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1. Introduction

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

1.1. Introduction

Through the Ministry of Housing, Communities and Local Government (MHCLG) Neighbourhood Planning Programme led by Locality, AECOM has been commissioned to provide design support to Sarratt Parish Council. The support is intended to provide design codes to the group's work in producing the Sarratt Neighbourhood Plan (SNP).

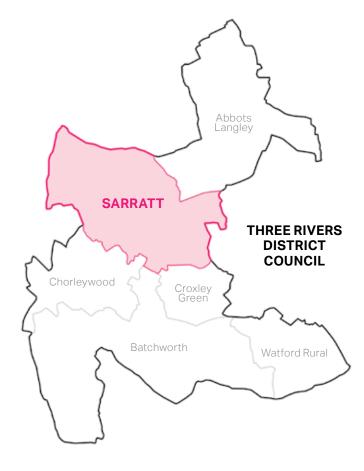
1.2. Objective

The main objective of this report was agreed with Sarratt Parish Council at the outset of the project. This report aims to provide design guidance that will influence the form of new development that will come forward in the Neighbourhood Plan area. The design codes will apply not only to infill and village extension sites, but also to potential large new settlements outside the settlement boundaries. A particular emphasis will be put on retaining the scenic character of the area, which is subject to increased development pressures.

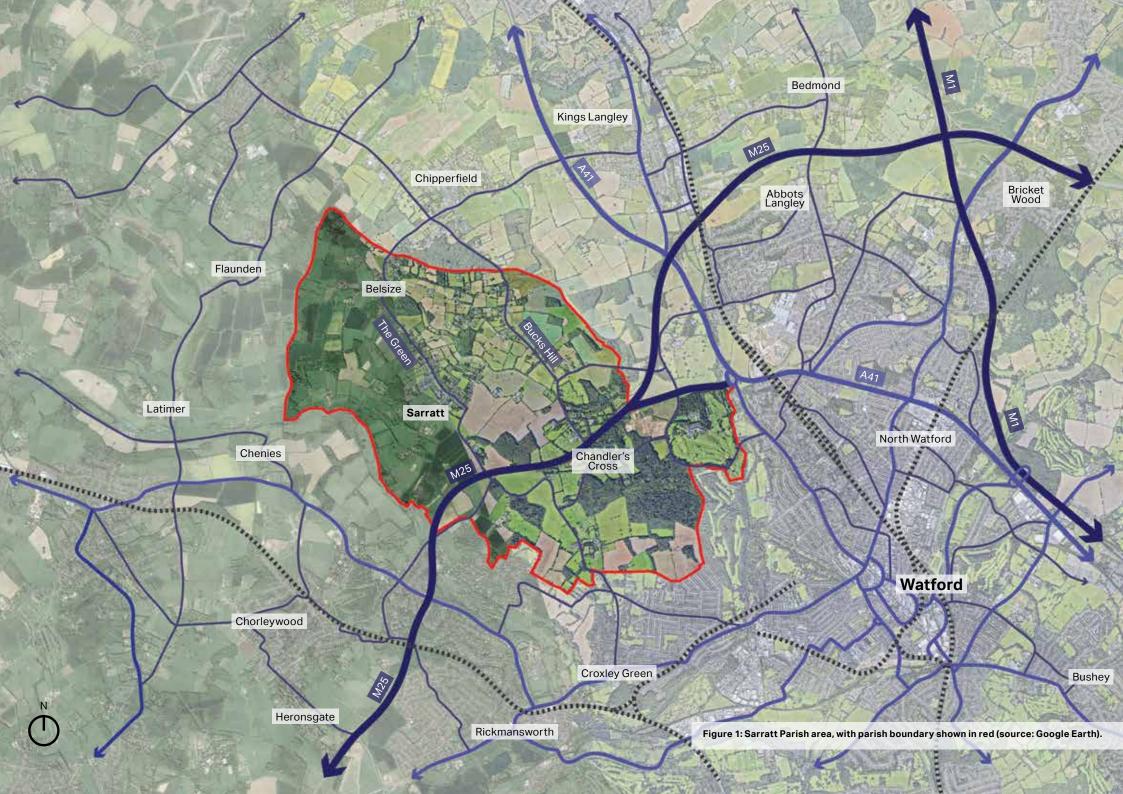
1.3. Process

Following an inception meeting and a site visit with Sarratt Parish Council members, AECOM carried out a high level assessment of the village. The following steps were agreed with the group to produce this report:

- Initial site visit;
- Urban design analysis;
- Desktop research;
- Preparation of a draft report, subsequently revised in response to feedback provided by Sarratt Parish Council; and
- Submission of a final report.



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1.4. Area of Study

Location

Sarratt is a village and civil parish in Three Rivers District, Hertfordshire. It is located approximately 6.5 km north of Rickmansworth near the Buckinghamshire county boundary, 10.5 km north-west of Watford, and 31 km north-west of London. The M25 crosses the southern half of the parish and forms a natural boundary between Sarratt and the London metropolitan area.

The parish includes the village of Sarratt as well as smaller settlements such as Bucks Hill, Commonwood, Belsize, Chandlers Cross and Micklefield. The parish remains largely rural in character despite its location between the London metropolitan area and (sub)urban settlements such as Watford, Hemel Hempstead, Amersham, and Chesham. The parish is surrounded by fields and bordered to the south by the River Chess and the Chess Valley, designated as an 'Area of Outstanding Natural Beauty' (AONB). The entire parish is located within the London Metropolitan Green Belt.

The main settlement is located in the Sarratt Plateau area of the Hertfordshire Landscape Character Area. The village centre evolved from ancient ribbon development alongside a village green, with gradual infilling on both sides of Sarratt Green since the medieval period. The Church of the Holy Cross, which is used as the parish church, is situated in the distinct settlement of Church End located over 1 km away from the main settlement. The village core occupies an elevated position on a plateau in the middle of the parish that dominates the surrounding countryside. This position enables long outward views but also exposes the settlement to views from across the valley and from the AONB, which constrains the location, size, and design of any new settlements in the parish.

The closest railway stations are Chorleywood and Kings Langley, both located within a 15 minutes drive from the village. Watford Junction station, located within a 20 minutes drive to the south-east, provides direct links to London, St Albans, and Hatfield.

Sarratt has a community-owned village shop, a post office, and six public houses in addition to over 35 local clubs and societies and over 80 small businesses. Within the parish there are two schools - Sarratt Village School and York House Preparatory School. The King George V sports and recreation field is also located within the village.

At the 2011 census the resident population was 1,849 in the parish and 918 in the built-up area.

Designations

The parish includes part of the Chilterns Area of Outstanding Natural Beauty (AONB). There are two conservation areas within the parish, both of which were established in 1969; The Green Conservation Area and Church End Conservation Area. The former encompasses The Green and surrounding properties in the village core, whereas the latter forms a cluster around the Church of Holy Cross to the south-west of the main settlement.

There is a total of 93 listed buildings within the parish, most of which are Grade II. The parish also contains many unlisted buildings of architectural interest, and the Green is protected as an Area of Archaeological Significance.

Some of the most prominent listed buildings and landmarks include:

- The Church of the Holy Cross (Grade II*)
- The Grove (Grade II*)
- Sarratt Hall (Grade II)
- The Boot and Cock Inn, public houses (Grade II)
- The pump on the green (Grade II)

In addition, the parish contains four Sites of Special Scientific Interest (SSSI): Sarratt Bottom, Frogmore Meadows, Whippendell Wood, and Westwood Quarry. Chorleywood Common is a Local Nature Reserve (LNR) located directly outside of the parish boundaries to the south-west. The parish shares one Registered Park and Garden, Cassiobury Park, with the neighbouring district of Watford.

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Figure 2: The Old School House, part of the Green at Sarratt conservation area.



Figure 4: Sarratt Community Post Office Stores.



Figure 3: Long distance view across the river Chess towards Church End.



Figure 5: Terraced houses along Dawes Lane.





2. Local Character Analysis

This section outlines the broad physical, historical, and contextual characteristics of Sarratt. It analyses the pattern and layout of buildings, hierarchy of movements, building heights and roofline, and parking. Images in this section have been used to portray the built form of Sarratt.

2.1. Introduction

The array of listed buildings reflects the architectural diversity and historic quality of Sarratt, whose village centre has been protected by a conservation area since 1969. There are 93 listed buildings within the parish boundaries of Sarratt, most of which are Grade II listed, as well as a number of noteworthy (unlisted) buildings such as the Cricketers pub on the Green and the former Providence Mission Hall on Dawes Lane. Cassiobury Park, a Registered Park and Garden, straddles the boundaries of Sarratt and Watford. In addition, the parish includes part of the Chilterns Area of Outstanding Natural Beauty (AONB).



Figure 6: Red brick and knapped flint building with red brick decoration to accentuate details.



Figure 8: Church of the Holy Cross (late 12th century) - knapped flint infill, ashlar and red brick quoins, and clay plaintile roof.



Figure 7: Yellow stock brick and slate roof building with recent porch addition.



Figure 9: Building with red brick window trims and quoins and flint infilling.



Figure 10: Two-storey red brick cottage (19th century) and single-storey building (17th century), The Cricketers.



Figure 11: Red brick building with clay plaintile roof.



Figure 12: Panoramic view from the Green.



Figure 13: Grade II listed K6 telephone kiosk located on the Green.

2.2. Local Character Analysis

2.2.1. Streets and Public Realm

Sarratt Green forms the linear armature of the village and is the convergence point of most roads in the parish. Most roads have an organic and meandering layout. In some places they lack pavements and have retained the width of historic country lanes. These characteristics contribute to the informal and rural character of the village. A minority of roads built in the 20th and 21st centuries, such as Wards Drive and the Briars, were laid out as cul-de-sacs. In a few locations near the village centre. some sections are narrow and framed directly by buildings with little or no setbacks. Outside the historic centre and in outlying settlements, they are bordered with landscaping, mature trees, or low walls, and some include planted verges. Although the street network in Sarratt is limited by its topography and rural nature, it is complemented by a dense network of interconnected footpaths that provide pedestrians with a wider choice of routes than the road network suggests.

The M25 constitutes an important severance in the parish but its location 1km away from the main settlement limits its visual and sensory impact.

2.2.2. Pattern and Layout of Buildings

The Green forms a long open corridor as the nucleus of the historic village and has strongly shaped the linear development of the village. Most properties that front the Green are detached and semi-detached houses site on large plots. The gently undulating topography and the wedge shape of the Green gives the settlement an informal rural character, with buildings with various heights and setbacks clustered around the Green. The interaction between this singular pattern and the moderate building density helps the village centre achieve

a successful balance between enclosure and openness. Successive additions to the built-up area consist mainly in linear developments along roads that branch away from the Green. This pattern is particularly visible along Church Lane, Dawes Lane, and Deadman's Ash Lane. Properties along these roads are a mix of detached, semi-detached, and terraced houses. There is a large variety of plot sizes and recesses, however most houses are set back from the highway by a front garden.

Branching away from side roads are modest areas of 20th and 21st century infilling. Cul-de-sac developments along Caroon Drive, the Briars, and Wards Drive are typically detached houses sited on large plots. Alexandra Road and Downer Drive have a mix of detached and terraced houses as well as flats.

Despite gradual infilling, the village mostly retains a one-house deep linear pattern. As a result, the village edges retain a high degree of openness to the countryside and green spaces.

Outlying areas in the parish are characterised by lower-density settlements and dispersed farmsteads. Bucks Hill, for example, has an elongated linear shape with most houses built along the main road and facing open fields. Belsize, in contrast, is clustered around a village green and is more compact in layout.

2.2.3. Building Height and Roofline

Building heights vary between one and two storeys. Typically, the roofline is pitched and punctuated by gables, dormers, and chimneys. There is a high diversity of roof and gable orientation, height, and materials, the most common being clay plaintiles and slate. Due to the low building height and the abundance of mature trees, the canopy conceals most of the settlement from inward long-distance views.

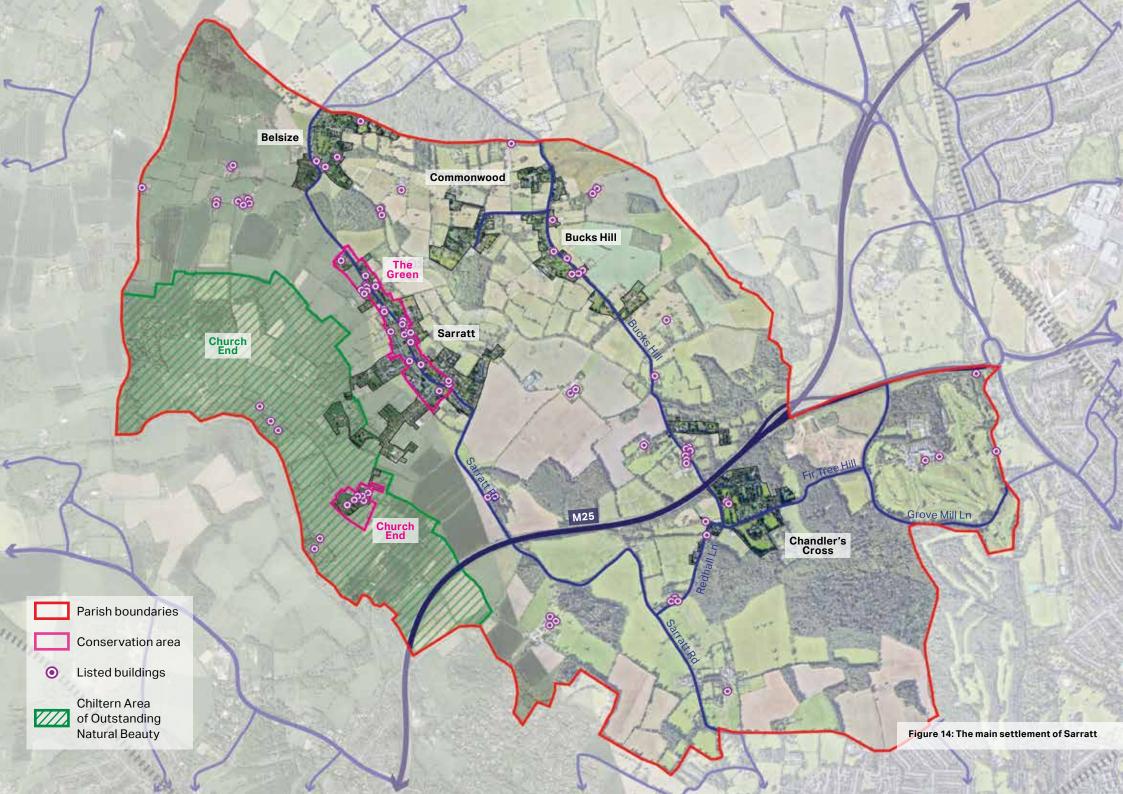
2.2.4. Car Parking

Car parking solutions vary depending on the location. In the village centre, the Green as well as some sections of the adjacent streets such Church Lane, Alexandra Road, and Dawes Lane provide informal on-street parking. Farther away from the village centre, most roads are too narrow to accommodate on-street parking.

Most properties provide on-plot residential parking in the form of front yard parking. Most are screened by a combination of soft landscaping, hedges, and low-level masonry walls. A minority of locations, most notably along Downer Drive, have front or back courtyard parking. In a minority of properties, the lack of front yard screening dilutes the overall rural quality of the village by replacing it with a car- and driveway-dominated character.

2.2.5. Open Space & Landscape

The parish is set in an undulating landscape within the London Metropolitan Green Belt and the Chiltern AONB, designations that have helped preserve large swaths of land from development. As a result, the parish remains secluded from the London metropolitan area as well as larger (sub)urban settlements. Due to the linear settlement pattern of the village, many properties either face or back on green areas. The village owes much of its open character to its spatial organisation around the Green, which is further enhanced by the Green's elongated shape and incorporation of mature trees and ponds.



2.3. Architectural Details

The following section showcases some local building details which should be considered as positive examples to inform the design guidelines that follow.



Consistency of arched window and door shapes across the main elevation.



Façade climbing plants and soft landscaping in a shallow front yard.



Quoins and window trims in yellow stock brick with knapped flint infilling. Detailed brickwork highlighting eaves and house entrance. Boundary wall with matching materials.



Large front yard with an attractive mix of boundary treatments (painted timber gate, low masonry wall, and soft landscaping) that mitigates the presence of automobiles.



Yellow stock brick house with a symmetrical elevation emphasised by an even distribution of sash windows and consistent treatment of window details.



Bay window in a Victorian terraced house.



Former Providence Mission Hall with bicolour brickwork around openings.



Gable with black weatherboarding.



Sarratt House (left) and the White Cottage (right), two listed houses with prominent verandahs (front garden cast-iron railings of Sarratt House also listed).



The Boot, a white-painted brick period cottage (source: Sarratt Parish Council).



Green End Farmhouse - red brick façade with upper floor horizontal sliding sash windows and ground floor multi-pane casement windows with cambered heads.





3. Design Guidelines

This section outlines key design elements and principles to consider when assessing applications for village extensions and larger new settlements.

3.1. General questions to ask and issues to consider when presented with a development proposal

Based on established good practice, this section provides a number of questions against which the design proposal should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has taken into account the context and provided an adequate design solution. As a first step there are a number of ideas or principles that should be present in the proposals. The proposals or design should:

- 1. Integrate with existing paths, streets, circulation networks and patterns of activity;
- Reinforce or enhance the established village character of streets, greens and other spaces;
- 3. Respect the rural character of views and gaps;
- 4. Harmonise and enhance existing settlement in terms of physical form, architecture and land use;

- 5. 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;
- 7. Retain and incorporate important existing features into the development;
- 8. Respect surrounding buildings in terms of scale, height, form and massing;
- 9. Adopt contextually appropriate materials and details;
- 10. 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;
- 12. Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other:
- 13. 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; and
- 14. Positively integrate energy efficient technologies.

To promote these principles, there are number of questions related to the design guidelines outlined later in the document.

Street Grid and Layout

- Does it favour accessibility and connectivity over cul-desac models? If not, why?
- Do any 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?

Local Green Spaces, Views and Character

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- Has the proposal been considered in 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 affect trees on or adjacent to the site?
- How does the proposal affect the character of a rural location?

- 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?
- Will any communal amenity space be created? If so, how this will be used by the new owners and how will it be managed?

Gateway and Access Features

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

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 overlook any adjacent properties or gardens? How is this mitigated?

Building Line and Boundary Treatment

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Have the appropriateness of the boundary treatments been considered in the context of the site?

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?

Building Materials and Surface Treatment

- What is the distinctive material in the area, if any?
- 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 roofs 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?

Car Parking Solutions

- 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?

Architectural Details

- If the proposal is within a conservation area, how are the characteristics reflected in the design?
- Does the proposal harmonise with the adjacent properties?
 This means that it follows the height, massing and general proportions of adjacent buildings and how it takes cues from materials and other physical characteristics.
- Does the proposal maintain or enhance the existing landscape features?
- Has the local architectural character and precedent been demonstrated in the proposals?
- If the proposal is a contemporary design, are the details and materials of a sufficiently high enough quality and does it relate specifically to the architectural characteristics and scale of the site?

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 either match or complement those of the existing dwelling?
- In case of side extension, 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?

Sustainability and Eco Design

- What effect will services have on the scheme as a whole?
- Can the effect of services be integrated at the planning design stage, or mitigated if harmful?
- Has adequate provision been made for bin storage, waste separation and relevant recycling facilities?
- Has the location of the bin storage facilities been considered relative to the travel distance from the collection vehicle?
- Has the impact of the design and location of the bin storage facilities been considered in the context of the whole development?
- Could additional measures, such as landscaping be used to help integrate the bin storage facilities into the development?
- Has any provision been made for the need to enlarge the bin storage in the future without adversely affecting the development in other ways?

- Have all aspects of security been fully considered and integrated into the design of the building and open spaces?
 For standalone elements (e.g. external bin areas, cycle storage, etc.) materials and treatment should be of equal quality, durability and appearance as for the main building.
- Use of energy saving/efficient technologies should be encouraged. If such technologies are used (e.g. solar, panels, green roofs, water harvesting, waste collection, etc.), these should be integrally designed to complement the building and not as bolt-ons after construction. Ideally a fabric-first approach would be adopted to ensure energy efficiency in addition to add-on technologies.

3.2. Design Guidelines

The aim of this section is to ensure that future developments consider local character and through design proposals they can further enhance local distinctiveness by creating good quality developments, thriving communities and prosperous places to live. It is set out in a way that is straightforward to interpret. It is accompanied by descriptive text, general guidelines and principles, images from Sarratt or other relevant case studies, illustrations, and diagrams. The design elements that this section covers are organised according to the following themes:

- Built forms;
- Street design, including dimensions as well as pedestrian and cycle connectivity;
- Parking solutions;
- Local green spaces and views;
- Traditional materials and architectural details;
- Sustainability; and
- Building extensions.

3.2.1. Built Form

Pattern and Layout of Buildings

- The existing rural character must be appreciated when contemplating new development, whatever its size or purpose.
- Where an intrinsic part of local character, properties should be clustered in small pockets showing a variety of types.
 The use of a repeating type of dwelling along the entirety of the street should be avoided (to create variety and interest in the streetscape).
- Boundaries such as walls or hedgerows, whichever is appropriate to the street, should enclose and define each street along the back edge of the pavement, adhering to a consistent building line for each development group.
- Properties should aim to provide rear and front gardens or at least a small buffer to the public sphere where the provision of a garden is not possible.
- The layout of new development should optimise the benefits of daylighting and passive solar gains as this can significantly reduce energy consumption.



Figure 15: Terraced cottages with short front garden.



Figure 17: Houses along the Green showing a variety of building recesses and front yard depths.



Figure 16: Terraced cottages on the Green with little building setback.



Figure 18: Semi-terraced houses along Alexandra Road with large front yards and driveways.



Figure 19: Illustrative plan for a small development highlighting many of the elements of the Sarratt code where they relate to the pattern and layout of buildings.

Gateway and Access Features

- For any future development, the design proposals should consider placing gateway and built elements highlighting the access or arrival to the new developed site.
- Gateway and landmark buildings should reflect local character. This means larger houses in local materials with emphasis on the design of chimneys and fenestration, as well as well laid and cared for landscape.
- Besides building elements acting as gateways, high quality landscaping features, gates or monuments could be considered appropriate to fulfill the same role.



Figure 20: A gateway for a shared front yard framed by masonry pillars and landscaping.



Figure 21: Entrance to Clutterbucks. The sense of arrival is highlighted by the change in paving materials and the careful landscaping that frames the road.

Building Line and Boundary Treatment

- Buildings should be aligned along the street with their main façade and entrance facing it, where this is in keeping with local character. The building line should have subtle variations in the form of recesses and protrusions but will generally form a unified whole.
- Buildings should be designed to ensure that streets and/ or public spaces have good levels of natural surveillance from buildings. This can be ensured by placing ground floor habitable rooms and upper floor windows overlooking the street.
- Boundary treatments should reinforce the sense of continuity of the property line and help define the street, appropriate to the rural character of the area, without impairing natural surveillance.
- Well vegetated front gardens with low walls or hedges are crucial in maintaining the rural character. The depth of front gardens in new constructions should be 3 m minimum, ideally 6 m.
- If placed on the property boundary, waste storage should be integrated as part of the overall design of the property. Landscaping could also be used to minimise the visual impact of bins and recycling containers.
- Entrance gates should preserve an adequate level of visibility and opportunities for interactions between the private and public spheres. Tall gates must be avoided.



Figure 22: Well-kept shrubs acting as a boundary between public and private spaces.



Figure 23: Low shrubs concealing low metal fence.



Figure 24: Boundary treatment combining a low masonry wall with landscaped hedges.



Figure 25: Houses abutting the boundary line (left) and recessed behind a front yard (right).

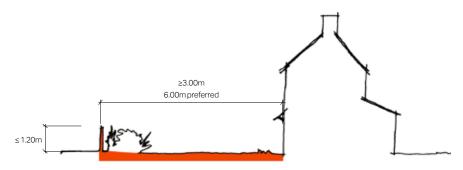


Figure 26: Recommended front garden depth - and boundary height.

Building Heights/Roofline

Creating a good variety in the roof line can be a significant element of designing attractive places. The following elements can be used as guideline in achieving a good variety of roofs:

- The scale of the roof should always be in proportion with the dimensions of the building itself;
- Monotonous building elevations should be avoided, therefore subtle changes in roofline should be ensured during the design process. Roofs that combine too many different shapes and pitches must however be avoided;
- Dormers can be used as design element to add variety and interest to roofs. However, care needs to be taken with their design elements, proportions, and how they are positioned on the roof; and
- To minimise the visual impact of guttering and down pipes these should be integrated with the design of the roof and façade.



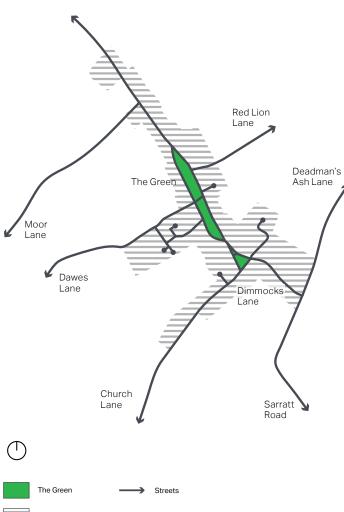
Figure 27: A group of buildings exhibiting a variety of roof heights types. The purple line highlights roofline variations.



Figure 28: Street-facing buildings exhibiting an even roofline punctuated by brick chimneys. The purple line highlights roofline variations.

3.2.2. Roads

- Streets must meet the technical highways requirements as well as be considered a 'place' to be used by all, not just motor vehicles. It is essential for the design of new development to include streets and junctions that incorporate the needs of pedestrians, cyclists, and if applicable, public transport users. It is also important that on-street parking, where introduced, does not impede the access of pedestrians and other vehicles.
- Within existing and new settlement boundaries, streets must not be built to maximise vehicle speed or capacity. Streets and junctions must be built or retrofitted to ensure the safety and accessibility of vulnerable groups such as children and wheelchair users. They may introduce a range of traffic calming measures such as raised junction tables and kerb extensions/build-outs.
- New streets must tend to be linear. Gentle meandering may be introduced to provide interest and evolving views while helping with orientation. Routes must be laid out in a permeable pattern allowing for multiple connections and choice of routes, particularly on foot. Any cul-de-sacs must be relatively short and provide onward pedestrian links.
- Streets must incorporate opportunities for tree planting, landscaping, green infrastructure, and sustainable drainage to mitigate the effects of climate change.
- The next pages introduce suggested guidelines and design features including a range of indicative dimensions for street types in new residential areas.



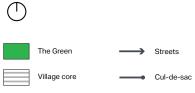


Figure 29: Street grid in Sarratt.



Figure 30: Low-traffic meandering carriageway along the Green, fronted by buildings on one side and green space on the other.

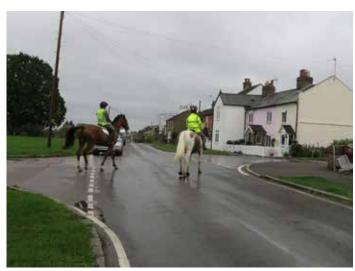
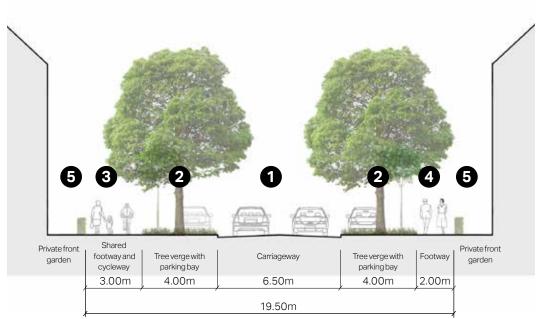


Figure 31: Horses and riders crossing a junction along the Green.

Primary Roads

- Primary roads are the widest neighbourhood roads and constitute the main accesses into new settlements, connecting the neighbourhoods with each other. They are also the main routes used for utility and emergency vehicles, as well as buses, if any.
- The design and character of primary roads must fulfill their place-making role at the heart of the new community while serving as through routes for vehicles.
- Primary roads must be defined by strong building lines with generous set-backs. Blank frontages must be avoided. The quality of the public realm must be of a high standard and consistent throughout the whole primary road, for example through the planting of trees and/or green verges along the road.
- Because primary roads are designed for comparatively higher speed and traffic volumes, they are more appropriate locations for cycle ways that are segregated from traffic, for instance in the form of green ways shared between cyclists and pedestrians.
- Direct access to individual residential car parking must be avoided to minimise disruptions to the relatively high levels of traffic on primary roads. Access to parking servicing buildings that front primary roads can instead be provided via parallel lanes, side streets, or from the rear.



Carriageway (village-wide traffic).

- Green verge with tall trees.
 The latter are optional but would be positive additions.
 Parking bays to be inset into the verges to avoid impeding moving traffic or pedestrians.
- Shared footway and cycleway

 cyclists to be segregated
 from vehicle traffic.
- 4. Footway.
- Residential frontage with boundary hedges and front gardens.

Figure 32: Section showing indicative dimensions for primary roads. In some places trees may be omitted from one or both sides although they help with placemaking, contribute to local biodiversity, and create a positive micro-climate



Figure 33: Primary road framed by wide tree verges in a residential neighbourhood. It is recommended that cycle provisions are separated from moving traffic and that parking bays, where required, are inset into the verges to avoid impeding the movement of pedestrians and vehicles.

Secondary Roads

- Secondary roads provide access between primary roads and neighbourhoods and clusters. They must emphasise the human scale and be designed for lower traffic volumes compared to primary roads.
- Secondary roads must accommodate carriageways wide enough for two-way traffic and on-street parallel car parking bays. They may also include tree verges on one or both sides. On-street parking may consist either in marked bays or spaces inset into green verges.
- Carriageways must be designed to be shared between motor vehicles and cyclists. Vertical traffic calming features such as raised tables may be introduced at key locations such as junctions and pedestrian crossings.

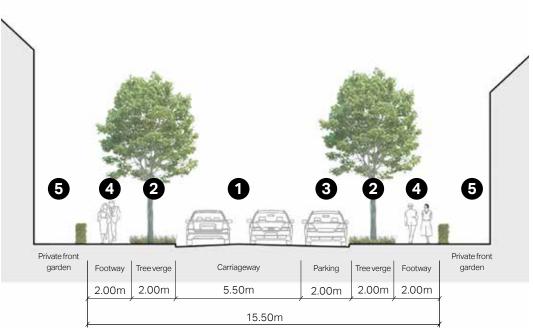


Figure 34: Section showing indicative dimensions for secondary roads. In some places tree verges may be omitted from one or both sides, and parking bays may alternate with tree verges.

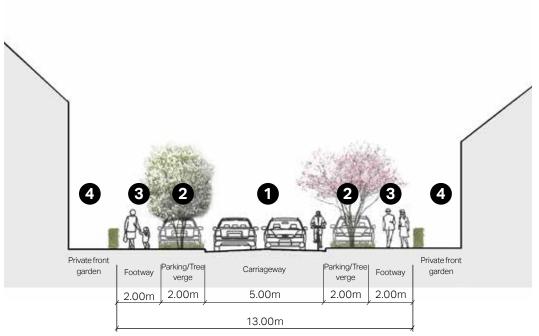
- Shared carriageway (neighbourhood traffic).
 Traffic calming measures may be introduced at key locations.
- Green verge with medium trees. The latter are optional but would be positive additions.
- 3. Parking bay (may also be inset into verges).
- 4. Footway.
- Residential frontage with boundary hedges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



Figure 35: Example of a secondary road, Brentham (note: parking bays may be inset into verges).

Tertiary Roads

- Tertiary roads have a strong residential character and provide direct access to residences from the secondary roads. They must be designed for low traffic volumes and low speed.
- Carriageways must accommodate two-way traffic and parking bays. They may also include green verges with small trees on one or both sides. Verges may alternate with parking to form inset parking bays. These roads must also accommodate footways with a 2m minimum width on either side, and must be designed for cyclists to mix with motor vehicles. Traffic calming features such as raised tables can be used to prevent speeding.



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

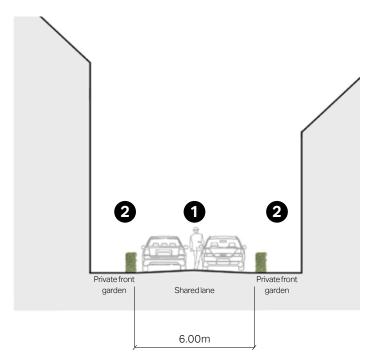
Figure 36: Section showing indicative dimensions for tertiary roads. In some places tree verges may be omitted from one or both sides.



Figure 37: Downer Drive, a tertiary road framed by green verges planted hedges. It is recommended that footways along the street are minimum 2m wide and that parking is provided in the form of inset bays to avoid impeding traffic.

Lanes/Private Drives

- Lanes and private drives are the access-only types of streets that usually serve a small number of houses. They must be minimum 6m wide to ensure sufficient space for parking manoeuvre. They must serve all types of transport modes including walking and cycling.
- Opportunities to include green infrastructure, hedges, and/ or private gardens to soften the edges must be maximised.



- Shared lane (local vehicle access, cyclists, and pedestrians).
- 2. Residential frontage with front hedges and gardens

Figure 38: Section showing indicative dimensions for lanes and private drives.



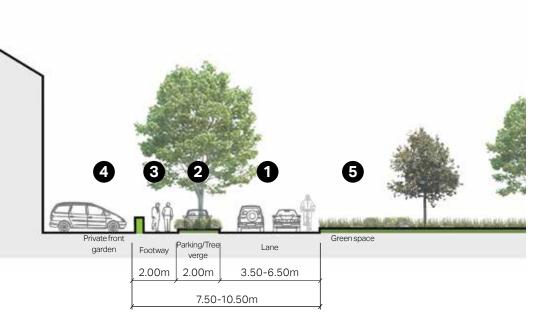
Figure 39: A low traffic lane shared between vehicles, cyclists, and pedestrians in Long Stratton, Norfolk.



Figure 40: Example of a lane/ private drive in Cambridge, with a shared surface for all road users.

Edge Lanes

- Edge lanes are low-speed and low-traffic roads that front houses with gardens on one side and a green space on the other. Carriageways typically consist of a single lane of traffic in either direction and are shared with cyclists.
- The lane width can vary to discourage speeding and introduce a more informal and intimate character. Variations in paving materials and textures can be used instead of kerbs or road markings.



- Shared lane (local access) width to vary.
- Green verge with trees. The latter are optional but would be positive additions. Parking bays may be interspersed with trees to soften the impact of parked cars.
- 3. Footway.
- Residential frontage with boundary hedges and front gardens.
- 5. Green space.

Figure 41: Section showing indicative dimensions for edge lanes. The lane width may vary to discourage speeding or provide space for parking.





Figure 42: Examples of edge lanes in Dorchester, with low-speed roads shared between motor vehicles and cyclists, and opportunities for on-street parking (note: some localities may prefer clearly defined footways and parking bays).

Pedestrian and Cycle Connectivity

- It is important that all newly developed areas must provide direct and attractive footpaths between neighbouring streets and local facilities. Establishing a robust pedestrian network a) across any new development and b) among new and existing development is key in achieving good levels of permeability among any part of the parish.
- Pedestrian paths must be included in new developments and be integrated with the existing pedestrian routes.
- A permeable street network at all levels provides people with a choice of different routes and allows traffic to be distributed in general more evenly across the network rather than concentrated on to heavily trafficked roads.
- Design features such as barriers to vehicle movement, gates to new developments, or footpaths between high fences must be kept at a minimum and the latter must be avoided.
- On high-traffic and/or high-speed roads, cyclists must be kept away from moving traffic and parked vehicles as much as possible through the use of traffic calming, physical separation, and road markings and signage. On narrow streets with lower traffic and speed limits no higher than 20 mph, the road can be shared between different modes.
- Within residential areas, safe pedestrian crossing points must be provided at regular intervals to retain pedestrian connectivity.

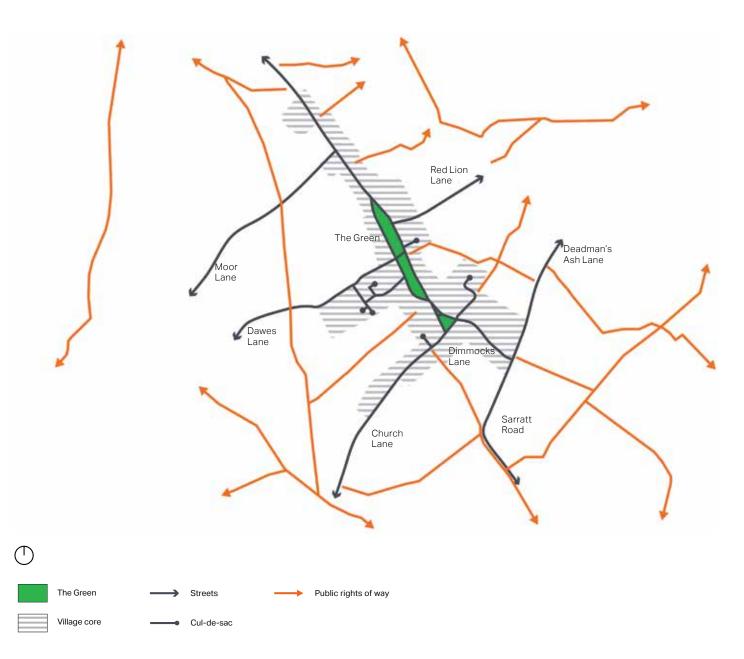


Figure 43: Public rights of way overlaid on the street grid in Sarratt.

Junctions and Pedestrian Crossings

- Crossing points that are safe, convenient, and accessible for pedestrians of all abilities must be placed at frequent intervals on pedestrian desire lines and at key nodes.
- Junctions must enable good visibility between vehicles and pedestrians. For this purpose, street furniture, planting, and parked cars must be kept away from visibility splays to avoid obstructing sight lines - see table and diagram opposite.
- Traffic calming measures should be introduced at crossing points to increase safety and discourage speeding. Along major streets, for example, kerb build outs can be used reduce pedestrian crossing distances and reduce the speed of turning vehicles. At junctions with minor roads, the carriageway surface can be raised across a pedestrian crossing to prioritise pedestrian movements.
- Traffic signals, where they are introduced, must be timed to enable the elderly, children, and disabled to cross safely and comfortably.
- Along low-traffic lanes and residential streets, crossing points can be more informal. For example, pedestrians may cross at any section of a street whose surface is shared between different users.



Figure 44: Example of a raised mid-block pedestrian crossing on a 20 mph street on Goldsmith Street, Norwich (note: many councils require blister tactile pavers at crossings to guide visually disabled pedestrians).





Figure 45: Example of a raised crossing across a main road in Cambridge, with contrasting paving materials and space for low-level planting and street furniture (note: traditional paving materials and muted colours are often preferred in conservation areas).

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The stopping sight distance (SSD) is the distance within which drivers need to be able to see ahead and stop from a given speed. The SSDs for various speeds between 16-60kph (10-37mph) as held within Manual for Streets (MfS) are as shown in the table below.

The distance back along the minor arm from which visibility is measured is known as the X distance; MfS states that an X distance of 2.4m should normally be used in most built-up situations, as this represents a reasonable maximum distance between the front of the car and the driver's eye.

The Y distance represents the distance that a driver who is about to exit from the minor arm can see to his left and right along the main alignment In accordance with MfS, the required visibility splay for a junction within an area where 85th percentile vehicle speeds are 30mph is 2.4m x 43m.

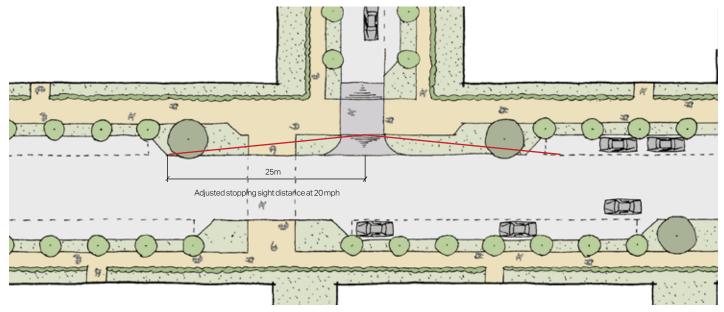


Figure 46: Indicative plan of a junction showing a visibility splay at a junction along a 20 mph primary road - see table below for details. Across the major arm, kerbs are built out to shorten pedestrian crossing distances. Across the minor arm, the carriageway is raised along the pedestrian crossing and can be built with contrasting materials for higher awareness.

Speed	Kilometre per hour	16	20	24	25	30	32	40	45	48	50	60
	Miles per hour	10	12	15	16	19	20	25	28	30	31	37
Stopping sight distance (SSD) in metres		9	12	15	16	20	22	31	36	40	43	56
Stopping sight distance adjusted for bonnet length		11	14	17	18	23	25	33	39	43	45	59

Figure 47: Stopping sight distances (SSD) for visibility splays (source: Department for Transport).

3.2.3. Vehicle Parking

- When needed, residential car parking can be a mix of on-plot side, front, garage, and courtyard parking, and complemented by on-street parking.
- For family homes, cars must be placed at the side (preferably) or front of the property. For small pockets of housing, a rear court is acceptable. Multiple garage parking is encouraged.
- Car parking design must be combined with landscaping to minimise the presence of vehicles.
- Parking areas and driveways must be designed to minimise impervious surfaces, for example through the use of permeable paving.
- When placing parking at the front, the area must be designed to minimise the visual impact of cars and driveways, which must blend with the existing streetscape and materials. The aim is to keep a sense of enclosure and to break the potential of a continuous area of car parking in front of the dwellings. This can be achieved by means of walls, hedging, planting, and the use of quality paving materials.
- Parking bays and spaces must be designed for easy access by wheelchairs, loading carts, and buggies.
- The following pages provide an array of complementary car parking solutions that can be employed in Sarratt.



Figure 48: On-street parking with inset bays (left).



Figure 50: Disabled parking bay in Cambridge with a ramp for easy wheelchair access.



Figure 49: Informal on-street parking on the Green.



Figure 51: Front yard parking with gravel surface.

On-Plot Side or Front Parking

- On-plot parking can be visually attractive when it is combined with high quality and well designed soft landscaping. Front garden depth from pavement back must be sufficient for a large family car.
- Boundary treatment is the key element to help avoid a car-dominated character. This can be achieved by using elements such as hedges, trees, flower beds, low walls, and high quality paving materials between the private and public space.
- Hard standing and driveways must be constructed from porous materials such as permeable paving or gravel to minimise surface water run-off.



 $Figure \ 52: Gravel \ front\ yard\ parking\ with\ landscaped\ property\ boundaries\ preventing\ a\ car-dominated\ character.$

- Front parking with part of the surface reserved for soft landscaping. Permeable pavement to be used whenever possible.
- Side parking set back from the main building line. Permeable pavement to be used whenever possible.
- Boundary hedges to screen vehicles and parking spaces.

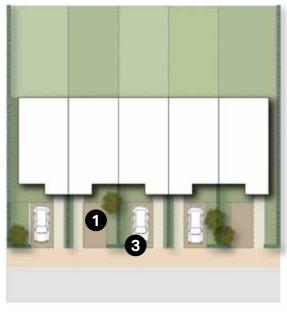
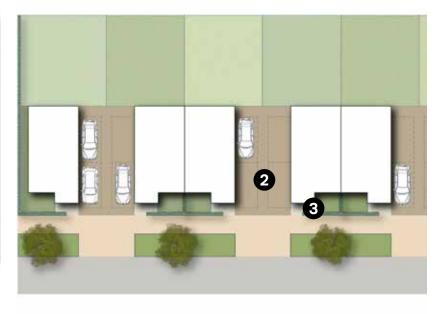


Figure 53: Illustrative diagram showing an indicative layout of on-plot front parking.



 $\label{thm:continuous} \textbf{Figure 54: Illustrative diagram showing an indicative layout of on-plot side parking.}$

On-Plot Garages

- Where provided, garages must be designed either as free standing structures or as additive form to the main building. In both situations, it must complement and harmonise with the architectural style of the main building rather than forming a mismatched unit.
- The garage should not obscure the dwelling from the street nor dominate the front garden. Garages should not be placed in front of the building at any time to avoid prominence on the streetscape and overshadowing of the main building.
- Garages may be used as a design element to create a link between buildings, ensuring continuity of the building line.
- It should be noted that many garages are not used for storing vehicles, and so may not be the best use of space.
- Considerations must be given to the integration of bicycle parking and/or waste storage into garages.



Figure 55: Side garage (left) designed as a secondary mass to the main residential building and built with a matching material palette.

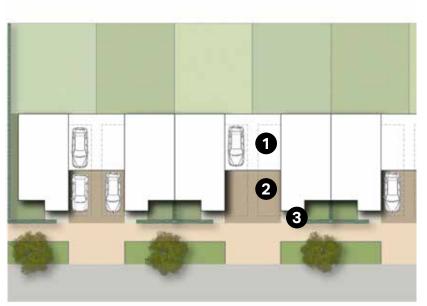


Figure 56: Illustrative diagram showing an indicative layout of on-plot parking with garages.

- Side parking set back from the main building line. Permeable pavement to be used whenever possible.
- Garage structure set back from main building line. Height to be no higher than the main roofline.
- Boundary hedges to screen vehicles and parking spaces.

Rear Parking Courtyards

- This parking arrangement can be appropriate for a wide range of land uses. It is especially suitable for apartments and townhouses fronting busier roads where it is impossible to provide direct access to individual parking spaces.
- Ideally all parking courts should benefit from natural surveillance.
- Parking courts should be an integral part of the public realm, hence it is important that high quality design and materials, both for hard and soft landscaping elements, are used.
- Parking bays must be arranged into clusters with widths of 4 spaces maximum and interspersed with trees and soft landscaping to provide shade, visual interest, and to reduce both heat island effects and impervious surface areas.



Figure 57: Small rear parking courtyard benefiting from natural surveillance and shading.



Figure 58: Illustrative diagram showing an indicative layout of on-plot rear courtyard parking.

- Rear courtyard parking with soft landscaping. Parking bays to be arranged in clusters of maximum 4 spaces maximum. Permeable pavement to be used whenever possible.
- 2. Sheltered parking space (optional).
- Trees and/or soft landscaping to prevent car dominance and add shading.
- Rear of residential properties

 balance to be sought
 between natural surveillance

 and privacy.
- Pedestrian link to main residential frontage.
- Boundary hedges to screen vehicles and parking spaces.

On-Street Parking

As we move forward into a future of electric vehicles, every opportunity must be taken to integrate charging technologies into the fabric of road and street furniture, including induction plate technologies and street lamp hook ups alongside independent charging posts as standard street furniture in the public realm.

- On-street parking can be arranged either perpendicular or parallel to the carriageway.
- On-street parking must be designed to avoid impeding the flow of pedestrians, cyclists, and other vehicles, and can serve a useful informal traffic calming function.
- Parking bays can be inset between kerb build outs or street trees. Kerb build outs between parking bays can shorten pedestrian crossing distances and can host street furniture or green infrastructure. They must be sufficiently wide to shelter the entire parking bay in order to avoid impeding traffic.
- On low-traffic residential streets or lanes that are shared between vehicles and pedestrians, parking bays can be clearly marked using changes of construction material instead of markings but must be of a different level to the pedestrian way e.g. with a kerb. This will provide drivers with an indication of where to park. The street must be sufficiently wide so that parked vehicles do not impede motor vehicles or pedestrians.
- Opportunities must be created for new public car parking spaces to include electric vehicle charging points. Such provision must be located conveniently throughout the village and designed to minimise street clutter.



Figure 59: Parking bays arranged between street trees in Dorchester.



Figure 60: Inset parking with electric vehicle charging points.

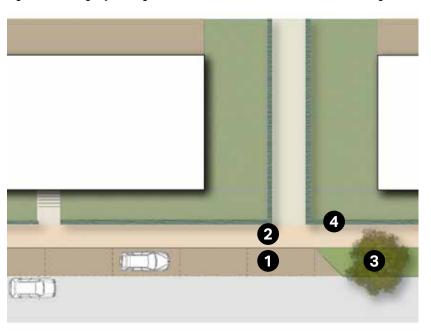


Figure 61: Illustrative diagram showing an indicative layout of on-street inset parking.

- On-street parking bay inset between kerb extensions.
- Footway additional green verge if street width permits.
- Planted kerb extensions width to be sufficient to fully shelter parking bay. Trees are optional but would be positive additions.
- . Boundary hedges.

Bicycle Parking

- A straightforward way to encourage cycling is to provide secured covered cycle parking within all new residential developments and publicly available cycle parking in the public realm.
- For residential units, where there is no garage on plot, covered and secured cycle parking must be provided within the domestic curtilage. The use of planting and smaller trees alongside cycle parking can be used to mitigate any visual impact on adjacent spaces or buildings.
- Bicycle stands in the public realm should be sited in locations that are convenient and that benefit from adequate natural surveillance. They should be placed in locations that do not impede pedestrian mobility or kerbside activities.



Figure 62: Example of public cycle parking (left) and sheltered cycle parking garage (right) in Cambridge.



Figure 63: Example of kerbside on-street cycle stands.

3.2.4. Local Green Spaces and Views

- Development adjoining public open spaces and important gaps should enhance the character of these spaces by either providing a positive interface (i.e. properties facing onto them to improve natural surveillance) or a soft landscaped edge.
- Any trees or woodland lost to new development must be replaced.
- The spacing of development should reflect the rural character and allow for long distance views of the countryside form the public realm.
- Landscape scheme should be designed and integrated with the open fields that currently border the village to avoid coalescence and prevent rural settlements from merging with larger existing settlements or large new settlements.
- Native trees and shrubs should be used to reinforce the rural character of the village and incorporated into the design of new areas.



Figure 64: Long distance views towards the village from North Hill. Mature trees screen most of the village from outside views.



Figure 65: North-western view along The Green in the centre of the village, highlighting the undulating terrain.

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Figure 66: Equestrian route along the Green.



Figure 67: An undeveloped street corner at the junction between Dawes Lane and Downer Drive. Houses on the right face an open field concealed by tall hedges on the left.



Figure 68: Panorama of the south-western village edge highlighting the relative height of the buildings and the mature trees, which concealed much of the village from long-distance inward views.

3.2.5. Materials and Building Details

The materials and architectural detailing in Sarratt contribute to the rural character of the area and the local vernacular. It is therefore important that the materials used in proposed development are of a high quality and reinforce local distinctiveness. Any future development proposals should demonstrate that the palette of materials has been selected based on an understanding of the surrounding built environment.

This section includes examples of building material that contribute to the local vernacular of Sarratt which could be used to inform future development.



Mixed tonality red brick



Red brick trim and knapped flint infilling



Red brick trim and yellow brick infilling



Knapped Hertfordshire puddingstone



Grey paint rendering



Slate roof



Mixed red and yellow bricks



Black weatherboarding



Clay plaintile roof



Gabled porch



Wall dormer



Double casement windows



Landscaped boundary hedge



Flint and brick gabled porch



Sash windows



Painted low-level timber gate



Low masonry wall with landscaped hedge



Pointed arch window



Bull's eye window with red brick trim



Knapped flint and red brick boundary wall



Red brick chimney

Fenestration

- Fenestration on public/private spaces increase the natural surveillance and enhance the attractiveness of the place.
 Long stretches of blank (windowless) walls should be avoided. Overall, considerations for natural surveillance, interaction, and privacy must be carefully balanced.
- Windows must be of sufficient size and number for abundant natural light.
- Site layout and building massing should ensure access to sunshine and avoid overshadowing neighbouring buildings.
 New developments should also maximise opportunities for long distance views.
- Consistent window styles and shapes must be used across a given façade to avoid visual clutter and dissonance.
- In proximity to historic areas, fenestration must reflect an understanding of locally distinctive features such as scale, proportions, rhythm, materials, ornamentation, and articulation. This should however not result in pastiche replicas.



Figure 69: Façades with a consistent arrangement of multi-pane windows with attractive brick ornamentation and articulations.



Figure 70: Traditional house with upper floor horizontal sliding multi-pane sash windows and ground floor casement windows with cambered heads.

Traditional Architecture

The gradual evolution of the village over the centuries has resulted in an organic character to development. Each building has its own individuality resulting in variations in height, the pattern of openings and detailing. This variety is balanced in several ways; through the proximity of each property to each other and broad similarities in scale, width, design and materials. Buildings are predominantly 2 storeys and the change in roof heights and the presence of chimneys contribute to the visual interest of the historic core.

Quarry flint is one of the most popular building stones in Hertfordshire. This is reflected is Sarratt's traditional architecture as well, where a good part of its heritage assets have been built utilising this fine-grained stone. Whereas, Hertfordshire Puddingstone is one of the most distinctive stone types within the county. Less distinctive building materials but that still make a good percentage of traditional architecture are yellow stock brick and red brick.







Figure 71: Buildings exhibiting a use of traditional local materials - knapped flint, red brick, slate, and clay plaintiles.



Figure 72: Church yard wall built with local flint.



Figure 73: New wall using a mix of traditional local materials © Sarratt Parish Council.

Contemporary Architecture

Within the neighbourhood plan area, there are a few examples of successful contemporary architecture that blend harmoniously with their physical context. It is suggested that this trend continues to further expand with additional eco design features incorporated in future developments. New buildings, when referencing traditional architecture, must however avoid combining elements from too many different architectural styles or employing low-quality imitations of traditional materials. A clear understanding of local and non-local styles and materials is also required.



Figure 74: A group of affordable housing units on Clutterbucks, with well-defined private and public spaces as well as attractive landscaping and construction materials.



Figure 75: A recently renovated house along the Green, with consistent fenestration and a contemporary treatment of traditional materials.

Public Realm Materials

- High quality landscaping and paving materials should be used across new developments. Factors such as durability, attractiveness, and maintenance must be considered in addition to the cost of installation. An effort should be made to (re)use traditional local materials when available.
- High quality stone, gravel, granite, and bricks can provide durable and attractive hard surface throughout the public realm. Special materials such as sandstone and limestone could also be used to further enhance the quality of particular spaces such as conservation areas.
- Variations in materials, colours, and textures can be used to define boundaries between different highway uses pavements, parking bays, cycleways, and carriageway.
 Special care should be taken when considering finishes and textures to avoid impeding the mobility and safety of disabled and visually impaired users.
- Opportunities to incorporate permeable paving and green infrastructure must be sought to reduce stormwater runoffs and reduce impervious surfaces.



Figure 76: Flint boundary wall of Church of the Holy Cross.



Figure 77: Natural stone paving in front of the Cricketers.



Figure 78: Granite kerbs along the Green.



Granite setts



Granite block vehicle crossover



Dark grey concrete block paving



Natural stone slabs/flags

Street Furniture

- The appearance of street furniture elements should be coordinated and contribute to the overall public realm and placemaking strategy.
- The siting of street furniture items such as benches, bins, and street signs must not impede pedestrian mobility or conflict with kerbside activities such as loading, refuse collection, and parking.
- Opportunities should be sought to consolidate different functions to reduce street clutter, for example by combining lighting columns (where appropriate) with electric vehicle charging points and supports for street signs.
- The number and size of street signs and signposts should be reduced to the minimum required. The appearance of signposts must not distract from the visual quality of the surrounding area.
- Public seating must be provided in convenient locations at regular intervals, especially in high footfall areas.



Figure 79: Timber bench on the Green.



Figure 81: Red letter box encased in masonry.



Figure 80: Timber shelter on the Green.

3.2.6. Sustainability and Eco Design

Energy efficient or ecological design combines all around energy efficient construction, appliances and lighting with commercially available renewable energy systems, such as solar water heating and solar electricity.

Starting from the design stage, there are strategies that can be incorporated towards passive solar heating, cooling and energy efficient landscaping which are determined by local climate and site conditions

The aim of these interventions is to reduce overall domestic energy use and to do so as cost effectively as the circumstances allow for.



Figure 82: Frog habitat corridor.

Wildlife-friendly environment

New developments should always aim to strengthen biodiversity and the natural environment. This can be done by creating new habitats and wildlife corridors, ensuring the continuity of habitats between gardens and public spaces, and linking them with existing ecological assets. Hedges, wildflower meadows, old trees, ponds, hard landscaping features (such as rock piles), nest boxes installed at the eaves of the buildings, frog habitat corridors, dry stone walls, and bug houses can all make a significant contribution to species diversity.

Protecting and enhancing existing landscape assets is crucial. The aim should always be to minimise the damage to natural habitats, add to the character and distinctiveness of a place, and contribute to climate change adaptation.

Solar roof panels

Solar panels on roofs should be designed for minimal visual impact. On new builds, they should be designed in from the start, forming part of the design concept. Some attractive options are solar shingles and photovoltaic slates or tiles. In this way, the solar panels can be used as a roofing material in their own right.

On retrofits, designers should:

- Analyse the proportions of the building and roof surface in order to identify the best location and sizing of panels;
- Aim to conceal wiring and other necessary installations; and,
- Consider introducing other tile or slate colours to create a composition with the solar panel materials.



Figure 83: Example of eco design led architecture.



Figure 84: Integrated design for solar panels.



Figure 85: Water harvesting tank.



Figure 86: Bug and bee house.

Rainwater harvesting

This refers to the systems allowing the capture and storage of rainwater as well as those enabling the reuse in-situ of grey water. These systems involve pipes and storage devices that could be unsightly if added without an integral vision for design. Therefore some design recommendation would be to:

- Conceal tanks by cladding them in complementary materials;
- Use attractive materials or finishing for pipes;
- Combine landscape/planters with water capture systems;
- Underground tanks; and,
- Utilise water bodies for storage.







Permeable pavements

Pavements add to the composition of the building. Thus permeable pavements should not only perform its primary function which is to let water filter through but also:

- Respect the material palette;
- Help to frame the building;
- Create an arrival statement:
- Be in harmony with the landscape treatment of the property; and,
- Help define the property boundary.

Waste collector integrated design

With modern requirements for waste separation and recycling, the number of household bins quantum and size have increased. This poses a problem with the aesthetics of the property if bins are left without a solution. Thus we recommend the following:

- Create a specific enclosure of sufficient size for all the necessary bins;
- Place it within easy access from the street and, where, possible, able to open on the pavement side to ease retrieval:
- Refer to the materials palette to analyse which would be a complementary material;
- Use it as part of the property boundary;
- Add to the green feel by incorporating a green roof or side planting element to it; and,
- Combine it with cycle storage.



Figure 88: Integrated design for differentiated waste collectors.



Figure 89: Integrated design for differentiated waste collectors and cycle storage.



Figure 90: Permeable brick paving.



Figure 91: Permeable concrete paving.

3.2.7. Building Modifications, Extensions, and Plot Infills

Extensions to dwellings can have a significant impact not only on the character and appearance of the building, but also on the street scene within which it sits. A well-designed extension can enhance the appearance of its street, whereas an unsympathetic extension can have a harmful impact, create problems for neighbouring residents and affect the overall character of the area.

The Planning Portal¹ contains more detailed information on building modifications and extensions, setting out what is usually permitted without planning permission (permitted development) as well as what requires planning permission. Sarratt Parish, for example, contains designated land² such as conservation areas or AONBs, where planning permission is required.

- Extensions should be appropriate to the scale, massing and design of the main building and complement the streetscape.
- Alterations and extensions of historic buildings should respect the host building. Replacement of historic and traditional features, such as timber windows and doors with uPVC and other non-traditional materials should be avoided.
- ¹ Planning Portal. https://www.planningportal.co.uk/ info/200234/home improvement projects
- ² Designated land is land within a conservation area, an area of outstanding natural beauty (AONB), an area specified by the Secretary of State for the purposes of enhancement and protection of the natural beauty and amenity of the countryside, the Broads, a National Park or a World Heritage Site.

- Extensions are more likely to be successful if they do not exceed the height of the original or adjacent buildings. Twostorey extensions should be constructed with the same angle of pitch as the existing roof.
- The design, materials and architectural detailing of extensions should be high quality and respond to the host building and the local character of the neighbourhood plan area.
- The impact on the space around the building should consider overlooking, overshadowing and overbearing.

The following diagrams illustrate key dimensions for household extensions, roof extensions, porches, and outbuildings under both permitted development conditions and in designated land.

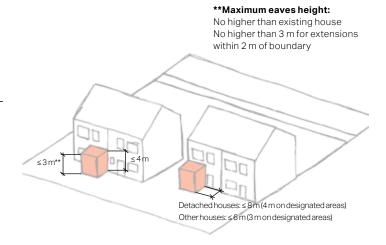


Figure 92: Single-storey rear extensions.

**Maximum eaves height:

No higher than existing house No higher than 3 m for extensions within 2 m of boundary

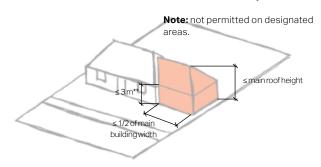


Figure 93: Side extension to a single-storey building.

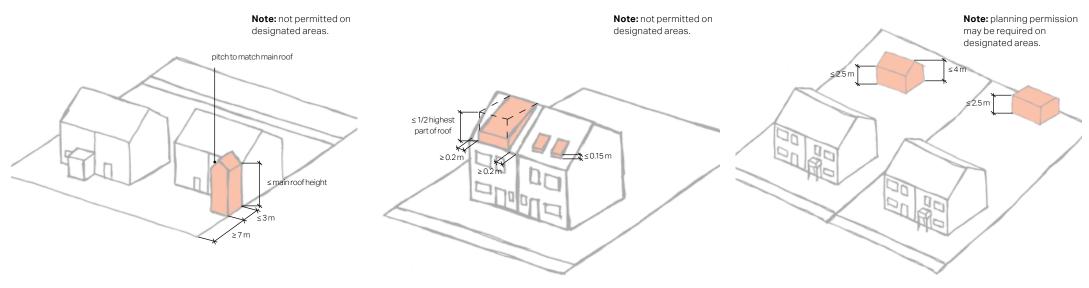
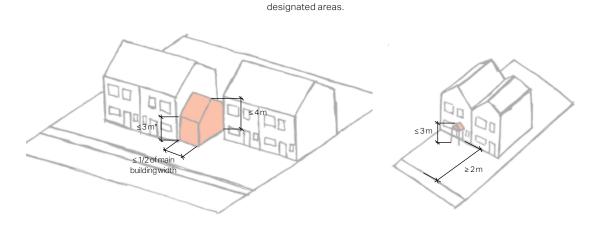


Figure 94: Two-storey rear extension.

Figure 96: Standard dimensions for roof extensions: lofts and skylights.

Figure 98: Standard dimensions for outbuildings.



Note: not permitted on

Figure 95: Side extension to a two-storey building.

Figure 97: Standard dimensions for porches.







4. Delivery

This section concludes the report with recommendations on how to embed findings in the Neighbourhood Plan and engage with Three Rivers Council to develop policies supporting the guidelines.

ACTORS	HOW THEY WILL USE THE DESIGN GUIDELINES			
Applicants, developers, and landowners	As a guide to community and Local Planning Authority expectations on design, allowing a degree of certainty – they will be expected to follow the 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	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.			
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.			
Statutory consultees	As a reference point when commenting on planning applications.			

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