Cambridge Influences - Colleges and Annexes

Copyright Getmapping plc

A4.2.5 Local Centres in Cambridge

There are several commercially successful local centres in Cambridge, offering amenity and services to their surrounding local communities, for example, at Chesterton Road, Newnham Road and at Mill Road. Usually, a local centre includes at least one foodstore alongside other complimentary shops, in order to meet people's daily needs. Depending on the scale of local demand, local centres may often also include a range of pubs and café/restaurants, providing places for people to meet and socialise.

In addition to commercial uses, local communities are brought together and defined by the cultural and public services available to them. These include schools, doctor's surgeries and meeting places for faith and other community groups.

Key influences are:

- Local centres are located along key routes, connecting major destinations but within walking distance of surrounding neighbourhoods
- Local centres must have a critical mass of active uses to animate the streets and spaces, throughout the day and evening.

Lessons and relevance to the Proposed Development:

- To be successful, it is essential to ensure the best possible location for a local centre. The local centre must be highly visible, ideally at the intersection of principal routes and offer the greatest possible breadth of amenities and services.
- To succeed in the broadest sense, the local centre should include both shops and café/restaurants alongside community facilities. Important public facilities, like a primary school, doctors surgery and community facilities will help to ensure that a local centre becomes the focus for a community, used by the widest possible number of people throughout the day and evening.

Local Centres in Cambridge

Local Centres in Cambridge

Cambridge Influences - Local Centres

Copyright Getmapping plc

A4.2.6 Market Squares

Many aspects of a local centre can be found in traditional market towns within the surrounding region. Small towns such as Bury St Edmunds, Newmarket and Huntington often feature village greens, churches, local pubs and market squares. Historically, these market squares were where food and other services were brought from the rural hinterland to the towns and sold. Today, buildings fronting onto these squares have often been converted and other smaller dwellings converted into shops and cafes.

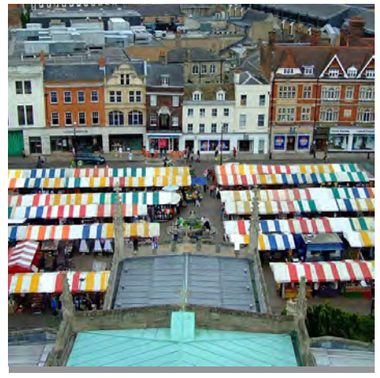
Key influences are:

- Regional Market Squares vary in scale depending on the size of the town itself. The main market square in Cambridge city centre is 85x55m, but other squares vary from 45-35m in width, creating a scale fitting with the use and size of a local community.
- Hotels, churches, schools and civic buildings often define the central public space of a community, alongside commercial activities. When used for markets and community festivals, the space itself allows people to participate in the public life of a place.

Lessons and relevance to the Proposed Development:

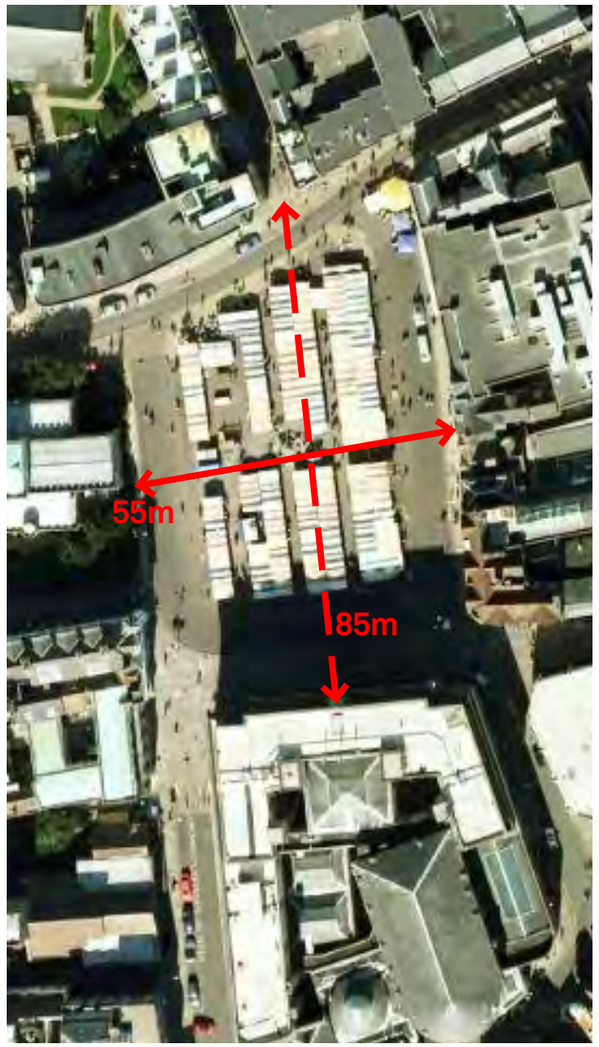
- Both everyday public, community and commercial uses can be brought together successfully around a well scaled space or market square;
- The scale and intimacy of Huntingdon market square is appropriate for the Proposed Development, considering the pedestrian priority character of the space; and
- When combined with a regular market or festival events, a market square can provide an active focus for the local community and attract others into the neighbourhood.

Market Squares - Bury St Edmunds and Huntingdon

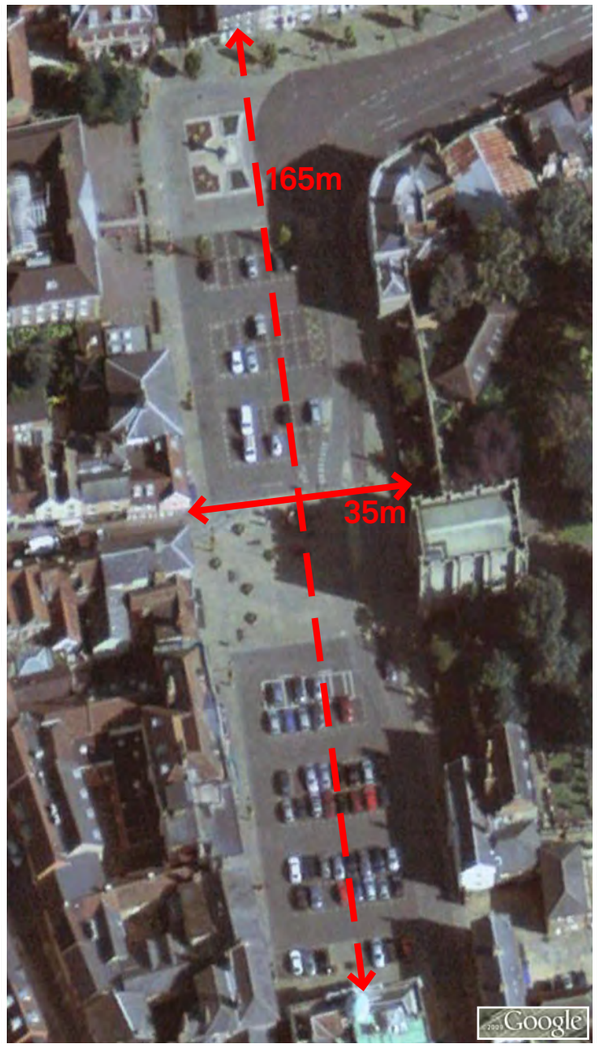


Market Squares - Downham Market, Ely and Cambridge Market

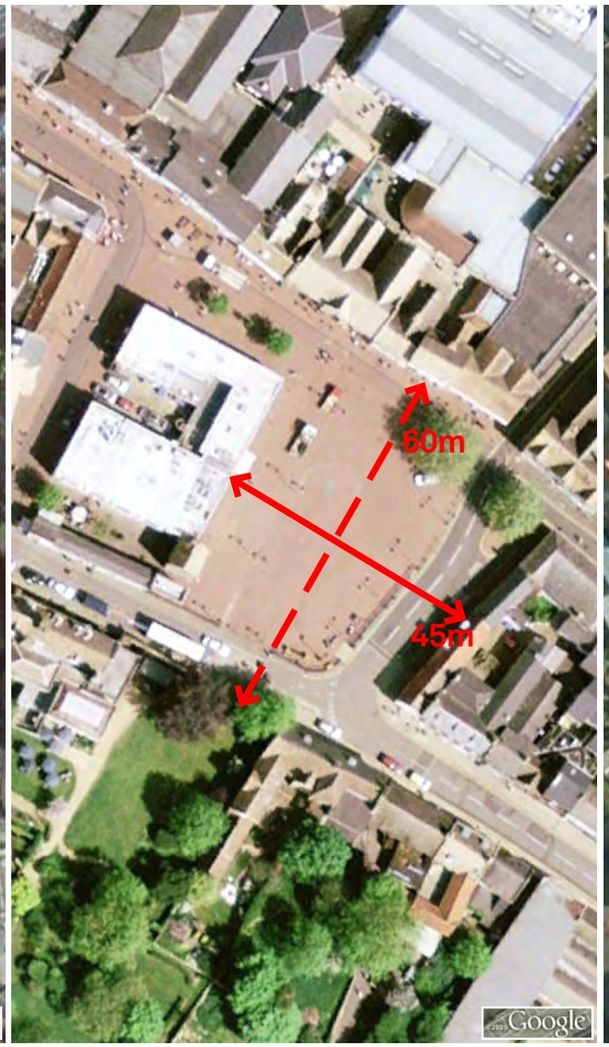
Cambridge Market



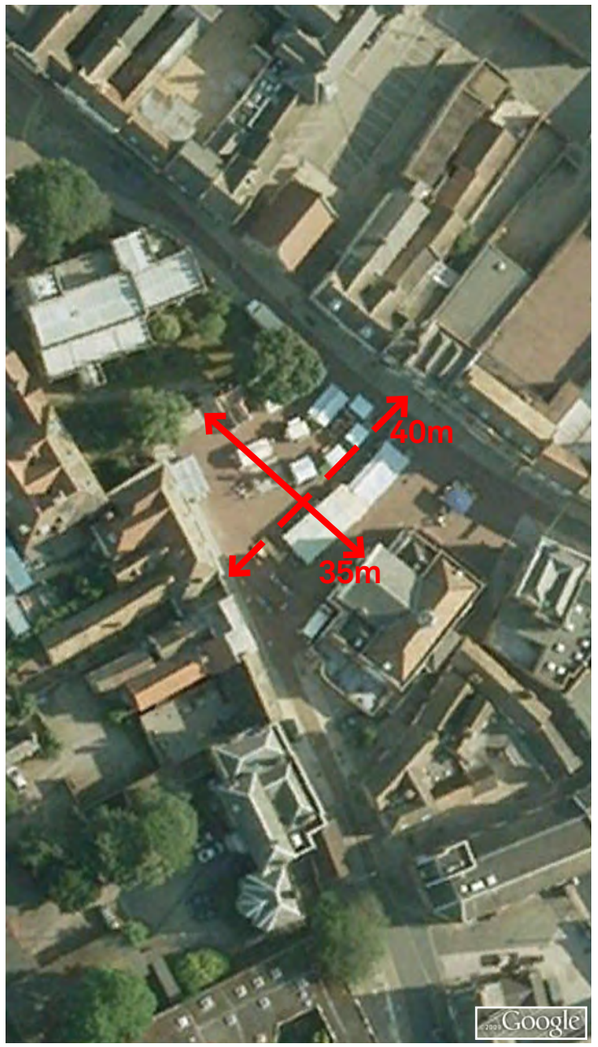
Bury St Edmunds

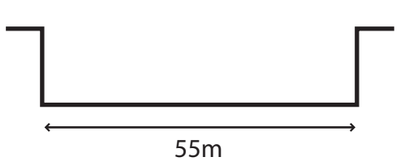


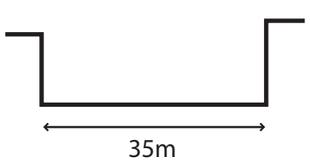
Ely

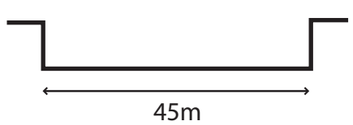


Huntingdon









A4.3. Evolution of the Proposals

The concept of creating a new urban quarter to meet the University's future accommodation and research requirements was first raised nearly 10 years ago. Since then the proposal has been publicly debated and subsequently adopted during reviews of the County Structure Plan, the Cambridge Local Plan and North West Cambridge Area Action Plan.

Process of arriving at the Proposed Development
The application incorporates Development Parameters in order to define the scope of the Proposed Development and in turn envelope within which applications for reserved matters must be accommodated.

Overview Process to date
The concepts underlying the Proposed Development and now embodied in the Development Parameters have evolved and will continue to evolve through an iterative and inclusive process. This process has already taken place over more than 7 years and included the following steps:

- in line with the University's vision, and in response to the influences identified above, formulating core principles for development of the Application Site;
- preparing a draft illustrative masterplan and topic based design studies to articulate the core principles;
- using the draft masterplan as a vehicle and for articulating emerging design concepts and core principles in a cohesive and readily intelligible way and for engaging stakeholders;
- consulting stakeholders in relation to individual topics and on draft masterplans as outlined in the Statement of Community Involvement;
- in the light of responses to stakeholder consultation:
  - refining the core principles;
  - revising the illustrative masterplan prepared in response to consultation responses and the refined core principles; and
  - undertaking further rounds of stakeholder engagement.
- once the core principles had been refined and tested through the media of draft masterplans, topic studies and stakeholder engagement, preparing a set of development parameters by which to frame the Proposed Development; and
- refining the Development Parameters (and indeed the Proposed Development itself) through the process of environmental assessment of the Proposed Development and the formal statutory consultation on the planning submission.

The need to plan for the University's future residential and research requirements led to the University's decision to commence a collaborative masterplanning process in 2005. In early 2005 a series of masterplan workshops were held. The 2005 masterplan formed the basis of the University's needs case at the Cambridge City Local Plan Inquiry. The Inspector agreed that development of land between Madingley Road and Huntingdon Road was essential to meet the University's development requirements to 2025 and beyond.

During 2007 and 2008, the University's masterplan continued to evolve. It took into account issues raised during consultation and during discussions with both Councils. Proposals were then widely consulted upon again in 2008-2009 to inform the Inspectors' Examination of the Area Action Plan. The outcome of the public examination of the AAP was a revision to the Green Belt boundary and changes to various policies within the AAP.

During 2009 and 2010, the University of Cambridge held a series of Stakeholder Workshops, Public Exhibitions and a Public Workshop. The first round of consultation was held in November 2009 and the second round of consultation in July 2010. The outputs from the collaborative workshop events and public exhibitions informed the masterplan evolution and the masterplan parameters prior to submission of the planning application.

In June 2010 the Cambridgeshire Quality Panel held a review of the North West Cambridge site. The Panel concluded that there has been some dedicated, robust work behind the development of the plans to date and the aspiration to create a world class place to live and the desire to link the city with the proposed development is highly commended by the Panel. The ambition to build a sustainable community is supported by the Panel.

Further, in July 2010 a CABE Review of the North West Cambridge scheme was conducted. The CABE reviewers commented that the design team had presented a logical masterplan strategy for the Application Site which placed a clear emphasis on connectivity, landscape character and environmental sustainability. The reviewers felt that the mix and planning of uses has the potential to create a richness and vibrancy across the development.

Both of the design reviews informed the later development stages of the masterplan, and the illustrative masterplan set out in this Design, Access

2005 Masterplan

Copyright Getmapping plc

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

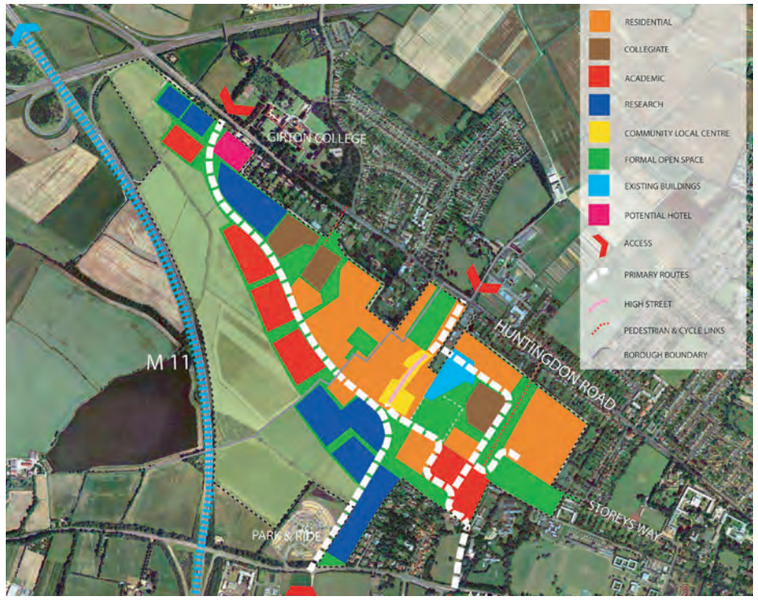
& Landscape Statement responding to issues raised by both panels.

This Design, Access and Landscape Statement addresses the key influences and underpinning principles of the masterplan, as established in numerous consultation exercises and as informed by the policy development over time. The detail of the consultation and engagement undertaken by the University is set out in the accompanying Statement of Community Involvement.

Masterplan Consultation
We set out below some examples of how the iterative, inclusive process above progressed through developing principles, articulating them in draft masterplan proposals, engaging with the community upon those

2005 - Masterplan Framework - Option 1

Copyright Getmapping plc



2005 - Masterplan Framework - Option 2

Copyright Getmapping plc

2005 - Masterplan Framework - Option 3

Copyright Getmapping plc

proposals and then revising proposals in response to consultation.

2005 Masterplan Framework
The initial masterplanning process, involved a fully transparent engagement process through a series of interactive and participatory workshops and public events. A number of early parameters were identified to inform the masterplanning process. This included an initial understanding of constraints, including the geological SSSI. The scheme also ensured it reflected good neighbour principles, by focussing on the need to minimise the impact of the development along the existing built up edges (particularly Huntingdon Road) through sensitive, low rise development.

At this stage the 'circus' was created as a distinctive road network feature in the urban form within the centre of the Application Site, framing the SSSI. The focus on access also included linkages to Huntingdon Road, Madingley Road and Storeys Way.
Views into and out of the development were assessed in design terms, and it was established that key views into the Application Site were restricted to a number of long distance experiences principally from vehicle traffic. The scheme also assessed the relationship of development to the M11 to provide an effective noise barrier and to maximize open space within development, in so doing providing accessible and high quality open space throughout the development and focusing non-residential development on the western built edge. As part of this, early landscape principles were established, which focussed on the importance of a new quality urban edge to the city, close to the M11 that would act as the gateway to the city from the west.
The indicative Masterplan Framework was generated through a series of workshop sessions and public forums/exhibitions held in January and March 2005. Building on the issues and parameters emerging from the first workshop, initial development options were produced by participants at the second workshop sessions and subsequently refined by the consultant team. These are illustrated below and represent different approaches to development based on an assessment of key environmental, planning and transport issues by participants at the workshop.

2006-7 Issues & Options Testing

Following the publication of the Issues and Options Consultation AAP on North West Cambridge, the University held a technical workshop in December 2006 with officers from Cambridge City Council, South Cambridgeshire District Council, Cambridgeshire County Council and Cambridgeshire Horizons. The objective was to investigate opportunities to develop the masterplan in light of the analysis in the North West Cambridge Area Action Plan Issues and Options Report and to reflect the University's developing thinking. The Technical Workshop was held to consider issues relating to the University's preferred option, Option 10.1, and collaboratively work with the Council to look at opportunities to resolve issues raised in the Issues and Options Report.

Amongst the key issues evolving from the workshops were the following:

- Development Form: The intention was to create a quality, sustainable urban extension to Cambridge which was well connected to the historic city core.
- Community Facilities: There are opportunities for co-location of community facilities, and a need for a community focus within the Application Site to unite the different parts of the development.
- Consideration should be given to how the community facilities on the Application Site relate to those provided at NIAB.
- Open Space & the Girton Gap: The proposed open space forming the Girton Gap from the September 2005 masterplan is too large and creates two separate communities in the proposed development. There are opportunities to reduce the gap and bring both sides of the new development closer together, whilst still respecting the concept of an open space corridor within the development. The corridor will include the SSSI, but does not need to be a straight north/south corridor. There are opportunities to pull the development line closer on both the eastern and western sides of the gap.
- M11 Edge: The M11 edge will project an identity for Cambridge. However, most people viewing the development from the M11 will not actually be entering Cambridge, and it is important to make a statement about Cambridge's status and identity to passing vehicles. It will be possible, either through built development or possibly land forms, to create a distinct identity along the M11 edge.

Following on from this workshop, further design testing was undertaken on the central green space. This testing, which was presented to the Councils, retained the orbital structuring routes and green space, but also introduced linking development to reduce the scale of the 2005 masterplan green space. This work helped inform the revisions to the Councils' draft Preferred Options AAP footprint, which was presented to members for approval. At this meeting, councillors expressed concerns about the scale of the gap and a redrawn version excluding the gap was drawn and agreed during the Council session. This modified footprint was been retained in the Councils' Submission Draft AAP.

2008 Area Action Plan - Examination Plan

Copyright Getmapping plc

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

2007 - 2008 Masterplan Refinement

The 2007/2008 plan underpinned the University's representations to the Area Action Plan Public Examination. A key element of the 2008 masterplan was a review of existing densities across the Application Site and review of the open space provision, in order to allow for the development required, at a scale of density appropriate to the development's surroundings and to Cambridge. The 2008 plan placed a greater focus on the open space network and the new urban edges, focussing the need for better connections and the creation of a high quality frontage and noise buffer. The role of green infrastructure was heightened, focussing on the need to link and enhance valuable habitats and important species populations within and outside the Application Site, and to link the city to the countryside.

The masterplan also focussed on the need to respect and enhance the main features, including the geological SSSI and ecological assets at specific locations.

The plan also established the primary road structure consisting of an east-west central spine allowing for even distribution, and the strategic north-south public transport priority route.

Copyright Getmapping plc

2009 Plan

2009 Plan

The North West Cambridge Area Action Plan, adopted in October 2009, identified a new boundary for development which expanded the development footprint and provided a series of detailed sustainability and energy standards for the scheme.

The University's 2009 plan reviewed the principles that had evolved over time. The plan optimised development capacity and began to address the detail of the masterplan, overhauling many elements to establish a workable series of parameters. The design creates a well defined central open space on a similar scale to that of Parker's Piece in central Cambridge, establishing a new central open space for North West Cambridge. A stronger series of structuring principles were established to define frontage to the central open space and by introducing the key pedestrian and cycle route - the Ridgeway.

The 2009 plan reinforced the existing landscape structure with a series of landscape threads running from north of the Application Site into the Western Edge. These threads will function as Sustainable Urban Drainage Systems corridors, areas for ecological habitats and biodiversity and provide space for informal recreation and play spaces. A series of further testing of open space elements also took place at this stage in the plan development process.

Copyright Getmapping plc

2011 Illustrative Masterplan

2011 Illustrative Masterplan

Since the AAP boundary was fixed by the adoption of the AAP in October 2009, further design development and refinement of the masterplan have led to land use proposals, including residential, academic and commercial research space, community facilities, and landscaping proposals. In particular, detailed capacity and 3-dimensional studies have informed a comprehensive understanding of land use distribution and potential character. An additional series of workshops with stakeholders and the public has also informed the current development proposals, and these are summarised in the accompanying Statement of Community Involvement.

The 2011 plan sees a 'refresh' of elements of open space and green infrastructure provision, including further focus on the creation of the Western Edge as a distinctive landscape, establishing a high performance and multi-functional integrated landscape and the consolidation of the 'avenue of horse chestnut trees' and the new 'Ridgeway' as a primary pedestrian and cycle route. The focus on the local centre and its role as the heart of the development has been further clarified and cemented, the market square, foodstore, and the social and community infrastructure will ensure the development of a sustainable community.

Copyright Getmapping plc

2012 Illustrative Masterplan

The 2011 illustrative masterplan has rationalised the street network and makes best use of the limited number of access points, to create a sense of arrival when reaching the Application Site. Detailed testing of plots and the careful balancing of housing versus apartments across the scheme as a whole has resulted in a refined distribution of uses and density profile. This has included consideration of the distribution of uses and open space within the local centre, documented in the illustrative masterplan section of the appendices.

2012 Illustrative Masterplan

Following feedback from the planning authorities, statutory consultees, the public and further detailed testing, the Application Parameters were revised to address issues raised in the consultation. The 2012 illustrative masterplan has been refined to test these principles. The main areas of change include further design evolution along the Western Edge to address issues of drainage, landscape and ecology, as well as revised illustrative proposals for the local centre.

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023305 (2010)

A4.4. Responding to Influences

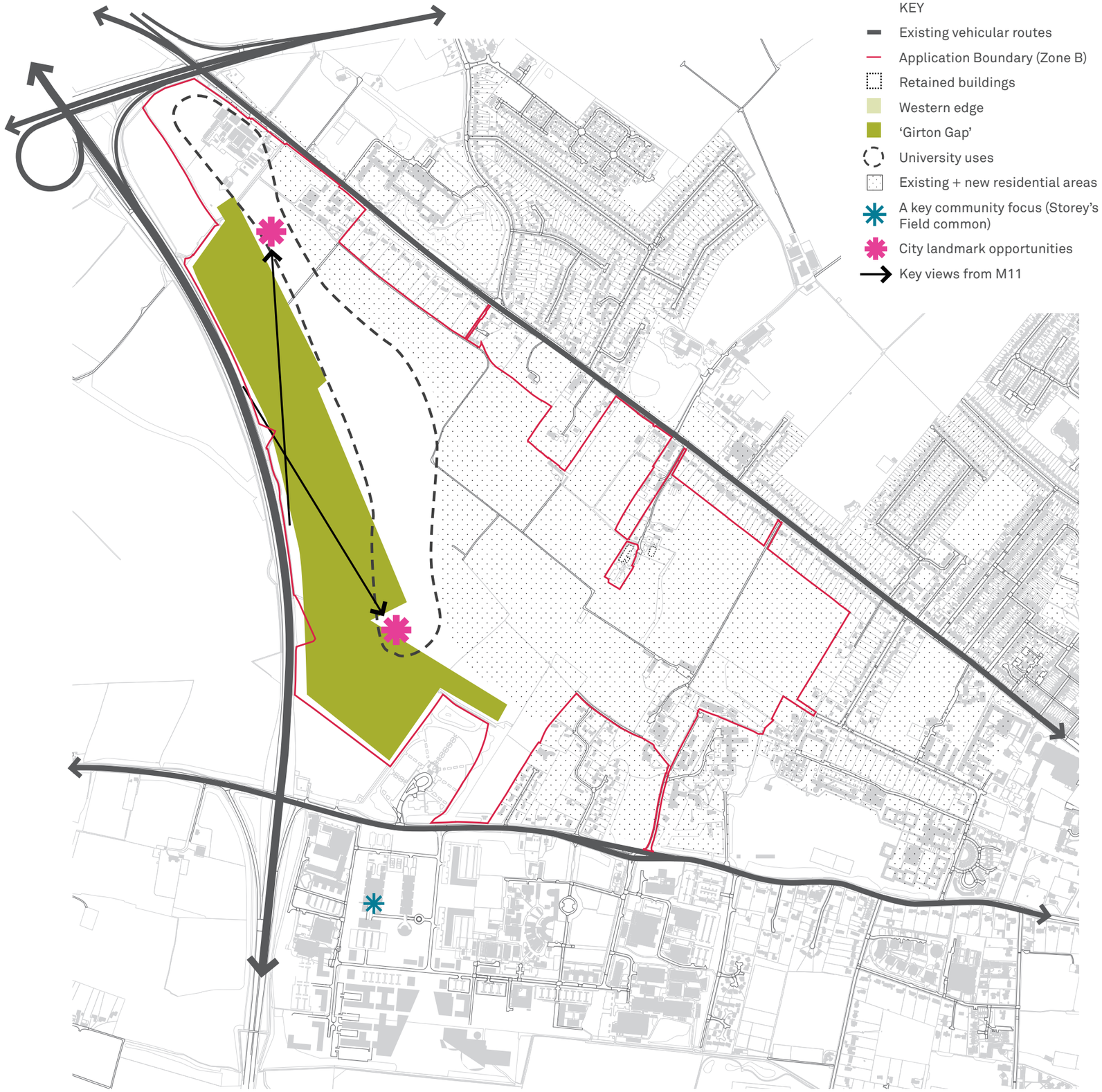
The Proposed Development will respond to the core principles, vision and influences to directly inform the development parameters.

The Girton Gap – Storey's Field

- The 'Girton Gap', should run north to south through the Application Site and form part of the retained green belt as part of the landscape principles. This strip of Open Land currently exists and would be incorporated into the Proposed Development as a strategic separation between Cambridge and Girton.
- The Girton Gap would perform the function of a space that serves to connect communities within the Proposed Development.
- Storey's Field, the central section of the Girton Gap would become the central open space focus for the Proposed Development, providing a new urban park for Cambridge on a scale with Parker's Piece.

The Girton Gap - Storey's Field

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)



The Western Edge

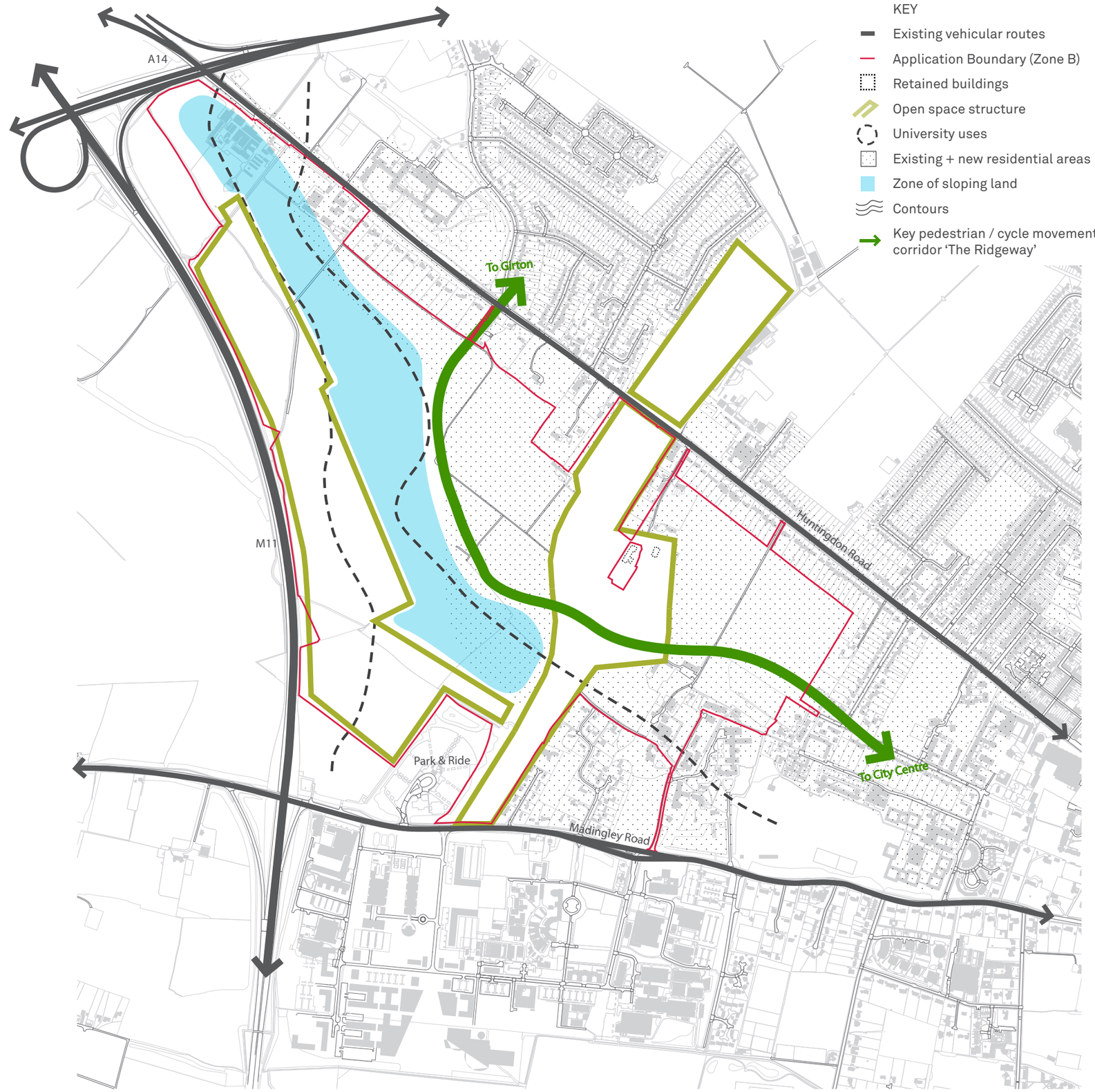
This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

The Western Edge

- Built development should be set back from the M11 and a major linear area of Primary Open Land will be established – "the Western Edge".
- Within and adjacent to the Western Edge, the development of the Application Site should incorporate a range of landscaping features and the optimisation of building massing.
- University and College uses may be located adjacent to the Western Edge. These buildings could shelter proposed and existing lower density residential uses behind from any wind borne noise from the M11.
- This University edge could provide a new landmark frontage, and thus a prominent edge to Cambridge.
- Landscape treatment within the Western Edge should help provide a distinctive setting for the proposed University uses, which together and in turn, should form a strong visual statement about the Proposed Development.
- There would be opportunities for landmark buildings at the northern and southern ends of the University Edge to respond to the views from passing traffic on the M11.

Topography - Making use of the Ridgeline

- A new strategic pedestrian cycle route should be located along the ridgeline of the slope. This route, as it follows the contours and remains on flatter land will enable cycle movement.
- The route should connect Girton village, via Huntingdon Road, through the Application Site to Storey's Way and the city centre.
- This primary pedestrian and cycle route would be known as The Ridgeway and will be one of the key elements of the Proposed Development.
- The University uses create the University Edge below the ridgeline on the sloping land of the Application Site. The topography here would enable the car parking for these uses to be hidden within semi-basements so allowing efficient use of the land at surface level.
- The slope would also assist the development of the proposed Sustainable Urban Drainage Systems (SUDS) intended to be integrated throughout the Proposed Development.
- Inclusion of SUDS within the Proposed Development would sustainably improve natural drainage, lessen the pressure upon existing 'traditional' urban drainage systems, and provide new ecological and wetland habitats and resources for the environment, wildlife and community.



Topography

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

Landscape Integration

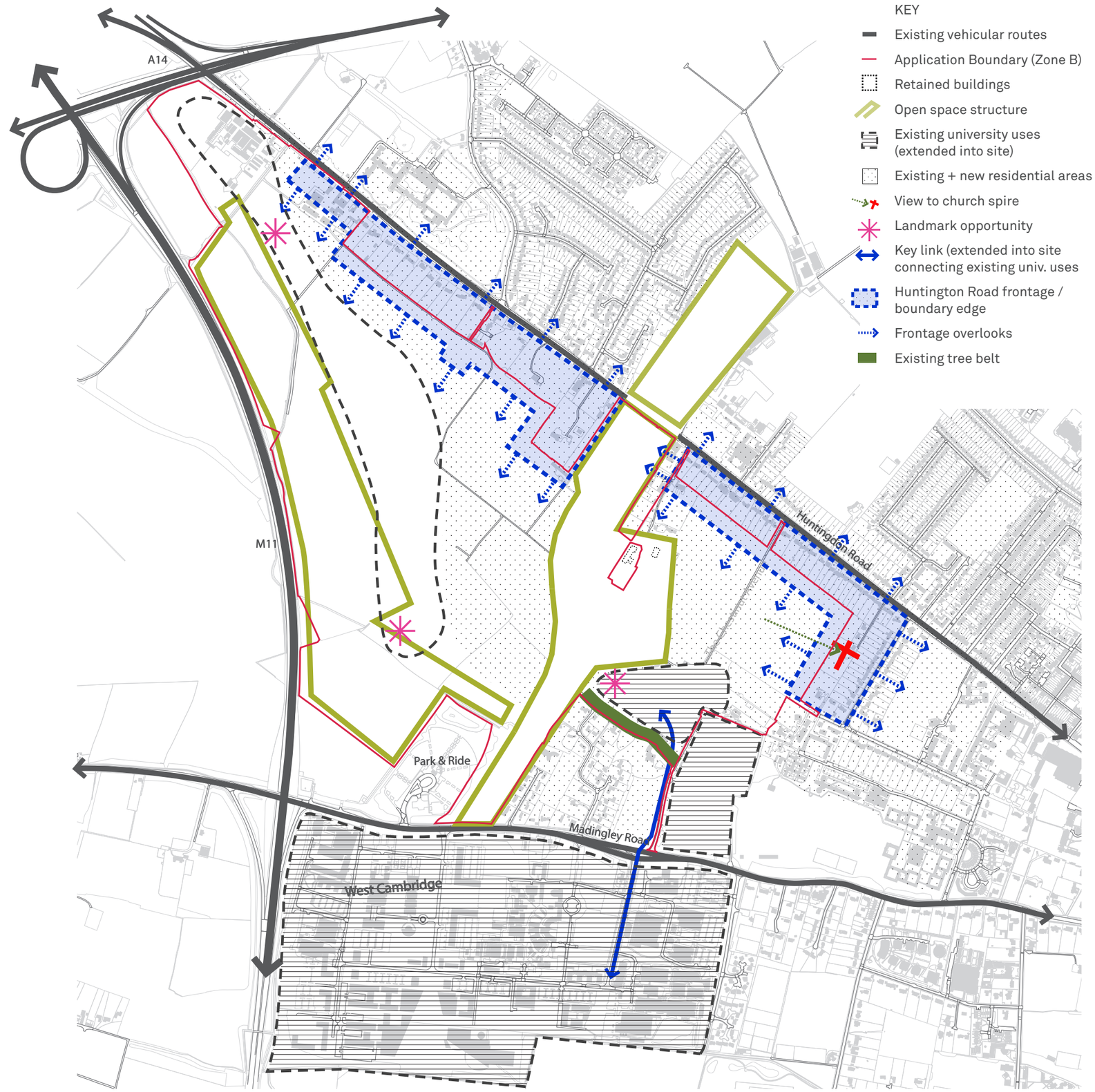
This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

Landscape Integration

- Green corridors running east to west could be formed through the University Edge (downhill of the Ridgeway), to provide connections between the residential areas and Primary Open Land.
- These corridors would provide access, and help provide long distance views both from within the Application Site to the open countryside to the west and from that countryside across the Proposed Development.
- This Primary and Secondary Open Land should be developed and laid out to ensure that existing features – the SSSI, existing woodland, the Chestnut Avenue, hedgerows and mature trees – are integrated and retained within the proposed new landscape setting.
- The overall objective would be to secure and integrate existing landscape assets while enhancing ecology and biodiversity.

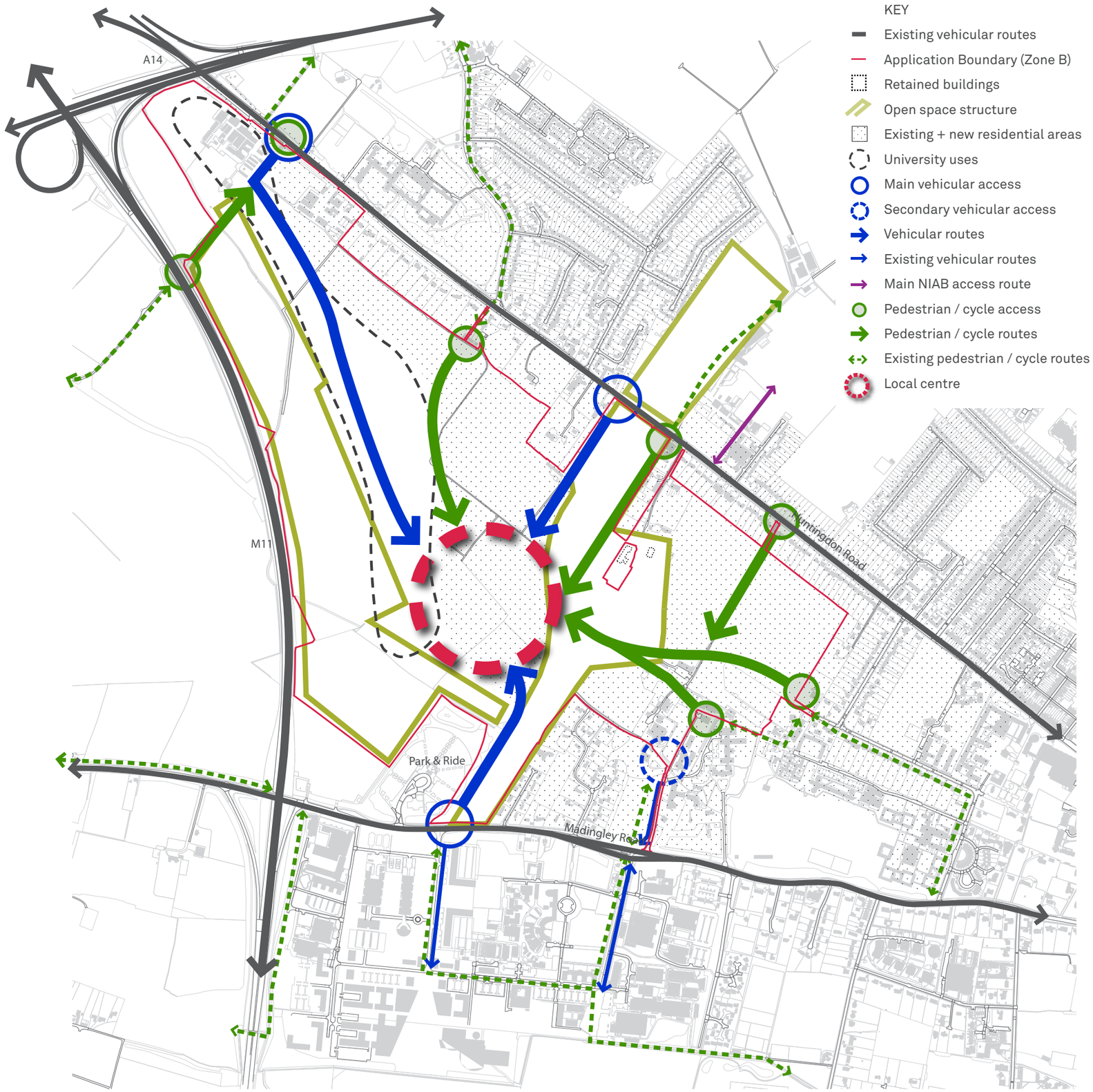
Surrounding Uses - Being a Good Neighbour

- The Proposed Development will respect existing uses, creating a special boundary edge condition to the north and east of the Application Site.
- The Proposed Development respects the scale of existing properties in the area and creates like-minded development that backs onto existing properties on Huntingdon Road, Storey's Way and All Souls Lane.
- The Proposed Development extends and reinforces existing University uses at the southern edge of the Application Site. A new academic cluster will be formed (combing existing and new development) at Madingley Rise, in the southern section of the Application Site.



Surrounding Uses - Being a Good Neighbour

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)



Integrating Existing Access Points

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

Integrating Existing Access Points

- The vehicle access points into the Application Site would be limited to two off the Huntingdon Road, one off Madingley Road and a secondary access from Madingley Rise.
- The Proposed Development would make best use of the limited number of access points to create a real sense of arrival when reaching the Application Site and reinforce pedestrian and cycle connections between the Application Site and the surrounding area.
- The primary and secondary routes through the Application Site, both vehicular and cycle routes, should converge at the local centre at the heart of the Proposed Development and include a corridor with public transport priority. This would reinforce the local centre to make a highly accessible location for all modes of transport not only to residents of the Proposed Development but also areas outside the Application Site.

Access and servicing principles are discussed further on the following pages.

Pedestrian / Cycle access
Pedestrian / cyclist access to the Proposed Development and the surrounding area is an important link between the Application Site and surrounding areas and central to the sustainable transportation offering of the Proposed Development. Specifically:

- connections with Huntingdon Road to the north-east are to be provided at five locations:
  - along the orbital site vehicular access route to the Eastern Huntingdon Road access by a combined cycleway / footway with cyclists transferring to an on-carriageway facility on the approach to the junction;
  - along the radial site vehicular route to the Western Huntingdon Road access by a combined cycleway / footway with cyclists transferring to an on-carriageway facility on the approach to the junction;
    - at the northern end of the Ridgeway cycleway, located on Huntingdon Road opposite the Girton Road priority junction by a combined cycleway / footway;
    - Bunkers Hill, located opposite the Whitehouse Lane priority junction, by a combined cycleway / footway;
    - to the south of Howes Place priority junction by a footway-only connection.
- connections with Madingley Road to the south are proposed at two locations:
  - along the radial site vehicular access route by a combined cycleway / footway with cyclists transferring to an on-carriageway facility on the approach to the junction;
  - along Madingley Rise by a combined cycleway / footway;
- a connection to Storey's Way to the south-east by a combined cycleway / footway; and
- enhancements are to be made to the M11 pedestrian underpass to improve access to the countryside.

The Ridgeway, a cycleway / footway, will provide a link through the Proposed Development between Storey's Way through to Huntingdon Road, opposite Girton Road. The Ridgeway will connect to local areas of the Proposed Development, and further lower hierarchy cycleway / footways through the development to increase permeability and connectivity. This Ridgeway route will assist both existing and proposed cycle and pedestrian movement through the area by providing improved direct connectivity between major generators and attractors.

Vehicle Access
Vehicular access to the Development and the surrounding area will be met through three general vehicular accesses to the Proposed Development and one limited vehicular access point. These are:

- Huntingdon Road East - to the north-east to Huntingdon Road, a traffic signal controlled junction access to provide access to the south, and the NIAB Development to the north;
- Huntingdon Road West - to the north-west on Huntingdon Road, a traffic signal controlled junction;
- to the south on Madingley Road ("Madingley Road West"), adjacent to the Park and Ride, a crossroad traffic signal controlled junction to provide access to the north, and to the West Cambridge Development to the south.
- to the south on Madingley Road, at Madingley Rise, a new toucan crossing).

The location of the Huntingdon Road West and Madingley Road West access points to the Proposed Development have been carefully set to intercept the maximum number of development-bound trips on the strategic highway network before these trips travel through the residential areas of Cambridge, thus minimising the impact of the Proposed Development on the local highway network.

All routes within the Proposed Development will be designed to accord with the principles of the Department for Transport's suite of documents *Manual for Streets*, design guidance to reduce the attractiveness of these routes as rat-runs, by reducing vehicle flows by restricting speeds to 20mph and incorporating suitable high-quality passive speed management measures.

Public Transport access
The bus access through the Proposed Development will generally reflect the vehicular access as identified above and enable existing and future bus routes passing along Huntingdon Road and Madingley Road to pass through and serve the Proposed Development.

A bus gate is proposed on the Huntingdon Road – Madingley Road Link Road in the centre of the Proposed Development to be provided in the early stages, to prevent traffic from taking a direct route between Huntingdon Road and Madingley Road (although an alternative, longer and less attractive route would be available for all vehicles).

Additional bus priority could be provided by the use of Selective Vehicle Detection (SVD) technology at traffic signals controlling the entrance to the Site from Madingley Road and Huntingdon Road. This would detect approaching buses, and alter signal phases accordingly to ensure the minimum of delay to the bus.

A range of infrastructure improvements for pedestrians, cyclists, public transport and vehicles will:

- deliver quality cycle and pedestrian connectivity throughout the Development;
- enhance pedestrian and cyclist safety off-site ;
- deliver connections to important local destinations - such as the secondary school to the north of Huntingdon Road, the employment opportunity to the south of Madingley Road, and towards the facilities within the City;
- significantly enhance the existing pedestrian and cycle provision to the surrounding area by providing direct routes across the Development;
- overall, preserve and enhance the attraction of pedestrian and cyclist modes of travel.

Utility Corridors

The Application Site is well located to take advantage of utility connections that serve the existing residential area that surrounds the Proposed Development. There are existing gas, water, electric and telecommunications services running within Huntingdon Road and Madingley Road, which are situated close to the northern and southern boundary of the Application Site.

The approach to utility provision is to run them along road corridors to avoid interference with private land interests and to enable ready long term access according to principles in the New Roads and Street Works Act in the event of need for repair and replacement.

Access Principles: Huntingdon Road West

- The Huntingdon Road West junction will provide the main vehicle route into the Application Site from Huntingdon Road, for car trips from outside of Cambridge.
- The access will provide links from the north west corner of the Application Site into the main heart of the Application Site and through to the local centre. It will provide the primary access for the academic and commercial research space intended for the southern built edge to the Proposed Development.

Access Principles: Huntingdon Road East

- The Huntingdon Road East junction is the main public transport link into the Application Site and also forms the link between the Application Site and the NIAB development to the north of Huntingdon Road.
- The junction would be located a suitable distance away from the agreed NIAB access junction (to the east) and also be located in an appropriately given the open land to be included within the Application Site immediately south of Huntingdon Road.
- The access would facilitate public transport and pedestrian movements, and enable ease of access for cyclists.

Access Principles: Madingley Road West

- The Madingley Road access would be located provided adjacent to the Park & Ride, and border the Ridge & Furrow field.
- The Madingley Road access will be the main route into the Application Site from the south and is nearest to the local centre.
- The north-south route from Huntingdon Road to Madingley Road has been designed to enable public transport priority, and the junction at Madingley Road will accommodate public transport movements.
- Provision of good cycle access onto Madingley Road, as well as easy cycle crossing into West Cambridge onto High Cross Street are important design criteria for this access.
- The junction design would also enable through pedestrian movements.

Access Principles: Madingley Road East

- A secondary access is to be provided to the Proposed Development from Madingley Rise.
- This access will enable linkages between existing University departments and the proposed Academic Research neighbourhood at the south of Storey's Field.
- The access from Madingley Rise will provide limited access within the Application Site to serve research uses, and will not provide through vehicular access into the Application Site (though pedestrian and cycle links to the rest of the Application Site will be provided).
- The Madingley Rise/Madingley Road junction will remain largely unchanged, with the addition of a toucan crossing to facilitate pedestrian and cycle movements from the Application Site to Charles Babbage Road in West Cambridge (to the south of Madingley Road).

Landscape Principles: Western Edge

- Enable the peak flows downstream of the Application Site to be reduced for a range of return periods and for floodwater to be stored within the landscaped areas on the Western Edge of the Proposed Development
- Preserve existing features, including mature trees along the northern half of the Washpit Brook;
- Improve the visibility and accessibility of the Washpit Brook, through a realigned position adjacent to the proposed maintenance access track;
- Create new ecological habitats for water voles, amphibians and invertebrates in the form of steep banks and linear ponds along the route of the realigned Washpit Brook.

A4.5. Establishing the Development Parameters

Explanation of the design principles and concepts applied to the Proposed Development and how they have been embodied in the Development Parameters. These parameters reflect the influence of ongoing evolution of the proposals and statutory consultation.

The Development Parameters are designed to provide the framework within which the University's vision and core principles for the Proposed Development can be delivered.

The core principles as refined can be summarised by reference to the required Design, Access and Landscape Statement Headings as follows.

Amount (Development Description - see A5.1)
The amount of development proposed derives from a combination of:

- the University's need for academic, research, collegiate and key worker accommodation (see A1 above);
- the need for the community to be created by the Proposed Development to be sustainable and self-sufficient (see A4.2.2 and A4.2.5);
- the requirements of Policies NW5, NW8, and NW10 of the NWC AAP; and
- the need for the Proposed Development to be viable and self-financing.

Scale (Parameter Plans 04, 05 and 06 and related text)
The scale of the Proposed Development is intended to be a direct response to:

- the importance of the Application Site as a gateway to Cambridge;
- the topography of the Application Site;
- the need to accommodate the requisite volume of development in a sustainable way whilst respecting Green Belt constraints;
- the importance of being a good neighbour to surrounding areas;
- the need to respect the setting of neighbouring listed buildings, conservation areas and important viewpoints;
- the requirements of Policies NW1, NW2, and NW4 of the NWC AAP;
- the importance of creating the opportunity for architectural variety, landmark and gateway buildings and a sense of place without being overbearing; and
- the anticipated space requirements of future occupiers of the development.

Layout (Parameter Plans 02, 03, 04, 05, 06 and 07)
The proposed layout of the Development is and is intended to be a response to:

- accommodating development of the requisite scale and amount within the Application Site in a sustainable way whilst recognising, Green Belt, topographical and flood storage influences;
- the importance of delivering a legible easily navigable development which facilitates orientation of and spaces between buildings;
- the desire to achieve neighbourhoods in which all day to day facilities can be within walking distance;
- the importance of avoiding built development in areas of particular sensitivity such as the Traveller's Rest Pit SSSI;
- the importance of accommodating built development, habitats for wildlife, sustainable drainage systems, flood storage and conveyance, open space and recreation facilities in an integrated and balanced manner;
- the importance of a layout which can evolve in time with the progress of the development whilst accommodating phased delivery of infrastructure, sustainable energy systems and access routes;
- creating a permeable pedestrian and cycle friendly development with linked public realm, movement corridors, open space and green corridors;
- the desire to work with the grain of the topography of the Application Site to avoid excessive cut and fill, to achieve a cut and fill balance and to achieve a permeable easily draining development;
- the desire to create a central green focus for the Proposed Development;
- the desire to create opportunities to develop three concentrations of commercial research activities with adjacent clusters of academic development along the western edge of the Proposed Development;
- the desire to create a nucleus of service development within a centrally located Local Centre which is in turn in easy reach of collegiate accommodation, and key worker and market housing;
- the desire to locate lower density development along Huntingdon Road and backing onto existing dwellings; and
- the desire to achieve a sustainable balance between the public realm and areas of private space.

Appearance
The appearance of the Proposed Development is intended to be a response to:

- the opportunities created by the layout, topography and location of the Application Site;
- the requirements of Policies NW2 and NW4 of the NWC AAP;
- the use of sustainable materials in a sustainable manner;
- the importance of being able to provide well designed yet economically constructed and affordable dwellings alongside landmark research and collegiate buildings;
- the University's commitment to creating sensitively designed sustainable, and architecturally distinguished buildings;
- ensuring that buildings are designed to meet requisite DDA and inclusivity standards;
- University's vision of a new university led quarter that is sensitive to its neighbours yet has its own prestigious, high quality character;
- the desire to incorporate renewable energy infrastructure into the fabric of buildings and of the wider development; and
- the desire to manage lighting in a way sensitive to the surrounding environment.

Landscape (Parameter Plans 03, 07 and 10)
The landscape of the Proposed Development is intended to:

- create a setting for the Proposed Development which highlights its status and reflects the sensitivity of the Application Site as a gateway to Cambridge;
- balance issues of residential amenity, drainage and engineering, and ecology to establish the principles for the Western Edge as the setting for the Proposed Development and the City;
- integrate built development, movement corridors, public realm, open land, recreational areas and wildlife habitat;
- reflect the requirements of Policies NW4, NW23, NW25 and NW29 of the NWC AAP;
- integrate the Green Belt and Girton Gap into the fabric of and grain of the Proposed Development;
- retain a green corridor parallel to the M11 to provide a landscaped north western edge to Cambridge;
- retain important trees, species rich hedgerow and to avoid prejudice to the Travellers' Rest Pit SSSI;
- integrate play areas and sports fields with informal landscape; and
- create a high quality public realm for the Proposed Development.

Access (Parameter Plan 02)
Access to the Proposed Development is intended to reflect the following principles:

- the creation of a pedestrian, cyclist and public transport friendly development;
- a balance between pedestrian permeable public realm with efficient movement corridors;
- the requirements of Policies NW11-NW19 of the NWC AAP;
- making use of existing accessways into the Application Site and creating any new accessways away from existing residential properties wherever practicable;
- ensuring that pedestrian movement corridors are designed to meet requisite DDA and inclusivity standards;
- ensuring that measures to avoid pedestrian/ vehicle conflict are managed in such a way as to maintain free movement but to give pedestrian appropriate priority; and
- enabling cross site pedestrian and cycle corridors to be well related to topographical features to meet secured by design standards and to reflect natural desire lines.

Distribution of uses:

Access to uses, relationship to adjoining uses

The Land Use Parameter Plan sets out the broad distribution of uses in the Proposed Development, with a mixed use local centre along the main public transport route from Huntingdon Road to Madingley Road. Main residential neighbourhoods back onto existing residential areas, and academic and/or commercial research areas are located on the development edge along the M11 and at the northern end of Madingley Rise. Collegiate development will support the local centre and also come forward towards the northern end of the Ridgeway.

Amount of development:

Amount of development proposed

The Description of Development sets out the maximum amount of development within the application proposals.

Layout:

Parameters setting out way in which buildings, routes, 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

Details of layout are reserved within the parameters set out in the Parameter Plans and Statements and Environmental Statement.

Scale:

Parameters for height, width and length of buildings in relation to their surroundings

Details of scale are reserved within the parameters set out in the Parameter Plans and Statements and Environmental Statement.

The Application proposals include minimum and maximum height, width and length parameters for buildings in relation to their surroundings, taking into account the likely use of each area and the potential building typologies.

Landscape:

Principles that will inform future treatment of spaces in terms of hard and soft landscaping, how landscaping will be maintained

Details of landscaping are reserved within the parameters set out in the Parameter Plans and Statements and Environmental Statement.

Appearance:

Principles behind intended appearance, how will inform final design

Details of appearance are reserved within the parameters set out in the Parameter Plans and Statements and Environmental Statement.

Access:

Access and how issues of access (both social &physical) have been considered through design process

Details of access are set out in the Application Plans and Parameter Plans in relation to the Huntingdon Road and Madingley Road corridors.

The Application Proposals include a full pedestrian, cycle and vehicular network which integrates with the existing networks and ensures ease of access to the site and within the Application Site.

A5
Application Proposals

A5. The Application Proposals

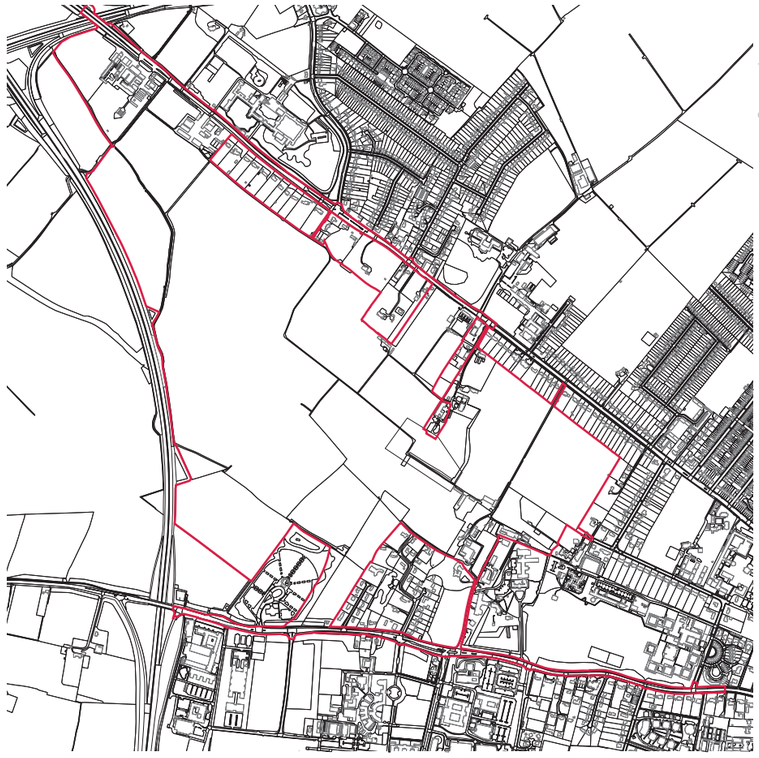
This section includes the Description of Development, Application Plans and the Parameter Plans forming the basis of the planning application for North West Cambridge.

The Proposed Development has been derived from an understanding of the Application Site context, the main influences, and importantly the University's need for development. For each of the Parameter Plans, the core principles are shown in relation to each plan.

Drawings are reproduced in the margin of Section A5 to indicate the Parameter Plans and Parameter Statements which have been (a) designed to reflect the relevant principles and (b) to set the framework for delivery of development in accordance with those principles. Where drawings are relevant to more than one parameter, they have been reproduced alongside that to which they are most relevant.

Appendix B1 builds further on the core principles using Cambridgeshire Horizons "four C's" headings: "Connectivity", "Character", Community and Open Space" and "Climate". In so doing, it indicates how, post permission, they might influence applications for approval of reserved matters.

Appendix B2 articulates, by reference to the most recent version of the illustrative masterplan one, but not the only, way in which those core principles might be delivered. It includes within it some illustrative design studies and alternatives considered in relation to the layout of the Proposed Development as well as indicative block layouts, street sections and SUDS corridors.



Application Plan 01 - Application Boundary

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

A5.1. Description of Development

The Planning Application seeks planning permission with details of appearance, landscaping, layout, scale and (save for the matters submitted in respect of zones A and C) access reserved within the parameters set out in the Parameter Plans and Statements.

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; up to 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 1,250 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)
- Works to Washpit Brook (including enlarged channel, storage area and flow control structure)
- Earthworks to provide revised ground contours
- Demolition of existing buildings and structures

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 sections of unsegregated footway/cycleway and provision of sections of on-carriageway cycleway on the southern side of Huntingdon Roadd
- 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
- Construction of sections of unsegregated footway/cycleway and provision of sections of on-carriageway cycleway on the northern side of Madingley Road
- 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

A5.2. Application Drawings

The Plans for Approval are:

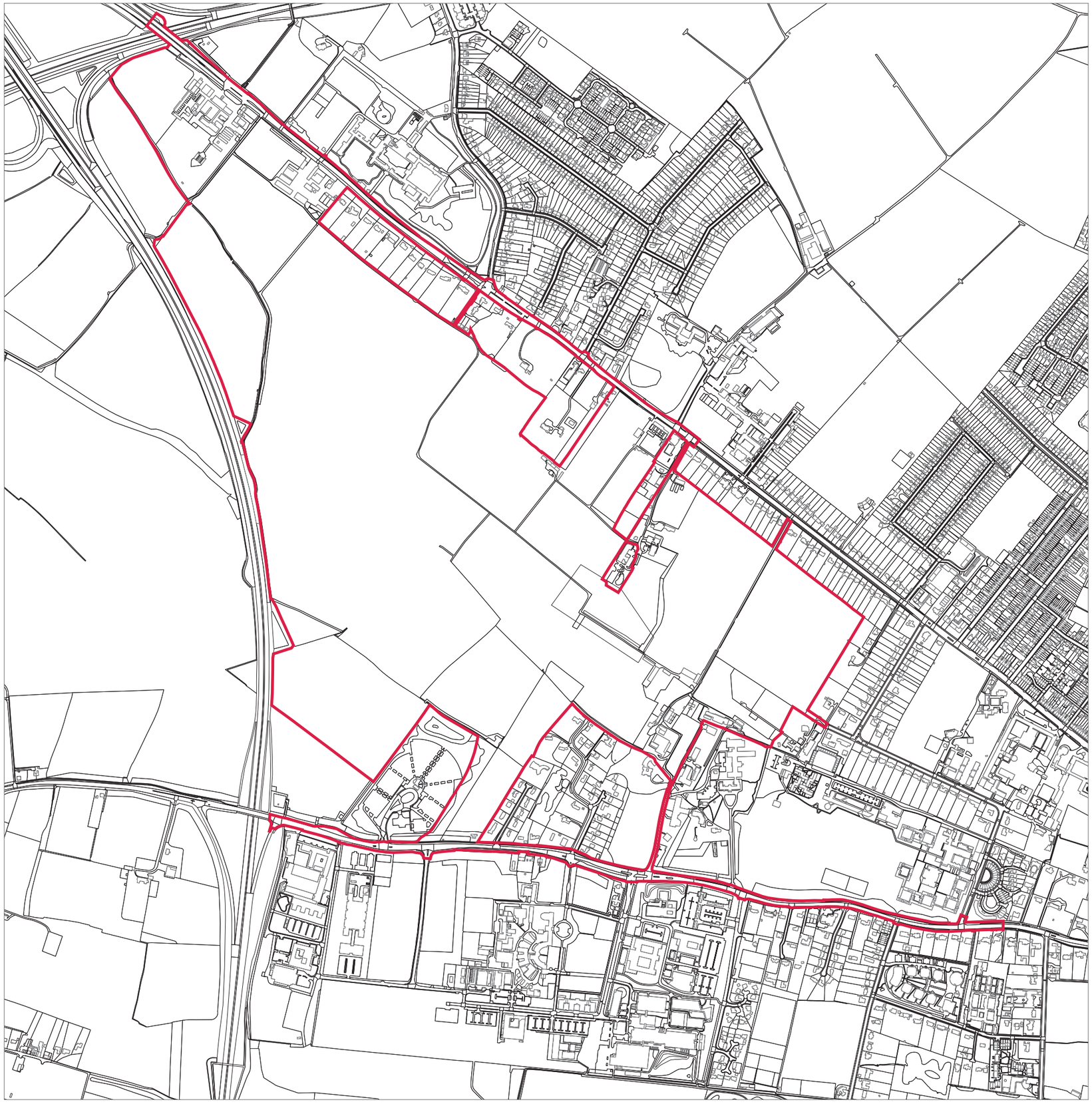
- Application Plan 01 - Application Site Boundary
- Application Plan 01A - Application Site Boundary South Cambridgeshire District Council
- Application Plan 01B - Application Site Boundary Cambridge City Council
- Application Plan 02 - Demolition Plan
- Application Plan 03 - Huntingdon Road Junction West
- Application Plan 04 - Huntingdon Road Junction East
- Application Plan 05 - Madingley Road Junction West
- Application Plan 06 - Madingley Road Junction East

The Parameter Plans are:

- Parameter Plan 01 - Zones
- Parameter Plan 02 - Access; Zone B
- Parameter Plan 03 - Open Land and Landscape Areas; Zone B
- Parameter Plan 04 - Land Use (Built Development and Ancillary Space); Zone B
- Parameter Plan 05 - Development Building Zones; Zone B
- Parameter Plan 06 - Building Heights; Zone B
- Parameter Plan 07 - Topography; Zone B
- Parameter Plan 08 - Highway & Utility Works on Huntingdon Road; Zone A
- Parameter Plan 09 - Highway & Utility Works on Madingley Road; Zone C

The Contextual Plans are:

- Contextual Plan 01 - University Ownership Plan
- Contextual Plan 02 - Existing Topography
- Contextual Plan 03 - Tree Preservation Orders
- Contextual Plan 04 - Huntingdon Road Junction West Contextual Landscape
- Contextual Plan 05 - Huntingdon Road Junction East Contextual Landscape
- Contextual Plan 06 - Madingley Road Junction West Contextual Landscape



KEY

For Approval:

Application site boundary

Application Plan 01: Application Site Boundary

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/APP/01 - Plan for Approval: Application Site Boundary

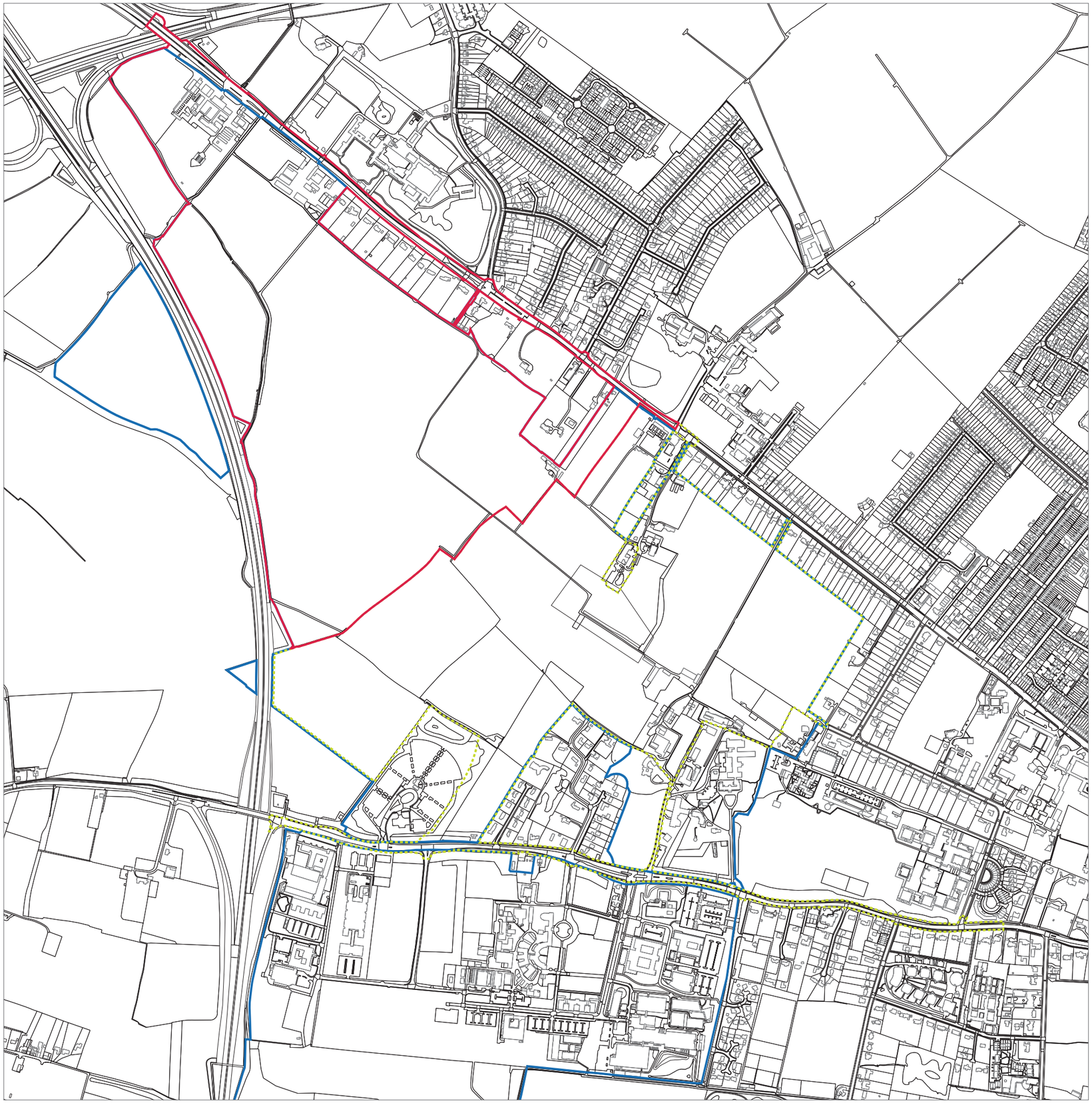
September 2011

UNIVERSITY OF CAMBRIDGE

0 10 50 100m

Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673



KEY

Contextual Information:

- Application site boundary Cambridge City Council
- University ownership boundary

For Approval:

- Application site boundary South Cambridgeshire District Council

Application Plan 01A: Application Boundary South Cambridgeshire District Council

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/APP/01A - Plan for Approval: Application Site Boundary South Cambridgeshire District Council

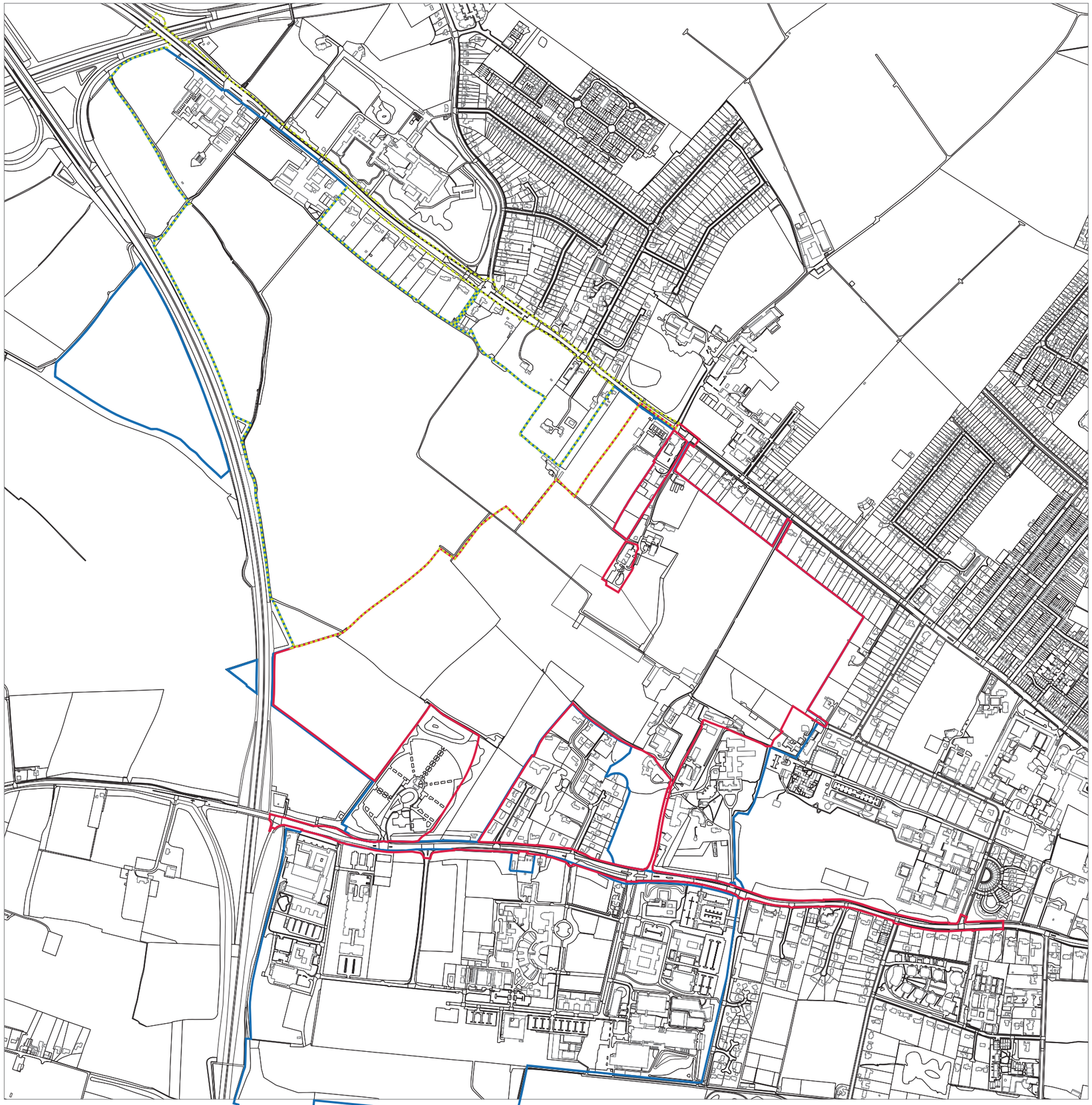
September 2011

UNIVERSITY OF CAMBRIDGE

0 10 50 100m

Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673



KEY

Contextual Information:

- Application site boundary South Cambridgeshire District Council
- University ownership boundary

For Approval:

- Application site boundary Cambridge City Council

Application Plan 01B: Application Boundary Cambridge City Council

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

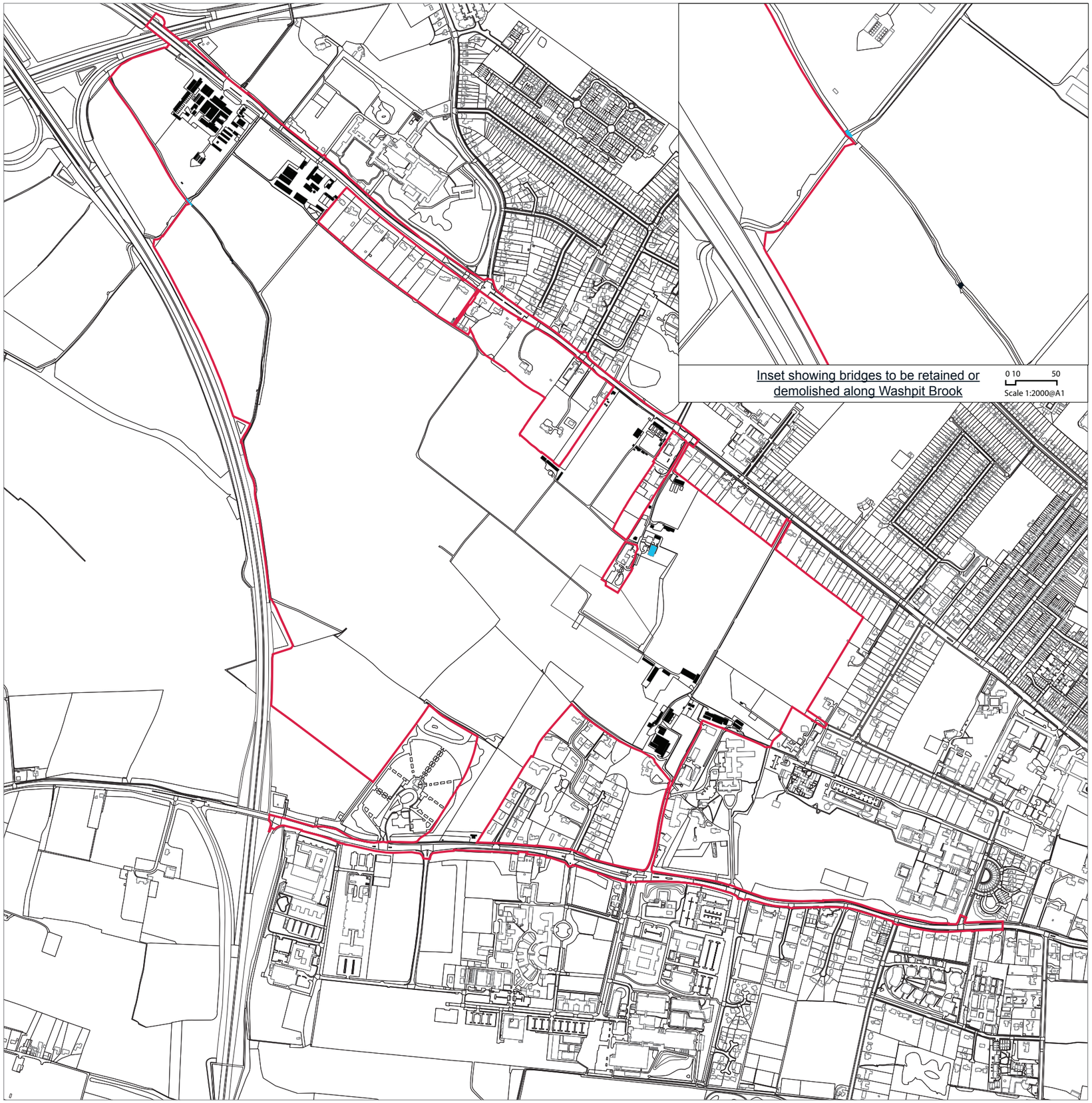
NWC/OPA/APP/01B - Plan for Approval:
Application Site Boundary Cambridge City Council

September 2011

UNIVERSITY OF CAMBRIDGE

0 10 50 100m
Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673



Inset showing bridges to be retained or demolished along Washpit Brook

0 10 50
Scale 1:2000@A1

KEY

For Approval:

- Application site boundary
- Buildings and bridges to be demolished
- Buildings and bridges to be retained

Application Plan 02: Demolition Plan

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

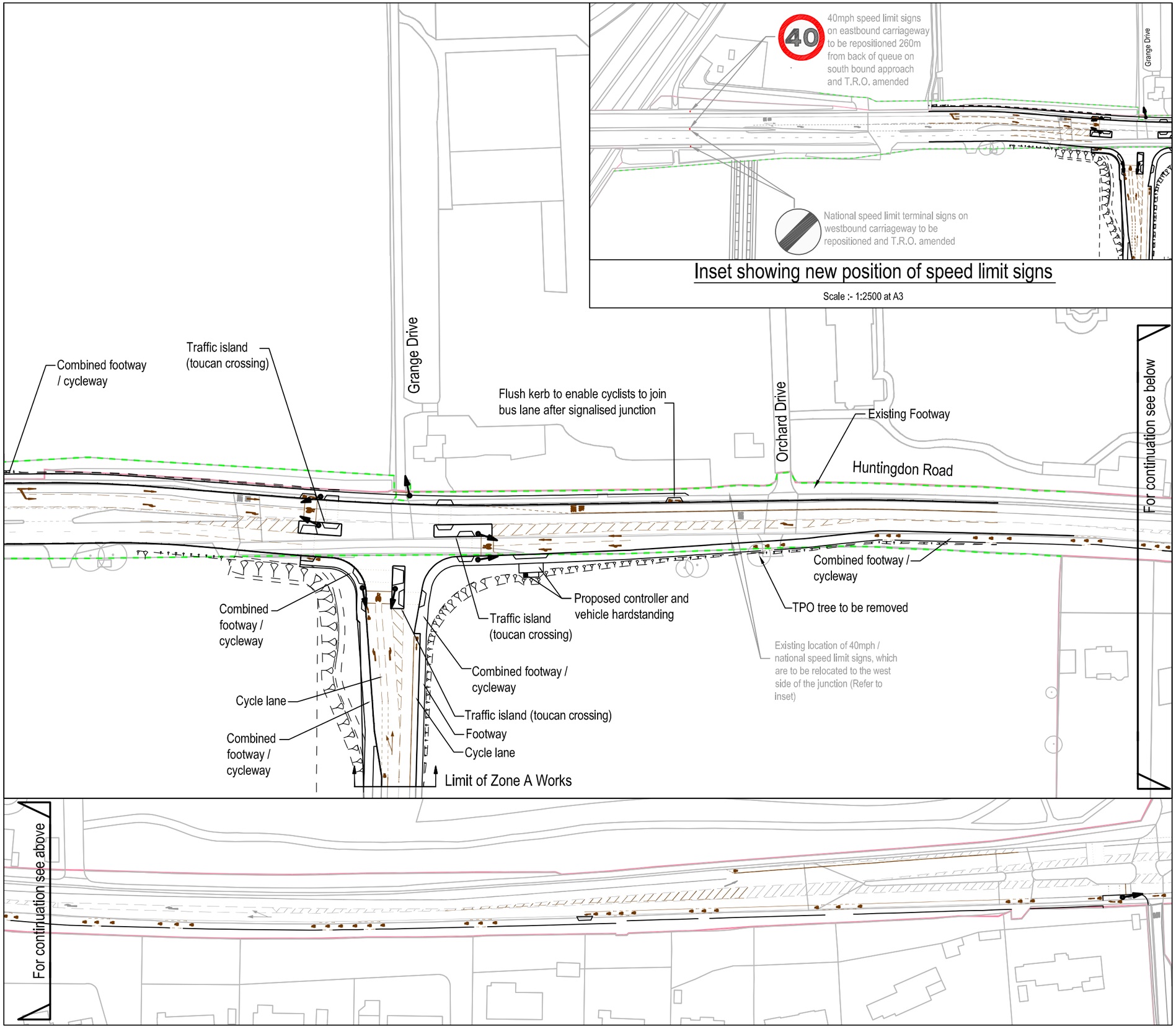
NWC/OPA/APP/02/A - Plan for Approval: Demolition Plan

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m
Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673



KEY

Contextual Information :

- Roadmarkings
- Highway land boundary
- Signal heads
- Flush kerbs

Carriageway works would be undertaken within the application site boundary wherever junction works are proposed and extend beyond the markings for junction works. The exact extent of carriageway works to be the subject of a condition.

For approval :

- Application site boundary
- Junction works

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/APP/03/A -

Huntingdon Road Junction West

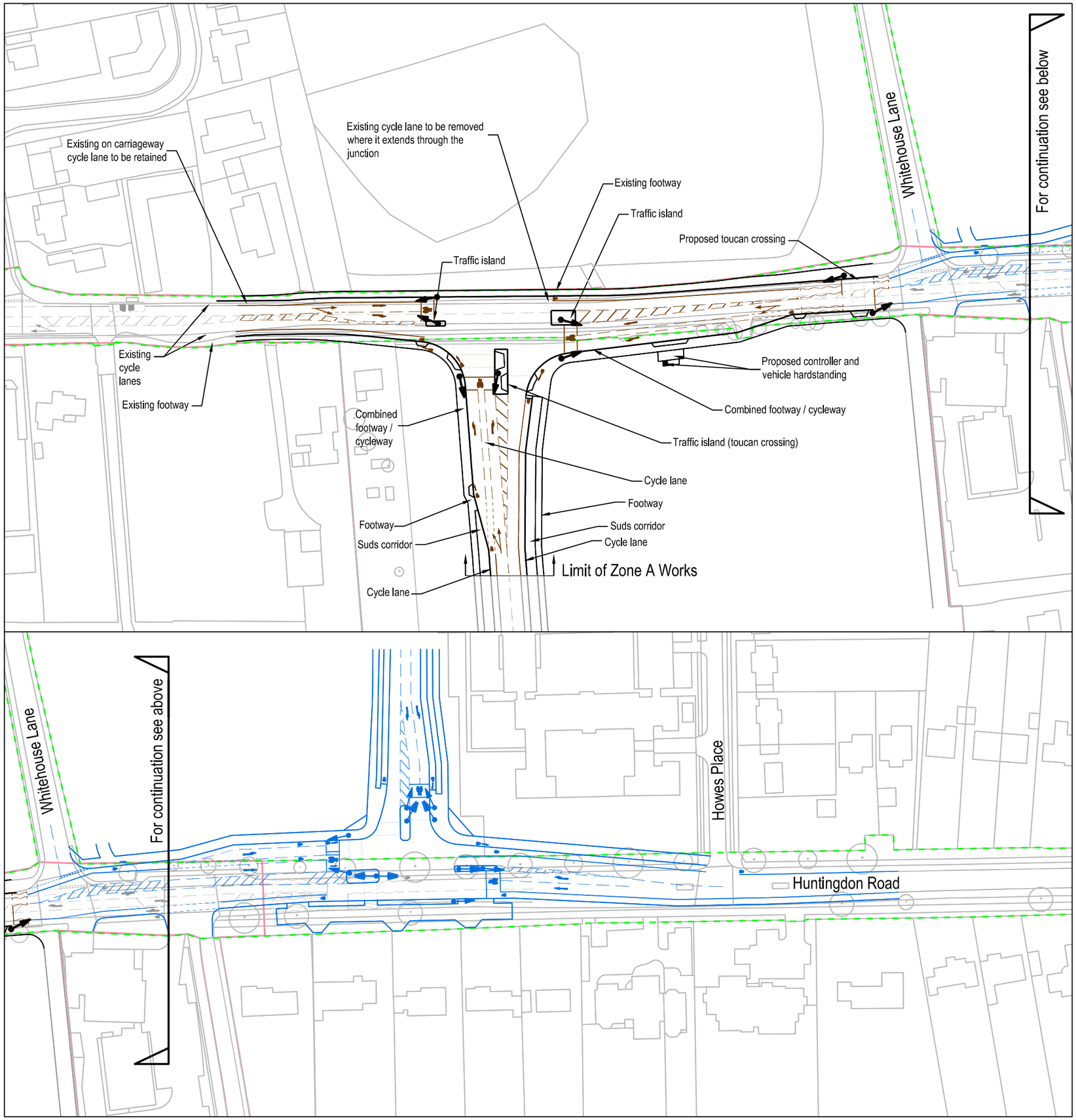
February 2012

UNIVERSITY OF CAMBRIDGE

0 10 20m

Scale 1:1250 @ A3

Reproduced from Ordnance Survey digital map data © Crown Copyright 2011. All rights reserved. Licence Number 0100031673



KEY

Contextual Information :

- Roadmarkings
- Highway land boundary
- NIAB site access
- Signal heads
- Flush kerbs

Carriageway works would be undertaken within the application site boundary wherever junction works are proposed and extend beyond the markings for junction works. The exact extent of carriageway works to be the subject of a condition.

For approval :

- Application site boundary
- Junction works

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

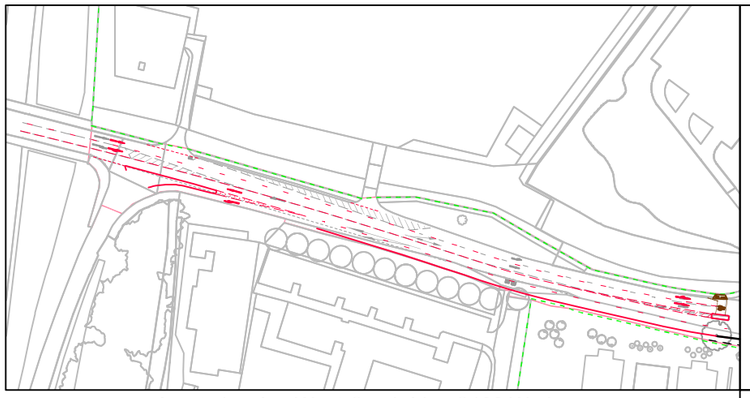
NWC/OPA/APP/04/A - Huntingdon Road Junction East

February 2012

UNIVERSITY OF CAMBRIDGE

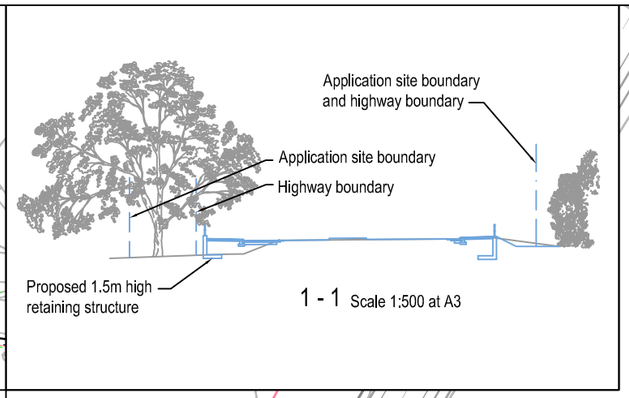
0 10 20m
Scale 1:1250 @ A3

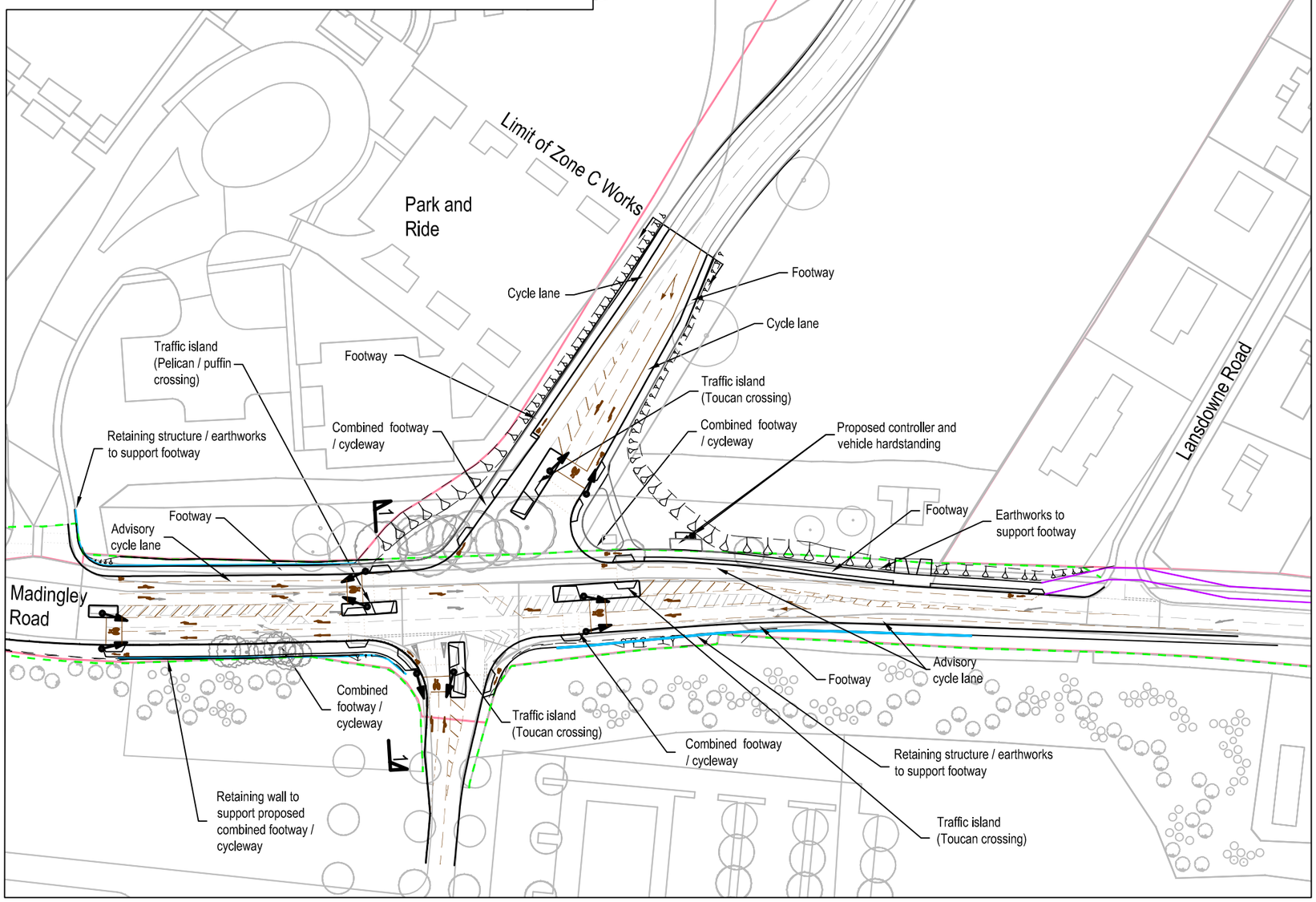
Reproduced from Ordnance Survey digital map data © Crown Copyright 2011. All rights reserved. Licence Number 0100031673



Inset showing West Cambridge S106 Works

Scale :- 1:2500 At A3





KEY

Contextual Information :

- Roadmarkings
- Highway land boundary
- West Cambridge Development S106 Works
- Cambridgeshire County Council Madingley Road Phase 1 Cycleway Scheme
- Signal Heads
- Flush Kerbs

Carriageway works would be undertaken within the application site boundary wherever junction works are proposed and extend beyond the markings for junction works. The exact extent of carriageway works to be the subject of a condition.

The footway/cycleway shown on this drawing includes (and seeks permission for) elements already forming part of Cambridgeshire County Council Madingley Road Phase 1 Cycleway Scheme. It is envisaged that those elements will be constructed by the County Council as currently proposed and that footways and/or cycleways newly proposed by the University will be tied into elements provided under that scheme. Details of any tie in would be for approval under condition.

The traffic signal infrastructure for the park and ride junction will be replaced as part of the proposals.

For approval :

- Application site boundary
- Junction works
- Retaining structure / earthworks to support footway

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/APP/05/A - Madingley Road Junction West

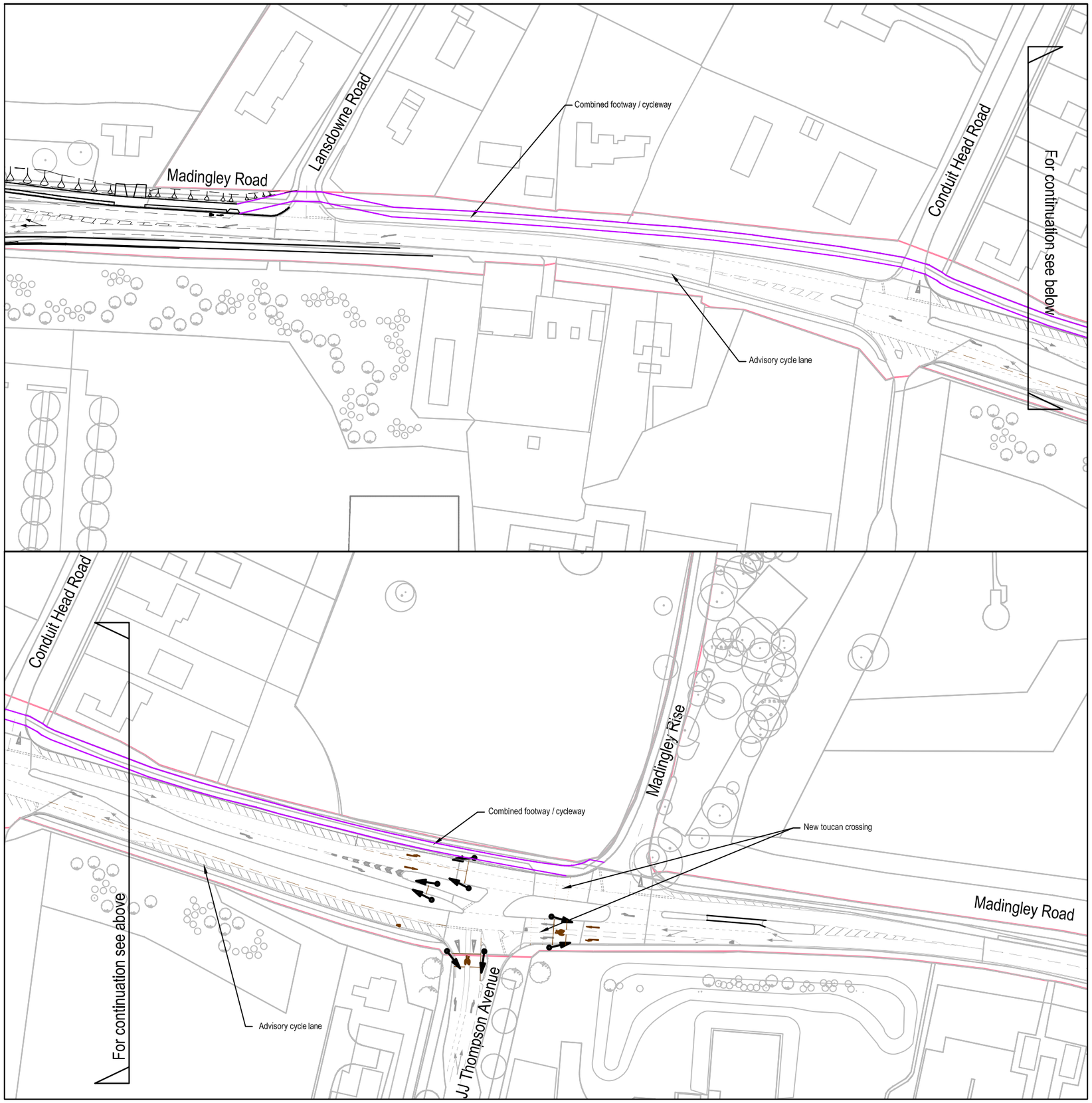
February 2012

UNIVERSITY OF CAMBRIDGE

0 10 20m

Scale 1:1250 @ A3

Reproduced from Ordnance Survey digital map data © Crown Copyright 2011. All rights reserved. Licence Number 0100031673



KEY

Contextual Information :

Roadmarkings

Cambridgeshire County Council Madingley Road Phase 1 Cyleway Scheme

Signal Heads

Carriageway works would be undertaken within the application site boundary wherever junction works are proposed and extend beyond the markings for junction works. The exact extent of carriageway works to be the subject of a condition.

The footway/cycleway shown on this drawing includes (and seeks permission for) elements already forming part of Cambridgeshire County Council Madingley Road Phase 1 Cycleway Scheme. It is envisaged that those elements will be constructed by the County Council as currently proposed and that footways and/or cycleways newly proposed by the University will be tied into elements provided under that scheme. Details of any tie in would be for approval under condition.

Pedestrian crossings and traffic signals to be provided by the University, unless provided beforehand by West Cambridge.

For approval :

Application site boundary

Junction works

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/APP/06/A - Madingley Road Junction East

February 2012

UNIVERSITY OF CAMBRIDGE

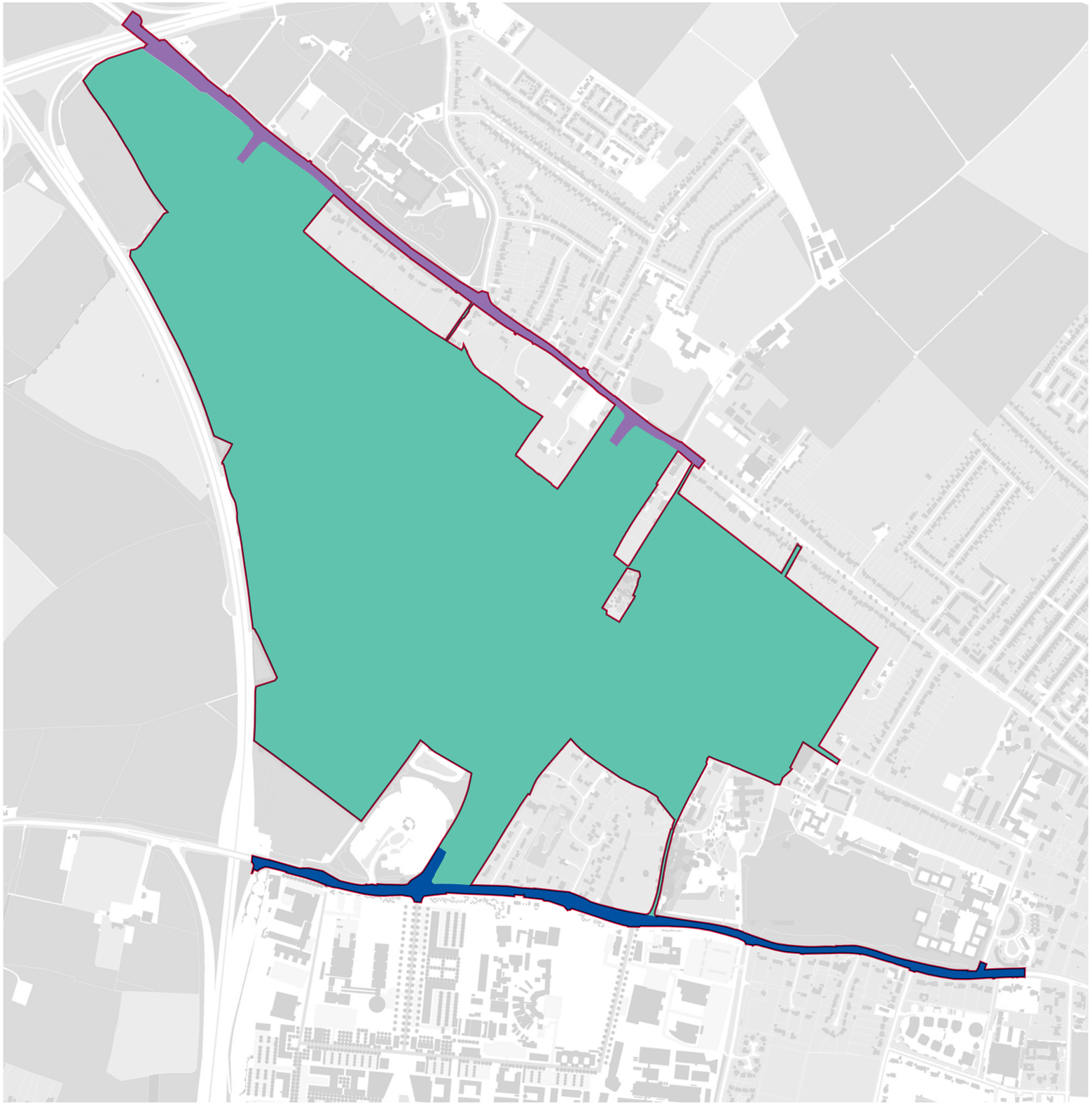
0 10 20m

Scale 1:1250 @ A3

Reproduced from Ordnance Survey digital map data © Crown Copyright 2011. All rights reserved. Licence Number 0100031673

Parameter Plan 01: Zones

Parameter Plan 01 identifies the three zones within the Application Site referred to in the Description of Development.



KEY

For Approval:

- Application boundary
- Zone A
- Zone B
- Zone C

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/PAR/01/A - Zone Parameter Plan

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m

Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673

Parameter Plan 02: Access; Zone B

Movement Corridors

Parameter Plan 02 identifies movement corridors within which primary vehicular routes, secondary vehicular routes, primary pedestrian/cycle routes and secondary pedestrian/cycle routes are to be constructed.

Land within any movement corridor not occupied by a primary and/or secondary vehicular and/or pedestrian or cycle route may be developed for any purpose for which any zone abutting or overlapping with that corridor may be developed. All vehicle routes will be speed limited to 20mph or less.

Primary Vehicular Routes

The Zones within which Primary Vehicular Routes may be constructed are shown on Parameter Plan 02. The lane width on any primary carriageway along any Primary Vehicular Route shall not exceed 3.65m.

Secondary Vehicular Routes

The Zones within which Secondary Vehicular Routes may be constructed are shown on Parameter Plan 02. The lane width on any secondary carriageway shall not exceed 3m.

Primary and Secondary Pedestrian/Cycle Routes

The carriageway width of any primary or secondary pedestrian or cycle route shall not be less than 2m or exceed 4m, except for the Ridgeway, which shall not be less than 2m or exceed 6m in width.

Pedestrian and cycle movement corridors within the Site and linking the Site to existing development in the surrounding area may be constructed within (but shall not be limited to) the areas shown on Parameter Plan 02, and may connect to areas outside the site at (but not shall be limited to) the pedestrian and cycle access points indicated in Parameter Plan 02.

Tertiary Routes

Tertiary vehicular and/or pedestrian/cycle routes may be constructed within any of the Building Zones indicated on Parameter Plan 05 for the purpose of connecting buildings and areas with Primary and/or Secondary Vehicular or Pedestrian/ Cycle routes. Tertiary pedestrian/cycle routes may additionally be constructed for the purpose of connecting buildings and areas with areas of open land or with other buildings.

The total carriageway widths of any Tertiary vehicular route shall not be less than 3.5m or more than 7m excluding any turning head, verge, footways, central reservations, visibility splays, passing places and pull-ins for bus stops. The total carriageway widths of any tertiary pedestrian/cycle route shall not be less than 2m or exceed 4m.

Access Points

There shall be no more than four general use permanent vehicular accessways into the Application Site when the Proposed Development has been completed.

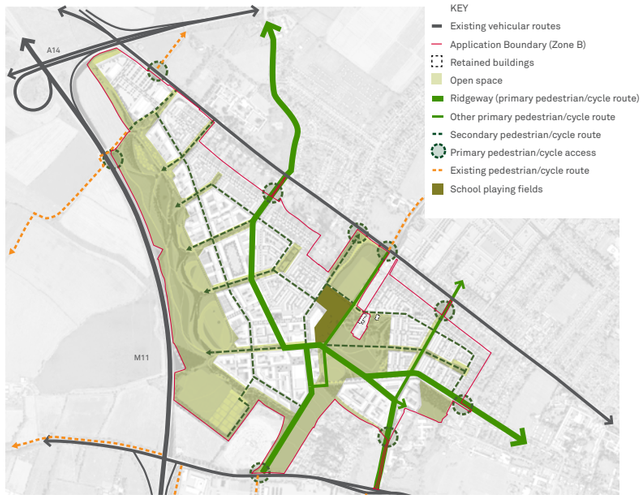
The principal points between which access may be gained into the Application Site shall be are indicated marked A-B; C-D; E-F and G-H on Parameter Plan 02 and set out in Application Plans 03-06.

Restricted Access Zone

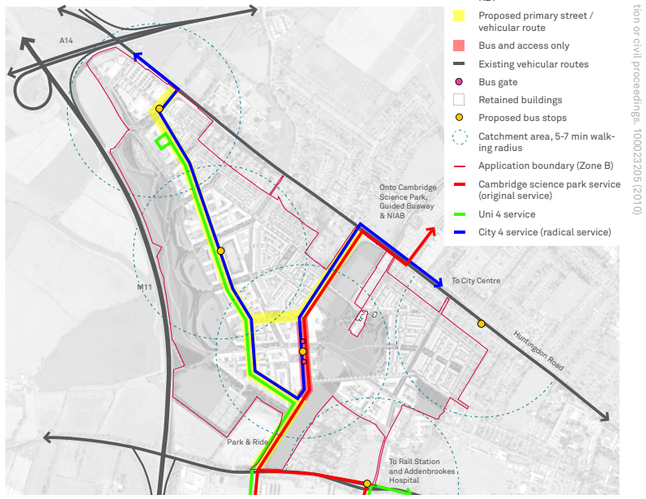
A restricted access zone will be created in the vicinity of the local centre within the zone indicated on Parameter Plan 02. Access to this zone will (at times of the day to be specified) be limited to pedestrians, cyclists, and public transport, service and emergency vehicles.

Market Square Pedestrianised Zone

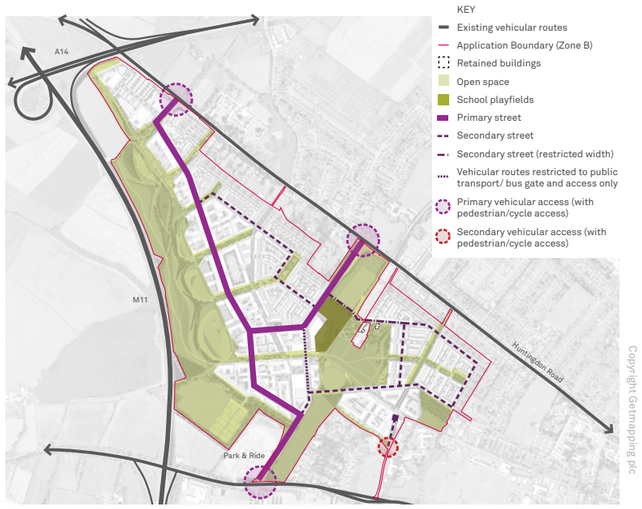
Within the Market Square Pedestrianised Zone, access will be limited to pedestrians, cyclists, service and emergency vehicles, except for access to designated car parking areas, where vehicle access will be permitted.



Principles Diagram - Pedestrian and Cycle Movement*



Principles Diagram - Public Transport*

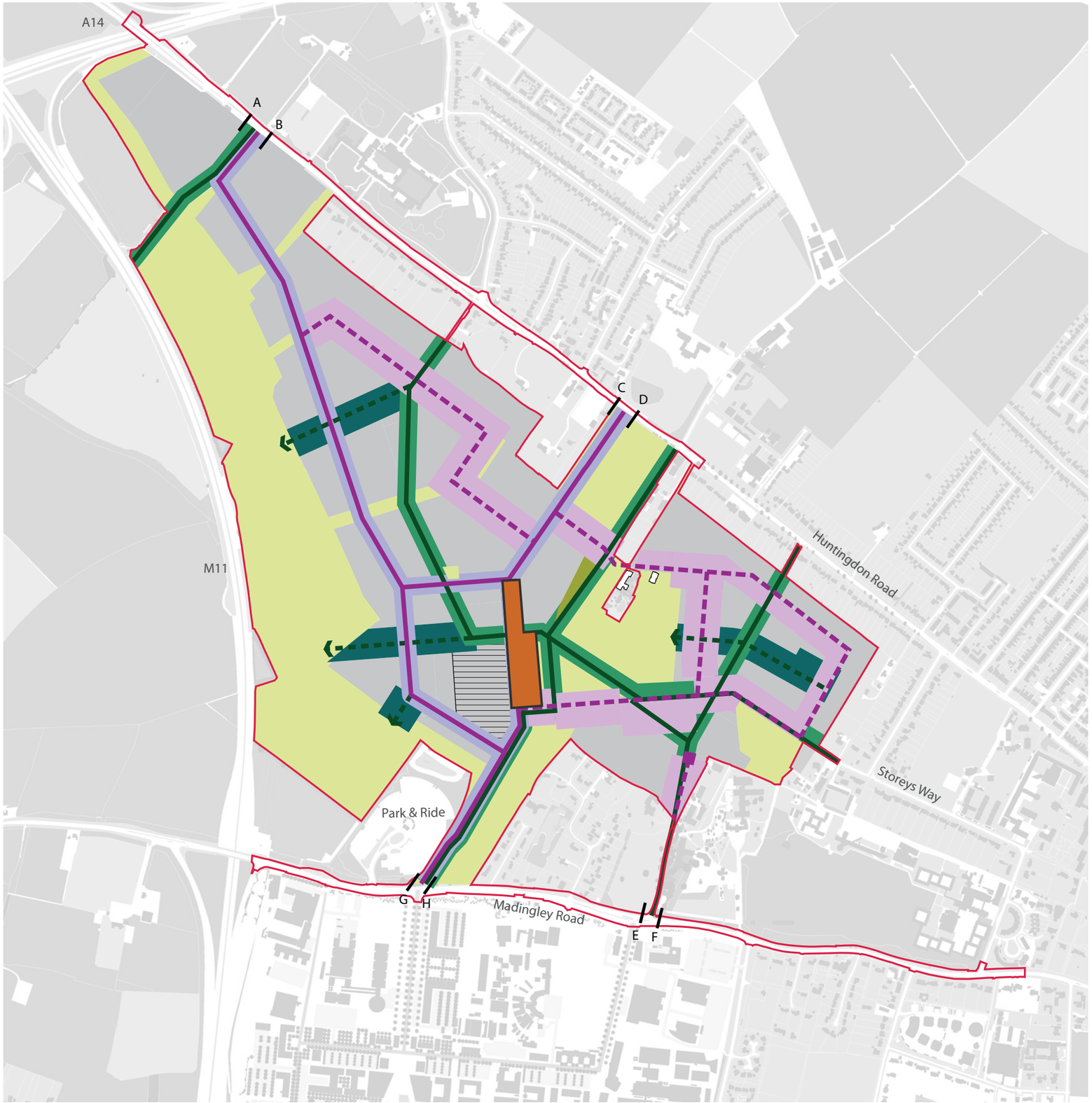


Principles Diagram - Vehicular Movement*

Note: The Principles are further explained in Appendix B1 and do not form part of the Proposed Development

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

Copyright Getmapping plc



KEY

Contextual Information:

- Existing and retained buildings
- Open land (reference NWC/OPA/PAR/03)
- Open land within school site (reference NWC/OPA/PAR/03)
- Primary street
- Secondary street
- Primary pedestrian/cycle route
- Secondary pedestrian/cycle route

For Approval:

- Application site boundary
- Primary street zone*
- Secondary street zone *
- Primary pedestrian/cycle route zone *
- Secondary pedestrian/cycle route zone *
- Restricted Access Zone
- Market Square pedestrianised Zone

* Zones may overlap

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/PAR/02/A - Access Parameter Plan: Zone B

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m

Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673

Parameter Plan 03: Open Land and Landscape Areas; Zone B

The zones within which open land may be provided are identified on Parameter Plan 03. The exact location and configuration of each space, including recreation provision and size, will be defined at the reserved matters stage.

Primary Open Land

Development of any buildings or structures within Primary Open Land shall be restricted to buildings and structures consistent with the use of the land as open land, including plant and equipment storage, bridges, pavilions, cafes, changing rooms, public toilets, car parking, hardstanding, information centres and buildings for housing utility undertakers' apparatus.

Development and/or use within Primary Open Land for the following purposes is (unless otherwise indicated) acceptable: open land; formal and informal recreation and outdoor entertainment; landscaping; surface water balancing and other water features; sustainable drainage systems; nature conservation; allotments; woodland; vehicular, pedestrian and cycle routes within the movement corridors defined on Parameter Plan 02; informal pedestrian and/or cycle routes; and utility and maintenance corridors for predominantly underground utility undertakers' apparatus and private utilities.

The Primary Open Land is divided into the 5 areas shown on Parameter Plan 03.

- Primary Open Land 1 (excluding SSSI): Primary Open Land 1 land for formal and informal recreation and floodlighting will not be included in this area.
- Primary Open Land 1 (SSSI): Use and development within the SSSI will accord with the Geological Site Management Plan, and floodlighting will not be included in this area.
- Primary Open Land 2: Primary Open Land 2 will not include floodlighting.
- Primary Open Land 3: Primary Open Land 3 Formal playing pitches and floodlighting will not be included in this area.
- Primary Open Land 4: Primary Open Land 4 Floodlighting may be provided in connection with sports pitches.
- Primary Open Land 5: Primary Open Land 5 land for formal and informal recreation and will not include floodlighting.

Primary Open Land 5 includes installation of a new flow control structure that will be capable of reducing the peak flows downstream of the Application Site for a range of return periods, up to and including a 1 in 100 year event, including an allowance for climate change. Excavation of a new two stage channel that will be capable of storing attenuated floodwater and provision of additional channels to enable floodwater to be effectively distributed within the two stage channel. These channels will be designed to create ecological opportunities through the provision of steep slopes, planting shelves and on line ponds. Construction of earthworks on the western edge of the Proposed Development to assist in the storage of floodwater.

- The minimum percentage reduction in peak flow downstream of the Application Site shall be 25% and 10% for events with a return period of 1 in 20 and 1 in 100 years (including an allowance for climate change) respectively.
- The flow control structure shall be designed ensuring that the peak flood level at the M11 culverts does not exceed 12.54mAOD and 12.76mAOD for events with a return period of 1 in 20 and 1 in 100 years (including an allowance for climate change) respectively.
- Floodwater shall be stored within landscaped areas of the area designated as Primarily Open Land 5 on Parameter Plan 03 and shall not encroach upon structures within the Proposed Development.

Within Primary Open Land 5, slopes on earthworks visible from the west of the Application Site will not exceed a 1:3 gradient.

Development within Primary Open Land 2-5 will be consistent with use the Green Belt planning status of the land. Within Primary Open Land 1, development within the land designated as Green Belt will be consistent with the Green Belt planning status of that land.

Secondary Open Land

The zones within which Secondary Open Land is to be located are identified on Parameter Plan 03 shaded in light blue. The minimum width of any area of Secondary Open Land (measured between its two longest boundaries) shall not be less than 20m, except where there is a drainage channel running longitudinally along the Secondary Open Land, where the minimum width shall not be less than 25m.

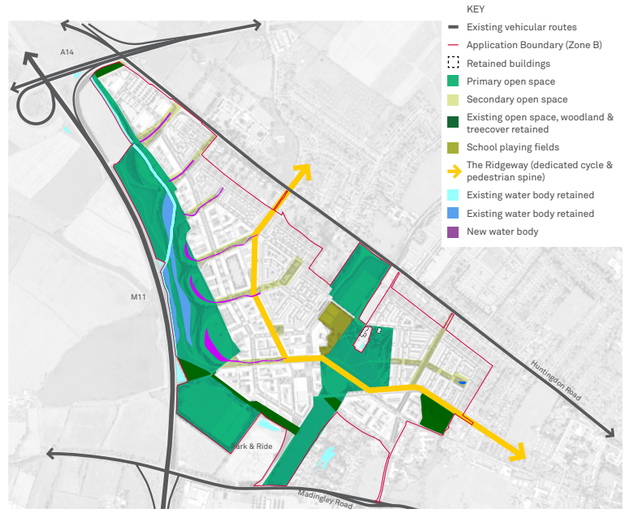
Development and/or use within Secondary Open Land for the following purposes is (unless otherwise indicated) acceptable: open land; formal and informal recreation and outdoor entertainment; landscaping; surface water balancing and other water features; water retention berms and structures; sustainable drainage systems; nature conservation; allotments; woodland; car parking and hardstanding; vehicular pedestrian and cycle routes within the movement corridors defined on Parameter Plan 02; informal pedestrian and/or cycle routes; and utility and maintenance corridors for predominantly underground utility undertakers' apparatus and private utilities.

Development of buildings within Secondary Open Land shall be restricted to buildings consistent with the use of the land as open land, including plant and equipment storage, bridges, pavilions, public toilets and information centres and buildings for housing utility undertakers' apparatus.

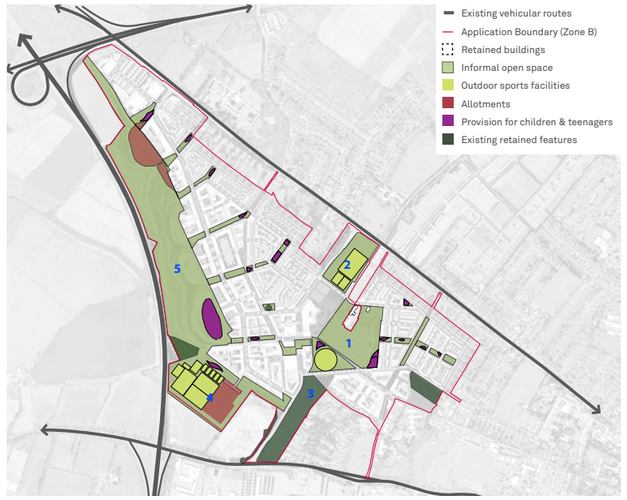
Tertiary Open Land

Tertiary Open Land may be located within any of the Building Zones shown on Parameter Plan 05 on areas not occupied by buildings for the uses indicated on Parameter Plan 04.

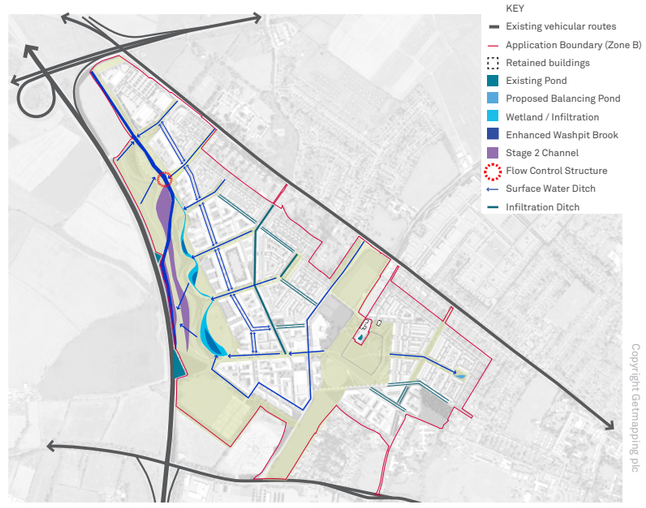
Development of buildings within Tertiary Open Land shall be restricted to buildings consistent with the use of such land as open land including plant and equipment storage, bridges, pavilions and buildings for housing utility undertakers' apparatus. Development and/or use within Tertiary Open Land for the following purposes is (unless otherwise indicated) acceptable: open land; informal recreation and outdoor entertainment; landscaping; surface water balancing and other water features; sustainable drainage systems; nature conservation; allotments; woodland; vehicular pedestrian and cycle routes within the movement corridors defined on Parameter Plan 02; informal pedestrian and/or cycle routes; and utility and maintenance corridors for predominantly underground utility undertakers' apparatus and private utilities.



Principles Diagram - Open Space structure*



Principles Diagram - Open space types and area requirements*



Principles Diagram - Drainage strategy*

Note: The Principles are further explained in Appendix B1 and do not form part of the Proposed Development

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

Copyright Getmapping plc

KEY

Contextual Information:

- AAP Development Footprint / Green Belt Boundary
- Existing and retained buildings
- Indicative primary and secondary routes (reference NWC/OPA/PAR/02)
- SSSI boundary
- SSSI 10m buffer
- Washpit Brook
- Areas of existing open land, woodland & treecover to be retained
- Secondary open land

For Approval:

- Application site boundary
- Primary open land (1-5)
- Primary open land boundary
- Open land within school site
- Secondary open land zone
- Zone for works to Washpit Brook
- Zone for location of flow control structure

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/PAR/03/A - Open Land and Landscape Areas Parameter Plan: Zone B

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m
Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673

Parameter Plan 04: Land Use (Built Development and Ancillary Space); Zone B

The disposition of land uses within the development shall conform to Parameter Plan 04.

Built development shall be divided between the 3 development areas shown on Parameter Plan 04. The disposition of floorspace (or dwellings) between the development areas and of floorspace within particular areas shall be as per the floorspace schedule below. The figures for each development area are subject to the overriding maxima in terms of total floorspace (or dwellings) for the Development and total floorspace (or dwellings) within particular categories as specified within the Description of Development.

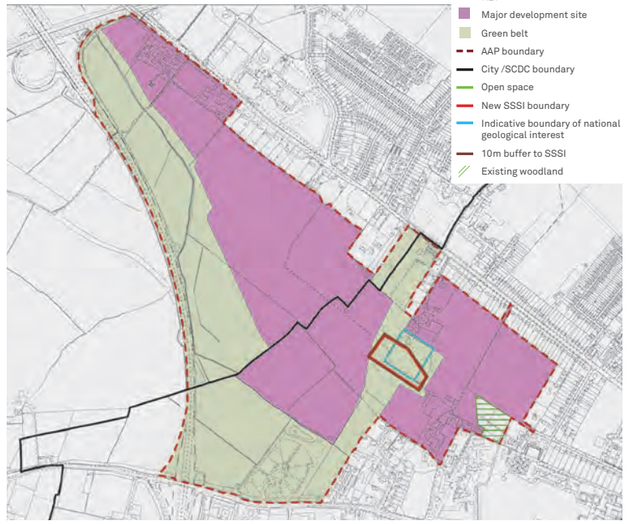
The black hatched area on Parameter Plan 04 indicates zones in which land use flexibility may be achieved through extension of adjacent land uses into these zones.

The blue hatched area on Parameter Plan 04 indicates zones in which land use flexibility may be achieved on the Western Edge through extension of either C2 or D1,B1(b) Sui Generis use.

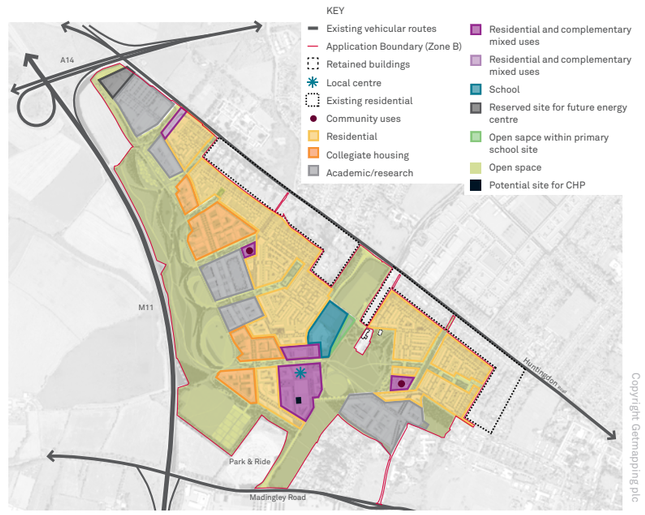
Within area 3 and within the SSSI in area 1 on Parameter Plan 03, no buildings shall be constructed. Within the remainder of area 1, and in areas 2, 4 and 5 on Parameter 03, buildings will be restricted as set out in Parameter Statement 03.

Where land use zones shown on Parameter Plan 04 overlap with zones for movement corridors or Secondary Open Land, as set out in Parameter Plans 02 or 03, respectively, the width of Secondary Open Land shall not be less than as described in Parameter Statement 03, the boundaries between buildings and their curtilage movement routes and open land shall be determined by approval of reserved matters and the land uses shown on Parameter Plan 04 shall apply within the curtilage of any building constructed within any Building Zone indicated on Parameter Plan 05.

Use Class	C3, C4 (Market and Key Worker Residential)	D1, B1(b), sui generis (Research Uses)	C2 (Student Accommodation)	A1, A2, A3, A4, A5	C1 (Hotel)	C2 (Senior Care)	sui generis (B2) (Energy Centre)	C3 (Community Residential)	B1 (Police)	D1, D2 (Other Community Uses)
	Dwellings	GFA (sq.m.)	GFA (sq.m.)	GFA (sq.m.)	GFA (sq.m.)	GFA (sq.m.)	GFA (sq.m.)	GFA (sq.m.)	GFA (sq.m.)	GFA (sq.m.)
Development Area 1	800	68,800	73,400	200	-	-	-	300	-	1,100
Development Area 2	1,600	20,100	41,300	5,000	7,000	6,500	1,250	300	200	6,600
Development Area 3	1,000	48,600	-	200	-	-	-	300	-	1,300
Total Maximum	**3,000**	**100,000**	**98,000**	**5,300**	**7,000**	**6,500**	1,250	**500**	**200**	**7,600**



Cambridge City Council and South Cambridgeshire District Council's AAP concept plan (adopted 2009)

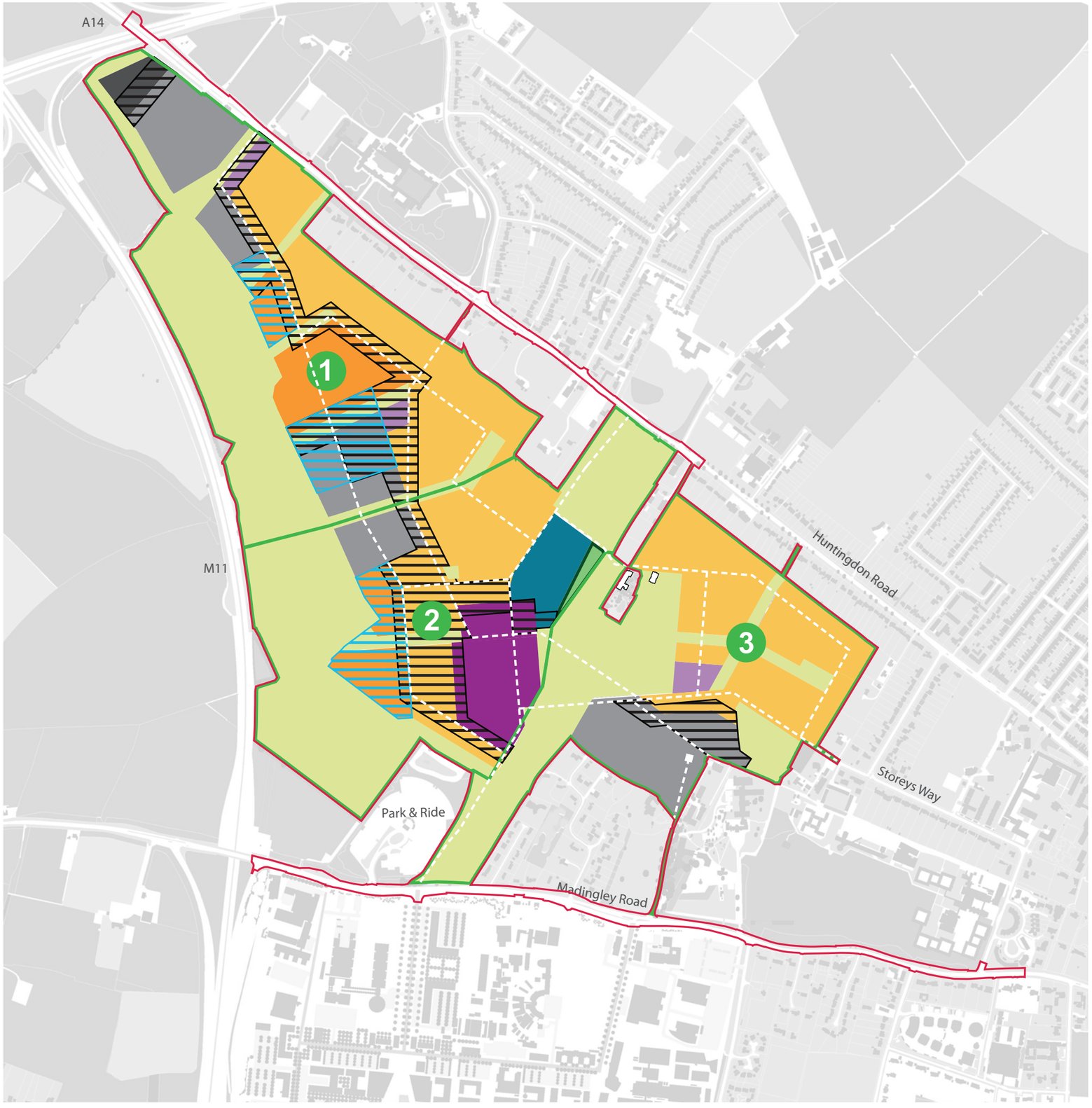


Principles Diagram - Land Uses*

Note: The Principles are further explained in Appendix B1 and do not form part of the Proposed Development

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

Copyright Getmapping plc



KEY

Contextual Information:

- Existing and retained buildings
- Indicative primary and secondary routes (reference NWC/OPA/PAR/02)
- Open land (reference NWC/OPA/PAR/03)
- Open land within school site (reference NWC/OPA/PAR/03)
- Potential reserved Energy Centre site: sui generis (B2)

For Approval:

- Application site boundary
- Development areas
- Residential: C3, C4
- Collegiate Housing: C2
- Academic/Research: D1, B1(b), sui generis
- Residential and complementary mixed uses: A1, A2, A3, A4, A5, C1, C2, C3, C4, D1, D2, sui generis (B2, Energy Centre)
- Residential and complementary mixed uses: C3, C4, D1, A1, A2, A3, A4, A5
- School
- Land use flexibility zone
- Western Edge land use flexibility zone

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/PAR/04/A - Land Use (Built Development and Ancillary Space) Parameter Plan: Zone B

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m
Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 Licence number 0100031673

Parameter Plan 05: Building Zones; Zone B

The maximum and minimum dimensions of the buildings (excluding temporary structures or outbuildings) within each building zone of the development identified in Parameter Plan 05 are set out in the table below.

For the purpose of this table, length is represented as frontage, and width is represented as depth.

Within any given zone, the maximum height of street lighting columns will not exceed 8m. Floodlighting for formal sports pitches will not exceed 15m.

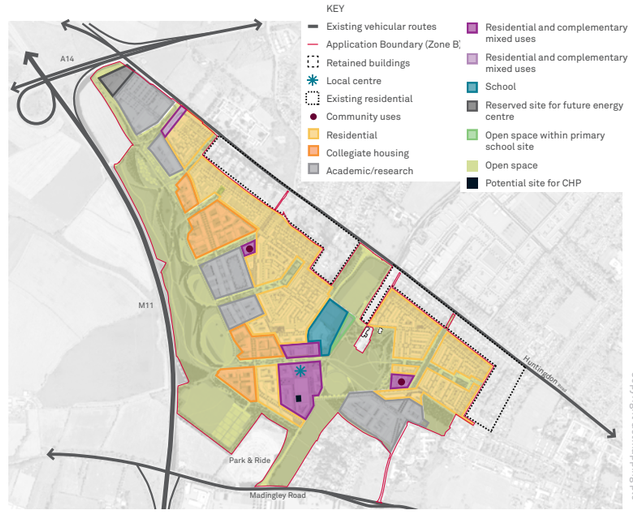
In the event of conflict between Parameter Plan 05 and/or Parameter Statement 05 and Parameter Plan 06, the maximum building heights stipulated in Parameter Plan 06 prevail subject to the following exception. Within Building Zones C, H, M, N, O, S and T, the maximum building heights stipulated in Parameter Statement 05 will prevail if (and only to the extent that) the resultant building height AOD would be lower.

For any building the footprint of which would fall within more than one Building Zone, the building frontage, depth and height will not exceed the height permitted within the Building Zone within which the majority of the building footprint is located.

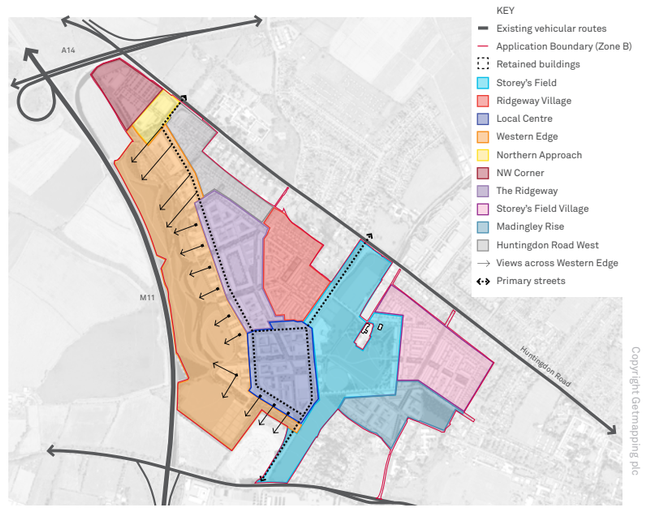
Where Building Zones shown on Parameter Plan 05 overlap with zones for movement corridors or open land, as set out in Parameter Plans 02 or 03, respectively, the width of Secondary Open Land shall not be less than as described in Parameter Statement 03, the boundaries between buildings and their curtilage, movement routes and Secondary Open Land shall be determined by approval of reserved matters and the land uses shown on Parameter Plan 04 shall apply within the curtilage of any building constructed within any Building Zone as indicated on Parameter Plan 05.

Building Zone	Minimum Building Frontage (m)	Maximum Building Frontage (m)	Minimum Building Depth (m)	Maximum Building Depth (m)	Minimum Building Height* (m)	Maximum Building Height* (m)
A	4	200	4	65	3	20
B	4	200	4	25	3	15
C	4	150	4	25	3	10
D	4	200	4	40	3	15
E	4	150	4	25	3	18
F	4	200	4	40	3	15
G	4	150	4	25	3	18
H	4	150	4	25	3	10
I	4	200	4	25	3	15
J	4	180	4	25	3	15
K	4	180	4	60	3	18
L	4	180	4	65	3	10
M	4	18	4	18	3**	8**
N	4	18	4	18	3	8
O	4	18	4	18	3	8
P	4	180	4	25	3	15
Q	4	115	4	25	3	15
R	4	200	4	40	3	15
S	4	20	4	25	3	10
T	4	200	4	40	3	10

*Measured from top of ground floor slab (at the principal entrance) to the apex of the roof (excluding any lightning conductors, weather vanes, rooftop plant (or parapet used to screen rooftop plant), equipment telecommunications equipment, floodlighting and aerials).
** Excluding floodlighting



Principles Diagram - Land Uses*



Principles Diagram -Character Areas*

Note: The Principles are further explained in Appendix B1 and do not form part of the Proposed Development

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)
Copyright Getmapping plc

KEY

Contextual Information:

- Indicative primary and secondary routes (reference NWC/OPA/PAR/02)
- Open land (reference NWC/OPA/PAR/03)
- Open land within school site (reference NWC/OPA/PAR/03)

For Approval:

- Application site boundary
- Building zones

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/PAR/05/A - Development Building Zones Parameter Plan: Zone B

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m

Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673

Parameter Plan 06: Building Heights; Zone B

Parameter Plan 06 defines the maximum heights of buildings as measured to the apex of the roof (excluding any lightning conductors, weather vanes, rooftop plant (or parapet used to screen rooftop plant), equipment telecommunications equipment, floodlighting and aerials).

In the event of conflict between Parameter Plan 05 and/or Parameter Statement 05 and Parameter Plan 06, the maximum building heights stipulated in Parameter Plan 06 prevail subject to the following exception. Within Building Zones C, H, M, N, O, S and T, the maximum building heights stipulated in Parameter Statement 05 will prevail if (and only to the extent that) the resultant building height AOD would be lower.

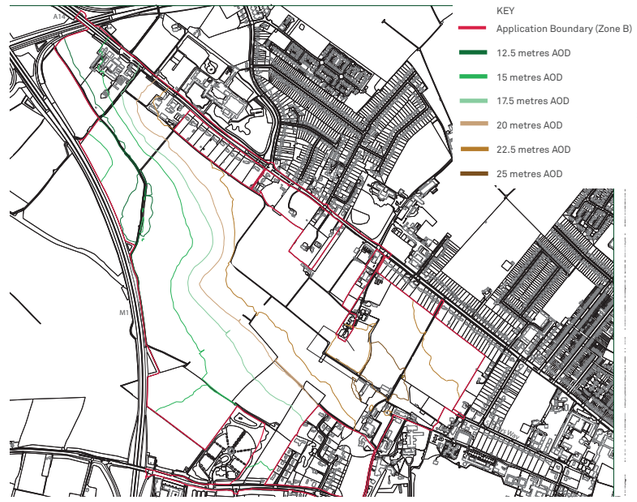
For any building the footprint of which would fall within more than one Building Zone as shown on Parameter Plan 05 , the building height will not exceed the height AOD permitted within the Building Zone within which the majority of the building footprint is located.

In areas of overlap between any Building Zone as shown on Parameter Plan 06 and any movement corridor, area of Secondary Open Land as indicated on Parameter Plans 02, 03 or 04, respectively the boundaries between buildings and their curtilage, the width of Secondary Open Land shall not be less than as described in Parameter Statement 03, movement routes and open land shall be determined by approval of reserved matters and where areas are occupied by buildings, within any of the uses shown on Parameter Plan 04 the maximum building height shall be as set out above.

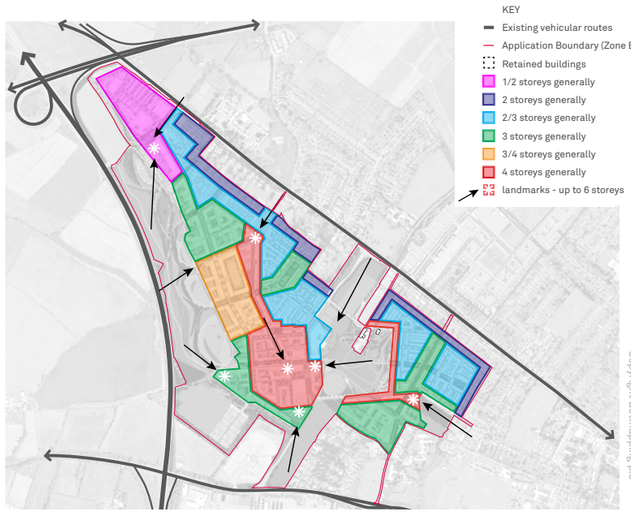
Energy Centre Chimney Flue Locations and Heights

Local Centre: the chimney flue associated with the Energy Centre shall be located within the zone within the area tinted red delineated by a black dotted line on Parameter Plan 06. The height of this flue will not (excluding any lightning conductor or aerial) exceed 42.5m AOD.

Contextual Information:
Northwest Corner: the chimney flue associated with the reserved site for an alternative Energy Centre shall be located within the area tinted yellow on delineated by a purple dotted line. The height of this flue will not (excluding any lightning conductor or aerial) exceed 53.5m AOD.



Contextual Plan - Existing Topography



Principles Diagram - Massing and Landmarks*

Note: The Principles are further explained in Appendix B1 and do not form part of the Proposed Development

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. 100023205 (2010)

Copyright Getmapping plc

KEY

Contextual Information:

- Existing and retained buildings
- Indicative primary and secondary routes (reference Access Parameter Plan NWC/OPA/PAR/02)
- Open land (reference NWC/OPA/PAR/03)
- Open land within school site (reference NWC/OPA/PAR/03)
- Indicative location of Energy Centre flue
- Indicative potential reserved location of Energy Centre flue
- (x.x) Existing ground level metres AOD
- Reserved Zone for Potential Energy Centre flue of 1.5m diameter and 53.5m AOD

For Approval:

- Application dite boundary

Maximum building heights

- 25.0 metres AOD
- 26.5 metres AOD
- 29.0 metres AOD
- 29.5 metres AOD
- 30.0 metres AOD
- 31.0 metres AOD
- 31.5 metres AOD
- 32.0 metres AOD
- 32.5 metres AOD
- 33.0 metres AOD
- 33.5 metres AOD
- 34.0 metres AOD
- 35.5 metres AOD
- 36.0 metres AOD
- 36.5 metres AOD
- 37.0 metres AOD
- 37.5 metres AOD
- 38.5 metres AOD
- 39.0 metres AOD
- 39.5 metres AOD
- 40.0 metres AOD
- 40.5 metres AOD
- 41.0 metres AOD
- 43.0 metres AOD

- Zone for Energy Centre flue of 0.6m diameter and 42.5m AOD

North West Cambridge

NWC/OPA/PAR/06/A - Building Heights Parameter Plan: Zone B

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m
Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673

Parameter Plan 07: Proposed Topography; Zone B

Parameter Plan 07 defines the finished ground contours for Primary Open Land across Zone B. These contours are +/- 2.5m, except within the designated SSSI area. Within the designated SSSI area, ground levels will not be modified.

KEY

Contextual Information:

- Indicative primary and secondary routes (reference NWC/OPA/PAR/02)
- Open land (reference NWC/OPA/PAR/03)
- Open land within school site (reference NWC/OPA/PAR/03)

For Approval:

- Application site boundary
- 12.5 metres AOD
- 15 metres AOD
- 17.5 metres AOD
- 20 metres AOD
- 22.5 metres AOD
- 25 metres AOD
- Development area

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/PAR/07/A - Topography Parameter Plan: Zone B

February 2012

UNIVERSITY OF CAMBRIDGE

0 10 50 100m

Scale 1:5000@A1

oduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
own Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673

Parameter Plan 08: Huntingdon Road Highway & Utilities Works; Zone A

Huntingdon Road - East Junction

Construction of a new three arm signal controlled at grade junction, including pedestrian and cycle crossings, to provide access to the Proposed Development to be located on Huntingdon Road between points C and D on Parameter Plan 02 (referred to in this description of development as “the Huntingdon East Road Junction”) together with ancillary works required for or associated with the construction of the new junction as shown on Application Plan 04 to include:

- breaking out of existing carriageway, kerbs, street furniture and underground service media
- tying into existing footways and carriageways, including; provision and installation of new carriageway and footway sub-base, base, binder course and surface course
- provision and installation of new kerb foundation and backing, kerbing, and edging
- provision of traffic islands
- construction of controller, kiosks and vehicle hardstanding
- the construction of a trench and the laying of vehicle detector loops and associated cables, ducts and access chambers within that trench on the approaches to the new junction to provide MOVA and SCOOT. This trench will be located within the highway boundary and it will have a maximum width of 1m and a minimum width of 0.45m; and a maximum depth of 1.5m and a minimum depth of 0.6m (save for connections to surface apparatus)
- taking down and re-erecting of street furniture and traffic signs and provision and erection of new street furniture including traffic signal lights, and associated poles and kiosks, traffic signs, pedestrian guardrailing and street lighting
- removal of part of existing vegetation to enable visibility splays to be created and provision of new landscaping

Huntingdon Road - West Junction

Construction of a new four arm signal controlled at grade junction, including pedestrian and cycle crossings, to provide access to the Proposed Development to be located on Huntingdon Road between points A and B on Parameter Plan 02 and as shown on Application Plan 03 (referred to in this Description of Development as “the Huntingdon Road West Junction”) together with ancillary works required for or associated with the construction of the new junction including:

- breaking out of existing carriageway, kerbs, street furniture and underground service media
- tying into existing footways and carriageways, including; provision and installation of new carriageway and footway sub-base, base, binder and surface course
- provision and installation of new kerb foundation and backing, kerbing, and edging
- provision of traffic islands
- construction of controller, kiosks and vehicle hardstanding
- the construction of a trench and the laying of vehicle detector loops and associated cables, ducts and access chambers within that trench on the approaches to the new junction to provide MOVA and SCOOT. This trench will be located within the highway boundary and it will have a maximum width of 1m and a minimum width of 0.45m; and a maximum depth of 1.5m and a minimum depth of 0.6m (save for connections to surface apparatus)
- taking down and re-erecting of street furniture and traffic signs and provision and erection of new street furniture including traffic signal lights and associated poles and kiosks, traffic signs, pedestrian guardrailing and street lighting
- removal of part of existing vegetation to enable visibility splays to be created and provision of new landscaping

Huntingdon Road - Toucan Crossing

Installation of a toucan crossing across Huntingdon Road located between the proposed Huntingdon Road East junction and the Whitehouse Lane/ Huntingdon Road junction as shown on Application Plan 04 to include:

- erection of new street furniture including traffic signal lights and poles and associated equipment kiosks, pedestrian guardrailing, traffic signs and installation of utilities

Huntingdon Road - Footway/cycleway

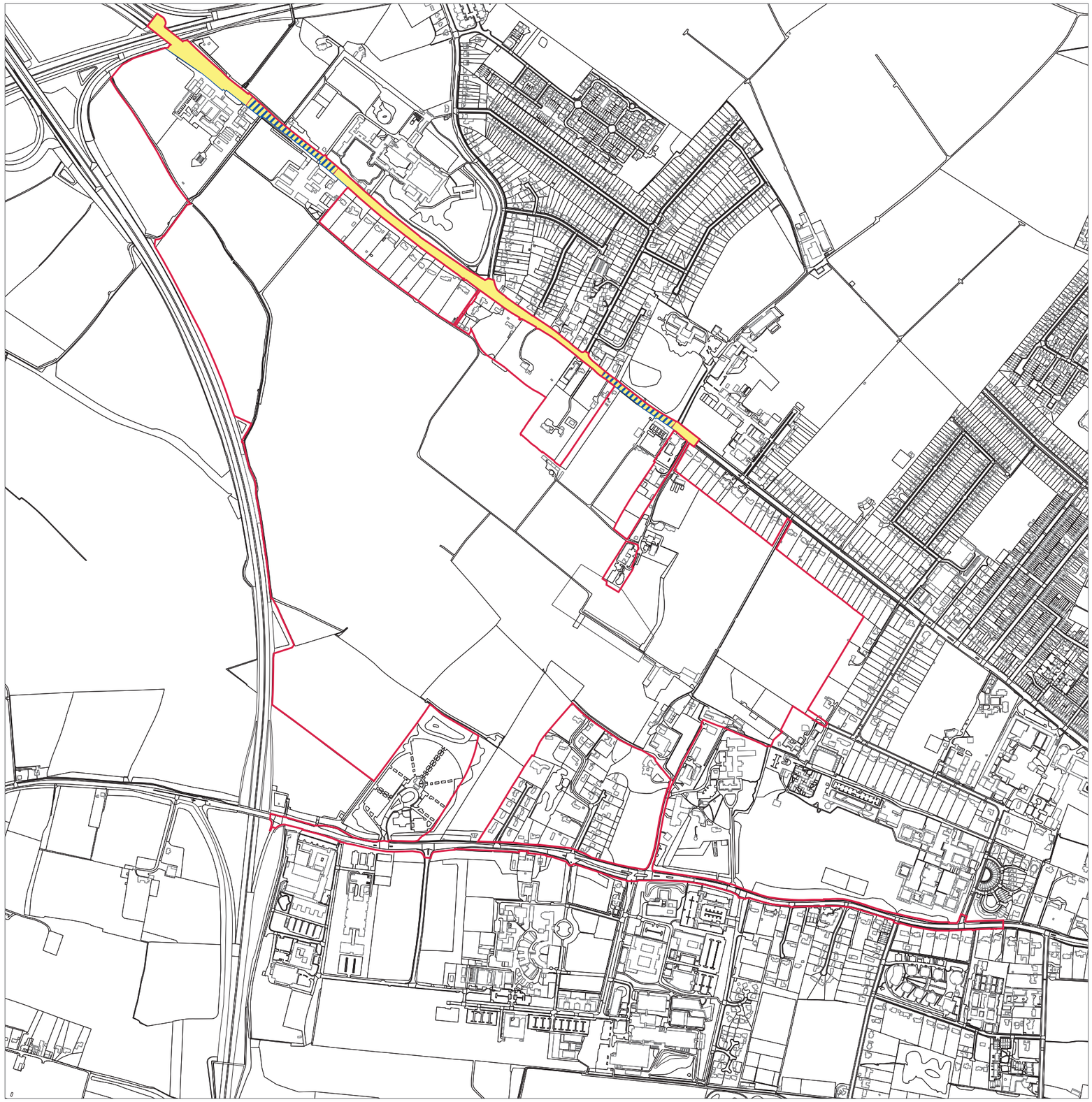
- Construction of a combination of unsegregated footway/cycleway and on-carriageway cycleway on the southern side of Huntingdon Road and associated works including:
  - taking down and re-erecting of street furniture and traffic signs and provision and erection of new street furniture including traffic signal lights and associated poles and kiosks, traffic signs, pedestrian guardrailing and street lighting and installation of utilities
  - breaking out of existing footway, carriageway, kerbs, street furniture and underground service media
  - tying into existing footways and carriageways, including; provision and installation of new carriageway and footway sub-base, base, binder and surface course
  - provision and installation of new kerb foundation and backing, kerbing, and edging

Huntingdon Road - Telecommunications Infrastructure

Installation of new telecommunication infrastructure in the form of ducts and fibre optic and copper cables to be laid within trenches a maximum width of 2m and a minimum width of 0.5m; and a maximum depth of 2m and a minimum depth of 0.5m (save for connections to surface apparatus). The telecommunications infrastructure is to be situated below the proposed roads, footpaths and cycleways within the Proposed Development shown on Parameter Plan 02 and connected to the existing apparatus situated below Huntingdon Road within the zone for new utility apparatus shown on Parameter Plan 08 together with associated access chambers and above ground kiosks.

Huntingdon Road - Utility diversion and protection works

Diversion and/or replacement and/or protection of existing utilities affected by the proposed highway works on Huntingdon Road, including drainage, electricity cables, low pressure gas mains, telecommunications apparatus, potable water mains and street lighting equipment within the zone of the highway works shown on Parameter Plan 08.



KEY

For Approval:

- Application site boundary
- Zone of highway works required to faciltate access to the Proposed Development and associated utility diversions
- Zone for installation of utility apparatus to link existing apparatus and/or to supply telecommunication services to the Proposed Development; related landscaping, accommodation works, street furniture, drainage, telemetry and utilities

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/PAR/08 - Parameter Plan:
Huntingdon Road Highway & Utility Works

September 2011

UNIVERSITY OF CAMBRIDGE

0 10 50 100m
Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673

Parameter Plan 09: Madingley Road Highway & Utilities Works; Zone C

Madingley Road - High Cross/Madingley Road Junction

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 at grade junction, including pedestrian and cycle crossings, to provide access to the Proposed Development with ancillary works as shown on Application Plan 05 to include:

- breaking out of existing carriageway, kerbs, street furniture and underground service media;
- tying into existing footways and carriageways, including; provision and installation of new carriageway and footway sub-base, base, binder course and surface course;
- provision and installation of new kerb foundation and backing, kerbing, and edging;
- provision of traffic islands;
- construction of controller, kiosks and vehicle hardstanding;
- the construction of a trench and the laying of vehicle detector loops and associated cables, ducts and access chambers within that trench on the approaches to the new junction to provide MOVA and SCOOT. This trench will be located within the highway boundary and it will have a maximum width of 1m and a minimum width of 0.45m; and a maximum depth of 1.5m and a minimum depth of 0.6m (save for connections to surface apparatus);
- Taking down and re-erecting of street furniture and traffic signs and provision and erection of new street furniture including traffic signal lights and associated poles and kiosks, traffic signs, pedestrian guardrailing and street lighting;
- Construction of retaining walls and associated parapets; and
- Removal of part of existing vegetation to enable visibility splays to be created and provision of new landscaping.

Madingley Road - Toucan Crossing

Installation of a toucan crossing across Madingley Road on the eastern side of the Madingley Road/JJ Thomson Avenue Junction as shown on Application Plan 06 to include:

- Erection of new street furniture including traffic signal lights and poles and associated equipment kiosks, pedestrian guardrails and traffic signs.

Madingley Road - Unsegregated footway/cycleway

Construction of a new 2.5m wide unsegregated footway/cycleway on the northern side of Madingley Road from the Madingley Road West Junction to the Madingley Road East Junction as shown on Application Plans 05 and 06 and associated works including:

- breaking out of existing footway, street furniture and underground service media;
- Construction of retaining walls and associated parapets;
- tying into existing footways and carriageways, including; provision and installation of new carriageway and footway sub-base, base, binder course and surface course; and
- taking down and re-erecting of street furniture and traffic signs, provision and erection of new street furniture, traffic signs and installation of utilities.

Madingley Road - New Pumped Foul Water Rising Main

Provision of a new pumped foul water rising main within a trench with a maximum width of 1.5m and a minimum width of 0.5m; and a maximum depth of 2m and a minimum depth of 0.9m to be situated within the zone for installation of new utility apparatus shown on Parameter Plan 09 and to extend in an easterly direction from the High Cross/Madingley Road junction to the existing trunk sewer which is situated near to the Madingley Road/ Wilberforce Road junction.

Madingley Road - Utility diversion and protection works

Diversion and/or replacement and/or protection of existing utilities affected by the proposed highway works on Madingley Road, including drainage, electricity cables, low pressure gas mains, telecommunications apparatus, potable water mains and street lighting equipment within the zone of the highway works shown on Parameter Plan 09.

Madingley Road - Electric Supply

Installation of high voltage electrical connections to electricity substations within the Proposed Development comprising cables installed within trenches with a maximum width of 1.5m and a minimum width of 0.5m; and a maximum depth of 1.5m and a minimum depth of 0.75m (save for connections to surface apparatus). This electrical apparatus is to be situated within the zone for installation of new utility apparatus shown on Parameter Plan 09 from the existing Primary Substation also shown on Parameter Plan 09 to the High Cross/Madingley Road junction together with transformer upgrades to the Primary Substation.

Madingley Road - Gas Supply

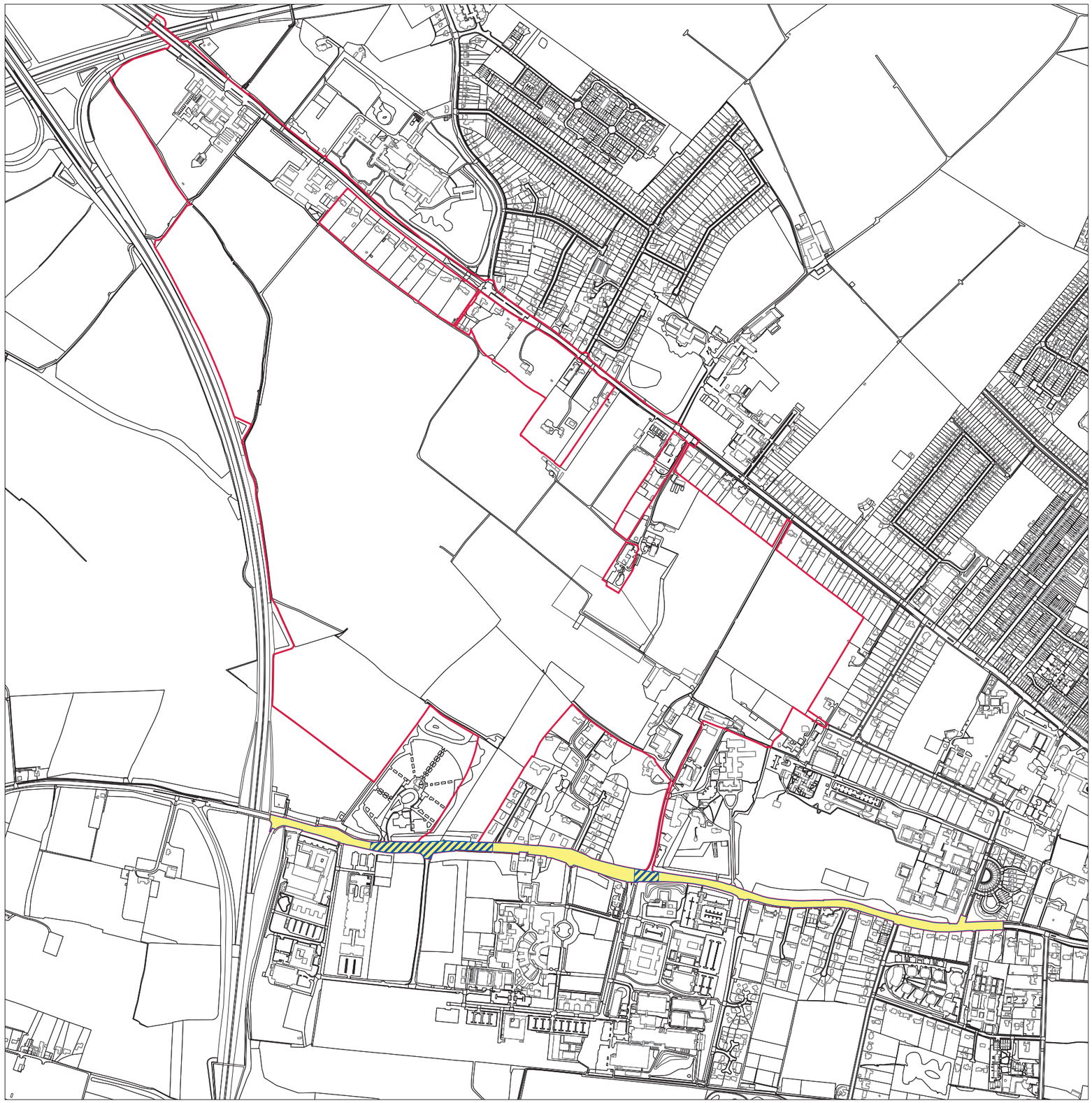
Installation of a new gas supply for the Proposed Development in the form of a pressurised main to be laid within trenches a maximum width of 1m and a minimum width of 0.3m; and a maximum depth of 1.5m and a minimum depth of 0.75m (save for connections to surface apparatus). The main is to extend below the proposed roads, footpaths and cycleways within the Proposed Development shown on Parameter Plan 02 from a new Pressure Reducing Station to the existing medium pressure gas main situated beneath Madingley Road within the zone for new utility apparatus shown on Parameter Plan 09.

Madingley Road - Telecommunications Infrastructure

Installation of new telecommunication infrastructure in the form of ducts and fibre optic or copper cables to be laid within trenches a maximum width of 2m and a minimum width of 0.5m; and a maximum depth of 2m and a minimum depth of 0.5m (save for connections to surface apparatus). The new telecommunications infrastructure is to be situated below the proposed roads, footpaths and cycleways within the Proposed Development shown on Parameter Plan 02 and connected to the existing apparatus situated below Madingley Road within the zone for new utility apparatus shown on Parameter Plan 09 together with associated access chambers and above ground kiosks.

Madingley Road – District Heating Infrastructure

Installation of new district heating infrastructure in the form of flow and return pipes to be laid within trenches a maximum width of 2m and a minimum width of 0.5m; and a maximum depth of 2m and a minimum depth of 1m (save for connections to surface apparatus). The district heating pipework is to extend from the Energy Centre, below the proposed roads, footpaths and cycleways within the Proposed Development shown on Parameter Plan 02.



KEY

For Approval:

- Application site boundary
- Zone of highway works required to faciltate access to the Proposed Development and associated utility diversions
- Zone for installation of utility apparatus to link to existing apparatus and/or to supply electricity, gas, potable water and telecommunications services to the Proposed Development, construction of pumped foul rising main and ancillary highway works; related landscaping, accommodation works, street furniture, drainage, telemetry and utilities

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

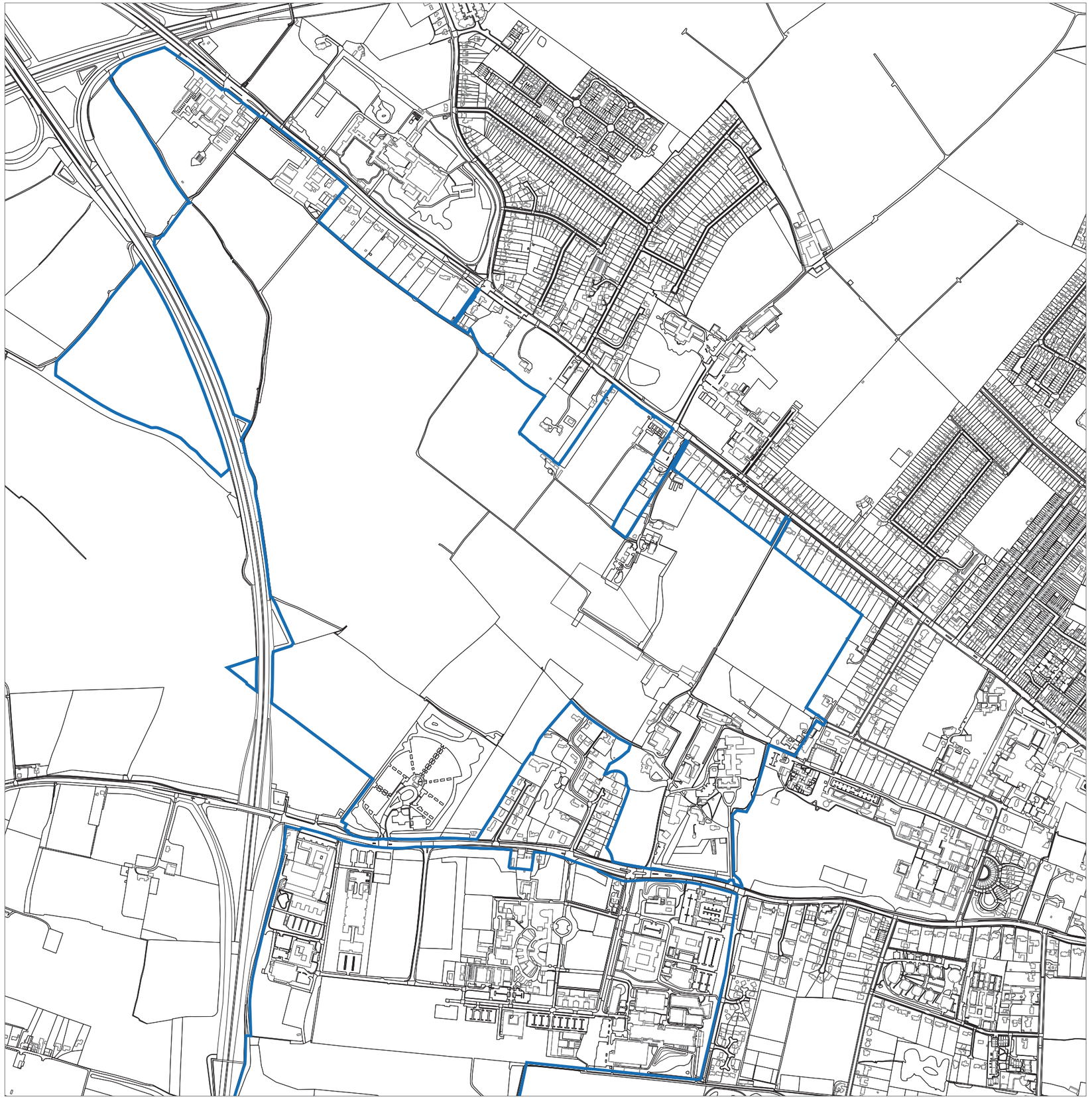
NWC/OPA/PAR/09 - Parameter Plan:
Madingley Road Highway & Utility Works

September 2011

UNIVERSITY OF CAMBRIDGE

0 10 50 100m
Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673



KEY

Contextual Information:

University ownership boundary*

Note: *Boundaries drawn to back of footpath, this does not compromise the presumption of ownership to the midpoint of highways.

Contextual Plan 01: University Ownership

All information other than that identified as being for approval is shown for contextual purposes only.

North West Cambridge

NWC/OPA/CON/01 - Contextual Plan: University Ownership Plan

September 2011

UNIVERSITY OF CAMBRIDGE

0 10 50 100m

Scale 1:5000@A1

Reproduced from the Ordnance Survey mapping by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office
© Crown Copyright All rights reserved Licence no. AL100014635 EDAW's business licence
© Crown Copyright, All rights reserved. 2004 License number 0100031673