

A stylized, light brown map of the North West Cambridge area is positioned on the left side of the page. It is set against a background that is dark brown at the top and light blue at the bottom, separated by a horizontal line. The map shows the irregular coastline and internal road network of the area.

NORTH WEST **cambridge**

Design, Access and Landscape Statement
September 2011

All of the drawings/diagrams in this document are provided for illustrative purposes only. This Design, Access and Landscape Statement is provided to support the planning application for the Proposed Development, and all details of access, appearance, landscaping, layout and scale are reserved within the parameters set out in the Parameter Plans & Statements and Environmental Statement

Design, Access & Landscape Statement

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Executive Summary

The Proposed Development will provide the University with a unique opportunity to establish a new University-led urban quarter to meet its future needs. Towards this end, the University has established a number of key priorities for the Proposed Development:

- Create a mixed-use extension of the City with an urban rather than suburban grain;
- Produce a development with a unique, outstanding University character, which blends with other uses across the site and with the wider area;
- Provide for and encourage a strong sense of community, reinforced through local facilities and creation of place;
- Use best principles and features of the Collegiate University in the design and use of the University and student accommodation;
- Apply high quality design principles that do not distinguish between University and market accommodation;
- Ensure extensive, high quality landscaping with high quality urban green spaces; and
- Plan for a low carbon, sustainable place that gives priority to cycling, walking and public transport and facilitates easy access to the City.

This Design, Access and Landscape Statement sets out the University need and vision, the Application Site context, evolution of the Proposed Development and influences on the Proposed Development. These components all underpin the Application Proposals. The design principles and illustrative masterplan then demonstrate how development may come forward within the parameters set out for the Proposed Development.

Credits:

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The Proposed Development - illustrative masterplan view from the south east

Introduction

The University of Cambridge has ambitious plans for the Proposed Development to help it maintain its position as one of the world's leading universities. The Proposed Development responds to clear direction from the University to create a place that meets the University's forecast needs and high standards of design.

The Proposed Development aims to achieve the highest standard of sustainable development. The Proposed Development will provide the University with a unique opportunity to meet a specific element of its staff recruitment needs and establish a new University-oriented urban quarter in Cambridge. A range of housing typologies, employment and research opportunities and recreational space will be created. In addition, a local centre with a foodstore and retail units, a school and other community facilities at the heart of the development will help to achieve a mixed use, socially inclusive community.

The Application Site is located to the north west of Cambridge City and straddles land within the administrative areas of both South Cambridgeshire District Council and Cambridge City Council. The Application Site sits at a strategic gateway location at key approaches into Cambridge City, between Huntingdon Road and Madingley Road.

The Proposed Development and the Masterplanning Process

In order to progress the Proposed Development, a masterplan has been used as a tool for establishing development parameters which ensure the development is robust and will encourage mixed and balanced communities. AECOM has led the masterplanning process for North West Cambridge underpinning the planning application. AECOM will follow this stage with the production of site-wide design guidelines (or design codes) to provide additional design detailing, meet planning requirements and attract potential development partners and ensure consistently high quality development.

A collaborative masterplanning process began in early 2005 with AECOM commissioned to lead a consultant team on behalf of the University of Cambridge. The masterplanning process was underpinned by preliminary technical studies of the site including ecological surveys, transport assessment, landscape appraisal and a review of the University's development requirements.

Development Proposals

This Design, Access and Landscape Statement is submitted in support of the application for planning permission.

The development proposals comprise:

Zone B:

- Up to 3,000 dwellings; (Class C3 and C4)
- Up to 2,000 student bedspaces; 98,000 sq.m. (Class C2)
- Up to 100,000 sq.m. new employment floorspace, of which:
 - Up to 40,000 sq.m. commercial employment floorspace (Class B1(b) and sui generis research uses)
 - At least 60,000 sq.m. academic employment floorspace (Class D1)
- Up to 5,300 sq.m. gross retail floorspace (Use Class A1/A2/A3/A4/A5) (of which the supermarket is not more than 2,000 sq.m. net floorspace)
- Senior living; up to 6,500sq.m. (Class C2)
- Community centre; up to 500 sq.m. (Class D1)
- Indoor sports provision, up to 450 sq.m. (Class D1)
- Police; up to 200 sq.m. (Class B1)
- Primary Health Care; up to 700 sq.m. (Class D1)
- School; 3,750 sq.m. (Class D1)
- Nurseries; up to 2,000 sq.m. (Class D1)
- Community Residential; up to 500 sq.m. (Class C3)
- Hotel (130 rooms); up to 7,000 sq.m. (Class C1)
- Access roads
- Pedestrian, cycle and vehicle routes
- Parking
- Energy Centre; up to 1,000 sq.m.
- Provision and/or upgrade of services and related service media and apparatus including pumping stations, substations and pressure regulators
- Drainage works (including sustainable ground and surface water attenuation and control)
- Open space and landscaping (including parks, play areas, playing fields,

allotments, water features, formal/informal open space, maintenance sheds, pavilions and support facilities)

- Earthworks to provide revised ground contours
- Demolition of existing buildings

Zone A: Huntingdon Road - Highway and Utility Works

- Construction of a new three arm and a new four arm signal controlled junctions, including pedestrian and cycle crossings, to provide access to the Proposed Development from Huntingdon Road
- Installation of a toucan crossing across Huntingdon Road
- Construction of an unsegregated footway/cycleway on the southern side of Huntingdon Road
- Diversion and/or replacement and/or protection of existing utilities affected by the proposed highway works
- Provision of new telecommunications infrastructure and connection to existing utility infrastructure situated along Huntingdon Road
- Related landscaping, accommodation works, street furniture, drainage, telemetry and utilities

Zone C: Madingley Road - Highway and Utility Works

- Junction improvement works at the High Cross/Madingley Road junction to alter it from a three arm priority junction to a four arm signal controlled junction, including pedestrian and cycle crossings, to provide access to the Proposed Development
- Installation of a toucan crossing across Madingley Road
- Diversion and/or replacement and/or protection of existing utilities affected by the proposed highway works
- Installation of a retaining wall along Madingley Road
- Provision of a new pumped foul water rising main, including chamber connection, and new telecommunications, electricity and gas infrastructure and the associated connection to existing utility infrastructure situated along Madingley Road
- Related landscaping, accommodation works, street furniture, drainage, telemetry and utilities

This Design, Access and Landscape Statement focuses on the development in Zone B, as defined on Parameter Plan 01, though the principles apply across the Proposed Development.



North West Cambridge - illustrative masterplan view from the north west

The Planning Application

The application seeks planning permission with details of appearance, landscaping, layout and scale reserved within the parameters set out in the accompanying Parameter Plans and Statements, the Environmental Statement and the following supporting documents:

- Planning Statement;
- Environmental Statement;
- Statement of Community Involvement;
- Health Impact Assessment;
- Sustainability Statement;
- Carbon Reduction Strategy;
- Site Waste Management Plan;
- Sustainable Resource and Waste Management Strategy;
- Transport Statement;
- Flood Risk Assessment;
- Key Worker Housing Statement;
- Hotel Needs Case;
- Faith Residential Needs Case;
- Senior Living Needs Case;
- Retail Impact Assessment; and
- Public Art Strategy.

Purpose Of The Design, Access And Landscape Statement

This Statement has been prepared in accordance with sections 62 and 327A of the Town and Country Planning Act. It has been prepared in accordance with the requirements set out in article 8 of the Development Management Procedure Order 2010 which consolidates the Town and Country Planning (General Development Procedure) Order 1995. It is also a requirement of Circular 01/2006 - Section 3 of which sets out the requirement for design and access statements to accompany applications for certain types of permission and consent (enforced from August 2006).

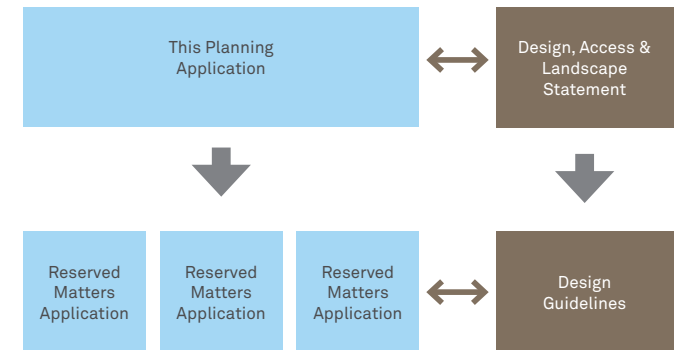
The Statement follows advice from the Department for Communities and Local Government set out in Circular 01/2006 and has been informed by the guidance from the Commission on Architecture the Built Environment (CABE) 'Design and Access Statements: how to write, read and use them'.

This Statement responds to Planning Policy Statement 1: Delivering Sustainable Development, which sets out the over-arching planning policies on the delivery of sustainable development through the planning system and the fundamental importance of good design to achieve this.

The Statement covers both design principles and concepts and how issues relating to access have been addressed within the final scheme design.

The Design, Access and Landscape Statement:

- demonstrates that the proposals are based on a considered approach to masterplan design;
- explains how the proposals respond to the physical, economic and social context of the application site and surrounding areas;
- explains how consultation and engagement have informed the evolution of the proposals; and
- explains and justifies the principles and concepts that will be used when the proposals are developed at Reserved Matters stage.



Relationship of this Design, Access & Landscape Statement to Design Guidelines

The Statement sets out the design principles and concepts that have been applied to particular aspects of the proposals in accordance with paragraph 52 of Circular 01/06 and CABE guidance, namely:

- Distribution of Uses - proposed land use and relationship to adjoining uses;
- Amount of Development - explaining and justifying the amount of development proposed;
- Layout - explanation of the parameters setting out the way in which buildings, routes and spaces should be placed and orientated in relation to each other, including an explanation of how proposals will create safe and sustainable places and address crime prevention issues;
- Scale - explanation and justification of the parameters for the height, width and length of buildings in relation to their surroundings;

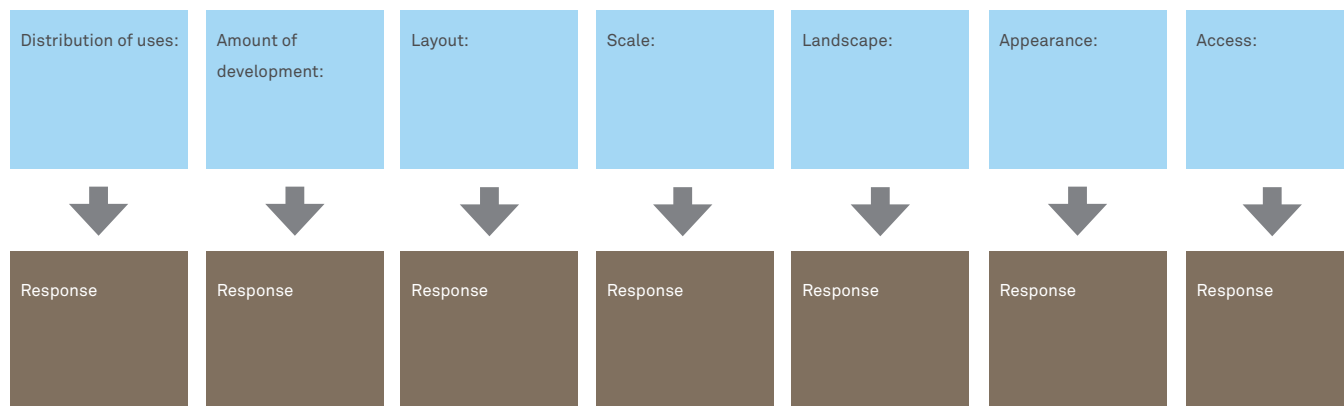


Diagram summarising design principles and concepts of each chapter

- Landscape – explanation and justification of the principles that will inform the future treatment of spaces in terms of hard and soft landscaping, and brief explanation of how the landscape will be maintained;
- Appearance – explanation and justification of the principles behind the intended appearance of the proposals and explanation of how these principles will inform the final design of the scheme; and
- Access - Approaches to access and how issues of access – both social and physical – have been considered throughout the design process.

This Design, Access and Landscape Assessment supports the planning application for the Proposed Development. This planning application will be followed by a series of reserved matters applications to provide subsequent detail on the detailed design of the Proposed Development. To guide the detailed design, the University will be developing Design

Guidelines that will be submitted to and approved by the Local Planning Authorities in advance of the determination of the first reserved matters application.

To support assessment of the Design, Access and Landscape Statement, the diagram above is located at the beginning of each chapter, summarising the chapter's response to the specific requirements of the Statement.

This Design, Access and Landscape Statement focuses on the development in Zone B, as defined on Parameter Plan 01, though the principles apply across the Proposed Development.

Structure Of The Design, Access and Landscape Statement

The Design, Access and Landscape Statement is structured as follows:

University Need

Sets out the University's forecast need for development, across land uses.

Vision

Establishes the University's overall vision for the Proposed Development.

Development Context

Describes the Application Site and surrounding context as it exists today. This section also identifies the constraints and opportunities presented by the site, the planning policy and social and economic context.

Influences and Evolution

Sets out the strategic, site-wide and Cambridge character influences on the Proposed Development and how the design has evolved to date.

Application Proposals

The final section presents the application proposals for the Application Site.

The document has two appendices as follows:

Design Principles and Concepts

Sets out the design principles and concepts developed within the framework of the Cambridgeshire Horizons Quality Charter four 'C's'; Connectivity, Character, Community and Climate. Within this framework, the design principles and concepts underpinning the proposed distribution of uses, the amount of development, layout, scale, landscape, appearance and access are set out.

Illustrative Masterplan

Provides design investigations and an illustrative masterplan, including the neighbourhoods, landscape principles and phasing. The Illustrative Masterplan demonstrates one way in which the Application Proposals could be delivered on the Application Site.

Distribution of uses:

Access to uses, relationship to adjoining uses

Amount of development:

Amount of development proposed



Following the release of land for development for University-related uses, the University must consider appropriate location and distribution of its uses across the Application Site to meet the following objectives:

- Proximity to existing University functions
- Adjacencies with other University uses to enable flexibility in future provision
- Adjacencies with University uses to enable implementation of efficient energy infrastructure.



There is an overwhelming University need to provide affordable housing to recruit & retain University & college staff and maintain its global profile. An associated need exists, based on the growth of University research, for additional research floorspace for both academic departments and related commercial research employment.

Other needs include student and graduate growth, enabling development including wider cultural and amenity needs to support the scale of new communities envisaged.

A1

University Need

A1. University Need

The Proposed Development will be instrumental in maintaining the University's long-term success and position on a global stage. It will provide the living and research accommodation needed to enable the University to grow its research capabilities and to maintain its world class research position. It will encourage substantial investment in Cambridge and will help to recruit and retain the best staff and students from around the world. This is good for the Cambridge city region and good for the wider UK economy.

The Application Site is the University's only option to address its long-term development needs. These are grounded in a mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence. The Proposed Development will also contribute to the Government's desire for growth in the higher education sector and actively support the expansion of the knowledge based economy.

The University will remain a collegiate organisation that offers accommodation in close proximity to research and teaching space. With a continually rising student population there is a clear need for additional accommodation that will reduce the current reliance on the commercial housing sector.

Key Worker Housing

In order to attract and retain staff, the University needs to achieve a fourfold increase in its provision of key worker housing to remain competitive in an international market. This need is urgent, to deal with recruitment and retention problems arising from local house prices and rental levels.

The need is also critical for the future recruitment prospects of the University and Colleges. It also has importance in reducing pressure on the overall Cambridge housing market. For example, from October 2008 - September 2009, the University Accommodation Service received 6,780 requests (staff and students) for accommodation, with only 360 University units available (Source: University Accommodation Service). Staff not accommodated within University properties are typically housed in private rented accommodation (brokered either independently or via the University Accommodations Service).

Evidence of Housing Needs for University and College staff is set out in the University's Housing Needs Study (2008), and was put forward to the Inspectors at the North West Cambridge Area Action Plan Examination.

Where staff members are recruited from outside the wider Cambridge, a failure to meet their housing needs will create significant additional pressure in the local housing market, leading to continuing pressure on house prices and rents, and the further subdivision of family accommodation to provide multi-occupancy houses. It is expected that provision for key workers at North West Cambridge will relieve some of this pressure.

The early provision of key worker housing at the Proposed Development will significantly improve the University's ability to attract and retain the best quality staff.

Academic and Commercial Research

The main driver for growth of the University estate is research growth, with an 8% per annum growth in research income driving a 2% increase in the estate. Growth in the estate is variable and has been lower (1.8% per annum) since 2005. Assuming future growth of the estate is lower at 1.5% indicates that the supply of space on existing sites (100,000 m²) will be used up by 2018. The supply at the Proposed Development would then meet needs until 2023.

The University's development needs relate not only to academic buildings. The University's research activities are increasingly carried out collaboratively with public and charitable sector research institutes, and industry. Of particular importance is development of environments where all of this activity can co-locate, for mutual benefit. The University needs to be able to provide a range of opportunities for such collaborations from small embedded units within academic departments to sites for major research facilities proximate to related University activities. Above all the University needs to be able to respond rapidly to opportunities arising from breakthroughs in research, technological advances and new funding sources.

With regards to commercial research, such activity is undertaken in offices, laboratories and production research space. Most of it requires offices. The need will arise from a number of areas, namely:

- Existing embedded businesses;
- Start ups within the University;
- Businesses located or potentially seeking to locate in the Sub-Region.

In the research area the ability to be able to respond rapidly to new developments is critical to attracting funding from the public, charitable and industrial sectors, and in drawing in institutions and companies seeking to be proximate to University activities.

Student Housing

Collectively, Colleges will not deliver enough of the University & Colleges' future need for student housing, if current rates of provision continue. The need results from current under-provision and also from future growth in student numbers. The University is best placed to fill that gap by bringing forward land for student accommodation in the Proposed Development, in partnership with Colleges and others, as may be appropriate.

The University proposes the delivery of approximately 2,000 student bedspaces in the Proposed Development. It is fundamental to continuing teaching and research pre-eminence and in the national interest that the University and its Colleges maintain close to 100% housing provision for undergraduate students and reach 90% provision for graduate students in the foreseeable future.

The residential nature of collegiate provision with a high level of pastoral care and the intellectual stimulus of living in a community of scholars from all disciplines is a key element of Cambridge's academic culture. As competition for students between universities internationally increases, failing to maintain housing provision will damage Cambridge's reputation.

Market Housing

The need for owner occupied market housing will be essential for the community balance and to cross subsidise needed University uses. The Proposed Development would not be viable if it relies purely on key worker housing, academic space, related research space, student and other related uses. Market housing will be of critical importance as this provides the necessary end values to meet build cost inflation and capital deficit.

Supporting Uses and Facilities

In developing a mixed-use amenity urban extension, it is critical that the full and appropriate range of facilities are planned to support the development needs identified above. A Local Centre, including a range of community facilities (school, nursery, primary health care, police touch down), retail shops, a foodstore, and a hotel, is an essential complementary feature to support the facilities that will be required to achieve the University's objectives.



North West Cambridge - illustrative masterplan view from the east

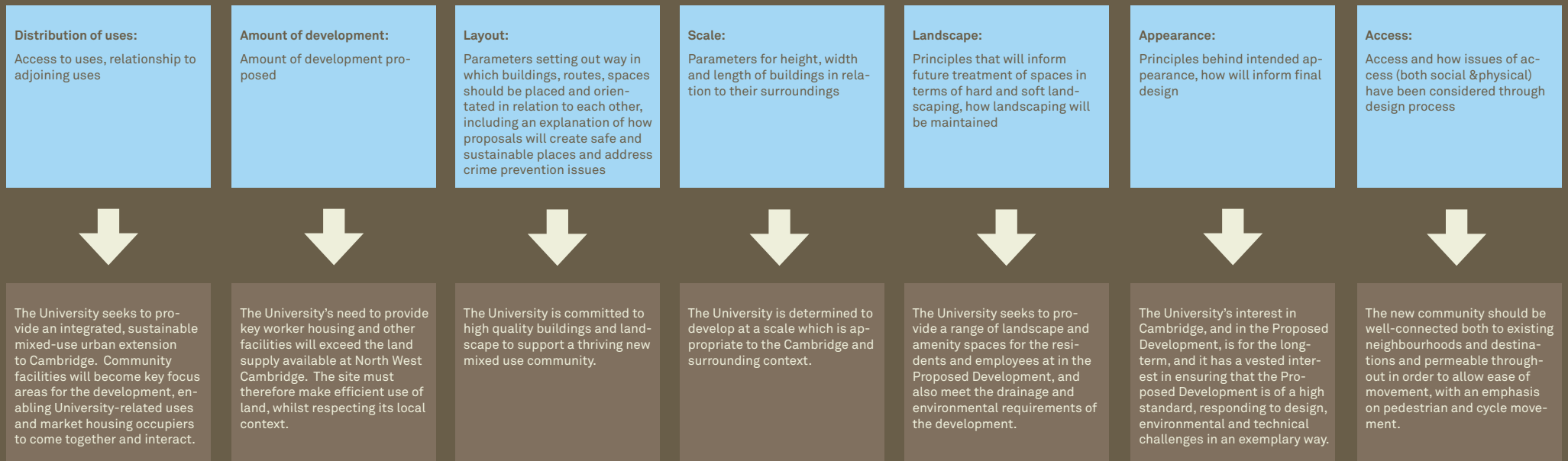
Area Action Plan for North West Cambridge

The North West Cambridge Area Action Plan identifies land to be released from the Cambridge Green Belt, to contribute towards meeting the development needs of Cambridge University. The AAP also sets out policies and proposals to guide individual elements of the development, as follows:

The Proposed Development will create a new University quarter, which will contribute to meeting the needs of the wider city community, and which will ensure a focus on environmental sustainability. Development will be of the highest quality and support the further development of the University, Cambridge and the Sub-Region as a centre of excellence and a world leader within the fields of higher education and research, and will address the University's long-term development needs to 2021 and beyond. The new local centre will act as a focus for the development and will also provide facilities and services for nearby communities. The new landscaped urban edge will preserve the unique character of Cambridge, enhance its setting and maintain the separate identity of Girton village.

The AAP states that North West Cambridge will be planned and developed:

- As an attractive and distinctive mixed-use development well integrated with the City and connected to surrounding communities and the countryside;
- To a high level of design quality for all parts of the community to create accessible developments and neighbourhoods with their own character and legibility;
- As a balanced, viable and socially inclusive community where people can live in a healthy and safe environment;
- To a flexible design which will be energy efficient, and built to be an exemplar of sustainable living with low carbon and greenhouse gas emissions and able to accommodate the impacts of climate change;
- To avoid the necessity for noise and air quality mitigation measures that would detract from the landscape setting of Cambridge.



A2

Vision

A2. Vision for North West Cambridge

Vision

The University is committed to creating a successful, sustainable, mixed-use new community in the Proposed Development by delivering high quality buildings and landscapes. By producing a robust and flexible development parameters, the University can ensure that this is achieved.

The University's proposals provide for up to 3,000 new dwellings, comprising 1,500 key worker units and 1,500 private residential units, student housing and research and development facilities.

The vision has continually evolved since 2005, through a collaborative process of engagement with the University, Cambridge City Council (CCC) and South Cambridgeshire District Council (SCDC), Cambridgeshire Horizons, key stakeholders and local residents. Throughout this time the intention has been to continually try to achieve the best possible outcome for the University in terms of meeting its development needs, whilst taking into account and responding to Application Site characteristics, landscape character and consideration of the setting of Cambridge.

The vision for the Proposed Development is to create a new urban extension to the built up area of Cambridge. The University's ambition for the Proposed Development is set out in a series of development principles and concepts. These include:

- A central 'green focus' and parkland corridor which would have a similar scale to Parker's Piece in Cambridge, linking the surrounding development areas and providing sufficient space for it to act as a wildlife corridor;
- A new place in its own right for the whole community to enjoy with a range of facilities, high quality green spaces and good pedestrian and cycle links;

- A public transport corridor which will eventually link West Cambridge with the Cambridge Science Park and will also link the Proposed Development to the NIAB development and future Chesterton station;
- A local centre, including a school, located in the heart of the development to serve the needs of the community in the North West Cambridge quadrant of Cambridge;
- Three concentrations of commercial research activities, along the western edge of the development, in the north west corner and adjacent to the existing Madingley Rise sites. Each cluster would create a quality urban setting and encourage inward investment;
- New academic space, within the same three clusters as the commercial research activities, which reflects existing activities at Madingley Rise and along the north western boundary close to Huntingdon Road;
- A green landscaped area running alongside the M11 which would provide a landscape setting to the north western edge of Cambridge and provide the opportunity for extensive habitat restoration and enhancement;
- Collegiate accommodation close to the local centre and along the western edge of the development;
- Attractive housing options for University staff on an affordable basis, which learn from the collegial models of housing to create stable, well integrated communities;
- Lower density residential development along Huntingdon Road with private gardens and spaces backing onto the existing residential properties;
- Protection and enhancement of biodiversity and habitats;

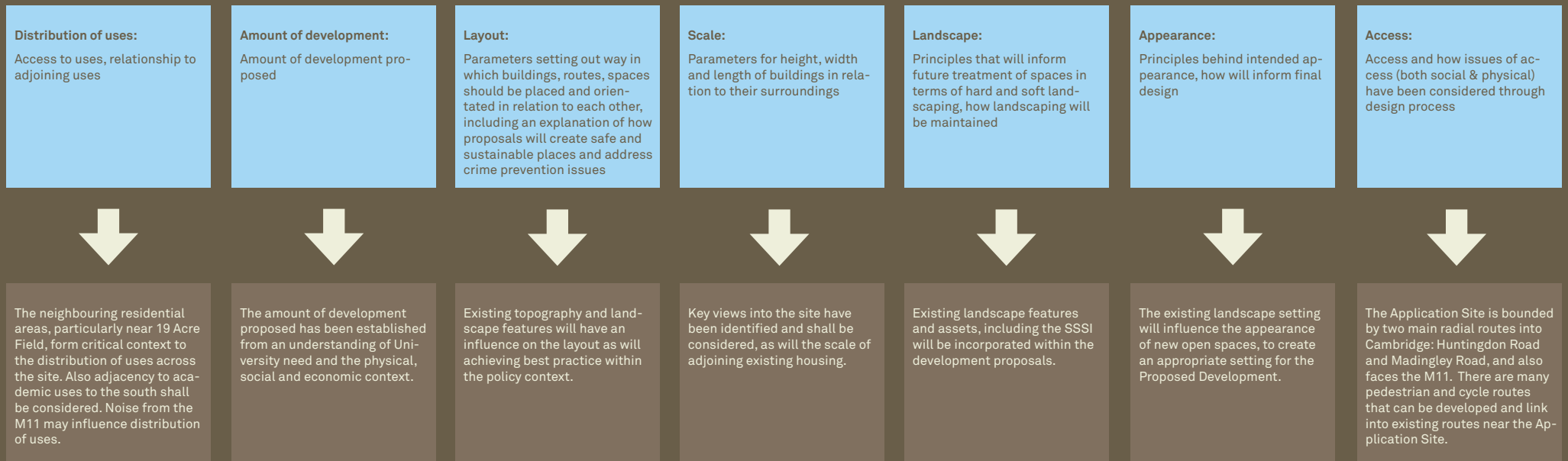
- Advanced energy performance in building design from the development parameters level downwards. This seeks to incorporate:
 - Buildings that out-perform current standards in terms of comfort, utilities and whole-life costs;
 - A range of best practice energy and environmental features, drawing on current and future technologies and techniques that promote sustainable development;
 - Optimising the potential for homes to reduce carbon emissions and meet the requirements of the Governments code for sustainable homes, which aims to achieve zero carbon by 2016.

The University proposes a range of uses distributed across the Application Site that will help to establish a cohesive and sustainable community, providing a residential mix in response to demand for both key worker and market housing. In addition, neighbourhood facilities and a school, alongside research and development uses and collegiate student accommodation, will ensure a distinctive balanced, socially inclusive and mixed use development.

The Proposed Development will be underpinned by the highest environmental standards, embodying best practice in environmental sustainability. The vision looks to create a place that links and integrates the new development with existing neighbourhoods, to ensure the new development is firmly placed as a seamless new part of Cambridge.



North West Cambridge - illustrative masterplan view from the south



A3

Development Context

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The Application Site in context

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A3.1.1. Application Site Location

The Application Site is an approximately 150 hectare site bounded by the M11, the A14, Huntingdon Road (A1307) and Madingley Road (A1303).

On the northern boundary of the Application Site are the existing residential properties along Huntingdon Road. A Park & Ride facility, accessed from Madingley Road, is located on the southern boundary of the Application Site, and to the south east, University uses are located in addition to further residential uses. At the eastern boundary is the Chapel of the Ascension and its burial ground. The western boundary is formed by the M11, a finite edge to the City.

A suburban townscape exists to the north and east of the Application Site, while a predominantly rural landscape exists to the west and south, past the developing West Cambridge campus. The Application Site therefore sits at the juxtaposition of the urban/rural edge to Cambridge and this special condition will assist in establishing a unique 'University edge' to the North West of Cambridge.

Landscape Character

Cambridge itself lies at the eastern extent of the Bedfordshire & Cambridgeshire Claylands Landscape Character Area which covers most of East Anglia. The Application Site and broader landscape area lie within this landscape type. The Claylands cover most of central and northern Bedfordshire and western Cambridgeshire and comprise a broad sweep of lowland plateau, dissected by a number of wide shallow valleys, including the river Great Ouse.

The landscape is typically an empty, gently undulating lowland landscape with expansive views of large-scale arable farmland contained either by sparse trimmed hedgerows, shelterbelts, open ditches or stream-side vegetation. There are scattered ancient woodlands and plantation that form important visual and wildlife features within the landscape.

A large majority of the outlying land is in arable land use, with the land within the Application Site following gently undulating contours and ground topography, softly sloping towards the existing river tributary, the Washpit Brook.

A3.1.2. Existing conditions

The Application Site is currently used for agriculture and agricultural research. At present the Application Site accommodates the University farm and out buildings, other University research facilities and arable farmland.

The existing landscape of the Application Site is characterised by a strong rural landscape pattern, with the Application Site divided into large open fields, some bound by hedgerows and/or drainage ditches. These hedgerow or ditch field boundaries clearly demarcate the historic field patterns. Other elements of mature planting and woodland characterise the Application Site: both the northern and southern parts of the M11 are wooded which restricts views into the Application Site. To the west, the Application Site is predominantly in agricultural use, but still contains a significant number of stands of trees, including a mature Oak tree. To the east of the Application Site is an important mature avenue of Chestnut trees, which runs north south through the Application Site and links to Huntingdon Road. A number of pockets or clusters of remnant /ancient woodland can be found on the Application Site and a number of significant mammal and reptile habitats have been identified.

In the centre of the Application Site is a geological Site of Special Scientific Interest (SSSI). This is known as the Travellers Rest Pit SSSI, and is a geological landform, important to the unique character of the Application Site. This has been highlighted by Natural England, who recently issued notification which amends the boundaries of the SSSI.

Also within the Application Site is evidence of historic ridge and furrow field patterns to the east of the Madingley Park & Ride.

These historic landscape features and the SSSI will be incorporated within the Proposed Development as key features and foci of interest.

Nature Conservation

The Application Site is adjacent to a number of county wildlife sites and sites of acknowledged nature conservation value and a small water body is within the Application Site, the Washpit Brook. The brook runs from south to north through the Application Site more or less parallel to the M11. A full report on the potential for protected species on the Application Site and the fauna and flora is contained as part of the accompanying Environmental Statement.



The Proposed Development - Application Site boundary (Zone B) with key to views

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1. The Chestnut Avenue to the east of the Application Site



2. The Spire of the Chapel of the Ascension and Burial Ground



3. View of Application Site with the Ridgeline in the distance



4. The M11 forms the western boundary of the Application Site



5. Existing hedgerows and trees within the Application Site



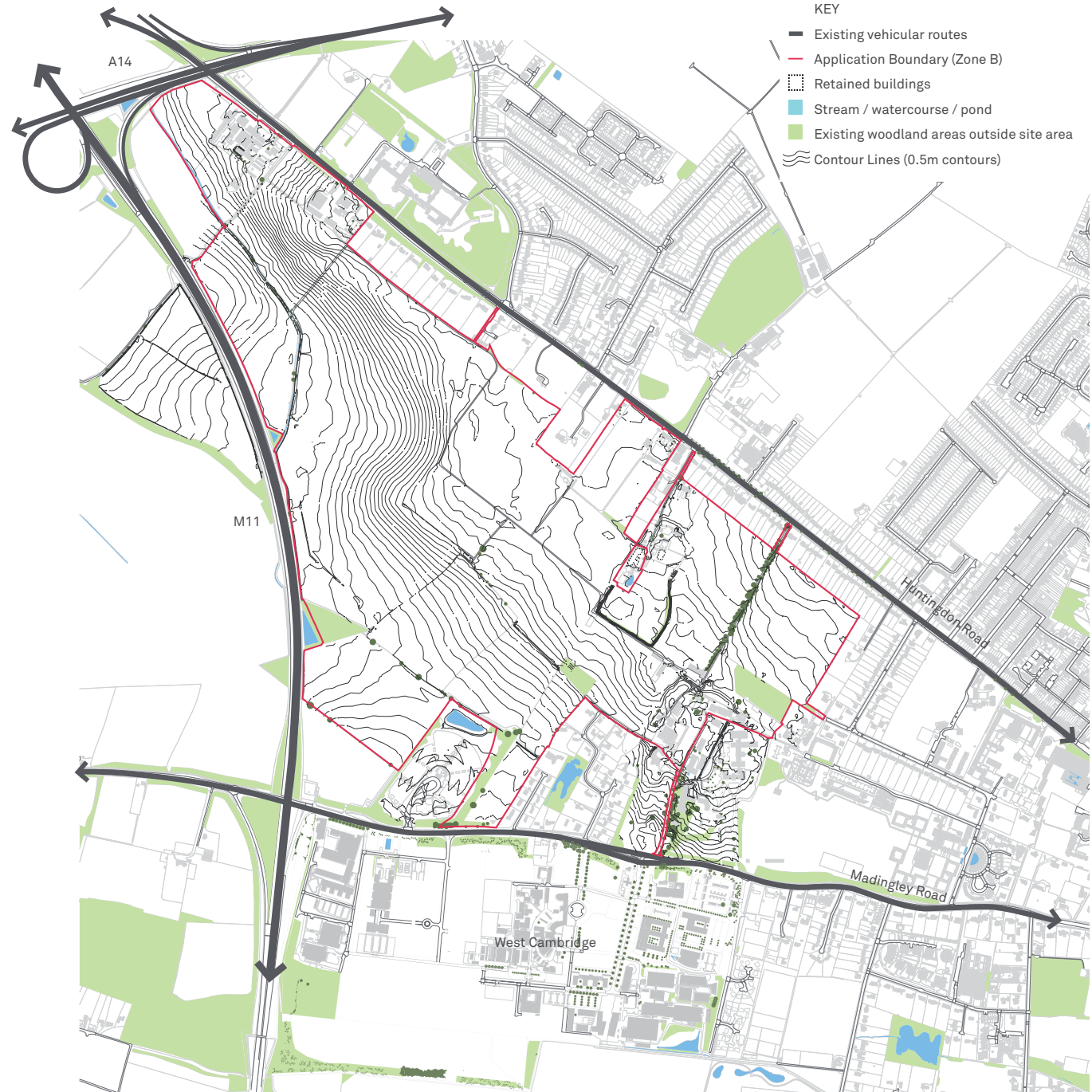
6. Existing buildings on the Application Site, including WCMC building which itself is not included in the Application Site Boundary

A3.1.3. Existing Topography

The Application Site lies within a low plateau valley area that is typically characteristic of the Western Claylands character. The topography of the area is of a gently undulating plateau landscape intersected with highways and urban settlements.

The topography is varied across the Application Site, consisting of a gently undulating plateau which decreases in height from north to south. To the east, a ridgeline follows the Huntingdon Road (24m AOD) and runs along the north eastern boundary of the Application Site. The ridgeline gradually falls away to the west across the Application Site toward the motorway, eventually levelling out to a low plateau at approximately 14m AOD. The slope from Huntingdon Road to the Washpit Brook in the west of the Application Site is both gradual and gentle. At the northern end of the Application Site, the slope is more pronounced.

This slope assists the natural drainage of the Application Site to the Washpit Brook which meanders along the western boundary of the Application Site.



Existing topography of the Application Site

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Existing topography on Application Site



Existing topography on Application Site



Existing topography on the Application Site

A3.1.4. Existing Landscape and Ecology

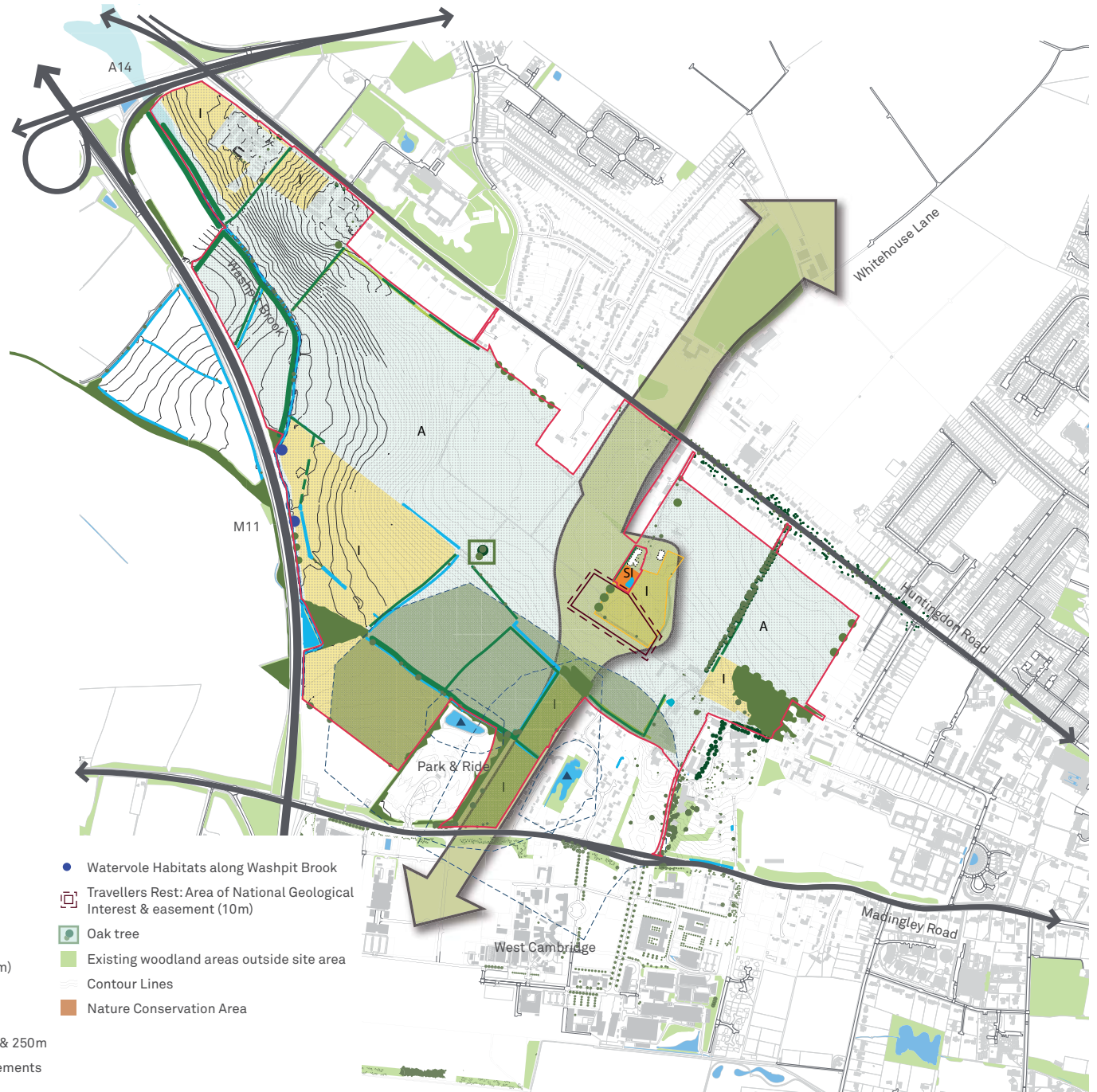
A full report on the fauna and flora is contained in the accompanying Environmental Statement, including site surveys undertaken.

The diagram opposite summarises and locates the historic landscape and ecological features described more fully elsewhere.

Due to the current and historical agricultural use of the landscape, the ecological value of the Application Site is limited to a number of key locations:

- In and around the Travellers' Rest Pit SSSI. The embankments offer wildlife habitats and a well established wildlife pond and garden support a range of wildlife species, habitats and vegetation;
- Within the mature hedgerows, wooded plantation areas, ponds and water bodies;
- Possible nesting sites for bats within the existing farm building and mature trees;
- Habitats around the pond located near the Park & Ride, where the presence of the Great Crested Newt has been recorded;
- A number of badger sett locations are present on the Application Site.

The 'Girton Gap' which runs north to south through the Application Site, exists as a strategic separation between Girton and Cambridge. This will form part of the retained Green Belt.



Existing landscape and ecology

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Existing newt pond



Existing hedgerow within the Application Site



Existing woodland within the Application Site

A3.1.5. Key Views

The Application Site is a rural edge to the city of Cambridge. Due to the topography of the landscape, the existing vegetation and the existing development surrounding the Application Site, views into the Application Site are generally short distance and primarily offered at close proximity to the Application Site boundary. However, a limited number of longer distance views are possible:

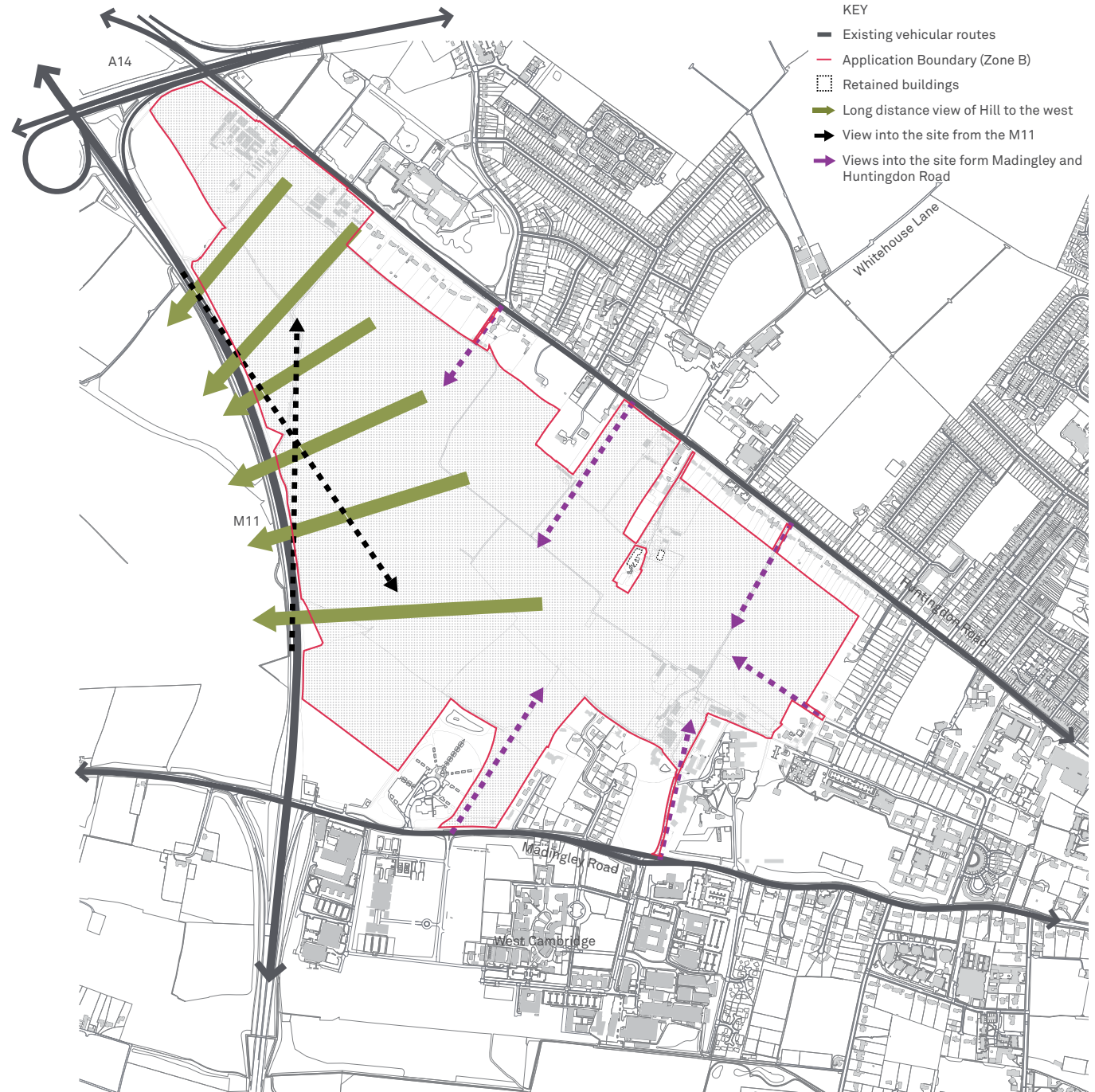
- The viewpoint from the northern entrance to the American Cemetery and Memorial at Maddingley Wood;
- Through gaps in the woodland blocks running along the side of Maddingley Road when approaching Cambridge from the west;
- Glimpses of the Application Site from The Avenue road running from Maddingley to the M11;
- Intermittent views into the Application Site from the footpath running between Cambridge Road and Huntingdon Road via Wrangling Corner and the M11 underpass.

The close distance views over the Application Site are offered from the M11 motorway due to its elevated position, sited on top of the highway embankment that forms the western boundary to the Application Site. The views from the motorway are oblique and fleeting, but would be experienced by vehicle users travelling in either direction along the busy transport route. These views are shown in the plan opposite.

A number of key views into and within the Application Site are reinforced by the built form, assisting integration with existing landforms and the wider urban fabric.

Long views are experienced from within the Application Site, principally from along the higher ground at the ridgeline. These provide views across the wider landscape that lies west of the M11.

A full report on landscape and visual issues is contained in chapter 6 of the accompanying Environmental Statement



Views into and out of the Application Site

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- KEY**
- Existing vehicular routes
 - Application boundary (Zone B)
 - Colleges/Schools
 - Existing residential areas
 - Proposed NIAB development
 - Existing open space
 - Research and academic

Existing land use

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A3.1.6. Existing and Adjoining Land Uses

The Application Site is currently used predominantly for agricultural research uses by the University Farm. Additional University research and Traffic International also exist on the Application Site.

The northern boundary of the Application Site along Huntingdon Road is characterised by a substantial number of large houses, which have significant sized gardens backing onto the Application Site. There are also a number of commercial premises, including the Travellers Rest pub and hotel. Access from Huntingdon Road is also provided to the Agronomy Centre and the University farm (Howe Farm) which are located within the Application Site at the northern boundary. Access is also provided to the World Conservation Monitoring Centre, which is excluded from the Application Site boundary.

To the north of Huntingdon Road are the NIAB sites which will be developed for residential use, forming a new development frontage to the north of Huntingdon Road. The eastern boundary of the Application Site is principally residential, with the Chapel of the Ascension and its burial ground. The spire of the chapel forms a local landmark in the landscape.

The southern boundary to the Application Site is defined by the various uses along Madingley Road, which include University and residential uses and the Park & Ride facility. Part of the southern boundary reaches Madingley Road and the West Cambridge campus - providing an opportunity to connect these two major University development areas. The Madingley Road Park & Ride is located further to the west, whilst West Cambridge is located on the south side of Madingley Road.

The south eastern boundary to the Application Site is formed by academic and research buildings at Madingley Rise, connecting through to Churchill College. Other notable College and University uses in close proximity to the Application Site include Girton College to the north, the Centre for Mathematical Science linking through to Grange Road and the cluster of Colleges and Annexes on Storey's Way including Fitzwilliam, Trinity Hall and Murray Edwards Colleges, linking to the City centre.

A3.1.7. Existing Noise Conditions

The noise climate across the Application Site is influenced by road traffic noise from the M11, with minor contributions from traffic on Huntingdon Road and Madingley Road.

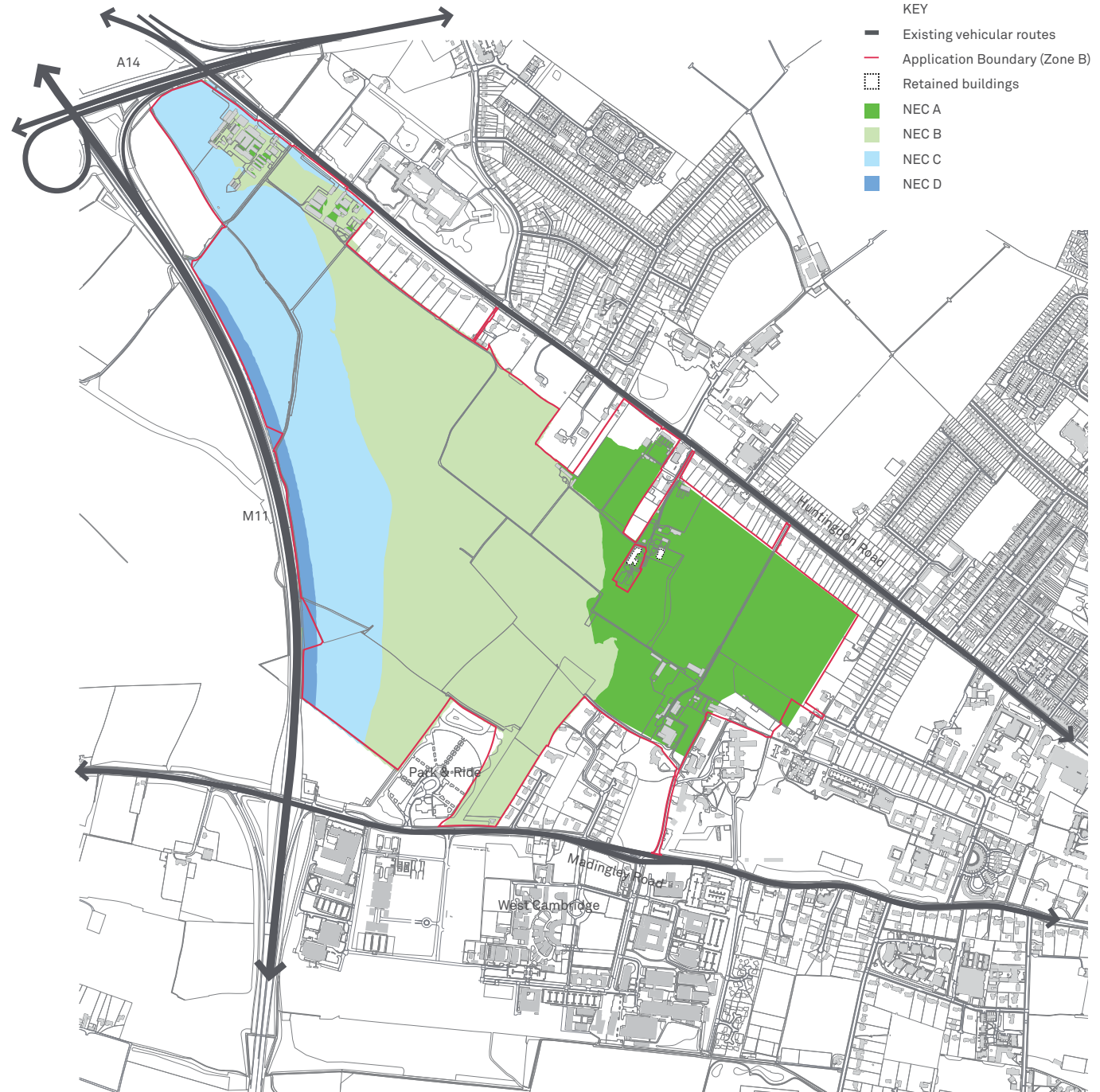
Extensive noise monitoring, in conjunction with detailed computer modelling of the Application Site and surrounding roads, has been employed to quantify the noise levels across the Application Site. This has enabled the classification of the Application Site in terms of Noise Exposure Categories (NEC) as defined in PPG24, and is set out in the accompanying Environmental Statement.

Air Quality

Air quality is generally of a good standard in Cambridge. Cambridge City Council have an Air Quality Action Plan in place that is intended to deliver reductions in pollutant concentrations in future years, so that the air quality objectives are achieved.

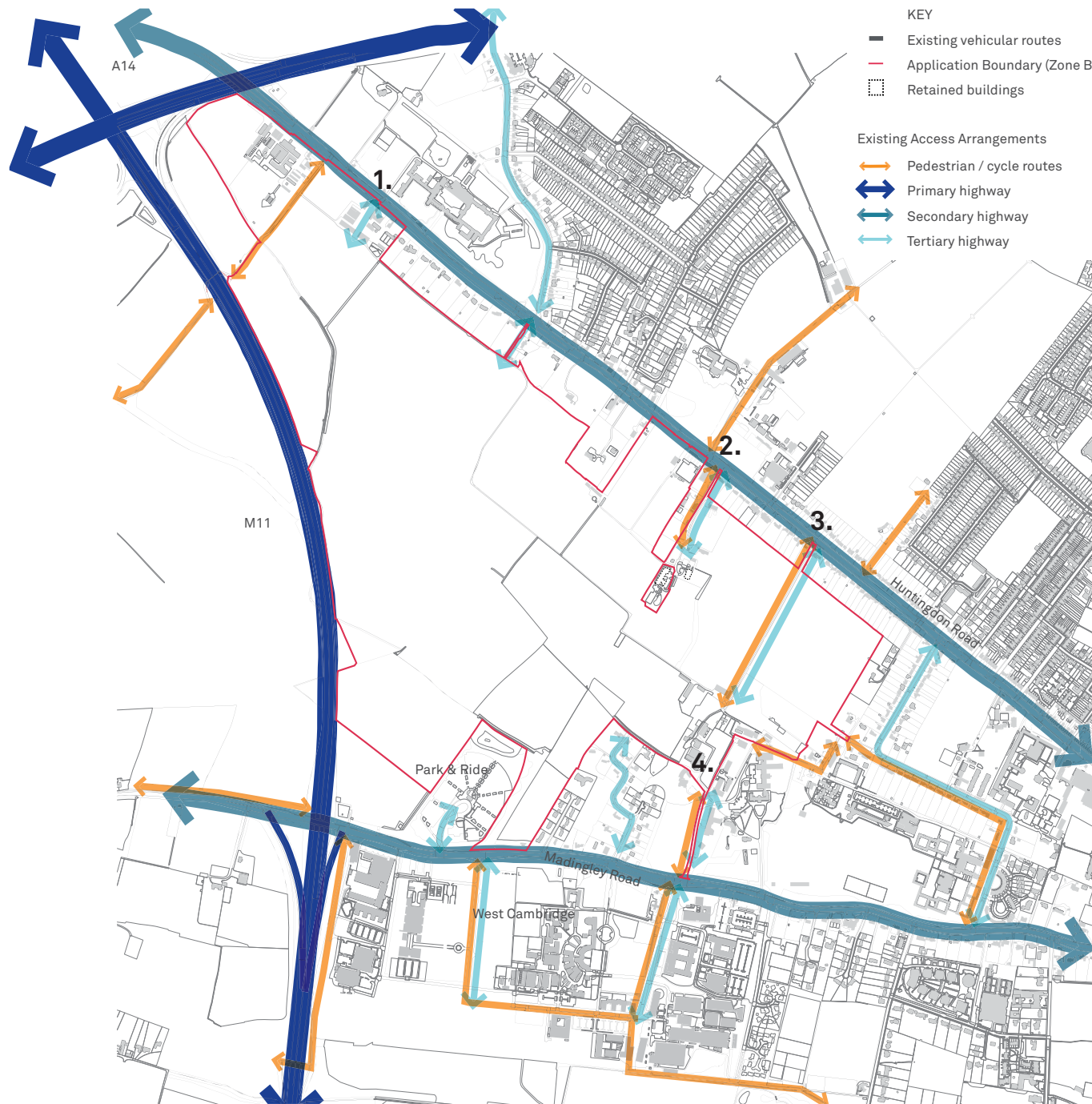
The Cambridge City Centre Air Quality Management Area (AQMA) is located close to the Application Site at the junction of the ring road (A1134) with Huntingdon Road (A1307) and Histon Road (B1049). Histon Road provides an alternative route between the A14 and the city centre, to the A1307; therefore a key node that is important to monitor given the number of residents that are sensitive to local air quality in this area.

A full report on the noise environment is contained in chapter 13 of the accompanying Environmental Statement



Existing noise conditions

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- KEY**
- Existing vehicular routes
 - Application Boundary (Zone B)
 - - - Retained buildings
- Existing Access Arrangements**
- Pedestrian / cycle routes
 - Primary highway
 - Secondary highway
 - Tertiary highway

A3.1.8. Existing Access Points

Existing the vehicular access to the Application Site is restricted to serving specific users located in the periphery. These include:

1. Access from Huntingdon Road to the University farm;
2. Access from Huntingdon Road leading to the World Conservation Monitoring Centre;
3. Access from Huntingdon Road along a tree lined route to the former Gravel Hill Farm;
4. Access from Madingley Road to University uses at Madingley Rise, residential areas and Madingley Road Park & Ride.

Currently, there is no public access to the Application Site with the exception of the public right of way close to the farm buildings in the north west corner of the Application Site, which runs in a westerly direction under the M11 towards Madingley. There are, however, a number of possible new non-vehicular linkages including some along the eastern boundary of the Application Site which could provide a direct link with the adjacent colleges and the centre of Cambridge.

A full report on traffic and transport is contained in chapter 12 of the accompanying Environmental Statement and set out in the Transport Assessment and Travel Plan.

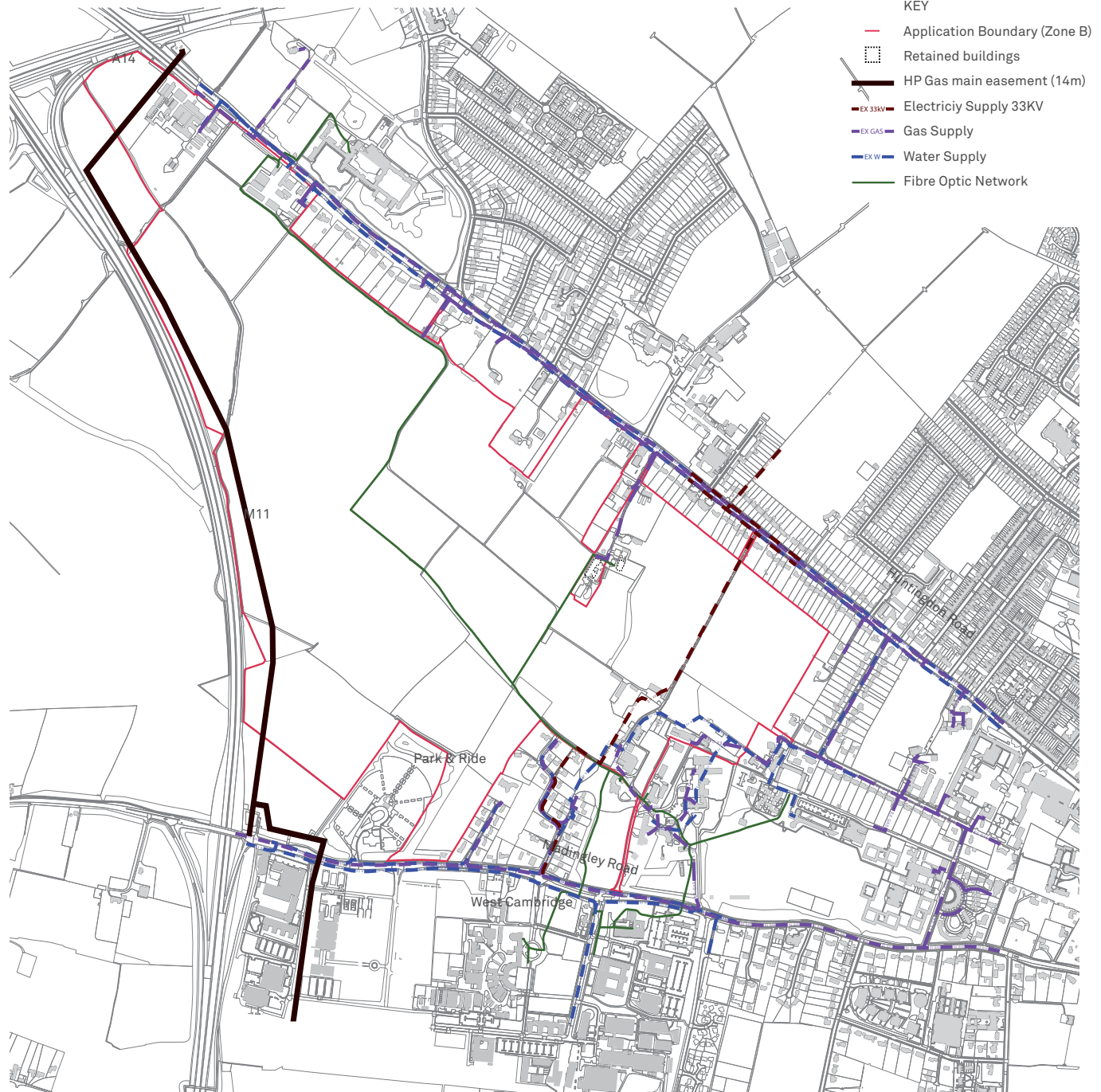
Existing Application Site access

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A3.1.9. Existing Utilities

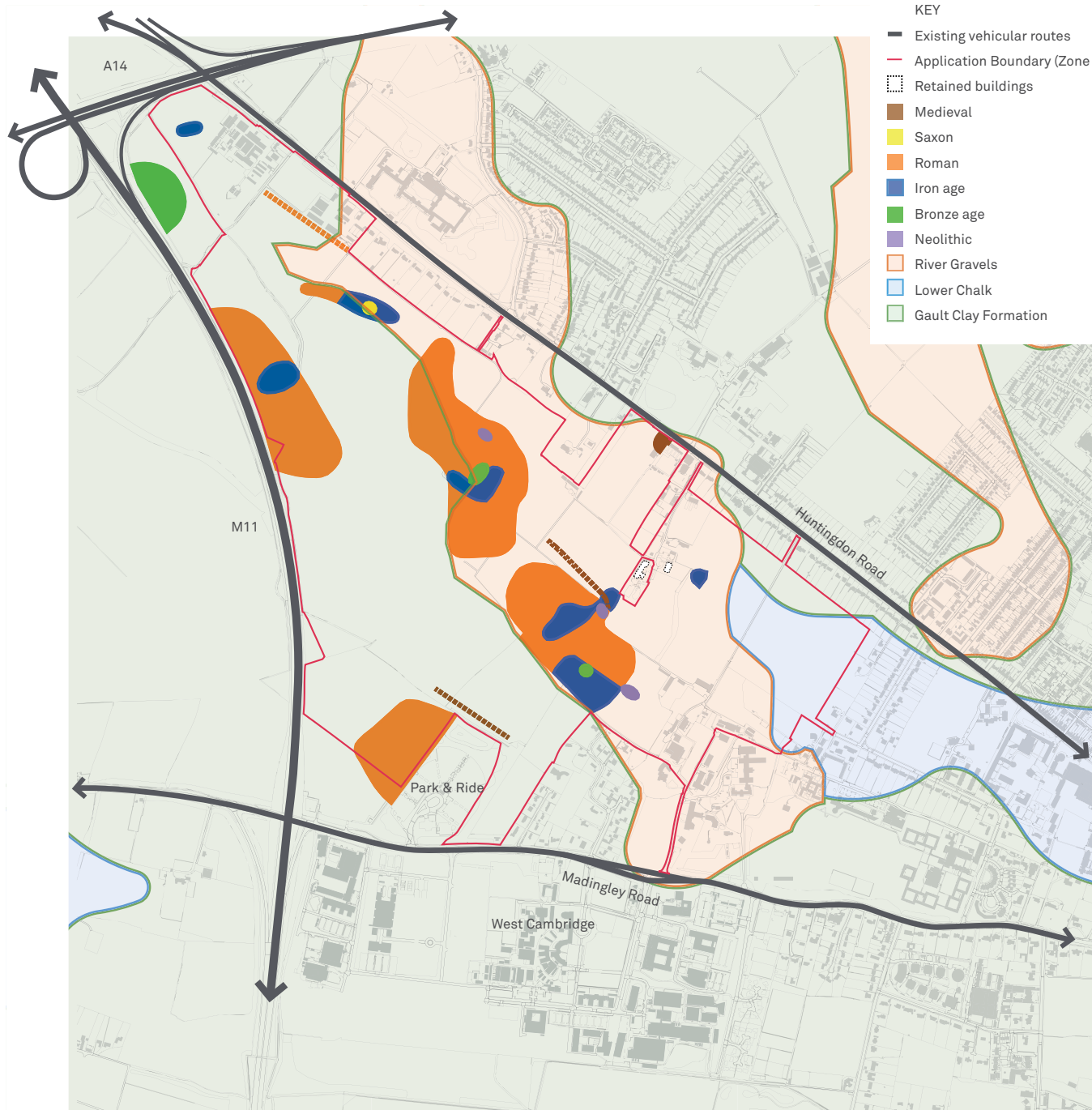
The locations of existing services and utilities supplies have been surveyed as follows:

- A 200mm high pressure gas main runs through the Application Site parallel to the M11 motorway, approximately 30m from the top of the supporting embankment;
- The private Cambridge University Fibre Network, Granta, runs through the central area of the Application Site and generally follows the route of existing tracks, hedgelines and field boundaries;
- An existing 33kV electricity cable runs in a northerly direction through the eastern portion of the Application Site from the existing Madingley Road substation to serve the properties adjoining Huntingdon Road. There are also several existing overhead electricity lines that serve existing buildings within the Application Site; and
- BT Openreach, Virgin Media and EDF Energy have apparatus running along Madingley Road and Huntingdon Road.



Existing utilities

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Existing geology and archaeology

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A3.1.10. Archaeology

Comprehensive archaeological surveys have been conducted and thorough consideration given to the potential effect upon heritage assets from the Proposed Development. This has been undertaken with an appreciation of the wider landscape and has been subject to intensive study over the last few years. Spanning from the Paleolithic through to Medieval times, the evaluation results clearly convey the area's long land-use history.

As the sites were only discovered as a result of the evaluation programme, all rank as undesignated heritage assets and generally, their preservation is 'moderate' to 'poor' as the area's long history of arable usage and quarrying has meant that they are severely affected and cannot be considered 'pristine'.

Further detail regarding the archaeological assets are included within the Environmental Statement.

A3.2. Policy Context

This section summarises the policy context for the Proposed Development, providing the guiding principles for development. The full planning policy assessment is addressed in the accompanying Planning Statement and Environmental Statement.

Government Policy

The Localism Bill

The Localism Bill is currently progressing through Parliament and is expected to come into force as the Localism Act by November 2011. The Bill proposes significant amendments to current legislation relevant to the Application Site, including but not limited to the Town and Country Planning Act 1990, the Planning and Compulsory Purchase Act 2004, the Planning Act 2008 and the Local Democracy, Economic Development and Construction Act 2009. Barring further changes, the Bill will ultimately devolve greater powers to councils and neighbourhoods and gives local communities more control over housing and planning decisions.

The Draft National Planning Policy Framework

The Government has published the draft National Planning Policy Framework ("the Draft NPPF") for consultation. The NPPF will replace the current suite of national Planning Policy Statements, Planning Policy Guidance notes and some Circulars with a single, streamlined document.

The NPPF will set out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations. The draft NPPF continues to recognise that planning system is plan-led and that therefore Local Plans, incorporating neighbourhood plans where relevant, are the starting point for the determination of any planning application.

The presumption in favour of sustainable development (the 'presumption') is central to the policy approach in the NPPF, as it sets the tone of the Government's overall stance and operates with and through the other policies in the document. Its purpose is to send a strong signal to all those involved in the planning process about the need to plan positively for appropriate new development; so that both plan-making and development management are proactive and driven by a search for opportunities to deliver sustainable development, rather than barriers. It does this by placing increased emphasis on the importance of meeting development needs through plans; on the need to approve proposals quickly where they are in line with those plans; and on the role of the Framework as a basis for decisions where plans are not an adequate basis for deciding applications.

Planning Policy Statement: Planning and Climate Change - Supplement to PPS1 (2007) encourages the delivery of sustainable patterns of urban growth and rural development that help secure the fullest possible use of sustainable transport modes and reduce the need to travel, especially by car. The supplement aims to conserve and enhance biodiversity, reflect the development needs and interests of communities and enable them to contribute effectively to tackling climate change; and assist businesses and technological innovation to mitigate and adapt to climate change.

In terms of designing new housing developments these should:

- be located to optimise its carbon performance and limit its likely contribution to carbon emissions – in particular taking account of the potential for decentralised energy based on renewable and low carbon energy; and
- be located and designed for the climate and the impacts it is likely to experience over its intended lifetime.

Planning Policy Statement 1: Delivering Sustainable Development PPS1 (2005) places importance on high quality and inclusive design. This is placed at the centre of the development process and should be the objective of all stakeholders. Good design should deliver developments that will:

- protect and where possible enhance the natural and historic environment and existing successful communities;
- ensure that development supports existing communities and contributes to the creation of safe, sustainable and liveable communities with good access to key services;
- be sustainable, durable and adaptable (including taking into account natural hazards such as flooding and the potential impacts of climate change); and
- be visually attractive as a result of good architecture and appropriate landscaping.



Cambridge City Council and South Cambridgeshire District Council's AAP Proposals Map (adopted 2009)

- | | |
|--|---|
| Major development site | New SSSI boundary |
| Green belt | Indicative boundary of national geological interest |
| AAP boundary | 10m buffer to SSSI |
| City /SCDC boundary | Existing woodland |
| Open space | |

Design And Development Guidance

The Proposed Development seeks to encapsulate the Government's commitment to sustainable development and the creation of sustainable communities to ensure high standards of development. As such a range of nationally and locally defined quality standards are set to be incorporated into the future development of the scheme and have informed the evolution of the masterplan proposals.

Code for Sustainable Homes

The University of Cambridge is committed to meeting the Government's Code for Sustainable Homes. Proposals will seek to incorporate Code Level 5 in early stages with an aim to achieve Code Level 6 by 2016, depending upon technological and viability issues and compliant with the North West Cambridge Area Action Plan (APP).

Lifetime Homes Standards

The Government's Lifetime Homes Standards ensure that residential development is designed to meet the needs of all residents at different life stages. These provide accessible and adaptable accommodation for everyone, from young families to older people and individuals with a temporary or permanent physical impairment.

The standards require that all houses of more than two storeys will have a habitable room and WC on the ground floor, homes and spaces will be adaptable for wheelchair users and car parking will be accessible for disabled users. The North West Cambridge masterplan proposals have been evolved to ensure all lifetime homes standards can be met.

Cabe Guidance

Good practice guidance has been produced by the Commission for Architecture and the Built Environment (CABE). By Design: Urban Design in the Planning System: towards Better Practice (CABE, 2006) aims to encourage better design, focussing on careful consideration of place and context.

Principles of Inclusive Design (CABE, 2006) encourages high quality and inclusive design which meets the built environment needs of everyone on equal terms, regardless of age, disability, ethnicity or social grouping. The guide aims to encourage policy makers and developers to embrace design that creates places that everyone can use.

Designing For Safer Environments

Manual for Streets 2 (2010) builds on the principles established in Manual for Streets (2007) and sets out guidance for the planning, design, provision and approval of new residential streets. It aims to assist in the creation of high quality residential streets that:

- build and strengthen communities;
- balance the needs of all users;
- form part of a well-connected network;
- create safe and attractive places which have their own identity; and
- are cost-effective to construct and maintain.

Transformation in the quality of streets requires a fundamental culture change in the way streets are designed. This needs a more collaborative approach between design professions and other stakeholders with people thinking creatively about their various roles in the design process.

Safer Places: the Planning System and Crime Prevention Communities and Local Government (Feb 2004), provides guidance on delivering safer places through design, identifying specific attributes of sustainable communities in relation to crime prevention.

The guidance also highlights the need for natural surveillance and the creation of active neighbourhoods through the design and layout of buildings and open space.

Secured by Design (SBD) is a police initiative which seeks to encourage the new development to adopt crime prevention measures in their design to reduce the opportunity for crime and the fear of crime, creating a safer and more secure environment for all users. Additional legislation and guidance to inform the iterative design and consultation process for North West Cambridge including the development of both built form and open spaces.

AAP policy NW2 states an objective is also to produce a high level of design quality for all parts of the community to create accessible developments and neighbourhoods with their own character and legibility.

AAP policy NW24 states development will be required to demonstrate that it has been designed to high standards of sustainability, to minimise water consumption and CO2 emissions, and to adapt to the predicted effects of climate change.

Local And Regional Design Policy

At the regional level the vision for the Cambridge Sub-Region to 2021 and beyond is to continue to develop as a centre of excellence and world leader in higher education and research.

East of England Plan (May 2008)

The East of England plan states that Local Development Documents should provide for development focused on making the most of the development potential of land, including that on the periphery of the built-up area of Cambridge. This includes land released from the green belt following the Cambridgeshire and Peterborough Structure Plan 2003 and through the Cambridge Local Plan and development plan documents prepared by the local planning authorities.

Following the approval of the East of England Plan only a small number of policies from the Cambridgeshire and Peterborough Structure Plan 2003 remain in force. This includes Policy 9/2c which considers the location and phasing of development land to be released from the green belt. It specifically states that Land between Maddingley Road and Huntingdon Road should be reserved for predominantly University-related uses and only brought forward when the University can show a clear need for the land to be released. The following details relevant policy contained within the East of England Plan.

Policy SS1 states the need to bring about sustainable development by being 1) environmentally sensitive, 2) well designed and built. Policy T4 states the need to Identify ways to bring about a shift away from car use to public transport, walking and cycling by ensuring urban extensions and other major developments are linked from the outset into the existing urban structure through safe, well designed pedestrian and cycling routes and a high standard of public transport.

Policy ENV7 states that new development should provide buildings of an appropriate scale, founded on clear site analysis and urban design principles.

Cambridge City Local Plan (2006), including saved policies

At the local level, the Cambridge City Local Plan (2006) sets out a series of policies which include a focus on good design.

Policy 3/7 states development will be permitted which demonstrates that it is designed to provide attractive, high quality, accessible, stimulating, socially inclusive and safe living and working environments. Factors to be taken into account include a comprehensive design approach which achieves good interrelations and integrations between buildings, routes and spaces.

Policy 3/11 states that external spaces and boundary treatments must be designed as an integral part of development proposals. Development will be permitted if it can be demonstrated that the landscape design relates to the character and function of the spaces and surrounding buildings and existing features which positively contribute to the landscape, character and amenity of the site are retained and protected during construction.

Policy 3/12 states that new buildings will be permitted where it can be demonstrated that they have a positive impact on their setting in terms of location on the site, height, scale and form, materials, detailing, wider townscape and landscape impacts and available views.

Policy P9/2c states that local plans will make provision for housing and mixed-use development on land to be released from the Green Belt in accordance with the principles set out in Policy P9/2b and in the following location, between Madingley Road and Huntingdon Road.

These areas will include locations for the 8,000 dwellings which will be required by 2016. They will help to deliver the vision of Cambridge as a compact dynamic city by:

- Promoting a sustainable and spatially concentrated pattern of locations for development and sustainable travel patterns;
- Allowing scope for, rather than constraining, continuing development beyond 2016;
- whilst protecting and enhancing the historic character and setting of Cambridge and the important environmental qualities of the surrounding area.

Land between Madingley Road and Huntingdon Road should be reserved for predominantly University-related uses and only brought forward when the University can show a clear need for the land to be released.

Policy 9/3 states that the development of the urban extensions will: a -create attractive, stimulating, socially inclusive and safe living and working environments with distinctive characters incorporating high quality design sensitively integrated with existing communities; enhance the setting and character of Cambridge; respect key views and create new vistas; develop a new, strong landscape framework.

South Cambridgeshire Core Strategy (2007)

The South Cambridgeshire District Core Strategy includes a number of related policies to the outline planning application:

- Policy ST/2 states that the District Council will make provision for 20,000 new homes in South Cambridgeshire during the period 1999 to 2016. On the edge of Cambridge; the provision of affordable housing, including housing for Key Workers, will be sought as part of overall housing provision.
- Policy ST/8 states that policies in Local Development Documents will ensure sufficient employment land is available to enable further development of the high technology clusters and meet local needs. Additional land will be brought forward for employment development at the Strategic Employment Locations of sites including Northwest Cambridge.

The University, in providing up to 3,000 new dwellings, fifty percent of which are affordable key worker homes, located on the north western edge of Cambridge, ensures that it meets policy ST/2 by providing a proportion of dwellings that go towards meeting the target of 20,000 new dwellings. In addition, by providing 100,000 sq.m. of employment floorspace in the form of academic and commercial research space, the University meets the requirements of policy ST/8 by ensuring sufficient employment land is available to enable further development of the high technology clusters and to meet local needs.

North West Cambridge Area Action Plan (2009)

The North West Cambridge Area Action Plan (AAP) details specific policy directly relating to the Application Site. The policies focuses on ensuring a high quality, sustainable development is provided.

The AAP policy NW1 states that North West Cambridge will create a new University quarter, which will contribute to meeting the needs of the wider city community, and which will embody best practice in environmental sustainability. Development will be of the highest quality and support the further development of the University. Objectives of the Area Action Plan include to secure high quality development of both built form and open spaces.

AAP policy NW2 states an objective is also to produce a high level of design quality for all parts of the community to create accessible developments and neighbourhoods with their own character and legibility.

AAP policy NW24 states development will be required to demonstrate that it has been designed to adapt to the predicted effects of climate change.

Supplementary Planning Policy Documents

Cambridge City Council and South Cambridgeshire District Council have a number of supplementary planning documents (SPDs) including, amongst others, Public Art and an Open Space Strategy. Within Cambridge City, the main SPD of relevance to North West Cambridge design is the Sustainable Design and Construction SPD (June 2007).

The Sustainable Design and Construction SPD (June 2007) is intended to provide guidance on the policies within the Cambridge Local Plan (2006) that relate to sustainability. The SPD does not have direct bearing on North West Cambridge due to the presence of the AAP, but has been taken into consideration in the design process and the sustainability strategy.

A3.3. Social and Economic Context

Given the high profile nature of Cambridge University, the effects of the University's growth and expansion have the potential to influence economic performance on a regional, even national scale. The Outer Impact Area (OIA) against which the characteristics of the population have been reviewed is limited to the geographies of the South Cambridgeshire and Cambridge City local authority boundaries.

The Inner Impact Area (IIA) surrounds the Application Site. The IIA is based on a simple estimated 20 minute general walk time buffer. This was calculated by applying the assumption that the average person walks at 6.43km/h (4 mph). This equates to approximately 2,143 metres (2.14km) – which is the circular buffer formed around the Application Site.

To inform the parameters for the Proposed Development, a socio-economic baseline analysis reviewed the socio-economic conditions of the Application Site and surrounding area, based on a wide range of comprehensive data sources, including the 2001 ONS Census, Index of Multiple Deprivation and NOMIS labour market statistics. This is considered in greater detail in the accompanying Environmental Statement.

Total Population

At the time of the 2001 Census a collective total of 238,971 people lived in the local authorities of Cambridge City and South Cambridgeshire, representing 43.2% of the county population. Of this, 11,000 people lived in the Girton and Castle wards.

Age Profile

Of the 45,958 people living within the IIA, 74.7% are of working age (aged 16-64), compared to 65.8% at the county level, 63.4% regionally and 64% nationally. The proportion of this age group living within the OIA is 68.3%. This higher proportion of the working age population within Cambridge could be due to the large student population in the IIA.

Percentage age profile breakdown across the geographies

Age Cohort	IIA	OIA	County	Region	England
Under 5	4%	5.40%	5.80%	6.00%	6.00%
Aged 5-15	8.80%	12.30%	13.60%	14.10%	14.20%
Aged 16-64	74.70%	68.30%	65.80%	63.40%	64.00%
Aged 65+	12.50%	14.00%	14.80%	16.50%	15.90%

Source: ONS Census (2001)

Economic Activity

Of the 75% IIA working age population aged 16-74, less than half are economically active, with only 30.2% in full time employment, which is significantly lower when compared across the geographies, and almost 13% lower than that of the OIA and over 10% lower than the national average.

As expected in the Cambridge area, the proportion of full time students across the IIA is 38.9%, which is considerably higher than its comparative areas.

An indicator of the area's relative well-being are the IIA benefits from the lowest proportions of home caring and sick or disabled rates. Collectively this amounts to 5.5% in comparison to the national figure of 11.8%. Unemployment within the IIA and OIA are also the lowest with 1.8% and 1.9% respectively.

Employment

A high proportion of Cambridge's economically active are educated with semi-professional or professional occupations, often referred to as 'white-collar workers'. This is reflected in the statistics in that 23.6% and 22.1% of the populations within the IIA and OIA respectively work within the finance and real estate industry – a figure higher than the county, regional and national levels.

One third of the working population within the IIA are employed in the education, health and social sectors, of which 24.6% of the population work in education.

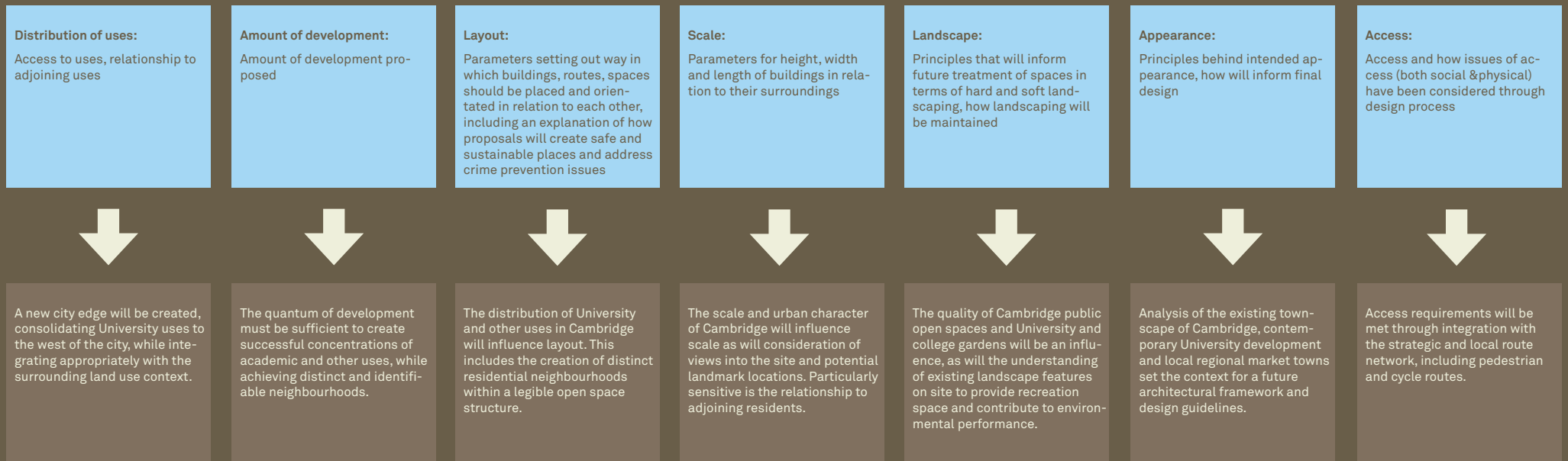
Industry of Employment

Industry of Employment	IIA	OIA	County	Region	England
Primary Industry	1.0%	1.8%	2.7%	2.1%	1.7%
Manufacturing, Utilities + Construction	13.1%	18.5%	22.7%	22.7%	22.3%
Wholesale + Retail	10.0%	12.7%	15.1%	17.3%	16.9%
Hotels + Restaurants	4.5%	4.0%	3.6%	4.2%	4.7%
Transport, Storage + Communication	4.4%	5.5%	6.1%	7.4%	7.1%
Finance + Real Estate	23.6%	22.1%	18.5%	19.1%	18.0%
Public Admin, Defence, Social Security	3.8%	4.3%	5.9%	5.2%	5.7%
Health, Education + Social	33.6%	26.3%	20.5%	17.0%	18.4%
Other	6.0%	4.8%	4.8%	5.0%	5.2%
Total	100%	100%	100%	100%	100%

Source: ONS Census (2001)

In summary there are characteristics of the IIA population which could have a bearing on how facilities on the Application Site may be accessed and also the general nature of the population that will surround the Application Site, which include:

- High levels of economic activity in professional sectors with a dominance weighted on education, health and training sectors;
- High levels of students and a highly qualified population;
- More than proportionate levels of stable family households, with low levels of worklessness; and
- Lower than proportionate increases in job seekers as a result of recent economic adjustments.



A4

Influences and Evolution

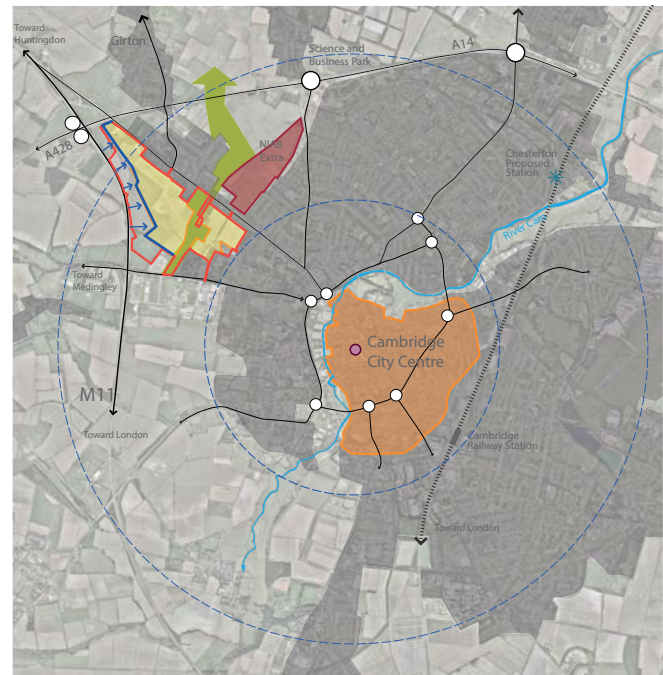
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A4.1. Strategic Influences

The Application Site represents a significant development and extension to the city, creating a new city edge. Together with NIAB and ongoing development in West Cambridge, a new north west quadrant to Cambridge will be established.

A strategic open space structure can be formed through the retention and enhancement of the Girton Gap and new landscapes at the Western Edge.

The Proposed Development is envisaged as an integral part of the city, easily accessible from the historic centre, a 10 minute cycle ride away. Strategic connections can be made between Girton and the city centre, between West Cambridge, the Science and Business Park and the proposed Chesterton Station.



A new city edge

KEY

- | | |
|------------------------------------|-------------------------------|
| — Application Boundary (Zone B) | — New city edge |
| ■ North West Cambridge Development | — Railway line |
| ■ NIAB Extra | → Existing roads |
| ■ Cambridge city centre | ★ Chesterton proposed station |
| ■ Cambridge urban area | ○ Cycling distance 10,20 min |
| ■ Girton Gap | ● Cambridge city centre |

The New City Edge

The Proposed Development, combined with the ongoing development at West Cambridge and new development at the NIAB site, forms a significant expansion to the city. Together these developments form a new North West Quadrant of the city.

The Proposed Development will form a new edge to the city, visible from the M11. This new city edge will form a gateway to the city and, as such, it is appropriate that the University is prominent here. The new city edge will be made up of predominantly University uses and a new, distinctive landscape.

Strategic Green Corridor - Girton Gap

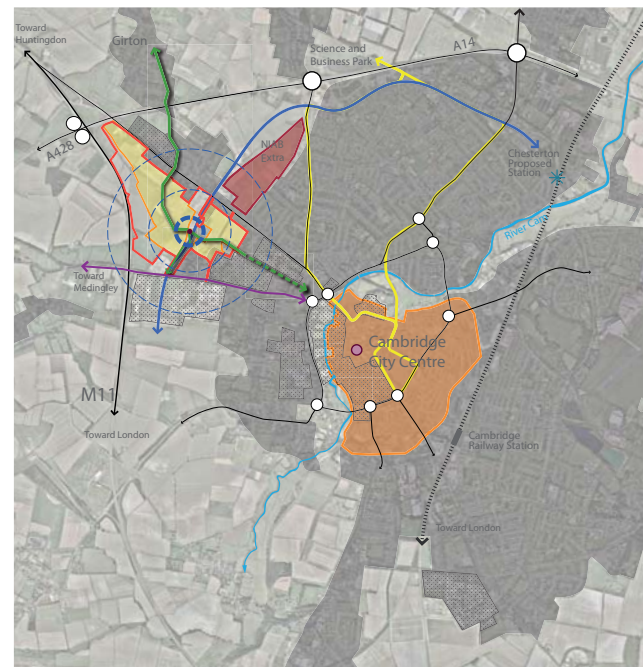
The retention of the strategic green corridor through the development is a key structuring element of the Proposed Development and of great importance in the local area. The green corridor encourages accessibility to the open countryside. However, the development will function as a single community by ensuring activities and uses are well-located to promote connections between the two parts of the Application Site.

Creating a University Orientated Urban Quarter

A new western focus for the City of Cambridge will add to life and the vibrancy of the west of the city. This western segment of Cambridge consists of many University uses, representing the gradual expansion and development of the university from its central location.

The surrounding University uses consist of Colleges and college annexes, including Churchill, Trinity Hall and Fitzwilliam, academic sites, including the Sidgwick site, the Centre for Mathematical Sciences and the West Cambridge campus. These uses are dispersed throughout the western area with little sense of overall cohesion. Currently, there is a lack focus and these uses are seen to be at the edge of the city centre.

The Proposed Development will form a new focus for these disparate uses, helping to consolidate University uses into a new University orientated urban quarter. In addition, the Proposed Development will become a focus for the existing residential uses surrounding the Application Site, including Girton village, the NIAB development and the West Cambridge campus. This will ensure the new community is truly integrated with the already established surrounding communities.



Strategic Connections

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KEY

- Application Boundary (Zone B)
- North West Cambridge Development
- NIAB Extra
- Cambridge city centre
- Cambridge urban area
- Indicative University and College uses
- Railway line
- Existing roads
- Existing cycle network
- Proposed cycle network
- Proposed Strategic Orbital bus route
- Existing busway
- Proposed local centre
- ★ Chesteron proposed station
- Cycling distance 10,20 min
- Cambridge city centre

Creating a New Centre

The University will establish a heart to the Proposed Development in the local centre. As well as a focal point of local facilities serving the community, the local centre will encourage social interaction, activating the development and radiate this activity outwards to the surrounding communities. The uses within the local centre will include provision of a school, a health centre, nursery school provision, a police touch down station, a community centre, foodstore and local shops. The University recognises the importance of these facilities and the sense of place and community cohesion a local centre will provide for both the envisaged settlement as well as existing adjacent communities.

Strategic Cycle and Public Transport Infrastructure

The development of new strategic cycle infrastructure, together with the existing cycle network, will connect the various separate neighbourhoods of the Proposed Development, bringing them into the new local centre.

This infrastructure will connect the whole area together, including Girton College to West Cambridge and the city centre.

A4.2. Cambridge Influences

Fundamental to the success of the Proposed Development is the creation of a strong sense of place as a natural extension of, one which feels like a part of the historic city. To inform the character of the Proposed Development, existing spatial and functional typologies have been studied and scales compared. These studies have influenced the design principles and concepts within the Proposed Development, including:

- Open Spaces
- Residential Neighbourhoods
- Academic Clusters
- Colleges and Annexes
- Local Centres
- Regional Market Squares



Cambridge City Centre - built form character



Cambridge City Centre - open space and public realm character



Cambridge Influences - Open Spaces, Residential Neighbourhoods, Academic Clusters and Colleges/Annexes

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A4.2.1 Open Spaces

Stitching the colleges and academic clusters together is the open space structure of Cambridge city.

The River Cam and the Fenland geography have continued to play an instrumental role in the development of the city. This informal and naturalistic landscape is complimented by series of formal greens associated with various colleges. Together, they form a green and legible structure that holds the city together.

Key influences are:

- mature landscape, carefully integrated within the city fabric;
- in addition to the natural landscape, formal open spaces create a sense of focus within the city;
- colleges such as King's, Trinity and St. John's extend between Queen's Road and King's Parade embedding the River Cam within College grounds; and
- both formal and informal Cambridge landscapes are the product of long term ownership and continuous maintenance.

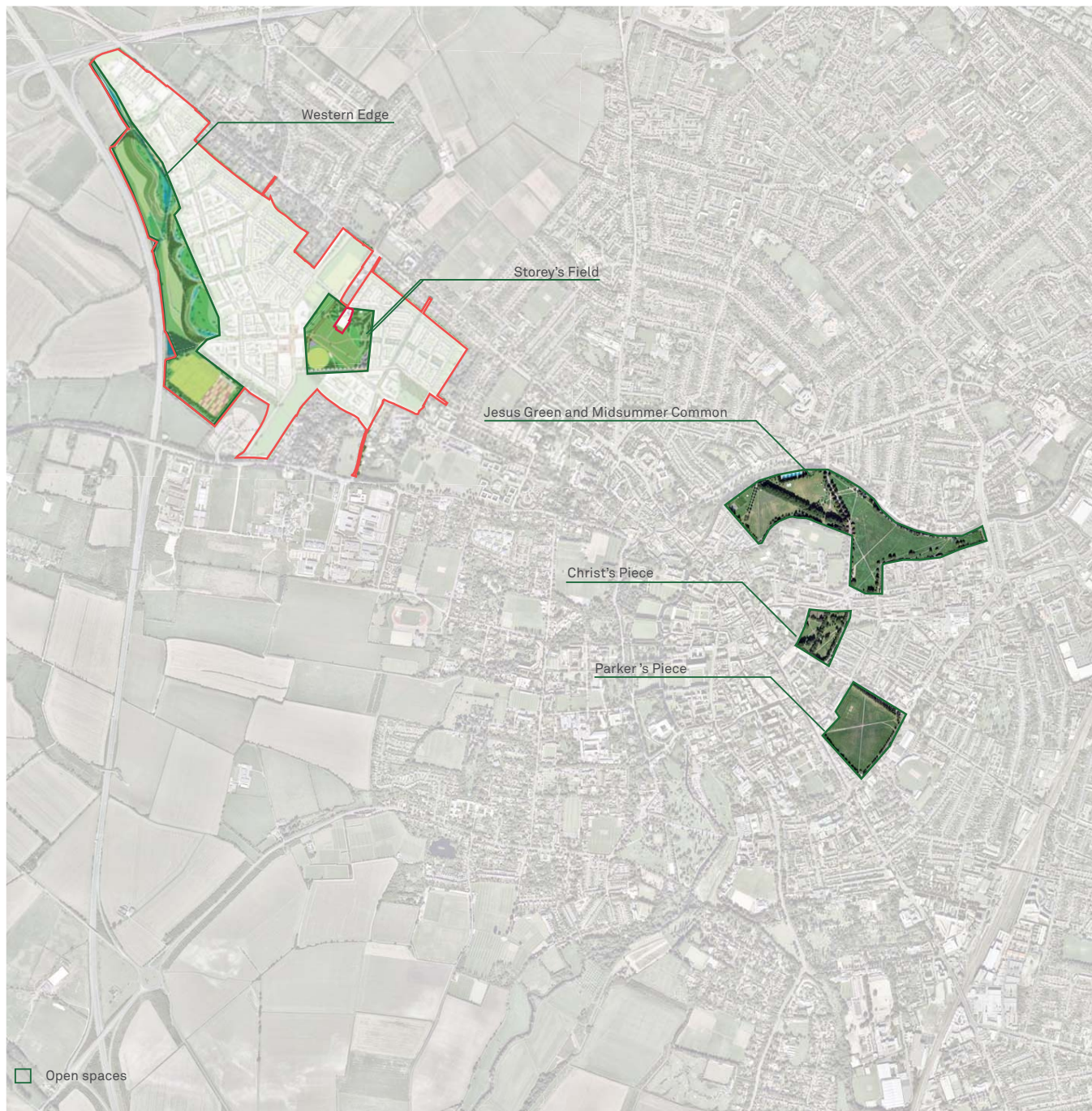
Lessons and relevance to the Proposed Development:

- the long term University and College stewardship of open space results in high quality public realm for the benefit of the whole community.
- play areas and sports fields should be integrated within informal landscape areas.



Open Spaces - Christ's Pieces

Open Spaces in Cambridge



A4.2.2 Residential Neighbourhoods

As the city of Cambridge has grown, the University and wider urban fabric has become increasingly interwoven. New residential neighbourhoods have grown along principal routes into the city. With the arrival of railway in the 19th century, neighbourhoods of terraced housing were developed adjacent to more traditional neighbourhoods. Residential neighbourhoods are largely urban in character with 2-4 storey terraces forming long, straight streets, typical of traditional Victorian urban fabric. Romsey is one of few neighbourhoods with its own 'high street', namely Mill Road. Spatially, Mill Road is a 'spine' that links together side streets sprung to the north and south. Shops, key bus routes, cafes, restaurants and other services along Mill Road give this spine its function role and draw activities along its length both day and night.

In contrast, the character of Newnham village, located to the western side of the city centre, is much more sub-urban in character with a lower density of terraces, semi-detached and detached houses. Newnham village is also centred around a local school and nursery. Most recently the Accordia development, has shown that new communities can be created quickly by bringing together high quality, contemporary architecture in a mature landscape setting.

Key influences:

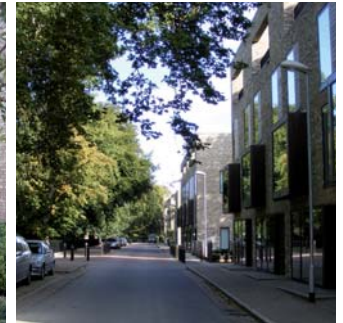
- these neighbourhoods offer a clear and legible street network;
- residential streets are characterised by their scale and their hard/soft landscape treatment; and
- residential neighbourhoods are focused around high streets or local destinations such as schools.

Lessons and relevance to the Proposed Development:

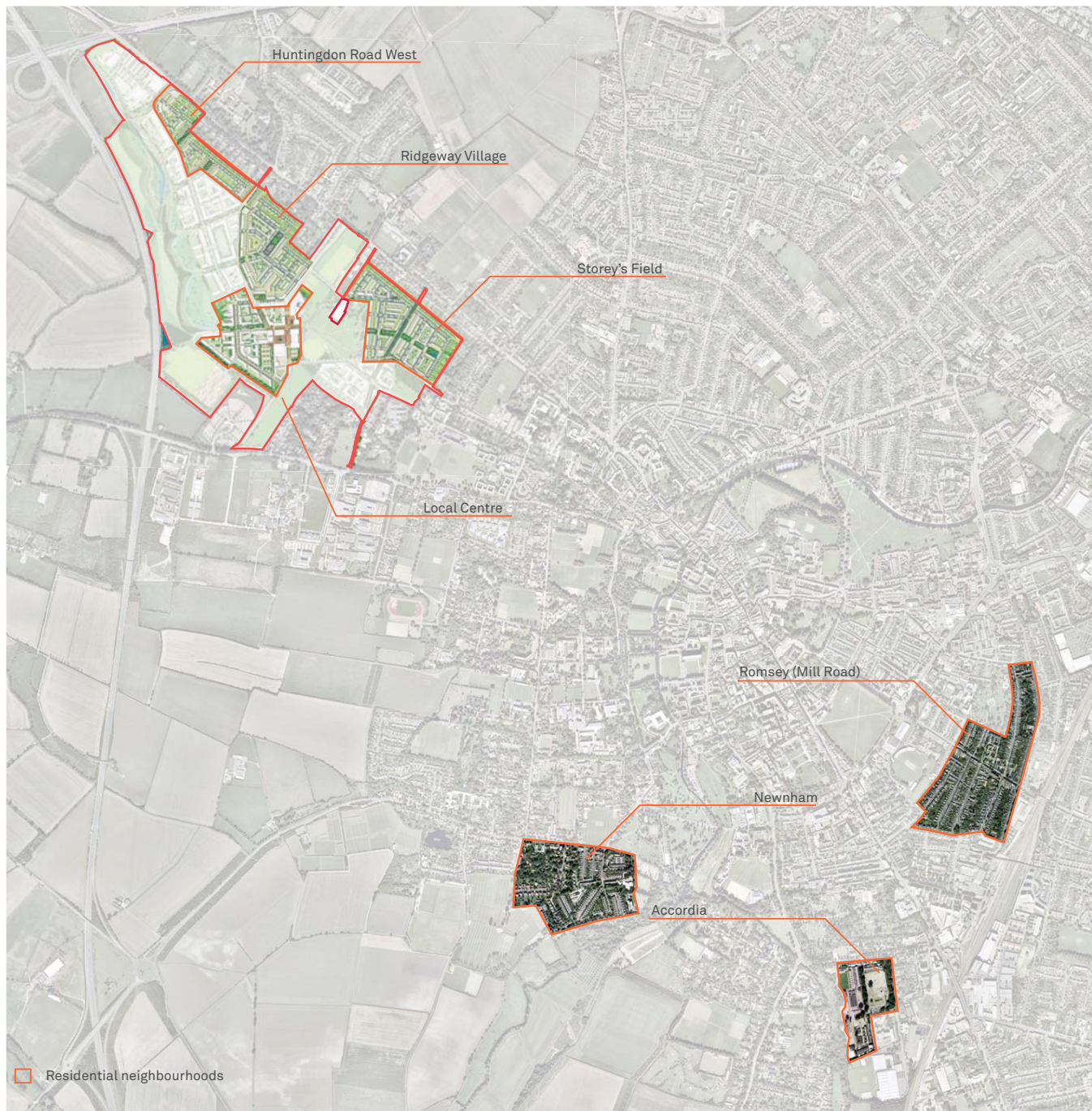
- sufficient residential accommodation with a distinctive character is required to create a successful and identifiable neighbourhood;
- a mix of tenures and types of housing will attract diverse social groups, which in turn, support a richer mix of uses in the local centre;
- a mixed use local centre is only successful if it is positioned sufficiently far away from the city centre; and
- a local centre needs to connect destinations and channel activities and retail footfall.



Residential Neighbourhoods - Newnham Village



Residential Neighbourhoods - Accordia



A4.2.3 Academic Clusters

Concentrated within the fabric of Cambridge, University departments and research and teaching facilities have been brought together over a long period of time in specific academic clusters or sites. Current sites, such as the Sidgwick and Downing sites, have grown significantly. As the University continues to evolve and grow, similar academic sites need to be created, where co-location of appropriate academic and research disciplines may be brought together for mutual benefit.

Key influences are:

- for maximum flexibility over time, existing academic clusters tend to occupy significant land parcels;
- vehicular access and limited parking are located on periphery of site;
- pedestrian and cycle routes within the land parcel provide good permeability; and
- Many academic buildings are loosely arranged around landscape courtyards.

Lessons and relevance to the Proposed Development:

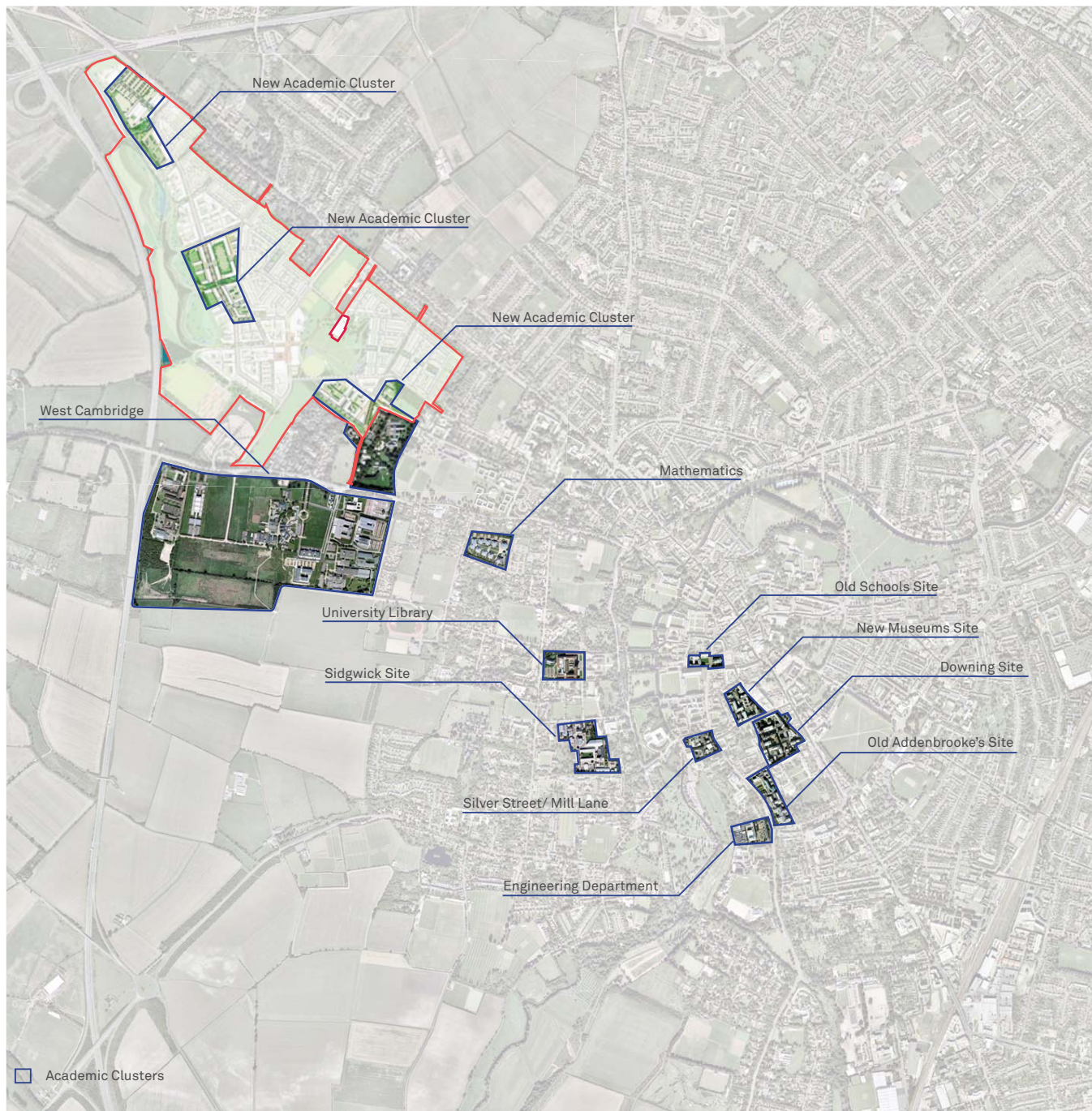
- for maximum flexibility over time, good-sized plots should be created where academic clusters can grow and evolve over time and create coherent long term solutions;
- permeability and location on principal desire lines and routes will help to maintain life and activity throughout the day; and
- by locating these academic clusters close to the amenities of the local centre, working daytime and residential populations may be brought together successfully.



Academic Cluster - Mathematical Sciences



Academic Cluster - Sidgwick Site



A4.2.4 Colleges and Annexes

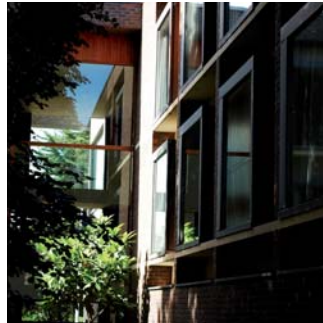
Colleges have been the fundamental building blocks of Cambridge over the last 800 years. Similar to the academic clusters, colleges have grown over time and they often occupy large land parcels, spanning from street to street that radiate out from the heart of the city. Although no new colleges are currently planned within the Proposed Development, the development parameters must allow for this future possibility, as well as creating opportunities for colleges to expand by creating annexes within the site.

Key influences are:

- typical college land parcels are substantial;
- with Porter’s Lodge systems, colleges access are well-managed; and
- most historic colleges have been developed in the form of interconnected courts, creating a legible environment with clear hierarchy.

Lessons and relevance to the Proposed Development:

- as collegiate courts are actively managed, routes through the colleges tend to close in the evening and out of term time; alternative and perhaps more circuitous routes around the colleges are readily available to maintain permeability throughout the city; and
- as courts tend to focus on the interior life, the relationship between the college and the city may at times seem secondary. Sometimes, this can compromise the public realm environment and should be avoided in the Proposed Development.



Colleges and Annexes - Trinity Hall

Colleges and Annexes - Churchill and Fitzwilliam