Development Framework & Design Guidelines for Future Growth at Needham Market

Final Report

November 2020

Quality information

Project role	Name	Position	Action summary	Signature	Date
Qualifying body	Needham Market Town Council	Needham Market Town Council	Review		06.08.2020
Director / QA	Patrick Clarke	Technical Director	Review and approval of draft report	Patrick Clarke	05.11.2020
Researcher	Emilia Machedon	Principal Urban Designer	Research, drawings	Emilia Machedon	05.11.2020
Researcher	Hoorieh Morshedi	Graduate Urban Designer	Research, drawings	Hoorieh Morshedi	05.11.2020
Project Coordinator	-	Project Coordinator	Review		-

Contents

Introduction

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1. Introduction

1.1. Overview

This report defines Design Guidelines for the Needham Market extension as described in the Needham Market Feasibility Study Report, dated June 2018.

The Feasibility Study Report proposed a Concept Framework for the long term expansion of Needham Market to the west of its current location, including a relief road. The relief road aims to divert HGV traffic from the High Street and improve the street-scape quality.

The Feasibility Study was subject to public and stakeholder consultation both on the principle of strategic growth and more detailed aspects of the proposed approach. As one would expect with large scale and long term proposals of this type, a mixture of different views were expressed and where possible these have been taken into account both in the final version of the Feasibility Study and in this document.

Following feedback from this consultation and confirmation of a lower housing figure of 497 homes in the Banbergh and Mid Suffolk Local Plan, the Town Council decided not to proceed with the approach set out in the Feasibility Study as the level of strategic housing growth envisaged is not required at this time.

However, the Town Council is mindful of the need to plan for the longer term and to anticipate the future growth of Needham Market beyond the current Local Plan allocations. It is possible that this could include strategic growth to the west of the Town as envisaged by the Feasibility Study. The Town Council has therefore commissioned this report to set out further design guidance on how strategic growth should be planned and designed to create an attractive, sustainable and resilient expansion of Needham Market if this is needed in the future. This is intended to assist the Town Council in positively shaping the future of Needham Market and support on-going engagement with residents and other stakeholders on how the Town should grow in the future.

The delivery of strategic projects like that considered in the Feasibility Study is a lengthy and complex process and the further work presented here has an important role to play in informing the debate around growth at Needham Market and ensuring that this is delivered in a comprehensively planned way to the highest possible standards of design quality and sustainability. The Concept Framework provides a development guideline not a blueprint. Likewise the Design Guidelines provides a development framework and a set of design principles to guide strategic growth at Needham Market should this be appropriate in the future.

The study was commissioned by Needham Market Town Council under the Ministry of Housing, Communities and Local Government (MHCLG) programme of support for Neighbourhood Plans.

1.2. Process

This report is informed by the Needham Market Feasibility Study Report, dated June 2018. The Feasibility Study Report recommendations and conclusions are summarised in chapter 2 of this report.

The following steps are undertaken in the preparation of this report:

- Relief Road Feasibility Study Review
- Virtual site visit;
- Existing character analysis;
- Draft report with Design Guidelines.

The report will be updated following Client review and consultation.

1.3. Purpose and Scope

The main purpose of this report is:

- To develop design guidelines for the Concept Framework;
- To inform the design of future planning applications and residential developments in Needham Market;
- To support the design code of the planning applications for the town extension.

The report elaborates Design Guidelines for the following key aspects:

- Connectivity Guidelines;
- Parking Guidelines;
- Open Space Guidelines;
- Built Form Guidelines;
- Sustainability.

1.4. This Report

This report is structured in five chapters as follows:

Chapter 1 Introduction introduces the project methodology and report structure.

Chapter 2 Concept Framework summarises the Relief Road Feasibility Study Report recommendations and conclusions.

Chapter 3 Existing Character summarises the site analysis findings.

Chapter 4 Design Guidelines describes the proposed design guidelines.

Chapter 5 Next Steps outlines the next project stages.

Figure 1: Needham Market aerial view.

Concept Framework

02

2. Concept Framework

2.1. Overview

The Needham Market Feasibility Study confirms the potential for strategic growth west of the town's current location in the context of the westerly re-routing of heavy traffic via the potential relief road.

This chapter summarises the main recommendations and conclusions of the Needham Market Feasibility Study with a main focus on the proposed Concept Framework. For more detailed information please refer to the Feasibility Study report.

2.2. Main Findings

The development of Needham Market to the west is the most suitable growth direction because:

- It is not in the flood plain of the River Gipping that constrains development to the east of the town;
- It is very well linked to the High Street by a number of existing roads and footpaths and thus can be well integrated with the existing town (as compared to the east which is severed by the railway line);
- It would not contribute to a coalescence with adjoining settlements as compared to growth to the north that would reduce the gap between Needham Market and Stowmarket;
- The area is free from constraints that would prevent development or add excessively to the cost of development;
- It is large enough to accommodate to strategic growth and could support the delivery of a relief road;
- It is large enough to embrace garden village principles; and
- It is small enough to be progressed to an application under neighbourhood planning legislation, therefore ensuring maximum involvement of the community in the design and phasing.

2.3. Concept Plan

The main elements of the Concept Plan illustrated in figure 2 include:

- Existing main road network and railway;
- Integration of the potential development site with the existing town;
- Potential relief road;
- Existing and upgraded west-east road connections between the town and the potential development site;
- Existing green areas and possible location for new green spaces and green corridors;
- High voltage overhead powerline at the western edge of the potential development.

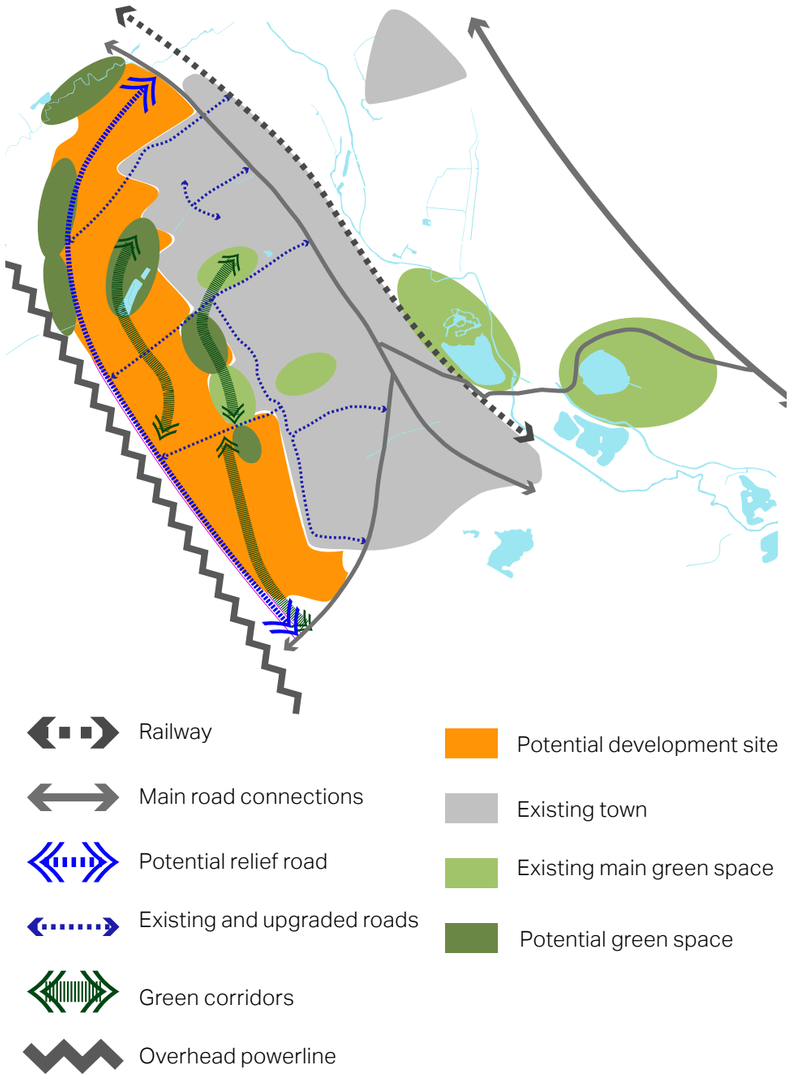

Figure 2: Needham Market Concept Plan

Figure 3: Needham Market Concept Framework

2.4. Concept Framework

The Concept Framework illustrated in figure 3 sets out the potential site development opportunities and expresses a spatial dimension to place-making. The framework aims to achieve sufficient critical mass to support the provision of community infrastructure, such as the relief road, schools, local shops and open spaces.

The Concept Framework plan includes:

- Development Parcels;
- Relief Road and potential upgrade of existing roads that connect east-west the High Street to the potential development site;
- Strategic Green Spaces;
- Mixed Use Area within the local centre. This area presents a higher density than the remaining residential areas; and
- Nursery, Primary School and GP.

Existing Character

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3. Existing Character

3.1. Overview

This section outlines the broad historical and spatial characteristics of Needham Market. It analyses the history, town character, housing typologies, materials and architectural details typical to Needham Market.

3.2. History

The map on the opposite page shows the historic evolution of Needham Market. The town started growing from a linear north-south structure along the High Street. Growth also included residential blocks along the historic road network. Residential development during post-war period is located mainly to the west of the old town due to the presence of flood plain of the River Gipping to the east of the town.

Needham Market includes a conservation area. The significant collection of listed buildings date back to medieval period. Some of them are listed below:

- Church of St. John the Baptist, 15th century parish church;
- Victorian railway station, built in 1849;
- Tudor House, 111 High Street;
- Ancient House, located on King William Street;
- Christchurch, built in 1837;
- Post office on the High Street.

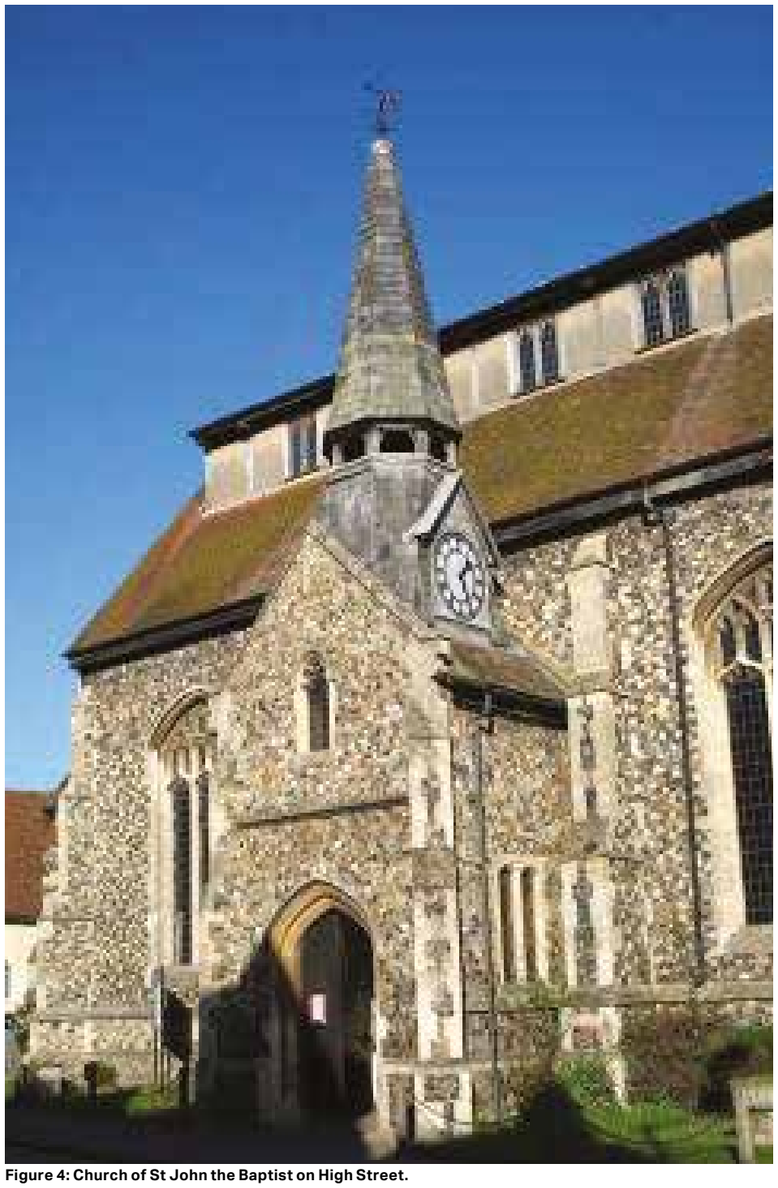


Figure 4: Church of St John the Baptist on High Street.

Figure 5: The village sign in Needham Market.

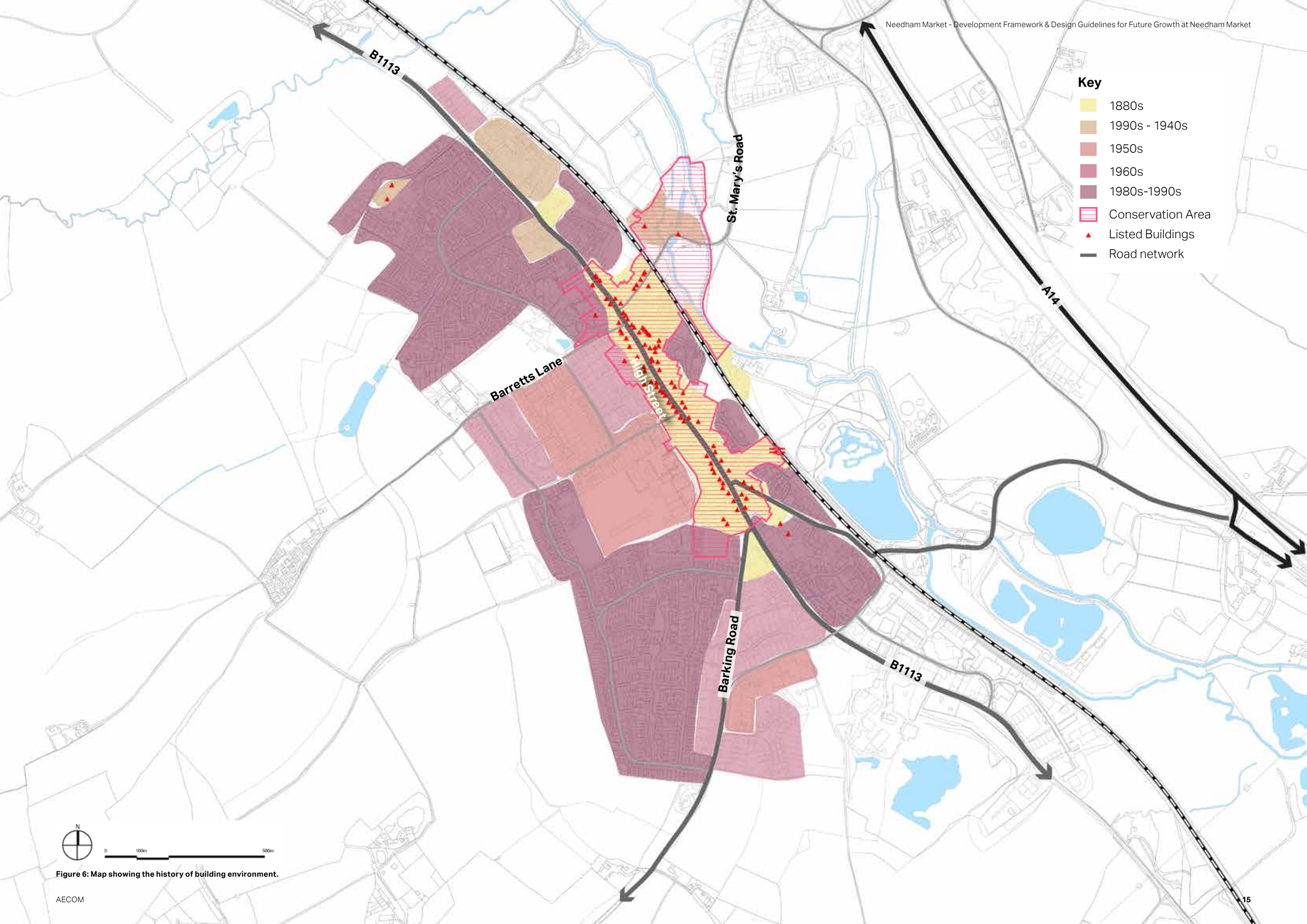


Figure 6: Map showing the history of building environment.

3.3. Town Character

The figure ground map on the opposite page illustrates the form and position of buildings in relation to open space. The map assists an understanding of the different characteristics of the town's evolution.

Linear Development

The historic town includes the north-south linear development along the High Street. This is the mostly densely built up area. It is characterised by linear frontages with occasional breaks at junctions with secondary east-west connections.

Plots are narrow and deep creating space for long rear gardens. The building grain defines the local streetscape rhythm.

Postwar Era Development

Developments in the 1950s and 1960s include orthogonal street patterns, larger plots and a provision of semi-detached and row housing with regular set-backs.

Modern Suburban Area

Modern suburban areas include larger plots, with detached or semi-detached buildings and large rear gardens. The pattern varies between greater set-backs and less regular appearance to more regular building line. The streetscape includes cul-de sacs which define impermeable and less walkable area.

Industrial Area

The industrial area is characterised by a central distribution road and a regular pattern of industrial buildings.

Figure 7: Linear development, High Street.

Figure 8: Modern suburban area, Chainhouse Road.

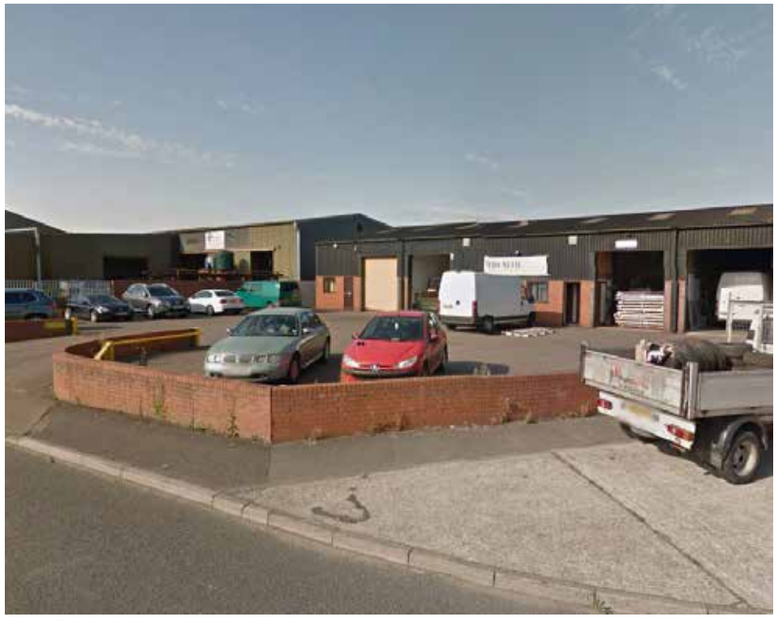


Figure 9: Industrial area, Maitland Road.

Figure 10: Postwar Era Development, Park Road.

Figure 11: Map showing the different character within Needham Market.

3.4. Housing Types

The map on the opposite page illustrates the typical building types. Needham Market has a diverse distribution of building types including detached, semi-detached and terraced housing.

The historic town presents a majority of terraced houses. More recent development includes predominantly detached and semi-detached houses.

Figure 12: Detached house, Barking Road.

Figure 13: Semi-detached house, Crowley Road.

Figure 14: Terraced house, High Street.

Figure 15: Detached House, Hill House Lane.

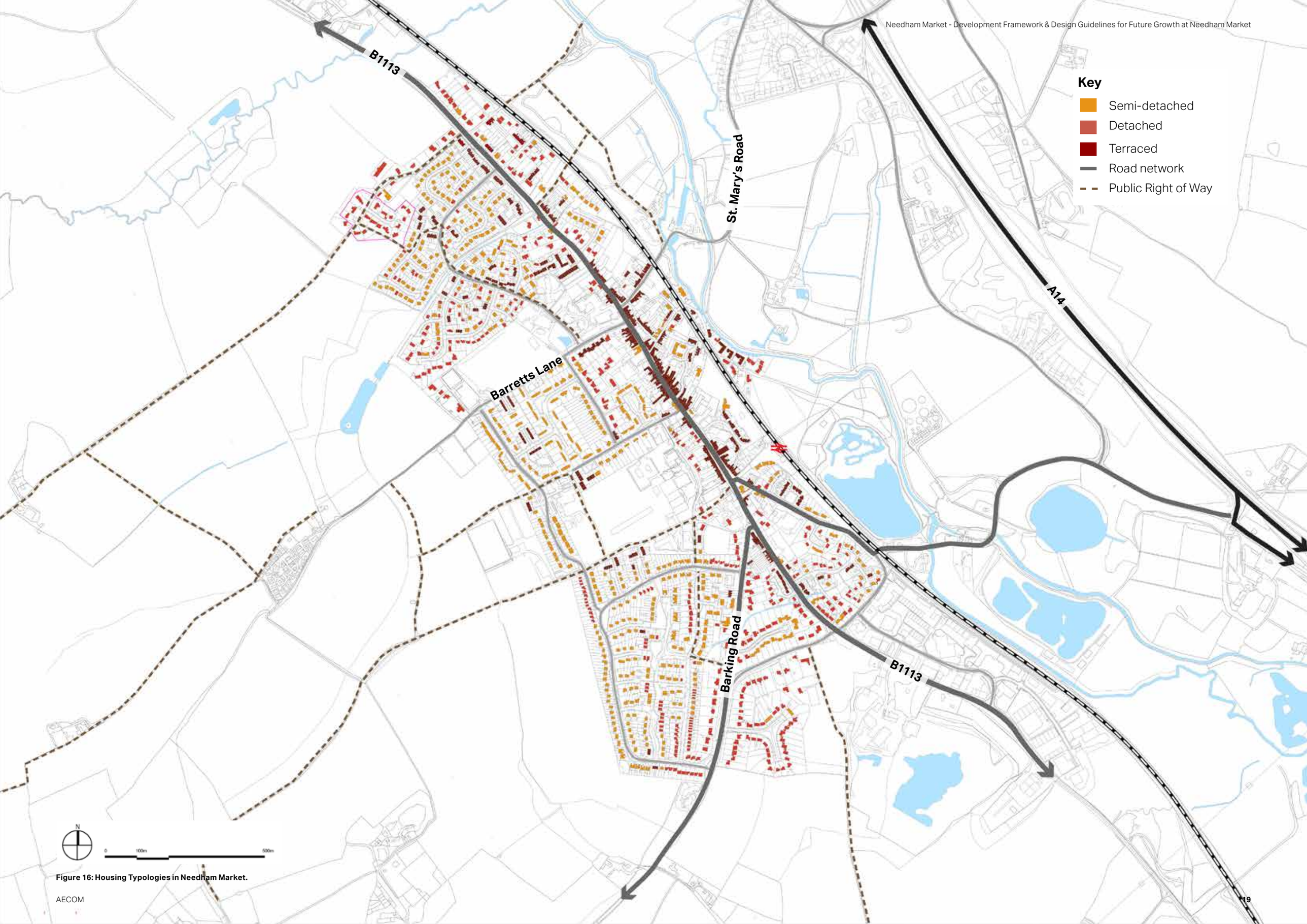


Figure 16: Housing Typologies in Needham Market.

3.5. Materials and Architectural Details

The materials and architectural detailing in Needham Market contribute to the historic character of the area. 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.

Buildings include timber-frame construction typical to the Suffolk area. Recent buildings include local soft red or white bricks and are more often slate roofed. The brickwork is sometimes lost behind a rendered or painted finish.

Other local materials include red brick built in rat-trap bond, pantile roofs, one thatched roof and a few examples of black weatherboarding on outbuildings and barns.

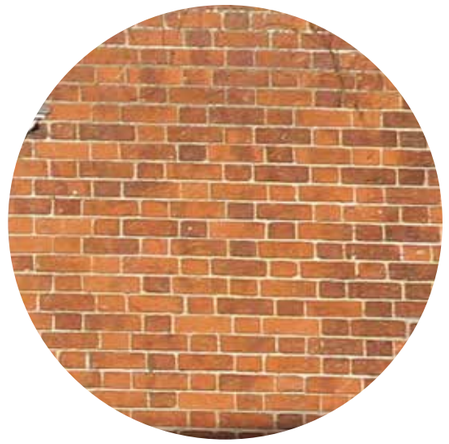
Knapped flint was used on parts of the Church, and also appears unworked in numerous boundary walls in the town, usually with red brick piers and cappings. Flints can also be found as a paving material throughout the town, usually as cobbled aprons to back of pavement areas. At one time, the entire High Street was paved in York stone with a cobbled edge strip at the kerb.

The pictures on this page and the opposite page illustrate a selection of building materials found in Needham Market.

WHITE BRICK

EXPOSED TIMBER FRAMING

WHITE PAINTED BRICK



RED BRICK

KNAPPED FLINT

BLACK WEATHERBOARDING

CLAY PANTILE ROOF

GABLED DORMER

BRICK CHIMNEY

SASH WINDOW

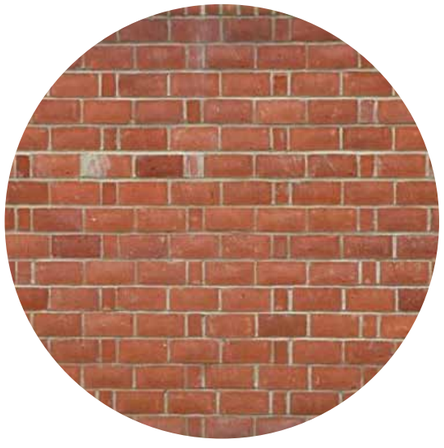
THATCHED ROOF

SUFFOLK PINK RENDER

DECORATIVE BARGE BOARD

MULTI-PANE CASEMENT WINDOW

SLATE ROOF



RED BRICK WITH RAT TRAP BOND

OFF-WHITE RENDER

CLAY PANTILE ROOF

Design Guidelines

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4. Design Guidelines

4.1. Overview

This section sets out the guidance that is intended to help shape the design of high quality and sustainable new neighbourhood at Needham Market. The principles set out here should be read alongside other design policies in the Neighbourhood Plan, Local Authority design guidance as well as the National Urban Design Guide and the Building for Life Standards.

4.2. General Design Principles

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

A brief reference to general design principles and questions will be mentioned before the main part of the design guidance with reference to Needham Market.

The guidelines developed in the document focus on residential environments. However, new housing development should not be viewed in isolation. Considerations of design and layout must be informed by the wider context, considering not only the immediate neighbouring buildings but also the townscape and landscape of the wider locality.

The local pattern of streets and connectivity, building traditions, materials and natural environment should all help to determine the character and identity of a development recognising that new building technologies are capable of delivering acceptable built forms and may sometimes be more efficient. It is important with any proposal that full account is taken of the local context and that the new design embodies the 'sense of place' and also meets the aspirations of people already living in the area.

As a first step, there are a number of design principles that should be present in any proposals. As general design guidelines new development should:

- Respect the existing settlements pattern in order to preserve the character. Coalescence development should be avoided;
- Integrate with existing paths, streets, circulation networks;
- Reinforce or enhance the established character of streets, greens and other spaces;
- Harmonise and enhance existing settlements in terms of physical form, architecture and land use;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, roofline, height, form and density;
- Enhance and reinforce the property boundary treatments;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other; and
- Aim for innovative design and eco-friendly buildings while respecting the architectural heritage and tradition of the area and integrating them with future development.

Street grid and layout

- Does it favour accessibility and connectivity over cul-de-sac models? If not, why?
- Do the new points of access and street layout have regard for all users of the development; in particular pedestrians, cyclists and those with disabilities?
- What are the essential characteristics of the existing street pattern; are these reflected in the proposal?
- How will the new design or extension integrate with the existing street arrangement?
- Are the new points of access appropriate in terms of patterns of movement?
- Do the points of access conform to the statutory technical requirements?

Local green spaces, views and character

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- How does the proposal affect the trees on or adjacent to the site?
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal 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 settlements?
- 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 maintain the character of dwelling clusters stemming from the main road?
- 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?
- Has 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 roof details been addressed in the context of the overall design?
- Does the new proposed materials respect or enhance the existing area or adversely change its character?

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?
- Have the needs of wheelchair users been considered?

Architectural details and contemporary design

- As parts of the development are close to the Conservation Area how do they relate to it and 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?

Western Expansion Design Guidelines

The following principles are intended to guide the approach to urban design and place-making as part of a future western expansion of Needham Market:

- Connectivity Guidelines;
- Parking Guidelines;
- Open Space Guidelines;
- Built Form Guidelines; and
- Sustainability.

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4.3. Connectivity Guidelines

Overview

The framework study recognises the importance of general principles, such as:

- Type and location of vehicular access;
- The impact that the potential development site has on the surrounding highway network and the need for the relief road; and
- The necessity of sustainable transport modes (i.e. walking, cycling and public transport).

The road network is typically characterised by a series of road types, each of particular form and function to support the delivery of an integrated network and serve separate local traffic. This ensures the efficient use of spaces and establishes a coherent and integrated highways, transit and public realm network.

Through this approach roads will also be planned with a view on the human scale to ensure they include generous pedestrian facilities promoting activity and mobility by non-car modes and accommodate public transport where required.

Higher order roads, such as the relief road, should have a clear strategic function acting as a route around Needham Market and as a means of access to the potential development site, rather than playing the role for typical short distance journeys which create congestion and severance.

Lower order roads in return are planned to provide connections defined through a street typology. Streets are planned to ensure access to public transport, promote walking and cycling, in some cases accommodate car parking and other forms of activity.

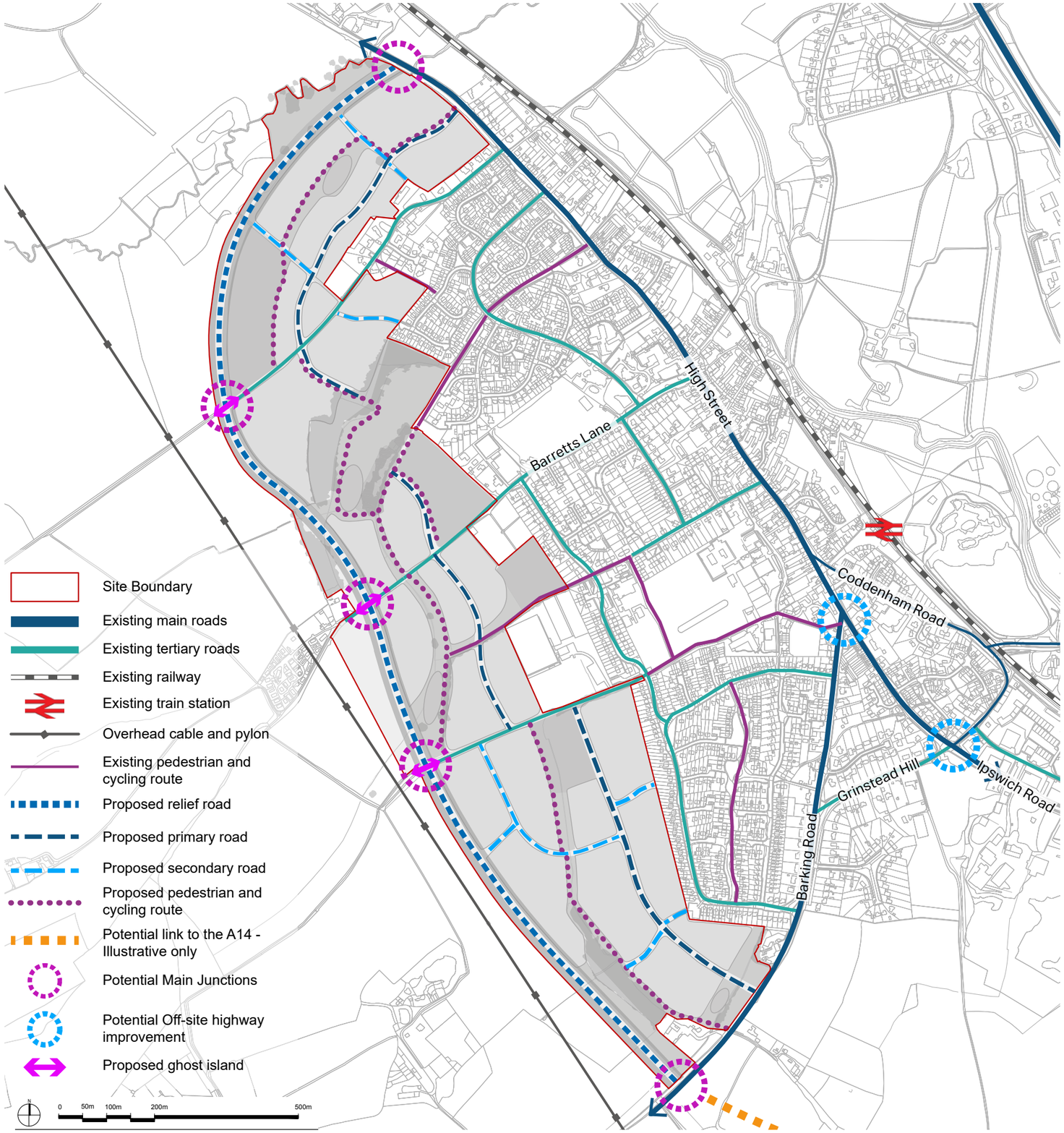


Figure 17: Map showing key connection and access.

Connectivity Principles

The following principles regarding the connecting and cycling guidelines are as follow:

- All newly developed areas must retain or provide safe, direct, and attractive pedestrian links between neighbouring roads and lanes 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 Town. This is especially important in Needham Market, where a robust network of paths is needed to shore up the sparse road network to provide car-free links to neighbouring settlements and the surrounding countryside for pedestrians, cyclists, and horse riders;
- A permeable network of roads, lanes, and paths provides people with a choice of different routes and enables pedestrians, cyclists, and horse riders to avoid heavily trafficked roads;
- Design features such as barriers to vehicles must be kept to a minimum to avoid the creation of gated communities. Footpaths in new developments must remain accessible to the wider community where possible; and
- Strategically placed signposts can assist pedestrians and cyclists with orientation and increase awareness of publicly accessible paths beyond the town. However, new signposts must respect the rural character of the area and avoid creating visual clutter.

Figure 18: Eddington Ridgeway access.

Figure 19: Eddington pedestrian and cycle friendly access.

Relief Road

The Relief Road indicated on Figure 20 follows the alignment of the relief road as shown in the Feasibility Study. This road is intended to carry HGV traffic around Needham Market and therefore it runs along the edge of the new development for most of its length. The cross section diagram in the Feasibility Study identifies the main engineering standards that would need to be met for this type of road, but through more detailed design consideration it should be possible to develop some of the place-making principles highlighted for the Primary Roads below.

Primary Roads

Primary roads are the widest neighbourhood roads and 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.

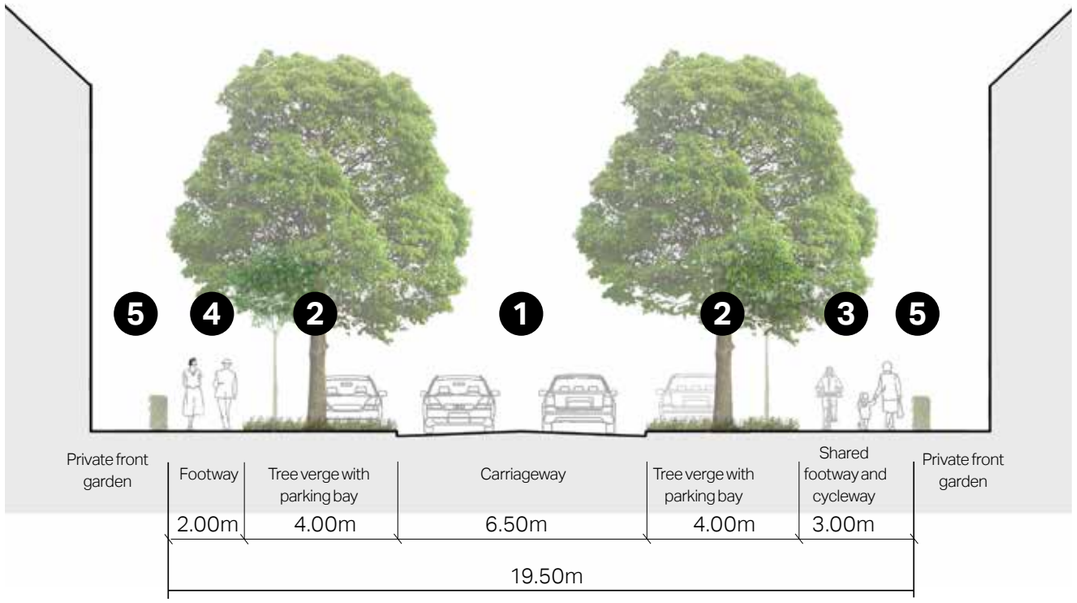


Figure 20: Section showing indicative dimensions for primary roads.

1. **Carriageway (town-wide traffic).**
2. **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.**
3. **Shared footway and cycleway can provide an opportunity for cyclists to be segregated from vehicle traffic.**
4. **Footway.**
5. **Residential frontage with boundary hedges and front gardens.**

Figure 21: An example showing primary road with on-street parallel car parking bays in both side.

Secondary Roads

Secondary roads provide access between primary roads and neighbourhoods and clusters. They should emphasise the human scale and be designed for lower traffic volumes compared to primary roads.

Secondary roads should 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.

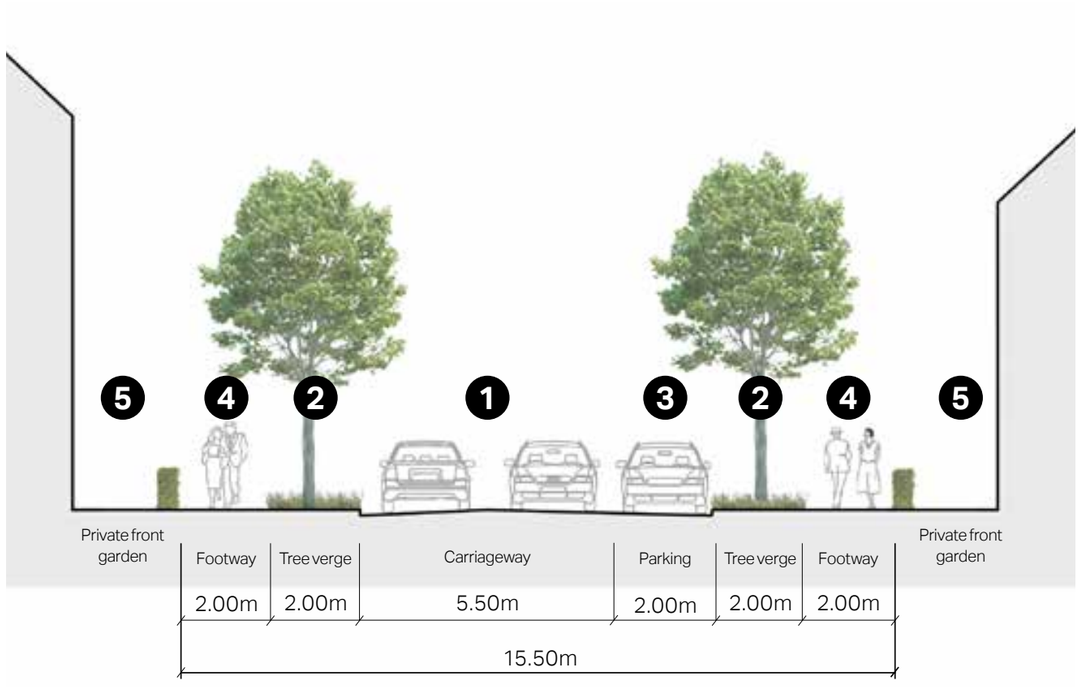


Figure 22: Section showing indicative dimensions for secondary roads.

1. **Shared carriageway (neighbourhood traffic). Traffic calming measures may be introduced at key locations.**
2. **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.**
5. **Residential frontage with boundary hedges and front gardens.**

Figure 23: An example showing secondary road (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.

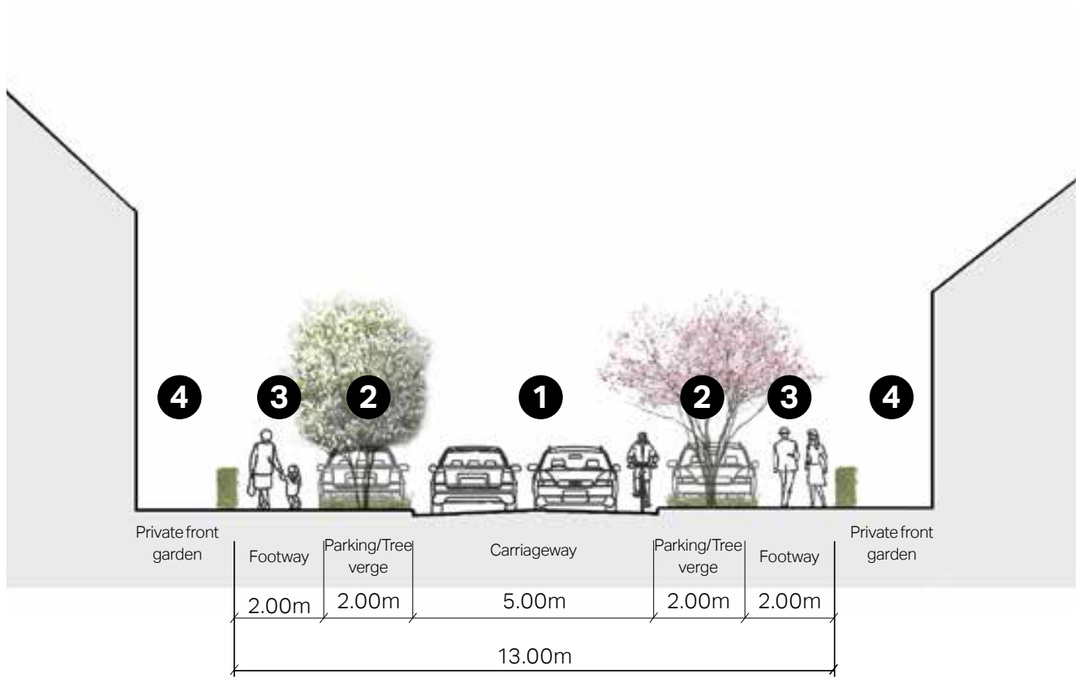


Figure 24: Section showing indicative dimensions for tertiary roads. In some places tree verges may be omitted from one or both sides.

1. **Carriageway should accommodate both vehicles and cyclists(local access). Traffic calming measures may be introduced at key locations.**
2. **Tree verge or pit 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.**
3. **Footway.**
4. **Residential frontage with boundary hedges and front gardens.**

Figure 25: An example showing tertiary road framed with footpath on both sides.

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 and serve all types of transport modes including walking and cycling, and allow sufficient space for parking manoeuvre.

Opportunities to include green infrastructure, hedges, and/or private gardens to soften the edges must be maximised.

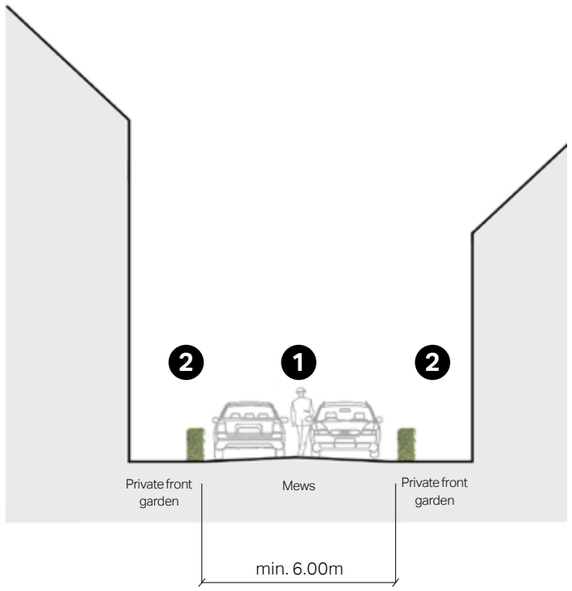


Figure 26: Section showing indicative dimensions for lanes and private drives.

1. **Mews (local vehicle access, cyclists, and pedestrians).**
2. **Residential frontage with boundary planting and gardens**

Figure 27: Example of lanes/ private drives with the shared surface for all road users.

4.4. Parking Guidelines

In general, the over-provision of parking spaces is detrimental to the character of a place and encourages an over-reliance on cars. Measures to ensure that the design of vehicle parking, where its need has been demonstrated, is sympathetic to the public realm are therefore needed:

- Residential car parking should be a mix of on-plot side, front, garage, and courtyard parking, depending on the most appropriate solution for each location. There is a strong wish among residents that car parking generated by any new development should be accommodated within that development rather than displaced into neighbouring streets;
- For family homes, cars should be placed at the side (preferably) or front of the property;
- All new car parking surfaces should be permeable;
- Any new car parking must be sensitively located, landscaped, and planted to remove the visual clutter that vehicles bring. This is particularly important when parking is placed at the front of properties, where it must harmonise 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 use of differentiated quality paving materials; and
- Where provided, garages should reflect or complement the architectural style of the main building rather than forming a distractive mismatched unit.

Figure 28: An example of on-street parking (right) and on-plot parking (left), Cambridge residential development.

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. Low walls, where appropriate, should employ high-quality materials that respect the local character; and
- All parking surfaces must be constructed from porous materials to reduce surface water run-off.

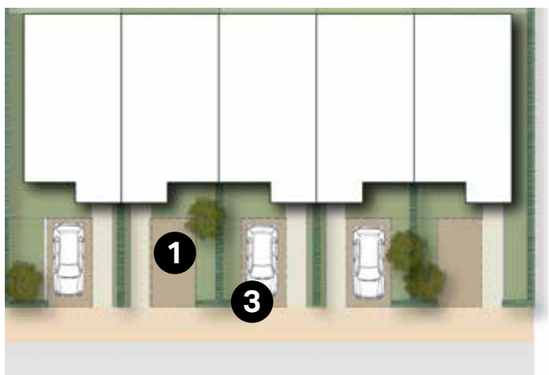


Figure 29: Illustrative diagram showing an indicative layout of on-plot front parking.

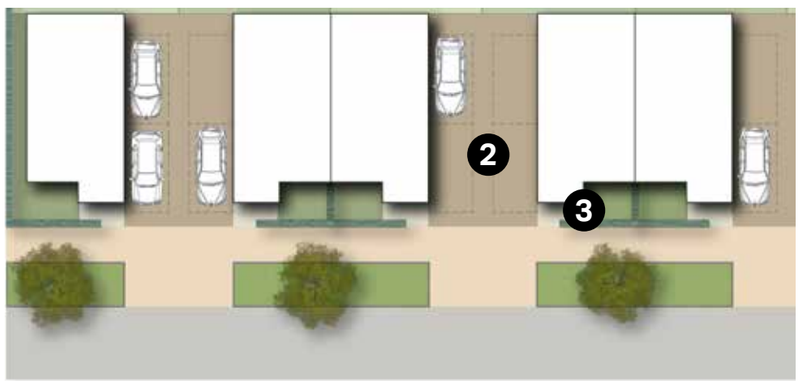


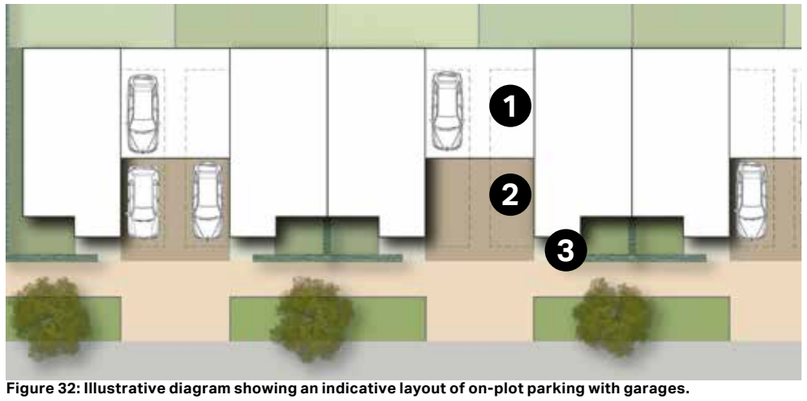
Figure 30: Illustrative diagram showing an indicative layout of on-plot side parking.

1. **Front parking with part of the surface reserved for soft landscaping. Permeable pavement to be used whenever possible.**
2. **Side parking set back from the main building line. Permeable pavement to be used whenever possible.**
3. **Boundary hedges or low masonry walls (where appropriate) to screen vehicles and parking spaces.**

Figure 31: An example of on-plot side parking, Cambridge residential development.

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, they must complement and harmonise with the architectural style of the main building rather than forming a mismatched unit. They must also not result in excessively small and overshadowed gardens;
- Often, garages can be used as a design element to create a link between buildings, ensuring continuity of the building line. However, it should be considered that garages are not prominent elements and they must be designed accordingly;
- It should be noted that many garages are not used for storing vehicles, so they must be carefully compared with other vehicle parking options to make the best use of the space available on a given property; and
- Garages in all new developments should make provision for wheelie bin storage and/or bicycle parking where possible. See page 32 and Section 3.18 for the design of bicycle parking and bin storage respectively.



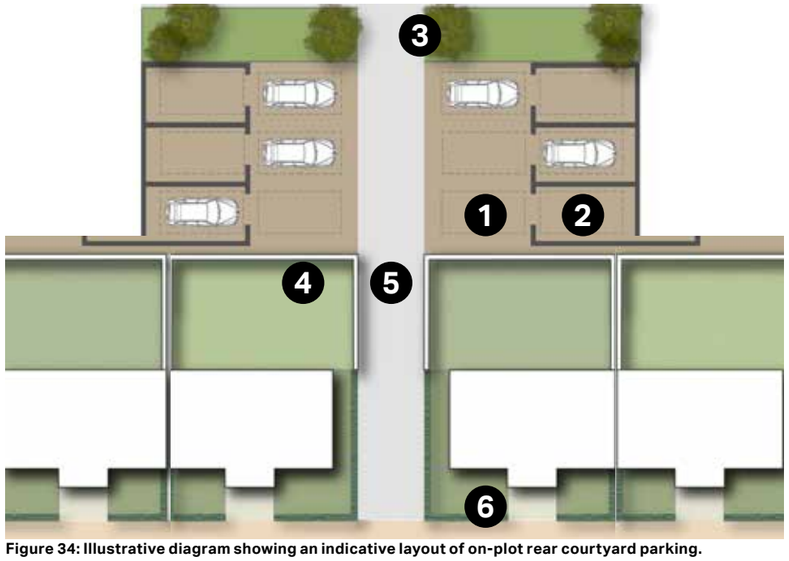
1. **Side parking set back from the main building line. Permeable pavement to be used whenever possible.**
2. **Garage structure set back from main building line. Height to be no higher than the main roofline.**
3. **Boundary hedges to screen vehicles and parking spaces.**

Figure 32: Illustrative diagram showing an indicative layout of on-plot parking with garages.

Figure 33: An example of on-plot garage, Cambridge residential development.

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. It should be noted that some local authorities may prefer rear parking courtyards over front courtyards;
- Ideally, all parking courts should benefit from natural surveillance;
- Parking courts should complement the public realm; hence it is important that high-quality design and materials, both for hard and soft landscaping elements, are used; and
- 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.



1. **Courtyard parking with soft landscaping. Parking bays to be arranged in clusters of 4 spaces maximum. Permeable pavement to be used whenever possible.**
2. **Sheltered parking space (optional).**
3. **Trees and/or soft landscaping to prevent car dominance and add shading.**
4. **Rear of residential properties - balance to be sought between natural surveillance and privacy.**
5. **Pedestrian link to main residential frontage.**
6. **Boundary hedges or low masonry walls (where appropriate).**

Figure 34: Illustrative diagram showing an indicative layout of on-plot rear courtyard parking.

Figure 35: An example of parking courtyards, Cambridge residential development.

4.5. Open Space Guidelines

Overview

The Strategic Green Space Framework illustrated on this page recognises the value of the existing landscape and promotes potential open green spaces. Green infrastructure is a network of open space and natural systems that deliver a wide range of environmental, economic and social benefits for communities. Formal and informal open spaces can also have a multifunctional role, combining recreational, water management, environmental, health, amenity and social value functions. Public open spaces have been highly valued during the Covid-19 pandemic and it will be essential that the western expansion of Needham Market adds to the choice of high quality open spaces to provide residents with the greatest possible opportunities to experience open space and the natural environment. and amenity value functions. The green areas:

- Respond to the current open space standard;
- Promote attractive settings to the built environment;
- Protect and integrate the existing green amenity;
- Enable the development to deliver a Net Gain in Biodiversity over the baseline condition:; and
- Are distributed in a way that creates visual and spatial continuity within the potential development site.

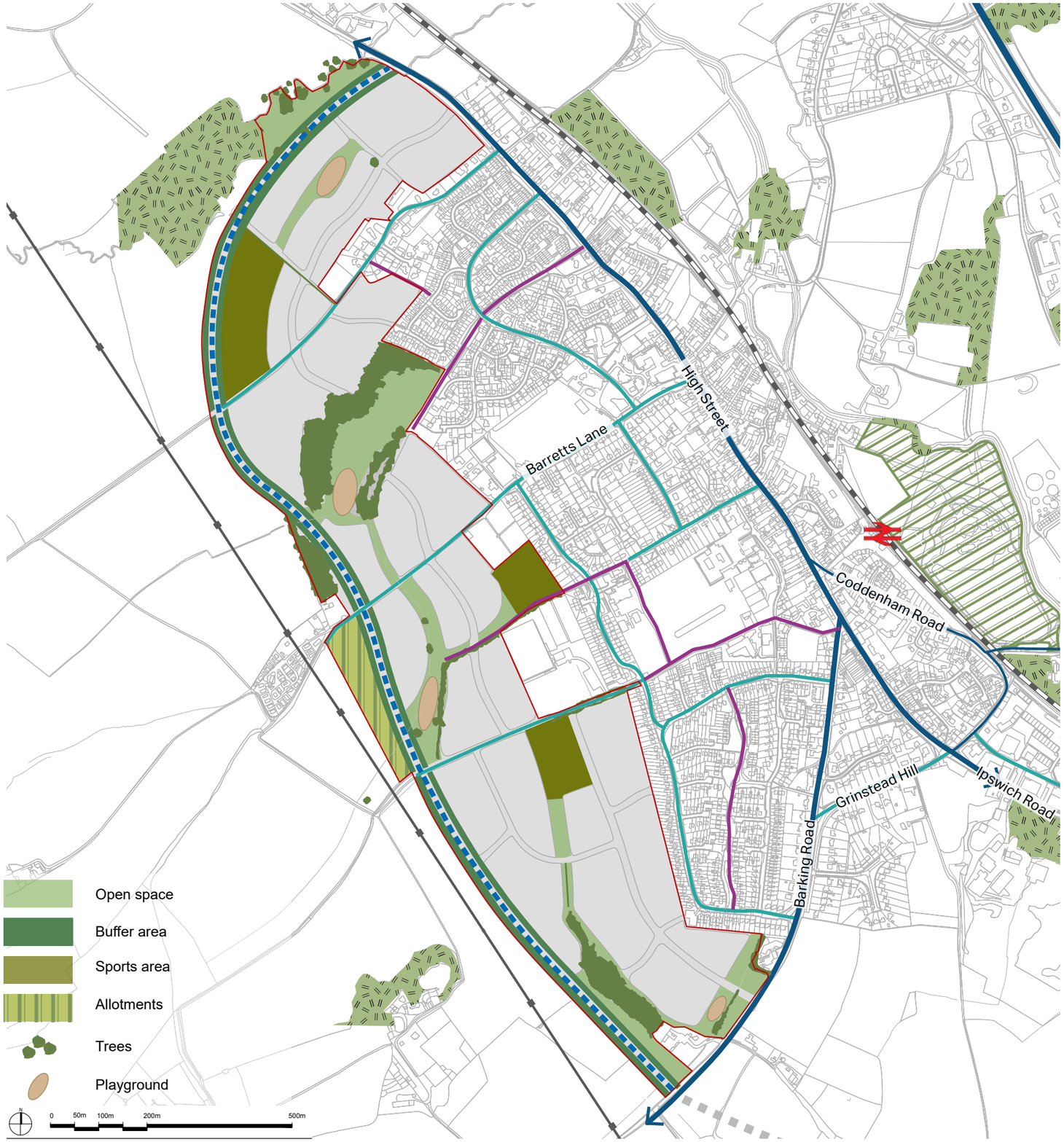


Figure 36: Map showing the different types of existing and proposed green spaces.

General Guidelines

New developments should take a number of measures to preserve and enhance open space as well as the local flora and fauna:

- 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;
- New developments should incorporate existing native trees and shrubs and avoid unnecessary loss of flora. Any trees or woodland lost to new development must be replaced. Native trees and shrubs should be used to reinforce the more rural character of the area;
- Open space networks should be planned to connect habitats and create bio-diversity corridors to support the delivery of a net gain in Biodiversity;
- Needham Market is a low-lying town that owes its setting partly to mature trees that help integrate it into the surrounding landscape. The layout and spacing of new buildings should reflect the rural character and allow as much as possible for long-distance views of the countryside while creating opportunities for new trees and greenery where appropriate;
- Opportunities to create or enhance pedestrian links with green and open spaces must be sought;
- Landscape schemes should be designed and integrated with the open fields that border the town to avoid coalescence with larger neighbouring settlements; and
- On-street parking must be carefully managed along and in the vicinity of green spaces.

Figure 37: Green spines with SUDS.

Figure 38: Shared surface around a village green.

Figure 39: Quality public realm.

Figure 40: Green infrastructure.

Public Realm and Streetscape

High quality landscaping and building materials must be used across the new development. Care must be taken when selecting the materials that will be used for the paved areas.

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.

Variations in materials, colours, and textures can be used to define boundaries between different highway uses - pavements, parking bays, cycleways, and carriageway.

Special care must be taken when considering finishes and textures to avoid impeding the mobility and safety of disabled and visually impaired users.

Figure 41: Cambridge residential development. Diversity of public space materials and furniture

Figure 42: Cambridge residential development. Diversity of public space materials and vegetation

Public Open Spaces

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Private Open Spaces

Good quality private amenity space should be provided for all homes. This should include good sized gardens for individual houses and balconies and terraces for apartments.

These spaces should enjoy a good level of privacy and provide sufficient space for children's play, garden planting and food growing and outdoor eating and relaxation as appropriate.

Surveys have consistently shown people attaching high importance to private outdoor space (alongside quality public and shared spaces) and the importance attached to this following the Covid-19 pandemic will be even greater.

Providing quality private outdoor space is therefore an important consideration in planning for future resilience as well as meeting an important aspiration of the majority of residents.

Figure 43: Cambridge semi-public green open spaces and furniture

Figure 44: Private rear garden providing space for nature, play and relaxation as well as providing shade and cooling and attenuating heavy rainfall.

Figure 45: Private outdoor space, in form of a shared garden and balconies for residents, New Ground Cohoudsing development, Barnet.

4.6. Built Form Guidelines

Building Scale and Massing

Single-family residential buildings must be sympathetic in scale to the surrounding context and should not exceed 2-2.5 storeys in residential areas. Multi-family buildings may reach 3-3.5 storeys, provided they do not overshadow neighbouring buildings and respect the neighbourhood character.

- Subtle variation in height is encouraged to add visual interest, such as altering eaves and ridge heights. Another way of doing it could be by variation of frontage widths and plan forms. The application of a uniform building type throughout a development must be avoided; and
- The massing of new buildings must ensure adequate privacy and access to natural light for their occupants, and avoid overshadowing existing buildings.

Figure 46: Examples of buildings in Needham Market demonstrating a variety in scale and massing. From top left the pictures are from Hargrave Avenue, High Street, Park Road and Quinton Road.

Building Height and Roofline

Creating a good variety in the roof line is a significant element of designing attractive places. There are certain elements that serve as guidelines in achieving an attractive roofscape:

- The scale of the roof must always be in proportion with the dimensions of the building itself;
- Subtle changes in roofline must be ensured during the design process;
- New developments should demonstrate an intelligent interpretation of local traditional roof detailing elements; and
- Dormers can be used.

Figure 47: Gabled roof on Chainhouse Road.

Figure 48: A local example of roofline style including gabled dormer, and various types of chimney stacks on High Street.

Figure 49: In most of the town chimney stacks, variations in roof shapes, heights and materials provide an informal character.

Frontage

Focal points and public squares and spaces in new developments must be designed in good proportions and maximise opportunities to provide active frontages and natural surveillance. Clearly defined spaces help in achieving cohesive and attractive urban form, and help in creating an appropriate sense of enclosure.

The following principles serve as general guidelines that must be considered towards achieving satisfactory sense of enclosure:

- The width of the street must be proportionate to the height of the buildings that front it. In most cases that ratio should be between 1:1 and 1:2, assuming that the scale of new buildings is appropriate to the existing context. Some diagrams illustrating different levels of enclosure are shown opposite;
- Buildings must be designed to turn corners and terminate views;
- Generally, building façades must front onto streets. Variation to the building line can be introduced to create an informal character;
- In case of terraced buildings, it is recommended that a variety of plot widths, land use and façade depth should be considered during the design process to create an attractive townscape; and
- A physical context with high levels of street enclosure may also bring traffic calming benefits as they often act as psychological incentives to lower vehicle speeds.

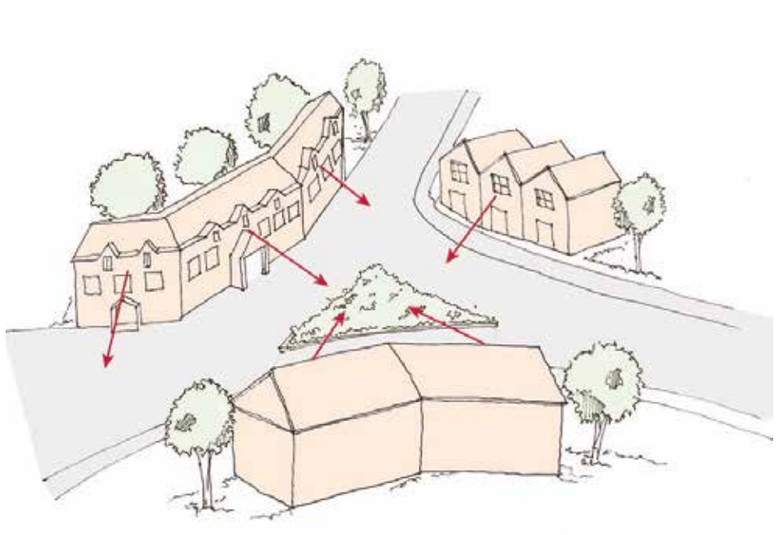

Figure 50: Diagram showing buildings overlooking public space.

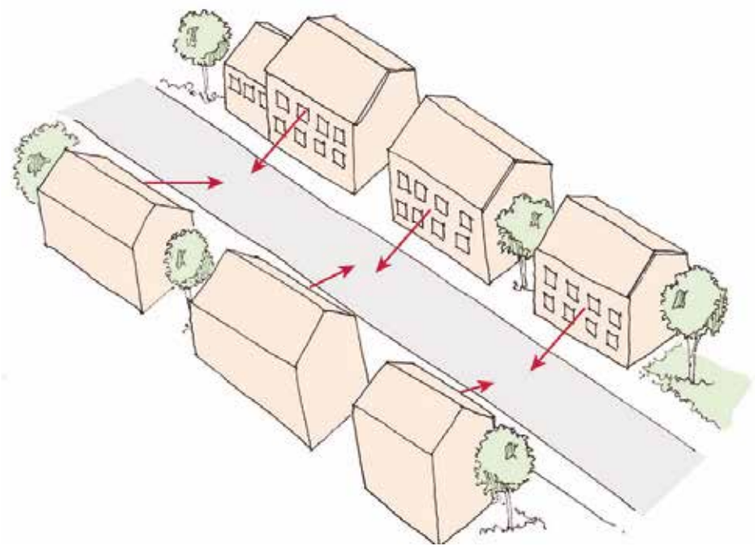

Figure 52: Diagram of an overlooked street.

Figure 51: Cambridge residential development. Continuous frontage.

Enclosure

Focal points and public squares and spaces in new developments must be designed in good proportions and maximise opportunities to provide active frontages and natural surveillance. Clearly defined spaces help in achieving cohesive and attractive urban form, and help in creating an appropriate sense of enclosure.

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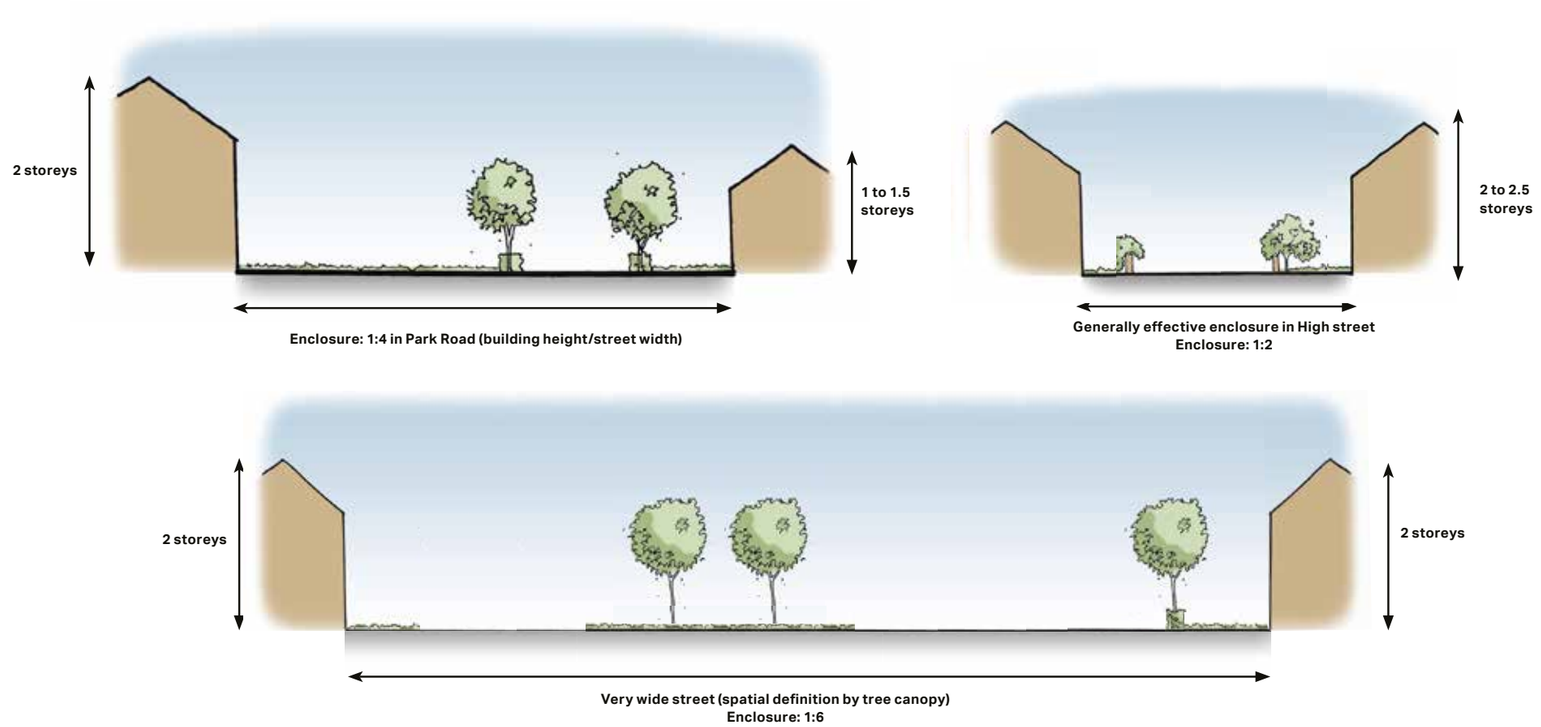


Figure 53: Street sections illustrating different enclosure levels.

Figure 54: Cambridge residential development. Narrow street profile.

4.7. Sustainability

Eco Design

Energy efficient or eco design combine 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 must 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 home energy use as cost effectively as the circumstances allow for.

Whereas, the final step towards a high performance building would consist of other on site measures towards renewable energy systems.

Developers must include driveway charging infrastructure to all properties with parking provision, either through future proof induction plates or domestic hook up points. They must also look into provision of charging hook up points into communal parking areas

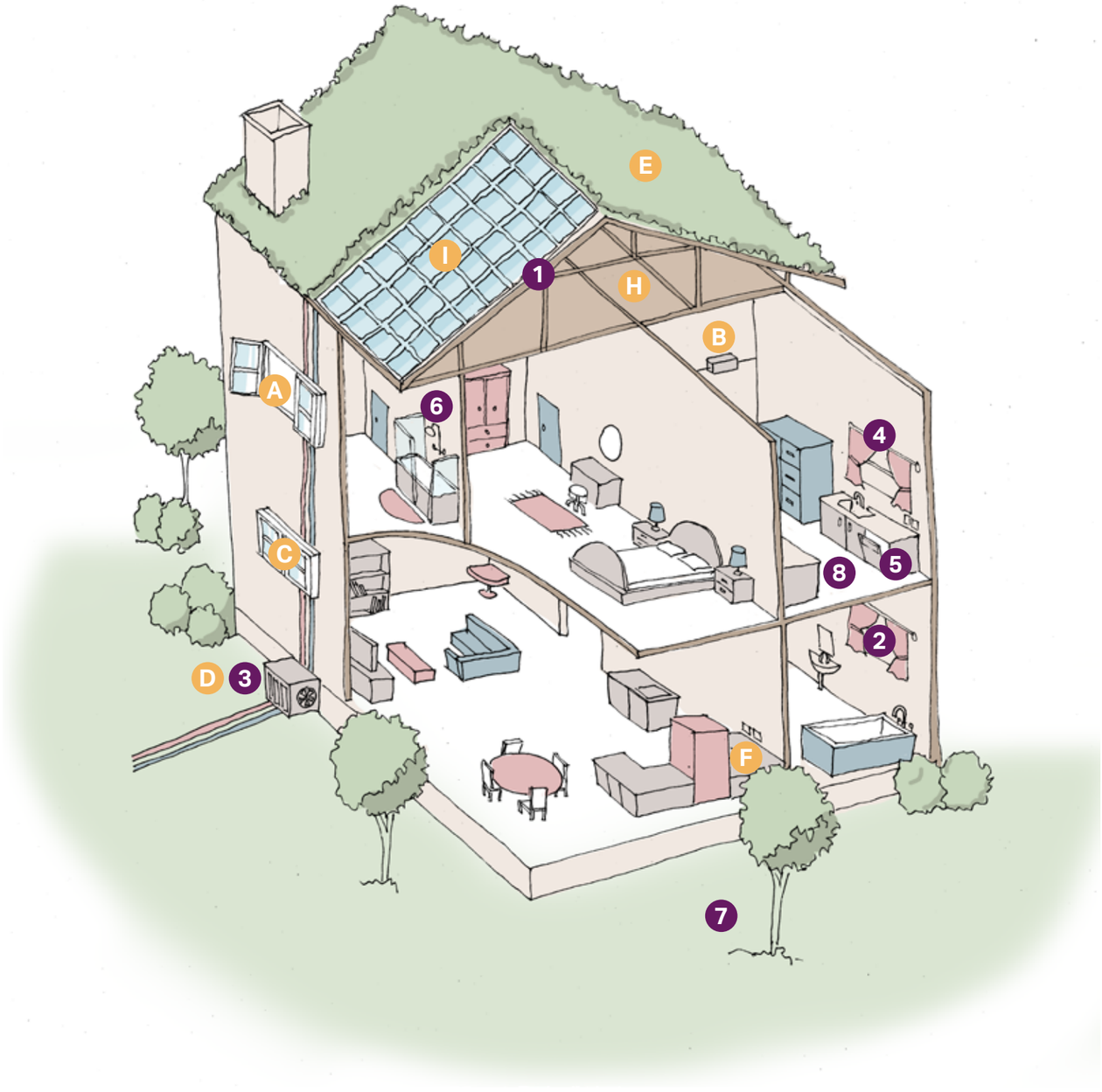


Figure 55: Diagram showing low-carbon homes in both existing and new build conditions.

Existing homes

1. **Insulation** in lofts and walls (cavity and solid)
2. **Double or triple glazing with shading** (e.g. tinted window film, blinds, curtains and trees outside)
3. **Low- carbon heating** with heat pumps or connections to district heat network
4. **Draught proofing** of floors, windows and doors
5. **Highly energy- efficient appliances** (e.g. A++ and A+++ rating)
6. **Highly waste- efficient devices** with low-flow showers and taps, insulated tanks and hot water thermostats
7. **Green space (e.g. gardens and trees)** to help reduce the risks and impacts of flooding and overheating
8. **Flood resilience and resistance** with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors

New build homes

A. **High levels of airtightness**

B. **More fresh air** with the mechanical ventilation and heat recovery, and passive cooling

C. **Triple glazed windows and external shading** especially on south and west faces

D. **Low-carbon heating** and no new homes on the gas grid by 2025 at the latest

E. **Water management and cooling** more ambitious water efficiency standards, green roofs and reflective walls

F. **Flood resilience and resistance** e.g. raised electrical, concrete floors and greening your garden

H. **Construction and site planning** timber frames, sustainable transport options (such as cycling)

I. **Solar panel**

Solar Roof Panels

The aesthetics of solar panels over a rooftop can be a matter of concern for many homeowners. Some hesitate to incorporate them because they believe these diminish the home aesthetics in a context where looks are often a matter of pride among the owners. This is especially acute in the case of historic buildings and conservation areas, where there has been a lot of objection for setting up solar panels on visible roof areas. Thus some solutions are suggested as follows:

- Design solar panel features from the start, forming part of the design concept. Some attractive options are solar shingles and photovoltaic slates; and
- Use the solar panels as a material in their own right.

Rainwater Harvesting

Rainwater harvesting refers to systems designed to capture and store rainwater. It also referes to those systems enabling the reuse in-situ of grey water. These systems require the use of pipes and storage devices that could be unsightly if added without an integral vision for design. Therefore rainwater harvesting design recommendation include the below:

- 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.

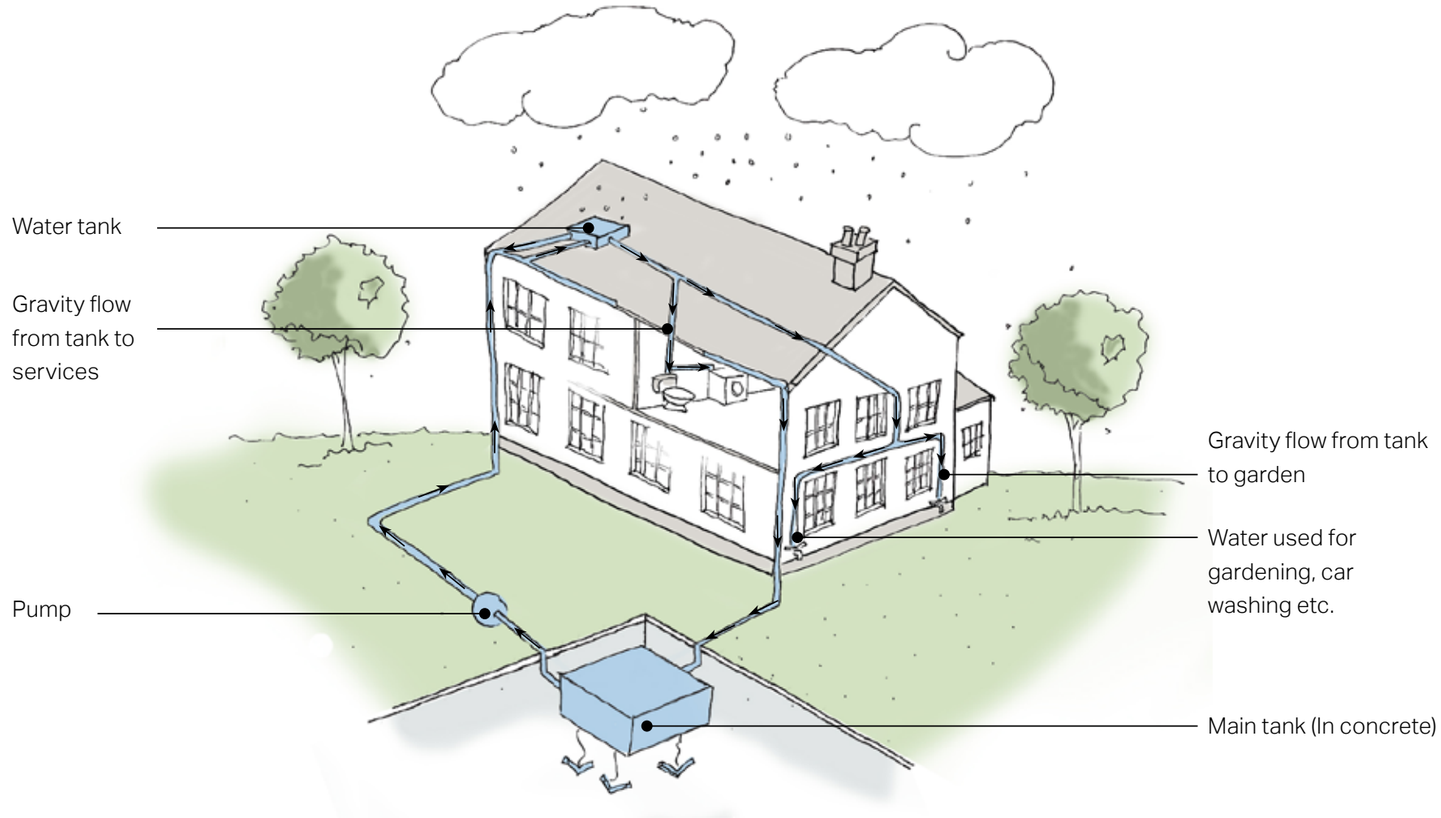


Figure 56: Diagram showing the rain harvesting process.

Cycle 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.

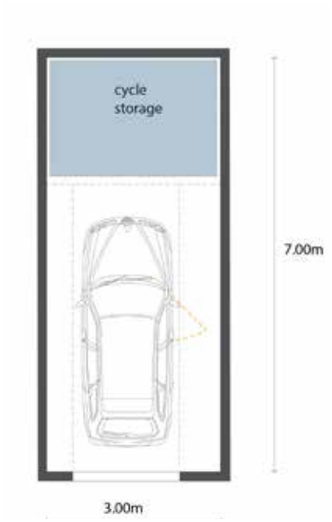


Figure 57: Indicative layout of a garage with a cycle storage area.

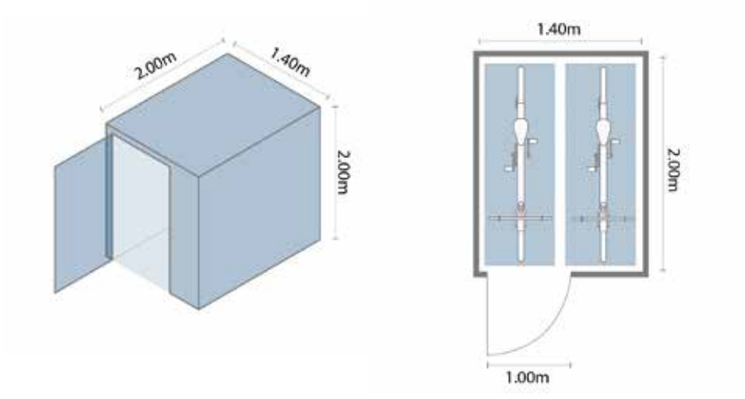


Figure 58: Secure covered cycle store for two cycle storage illustration.

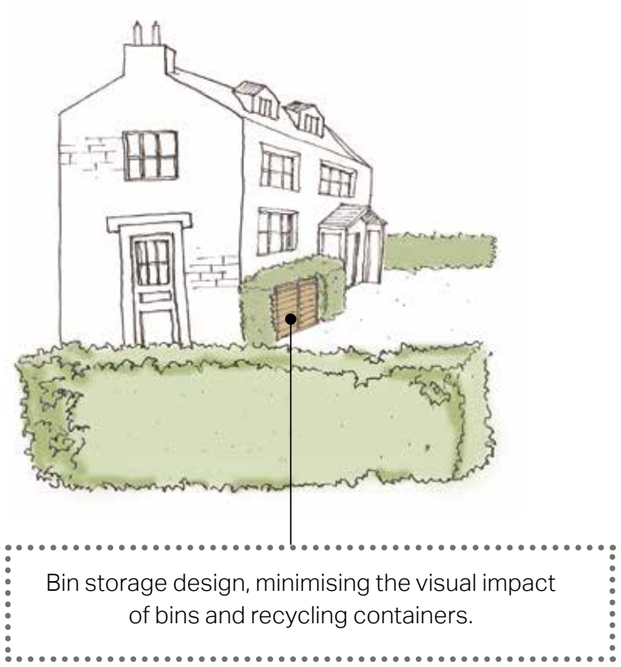
Figure 59: Example image of cycle storage in house (top) and public cycle parking (below, Cambridge).

Servicing

With modern requirements for waste separation and recycling, the number of household bins and size has increased. This issue poses a problem to the aesthetics of the property if bins are left without an effective design solution.

Waste and cycle storage, if placed on the property boundary, must be integrated with the overall design of the boundary. A range of hard and soft landscaping treatments such as hedges, trees, flower beds, low walls, and high quality paving materials could be used to minimise the visual impact of bins and recycling containers.

Opportunities to integrate underground bin storage solutions into new developments must be considered. These solutions reduce the need for refuse vehicle trips as well as clutter in the public realm by consolidating waste collection points.



Bin storage design, minimising the visual impact of bins and recycling containers.

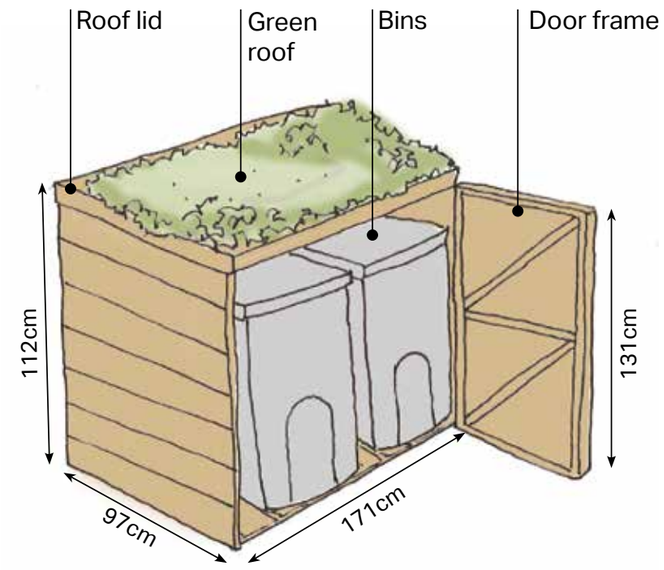


Figure 60: Bin storage design solution.

Figure 61: Example image showing bins stored at the rear of the house.

Figure 62: Example image showing bins stored in the front of the house.

Permeable Paving

Permeable paving can be used where appropriate on footpaths, public squares, and private access roads and private areas within the individual development boundaries. In addition, permeable pavement must 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.

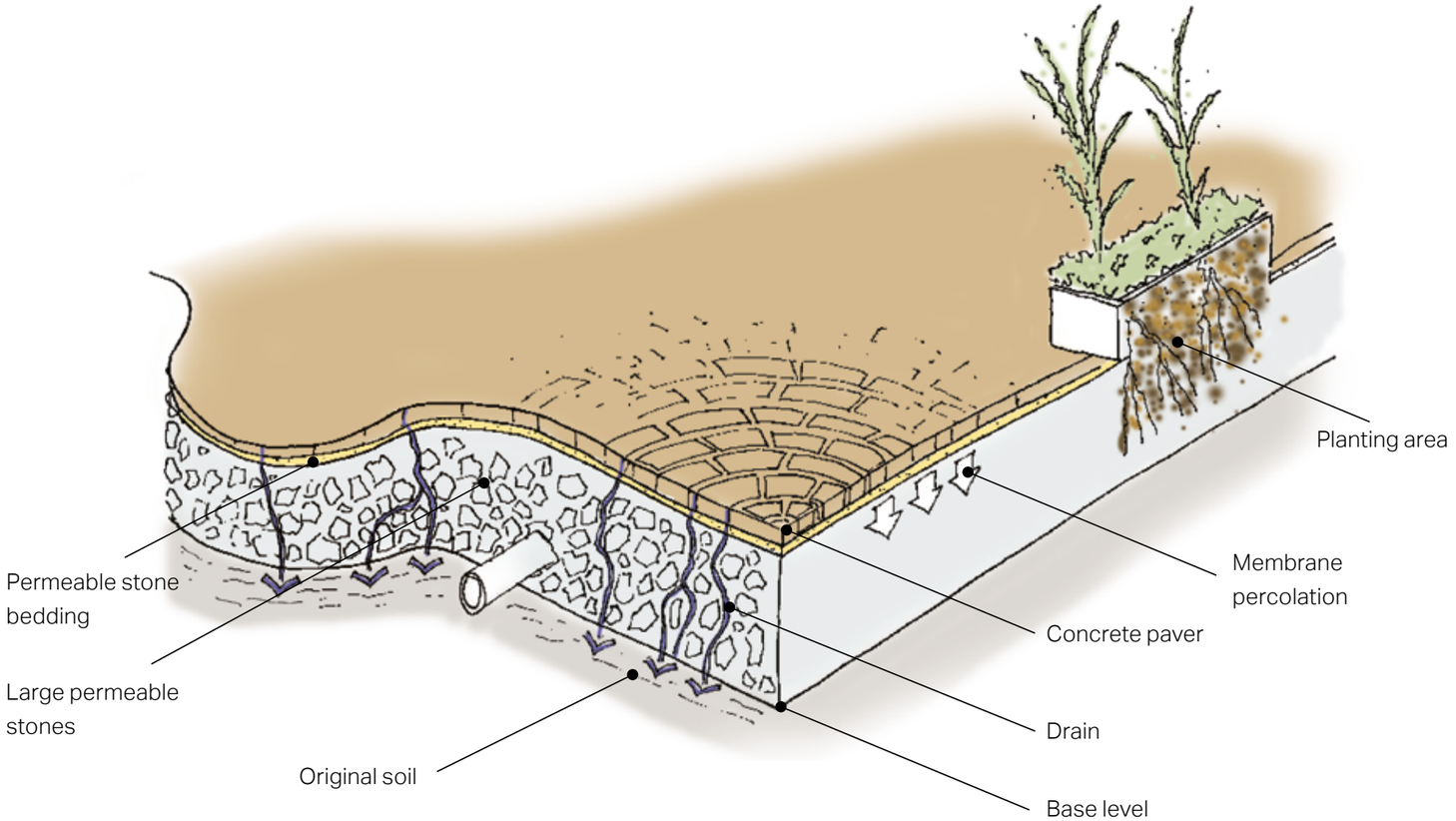


Figure 63: Permeable paving and considerations diagram.

Figure 64: Examples of permeable paving treatments: clay pavers, stone/precast concrete setts, and unbound gravel.

Next Steps

05

5. Next Steps

5.1. Overview

The Feasibility Study and this Development Framework set out the basis for a comprehensive approach to the planning of strategic growth at Needham Market. The level of growth is not required in the emerging Babergh and Mid Suffolk Local Plan and the Town Council has therefore resolved to prepare the Neighbourhood Plan on the basis of the lower housing allocation.

However, the Town Council is mindful of the need to plan for the longer term and recognizes that Local Plans are often subject to review earlier than anticipated as circumstances change. In planning for the future of Needham Market it is important to have a vision for how the Town should grow so that the Town Council is in a strong position to lead that debate supported by appropriate technical evidence. The Feasibility Study and this Development Framework are intended to support the Town Council in developing this long term vision and engaging with their community and stakeholders about the future growth of their Town.

While looking to a longer time horizon, the Development Framework is consistent with the vision set out in the draft Neighbourhood Plan. This is "To ensure that Needham Market's future growth occurs in a balanced and sustainable way, which preserves and enhances its attractive historic core and promotes the health and well-being of local people. Needham Market will continue to be a self-contained settlement providing the necessary housing and jobs needed by its local residents."

In particular, the Development Framework provides more detailed Design Guidance to support Policy NM2 Good Design and Layout and especially in circumstances where proposals come forward at a larger scale. This will help to ensure context-driven and high quality design in Needham Market.

The Development Framework will be particularly relevant to the consideration of any development proposals that are brought forward within the western expansion area. The Development Framework will assist different actors in the design and development process in a number of different ways as set out in the Table below.

Looking to the future the Feasibility Study and Development Framework will assist the Town Council in engaging with a wide range of stakeholders and the local community about the potential to plan at a larger scale for infrastructure-led development at Needham Market. Stakeholders who will be interested in the Development Framework and Feasibility Study will include MHCLG Garden Communities Team, Homes England, Suffolk County Council and Babergh and Mid Suffolk District Council. The Feasibility Study and Development Framework will enable the Town Council to engage with these stakeholders to build support and commitment to the carefully planned expansion of Needham Market should that be required in the future.

The Development Framework also has a key role to play in engaging with the local community and stakeholder groups around the opportunities to meet a wide variety of housing needs going forward, how growth can promote health and well-being and active lifestyles and address climate change and resilience imperatives.

In this regard the Development Framework should be seen as a starting point for the long term planning of Needham Market that will be enriched with the ideas and vision of local people as they think positively about the long term future of their town.

Actors	How They Will Use the Design Guidelines
Applicants, developers, and landowners	As a guide to the Town Council and community 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 with the questions set out in Section 4 providing prompts for these discussions.
Town 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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Contact
Patrick Clarke
Technical Director
patrick.clarke@aecom.com

aecom.com