CAMBRIDGE SOUTH

RESPONSE TO CALL FOR SITES

MARCH 2019

Contents

1 Introduction

The Cambridge South site occupies approximately 200 hectares of land on the southern edge of Cambridge. Its location at an important gateway to the city and its proximity to a world-renowned centre for excellence in Life Sciences makes it an important location for sustainable growth in both housing and employment floorspace.

1.1 This submission concerns the site known as 'Cambridge South' (the 'Site'), which is located to the south of Trumpington on the southern edge of the city. It is submitted in response to the Call for Sites being undertaken by Greater Cambridge Shared Planning in March 2019.

1.2 The Call for Sites is being carried out to facilitate the preparation of a new Local Plan for the Greater Cambridge area (covering Cambridge and South Cambridgeshire) in accordance with the Greater Cambridge City Deal (the 'City Deal'). The Site straddles the local planning authority boundaries of Cambridge City Council ('CCC') and South Cambridgeshire District Council ('SCDC') and therefore the principle of a joined up approach to planning is strongly supported and is considered to be the most appropriate means of addressing the wider needs of the city, its residents, businesses and visitors.

1.3 The Site the subject of this submission comprises a largely undeveloped area of approximately 200 hectares. The extent of the Site is illustrated in Figure 1 (a full-size copy of this plan is attached).

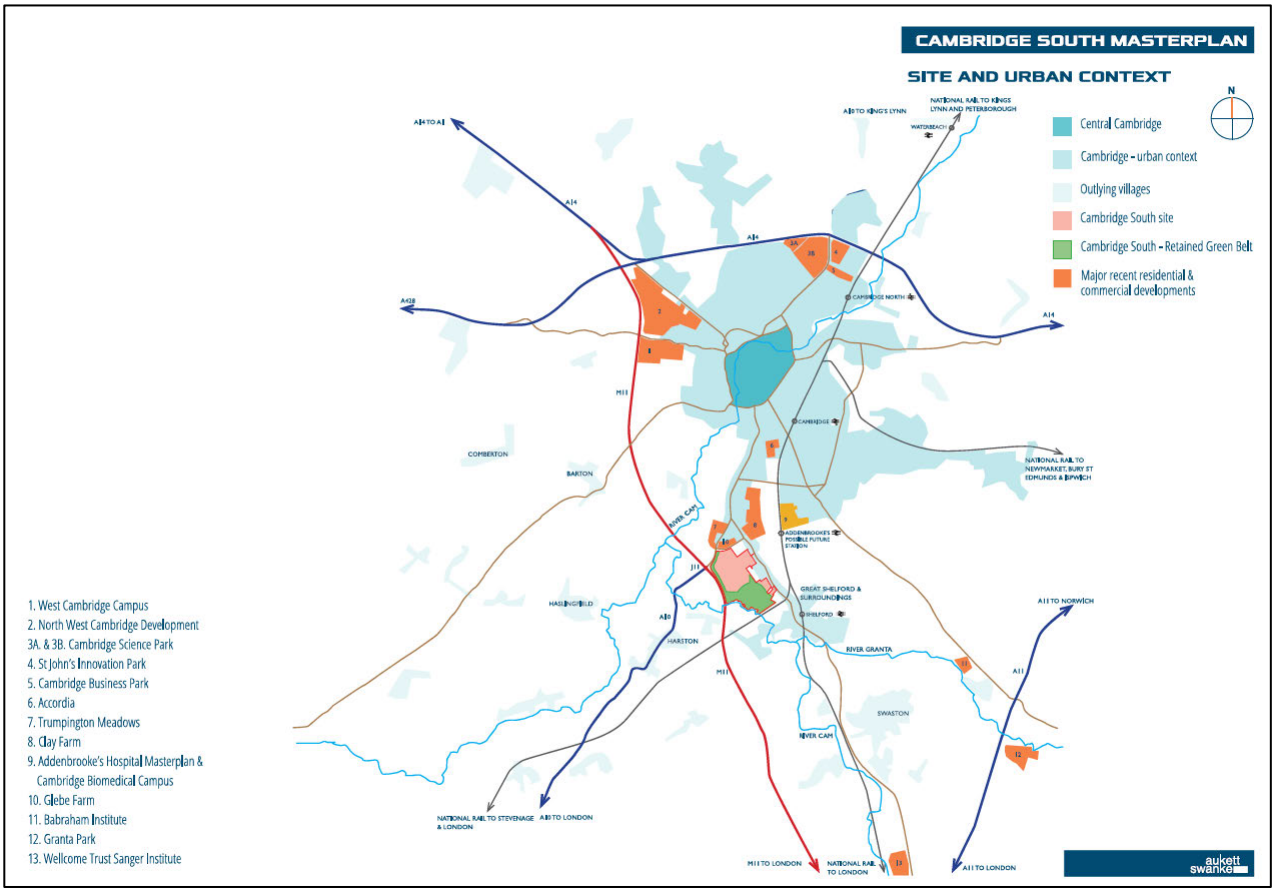


Figure 1 Site Location

1.4 The submission is made by Quod on behalf of the five parties with an interest in the Site: Jesus College; the Pemberton Trust; Pigeon Land; Lands Improvement Holdings; and Cambridge County Council, ('the owners') who together support the allocation of the land in the new Local Plan.

1.5 As will be set out further in this representation, the Site is considered to respond directly to the objectives of the City Deal by offering a space to grow in a highly accessible location and in a way that would contribute to the area's attractiveness and success.

1.6 The City Deal recognises the importance of enabling the next wave of the "Cambridge Phenomenon" by growing employment hubs and high tech clusters around the city while addressing a shortage of housing in the area and the significant transport congestion that is threatening to choke off further economic growth.

1.7 Against these three objectives, the Site has a strong locational advantage.

1.8 The Site is approximately 2 kilometres south west of the Cambridge Biomedical Campus ('CBC'). As is explained in section 4, the CBC is a highly specialised and nationally important cluster of life-science and biomedical research. Demand for its expansion was confirmed in the preparation of the South Cambridgeshire and Cambridge City Local Plans and it is considered to be a key priority in the Draft Cambridgeshire and Peterborough Local Industrial Strategy[1].

1.9 The Site's proximity to the CBC and its position at the gateway to Cambridge provides the opportunity for both additional employment floorspace related to the CBC and the provision of new homes for employees of the CBC, linked by sustainable modes of transport. All three opportunities have to be addressed if the southern part of the city fringe is to meet its potential and to function properly. The new Local Plan has an important role to play in this respect and the owners have been working closely with their neighbours to develop a comprehensive solution which uses the attributes of each principal site to address the critical issues.

1.10 In this respect, the owners are engaged with One Nucleus, which is examining how the issues facing the CBC can be addressed. The owners are also liaising with the Country Council who own land to the north and with Grosvenor who own significant land to the west to discuss opportunities for strategic transport solutions. There is an important opportunity for the parties to work together, with the planning authorities, to plan a sustainable future for this critical area of the city.

1.11 The proposals seek to optimise the excellent connectivity of the area and locate new space for research and development close to the CBC and Addenbrooke's Hospital, maximising potential synergy benefits through clustering and providing new private and affordable housing near to the hospital to address a well-documented need.

1.1. This document provides details of the Site itself, the scale of the development opportunity available and the vision for the Site's contribution to the future of Cambridge. Following this introductory section, this submission is structured as follows:

2) The Site
3) The opportunity
4) The Life Science industry
5) Consistency with policy
6) Conclusion.

[1] Draft for Business Board, 15 March 2019

2 The Site

Locational Advantage

2.1 The Cambridge South site is located on the south west fringes of Cambridge immediately adjacent the M11 motorway and just north of Great Shelford.

2.2 The River Cam and the railway line between Foxton and Cambridge provide a southern boundary to the Site.

2.3 The eastern boundary is formed by the back of residential properties along Shelford Road / Cambridge Road, allotments and a rugby club, although the south east corner of the Site is immediately adjacent to the public highway (Cambridge Road).

2.4 The northern boundary of the Site abuts the Addenbrooke's Road, which connects the A1309 Hauxton Road in the west to Addenbrooke's Hospital and the CBC in the east.

2.5 The western boundary of the Site is formed by the A1309 Hauxton Road and the M11. The A1309 Hauxton Road provides a link between the A10 / M11 Junction 11 and Trumpington.

2.6 The Site straddles the local planning authority boundaries of CCC and SCDC. Figure 3 shows the location of the Site relative to the CBC.

a) Accessibility – Pedestrians and Cyclists

2.7 The Site is already well served by cycling and walking links that provide safe routes to Cambridge City Centre, the CBC and Addenbrooke's Hospital, and surrounding settlements.

2.8 Cycle routes to the Site are provided by way of dual use off-road facilities on the Addenbrooke's Road and Hauxton Road to the north, as well as on-road cycle lanes on the Addenbrooke's Road, Shelford Road and Cambridge Road. Addenbrooke's Hospital and CBC are within a 10 minute cycle ride along the Addenbrooke's Road.

2.9 Pedestrian connections to the north (Glebe Farm and Great Kneighton developments) also exist, connecting the Site on to Addenbrooke's Hospital and the CBC as well as other destinations to the north and east.

2.10 To the south, the Site is connected by footpaths and a mixture of on-road and off-road cycleways to several local settlements including Great Shelford, which is served by Shelford Rail Station. A short distance to the east is National Cycle Route 11, which it is proposed will ultimately connect Harlow in the south to Kings Lynn in the north and can provide longer distance commuter and leisure routes, in conjunction with the off-road route along the A10.

2.11 Given the proximity of key destinations within a short distance of the Site, it is anticipated that a significant proportion of trips would be made to and from Cambridge South by foot or bike.

2.12 Figure 2 identifies walking isochrones for the proposed development.

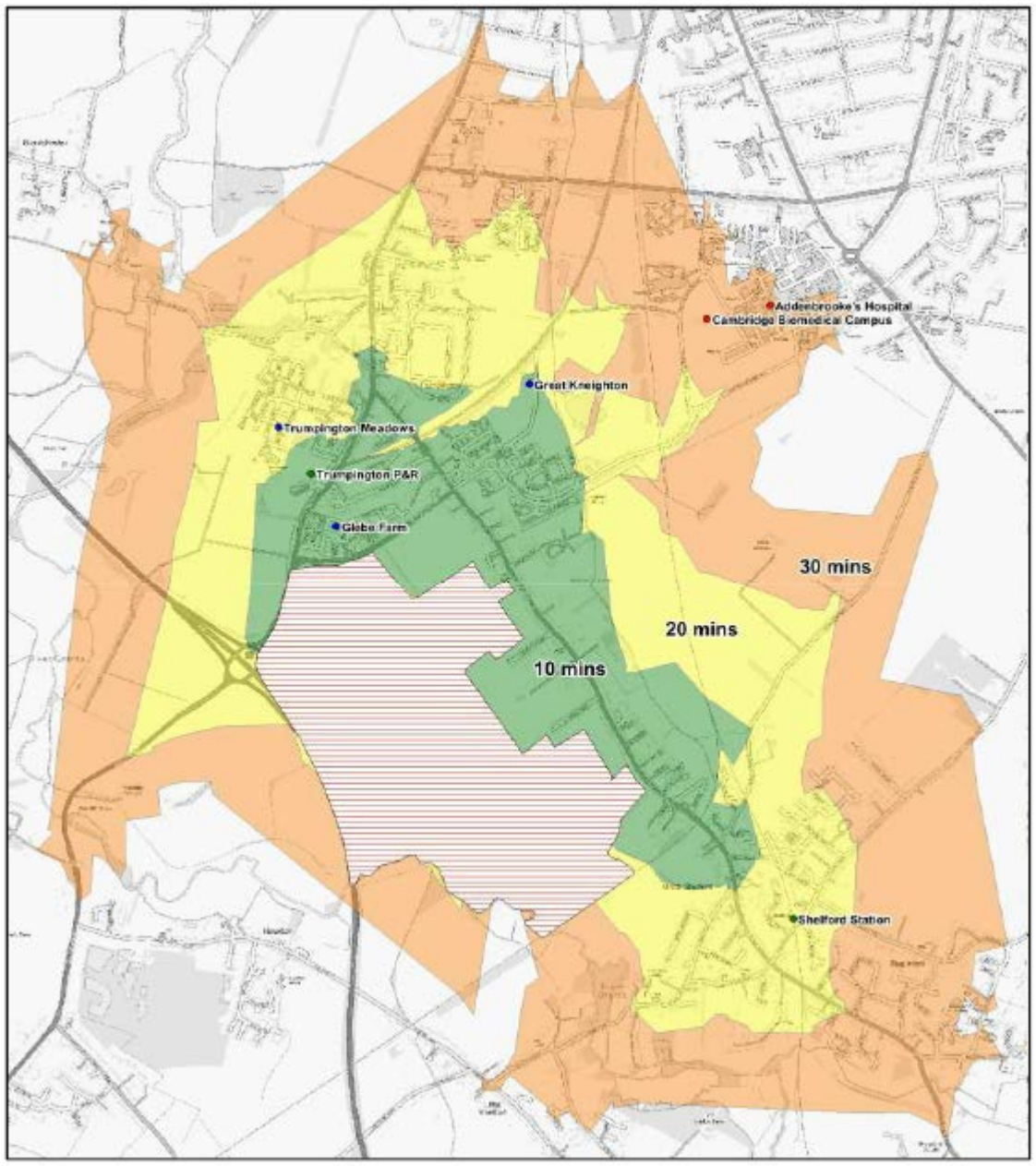


Figure 2 Walking Isochrones

2.13 Figure 2 shows that, as well as the existing residential areas in Trumpington and Shelford, the new residential developments at Trumpington Meadows, Glebe Farm and Great Kneighton, are all within a 20 minute walk of the Site. This indicates a significant potential residential catchment within easy walking distance of the proposed employment space, as well as the ability of homes on the Site to be well located for employment destinations and public transport connections.

2.14 Addenbrooke's Hospital and CBC are within a 20 to 30 minute walk of the Site. As well as providing good access to key health facilities, this also has the dual benefit of nearby employment opportunities and other research and development companies being located within a short journey of the development. This is an important consideration to businesses looking to benefit from being located within the biomedical cluster.

2.15 In addition, Trumpington Park & Ride, which provides access to the Cambridge Guided Busway, Park & Ride and conventional bus services, is within a 10 minute walk of the Site. To the south, Shelford Rail Station is within a 20 minute walk. The proposals for the delivery of Addenbrooke's Rail Station (Cambridge South) would further increase the accessibility of the Site.

2.16 Figure 3 identifies cycling isochrones for the proposed development.

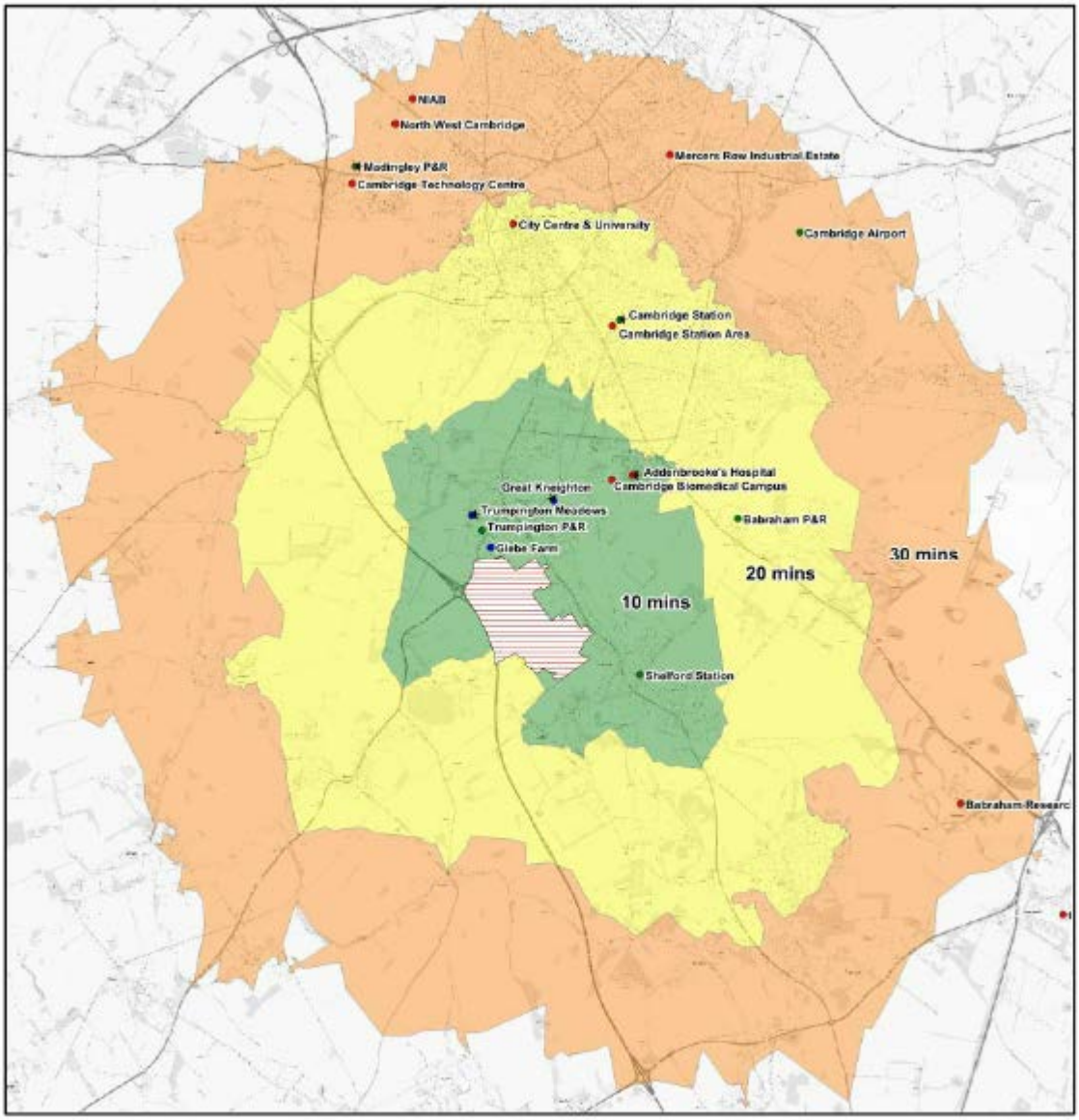


Figure 3 Cycling Isochrones

2.17 Figure 3 further emphasises the benefits of the Site's location and its excellent connectivity, with the majority of Cambridge accessible within 30 minutes. Addenbrooke's Hospital and CBC are within a 10 minute cycle ride along the Addenbrooke's Road. Cambridge Rail Station and its surrounding development area along with the City Centre and University District are all within a 20 minute cycle ride. Babraham Research Park, NIAB and the North-West Cambridge Development area are all within 30 minutes cycle, while Cambridge Science Park is just beyond this.

b) Accessibility – Public Transport

2.18 The Site is well located in terms of the existing public transport network. A short distance to the north-west is the Trumpington Park & Ride. This provides a frequent service (6 buses an hour) to and from the City Centre.

2.19 In addition, the Park & Ride site is the current southern terminus for the Cambridge Guided Busway Routes A and R. Busway A connects the Park & Ride site to St Ives and Wyton Airfield via Addenbrooke's Hospital, Cambridge Station, Central Cambridge and Cambridge Science Park. Services operate every 15 minutes in either direction and the busway is off-road (guided) between the Park & Ride and Cambridge Station and between the Science Park and St Ives. Busway R operates between Trumpington P&R and Cambridge Station, with some services operating via Addenbrookes Hospital.

2.20 The Park & Ride also offers connections to strategic locations by coach including Stansted, Luton, Heathrow and Gatwick airports and London.

2.21 Further bus routes operate along both the Hauxton Road and Shelford Road / Cambridge Road corridors adjacent to the Site. These not only provide further connections into the City Centre and facilities within Cambridge, but also to nearby settlements, including Great Shelford and Royston.

2.22 The Site, in combination with its neighbours offers the opportunity to optimise the use of these connections but also to develop a sustainable transport network which has the capacity to resolve the chronic problems of congestion apparent in the area and which will inevitably worsen as occupation is taken up of the CBC.

2.23 Figure 4 illustrates the accessibility of the Site (a full size copy of this plan is attached).

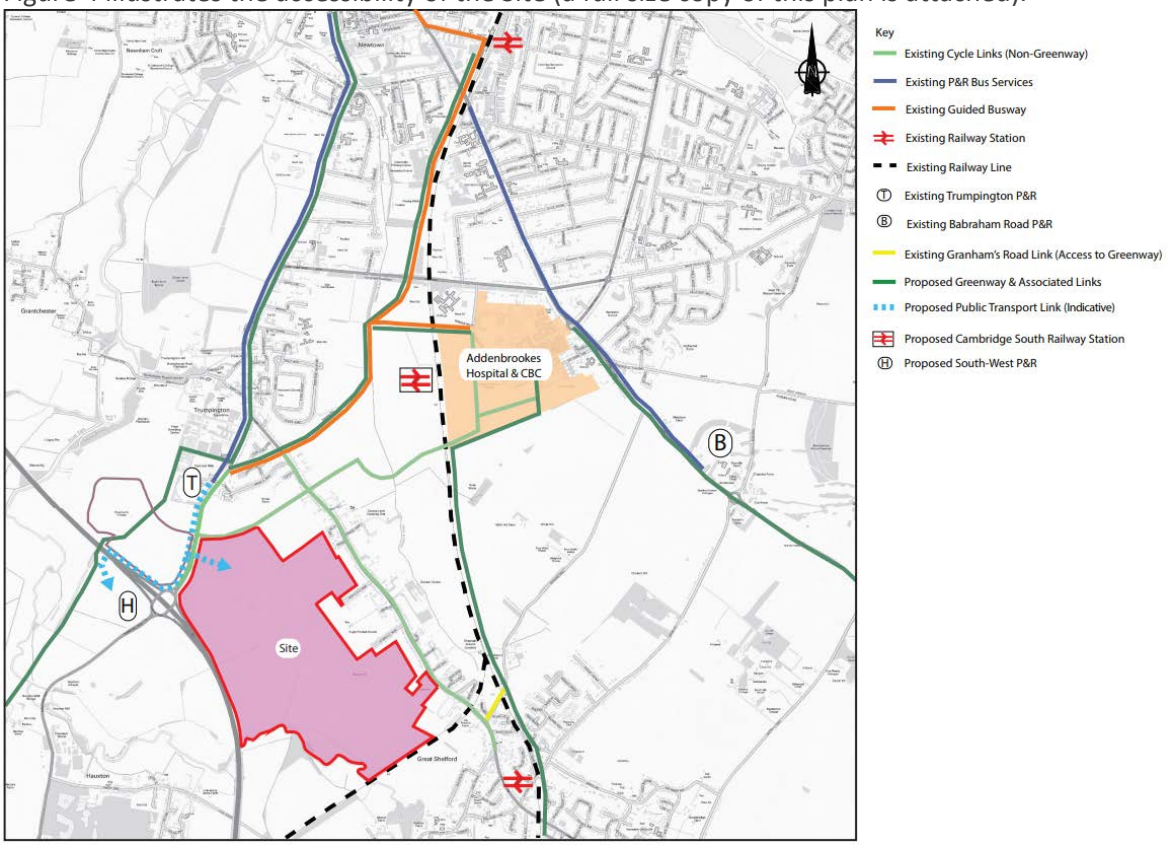


Figure 4 Public Transport Accessibility

2.24

Designations

2.25 While there are no landscape or ecological designations on Cambridge South or its context, the Site is within the Green Belt, and a portion of the south west of the Site is designated as a Scheduled Monument. As will be set out in Section 3, the location of the Scheduled Monument on the edge of Site would allow it to be retained and public accessibility enhanced as part of the future development.

3 The Opportunity

3.1 Initial feasibility work has been undertaken to better understand the development capacity of the Site and the opportunity for different uses. To ensure that the output is both deliverable and supported by the planning framework, this work has drawn on a range of technical inputs, including an assessment of the land and Green Belt features of the Site, planning and transport expertise. This has been initial feasibility work for the purposes of site testing. Were the land to be identified for development, the owners would engage closely with the community, the Councils and other stakeholders in order to develop a consensus around the most sustainable future, including further discussions around the right mix of uses, density and layout.

3.2 A concept plan has been prepared by Aukett Swanke which recognises, respects and enhances the approach to and setting of the city, the river Cam corridor, and the scheduled monument.

3.3 The Site is considered to offer a sustainable location primarily for employment and residential use supported by ancillary facilities. Initial feasibility work demonstrates potential capacity for at least 1,250 homes and 85,000 sqm of employment and research space, located around a new country park. See Figure 4 below (a full size copy of this plan is attached).

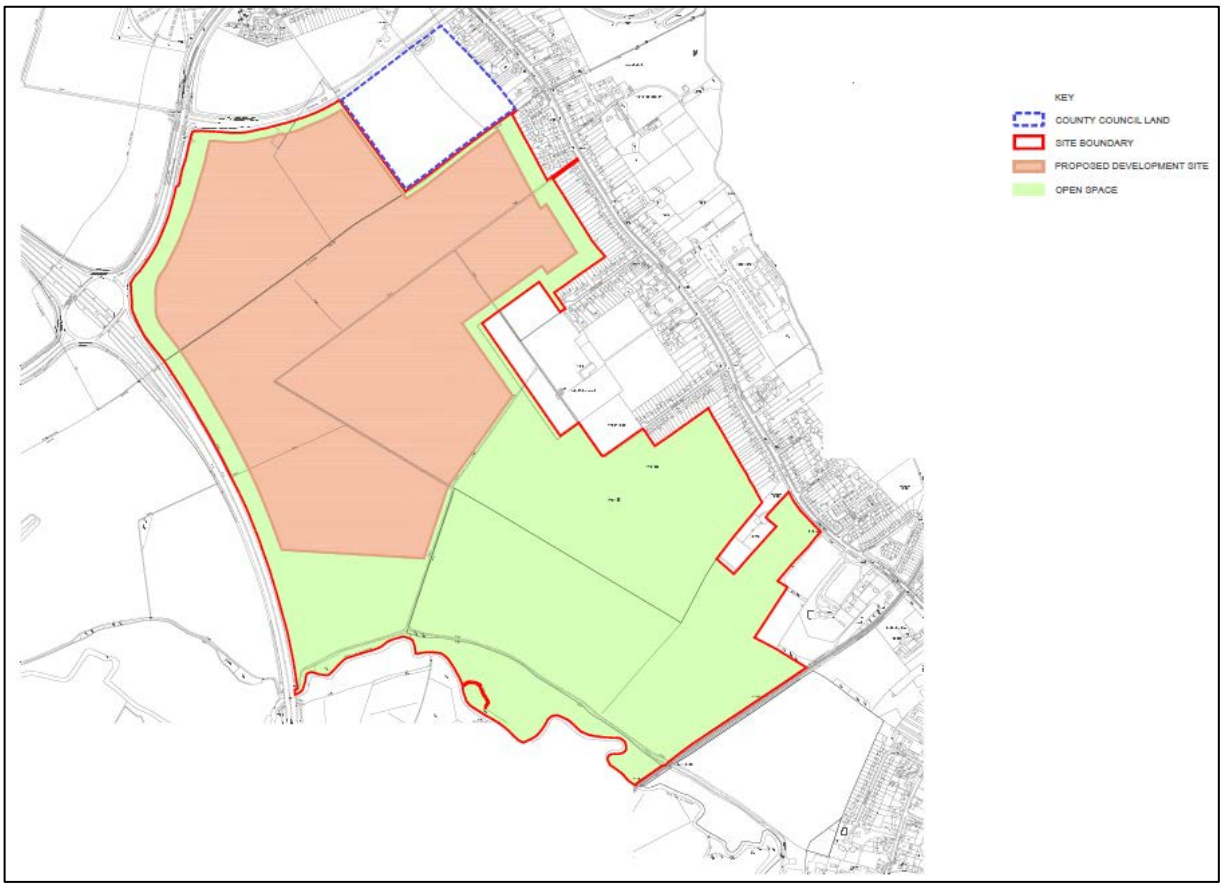


Figure 5 Masterplan Concept

3.4 The route from the M11 into Cambridge is an important introduction and approach to the city. The Site is flat and currently open, with views across the Site to urbanised boundaries to the north and east. Accordingly, the Site offers the opportunity to compose an exemplar modern gateway into Cambridge, eventually leading to the historical core at the heart of the city.

3.5 The retention of a large area of Green Belt in the southern half of the Site is proposed to maintain a physical separation from the village of Great Shelford and enhance the setting of the River Cam and the Scheduled Monument. The open space would also provide public access to a landscape and ecological resource for Cambridge and the local community.

3.6 The concept plan also includes the retention of the Green Belt along a large section of the M11 frontage and a wide buffer landscape zone to filter views into the new development and create a soft landscaped perimeter character to the new development.

3.7 Further detailed assessments and joint working will consider how the development can also contribute to an improved transport network in the Southern Fringe, including the potential to provide on-site or support off-site the delivery of a new Park & Ride facility to support the existing Trumpington Park & Ride which is at capacity. Detailed assessments would also consider the opportunity for relief to key junctions around the Site, the potential to enhance Addenbrookes Road as a corridor with public transport priority and the potential to intercept traffic bound for the CBC. The ability to connect to or extend the Guided busway into the Site is also apparent. The opportunity to deliver transformational change through modern connectivity interventions is at the heart of the owners' vision for the Site. Discussions with Grosvenor and with the CBC suggest there is a significant opportunity to plan a collective vision.

3.8 The Site has the ability, like no other, to deliver restricted and carefully controlled uses, meeting the economic needs of the Life Sciences and medical research subsector in close co-location with CBC and Addenbrooke's and providing a substantial number of homes for key workers on the Site, to minimise the distance to travel and maximise the use of sustainable modes of transport. These unique qualities of the Site support its inclusion within the new Local Plan.

3.9 The Site, although not directly adjacent to CBC, is in close enough proximity to assist in meeting the needs of the subsector. Reports from JLL and Creative Places and results of their demand surveys contain further evidence from both local and international agents explaining the need for proximity in the subsector, the proximity criteria which businesses and organisations use for investment decisions in the subsector with the conclusion that the Site would function strongly in this regard[2].

[2] Appendix 2 - Locational Key Considerations, JLL Letter dated 15 February 2017;
Appendix 3 - JLL Cambridge South Demand Study and Creative Places Demand Study.

4 The Life Science Industry

4.1 The Site lies close to the south-west of the CBC, a world-renowned centre of excellence for biomedical research and development, and medical care. The CBC is an important asset of national importance.

4.2 Cambridge is a global research and development ('R&D') cluster, with over 190 Life Science related companies based in the City and surrounding areas. The University, frequently ranked as one of the top five in the world, delivers a strong talent pool providing Cambridge with one of the best educated workforces in the UK. Alongside skilled labour, Cambridge's success has occurred due to the breadth of sciences that are able to come together in one place and collaborate across multiple facets of science. This is achievable through access to world-leading centres of research and the concentration of world leading healthcare providers including Addenbrooke's Hospital, Papworth Hospital and the School of Clinical Medicine. Working in collaboration with these major health organisations provides vital research partnerships for the University's research institutes as well as international companies and SMEs, resulting in innovative discoveries and technological advancement in the city. The success of the sector is exemplified by the number of international occupiers who have located in the CBC and this is well documented in the Draft Cambridgeshire and Peterborough Local Industrial Strategy[3].

4.3 However, the success of the CBC in attracting and retaining globally significant development and research firms, as well as the best talent, has resulted in the existing floorspace and site infrastructure becoming insufficient. Further employment and residential floorspace and a significant improvement to the accessibility of the Site is required to enable future growth.

4.4 The Cambridgeshire and Peterborough Independent Economic Review (CPIER) (Barker, 2018) has highlighted the risk of not addressing this issue in the case of knowledge-intensive businesses where agglomeration effects are important. Key recommendation 3 advises government to *"adopt a 'Cambridge or overseas' mentality towards knowledge-intensive (KI) business in this area, recognising that in an era of international connectivity and footloose labour, many high-value companies will need to relocate abroad if this area no longer meets their needs. Ensuring that Cambridge continues to deliver for KI businesses should be considered a nationally strategic priority."*

4.5 The CPIER was published by the Cambridgeshire and Peterborough Independent Economic Commission in September 2018. The report was prepared to create a single strategic position to help the Greater Cambridgeshire and Peterborough area consider the case for greater fiscal devolution and powers to unlock the delivery of major infrastructure, which could deliver benefits to the rest of the UK. The CPIER recognises the increasing economic importance of the Cambridgeshire and Peterborough area by identifying that its economic growth has outpaced both the East of England and the UK over the last decade, which is primarily the result of rapid business creation and growth in Cambridge (page 24).

4.6 The Local Industrial Strategy emphasises the imperative for Cambridge to "*expand and build on the clusters and networks that have enabled Cambridge to become a global leader*." [4]

4.7 Recent analysis of the existing situation by Creative Places on behalf of the owners demonstrates that if the CBC campus continues to grow at the existing rate (an average of 18,050 sqm per annum taken from the ten-year period from the 2009 outline permission), then land supply would be exhausted

[3] Page 16, Draft for Business Board, 15 March 2019
[4] Local Industrial Strategy, page 4.

within five years, assuming that the Phase 3 land (land allocated in the 2018 Local Plan) can be made available once Phase 2 is built through. Even at half this rate, all land will have been used within nine years.

4.8 There is no further land allocated in the proximity of CBC, or indeed on the south side of the City, for the plan period through to 2031. Given the evidence above regarding the need for proximity to the research base and close to Addenbrooke's Hospital in order to deliver advanced healthcare research and innovative products and therapies, it is critical that more land is allocated on the south side of Cambridge. Given the time horizon of the new Local Plan, detailed forecasting must be prepared and provision should be made as part of a wider strategy for the south of Cambridge.

4.9 Importantly, occupiers are also concerned with housing for employees. The Local Planning Authorities are familiar with the significant demand for housing for key workers in the research and healthcare industry. The Draft Cambridgeshire and Peterborough Local Industrial Strategy reports that house prices have reached over 13 times average salaries in Greater Cambridge[5] and that housing, as well as energy capacity and transport issues, "*will significantly reduce the success of Greater Cambridge if not dealt with*"[6].

4.10 The recruitment and retention of employees is critical to the growth of a knowledge intensive industry and, therefore, the critical shortage of appropriate housing at prices which specific key workers can afford is a principal concern of research organisations at CBC.

4.11 It is therefore incumbent on the Local Plan to recognise the significance of these issues and to work with key landowners to develop a strategy for the southern city fringe which can address the issues comprehensively and sustainably.

[5] Page 7, Draft for Business Board, 15 March 2019
[6] Page 24 - Draft for Business Board, 15 March 2019

5 Consistency with Policy

5.1 The requirement for the planning authorities to meet objectively assessed needs is set out in the NPPF. Paragraph 14 promotes a presumption in favour of sustainable development which should act as a golden thread in both Local Plan-making and decision taking. For plan-making this means that LPAs should positively seek opportunities to meet the development needs of their area and that Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change.

5.2 Paragraph 17 of the NPPF requires Plans to set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities.

5.3 The NPPF states that Green Belt boundaries may be altered in "*exceptional circumstances*", where brownfield alternatives, the densification in urban areas, and discussions with neighbouring authorities have all been exhausted as avenues for development (paragraph 137). In order to provide the volume and quality of genuinely deliverable land in the right location, i.e. in close proximity to the CBC, the Council should recognise that circumstances are such that fully addressing this demand can only be done with the release of Green Belt land for development.

5.4 There is nothing unusual in principle with this position and the NPPF clearly contemplates the review of Green Belt boundaries through the Local Plan to respond to the need for sustainable development.

5.5 Paragraph 80 of the NPPF requires Plans to help *"create the conditions in which businesses can invest, expand and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. The approach taken should allow each area to build on its strengths, counter any weaknesses and address the challenges of the future. This is particularly important where Britain can be a global leader in driving innovation, and in areas with high levels of productivity, which should be able to capitalise on their performance and potential."*

5.6 In this context, support for development of Cambridge South would be entirely consistent with the NPPF.

5.7 It would also be consistent with the draft Local Industrial Strategy, which sets out as its first priority to "*improve the long-term capacity for growth in Greater Cambridge*". [7]

[7] Draft Local Industrial Strategy, page 4.

6 Conclusion

6.1 The Cambridge South site is located at an important gateway to the city and in close proximity to a world-renowned centre for excellence in Life Sciences, the CBC.

6.2 This CBC is a highly specialised and nationally important cluster of life-science and biomedical research, but its ability to maintain this status is threatened by its inability for growth and evolution, caused by the limited, short-term availability of land and by a chronic shortage of access to suitable housing for its staff. There is also a need to develop innovative, sustainable transport networks to reverse the congestion which affects the CBC, and which is forecast to worsen.

6.3 These requirements will have to be addressed if the southern part of the city fringe is to meet its potential. The new Local Plan has an important role to play in this respect and the owners of the Site have been working closely with their neighbours to develop a comprehensive solution which uses the attributes of each principal site to address the critical issues.

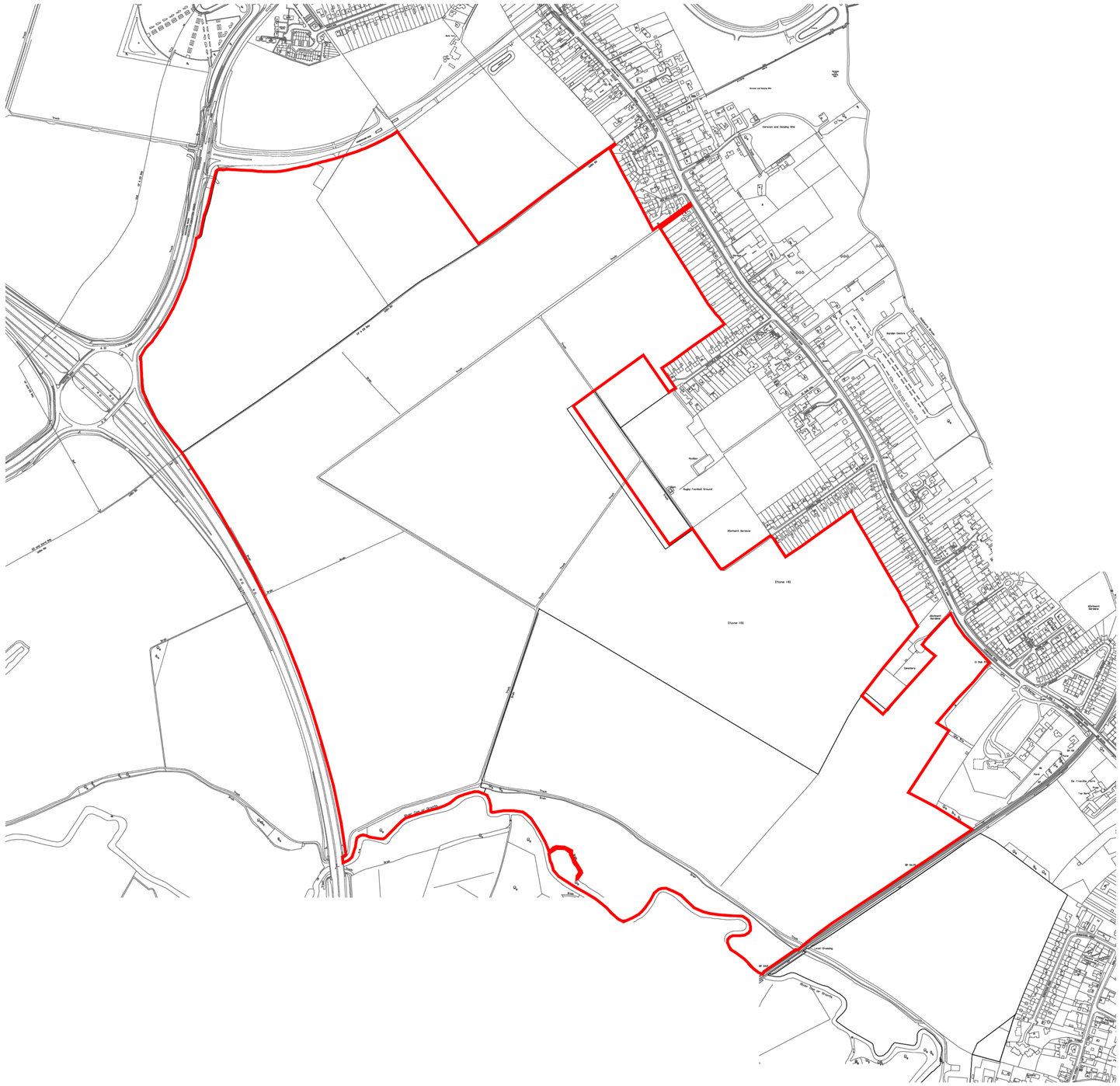
6.4 The Cambridge South site presents an exciting opportunity to achieve such growth in a sustainable and attractive way.

6.5 The Site occupies an underutilised, large parcel of land. It is largely undeveloped and its limited number of owners have agreed to work together. Consequently, there should be no barriers that would prevent the Site coming forward quickly. These Representations confirm that the Site is available and deliverable.

6.6 Allocation of the Site in the Greater Cambridge Local Plan for mixed housing and employment development is respectfully requested.

Appendix 1: Site Location Plan

aukett swanke



KEY

SITE BOUNDARY

N

Scale 1:5000
0 100 200 300 400 500M

Cambridge Consortium

Cambridge South

SITE BOUNDARY PLAN

Rev	Date	Details	By	Authorised

Drawn By:	Checked By:	Authorised By:	Revision By:	Rev Authorised By:
VL	AM	DW	VL	AM
Date:	Scale	Drawing No.	Rev:	Rev date:
19/03/2019	1:5000@A1	20971-01-AR-10-118	A	19/03/2019

20-Mar-19 11:42 AM By Valentine Lestas

Appendix 2: Locational Key Considerations, JLL

Jones Lang LaSalle Ltd
30 Warwick Street London W1B
5NH +44

Ms Viktoria Oakley
Lands Improvement
10 Lower Grosvenor Place
London
SW1W 0EN

Our ref Cambridge South
Direct line
Direct fax
Mobile
Email

15 h February 2017

Dear Viktoria,

Cambridge South: International R&D Life Science Companies

Please find a brief overview outlining key considerations for Cambridge South as a future life science cluster within Cambridge.

The context of Cambridge as an international player in the life science industry

Europe is home to a number of countries who play an important role in the growth of the life science market, but the largest markets, competing at the international level, are the UK, Germany and Switzerland. In the UK, the sector is worth £60bn a year, employs more than 220,000 highly skilled people[1], and is largely dominated by the "golden triangle" which comprises London, Oxford and Cambridge, where companies based in this region contribute to 25% of total pharmaceutical turnover.

Cambridge is a global R&D cluster, with over 190 life science related companies[2] based in the City and surrounding areas. The University, frequently ranked as one of the top five in the world, delivers a strong talent pool with 61.3%[3] of its residents possessing a bachelor's degree, one of the best educated workforces in the UK. Alongside skilled labour, Cambridge's success has occurred due to the breadth of sciences that are able to come together in one place and collaborate across multiple facets of science. This is achievable through access to world-leading centres of research such as the Sanger Centre, the John Innes Centre for Plant Research and the Babraham Institute of Immunology Research, and also the concentration of world leading healthcare providers including Addenbrooke's Hospital, Papworth Hospital and the School of Clinical Medicine. Working in collaboration with these major health organisations provides vital research partnerships for the University's research institutes as well as international companies and SMEs, resulting in innovative discoveries and technological advancement in the City. Proof of Cambridge's standing as a world leading life science powerhouse, is substantiated by the number of international occupiers who have located there including Amgen, AstraZeneca, Bayer, Gilead, GlaxoSmithKline and Medimmune.

This trend is not exclusive to the life science sector as the market has witnessed a number of international occupiers expanding operations as well as moving their HQs into Cambridge. Microsoft relocated its European Research HQ into CB1 in 2013, in expanding their exposure into healthcare, they chose to be located in proximity to Cambridge Biomedical Campus. Amazon who had existing

[1] https://www.gov.uk/government/news/ fe-sc ence- eaders-say-uk- s-better-off- n-a-reformed-eu
[2] www.onenuc eaus.com
[3] Off ce for Nat ona Stat st cs

space at their Cambridge Development Centre are taking further space at One The Square, Brookgate's CB1 development adjacent to the station. And other companies in the technology sector such as Nokia have a strong foothold in the City, with others such as Google and Apple also known to be considering a move to the City.

Brexit and the government commitment to Life Sciences

Brexit presents opportunities and challenges for the UK life science market. Commentators have speculated about the impact from a loss of funding in the sector, the EU provided €8.8bn ($9.8bn) in grants during 2007-13. However, not all of this funding goes to EU members (such as Israel, Tunisia and Turkey) and outside of the EU it is possible that the UK could still benefit. In addition, as one of the contributors to this funding pot, the UK should be able to re-allocate resources to its own initiatives. Equally, not being part of the EU may allow the UK to be more agile by offering attractive incentives to business, in a similar way to Switzerland and Singapore. A key consideration will be the ability to attract and retain EU nationals who make up 17% of researchers and academics in higher education in the UK[4].

There is uncertainty surrounding Brexit and this means that the UK and cities like Cambridge need to adopt a proactive approach so that they remain competitive on the international stage. Given that the life science sector contributes so extensively to the economy, the Government has made commitments to promote growth. In November 2016, Theresa May announced an additional £2bn of investment per year for R&D (over the current administration), to ensure British business remains at the cutting edge of scientific and technological discovery. This represented a promise from the Government to promote life sciences and maintain the industry's status as a significant contributor to the sustained growth of the economy. Evidence that the Government recognises Cambridge's vital role in supporting growth in the life science market, was also demonstrated when Greg Hands, International Trade Minister, visited the City to pledge his continued support for the sector in Britain. Substantiating this, the Government committed £137m to Cambridge University, underwriting the EU funding already devoted to research projects.

The key drivers for life science occupiers

The life science sector is not a traditional commercial market. As an international industry, occupiers are often footloose, however R&D occupiers are increasingly unwilling to compromise on location with decisions being driven by specific requirements relevant to their business model. JLL have experienced this first hand as advisors to international life science occupiers including AstraZeneca, Bayer, GSK, MSD and Pfizer. We therefore have a good understanding of the key drivers, which we define as the 'Ingredients for Success', a list of key credentials that are necessary in order to establish a successful and vibrant science hub and attract new occupiers.

1. **Being part of a cluster** – occupiers want to be part of a cluster that will foster innovation and encourage growth. If this is not possible, it is likely that they will aim to be situated close to an existing and established cluster in order to benefit from a ripple effect.
2. **Successful collaboration between academic and commercial research** is important within life science clusters, where research institutes, hospitals and corporate life science companies are able to complement each other's projects. This is particularly key where some companies have a business need to be adjacent to hospital facilities.

[4] http://www.econom st.com/news/br ta n/21709600-med ca -and-pharmaceut ca -f rms-ponder-the r-pos t on-outs de-europe- fe-after-brex t

3. **Access to skilled labour** by being based in an area where there is a strong talent pool of researchers and scientists. Alternatively, some newly developed clusters place themselves close to areas where there is a future talent pipeline.
4. **Cost** is particularly important for SMEs who require costs to be competitive and based on flexible lease terms and favourable incentive packages. However, for larger R&D occupiers, cost is a secondary factor as they are willing to pay the 'cost of entry' in to the market.
5. **Infrastructure**, this includes:
    a. **hard infrastructure** such as transport links via road, rail and air, and internet accessibility and speed of network
    b. **social infrastructure** such as the availability of affordable housing for staff
6. **A commercial anchor** is recognised as an important component in providing capability and resources for driving entrepreneurial initiatives forward.
7. **Development mix** – delivering the right environment for a range of company sizes and development stages by delivering an appropriate split of space between incubator, grow on and larger institutional type space.
8. **Access to funding** has become increasingly important for life science clusters to kick start development, particularly for SMEs.
9. **Amenity provision** of cafes, communal areas and facilities such as nurseries and gyms have become increasingly important to create an attractive working environment for employees.
10. **Presence of serial entrepreneurs,** people in the market who successfully commercialise IP

Based on previous market testing, the principal influences in choosing a location were revealed to be; successful clustering, access to talent and a strong link to academia/research institutions. Given that these are all features that are synonymous with Cambridge, it provides an indication of how it has become such a successful life science hub and a leading global destination for occupiers.

The impact of global trends

The advancement of technology has allowed real estate to work more efficiently for occupiers resulting in large real estate portfolios of international pharmaceutical occupiers becoming consolidated. This consolidation of space has pushed location further up the agenda with R&D occupiers becoming increasingly focused on existing clusters, with a polarisation of activity on well-known and established locations that satisfy the 'Ingredients for Success'. Cambridge is well positioned to benefit from this as an international cluster across diverse facets of science.

The ability to recruit and retain staff has also become an increasingly competitive process as employees are footloose, altering jobs and career paths regularly. To retain talent, occupiers have to choose vibrant and well-connected locations, with a strong amenity provision. Cambridge has strong competition from London and other global clusters such as San Diego, Bay Area, Boston and Singapore. In order to compete there needs to be further investment into infrastructure to ensure that the City becomes more interconnected as well better linked on a national and international scale.

Cambridge South – Local drivers of demand

Cambridge South is situated in a prominent location due to its proximity to Cambridge BioMedical Campus that includes Addenbrooke's Hospital, Papworth Hospital, Medical Research Council and AstraZeneca. Establishing strong links with healthcare providers such as Addenbrooke's enables life science occupiers to collaborate with clinicians on the delivery of their healthcare solutions and to

access clinical trials. Furthermore, as discussed above, new occupiers will seek to directly benefit from clustering with life science companies such as AstraZeneca. These are attractive benefits to the site, and are ones that would draw larger scale occupiers on a national and international scale, as well as those that are smaller start-up businesses, SME type operators and spin out companies from incubators who want to be part of an R&D cluster.

Evidence of global life science companies moving into Cambridge.
In substantiating the case that Cambridge is a global hub for life science activity, AstraZeneca is an example of an international occupier who selected Cambridge in 2013 to house not just their operating functions, but also their headquarters into the City. Their new £330 million headquarters HQ at the Cambridge Biomedical Campus comprised a site of 11 acres and delivered circa 650,000 sq ft of space, inclusive of a 500,000 sq ft R&D centre to house 2,000 staff.

JLL advised AstraZeneca on this move and presented a wide range of options in different cities to them, from which they could base their research operations and HQ. After a detailed process Cambridge was selected. CEO Pascal Soriot cited publicly at the time that the future of their business was to shift its strategy towards more patient centric work, and at a local level, being situated in proximity Cambridge Biomedical Campus was perceived to be great advantage. This was due to the other pharmaceuticals who had clustered around there, but also as a result of the site's proximity to Addenbrooke's Hospital, where they are able to engage with healthcare professionals to develop and improve the research and development of treatment and access clinical trials. This was a clear differentiator for the site in the selection process and one that was closely aligned to their business strategy.

Challenges of the Cambridge market
Cambridge does however present some challenges for life science occupiers. Firstly, infrastructure in the City requires significant improvement. Traffic congestion is a major issue facing commuters traveling around Cambridge, furthermore train connections from the City across the country are poor and in need of upgrading. With life sciences becoming an increasingly globalised sector, Cambridge would also benefit from Stansted Airport being more extensively serviced by a greater number of international flights. For occupiers, connectivity has become a major locational driver, given that younger generations tend not to own cars, in order to retain talent the ease of commuting via public transport is a major requirement.

A significant challenge for occupiers within Cambridge is the lack of available accommodation. According to Bidwells, office supply has fallen to its lowest level in 15 years with availability rates down to 8.5%. The laboratory market has also experienced a decrease, with available supply falling from 14% in 2012 to 4% by last year. This creates a very constrained market and makes it difficult for occupiers to select space that is appropriate for their requirements. New supply is needed in the Cambridge market, and this supply needs to be viewed as a deliverable proposition to be considered (such as having a favourable planning policy) so that it can compete with other international R&D clusters to attract life science / R&D companies. Bearing in mind the footloose nature of the potential occupiers, this is a key challenge for Cambridge moving forward.

Thirdly, the cost of residential accommodation in Cambridge is another key challenge for occupiers. Prices have risen 75% in a decade, with the asking price in 2006, at £264,227 rising to £463,093 by last year[5]. This makes it challenging for life science occupiers to recruit young professionals who

[5] http://www. nvestforproperty.co.uk/cambr dge-f gures-at-top-w th-75-per-cent-r se- n-property-pr ces- n-a-decade/

cannot afford to live in the City and the surrounding areas. The combination of these issues could result in occupiers looking to other competing locations with a better infrastructure provision, more choice of suitable office and laboratory accommodation and cheaper costs of living for their employees.

Conclusion

Cambridge is a life science cluster of international importance showcasing a number of key ingredients that we identify as being crucial to the success of a life science hub. Global trends are influencing how occupiers make location decisions but these potentially accentuate Cambridge's strengths, namely a strong existing cluster, access to academia and research, and talent. However, if Cambridge is to preserve its current standing, and continue to grow as a world leading life science hub, it is essential to provide additional office and laboratory accommodation in appropriate locations within the City. At a local level, Cambridge South provides an opportunity to respond to well recognised drivers in the market and develop a life science cluster of scale with proximity to the Cambridge Biomedical Campus, a local hub for life sciences within Cambridge

Next Steps

We would advise that the business case for Cambridge, and Cambridge South, is tested further with potential occupiers to understand the drivers for demand. From this we will build on the findings of this brief overview to bring together a clear strategy for the development moving forward.

If you have any questions please do not hesitate to contact me.

Kind regards,

Chris Walters
Associate Director - Strategic Development Consultancy
JLL

Appendix 3: Cambridge South Demand Study, JLL and Creative Spaces

Cambridge South Demand Study

Introduction

In order to fu y understand the ma n dr vers of the L fe Sc ence market n Cambr dge, JLL and Creat ve P aces undertook soft market test ng w th a number of R&D stakeho ders rang ng from mu t nat ona s through to sma er, oca occup ers. The object ve of the nterv ews was to rea se how these market p ayers v ew Cambr dge s future R&D capab ty and estab sh what the r key ocat ona dr vers were. Fo ow ng on from th s, the test ng was a so used to understand the market s percept on of Cambr dge South as a R&D hub, compared w th other ocat ons w th n the c ty, as we as w th the rest of the UK.

JLL and Creat ve P aces sought the v ews of 12 market p ayers nc ud ng mu t nat ona pharmaceut ca , med um s zed R&D compan es as we as sma bus nesses. Th s a owed for a range of opt ons to be canvased to estab sh a oca , nat ona and nternat ona perspect ve.

Key Findings

JLL ed on the nterv ews of arger, nternat ona R&D compan es, speak ng to four compan es who operate n th s market. The key outputs were:

1. Defining the main drivers for CBC, referencing survey results

Through the market test ng resu ts we have been ab e to estab sh the pr nc p e ocat ona dr vers of L fe Sc ence occup ers.

What emerged from our market test ng was the mportance that nternat ona occup ers attr bute to c uster ng a ongs de academ c nst tut ons, c n ca research and hosp ta s. These factors were perce ved to be key n promot ng nnovat on and deve opment n the r products.

Further to th s, access to ta ent and a company s ab ty to reta n and attract t was a so h gh ghted to be a centra reason to ocate n a part cu ar ocat on. To quote one mu t nat ona pharmaceut ca we nterv ewed, “It s a about the peop e at the end of the day, t s a strugg e to recru t and reta n from day one. If you have a strong research nst tute and commun ty, the peop e are a ready there wh ch he ps. They go hand n g ove.”

The ack of hous ng that s affordab e, was one factor that was h gh ghted as be ng restr ct ve for occup ers n attract ng and reta n ng ta ent n Cambr dge. The rap d r se n cap ta and renta va ues of res dent a accommodat on n Cambr dge have made t a cha enge for L fe Sc ence compan es to emp oy young profess ona s as they cannot afford to ve w th n the c ty.

Access to transport was a so h gh ghted as a key cons derat on of a part cu ar ocat on. Connect v ty s very mportant part cu ar y for nternat ona pharmaceut ca s, f rst y n order to nk to the r own g oba network, but a so n access ng c n ca research, fund ng partners and academ c nst tut ons eas y.

As a resu t of these key dr v ng factors, nterv ewees were c ear that they had a preference to be ocated n c ose prox m ty to Addenbrooke s Hosp ta and Cambr dge B omed ca Campus.

2. Demonstrate in your opinion that Cambridge South that is close enough to operate successfully in this way.

When quest oned on the su tab ty of Cambr dge South as a ocat on to successfu y operate from, occup ers h gh ghted that t wou d be a strong cons derat on for them. Prox m ty to the key nst tut ons d scussed above were v ewed as essent a to enab e co aborat on, know edge transfer and nnovat on. “Prox m ty” was def ned as be ng w th n 10-15 m nutes by wa k ng, cyc ng or pub c transport, by a of the g oba pharmaceut ca compan es who responded to the market test ng. One respondent emphas sed th s po nt, h gh ght ng that through research they had carr ed out on th s part cu ar subject, they had found that “when we moved from a ocat on from 30 m nutes to 10 m nutes, the co aborat on ncreased s gn f cant y because t was a drop n type arrangement.”

It was h gh ghted by the major ty of pharmaceut ca occup ers quest oned, that the current supp y su tab y ocated L fe Sc ence accommodat on was “cr t ca y ow” to “ ow” n Cambr dge and was therefore conc uded that n order to ma nta n Cambr dge s reputat on and stand ng as a g oba p ayer n the L fe Sc ence market, there was a c ear need to deve op a successfu c uster n prox m ty to the c ty s academ c nst tut ons, c n ca research nst tut ons and Addenbrooke s Hosp ta .

Cambridge South Demand Study

Introduction

Creative Places are specialist property consultants working in the research/commercial R&D sectors. We have been working on a number of projects within the Cambridge sub-region, sitting alongside commercial property agents, since we were formed in 2009. We have direct experience of bringing businesses into these places and have unique understanding of the drivers that affect where businesses ultimately choose to locate.

We have conducted interviews with a number of businesses in the Cambridge sub-region that have recently acquired property or who may have property requirements in the short to medium term – and who are looking to undertake R&D activity with healthcare related application. They are a cohort that have direct experience of looking for property or considering the issues of where best to locate their activity. We present our key findings made by these businesses during our interviews below.

In summary, our view suggests that delivering further capacity at or close to the Cambridge Biomedical Campus, within Cambridge rather than beyond it, will be important.

Key Findings

1. Defining the main drivers for our cohort, referencing survey results

R&D intensive companies value the proximity to current and potential future collaborators from both an academic and clinical research perspective. These collaborations allow commercial product development time and costs to be shortened when working with key opinion leaders in their respective therapeutic or technology area.

Companies placed attracting and retaining talent from both domestic and international locations as a major factor in location decisions. Cambridge has a significant advantage owing to the brand of the science and skills capability that exists in the cluster and across the region.

Companies have clearly defined cultures and place great emphasis on their staff's ability to travel to work in a flexible way. The majority of companies we interviewed stated being within a 20 minute cyclable distance from the city centre was important. Two companies in particular went further to define their location decisions were made solely on a cyclable distance and also a site which had adequate public transport that they would not have to use a private car to commute to work. Therefore, making it easy and flexible for staff is one of the key factors in location decisions when moving around Cambridge.

Another core logistics and transportation theme emerging from the interviews is connectivity and access to the railway network in order to commute to London.

2. **Demonstrate in your opinion that Cambridge South is close enough to operate successfully in this way**

Looking at location maps of key sites across Cambridge, the majority of companies indicated that being located south of the city would be preferable. The majority of local companies expressed their preferences for a short cyclable distance when conducting their research and collaboration activities on the Cambridge Biomedical Campus and between Cambridge South as a location.

One company stated *"We would prefer to be around Addenbrooke's Hospital but if Cambridge South has a railway station that makes it attractive for connecting to London"*.

Another company quoted *"We prefer the southern side of the city owing to a combination of infrastructure, potential collaborators and it is still close to the city centre and the railway station."*

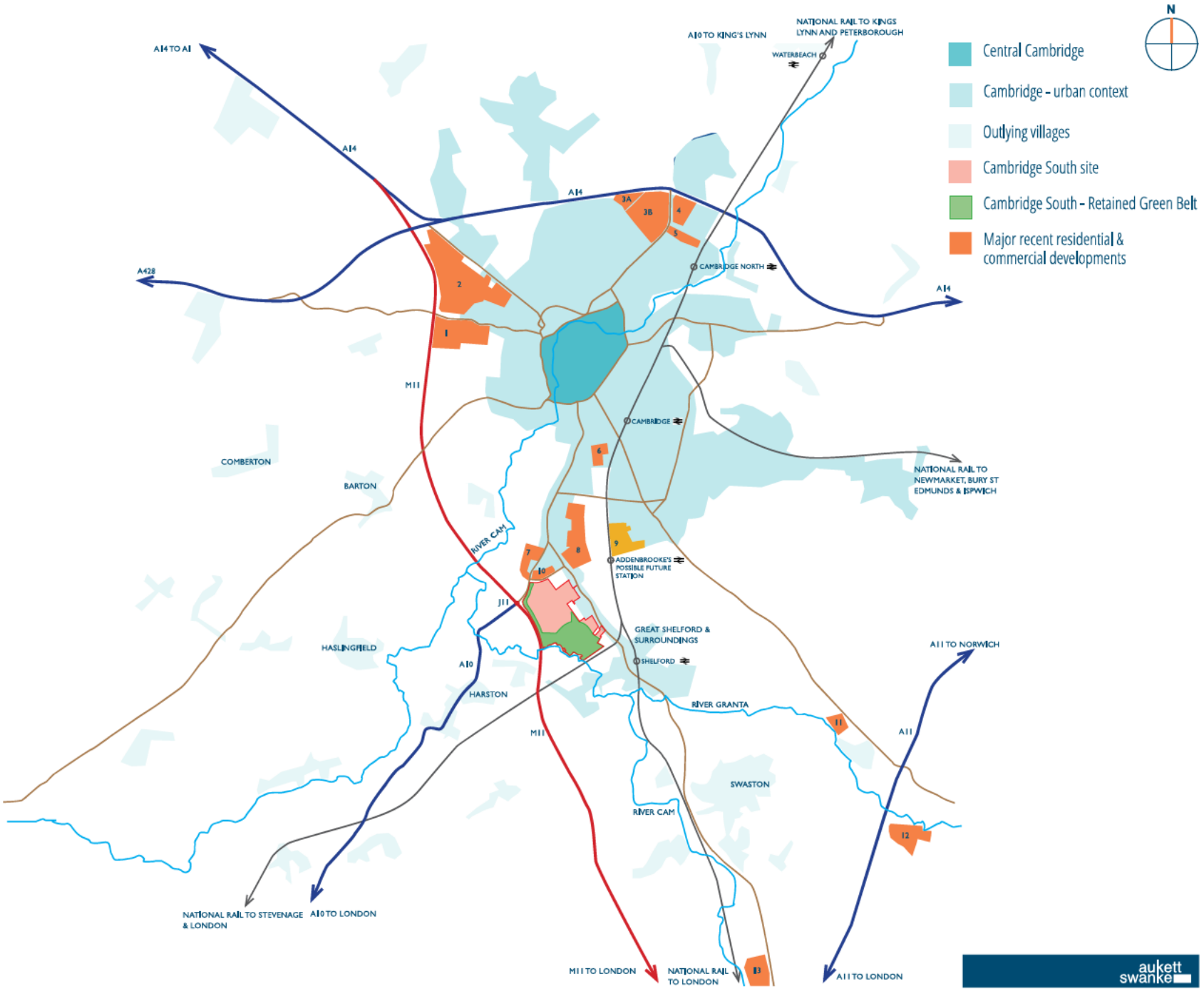
Some SMEs on the next stage of their growth, found it difficult to find the right supply of property in Cambridge. Most companies ranked the perception of availability of commercial space in Cambridge as critically low. Some went on to state *"We only wanted to be on the south side of the city and found it incredibly hard to find the right space".*

A company scaling up to over 100 people went further to define Cambridge as having a tricky commercial property situation. *"If Cambridge is the world's knowledge-based economy and we are to exploit the success of our science and technology base, then there needs to be more consideration to provision of buildings for scale ups. Think of the movie, Field of Dreams 'if you build it, they will come' is what's needed, Cambridge will fill it!"*

Figure 1 Site Location

CAMBRIDGE SOUTH MASTERPLAN

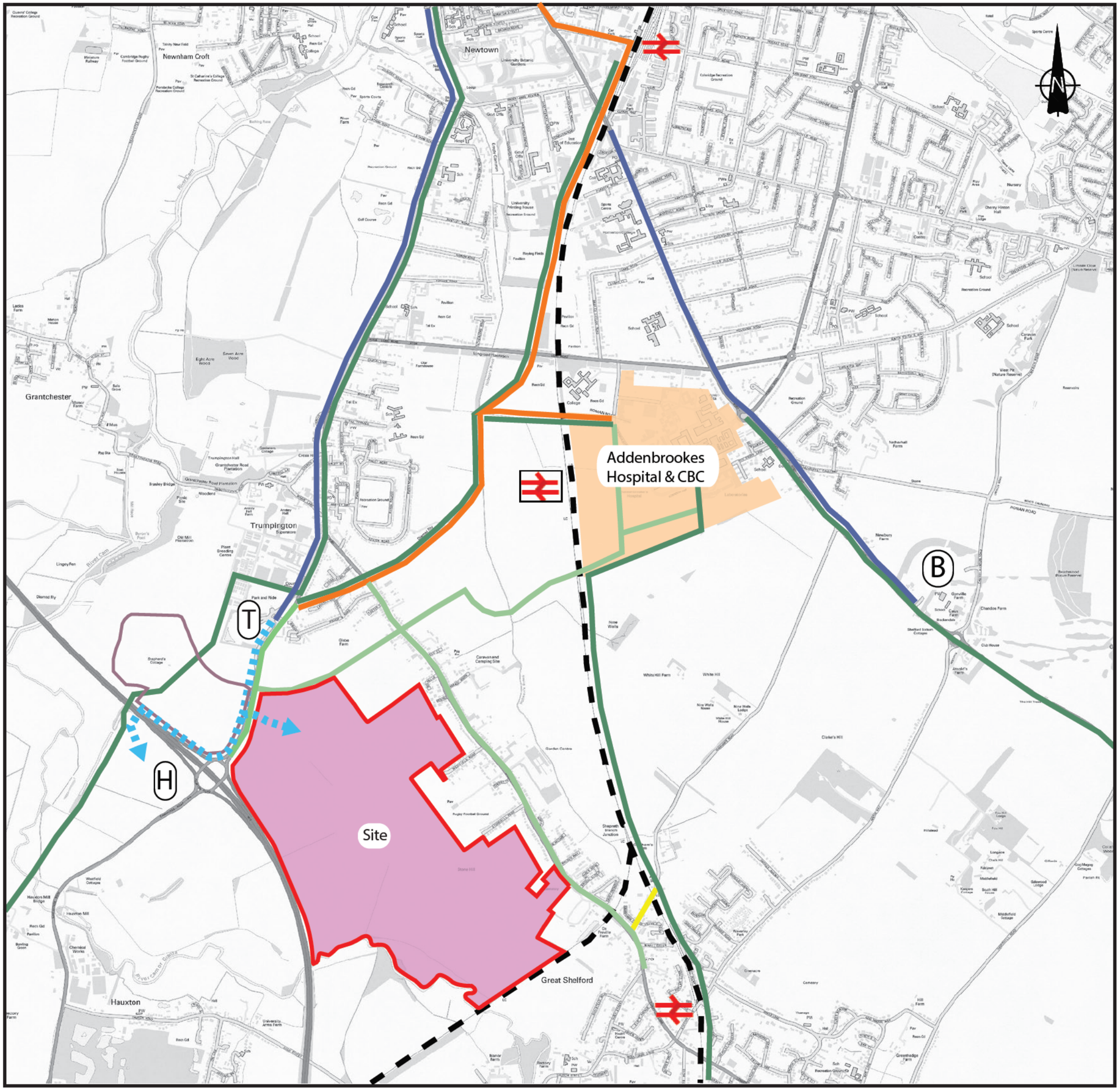
SITE AND URBAN CONTEXT



1. West Cambridge Campus
2. North West Cambridge Development
3A. & 3B. Cambridge Science Park
4. St John's Innovation Park
5. Cambridge Business Park
6. Accordia
7. Trumpington Meadows
8. Clay Farm
9. Addenbrooke's Hospital Masterplan & Cambridge Biomedical Campus
10. Glebe Farm
11. Babraham Institute
12. Granta Park
13. Wellcome Trust Sanger Institute

aukett swanke

Figure 4 Public Transport Accessibility



Key

- Existing Cycle Links (Non-Greenway)
- Existing P&R Bus Services
- Existing Guided Busway
- Existing Railway Station
- Existing Railway Line
- Ⓣ Existing Trumpington P&R
- Ⓑ Existing Babraham Road P&R
- Existing Granham's Road Link (Access to Greenway)
- Proposed Greenway & Associated Links
- Proposed Public Transport Link (Indicative)
- Proposed Cambridge South Railway Station
- Ⓗ Proposed South-West P&R

Figure 5 Masterplan Concept

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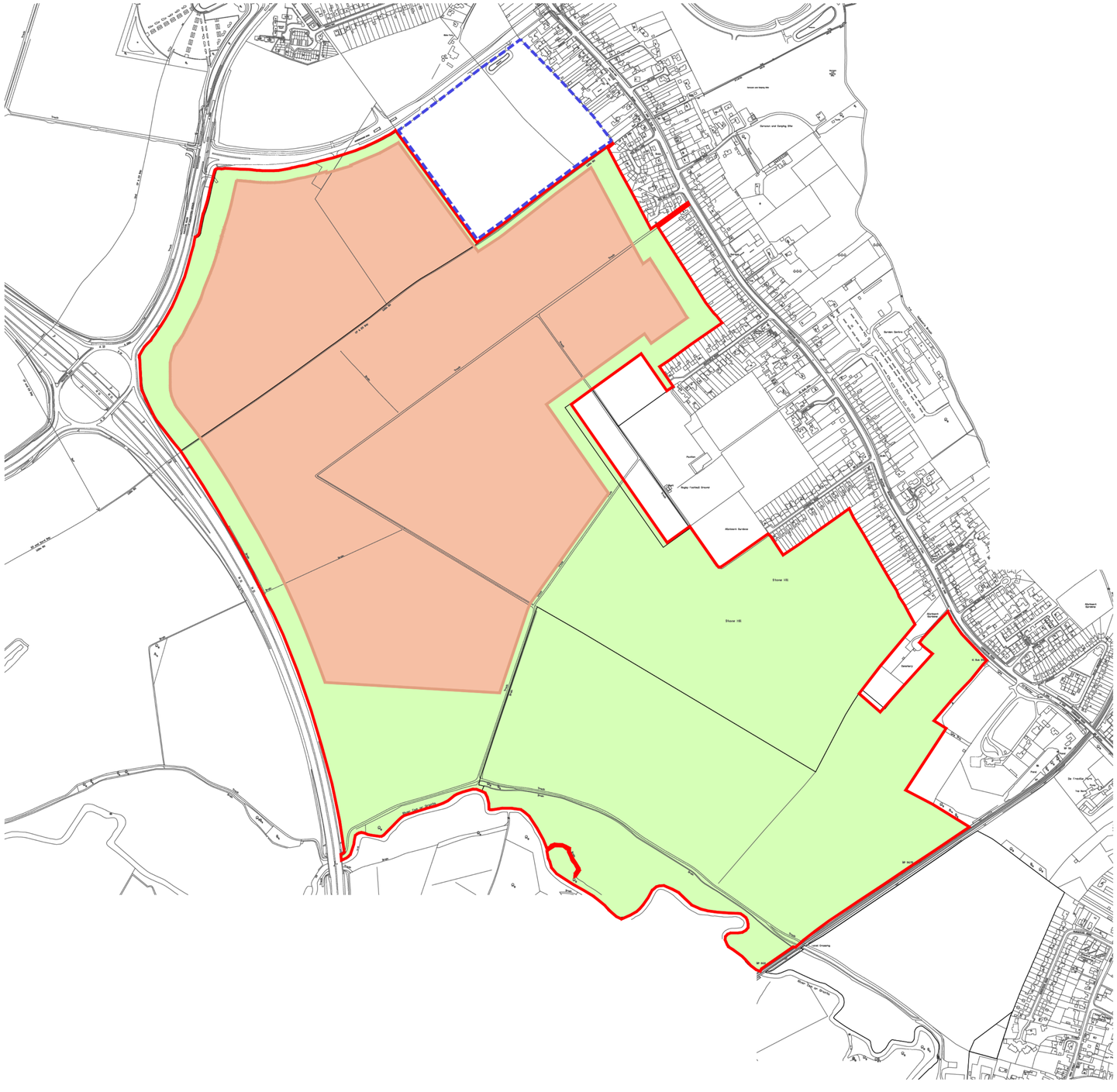

KEY

- COUNTY COUNCIL LAND
- SITE BOUNDARY
- PROPOSED DEVELOPMENT SITE
- OPEN SPACE

N

Scale 1:5000

0 100 200 300 400 500M

Cambridge Consortium

Cambridge South

Rev Date Details By Authorised

ZONES PLAN

Drawn By:	Checked By:	Authorised By:	Revision By:	Rev Authorised By:
VL	AM	DW	VL	AM
Date:	Scale:	Drawing No:	Rev:	Rev date:
19/03/2019	1:5000@A1	20971-01-AR-10-119	A	19/03/2019

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