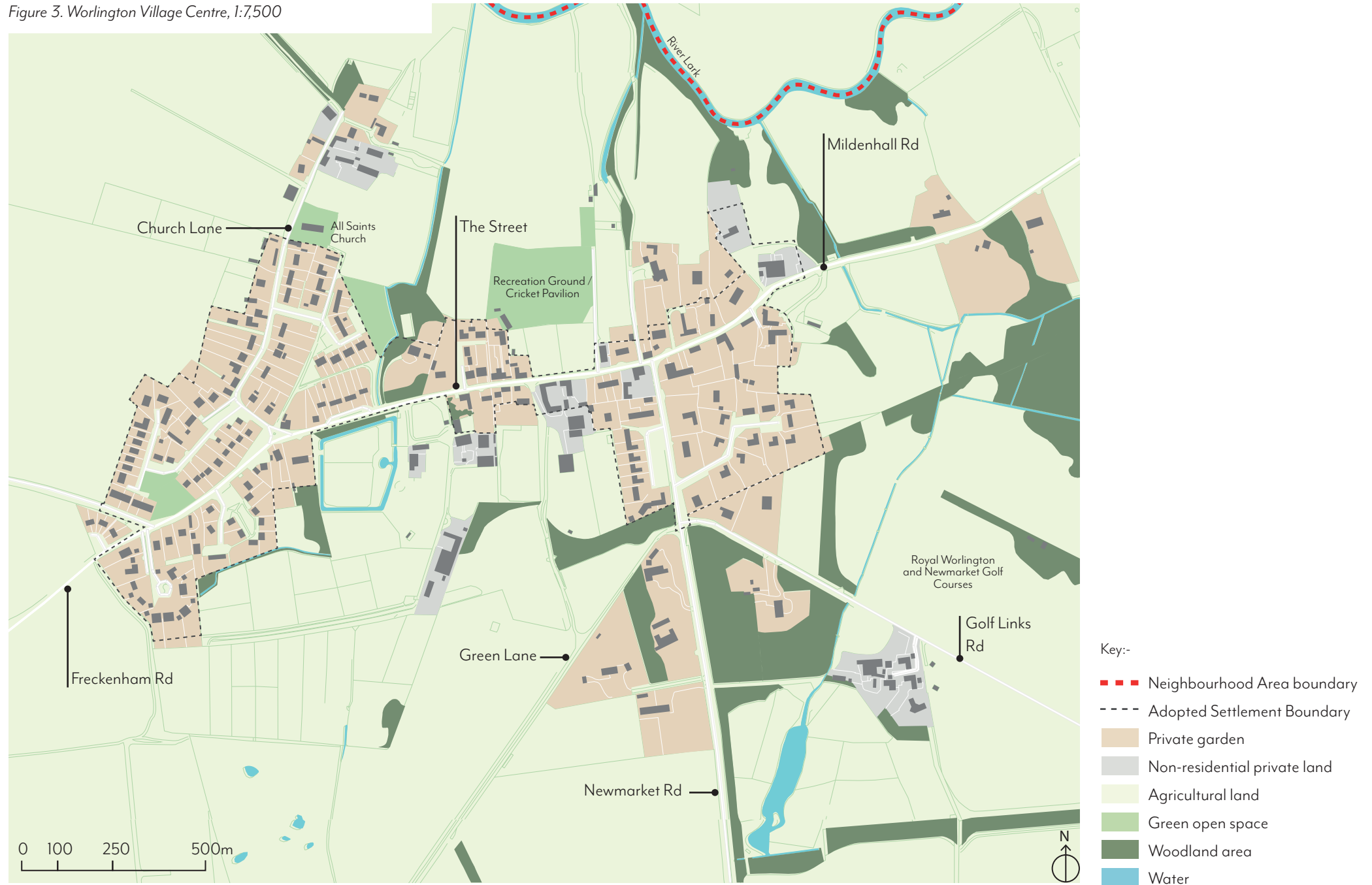
In December 2021, AR Urbanism were commissioned by Locality, on behalf of Worlington Parish Council, to prepare a Design Code for the whole Neighbourhood Plan Area. The design codes within this report are applicable as appropriate to any development across the Neighbourhood Plan Area, in accordance with the policies to be contained in the Worlington Neighbourhood Plan.

A desktop review of the relevant national and local planning policy context was undertaken, along with an analysis of the village's character. The character analysis builds on the Worlington Landscape Character & Sensitivity Assessment (March 2022) to understand how the area functions as a place. This report analyses the design opportunities and constraints of the village.

The design codes set out the type of development suitable for Worlington parish, with a focus on Worlington village.

AR Urbanism have conducted conversations with representatives of the Worlington Parish Council to discuss the opportunities and constraints of the village and these consultations have informed the design code.

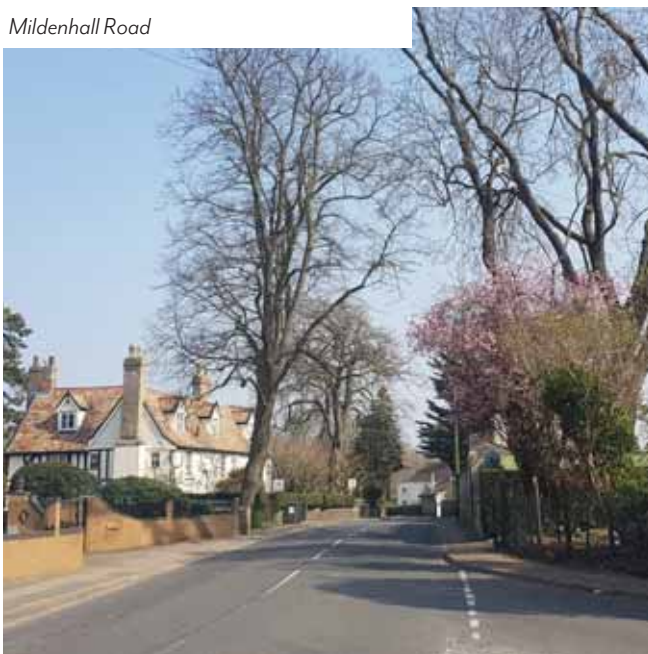
Figure 3. Worlington Village Centre, 1:7,500



The Street



Mildenhall Road



About Worlington

Worlington Neighbourhood Area (WNA) comprises a small village in a rural parish of 1,870 acres (756ha) situated to the far west of the West Suffolk district (formerly Forest Heath), close to the border with Cambridgeshire.

The parish is bound by Freckenham parish to the west, Red Lodge parish to the south, Barton Mills parish to the east, and West Row and Mildenhall parishes to the north. The latest census recorded that the Parish has a population of 552.

The village is located 3min drive away from Mildenhall, and 14min drive to Newmarket. Other service centres further away but within easy reach are Ely and Bury St Edmunds, both within 22-25min drive away.

Worlington is an ancient parish, rich in archaeological finds from as early as the Neolithic. The parish was recorded in the Domesday Book with the name of 'Wirilintona', and it was recorded to have a mill and two fisheries at the time, which suggests that the village lay on the edge of the old fen sea. Worlington's valley side location, close to the river Lark that provided a water supply, made settlement possible.

The river Lark used to be navigable up until Bury St Edmunds, thirteen miles to the southeast of Worlington. From Roman times the river Lark was a key transportation route linking the village with towns east as far as Bury St Edmunds, and to the ports in the west. Horse-pulled barges would have been regularly seen drawing agricultural products to the ports downstream. The river Lark would have remained the main mode of transport until the 1800s, followed by the road and then the railway between 1920s and 1960s.

Domesday suggests that medieval Worlington was based around two manors, one probably in the vicinity of Manor Farm, and the other perhaps connected with the Old Hall at the east end of the village. Old maps show the historic

village as a scattering of houses and farmsteads with their cottages.

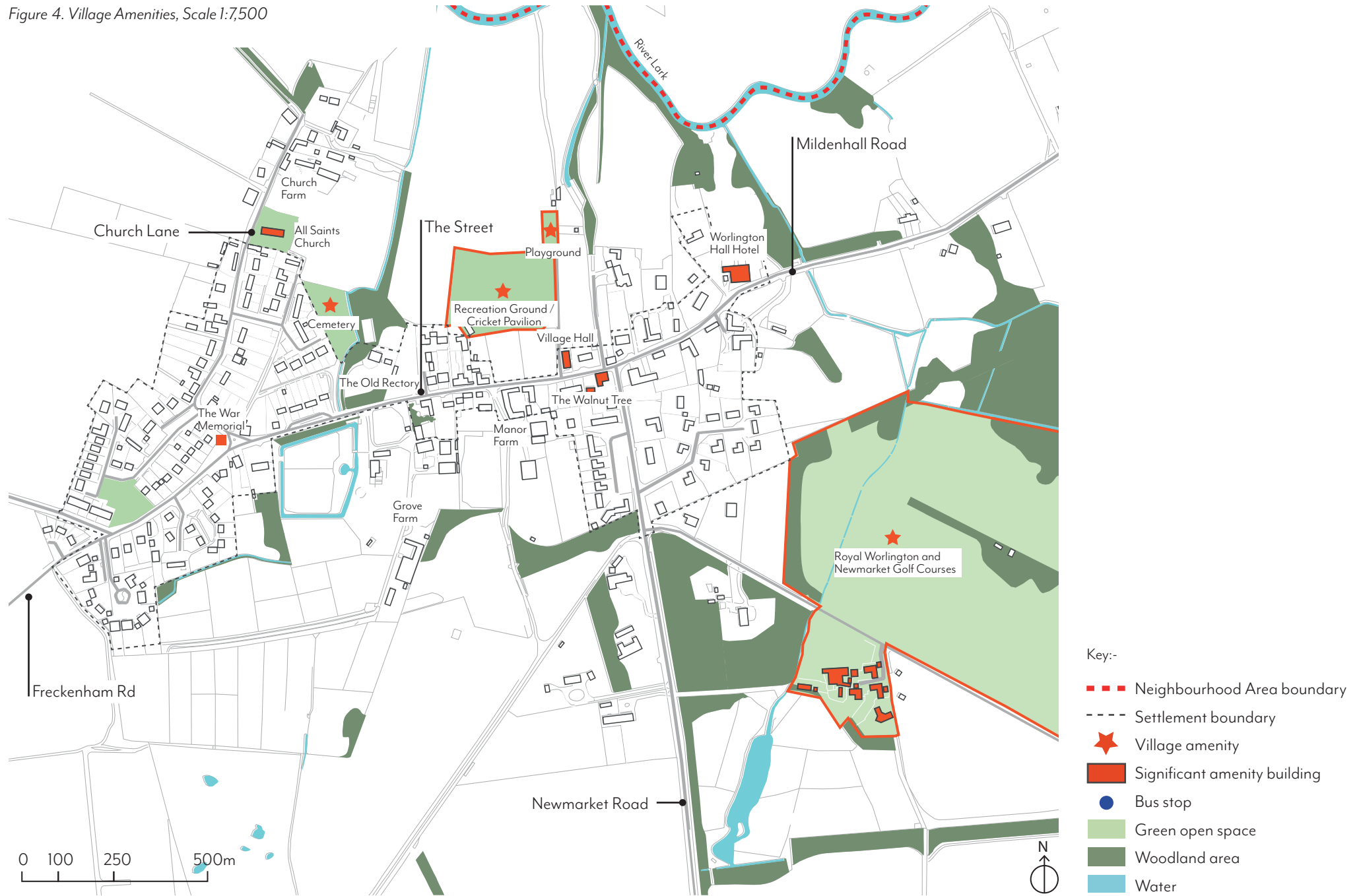
The village today is formed of a single 'cluster' with an overall broadly linear form, arranged along the B1102. Modern development has formed a 'bow-tie' shape with expansions on the east and west sides, but not in the 'centre' of the village, where the historic one-plot deep pattern remains.

In the village there are a number of listed buildings of notable character. Of particular note is the Grade I listed Church of All Saints, dating from the 13th century. Worlington Hall is an elegant 16th century former Manor House, which was built in 1570.

The Royal Worlington and Newmarket Golf Club is a famous 9-hole golf course located to the south east of the village, dating back to the reign of Queen Victoria. The course is known as "The Sacred Nine" since 1928 when British golf writer Bernard Darwin praised the Worlington course as being the best nine-hole course in the world. The club is home to the Light Blues, the golf team of Cambridge University.

Worlington has a strong sense of community despite its small population. The church and other local organisations frequently hold community events and fund-raisers.

Figure 4. Village Amenities, Scale 1:7,500



Worlington Hall



Royal Worlington & Newmarket Golf Club



The Walnut Tree



Village Analysis

Land Use

Land use in the parish is dominated by large-scale farming. Historic farmsteads are still found along the main roads in the village, such as Church Farm and Manor Farm, but today they have lost their economic connection with the land. Instead, farming today takes place in a small number of modern farms, scattered in outlying positions in the parish, outside the village, such as Rectory Farm, Bay Farm or Coldwell Farm. Equestrianism takes up to 28 acres at the heart of the village at Grove Farm, a hint at the influence of nearby Newmarket and its racing industry.

The Maltings was where hops and barley were brought from the River Lark, up through a cut-off channel, to begin the process of making good quality ale for the brewery. Part of the Maltings, now refurbished, can still be seen in the heart of the village, which was once the industrial centre of Worlington.

Today the village has a vibrant community life centred on the Village Hall, but also the Church and the Cricket Club.

The village hall is a well maintained building with easy access to both the village Play Area and Recreation Field.

Village Hall



It has capacity for 80 people and is frequently hired for meetings, seminars, quiz nights, fund raising events, clubs, fairs, or parties. The village hall periodically hosts The Worlie Cafe, a well-attended, volunteer-run cafe that raises funds for the hall.

All Saints Church stands at the centre of the Church Lane area of the village. It is an active church, with twice monthly services being regularly attended by the villagers. The Church also hosts a successful book exchange scheme, as well as monthly coffee mornings, afternoon teas and church festivals. Themed flower festivals are a biennial event, when the church is decorated by locals.

The Cricket Club is a thriving club started in 2008. It is an accredited village team whose senior sides have historically been successful, especially in 2011. Currently the club has more than 50 players.

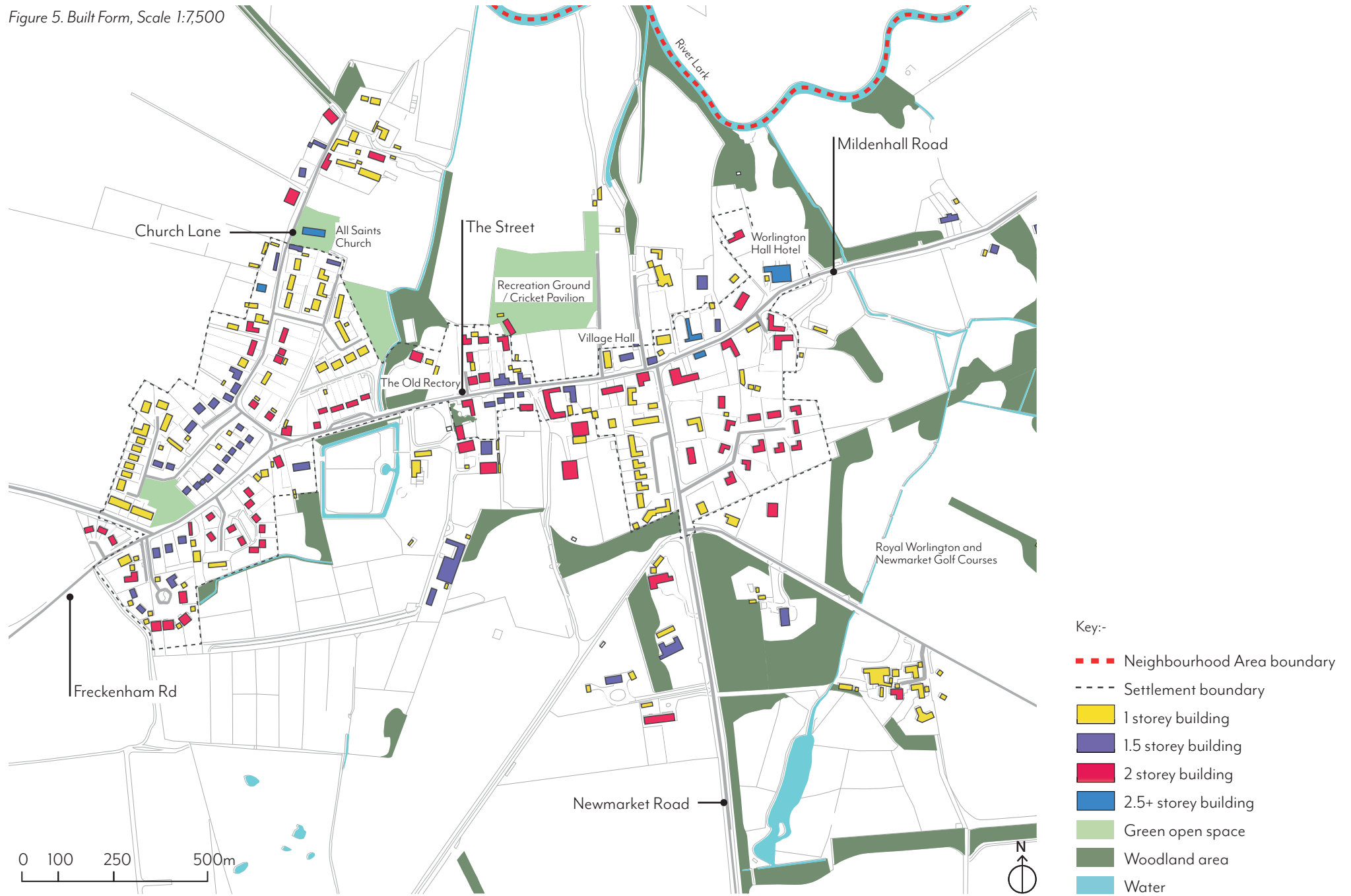
The listed Worlington Hall Hotel is a former manor house that has recently been refurbished. It offers food, drink and accommodation and is successful in bringing visitors to Worlington from around the country, but also sometimes provide accommodation for visitors to the world-famed Royal Worlington & Newmarket Golf Club.

The Worlington Golf Club was formally established in 1893, on a former rabbit warren. It is a 9-hole course that has long been home to the Cambridge University Golf Club and is known as "The Sacred Nine", for its high-quality landscaping and design.

The Walnut Tree is a former inn, now a thriving pub and restaurant that also offers accommodation.

The Hythe is a community-run wildlife project, managed by the council. It is located to the northwest of the village on the southern bank of river Lark. Through an effort by the locals and support from the Woodland Trust, the Hythe was restored in 2021.

Figure 5. Built Form, Scale 1:7,500



1-Storey detached



1-Storey terraced



1.5-Storey detached



1.5-Storey semi-detached



2-Storey detached



2-Storey semi-detached



Built Form

Buildings within Worlington range from 1-2.5 storey detached, semi-detached and terraced buildings across both historic and modern developments.

Historic houses in Worlington vary in height. All the buildings taller than 2 storeys in the village are listed, historic buildings such as the Church, the Worlington Hall Hotel, or Worlington House. However, other historic buildings also represent the tendency for smaller heights such as Coopers Cottage or cottages along Church Lane. These generally have lower heights in absolute terms thanks to their lower floor-to-ceiling heights.

A significant feature of Worlington is the 1.5 storey dwelling with dormer windows. This characteristic minimises the presence of the building while creating an attractive roof-line and delivering buildings that are effectively 2-storey in terms of usable floorspace. There are also a few examples of 2.5 storey houses, designed with the same approach, such as Worlington House and Cranford House on Mildenhall Road.

The following pages look in greater detail at the density and layout of built form across different areas of the village.

2.5-Storey detached (Worlington House)



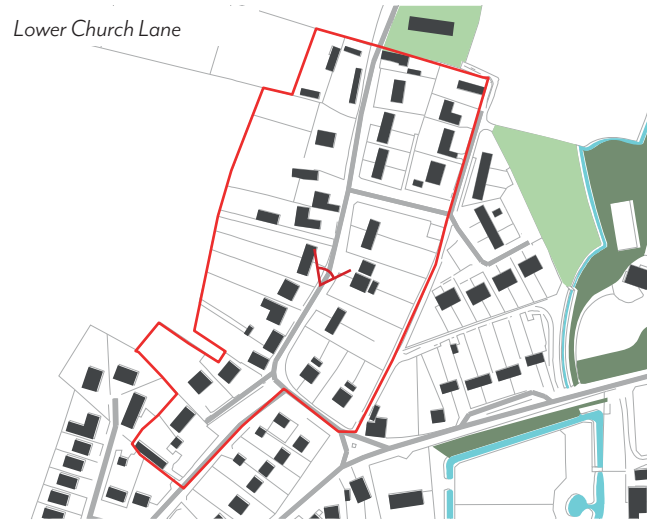
Upper Church Lane



Upper Church Lane

- Considered the 'centre' of the village along with Lower Church Lane. Rich in heritage, and characteristic long views, it is located away from the heavy traffic of the B1102 and is a popular route, leading to the Hythe and countryside walks.
- There are no footways, but the narrowness of the lane and the fact that it terminates without connecting to other vehicle routes makes it a quiet street to walk on;
- Farm yards are arranged in courtyards along this area of Church Lane. Farm buildings are placed directly on the street, only separated by narrow green verges.

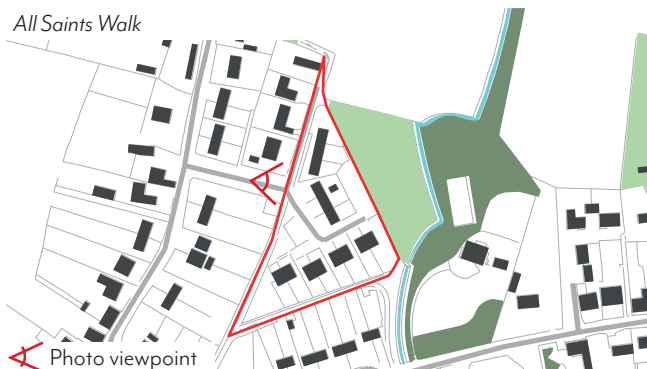
Lower Church Lane



Lower Church Lane

- It is considered the 'centre' of the village together with the Upper Church Lane area;
- There are numerous historic cottages along this part of Church Lane;
- Average height increases from 1 storey around All Saints Walk to 2 storeys towards the junction with the main road;
- Old buildings are located directly on the street, while newer, taller buildings are set back considerably from the road by generous front gardens, marked by low hedges or fences;
- It has a historic feel thanks to the Church and the churchyard.

All Saints Walk



All Saints Walk

- This area is a very quiet residential area, accessible off Church Lane, and with a rare visual connection to the tower of All Saints Church;
- The buildings in this area are one storey bungalows, semi-detached or terraced, setback from the street by narrow front gardens;
- Parking is provided in separate garage structures.



Freckenham Road

- In this area houses typically face small access roads that branch off the main road, forming cul-de-sacs, and a central courtyard or green building arrangement;
- Buildings are predominantly 2 storeys high, set back from the street, and placed at an angle to each other;
- The open space at the centre of the group of buildings known as “The Meadows” is predominantly hard surfaced and used for parking, although it has potential to provide amenity green open space.



The Moat

- Buildings in this area are predominantly 2 storeys and set back from the street, with the exception of the Bell House, formerly the Bell Inn, located at the junction between The Street and Church Lane;
- Most houses are located on an access road parallel to the main road. They have parking at the back, accessed by a small side lane;
- There is a footway on the north side of the street, while on the opposite side of the main road The Moat is an inaccessible, densely grown area of shrubs and trees with no footway.



Walnut Grove

- In this area 1.5 storey houses with dormer windows are set back in deep, narrow plots. Houses on Freckenham Road back onto Walnut Grove with high, defensive fencing;
- Around the Walnut Grove green open space houses are 1 storey detached or semi-detached, similarly set back from the street by a generous front garden;
- Insufficient parking provision causes parking on the footway and on the green space.

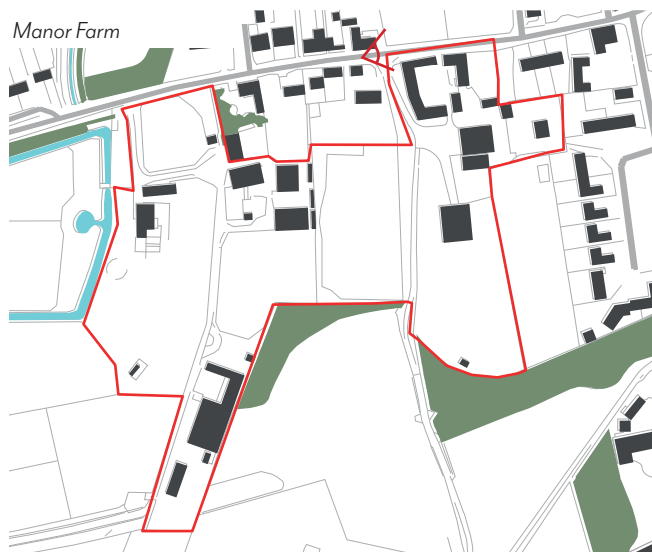
The Street



The Street

- Chestnut Close is a recent development of 2 storey houses with parking in garages, located directly on a side access street, and with no front gardens;
- The older houses in this area are located directly on the street, with no setback, and have the characteristic 1.5 storey building form with dormer windows, large chimneys and gables oriented parallel to the street;
- Boundary treatments are mixed, from high brick walls to low hedges and timber fencing.

Manor Farm



Manor Farm

- In this area the former industrial heart of the village is visible, through the remaining barns and farmyards;
- The historic one plot depth is retained. This area is the geometrical centre of Worlington, and it provides longer views and a much greater sense of openness than more peripheral areas of the village;
- Some farm buildings are located directly on the street, but are accessed from the side or back through access roads. These provide access to the other buildings, scattered across the plot. Due to being turned inwards, these buildings provide little to no active frontages to the main road;
- The farm yards and barns in this area are currently used for equestrianism and despite their occasional openness, the activities here are strongly separated from the street.

Mildenhall Road



Mildenhall Road

- This is an older area of the village, as illustrated by the numerous mature trees dotted along the main road;
- This area comprises a large proportion of Worlington's heritage and listed buildings;
- Houses are predominantly larger, detached 2 and 2.5 storey buildings, set back from the street by front gardens;
- Properties in this area are frequently separated from the street by historic, characteristic tall brick walls.



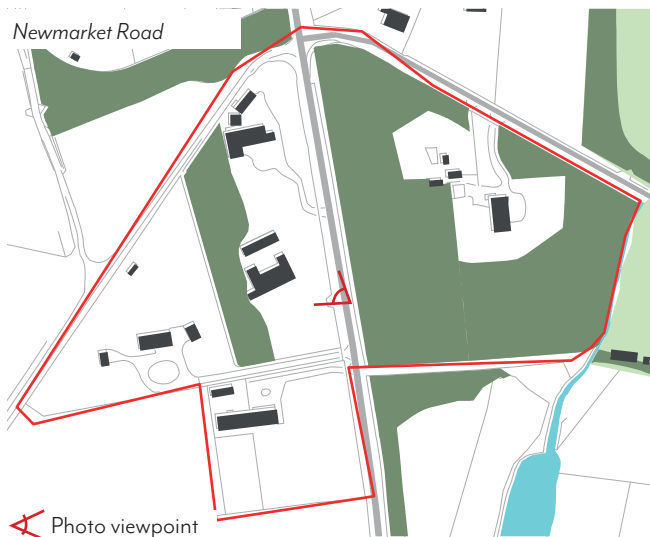
The Paddocks

- This area focuses on The Paddocks road, a dead-end road off Newmarket Road, a very quiet area, dotted with mature trees;
- Houses are large two storey, detached buildings, located deep within their plots, with generous front gardens;
- Buildings have their own driveways and parking on-plot, and are separated from the street by hedge fencing;
- Properties that have boundaries on Newmarket Rd are strongly separated from the traffic by very tall and dense hedges, making Newmarket Rd a hostile pedestrian environment.



Lark Close

- Houses are buffered from the traffic on Newmarket Rd by being located on a smaller access road, parallel to the main road;
- This forms a small green upon which the houses converge. However, the intensity of the traffic and the exposure of the green make it an unattractive open space for leisure;
- Houses are one storey buildings, similar in character to the clusters in Walnut Grove and All Saints Walk areas.



Newmarket Road

- This area is a very sparsely built part of the village;
- Development here comprises a few scattered houses, typically large buildings located far from the road, in deep and wide plots;
- Their location and setback ensures they are sheltered from the heavy traffic of Newmarket Road;
- Properties and gardens are dotted with mature trees that helps shelter and isolate them.

Figure 6. Routes and Connections, 1:7,500



The Street



Mildenhall Road



Golf Links Road



Church Lane



Footpath to the Hythe



Footpath to cemetery



Routes and Connections

The main B1102 road, which connects Mildenhall to the northeast with Fordham and other villages to the southwest, is very busy and it carries traffic at significant speed into Worlington. Large freight and agricultural vehicles pass through the village frequently. In contrast to the traffic carried on the main roads, only Church Lane, which connects into the heart of the village at the War Memorial, is narrow and quiet. It leads north to All Saints Church and Church Farm, before terminating.

The quality of the pedestrian environment within Worlington village centre is mixed and parts of the village suffer from a fragmented pavement network. Some key village routes lack consistent pedestrian pavement connections or have no pavements at all.

Footways beyond the junction with Newmarket Road, along Mildenhall Road, are very narrow and dangerous, especially at bends. Buses and lorries passing at high speeds at these points force pedestrians to step away from the road or stop walking to stay safe.

Worlington benefits from a series of public rights of way and permissive routes. Access to the landscape is key to the character of this semi-rural village, as provided by Green Lane and the footpath at the end of Church Lane, or by footpaths across the cemetery grounds, linking to The Street.

There is a lack of defined cycling infrastructure within the village, with no dedicated cycle paths (on- or off- road), crossings or public cycle parking.

There are bus stops on Mildenhall Road and at the junction of The Street and Church Lane. There is a twice daily bus service between Mildenhall and Bury St Edmunds.

Walnut Grove is poorly connected to the main road. An informal opening in the hedge illustrates the desire line across the green open space and into the main road.

Figure 7. Green and open spaces, 1:7,500



All Saints Churchyard



The Meadows



Cemetery and open space



Green Lane to Badlingham



Walnut Grove open space



Open space along Newmarket Road



Green and Open Spaces

The green infrastructure of Worlington is currently disjointed. Green open spaces reach deep into the village centre thanks to the one-plot depth historic layout which has been preserved here, but not to the west and east of the village where most expansion has taken place. This greenery takes the form of The Moat shrub and woodland south of The Street, and the horse paddock and cricket ground north of The Street. The Moat is the remains of a medieval trapezoidal-shaped moat and/or fishpond west of Grove Farm, and is currently in private ownership.

The central area of Worlington is connected to The Hythe open space through a network of connected footpaths. This network follows at first the course of a small watercourse that drains the Moat into the River Lark west of the Rectory, then across the cemetery open space, through the churchyard and along Church Lane.

The Hythe is a riverside site beside the River Lark that was recently restored for wildlife and opened for the use of the community. Picnic benches have been installed and there are plans for the installation of a fishing platform, both measures welcomed by the community.

Walnut Grove is a small green open space in the west of the village, surrounded by housing. This space is formally separated from the main road by a tall row of hedges.

The Green Lane is a relatively historic route and offers a traffic-free walking route connecting to Badlingham, away from the often busy roads. It is much valued by the community.

The Meadows is a large open space that is currently hard landscaped and used for parking, just off Freckenham Road. This makes poor use of the large communal space between houses and could be improved.

Figure 8. Built Heritage, 1:7,500



Manor Farm



Coopers Cottage



Built Heritage

Worlington does not have a Conservation Area designation. There are 11 listed buildings in the village, of which one is Grade I listed, and the rest are Grade II listed.

Historic England provides records of all Grade I and Grade II listed buildings within the Worlington Neighbourhood Area :

Grade I listed:

- All Saints Church

Grade II listed:

- Church Farm
- Cross base in Churchyard
- Worlington War Memorial
- Manor Farm
- Coopers Cottage
- Cranford House
- Worlington House
- Worlington Hall
- Worlington Old Hall
- Old Hall Cottage

All Saints Church



Church Farm, Church Lane



Worlington Hall



Worlington House



The oldest building in the village is All Saints Church; parts of the current building date from the 13th century. The church is currently located on an out-of-the-way lane to the north west of the village. Together with Church Farm it provides a historic feel and a well-loved leisure centre of the village.

The oldest house in the village is Worlington Old Hall (early 16th century). Later, other imposing country houses were added to the streetscene - Worlington Hall (16th century) and Worlington House (17th and 18th century).

All Saints Church



Cranford House



Worlington Old Hall



Worlington House



There were two pubs in the village by the end of the 19th century, one at each end of the settlement - The Bell Inn (now turned into Bell House) and The Chequers (now Walnut Tree pub).

At the junction between The Street and Newmarket Road there used to be a smithy, on the site of which today is a private residence called "The Old Forge".

The village school which was opened in 1840 operated until 1959 and is now a private residence. The Post office in Worlington shut in 2004.

Flint wall, 1 Freckenham Road*Render and plain roof tiles on Bakers Cottage**Buff brick on the Old Post Office**Knapped flint on Bell House rear extension**Red brick at 10, The Street**Garden wall on Church Lane*

Materials

Most common traditional materials in Worlington are red brick, buff brick, render, knapped flint, and plain flint.

Brick walls are typical elements in the streetscape of Worlington, especially in the older parts of the village, where they form tall or low boundary treatments.

Render is a common treatment of facades of old cottages, as seen along Church Lane, but also in the case of some of the larger detached historic buildings along Mildenhall Road.

Red and buff bricks are typical materials for the newer developments in the village, such as: the new buildings at the junction between Freckenham Road and Isleham Road, at the western entrance of the village, or the 2 storey buildings converging on The Meadows.

Flint is seen in the walls of buildings or as garden walls in the more historic areas such as Church Lane.

Occasionally there is decorative woodwork such as the village hall wooden carved panels.

Roof treatment is typically red clay tiles, such as the red pantiles at 1 Freckenham Road, or plain roof tiles on Bakers Cottage. Slate roofing is also present, and in the newer developments sometimes tin roofing is used.

Figure 9. Mildenhall Road



Design Codes

AR Urbanism have developed these design codes in conjunction with Worlington Neighbourhood Planning Steering Group (WNPSG) to reflect their ambitions and aspirations for any new development or changes to existing buildings and spaces within the Worlington Neighbourhood Area. The design codes work in tandem with the Worlington Neighbourhood Plan (WNP) to provide guidance on the built form, layout and sustainability of development, which must be designed and constructed to perform to increasingly low-carbon requirements set by central and local government.

Golf Links Road



ARU have established the following **key urban design principles** which have inform the design codes:

- Ensure the layout and scale of new development reinforces the **distinctive historic character** of the village;
- Conserve and enhance the **rural landscape** of the Parish by preserving the existing open views and natural green buffers, including hedgerows and mature trees;
- New development should **improve access routes** for new and existing residents, where possible. This involves improving connections to the rural landscape and creating safer footpaths that connect development, especially in the east of the village;
- Ensure new **homes and spaces are well-designed for all ages**, including older residents, young families, teenagers and children. This should take into account the impact of Covid-19 and the increased opportunity for residents to work from home;
- The orientation of buildings and plots should respond to environmental opportunities and constraints and maximise opportunities for residents to live **sustainable lifestyles**;
- New development should protect the **settlement separation** between Worlington and Mildenhall.

The design codes reflect the findings of the initial village assessment, which defines the character and issues and opportunities of the area. They are structured into two parts:

The first part of the codes informs development at three scales:

- 1.) Strategic Approach - the site-wide integration of the development within the surrounding landscape and existing settlement;
- 2.) Streets and Spaces - the quality and character of the public realm;
- 3.) Sustainable Homes - contextual buildings that are sustainable and well-considered.

The second part of the codes provides a development management checklist of key items that should be considered to achieve a high quality design outcome that is contextual to Worlington. The development checklist should be used to inform development design, at all stages from concept to detail design, as applicable to the scale and type of the proposal.

The design codes are then followed by a short outline of relevant case studies. These demonstrate sustainable, high-quality housing design in rural settlements and are based on exemplar place-making that responds to the local character. The case studies provide further clues as to WNPSG's aspirations for any new development within Worlington.

Figure 10. St Andrew's Church



Strategic Approach: context specific and sustainable places

The strategic layout of new places should support the principle of sustainable development—maximising opportunities for residents to live healthy lifestyles, while minimising their carbon footprint. The orientation of buildings and plots and the layout of streets and spaces should create visual and physical connections to the surrounding landscape and built environment. Development should respond positively to the character of the site's environmental opportunities and constraints.

SA. 1 Sustainable development principles

SA. 1.1 Development location and type

- Development should be focused around the village of Worlington.
- Development proposals must promote an appropriate density that supports efficient land use while reinforcing the character of Worlington.
- Developments should support improvements to the infrastructure of Worlington to mitigate the impact of development and generate wider social value for the rest of the community.
- Proposals for sites with existing buildings should prioritise the reuse, extension or alteration of buildings, over demolition and redevelopment wherever possible.
- New developments should protect and where possible support the provision of services and facilities in Worlington.
- Developments of multiple buildings must safeguard the settlement separation between Worlington and Mildenhall by remaining within the settlement boundary.

SA. 1.2 Contextual Design

- Development should be sensitive to local context, and be informed by analysis of the site and the surrounding area.
- Development should protect and preserve the rural aspect of Worlington and take particular care to maintain the tranquillity of the parish.
- Any proposals for developments of five or more buildings should be subject to a masterplan developed in consultation with the local community, and demonstrating a strategic approach to design.

SA. 1.3 Daylight, sunlight and overheating

- Wind and solar studies should be used to inform the orientation of buildings and plots, and the size and location of openable windows. The design should ensure adequate daylight and sunlight reaches internal living spaces, while optimising natural cross ventilation to minimise the risk of overheating.

SA. 1.4 Site wide energy strategy

- Developments should follow the energy hierarchy: the priority should be to reduce the amount of embodied carbon and operational energy use; secondly, switching to more efficient energy systems and fixtures; and thirdly focusing on achieving energy needs through renewable sources.
- Renewable energy sources, such as PV, should be integrated within design proposals in a manner that does not detract from the character of Worlington. Roof pitches should be orientated to maximise the potential of PV installations.
- Development sites for multiple buildings should consider communal energy generation and battery storage to improve efficiency and reduce energy costs.

SA. 1.5 Flood resilience

- Development sites and sites for public realm improvements should be considered three-dimensionally and incorporate natural drainage features such as SuDs (Sustainable Drainage systems) and swales to increase their resilience to flooding.

Example public realm materials for improving wayfinding and connections to the landscape



Examples of way finding and educational signage appropriate to Worlington.



Selfbinding gravel



Vegetable bonded asphalt



Woodchip



Timber boardwalk



Permeable block paving

Examples of public realm materials suitable for Worlington.

SA.2 Response to landscape context

SA. 1.6 Sustainable travel

- All new development should be easily accessed by pedestrians and cyclists via designated routes that connect with existing routes to the village, wider landscape and adjacent plots.
- Development should contribute to the creation of a connected and accessible street network that promotes walkable neighbourhoods for people in and around the village.
- Development should seek to improve inclusive access by making streets safer for pedestrians and vulnerable users, including the elderly, disabled and children.
- New development should provide safe pedestrian access, and encourage the development of sufficiently wide footways wherever possible.

SA. 2.1 Landscape character

- The overall site layout of new development should build upon a strong landscape inspired framework. Existing landscape features should form the starting point for the design of a network of green spaces and wildlife corridors that integrate with existing open spaces, habitats, trees and hedgerows.
- The design of the landscape framework should reference the heritage of the area such as the location of Worlington on the edge of the old fen sea.
- Development should reflect the rural character of Worlington and sit harmoniously within the landscape. Urban-style developments are not appropriate.

SA. 2.2 Wayfinding and public rights of way

- The rural character of existing public rights of way should be safeguarded and enhanced through encouraging sympathetic landscaping and the retention of hedgerows, trees and native plants. A bespoke wayfinding strategy should be implemented to enhance existing public right of way connections linking village with wider landscape (see examples on page opposite).
- Public rights of way should be incorporated into the public realm of new development. Where new development impacts existing public rights of way, these should be re-provided and extended in all cases.

SA. 2.3 Landscape views

- Visual connections to the surrounding farmlands should be preserved, especially views from Church Lane and The Street.
- The visual impact of new buildings and extensions to existing properties should be considered from landscape viewpoints including long-distance views of All Saints Church and long-distance landscape views, landscape features, footpaths and bridleways and open spaces.

SA. 2.4 Retaining and enhancing natural assets

- Existing hedgerows should be retained, integrated and enhanced with additional species-rich infill planting, using native species of local provenance to increase biodiversity.
- Existing trees should be retained, and new appropriate deciduous trees using native species of local provenance should be planted in strategic locations. These provide shade in summer, but are without leaf in winter, allowing for sunlight and passive warmth.
- Strategically located planting should be used to minimise the impact of prevailing winds, which can cause major cooling of house interiors. This is particularly relevant to homes with fenestration on the south and western elevations.
- The species, location and continuity of trees, hedgerows and other landscape features should be considered as part of an overall strategy to improve existing habitats and create wildlife corridors.
- Native species should be used wherever suitable and 'wild', rural inspired planting treatments should be promoted over uncharacteristic, ornamental species.
- Public spaces should 'work hard' to provide not only amenity, but also flood resilience and biodiversity gains.

Example materials for new residential development



Permeable block paving in different colours to define spaces for parking.



Reinforced grass for areas of low use

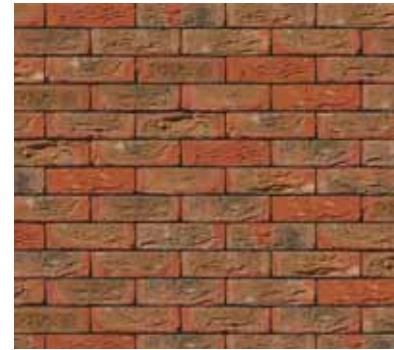


Vegetable bonded asphalt

Example materials for driveways and shared surfaces within new and existing developments.



Brick of different varying colours including, yellow, red, grey and brown.



Flint



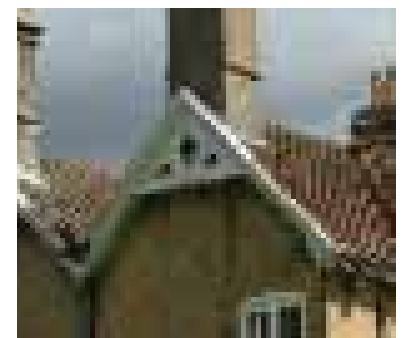
Render with limewash pigments in a variety of colours and pargetting details



Clay tiles



Slate



Decorated gable end barge-boards

Above: contextual building materials for new development in Worlington.

SA. 3 Response to built context

SA. 3.1 Built heritage context

- All development within Worlington should respect the setting of listed buildings and any locally significant non-designated heritage assets. This should be achieved through the use of high-quality design that seeks to integrate into the surrounding context. Development should not dominate heritage assets through excessive building height, massing or inappropriate materiality or features.
- New buildings within Worlington should seek to incorporate materials and features that are typical of the area such as those shown on page 23.

SA. 3.2 Building typologies

- A key feature of Worlington is its diverse typologies including bungalows and detached and semi-detached housing. New development should continue this trend to meet needs of different members of the community.

SA. 3.3 Built frontages

- Along streets, new and existing frontages should follow the same orientation of the building line to provide a sense of continuity between new and existing places.
- Where green spaces are provided within new development, buildings should front onto these to animate them and provide passive surveillance.
- In new developments, orientation of frontages that creates views of the 'back of the fence lines' should be avoided.

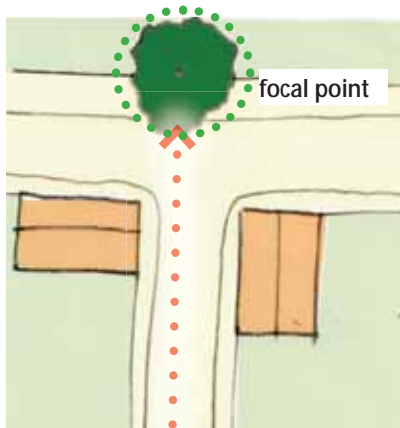
SA. 3.4 Scale and massing

- An important feature of Worlington is its varying building heights (ranging from 1-2.5 storeys) and orientation of roof pitches, that result from its diverse building typologies. New development should reinforce this characteristic.
- The scale and massing of new buildings should respect sensitive boundaries. For example, building heights may need to step down in specific locations to avoid overshadowing and overlooking at boundaries with neighbouring amenity space; additional landscaping may be required to create defensible boundaries between new and existing dwellings.

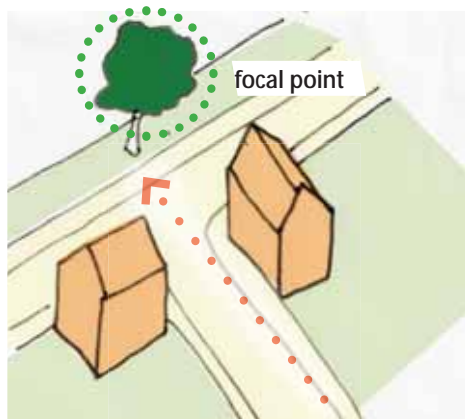
SA. 3.5 Site-wide material strategy

- The materiality, detail and fenestration of new buildings should reflect the rich local material palette of Worlington. A site wide material strategy should explain how local materials have informed the palette of elevations, paving, public realm areas, planting strategy and roof scape.
- New development should take inspiration from the materials palette on page opposite and use locally sourced materials where possible to help minimise embodied carbon.

Example new building placement relative to public space



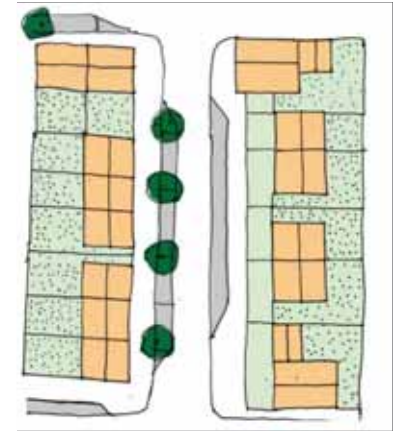
Plan



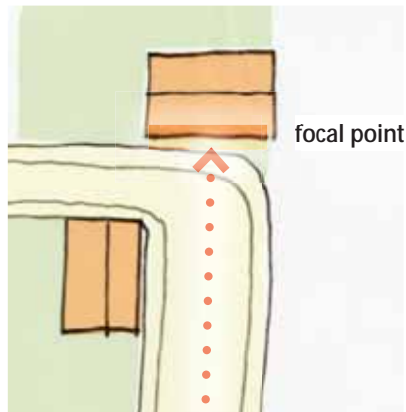
Axo



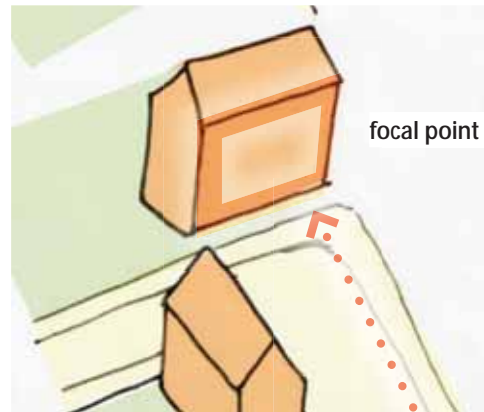
Rural lane



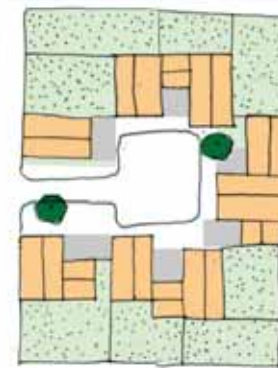
Tree lined street



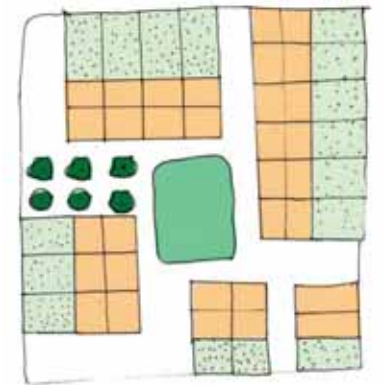
Plan



Axo



Courtyard cluster



Village green

• Intersection principles: The diagrams above illustrate how building elevations and trees located at key junctions act as focal points that aid wayfinding.

• The diagrams above illustrate how the layout and arrangement of buildings can be used to create clearly defined public spaces.

Streets and Spaces: a characterful and safe public realm

Successful places are underpinned by a network of routes providing convenient, safe and enjoyable streets and public spaces, that encourage walking and cycling and mitigate the noise and pollution impacts of cars.

Any new development, whether infill, multiple buildings, or the development of new green spaces, requires access and arrival arrangements. Through careful design any development can contribute towards the creation of a safe and characterful street environment.

	Tertiary Street	Mews	Lane
Building to building distance	12.5-16.5m	15m	10m
Carriageway/ shared surface width	5.5m	7m (shared)	7m (shared)
Street surface	Asphalt or block paving	Block paving	Block paving
Footway	2m	Shared	Shared
Cycling	On street	Shared surface	Shared surface

SS. 1 Views and focal points

SS. 1.1 Arrival sequence to new developments

- The sequence of arrival should be designed with focal points (feature buildings, public spaces) along the way where possible, in order to aid navigation.

SS. 1.2 Streetscape elevations

- The elevations of buildings should be designed according to their specific location in public realm and the wider streetscape. New developments should avoid views of blank gable ends in prominent locations and instead should ensure feature buildings and elevations address important junctions and public spaces. Decorated gable end barge-boards are a common feature of Suffolk.

SS. 1.3 Streetscape views

- Where appropriate public realm spaces should create vistas by using built form to frame views towards the village or across the landscape.

SS. 2 Joyful Streets

SS. 2.1 Street typologies

- Streets should be designed primarily as places rather than spaces for vehicular movement, with the arrangement of buildings and provision of footpaths, landscaping and public realm prioritised. The typologies in the table opposite are suggested as a starting point for design layouts to create a positive and people friendly environment.

SS. 2.2 Soft landscaping treatments

- The hierarchy of planting should reflect the typology of each street in the village: trees along key routes, threshold planting along tertiary routes.

SS. 2.3 Hard landscaping treatments

- Different paving types and colours should define spaces for people and vehicles, reducing the need for obstructive clutter such as bollards, guard rails and unsightly white and yellow lines.
- The palette of public realm surfaces, street furniture and signage should reflect the rural character of Worlington (see material palettes on pages 23 and 30).

SS. 2.4 Passive surveillance

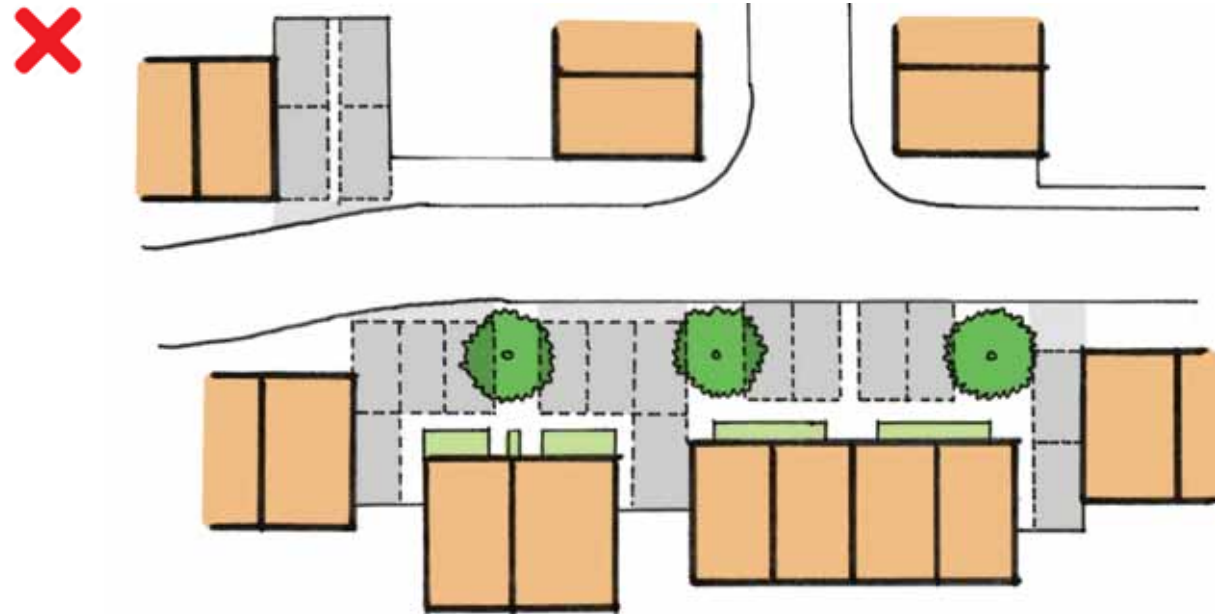
- Long areas of blank building frontage or pedestrian routes along narrow passages between buildings can feel unsafe and should be avoided.

SS. 3 Attractive Green Spaces

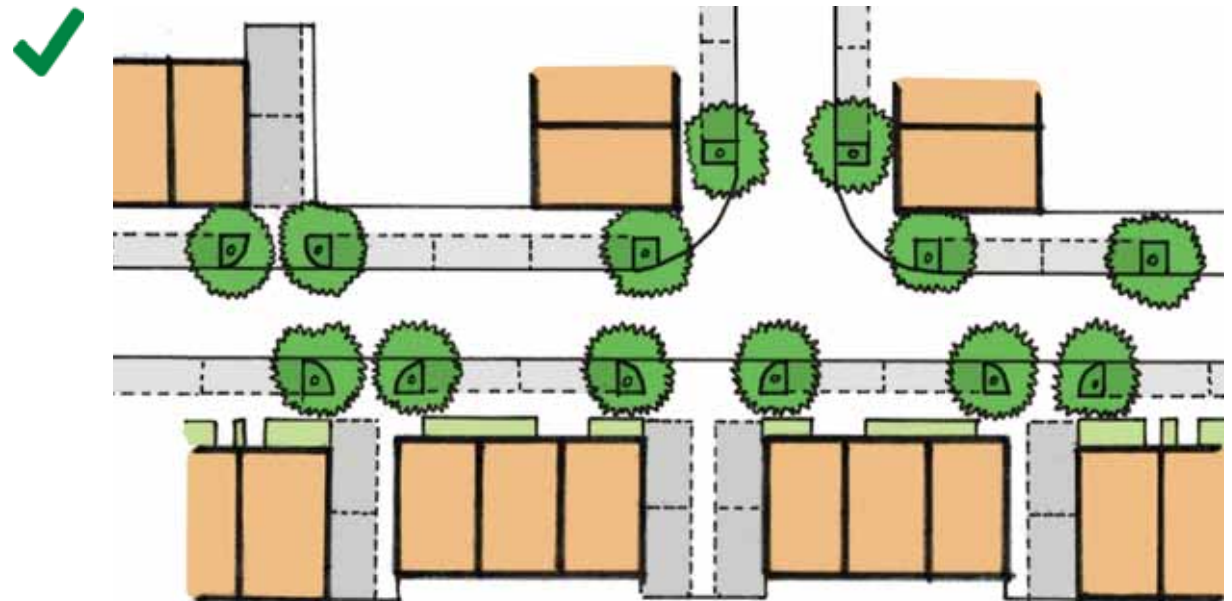
SS. 3.1 Multifunctional green spaces

- Green spaces in the public realm should be designed to be multi-functional to cater for the different needs of the community. Landscape features such as strategically placed tree stumps and play equipment create opportunities for 'play on the way' for children and places to sit for older residents.

Inappropriate Residential Street layout: In this example, extensive amount of in-curtilage parking are arranged in a way that dominates the street scene, minimising the amount of unallocated visitor parking available, or the potential for street trees and landscaping. This arrangement creates poorly overlooked streets with a lack of consistent frontage or sense of enclosure along the route.



Appropriate Residential Street layout: A more appropriate layout combined in-curtilage parking with both allocated and unallocated parking on-street, enabling parrallel parking arrangements broken by street trees. This preserves a sense of landscape along the route, while enabling more consistent building frontages and smaller street widths which provide a greater sense of enclosure and overlooking.



SS. 5 Public realm furniture

SS. 3.2 Encouraging active travel

- The design of movement and access routes should include features at the pedestrian level to encourage walking and cycling. This may include colourful and scented planting to provide interest along key routes.

SS. 4 Bins, bikes and cars

SS. 4.1 Refuse storage and collection strategy

- Integrated bin and bike storage units should be secure, covered and hidden. They should be located for easy access to the street and to avoid residents needing to pass through the home. Communal bin storage should be considered on larger sites as this avoids unsightly bins cluttering the streets on collection days and means that fewer streets are required to meet the requirement for bin lorry access.

SS. 4.2 Vehicle parking and charging strategy

- Cars should not be allowed to dominate the street scene or impede on the footways.
- A combination of on-street and off-street parking should be used on new development. Visitor cycle parking spaces should be provided in convenient and well-lit and overlooked spaces. Public and private electrical vehicle charging points must be included relative to allocated parking spaces or garages.

SS. 5.1 Function and location of street furniture

- Street furniture greatly influences the character and aesthetic appeal of the public realm. Street furniture must be appropriate for the location and function it is intended for.
- Defined furniture zones should be used to minimise cluttering of footways by lining up furniture to create visual order. Avoid unnecessary furniture by combining street furniture components on a single post where possible.

SS. 5.2 Use of bollards

- Bollards should be avoided as these add to visual clutter. However where these are required, they should be considered to reflect the village character of Worlington.

SS. 5.3 Use and type of external lighting

- External lighting should be used only where absolutely necessary for safety and security. This is to protect wildlife, limit light pollution and reinforce the rural character of the area.
- LED street lighting should be of low level and low intensity, with hoods and buffers that direct light to specific areas.

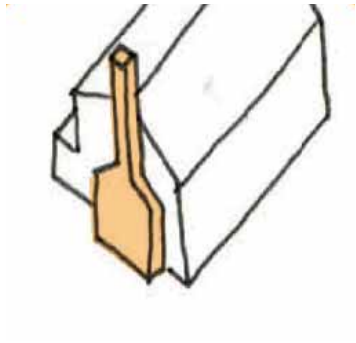
SS. 5.4 Location of external lighting

- Lighting mounted on buildings should be considered as part of an overall lighting strategy, and only in locations where it is practical and where this does not detract from the visual appearance of the building. Lighting should **not** be mounted on the façades buildings of particular townscape or heritage significance, such as the church or listed buildings within the village.

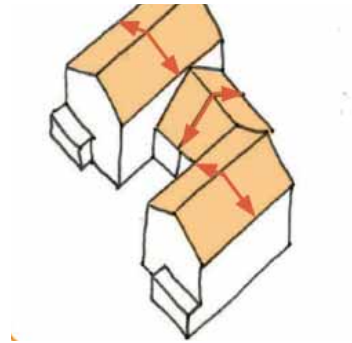
Examples of appropriate public realm furniture



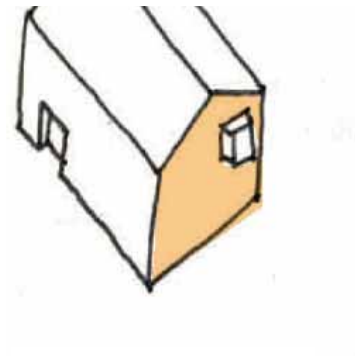
Suggested detailed design features



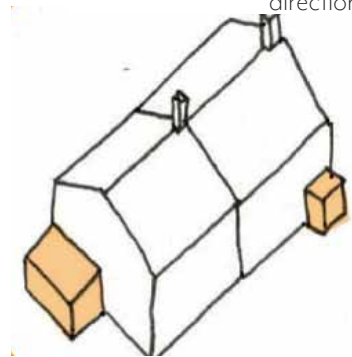
Feature chimney



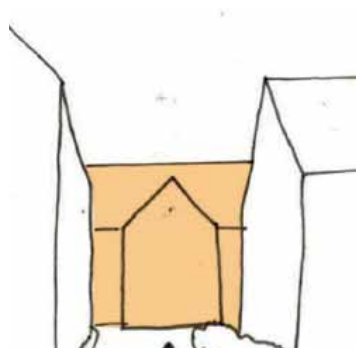
Roofs that slope in different directions



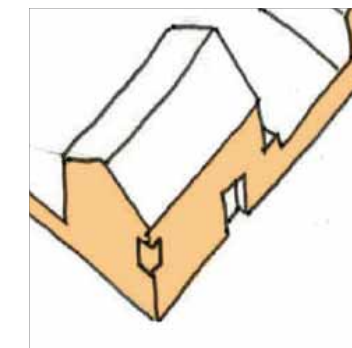
Feature window



Porches



Feature gable



Wrapping garden wall



Principal material carried through



Contemporary take on traditional roof forms



Framed view towards feature gable with staggered windows



Garden wall forms part of the building elevation

Sustainable Homes

Well-designed homes have clearly defined individual plots and contribute to the overall character of the public realm. The considered design of individual homes is important for creating attractive, functional and secure places to live.

SH. 1 Site Specific Design

SH. 1.1 Contextual built features

- Each new home should be designed with elements that distinguish it from its neighbours and respond to its specific location within the village.
- Fenestration detail should reinforce the character of Worlington and be intrinsic to the design of home rather than a superficial addition. Contemporary and innovative approaches to design are encouraged, as long as they are of an appropriate scale, form, height and materials, and the heritage or character of the village is not negatively affected.
- Varied roof forms, which include dormer windows and pitches in different directions, are a common feature of Worlington and should be incorporated into any new design. The examples on page opposite show other contextual fenestration options and design features, which are considered appropriate to Worlington.

SH 1.2 Elevation materials

- Elevational materials may be selected from the palette on page 23 to ensure they are in keeping with those typically found in Worlington. Timber weatherboarding can be found on subservient outbuildings within Worlington, however this should not be used for the elevations of primary buildings.
- Materials should be considered in relation to their sustainability, with the aim of optimising the thermal performance of new homes whilst minimising embodied carbon.
- New developments should consider building materials that encourage wildlife and biodiversity, while also being in keeping with the character of Worlington, such as for example 'bee bricks'.

SH 1.3 Passive design features

- To minimise energy bills and enhance their sustainability, homes should:
 - be dual aspect with openable windows of both sides to ensure cross ventilation can be achieved.
 - include blinds and shades on south-facing elevations to prevent overheating.
 - incorporate soft landscaping and trees into external areas to minimise effect of overheating from solar gain.
 - be constructed in simple forms to prevent heat loss and increase energy efficiency.
 - take advantage of renewable energy, including PVs.

SH. 1.4 Infill Development

Infill development should:

- adopt the scale, density and grain of the context;
- units should not block views or routes (even informal) from the village to the surrounding countryside;
- have a strong landscape framework, including the protection and enhancement of existing trees and hedgerows, and the provision of tall tree species and countryside shrubs in new landscaping designs;
- use historical references to inform well-executed contemporary design to add interest to the street;
- Ensure that the unique characteristics of listed (and non-listed assets) are respected;
- ensure any upgrade or extension of existing buildings is subservient to any adjacent heritage assets (where present).

Suggested boundary treatments



An inset entrance creates a clearly defined, covered entrance with space for a plant or two, which adds visual interest and identity to the wider streetscape.



A boundary treatment of open timber fencing with planting provides privacy and adds to the green character of the neighbourhood.

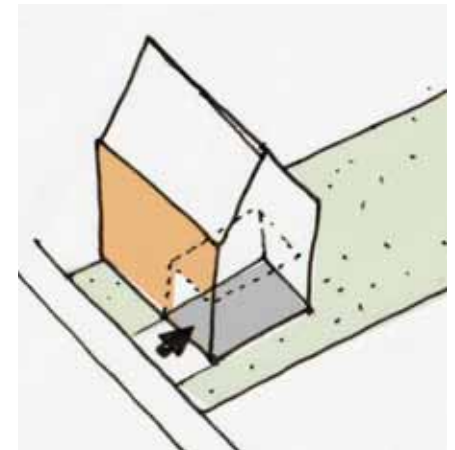
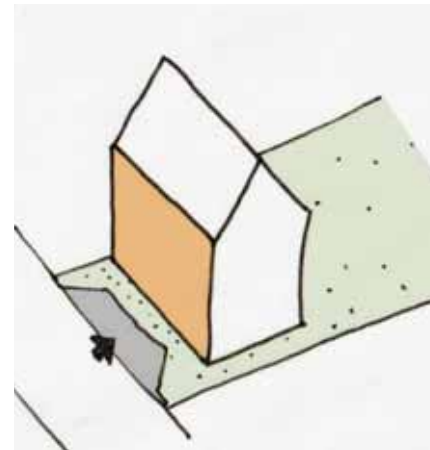
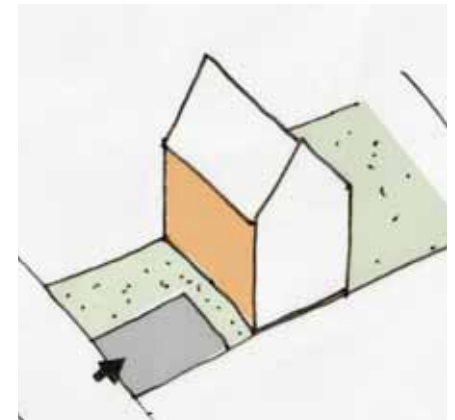
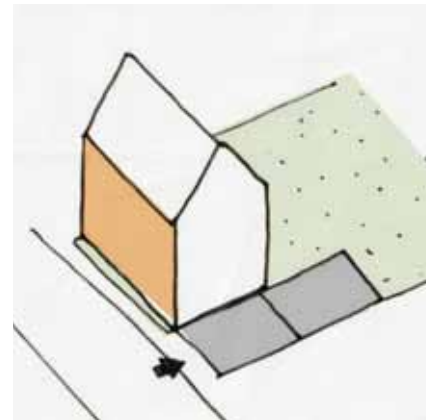


Porches can provide covered spaces for bikes, buggies and children's scooters.



Flint, brick and lime boundary walls are contextual to Worlington and create a robust edge to lanes and footpaths.

Suggested in-curtilage car parking space options



The diagrams above illustrate how cars can be incorporated on-plot so that they do not dominate the public realm.



Pastiche add ons



Contemporary and integrated covered entrances



Obtrusive utility boxes



Integrated utility and storage cupboards



Poorly considered building services



Sustainable design features celebrated



Bins that dominate the street



Integrated bin and bike storage

SH. 1.5 Extensions & Alterations

Extensions and alterations should:

- be appropriate to the building and context, and never dominate the original building along the street. Set-backs in the building facade, lower roofs (but similar pitches and geometry), and careful consideration of materials and details should be employed to create context-sensitive design and respect for neighbouring properties;
- retain or upgrade green front gardens and boundary walls including boundary edges, hedgerow species and tall trees where space allows;
- sensitively re-purpose agricultural buildings where possible, when they become redundant from their original use;
- be designed to a very high standard of sustainability, taking the opportunity to upgrade the efficiency of existing buildings, with sensitive integration of technology and equipment in the overall design.

SH. 2 Boundaries and thresholds

SH 2.1 Robust and contextual boundaries

All boundaries, whether they are between the gardens, courtyards, parking or the private and public realm, must be considered as an integral part of the overall design:

- Boundary treatments should be consistent along the length of street or rear elevations.
- The scale of boundaries should complement the architecture of the development and neighbouring buildings.
- Materials for boundaries should be robust and reflect those typical of the architecture of Worlington.

- Rear gardens and side boundaries between private and public realm must be a solid wall that is integral to the design of the building and made of the same material. Any masonry wall must be capped with coping.
- Corner plots should use a consistent boundary treatment on both faces of the corner. Boundaries between rear gardens should provide visual screening to private back gardens and private defensible areas between new and existing homes.
- Boundaries between rear gardens may be made from brick walls, high-quality architectural fencing, or slow-growing hedgerows and climbers which provide visual amenity and ecological enhancement.

SH 2.2 Amenity Space

- Amenity space should include suitable means for hanging washing out to dry.
- Storage for bicycles should be located where it is secure and convenient.
- Permeable paving, trees and threshold planting should be incorporated to minimise the risk of localised flooding.

SH 2.3 Utilities

- Utility boxes for houses and flats must be an integrated within entrances or side elevations of individual houses and not visible from the street or public rights of way.

Next Steps

The Worlington Design Codes will be an important contribution to Worlington's Neighbourhood Plan in ensuring new developments in the area deliver high-quality design that is sensitive to the local context and community aspirations. As guidance embedded within policy through the Neighbourhood Plan, the Design Codes would be used by different actors in the planning and development process (summarised below).

To further assist users in applying the Design Codes in the assessment and critique of proposals, we have developed a development management checklist (on the following pages). This checklist summarises the policies in the Design Code in a series of simple questions that can be asked

of applications. This checklist can be used by all actors, including the Parish Council and applicants, to assess their compliance of proposals against the Design Code.

Neighbourhood Plans need to be in general conformity with the strategic policies in their corresponding Local Plan. The principles and guidance included within the Worlington Design Codes are aligned with national policy and non-statutory best practice on design at the time of writing. The codes and checklist are designed to help key actors interpret and apply the statutory policies within the Neighbourhood Plan.

Actors	How they will use the Worlington Design Code
Applicants, developers, and landowners	The Design Codes enable a degree of certainty and guidance on the community and the Local Planning Authority's expectations on design. Applicants for planning permission in the area of the Neighbourhood Plan will be expected to follow the codes as planning consent is sought.
Parish Council	The Design Codes provide evidence and guidance for commenting on planning applications, to ensure that the Design Codes are complied with.
Local Planning Authority	The Design Codes should be discussed with applicants during any pre-application discussions, and will form a reference point (as embedded in the Neighbourhood Plan policy) against which to assess planning applications.
Statutory Consultees	The Design Codes should be referred to when commenting on planning applications.

Development Management Checklist

Not all items in the Development Management Checklist will be appropriate to every planning application. The checklist should therefore be applied accordingly, taking into consideration the proposal, its scale and location.

	Existing Context: Understanding Worlington	Red/Amber/ Green rating	Comments
1	Has the landscape of the existing site and setting been understood and explained through plans, sections and three-dimensional drawings?		
2	Are there diagrams and plans of the site and its wider area that identify key destinations and focal points?		
3	Are there diagrams explaining the sites' connection with public transport, walking and cycling routes to destinations in the local and wider area?		
4	Has the scale, detail and materials of adjacent and locally distinctive buildings been analysed and explained through photographs, 3D models or drawings and sketches?		
5	Have designers looked at the social, cultural history and building traditions of the local area?		
6	Have the designers looked at the demographics of the local area?		
7	Have designers engaged with residents and presented their concerns and needs in a clear and transparent way?		

	Strategic Approach	Design Codes	Red/Amber/Green rating	Comments
8	Does the massing and orientation of buildings and their plots make the most of natural daylight and ventilation?	SA. 1		
9	Have 3D models, plans and sections been produced to show how the layout of buildings and spaces respond to their landscape setting?	SA. 1		
10	Is there a landscape strategy showing the preservation and enhancement of existing landscape features and wildlife habitats?	SA. 2		
11	Does the landscape strategy show the location and character of new green spaces, play spaces and street furniture?	SA. 2		
12	Have 3D models, plans and sections been produced to show how the layout of buildings and spaces respond to existing buildings and sensitive boundaries?	SA. 3		
13	Are key destinations and focal points within the site and the wider area identified in the proposed site plan?	SA. 3		
14	Have safe and convenient walking and cycling routes between destinations within or across the site been identified on the proposed site plan?	SA. 2, SA. 3		
15	Do any new routes make logical connections to those that already exist in the wider area?	SA. 2, SA. 3		
16	Has the character of the key spaces been clearly explained through sketch views from an 'on the ground' perspective?	SA. 2, SA. 3		

	Streets and Spaces	Design Codes	Red/Amber/ Green rating	Comments
17	Is there a landscape strategy proposing contextual surfaces, planting, public realm furniture and lighting?	SS. 2, SS. 3, SS. 4		
18	Has the landscape strategy been thought through and fully integrated into the architecture and wider landscape?	SS. 1, SS. 2, SS. 3		
19	Have street views been prepared that show clearly defined focal points?	SS. 1		
20	Do the widths of spaces and heights of fronting buildings create intentional scale and character to outdoor spaces that is contextual to Worlington?	SS. 1, SS. 4		
21	Have the designers described the sequence of arrival from the entrance of the site to the front door of the home?	SS. 1, SS. 4		

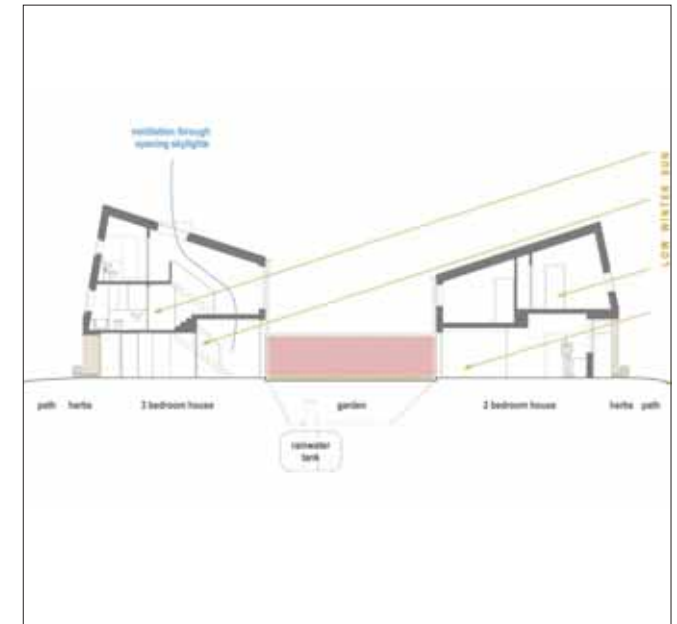
	Sustainable Homes	Design Codes	Red/Amber/ Green rating	Comments
22	Has the detailed design of each home been considered according to its location within the village?	SH. 1, SH. 2		
23	Do fenestration details, material choices and built features reflect the characteristics of local buildings?	SH. 1, SH. 2		
24	Does the overall design incorporate 'breathing space' for threshold planting, a front garden spaces and/or a porch area?	SH. 2		
25	Have entrances and front doors been considered to balance passive surveillance with privacy?	SH. 2		
26	Have front gardens, window boxes and hanging baskets been included so that residents can make their mark?	SH. 2		
27	Are there diagrams showing overlooking of entrances and circulation spaces from homes?	SH. 2		
28	Have sustainable building forms, construction methods and materials been used?	SH. 1		
29	Do homes take advantage of renewable energy, including PVs?	SH. 1		

Relevant Case Studies

Clay Field, Suffolk

Clay Field comprises 26 affordable homes for local families and young people. Houses are orientated to minimise overshadowing and maximise passive solar gain. Drainage is provided naturally, through a series of 'swales', dips and hollows.

The proposed communal gardens are low maintenance and include a wild flower meadow, an orchard of Suffolk apples (with play equipment for small children under the trees) and allotments. The layout of these spaces recall ancient field patterns.



Oakfield, Swindon

An example of how new contemporary residential development can take inspiration from traditional building forms. The 1.5 storey terraces with pitched roofs and dormer windows maximise internal space while minimising the visual impact of the new buildings from the wider landscape.



Maastricht-Gulpen Cycle Route, Holland

Long-distance rural cycle route between numerous rural settlements. A dedicated cycle lane and footpath has been provided within the field edges and separated from traditional yet constrained vehicular roads. This allows the maintenance of hedgerows and mature trees while providing a high-quality cycle route.

Silkin Way, Telford

An example of a network of existing footpaths/bridleways enhanced to cycling standards and providing increased amenity and sustainable connectivity between settlements.



Maastricht-Gulpen Cycle Route, Holland



Silkin Way, Telford

Sutcliffe Park, London

Landscape improvements combine public access with environmental conservation and enhancement of biodiversity. The use of walkways provide high-quality leisure routes near sensitive habitats, increasing access and awareness.

Rieselfeld, Freiburg

An example of how a multi-functional green open space can combine flood attenuation and SuDS within a well designed landscape recreation space and bring quality and amenity to local communities while enhancing sustainability.



Sutcliffe Park, London



Rieselfeld, Freiburg

Temple Gardens, Somerset

An example of how infill development can be sensitively accommodated within an existing village with heritage elements. Here a series of residential terraces provide frontage onto an existing street.

The new buildings adopt appropriate and traditional materials and forms and combined these with contemporary high-quality detailing to successfully integrate into the surrounding context without direct imitation.

Existing



Proposed



Lovedon Lane, Hampshire

New residential development on the edge of a rural settlement in Hampshire. The proposal is designed to respond to changes in topography, with careful consideration as to how the buildings and gardens transition to surrounding rural fields. This includes integration and enhancement of existing rural paths.



Derwenthope, York

Views from the points of access to the site and the wider area have been used to inform the height, form and roof pitch direction of each home. The image to the right shows how the orientation of one home can create a feature from its gable that becomes a focal point.



The Avenue, Saffron Walden

Thresholds have been carefully considered as integral to the overall design. The red brick garden wall steps up in key locations to form a characterful gable and wraps corners to create a sense of continuity. Contrasting paving, low maintenance threshold planting and porches allow space for personalisation that enlivens the street and define the private and public realm.



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