

6.4.6 Greenways

The alignment of the greenways is indicated on the Open Space Parameter Plan submitted as part of the application. An illustrative section showing a potential arrangement of the streetscape is shown below. The greenway corridor width, specified in the Parameter Plans as 6-10m can be a multifunctional space that comprises amenity space, tree planting and/or informal recreational opportunities and should be designed to be a usable area of public open space. As shown in the illustrative section below, the movement infrastructure could be accommodated outside of the greenway corridor to enable this space to be a functional and attractive green link.

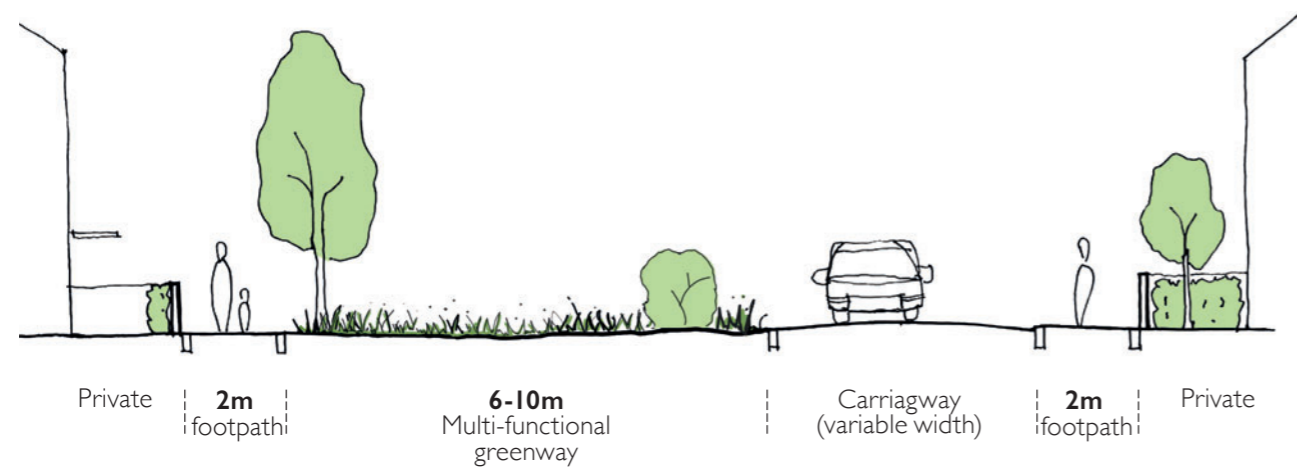


Figure 6.26: Illustrative greenway section

6.4.6 Cycling Strategy

Cycle Network

To deliver the vision for Northstowe as a cycle friendly town and to promote active travel, the masterplan and movement network have been developed to encourage cycling and make it convenient for people to choose the bike over the private car. The provision for cycle parking will be detailed in future reserved matters applications in accordance with local planning policy and good practice.

Different typologies of cycle routes will be provided throughout the site, including:

- Segregated cycle routes adjacent to the Primary Street and Secondary Streets;
- Vehicle free cycle routes incorporated into greenways; and
- Cycleways through quiet routes that are not segregated and lead through calm residential streets and neighbourhoods.

Cycle Parking

It is important to provide suitable parking infrastructure to allow residents to own and conveniently use cycle for everyday transportation to deliver the vision for Northstowe as a cycle friendly town.

Cycle parking must be designed as an essential component of the development and located in key public spaces, outside destinations (such as the primary school), play areas (such as the NEAP and LEAP) and within private residences. Visitor spaces must be provided separately.

Design Requirements - Cycle Parking for Residential Buildings

Provide secure and practical cycle parking that is conveniently located. Cycle parking for all homes will be designed in line with the Cycle Parking Standards of SCDC. Cycle parking must be:

- Protected from the weather and secure with access for residents only;
- Easily accessible and convenient;
- Integrate well with the surroundings; and
- Where possible, accessed from the front of the building either in a specially constructed enclosure, communal bike storage or easily accessible garage.

Communal cycle parking

In some locations it may be beneficial to provide communal cycle parking shared by a small number of homes. These communal cycle parking areas must be:

- Protected from the weather and secure with access for a limited number of residents only;
- Easily accessible and convenient, located in shared courtyards or at the end of streets;
- Integrate well with the surroundings, be attractive and robust.



Figure 6.27: Parking in the public realm.



Figure 6.28: Public cycle parking.



Figure 6.29: Communal cycle parking.

6.4.7 Vehicle Parking

Cycle and car parking is intended to be well integrated and flexible, to accommodate potential changes in travel patterns, car ownership and lifestyle changes.

Homes England intends to adopt a monitor and manage approach to car parking standards to ensure the development responds to potential future changes in car ownership and usage. In order to accommodate the required flexibility, the masterplan allows for a wide range of car parking options to be adopted including potential use of car barns and areas with reduced parking provision or, depending on further design development, elements of car free development.

Applied car parking standards and the specific approach to car parking would be defined at the detailed design stage, to ensure latest trends are being picked up.

Phase 3B intends to incorporate more flexible parking approaches than the more 'traditional' approach of providing between plot garages and car parking spaces.

Quality of place, health and wellbeing and flexibility are all compromised by developments that are dominated by cars, as described below:

Quality of Place

- Unattractive environment dominated by infrastructure serving vehicular traffic; and
- "There is a correlation between dissatisfaction with car parking and the overall neighbourhood perception" - post occupancy survey of major house builders.

Health and Wellbeing

Car based developments do not encourage:

- Active lifestyles due to 'suburban' form, lower densities and unattractive street environments (physical health); and
- Social interaction and sense of community (mental health).

Flexibility

- Places need the ability to adapt, as lifestyles change. This approach was encouraged by the design panels.



Figure 6.30: Illustrative parking impact

The three sketches above illustrate the impact that different parking solutions can have on the efficiency and flexibility of a site. Sketch 1 illustrates a 'typical' suburban layout, with parking accommodated on driveways or within garages that are on/in-between plots. Sketch 2 illustrates the same site, with the parking removed from in-between the housing and instead placed on street as part of an integrated public realm strategy. This results in a more continuous frontage, and begins to offer a level of flexibility that parking on plot doesn't have. If car ownership were to decrease in the future, this on-street parking provides the opportunity for parking spaces to be converted into areas of open space, as shown in sketch 3, to serve the community and improve the visual amenity of the street.

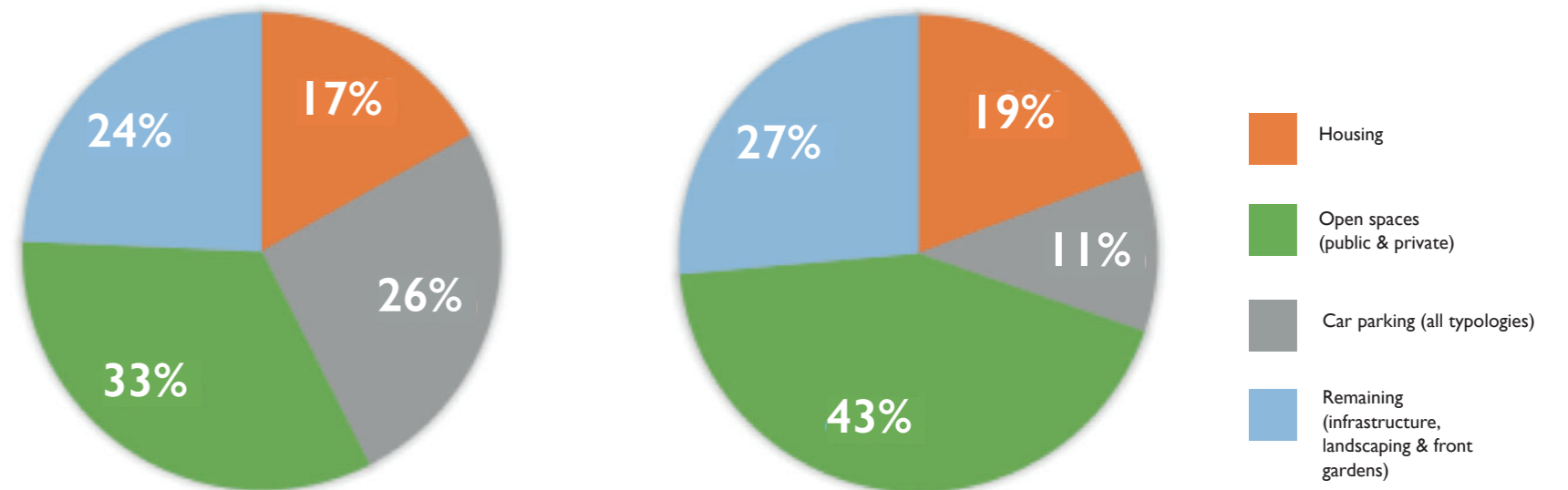


Figure 6.31: Case Study: Radstone Fields, Brackley - Suburban model with rear parking courtyards. This case study relates to the layout illustrated in sketch 1 above, resulting in a larger proportion of the land take used for parking.

Figure 6.32: Case Study: Great Kneighton, Cambridge - Mixed and flexible approach to parking. This case study relates to sketches 2/3 above, illustrating how the land take used for car parking can be traded off for an increase in open space, to serve a community.

6.4.8 Car Parking Strategies

Future flexibility of car parking spaces across Phase 3B has been a key design consideration throughout the development of the masterplan. On-street and other off-plot parking has been considered in suitable areas. This has many benefits, including:

- **Social interaction between neighbours through increased opportunities for ad-hoc meetings. This in turn strengthens the community;**
- **Increased on-street activity and sense of ownership of the public realm;**
- **Improved health and wellbeing through the promotion of walking and cycling, ensuring it is as accessible as other modes of transport, including the use of private cars; and**
- **Flexibility in future use. If car dependency declines then car parking spaces that are, for example, located within the public realm can be converted to open space to benefit the community.**

Northstowe is a Healthy New Town and as such promotes active travel. To encourage walking, densities within Northstowe are generally higher than in some other more suburban development. Many developments around the country, particularly those with mostly detached or semi-detached houses comprise high parking standards with on-plot parking. This approach has the following disadvantages:

- More land is used for parking than homes. Additional land take of lower densities is given to car parking and does not benefit residents in terms of larger gardens or more landscape;
- Many parking areas serving this single purpose do not have flexibility, i.e. amenity value or future opportunity for change; and
- Increased area taken up for parking reduces land available for public open space.

The quality of place of Phase 3B would be improved through the adoption of forward thinking parking strategies. This approach allows for future lifestyle changes and potential shifts in mindset towards private car use.

The masterplan approach comprises the following design principles:

- **Providing a range of parking opportunities, designed for specific areas;**
- **Creating more flexibility, i.e. clustered unallocated parking;**
- **Integrating parking positively into the public realm;**
- **Making use of the space above parking; and**
- **Exploring opportunities for a higher proportion of parking spaces to be provided remotely.**

Creating positive spaces

Parking spaces have to be designed into the public realm in a positive manner. On-street parking opportunities should be clearly defined and spaces delineated. This encourages the use of these spaces. The needs of cyclists and pedestrians have been given priority throughout the design and planning process to date, and will continue to be prioritised.

Many studies, including the recently published report *Transport for New Homes and Housing Design for Community Life* have identified the negative impact that inappropriately parked cars can have on the ability for people to walk, in particular the more vulnerable members of our community.

The report: *Housing Design for Community Life* further links cars, in particular anti-social car parking to the ability for children to be play safely within their neighbourhood. Apart from the impact on the ability of people to live a healthy lifestyle, wrongly parked cars can also undermine the quality of place.

Differing parking strategies can be applied across the development to reflect the character of an area and respond to the street hierarchy. For example, quieter areas of the development on tertiary streets could adopt a variety of on-plot car parking or car parking incorporated into the shared surfacing of quieter roads. Alternatively, primary and secondary roads, or areas of the neighbourhood that are significant for their community value, could incorporate integrated garages or on-street car parking within the public realm, allowing the frontages to be more continuous and thus providing more definition to the street. This principle is illustrated below:

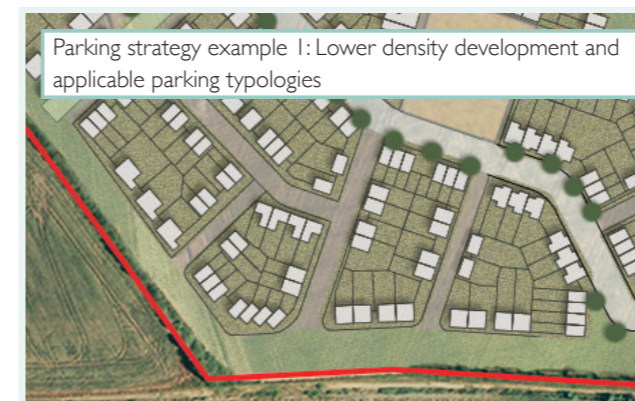


Figure 6.33: On-plot car parking.



Figure 6.35: On-street car parking integrated into public realm.



Figure 6.34: Car parking incorporated into the shared surfacing of quieter residential roads.



Figure 6.36: Integrated garages.

6.5 Community

6.5.1 Introduction

Many of Northstowe's community facilities, such as health and sport facilities, places of worship, and leisure and shopping opportunities are provided within the Town Centre in Phase 2 and within the Local Centre in Phase 1. Phase 3B has been considered in the context of the wider town, taking into account this wide ranging provision of facilities, in particular the Local Centre within Phase 1 that will be within a 10 minute walk (800m) for the majority of residents in Phase 3B.

The open spaces and the primary school within Phase 3B will form the focal points for community activity within the neighbourhood. The central area of open space has been integrated into a connected network of green infrastructure, offering a variety of informal and semi-formal recreational opportunities.

A secondary mixed-use zone has been identified at a key location within the site; sitting on a secondary street adjacent to the primary school. This is conceived as a residential area with adaptable ground floors where small businesses could be incorporated. The provision of this secondary mixed-use zone creates a level of flexibility within the masterplan that allows for future changes in employment patterns and enables the potential for local shops, cafés and small businesses to set up in this key zone of activity.

6.5.2 Working and Living in Northstowe

There are wide ranging opportunities for employment within Northstowe, notably within the Town Centre (Phase 2) and the Local Centres within Phases 1 and 3A. Phase 3B comprises a secondary mixed-use zone with measures to facilitate home working, which will support the development of this neighbourhood and the town as a place to live and work. For a more detailed explanation of the employment provision in Northstowe please refer to the Economic Development Strategy submitted as part of this application.

Home-working

Home-working is becoming of increasing importance and within a town that is looking towards the future, such as Northstowe, opportunities for home working need to be accommodated.

The Economic Development Strategy sets out the evidence and considerations in relation to home-working. The findings from the Strategy include (not exclusively):

- IT/Creative and Digital sector has one of the highest proportions of homeworkers. This is relevant to Northstowe as many of the likely growth sectors in and around Cambridge that are likely to be present in Northstowe are within the IT/Creative and Digital sectors.
- A National Small Business Association report revealed that arrangements for working from home increased 44% in 2012; and
- A desire for a better work-life balance, coupled with converging technologies and the digitisation of products has led to growing numbers of people leaving the office behind to work primarily from home.

The Economic Development Strategy states that the evidence demonstrates that home-working is likely to be a significant factor in Northstowe's economy, especially over the next decade and a half when the development is being built out.

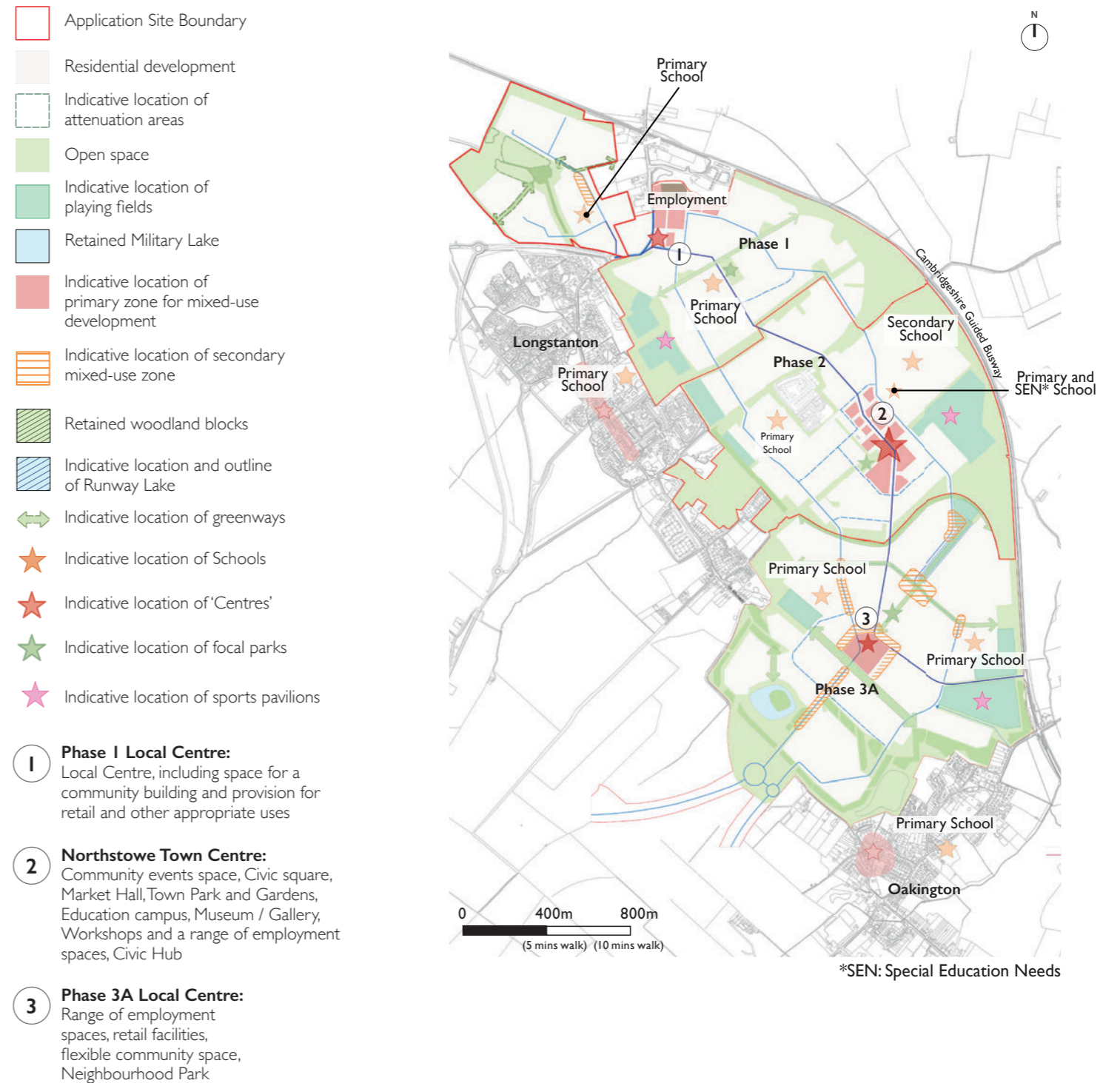


Figure 6.37: Community facilities within Northstowe

6.5.3 Living in Phase 3B

A range of housing types and tenures will be provided within Phase 3B, accommodating people of all ages and abilities including affordable homes for rent and purchase, self-build and custom build homes. This will help to establish a mixed community and addresses local housing need.

The homes are intended to be delivered tenure-blind to ensure consistency in high quality construction methods. The different types and tenures will be appropriately integrated into the neighbourhoods to ensure a cohesive community.

6.5.4 School Provision

The Primary School proposed within Phase 3B is a key community facility. The school is a proposed 2 Form Entry School, the location of which has been influenced by the following key factors:

- Provision and location of schools within Phase 1;
- Ensuring that the 800m catchment area covers as much of the proposed development as possible;
- Connectivity and ease of access from both within or adjacent to Northstowe and from surrounding settlements; and
- Opportunity to create a community node.

School Connectivity

The proposed Primary School has been located at a key point within the movement network so that sustainable and active modes of transport are attractive options for new and existing residents to reach these destinations. The key factors that ensure the school is well connected by cycle and walking routes are:

- Proximity to the pedestrian and cycle links that connect directly between Phase 3B and Phase 1; and
- Location on a secondary road which incorporates segregated cycle routes and pathways.

Community Design Principles

The following community design principles are to be applied to Northstowe Phase 3B:

- Maximise opportunities to connect 3B to Longstanton and the wider town to enable residents to access community, leisure, education and sport facilities via safe and convenient walking and cycle routes.
- Ensure that green links and open space are well overlooked by development frontages to encourage passive surveillance and improved real and perceived sense of safety.
- Ensure each home will be within a short walk of public open space to enhance community wellbeing. Provide 'doorstep play' to further improve accessibility to play.
- Provide accessible, safe, comfortable space that promotes social interaction.
- Provide for a mixed and balanced community through a series of different types of open space and housing typologies.
- Design open space as multifunctional space, incorporating recreation, formal and informal play, drainage and ecological functions.
- Create an integrated network of green and blue infrastructure. Connect the open spaces through the provision of safe routes and green links.
- Ensure open spaces are integrated into the Northstowe movement network as well as being accessible to neighbouring communities.
- Provision of informal open space (including children's play space), natural open space, allotments and community orchards to meet the need generated by the development.

6.5.5 Open Space and Activity

The recreation strategy for Phase 3B provides semi-formal and informal open space, which:

- Directly contribute towards positive lifestyle choices, such as informal activity of walking and cycling; and
- Are likely to be used by the older generations and those that are less active. Both of these groups of people are less likely to engage in formal sports.

Those that are most sedentary and therefore at risk of obesity benefit the most from increased activity, with even small increases in walking and cycling helping health.

In the case of neighbourhood design, improving neighbourhood walk-ability (i.e. an area that is supportive of walking) and infrastructure designed to promote walking and cycling, has numerous positive health outcomes, including: increased physical activity levels and improved social engagement among older adults. (Northstowe Phase 2 Healthy Living and Youth & Play Strategy). The approach proposed for Northstowe Phase 3B includes as many walk-able features as possible to design activity-friendly neighbourhoods.

By including a range of informal and semi-formal spaces throughout the neighbourhood that are easily accessible encourages exercise to become part of daily routine.

Natural environments such as woodlands, gardens, parks, grassland and farmland, are supportive of a range of physical activities. As found in the Phase 2 Healthy Living and Youth & Play Strategy, physical activity in natural environments can be more beneficial to health than in other environments.

The open space strategy for Phase 3B seeks to:

- Provide contact with nature, by retaining and integrating the existing tree copse and hedgerows where possible and by creating new attractive open spaces; and
- Create varied opportunities for everyone to adopt a more active lifestyle and enjoy time outdoors, either by playing, walking, sitting or engaging in sporting activities.

The retention of the natural landscape features where possible, alongside the desire to provide a range of informal recreational opportunities across the site has resulted in the open space strategy for Phase 3B providing substantially more open space than required by policy. This includes 16.29ha of open space, which can be broken down into:

- Parks and gardens: 5.39ha
- Natural and semi-natural urban green space: 8.45ha
- Allotments and community space: 2.45ha

For a full description of the open space across the site, please refer to the Landscape Strategy submitted as part of this application. The key design principles of the open space strategy are:

- Incorporating ancillary publicly usable open space over and above the Strategic Open Space within the Residential Development Areas to ensure each home is within easy walking distance of open space.
- Designing open space as multifunctional space incorporating, recreation, formal and informal play, drainage and ecological functions;
- Connecting open spaces by a network of safe routes and green links to give people a connection with the landscape, provide 'doorstep play' and create an integrated network of green infrastructure;
- Biodiverse streets and spaces including edible streets and community orchards to promote local food production with provision for community allotments;
- Retention of natural inherited assets to establish a strong sense of place;
- Enhancing the landscape to compliment the architecture and create a desirable setting for new homes; and
- Ensuring that green links and open space are well overlooked by development frontages.



Figure 6.38: A range of different play spaces will be integrated into the green infrastructure strategy. Natural settings and features will influence these play spaces where appropriate.



Figure 6.39: Illustrative Landscape Masterplan

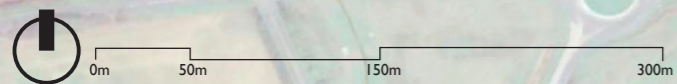


Figure 6.39: Illustrative Landscape Masterplan, 2018

January 2021

Landscape Treatment along Station Road

The illustrative section shown at Figure 6.41 illustrates the character and landscape treatment alongside the B1050 between Northstowe Phase 3B and Longstanton. This section draws on information set out on the Parameter Plans, Design Principles and the Landscape Strategy to illustrate a likely scenario for this development edge. It shows that a distance of approximately 95 metres is likely between the new homes within Northstowe Phase 3B and the existing buildings within Longstanton.

This section illustrates the proposed boundary treatment along the southern edge of Phase 3B. As shown on the Illustrative Landscape Masterplan (Figure 6.39) the existing hedgerow to the north of the B1050 will be enhanced and supplemented with additional wildflower and tree planting.

For the purpose of this section, the proposed planting along Phase 3B's southern boundary, as well as between the B1050 and the homes within Longstanton is shown at approximately 15 years establishment.



Figure 6.40: Section and photo location map.

Section Location

Photo location



Embankment/tree planting to northern edge of Longstanton

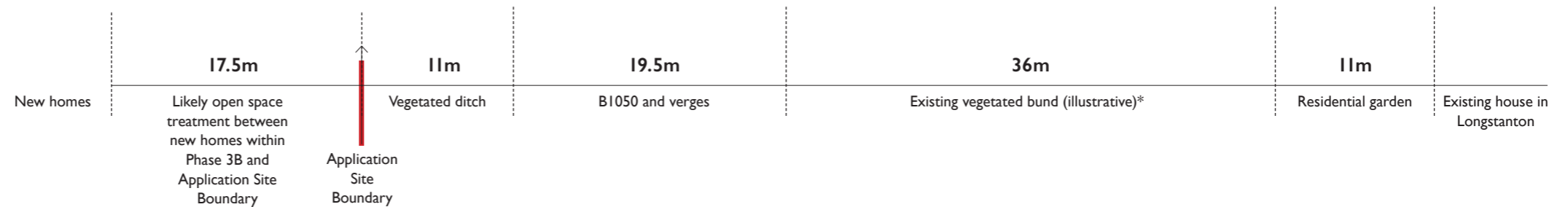
Vegetated ditch along northern edge of B1050

Figure 6.41: Photo looking north west across the Phase 3B site

Enhanced planting to B1050* as shown on the Illustrative Landscape Masterplan (Figure 4 within the Landscape Strategy). The strategy for this boundary comprises enhancements to the existing hedgerow and additional tree and wildflower planting.



Figure 6.42 (right): Illustrative Northstowe - Longstanton Section



Play Provision

Distribution of formal play areas within Phase 3B has been considered in relation to existing and proposed formal play provision in Northstowe Phase I. Site constraints such as the central woodland copse, multifunctional SuDS and the requirement for suitable separation to new homes have been considered. The equipped play provision is nominally shown to the western side of the development where it would be positioned to allow for natural surveillance and could be grouped to enable a larger open space of formal activity to occur away from the main roads through Phase 3B. The Local Equipped Area of Play (LEAP) location has been considered in alternative locations to bring all of the development within 400m walking distances however this is not achievable and locations such as close to the central copse and within development parcels have been discounted as the space required would not allow for adequate separation between equipped play and new homes. The locations shown in figure 6.44 are suggested and do not preclude relocation, however the locations shown would complement potential LEAP provision within Digital Park/Endurance Estates land to the east.

The following designated play provision must be provided:

- 1 Neighbourhood Equipped Area of Play (NEAP);
- 1 Local Equipped Area of Play (LEAP); and
- Approximately 10 Local Areas of Play (LAP) to ensure access from all residential properties within a 100m radius.

Throughout the provision of the above, the following design principles are relevant:

- Play provision must go beyond the offer of designated play spaces and must include playful landscapes and routes for people of all ages and abilities; and
- Play areas must be located where they are easily accessible and where natural surveillance is good.

Open spaces such as semi-formal kickabout areas, play areas, community planting and allotments will need to be designed and landscaped to a high standard. These open spaces must link to, and integrate with, other landscaped and amenity areas as well as contribute to the overall quality of the setting for the urban fabric of Northstowe.

The value of the landscaped areas within the town will be enhanced by linking them together to form a network with the landscapes created on the periphery of the town, in the country parks and through to the wider countryside.

In addition to the above, opportunities to encourage doorstep play and 'play on the way' will be explored in the future design code.



Figure 6.43: Precedent image - Opportunities for formal and imaginative play



Figure 6.44: Formal Play Provision Phase 3B

Integrating Public Art

Public Art Strategy

The public art strategy for Phase 3B will draw on the strategy set out within the Phase 2 Design Code (2017). This section sets out the approach.

Public art can play an important role in the creation of a thriving and distinct new community by making direct connections with the character areas of the town, the historic uses of the area and the values of the people that live there.

The public art provision shall be informed by SCDC's Public Art SPD (2009). The SPD refers to public art as permanent works, temporary, ephemeral or time-based contributions by an artist or crafts-person in any publicly accessible location. The 'art' can be part of the public realm, open space, and architecture of the development.

To ensure there is a coordinated and coherent approach to the site all art should find inspiration and be influenced by the following supporting themes:

- Roman heritage.
- Pioneers.
- Landscape / nature.

Public art commissions including installations, functional, practical urban furniture and way-finding features may be influenced by the above themes. Where possible, these should be integrated within the fabric of buildings and spaces rather than being conceived as isolated add-ons.

Public art will also have an important part to play in being a voice for the people and the place, in promoting a shared sense of community in which everyone has a role and in celebrating a sense of place for all.

As a key requirement, the art must always be developed in consultation with, and to be accessible for, the whole community.

Educational elements that tell residents and visitors about the history and landscape qualities are positive ways of integrating art and education.

Maintenance

Artworks must have low maintenance requirements, be durable and vandal proof. The artist commissioned is responsible for outlining any maintenance requirements at the time of proposal. It should be confirmed that there is available resource to comply with these requirements before any artwork can go into production.

It is intended that a Design Code for Phase 3B will provide further guidance on the provision of Public Art.



Interactive playable public art



Ecological/Educational Interpretation Points



Ecological/Educational Interpretation



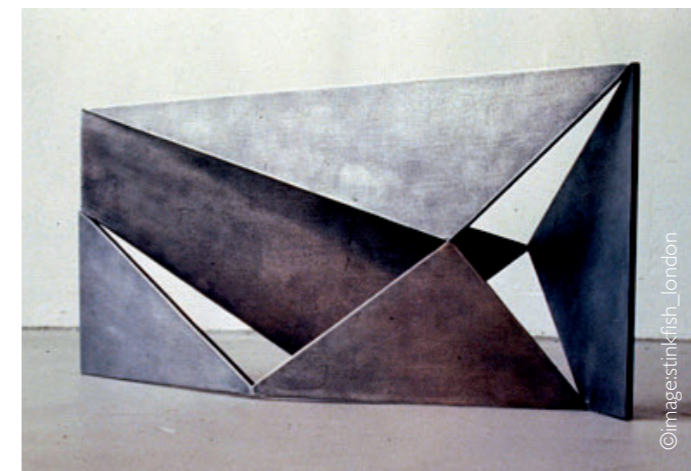
Feature Building Façade



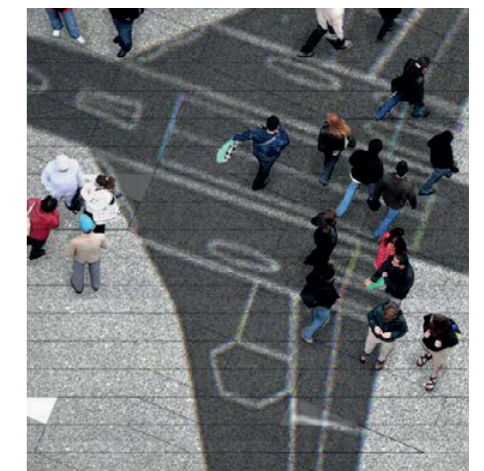
Public Art Focal Point



Youth-Focused Public Art



Interpretation of Site History



Interpretation of Site History

Figure 6.45: Examples of public art



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A large, stylized number '7' is centered on a teal square background. The number is composed of two vertical bars and a diagonal bar connecting them. The word 'Climate' is written in a dark grey, sans-serif font across the middle of the diagonal bar.

7
Climate

7 Climate

This section provides a high level summary of the Sustainability and Climate Strategy for Phase 3B. For further information please refer to Chapter 8: Climate of the Environmental Statement Volume 1, and the Sustainability Statement submitted as part of this application.

Sustainability Strategy

The Sustainability Strategy submitted as part of this application outlines the sustainability approach in line with the requirements set out by national and local planning policy as well as responding to the 2019 Declaration of a Climate Emergency in the Council.

Sustainability is the thread that weaves through the masterplan for the proposed development. By setting the standards and commitments highlighted in the Sustainability Statement, Northstowe Phase 3B is setting an ambitious path towards a zero carbon, sustainable development: meeting the need of this generation and protecting those of the future.

A path to achieve a zero carbon development has been set from the outset. The Energy Strategy has been developed to be flexible as Northstowe will be delivered over a long period in the context of tightening building standards and evolving technical solutions.

- Fabric First - high levels of thermal performance of thermal fabric and air permeability will be achieved
- No fossil fuels will be used on site
- Low carbon heating technology will be specified throughout
- Renewable energy generation technology (Solar PV) will be specified for each property

The structure of the approach is based on the Arcadis STAR (Sustainability Targeting and Assessment Rating) framework which assists in delivering improved sustainability performance and identifies opportunities for enhancing value during the development of masterplans based on national, regional, local policy, best in class examples and expertise. The Arcadis STAR is shown in diagrammatic format at Figure 7.1.

Homes England, as Master Developer, is committed to a process of learning and using best practice as the development is built out and will be pleased to work with the planning authority to monitor, review and implement sustainability measures at each stage.

3B Design Principles

The following climate design principles are to be applied to Northstowe Phase 3B:

- Sustainable construction methods will be adopted, using low-carbon materials; attracting green businesses; and creating demand for more sustainable products and services across the town. A fabric first approach to building design will improve energy efficiency and reduce carbon emissions.
- Widespread use of SuDS will provide sustainable storm water management and maximise available water resource from rainfall, as well as the creation of new wildlife corridors and spaces whilst incorporating existing wetlands and ponds, with a variety of flora and fauna, creating valuable open amenity areas.
- Enabling and promoting low carbon transport within, to and from Northstowe by ensuring access to public transport and cycle routes to reduce carbon emissions and encourage health and wellbeing.
- Incorporating low and zero carbon technologies into all buildings to provide energy, financial and carbon savings, therefore supporting the transition to net zero carbon where possible.
- Protecting and enhancing biodiversity and habitat connectivity via a strong network of Greenways and interconnected green and blue spaces to achieve a biodiversity net gain.

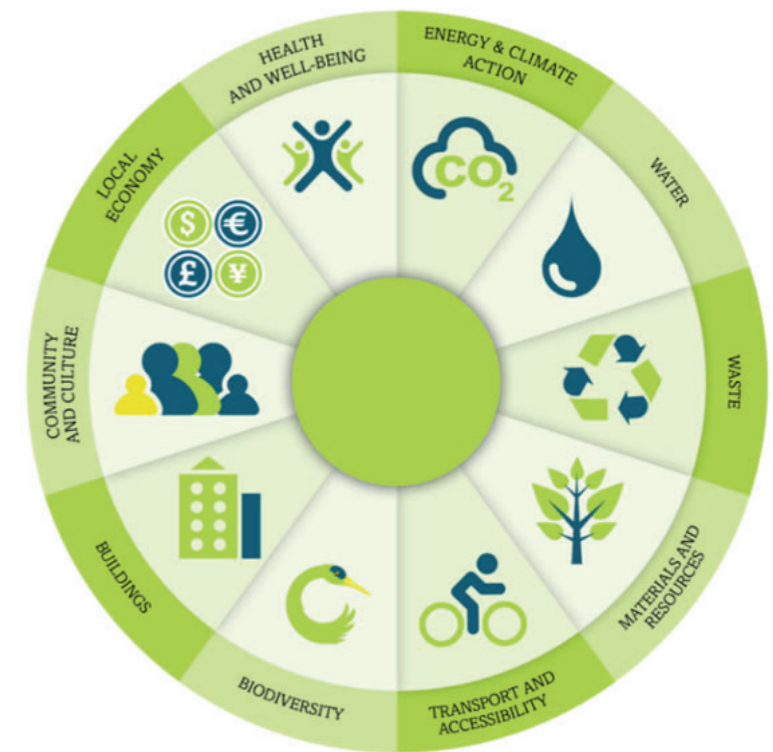


Figure 7.1: Arcadis STAR (Sustainability Targeting and Assessment Rating)

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8
**Delivering
Design Quality**

8 Delivering Design Quality

8.1 The Planning Application

The first step to delivering design quality is provided through this application, its content as well as the process and conditions that are proposed. The outline application and masterplan/design principles is a first step in a longer process that will lead to detailed design proposals and subsequent implementation.

The outline application has been structured to secure fixed parameters of the Proposed Development which have been assessed in the Environmental Statement. These are secured through the three submitted Parameter Plans:

- **Plan 01:** Open Space and Land Use
- **Plan 02:** Movement and Access
- **Plan 03:** Heights

Within these high level parameters a variety of detailed design approaches could be acceptable in planning terms.

In addition to the Parameter Plans the Application contains a Design Principles Document within Appendix A of this Design and Access Statement. This contains design principles that add further detail to the Parameter Plans and an Urban Design Framework Plan that brings all Parameter Plans together and defines the urban design approach. It is envisaged that all subsequent design stages are to be in substantial conformity with the Design Principles Document and that this will be secured through a planning condition. It brings together the Parameter Plans to illustrate how the different elements of green space, land use and movement interact with each other. Frontages are identified onto public open spaces and landscape features. In addition, frontages are expected to overlook all streets and spaces. The will inform future Design Coding.

This Design and Access Statement illustrates how the Parameter Plans and the design principles can lead to a high quality design.

Following approval of the Application and prior to the commencement of development, Homes England is committed to producing a Design Code. This Design Code will follow the high level principles and parameters established through the Application and inform the subsequent Reserved Matter applications. It is expected that a condition attached to the outline planning approval will require the preparation of the Design Code. At this stage further engagement with stakeholders and the communities are expected.

This plan is illustrated in the diagram to the right.

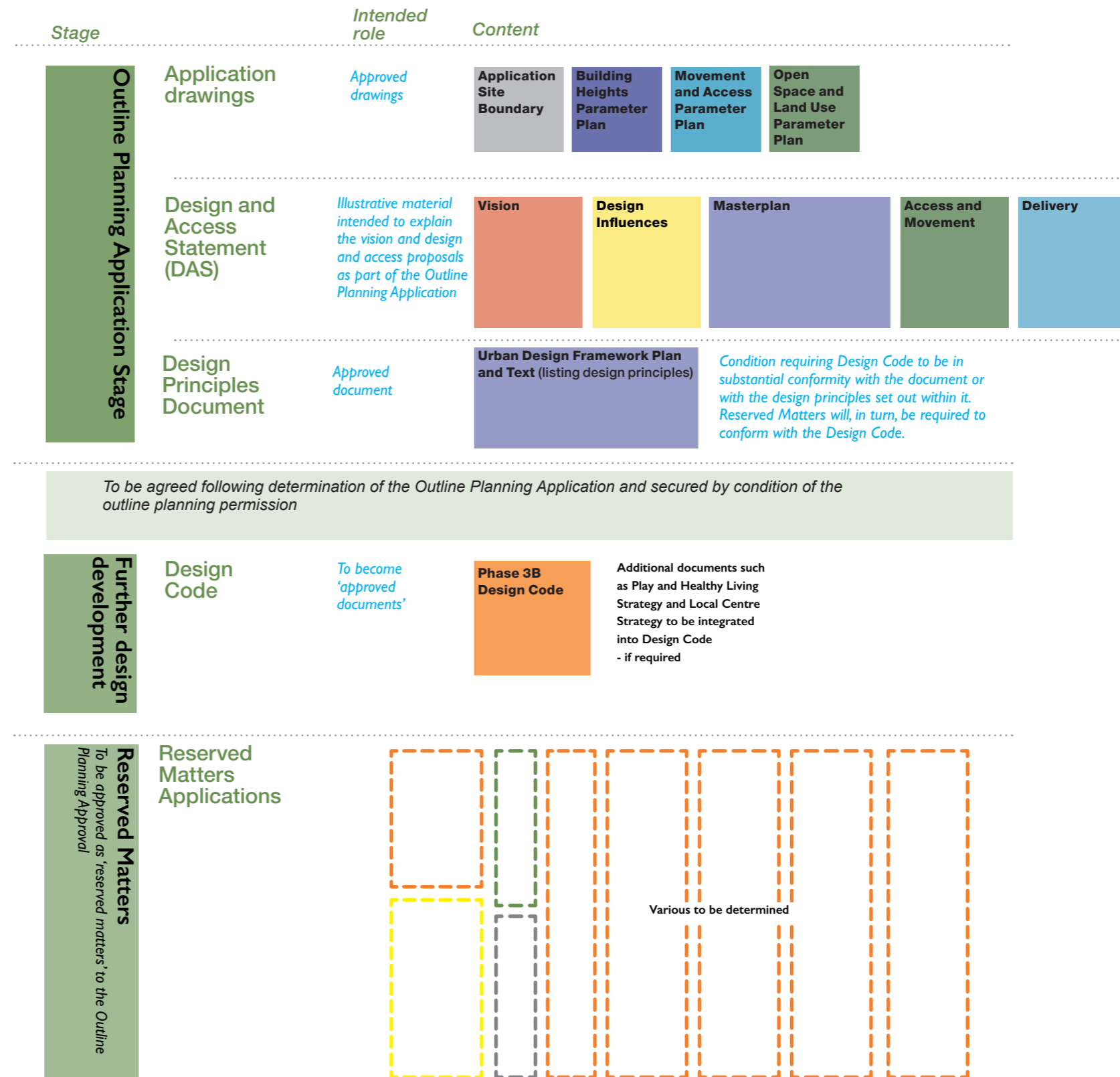


Figure 8.1: Delivering design quality through planning

8.2 Building for Life 12

Homes England is committed to delivering design quality and has its internal Design Quality Assessments, which are used when selecting development partners. The Homes England Strategic Plan for 2018/19–2022/23 refers to the ambition to show leadership on design, and this mission is supported by the desire to ‘create a more resilient market’, including ‘promoting better design and higher quality homes’. Homes England aims to improve design quality through the use of Building for Life 12 (BfL12).

This is an industry recognised initiative that has been widely adopted across the house building sector. Its success has secured support from government, and it is referenced in the revised National Planning Policy Framework under Section 12, ‘achieving well-designed places’.

Homes England will use the BfL12 criteria throughout the whole life of a project, as a ‘common thread’ of quality assessment. The initial step of this has been demonstrated within this DAS and the BfL12 pre-assessment, included in Appendix B.

8.3 Development Partner Selection

Homes England’s Strategic Plan encourages the use of a range of different developers, including SMEs and self-builders. The detailed phasing and parcel strategy is envisaged to support this by defining parcels of different sizes. The developer selection process will utilise the future design code to ensure development partners fully understand the design quality aspirations.

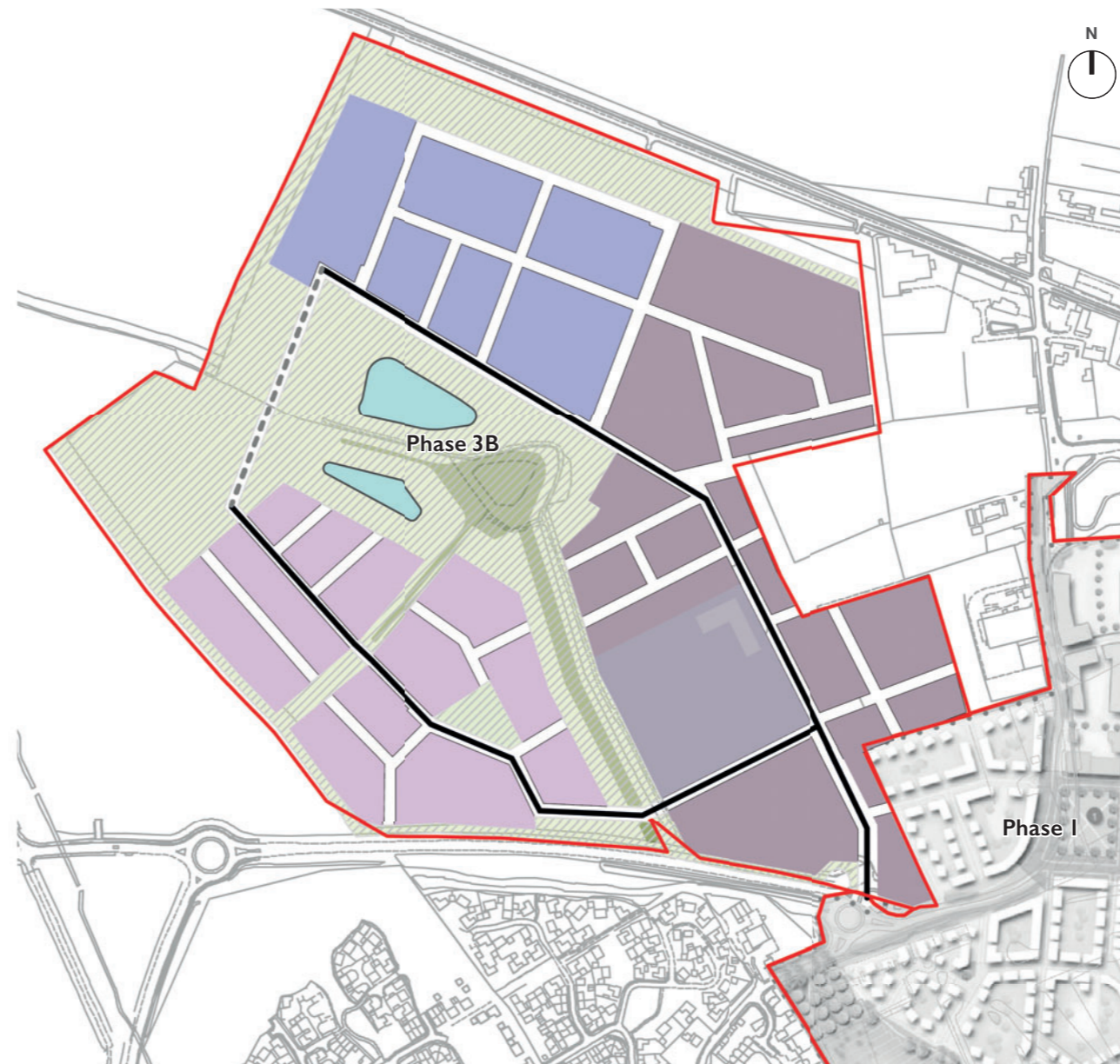
8.4 Master Developer Approach

Homes England will be acting as Master Developer for Phase 3B. As currently planned, they will deliver the primary infrastructure, strategic spaces, greenways and primary and secondary streets. Their long-term involvement and use of building leases will maintain control, ensure consistency/overview and help to ensure quality. Homes England is happy to continue collaborating with owners of adjoining development sites to ensure proposals are complementary.

8.5 Phased Approach

Phase 3B will be delivered in a phased approach. This Application contains an indicative high level phasing plan. As further detail is developed it will be refined. The following principles would influence the Phasing Strategy:

- Placemaking
- Developing a Community
- Buildability
- Movement Network



Key	Phase	Homes	Build out
	Phase 3b.1	450	Pre 2035
	Phase 3b.2	260	2032-2035
	Phase 3b.3	290	2033-2036
Total Units Phase 3b		1,000	

Figure 8.2: Phase 3B delivery phasing

Appendices



NORTHSTOWE

Phase 3B

Appendix A: Design Principles Document



Homes
England

Appendix A: Design Principles Document

Role and Status of the Design Principles Document

This Design Principles Document comprises the Urban Design Framework Plan (Figure A.1) for Phase 3B and an accompanying set of key design principles. For the purpose of this Design Principles Document, some of the text is repeated from the Design and Access Statement (DAS). Further explanation and illustration of the principles included within this document is set out within the DAS. This document is to be read in conjunction with the three submitted Parameter Plans:

- **Plan 01:** Open Space and Land Use
- **Plan 02:** Movement and Access
- **Plan 03:** Heights

Within these high level parameters a variety of detailed design approaches could be acceptable in planning terms.

The Design and Access Statement illustrates how the high level design principles, extracted into this document, and the Parameter Plans, can lead to a high quality design for Phase 3B. The purpose of extracting the urban design principles from the DAS into this document is to provide a clear and comprehensive set of guiding principles for the development.

In addition to the design principles, this document comprises the Urban Design Framework Plan (Figure A.1). This plan brings together the Parameter Plans and illustrates these primary urban design principles to demonstrate how the different elements of green space, land use and movement interact with each other. Frontages are identified onto public open spaces, landscape features, streets and spaces. These primary urban design principles should guide the development of Phase 3B and inform a future Design Code.

Figure 8.1 (Chapter 8) in the Design and Access Statement illustrates how the Design Principles Document is intended to relate to other documents - either submitted as part of this outline application or to be submitted in the future.

It is envisaged that an appropriate condition will ensure that future Design Code and Reserved Matters applications are in conformity with these design principles.



Figure A.1: Urban Design Framework Plan (Illustrative)

Design Principles

The design principles set out within this section are grouped under the four broad themes identified in the Cambridgeshire Quality Charter for Growth: Character, Connectivity, Community and Climate. Further explanation and illustration of these principles are set out within the DAS.

The proposals for Northstowe Phase 3B adopt a holistic approach to sustainability, covering social, economic and environmental factors. This holistic approach has led to a number of the 'Climate' objectives being integrated into the 'Character', 'Community' and 'Connectivity' sections. The 'Climate' section broadly sets out the key climate/ environmental objectives of the scheme.

The following design principles are to be applied to Northstowe Phase 3B:

Character

- Create development edges that achieve a clear distinction between countryside and town and establish a sense of arrival into Northstowe from the north.
- Create a legible structure of development that is reinforced by well researched and locally appropriate building characters, planting and clear forms of development that are recognisable from the local context.
- Arrange housing into streets to support strong and characterful frontages. This ensures that all streets and open spaces are well overlooked by development frontages.
- Create a development block pattern that creates short, medium and longer distance views to the retained tree copse.
- The majority of the buildings are between 2-3 storeys, with localized high points of 4 storeys. As well as creating interest in the townscape, the building heights will respond to the secondary zone for mixed-use development, which is located along a key corridor within the development. The design code will provide further detail and refinements to this broad brushed height strategy to secure legibility.
- Retain the existing copse of trees as a central focal point for the development.
- Retain the existing hedgerows and integrate these into street scenes and new public spaces. Enhance the landscape to compliment the architecture and create a desirable setting for new homes.
- Use a number of strategies to create distinctive public realm and arrangements of buildings around open space, squares and play. These include incidental spaces, retention of existing trees, street tree planting, reinforcing of existing tree belts and vegetation.
- Use simple, well designed buildings that are contemporary in style but informed by the local architectural context.

Connectivity

- Create a clear and legible street hierarchy that accommodates direct routes for pedestrians and cyclists.
- Provide potential pedestrian, cycle and emergency access from Phase 1.
- Create Primary and Secondary Streets (aiming for a design speed of 20mph) that are: positive places to walk and cycle along; designed appropriately for the traffic volume; fronted by development; and create a sense of place. Clear, obvious and safe crossing points should be incorporated into the design of the Primary and Secondary Streets.
- Provide a connected movement network that is adaptable, in terms of accommodating future changes in travel behaviour.
- Future proof potential links to the land to the east that may be bought forward by others.
- Provide pedestrian/cycle connections that connect to the existing bridleway that runs along the Cambridgeshire Guided Busway.
- Create a connected cycle network. These cycle routes will be either segregated routes alongside primary and secondary streets, car free routes through greenways or routes on-street through quiet residential streets. (e.g. shared surface home zones).
- Different parking strategies should be integrated into the design so that parking does not dominate the streetscape and encourages sustainable modes of travel.
- Convenient private, communal and public bike parking as well as electric charging points for vehicles and bikes should be integrated into the design.

Community

- Maximise opportunities to connect 3B to Longstanton and the wider town to enable residents to access community, leisure, education and sport facilities via safe and convenient walking and cycle routes.
- Ensure that green links and open space are well overlooked by development frontages to encourage passive surveillance and improved real and perceived sense of safety.
- Ensure each home will be within a short walk of public open space to enhance community wellbeing. Provide 'doorstep play' to further improve accessibility to play.
- Provide safe, comfortable space that promotes social interaction.
- Provision of a secondary zone for mixed use (with retail and associated services, food and drink, community, leisure, employment and residential uses).
- Provide for a mixed and balanced community through a series of different types of open space and housing typologies.
- Design open space as multifunctional space, incorporating recreation, formal and informal play, drainage and ecological functions.
- Create an integrated network of green and blue infrastructure. Connect the open spaces through the provision of safe routes and green links.
- Ensure open spaces are integrated into the Northstowe movement network as well as being accessible to neighbouring communities.
- Provision of informal open space (including children's play space), natural open space, allotments and community orchards to meet the need generated by the development.

Climate




- Sustainable construction methods will be adopted, using low-carbon materials; attracting green businesses; and creating demand for more sustainable products and services across the town. A fabric first approach to building design will improve energy efficiency and reduce carbon emissions.
- Widespread use of Sustainable Drainage Systems (SuDS) will provide sustainable storm water management and maximise available water resource from rainfall, as well as the creation of new wildlife corridors and spaces whilst incorporating existing wetlands and ponds, with a variety of flora and fauna, creating valuable open amenity areas.
- Enabling and promoting low carbon transport within, to and from Northstowe by ensuring access to public transport and cycle routes to reduce carbon emissions and encourage health and wellbeing.
- Incorporating low and zero carbon technologies into all buildings to provide energy, financial and carbon savings, therefore supporting the transition to net zero carbon where possible.
- Protecting and enhancing biodiversity and habitat connectivity via a strong network of Greenways and interconnected green and blue spaces to achieve a biodiversity net gain.

Appendix B: Building for Life 12 Assessment

This Appendix assesses the scheme against the criteria set out in Building for Life 12 (BfL 12, Third Edition - January 2015).





How does the traffic light system work?

Details are provided within the BfL 12 Guide. In brief:

-  Green shows the design of the scheme has responded positively to the question.
-  Amber is used where there is clear evidence of local constraints on the scheme beyond the control of the design team that prevent it from achieving a green.
-  Red elements identify aspects of proposals that need to be changed and where the scheme design at the time of assessment fails to respond to the question positively.

Questions

Response

Integrating into the neighbourhood		
I. Connections: Does the scheme integrate into its surroundings by reinforcing existing connections and creating new ones, while also respecting existing buildings and land uses around the development site?	Ia Where should vehicles come in and out of the development?	 Vehicles will enter the site from Station Road, via a northern arm provided as part of improvements to the existing roundabout. An additional potential secondary access point through the Endurance Estates land has been accommodated in the layout of the development. Furthermore, a potential emergency vehicle only access has been accommodated for to connect into the immediately adjacent Digital Park site.
	Ib Should there be pedestrian and cycle only routes into and through the development? if so, where should they go?	 There will be segregated pedestrian and cycle routes along the primary and secondary streets within the site to encourage active and sustainable travel. The proposed pedestrian and cycle routes will connect into the Phase 1 movement network and the adjoining Endurance Estates and Digital Park sites to create an integrated and comprehensive strategy. The cycleways will be located adjacent to the carriageways to ensure that cyclists have priority at junctions, thus improving safety and ease of movement through the site.
	Ic Where should new streets be placed, could they be used to cross the development site and help create linkages across the scheme and into the existing neighbourhood?	 The new streets form a permeable movement network through the site. The vehicular movement network does not connect directly into Phase 1, however permeability is provided through the pedestrian and cycle network which allows for sustainable travel throughout the new town.
	Id How should the new development relate to existing development? What should happen at the edges of the development site?	 The proposed pedestrian and cycle network connects into Phase 1, the adjoining sites on Station Road and further afield to Cambridge City via the existing bridleway along the Cambridgeshire Guided Busway. A key priority for the scheme has been to ensure the pedestrian and cycle networks in Phase 1 and 3B are integrated to ensure ease of travel throughout the town. The movement network in Phase 3B also safeguards links to provide connections to land to the east, which may be bought forward by others.

2. Facilities and services: Does the development provide (or is it close to) community facilities, such as shops, schools, workplaces, parks, play areas, pubs or cafés?	2a	Are there enough facilities and services in the local area to support the development? If not, what is needed?	Northstowe's Town Centre within Phase 2, and Local Centre within Phase 1, will provide a range of employment, leisure and commercial services and facilities which complement those provided within the adjacent settlements of Longstanton. The facilities in Phase 1, 2 and in Longstanton are accessible from Phase 3B through the connected footpath and cycle networks.
	2b	Where new facilities are proposed, are these facilities what the area needs?	The Economic Development Strategy for Phase 3B takes into account the existing provisions within Northstowe Phase 2 Town Centre, Longstanton and other commercial and economic centres in the wider region. A secondary mixed-use zone has been identified in a key location within the development allowing for future changes in employment patterns and enabling local shops, cafés and small businesses to set up in key zones of activity.
	2c	Where new facilities are proposed, are these new facilities located in the right place? If not, where should they go?	The secondary mixed-use zone Primary School proposed within Phase 3B are located at the heart of the movement network for the site, thus ensuring they are easily accessible for residents of Northstowe and other surrounding settlements.
	2d	Where new facilities are proposed, does the layout encourage walking, cycling or using public transport to reach them?	The Primary School and secondary mixed-use zone are both accessible via public footpaths and cycle routes provided along the primary street and secondary streets. .
3. Public transport: Does the scheme have good access to public transport to help reduce car dependency?	3a	What can the development do to encourage more people (both existing and new residents) to use public transport more often?	The masterplan has been developed to encourage 'green' transport methods. Longstanton Park and Ride, which is served by the Cambridgeshire Guided Busway and situated within walking distance of the site. The pedestrian and cycle network proposed within Phase 3B connects into the existing bridleway along the CGB, providing direct connections to this bus stop via sustainable modes of transport. Other local bus services providing to surrounding settlements, including Longstanton and Swavesey, are also within easy walking distance of the site.
	3b	Where should new public transport stops be located?	No new public transport stops are proposed, as the local bus services and stops are accessible from the new development.
4. Meeting local housing requirements: Does the development have a mix of housing types and tenures that suit local requirements?	4a	What types of homes, tenure and price range are needed in the area (for example, starter homes, family homes or homes for those downsizing?)	A full range of housing types will be provided in line with the local housing need.
	4b	Is there a need for different types of home ownership (such as part buy and part rent) or rented properties to help people on lower incomes?	A range of housing types and tenures will be provided within Phase 3B, accommodating for people of all ages and abilities including affordable homes for rent and purchase, self-build and custom build housing to help establish a mixed community. The housing provided will be tenure-blind.
	4c	Are the different types and tenures spatially integrated to create a cohesive community?	The different types and tenures will be appropriately integrated into the neighbourhoods to ensure a cohesive community.
Creating a place			
5. Character: Does the scheme create a place with a locally inspired or otherwise distinctive character?	5a	How can the development be designed to have a local or distinctive identity?	The proposed development of Phase 3B draws on the intrinsic characteristics of the site to create areas of distinctive identity. The retained central tree copse and radiating hedgerows define the unique character of this Phase. Variety in the design approaches reinforces defined areas of character, for example with regards to building height and density.
	5b	Are there any distinctive characteristics within the area, such as building shapes, styles, colours and materials or the character of streets and spaces that the development should draw inspiration from?	The development will draw on the overarching design principles set out in the Design Codes for Phases 1 and 2 to ensure the town forms a coherent whole. Northstowe will have its own, distinctive identity as a new town.
6. Working with the site and its context: Does the scheme take advantage of existing topography, landscape features (including water courses), trees and plants, wildlife habitats, existing buildings, site orientation and microclimate?	6a	Are there any views into or from the site that need to be carefully considered?	The hedgerows along the western, southern and part of the northern boundary filter views of the development from the surrounding landscape. The privacy of the existing residents in Phase 1 has been considered in the development of the masterplan, which has responded through the provision of a lower height range that relates to the existing homes, and frontages orientated to ensure the privacy of the existing homes is not compromised. The Guided Busway runs along a section of the site's northern boundary, visually separating the site from the fenland landscape beyond.
	6b	Are there any existing trees, hedgerows or other features, such as streams that need to be carefully designed into the development?	The majority of the trees and hedgerows have been retained as part of the proposals for Phase 3B. The tree copse (which encompasses a pond) that has been retained in the centre of the site forms the landscape landmark for the Phase. This copse has been carefully integrated into the development proposals to respect its ecological value.
	6c	Should the development keep any existing building(s) on the site? If so, how could they be used?	There are no existing buildings within the boundaries of Phase 3B.
7. Creating well defined streets and spaces: Are buildings designed and positioned with landscaping to define and enhance streets and spaces and are buildings designed to turn street corners well?	7a	Are buildings and landscaping schemes used to create enclosed streets and spaces?	Building heights and densities have been defined relative to the size of the street or open space they overlook to provide appropriate levels of enclosure. The street hierarchy within the site is defined by different levels of tree planting and enclosure to ensure a legible movement network.
	7b	Do buildings turn corners well?	The development blocks have been designed to ensure that there are no 'dead frontages' overlooking streets where corners occur. This will be further refined at the detailed design stage.
	7c	Do all fronts of buildings, including front doors and habitable rooms, face the street?	Buildings will overlook the streets and spaces throughout the development, ensuring there is passive surveillance of the public open space and thus improving safety.

8. Easy to find your way around: Is the development designed to make it easy to find your way around?	8a Will the development be easy to find your way around? If not, what could be done to make it easier to find your way around?	The development has been designed to have a distinctive street hierarchy that runs through different character areas to improve wayfinding. The retained tree copse forms the central point in a network of green infrastructure and is a landmark feature for the Phase. The different design approaches to the distinct character areas, will improve wayfinding through the Phase. The secondary mixed-use zone and Primary School form a key node within the development, which is reflected in the provision for up to 4 storey buildings in this location.	
	8b Are there any obvious landmarks?		As stated above, there are a series of landmarks both within the green infrastructure network and within the built development that will aid wayfinding through the Phase.
	8c Are the routes between places clear and direct?		The movement network follows desire lines, for example between the different areas of open space and Primary School to ensure that pedestrian and cycle routes are direct and easily navigable.
Street and home			
9. Streets for all: Are streets designed in a way that encourage low vehicle speeds and allow them to function as social spaces?	9a Are streets pedestrian friendly and are they designed to encourage cars to drive slower and more carefully?	The streets have been designed to ensure safety for all users, with segregated cycleways and footpaths along the section of primary street and the secondary streets. Appropriate speed limits will be enforced to ensure the safety of the users. The Primary Street will comprise landscaping and tree planting, to clearly mark the entrance into the Phase. Smaller residential streets will prioritise pedestrian and cycle movement, with shared paving treatment, on-street parking and appropriate landscaping incorporated into the streetscape to ensure slow vehicular movement.	
	9b Are streets designed in a way that they can be used as social spaces, such as places for children to play safely or for neighbours to converse	Within the residential blocks, shared paved surfaces will be carefully designed to prioritise pedestrians and cyclists and allow for the safe recreational use of the space by the residents. Boundaries between public and private spaces will be designed to encourage social interaction and provide active frontages onto the street.	
10. Car parking: Is resident and visitor parking sufficient and well integrated so that it does not dominate the street?	10a Is there enough parking for residents and visitors?	The development proposes a range of different parking solutions to anticipate future changes in car ownership and usage. Parking is provided both on-plot within integral garages and driveways and off-plot within the public realm. The different parking approaches have been developed relative to the characteristics of the street, for example more on-plot parking is provided in quieter areas of looser development whereas more central and key locations can support on-street and communal parking spaces.	
	10b Is parking positioned close to people's homes?	The range of parking solutions means that some of the parking is within the curtilage of people's homes, whereas some is on-street or within a communal car park further removed from the property. The masterplan allows for disabled and accessible parking to be provided where required.	
	10c Are any parking courtyards small in size (generally no more than five properties should use a parking courtyard) and are they well overlooked by neighbouring properties?	The masterplan demonstrates how communal parking courtyards could be approached if necessary, with the incorporation of dwellings into these spaces to ensure they are overlooked.	
	10d Are garages well positioned so that they do not dominate the street scene?	The Illustrative Masterplan allows for a range of housing typologies to be used to ensure garages do not dominate the streetscene at ground level.	
11. Public and private space: Will public and private spaces be clearly defined and designed to have appropriate access and be able to be well managed and safe in use?	11a What types of open space should be provided within this development?	The scale of the development means that a wide range of open spaces have been provided to accommodate for people of all ages and abilities. The development provides substantially more open space than required by policy to support its role as a Healthy New Town; encouraging contact with nature and creating varied opportunities for everyone to adopt a more active lifestyle either by playing, walking, sitting or engaging in sporting activities.	
	11b Is there a need for play facilities for children and teenagers? If so, is this the right place or should the developer contribute towards an existing facility in the area that could be made better?	There is a need for play facilities for children and teenagers, which has been met through the formal provision of LAP's, a LEAP and a NEAP as well as the provision of informal recreational space. These facilities are provided as part of the extensive public open space within the development.	
	11c How will they be looked after?	A maintenance strategy will be developed for the proposed open spaces at the detailed design stage.	

12. External storage and amenity: Is there adequate external storage space for bins and recycling, as well as vehicles and cycles?	12a Is storage for bins and recycling items fully integrated, so that these items are less likely to be left on the street?	The masterplan allows for flexibility in the housing typologies so that bin stores can be integrated at the detailed design stage subject to future coding.
	12b Is access to cycle and other vehicle storage convenient and secure?	

