

Cambridge South (The Research and Development Market)

Matter 4 – Appendix 2
5102/20801
10 October 2014





10 October 2014

Table of Contents

1	Introduction.....	1
2	Background.....	1
3	Supply.....	3
4	Land Allocations.....	3
5	Take Up.....	5
6	Total Requirements.....	7
7	Take Up/Requirements/Supply	9
8	Conclusion	9

Annexes

Annex 1 B1(b) Allocations

Annex 2 B1(b) Allocations Cambridge City Centre

Annex 3 B1(a) Allocations

Annex 4 B1(a) Allocations Cambridge City Centre

10 October 2014

1 Introduction

- 1.1 This report is written to provide the in-depth market evidence to support the submission document entitled "Cambridge South Employment Case".
- 1.2 The report is written by Bidwells who is the dominant agent operating in the Cambridge marketplace and celebrating its 175th year anniversary this year. Currently Bidwells have instructions to market 70% of the commercial buildings, land and emerging allocations in the greater Cambridge area. Through this exposure to the market Bidwells has an intimate knowledge of supply, take up levels and recorded demand that uniquely enables them to predict with confidence emerging patterns on the employment land market, the required research and development, and office land over the plan period.
- 1.3 The report identifies that the employment allocation for office and R&D land proposed by The City and South Cambs significantly undershoots what will be required in the Cambridge market. Without further land allocation it is certain that current requirements and future requirements will not be satisfied in the marketplace. Given Cambridge's global importance, as evidenced in **Appendix 1** this means that occupiers will look to satisfy requirements in other European and worldwide R&D clusters.

2 Background

- 2.1 The Cambridge office and R&D markets have changed significantly since the early 2000s. At that time Cambridge had a fantastic vibrant economy that attracted significant R&D investment. This enabled companies to grow rapidly and to take on larger premises. These companies then often became targets for foreign investors and the companies were traded and trans-located back to the investors' country of origin. The people in these companies did not want to go with the investors and spun out new companies with the revenue raised and the process started all over again. This ensured there was a healthy 'churn' of premises in the market place, where availability broadly matched demand.
- 2.2 This ensured that from about 2000 there was a constant turnover of stock, and take up rates for offices and R&D for the period until 2013 and have averaged circa 55,750 sq m per annum.
- 2.3 More recently, over the last three or four years, Cambridge's place in terms of global importance for R&D has been significantly enhanced. The major driver for Cambridge's success story has always been the University and the benefit that brings to The City. The University is now looking much more actively to engage with the private sector which will attract significantly more companies.
- 2.4 This has coincided with a 'step change' in the perception of Cambridge for varying reasons:
 - Cambridge companies are now determined to grow and remain in Cambridge. There are large numbers of home grown successful Cambridge companies namely;



- Foreign purchasers of Cambridge companies now realise that losing the key staff of companies through relocation is unsound investment strategy and now look to invest more in companies enabling them to grow in Cambridge. Examples of this include:



- The emergence of Cambridge as a worldwide/European destination for R&D headquarters. Again there are many examples of this and they include:



- 2.5 This in turn is sparking interest in Cambridge from numerous other technology related companies, all of whom will be new entries into Cambridge and include global brands such as Apple, Spotify, Huawei and Dow.
- 2.6 All this means that currently Cambridge is seeing take up well in excess of its long term average, recorded requirements at an all-time high, rents at record levels and supply falling to critical levels.
- 2.7 Due to the importance of clustering, the open innovation discussions and the importance of the University as set out in **Appendix 1** Cambridge is entering into a new exciting period of growth which will be sustained in the short, medium and long term. There is already compelling evidence for this which is set out in later sections of this report.
- 2.8 Additionally there are factors that will add further fuel to these levels of take up which include:
 - Service and support industry reaction.

10 October 2014

- Change of use/redevelopment.
- Large education or medical requirements.

2.9 The biggest risk to Cambridge of not being able to embrace the new exciting phase of its life is having sufficient available land supply in the right places. The plans as currently drafted do not meet the required land supply, in the short, medium or long terms.

3 Supply

3.1 The current available supply of offices and labs in Cambridge is recorded at 70,600 sq m out of a total stock of 696,800 sq m or roughly 10%. On the face of it, it shows a relatively healthy level of available space. However, if this space is analysed in more detail:

- 27,900 sq m is in suites of less than 4,465 sq m.
- 13,950 sq m is under offer.
- 10,000 sq m is redundant space or to be converted or redeveloped to residential or student accommodation.

Therefore, the true level of available accommodation in the greater Cambridge area is only 18,750 sq m in sizes where the majority of the demand is focused. With average take up over the last three years of offices and lab space at 56,480 sq m there is a significant shortage of supply. Evidence is compelling that the annual take up will increase to 92,900 sq m per annum which will put further pressure on available supply.

3.2 The consequence of there being very limited available buildings in the market at any one time is that the larger requirements will focus on land allocation. This is because those requirements cannot be satisfied by existing buildings. Historically, the long term trend is that circa 50% of requirements will take existing buildings and 50% will look towards land to satisfy their requirements either by purchasing the land or taking pre-lets. This focus will have to shift as the building availability is not there. We therefore anticipate that requirements will be forced to focus more and more on land availability and therefore the percentage of total take up will move in the direction of land take up as opposed to the building take up. We are already seeing this as ARM, Astra Zeneca and Cambridge Assessment have focused their sections of land.

4 Land Allocations

4.1 As has been discussed, with limited building availability in the market, the land supply will become of increasing importance to satisfy the demand.

4.2 The map below (**Annex 1**) shows the land R&D allocations with consent and also the emerging land allocations which are identified in the draft Local Plans for The City and South Cambs.

4.3 The map is divided into two areas:

- Urban Cambridge
- Greater Cambridge

4.4 The significance of this is that demand typically focuses on the 'urban' Cambridge area and will not compromise and take space in the greater Cambridge area. Taking a "snapshot" of current recorded

10 October 2014

requirements, 90% are focused on the built up area and will not look outside this area. Co-locating with likeminded businesses, the University and having access to key staff for the amenities of Cambridge is an essential factor in these companies choosing Cambridge.

4.5 While sites in the out of town area will continue to have a function they are generally developed for use by organisations with a more tentative link to the University, scientific and practitioner community where co-location is less important. Other tenants in the outer area have traditionally seen, and the signals suggest will continue to see, their occupation as temporary until a more suitable urban area site comes available or their decision can be driven by cost. The long-time experience in the marketplace is that there is, and always will be, considerably less demand and requirement from R&D organisations in the out of town area.

4.6 Looking at land availability in greater detail:

	Open/available	Restricted/unavailable	Total
Urban area	149,500 sq m *	293,000 sq m *	442,500 sq m
Out of town	100,000 sq m	58,000 sq m	158,000 sq m
TOTAL	249,500 sq m	351,000 sq m	600,500 sq m

4.7 The map in **(Annex 2)** shows the allocations with colour coding to reflect their availability. What is apparent is that since the start of the plan period in 2011 a number of the allocations have been taken up. This includes the whole of the original consent at the Biomedical Campus of 232,250 sq m. Part of the Phase 2 land is under offer, 14,000 sq m. Additionally there is 32,500 sq m identified at Peterhouse Technology Park which is for ARM expansion.

4.8 The other restricted sites include the University sites at West and North-West Cambridge which have University restrictions on them and can only be occupied by companies who are part of, or who have a direct relationship with the University.

4.9 R&D occupiers can look to occupy office space (B1(a)) depending on the nature of their R&D business. Looking specifically at office (B1(a)) availability in a similar way to B1(b) allocations, is illustrated on the map in **(Annex 3)**.

The same restrictions as categorised on the B1(b) are used to illustrate availability in the table below:

	Open/available	Restricted/unavailable	Total
Urban area	80,834 sq m	21,346 sq m	102,180 sq m
Out of town	47,720 sq m	16,536 sq m	64,256 sq m
Total	128,554 sq m	37,822 sq m	166,436 sq m

4.10 Again the map in **(Annex 4)** shows the restrictions on some of the B1(a) sites making them unavailable for the open market.

4.11 This clearly shows that there is only 128,554 sq m of open and available unrestricted supply in the B1(a) market. This means that should R&D occupiers not find B1(b) space then there is unlikely to be significant B1(a) land available for them. In the preferred area, i.e. the urban area where 90% of demand is focussed, there are only 80,834 sq m.

10 October 2014

4.12 It is, therefore, not conceivable that the shortage of R&D space could be met out of the surplus of B1(a) space. There is a significant shortage of both B1(a) and B1(b) space. Increasing requirement levels cannot be met through the existing land bank or the emerging land bank as shown in the proposed plans of The City and South Cambs.

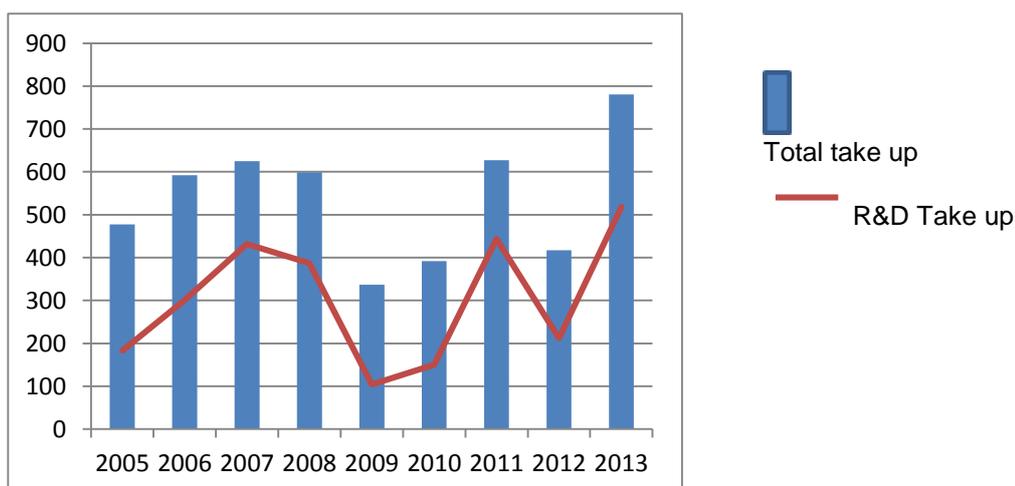
4.13 This shortage of land is further exacerbated due to the following factors:

- A number of the dated but functional office buildings in Cambridge are being converted/redeveloped for other uses, predominantly student accommodation or residential. In the centre of Cambridge this amounts to seven buildings totalling 25,000 sq m. The companies that currently occupy these buildings are being displaced meaning that 25,000 sq m of requirements are generated which are focusing on the limited available buildings. This essentially has a 50,000 sq m swing on stock levels and this is a trend that we are seeing increasingly.
- Other occupier classes are increasingly taking some of the B1(b) allocations of R&D occupiers. Examples of this include Papworth Hospital's decision to relocate to the Cambridge Biomedical Campus taking 37,160 sq m of allocation and the proposals from the University to relocate various faculties to the West Cambridge campus.
- A number of the central Cambridge residential allocations are on commercial sites. This includes Clifton Road and The Paddocks. Occupiers on these estates are predominantly industrial in nature, but play an important role in the running of the Cambridge economy. Provisions in the plan have not been allowed for the relocation of such uses who will naturally move further from central Cambridge and take some of the space on the B1 allocated parks. This could amount to another 30,000 sq m of space lost to R&D occupiers.
- Finally, allocations are quoted in gross acres in terms of planning. Office based R&D space is discussed on a net basis. Buildings generally have a ratio between the gross space and net space of 85%. In this regard, to compare requirements to allocation will require allocations to be 115% of requirement.

5 Take Up

5.1 Cambridge offices and R&D take up has averaged 56,480 sq m per annum over the last three years and if you take the last 10 year average, take up stands at an average of 50,450 sq m.

5.2 At this stage we have not differentiated between offices and R&D. This is because R&D occupiers can occupy either bespoke lab space (B1(b) space) or standard office space (B1(a) space). This has been discussed in Section 4 of this report. The Bidwells Data Book breaks the take up between offices and labs and is shown in the table below:



10 October 2014

- 5.3 In order to establish R&D take up numbers we have looked at the individual companies taking space in Cambridge over the last three years. R&D SIC code companies have averaged 65% of the total take up over the period of the last three years and 56% if the data is taken back over a 10 year period. If 65% of the take up is likely to be R&D focused and average take up is 56,480 sq m per annum then R&D take up will equate to 36,712 sq m per annum. As has been discussed 90% of this will focus on the urban area as illustrated in the 'land allocation' section of this report. Therefore 33,040 sq m per annum of the demand in the urban area, of this 50% is likely to focus on the land as opposed to buildings, i.e. 16,520 sq m per annum. As discussed in 3.2 of this report, there is an increasing trend towards land take up with little building availability which is likely to mean that 50% is understated.
- 5.4 We are already beginning to see a significant upturn in total take up figures. In 2013 recorded take up was 72,450 sq m of which 67% was R&D. In the first half of 2014 take up was recorded at 37,450 sq m and the second half of the year on transactions we know will happen is likely to be stronger in terms of take up than the first half of the year. Therefore, in 2014 we will see take up figures in excess of the records achieved in 2013 in Cambridge.
- 5.5 This is prior to the large forward commitments of space from a number of large companies committing to Cambridge such as Abcam, AstraZeneca, ARM and Cambridge Assessment. The table below shows the likely levels of take up over the next three years. This is assuming these companies have identified land, secured planning and start to build out.

	R&D sq m	Office sq m	Total sq m
2015	82,789.9	44,579.2	127,369
2016	60,386.3	32,515.7	92,902
2017	61,750	33,250	95,000

- 5.6 These are known requirements. In these years there will also be normal take up levels that have averaged 56,480 sq m over the last three years. Therefore take up for the years 2015, 2016 and 2017, which are the only years we can reasonably project, will be in excess of 92,900 sq m per annum. Furthermore the average over 5 years from 2013 will average in excess of 92,900 sq m per annum. If we break this down further as above, it gives an annual urban area land requirements of 23,175 sq m per annum.

R&D Land Requirements

Land Requirement	Historic Take Up (2014-2031)	Likely Projected Take Up (2014-2031)
Urban Area	297,370 sq m	489,150 sq m
Out of Town	33,040 sq m	54,345 sq m
Total	330,410 sq m	543,495 sq m

The table above shows R&D land requirements over the plan period until 2031, calculated on the historic take up level and projected take up levels, as discussed above.

- 5.7 Looking similarly at the likely office land requirement over the plan period and breaking it down in the same way as the R&D requirements, gives land requirements on an historic and projected level as set out in the table below:

10 October 2014

Office Land Requirements

Land Requirement	Historic Take Up (2014-2031)	Projected Take Up (2014-2031)
Urban area	160,120 sq m	263,380 sq m
Out of Town	17,790 sq m	29,264 sq m
Total	177,910 sq m	292,634 sq m

5.8 Other factors that will exaggerate these take up numbers are:

- Cambridge now has real momentum; it is recognised as a centre of excellence for R&D. The University, AstraZeneca, Microsoft and ARM may be the catalyst of this but there are now record levels of unsatisfied requirements in Cambridge.
- The large upswing in the R&D take up will bring its own supply and service industries. We are aware that AstraZeneca is looking to bring three or four significant companies with them to co-locate. We are already seeing the likes of Kids Unlimited and Bright Horizons looking for accommodation near to AstraZeneca. Huawei is looking at Cambridge for the first time to work closely with ARM. This does not include an increase in the suppliers or professional services that will follow the large R&D requirements.

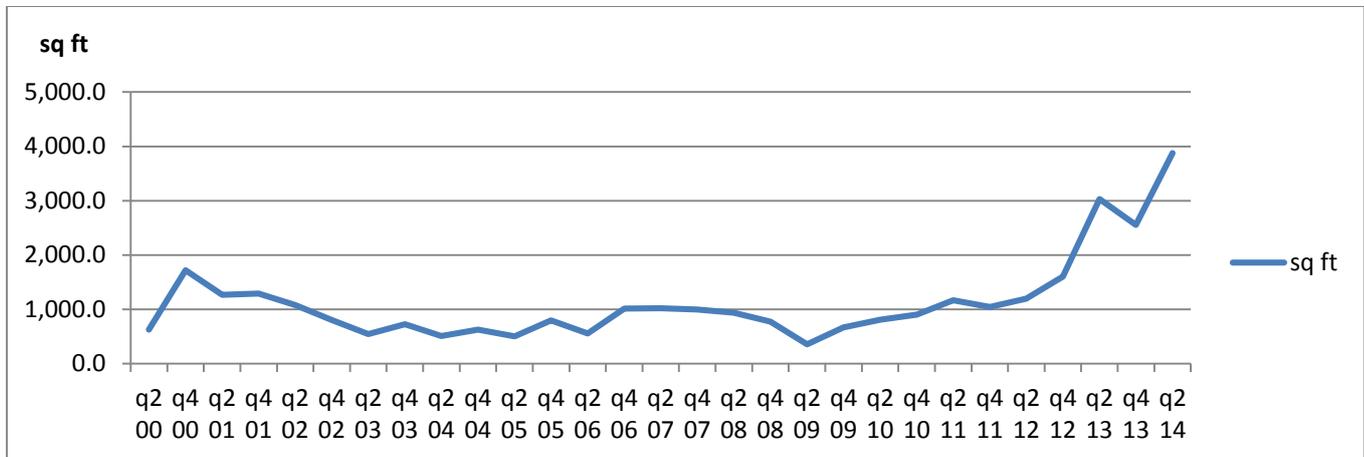
5.9 In this regard the take up we have seen in 2013 and will see in 2014 should not be regarded as exceptional. It will be exceeded by take up in 2015, 2016 and 2017. It is our strong belief that take up in Cambridge will soon consistently be averaging circa 92,900 sq m per annum. Applying the same assumptions as set out in 5.3, gives a projected R&D land take up figure in the urban area of 489,150 sq m and office land requirement of 263,370 sq m. This is against a combined unrestricted land availability of 230,332 sq m.

6 Total Requirements

6.1 Bidwells records total requirements at any one time in the market. These are occupiers or agents representing companies who at any time in a particular market have had a requirement. These are analysed on a six monthly basis as some requirements get satisfied, some requirements never materialise and some requirements are ongoing searches.

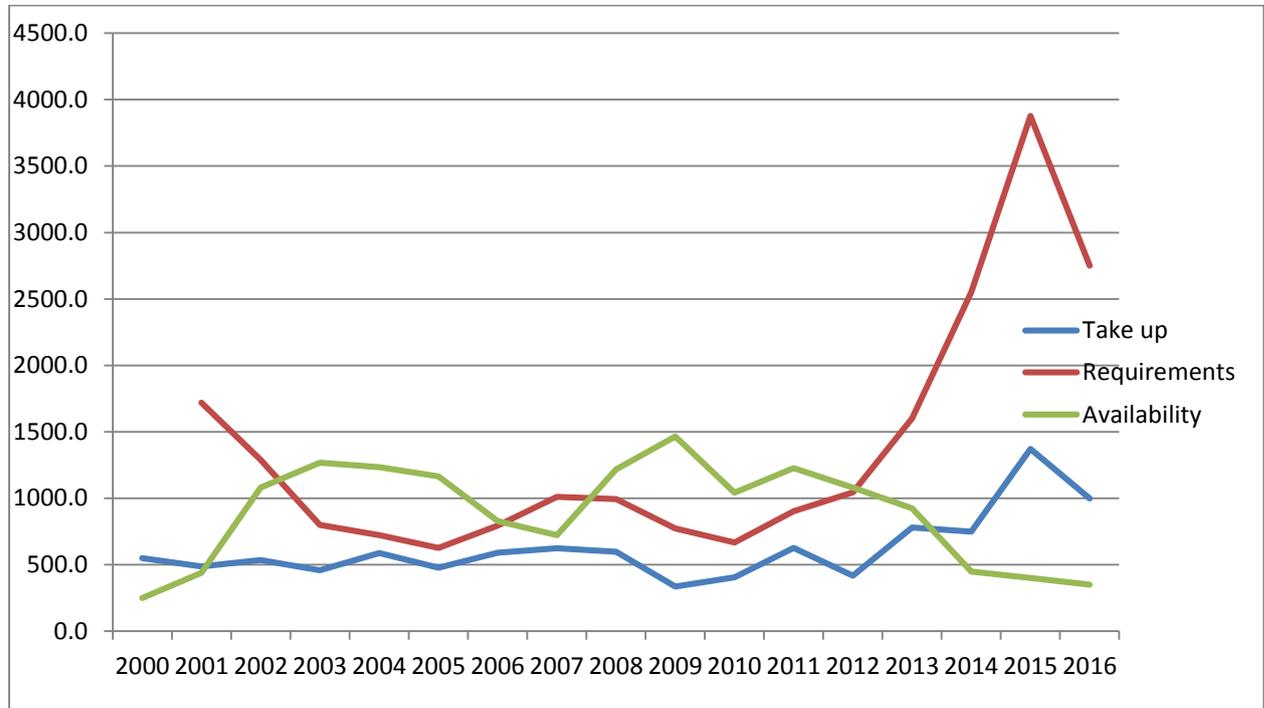
6.2 The graph below clearly illustrates demand for Cambridge is at an all-time high and progressively increasing.

10 October 2014



- 6.3 Requirements obviously run in front of take up and there is obviously a strong correlation between the two. The lag time is dependent on stock levels in the market at any one time. If the market is overloaded with existing building supply then requirements convert to take up relatively quickly, typically six to nine months. Where there is no stock in the market, as is the current case, the requirements will need to look at land and there is significant lag time to occupation which could take up to four years.
- 6.4 What will become evident given the shortage of supply of existing buildings as set out in an earlier section of this report is that the larger requirements will need to focus on land. ARM, AstraZeneca, Cambridge Assessments and Abcam are examples of this.
- 6.5 The market will respond by bringing forward development and indeed has begun to respond with 27,900 sq m of speculative construction either commenced or likely to commence over the next six months. This will convert to take up over the next two to three years as it helps satisfy the pent up demand. However, the consequence of this is the land bank is utilised at a much quicker rate.
- 6.6 There will inevitably be a drop off in requirement levels once AstraZeneca, ARM and Cambridge Assessments all get planning, however the underlying trend is increasing requirements for Cambridge. Clustering, open innovation and the University will increasingly attract local brands looking to set up European R&D hubs and benefit from everything Cambridge has to offer. Cambridge is the leading European location for R&D and we are seeing an increasing number of global brands focus their R&D searches on Cambridge.
- 6.7 The underlying average Cambridge requirements will continue to rise which will lead to increasing take up and therefore increasing land requirements.

7 Take Up/Requirements/Supply



8 Conclusion

- 8.1 Cambridge is now more recognised than it ever has been as a world centre of excellence for R&D.
- 8.2 It is undergoing a commercial transformation the likes of which has never been seen. Over the next three years there is likely to be an additional 3,327,000 sq m of B1(a) and B1(b) space under construction. This will increase total stock levels by circa 50%.
- 8.3 The global interest is fuelling further interest for open innovation and clustering with access to the world class Universities from increasing numbers of global brands looking to set up R&D centres of excellence.
- 8.4 The raw evidence for this is the commercial property market for office and R&D space:
- Current recorded demand – 350,000 sq m
 - Historic annual average take up (offices and labs) – 56,480 sq m per annum
 - Likely future take up 2013-2017 – 92,900 sq m per annum
 - Total availability land supply including future allocations – 378,000 sq m
 - Available land supply in preferred area – 230,334 sq m
 - Truly available offices and lab space – 18,750 sq m.
- 8.5 The plan period is until 2031, a 18 year period. At historic take up levels there is 7 years available buildings and land supply in the greater Cambridge area of South Cambs and The City. In the preferred area for occupiers there is only 4.25 years of supply.

10 October 2014

- 8.6 The long term take up average will get to circa 92,900 sq m per annum and if the five year period between 2013 to 2017 is used, take up will average this number which will be sustainable over a five year period. The available building and land supply will only last 4.25 years. Looking just at the preferred areas of these occupiers, this drops to only 2.7 years of supply in the plan period that is due to last to 2031.
- 8.7 As has been stated this problem will be exaggerated by other factors in the market such as:
- Loss of office stock to student/residential
 - Loss of land allocations to hospital/educational users
 - Loss of B1 allocation to displaced users from Cambridge
- 8.8 The plans of The City and South Cambs do not even begin to take into account the needs of future requirements of the office and R&D occupiers in Cambridge.
- 8.9 The consequences are significant as these companies are seeking to expand, or locate into the market and will neither have land or buildings available to them. These companies are competing in a global marketplace and will relocate or locate to other centres of excellence that offer the same dynamics as Cambridge and will in all probability be outside the UK.
- 8.10 Cambridge has always been good at planning for the future provision of employment land, particularly in the R&D sector. The proposed plans apply an immediate 'brake' to the future provision of sufficient land in the right place for the R&D sector.



Annexes

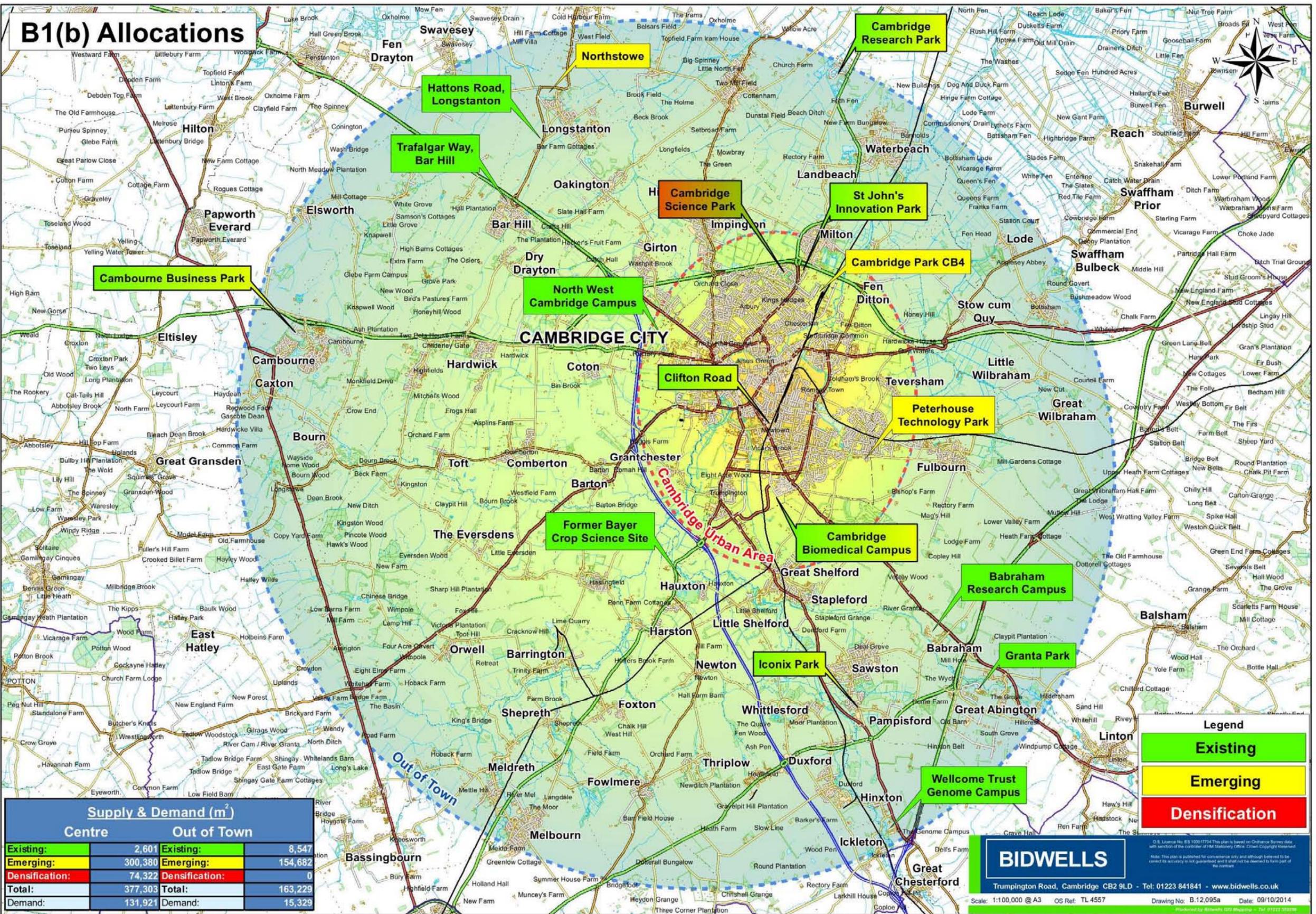
Matter 4 – Appendix 2
5102/20801



Annex 1

B1(b) Allocations

B1(b) Allocations



Supply & Demand (m ²)			
Centre		Out of Town	
Existing:	2,601	Existing:	8,547
Emerging:	300,380	Emerging:	154,682
Densification:	74,322	Densification:	0
Total:	377,303	Total:	163,229
Demand:	131,921	Demand:	15,329

Legend

- Existing
- Emerging
- Densification

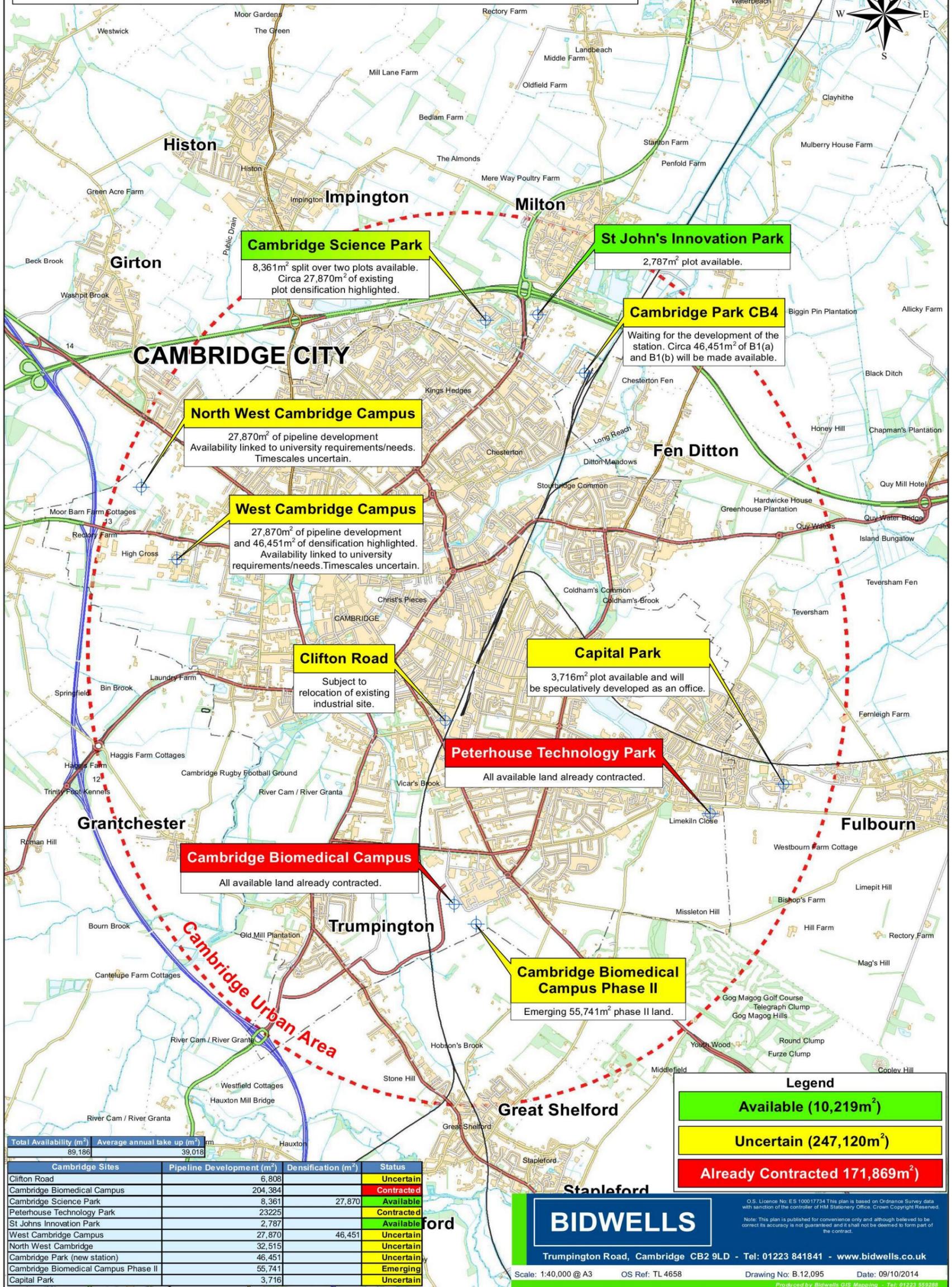
BIDWELLS
 Trumpton Road, Cambridge CB2 9LD - Tel: 01223 841841 - www.bidwells.co.uk
 Scale: 1:100,000 @ A3 OS Ref: TL 4557 Drawing No: B.12.095a Date: 09/10/2014



Annex 2

B1(b) Allocations Cambridge City Centre

B1(b) Allocations - Cambridge City Centre



Total Availability (m²) 89,186
Average annual take up (m²) 39,018

Legend

- Available (10,219m²)
- Uncertain (247,120m²)
- Already Contracted 171,869m²)

BIDWELLS

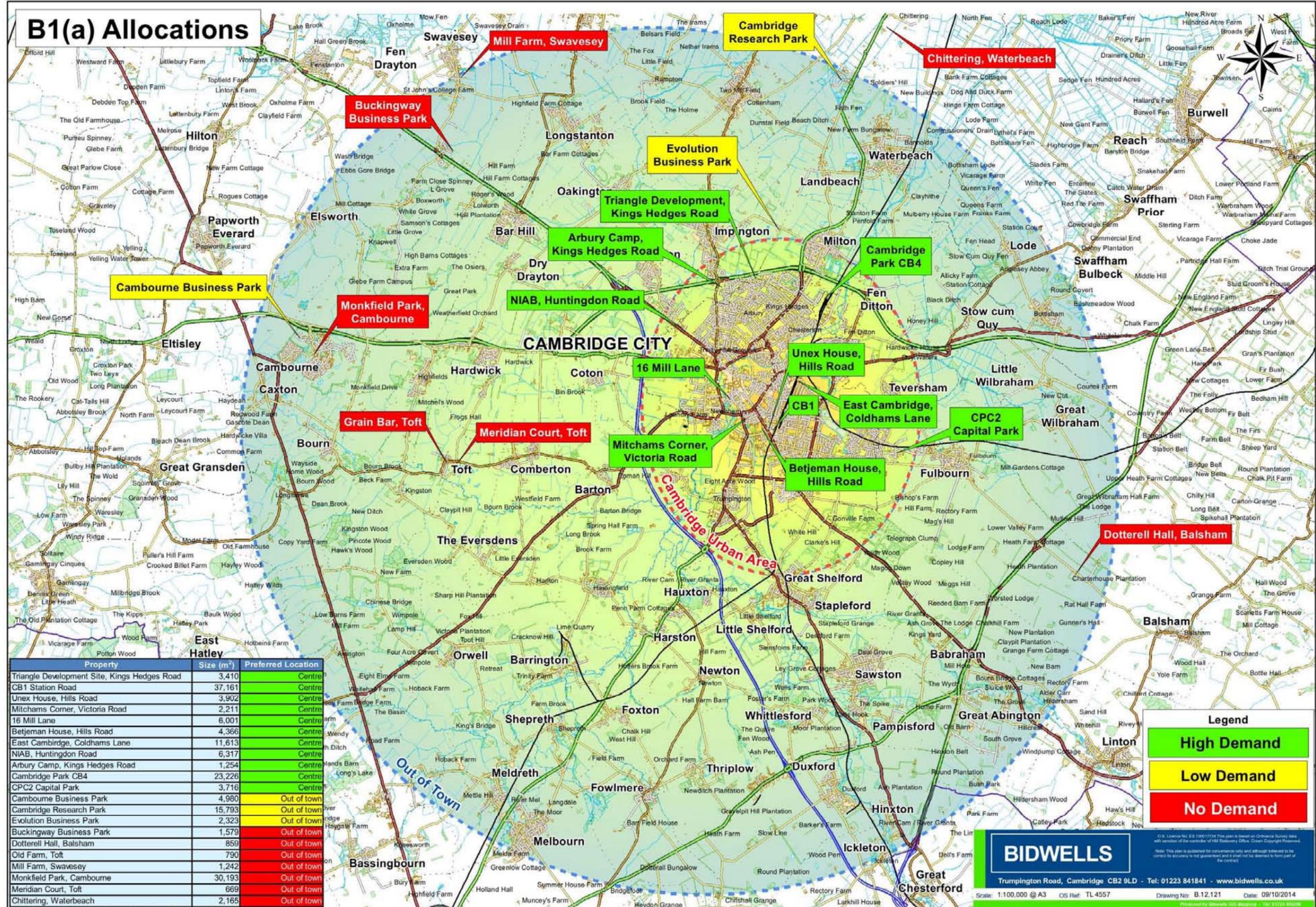
Trumpington Road, Cambridge CB2 9LD - Tel: 01223 841841 - www.bidwells.co.uk
Scale: 1:40,000 @ A3 OS Ref: TL 4658 Drawing No: B.12.095 Date: 09/10/2014
Produced by Bidwells GIS Mapping - Tel: 01223 559289



Annex 3

B1(a) Allocations

B1(a) Allocations



Property	Size (m ²)	Preferred Location
Triangle Development Site, Kings Hedges Road	3,410	Centre
CB1 Station Road	37,161	Centre
Unex House, Hills Road	3,902	Centre
Mitchams Corner, Victoria Road	2,211	Centre
16 Mill Lane	6,001	Centre
Betjeman House, Hills Road	4,366	Centre
East Cambridge, Coldhams Lane	11,613	Centre
NIAB, Huntingdon Road	6,317	Centre
Arbury Camp, Kings Hedges Road	1,254	Centre
Cambridge Park CB4	23,226	Centre
CPC2 Capital Park	3,716	Centre
Cambourne Business Park	4,980	Out of town
Cambridge Research Park	15,793	Out of town
Evolution Business Park	2,323	Out of town
Buckingway Business Park	1,579	Out of town
Dotterell Hall, Balsham	859	Out of town
Old Farm, Toft	790	Out of town
Mill Farm, Swavesey	1,242	Out of town
Monkfield Park, Cambourne	30,193	Out of town
Meridian Court, Toft	669	Out of town
Chittering, Waterbeach	2,165	Out of town

Legend

- High Demand
- Low Demand
- No Demand

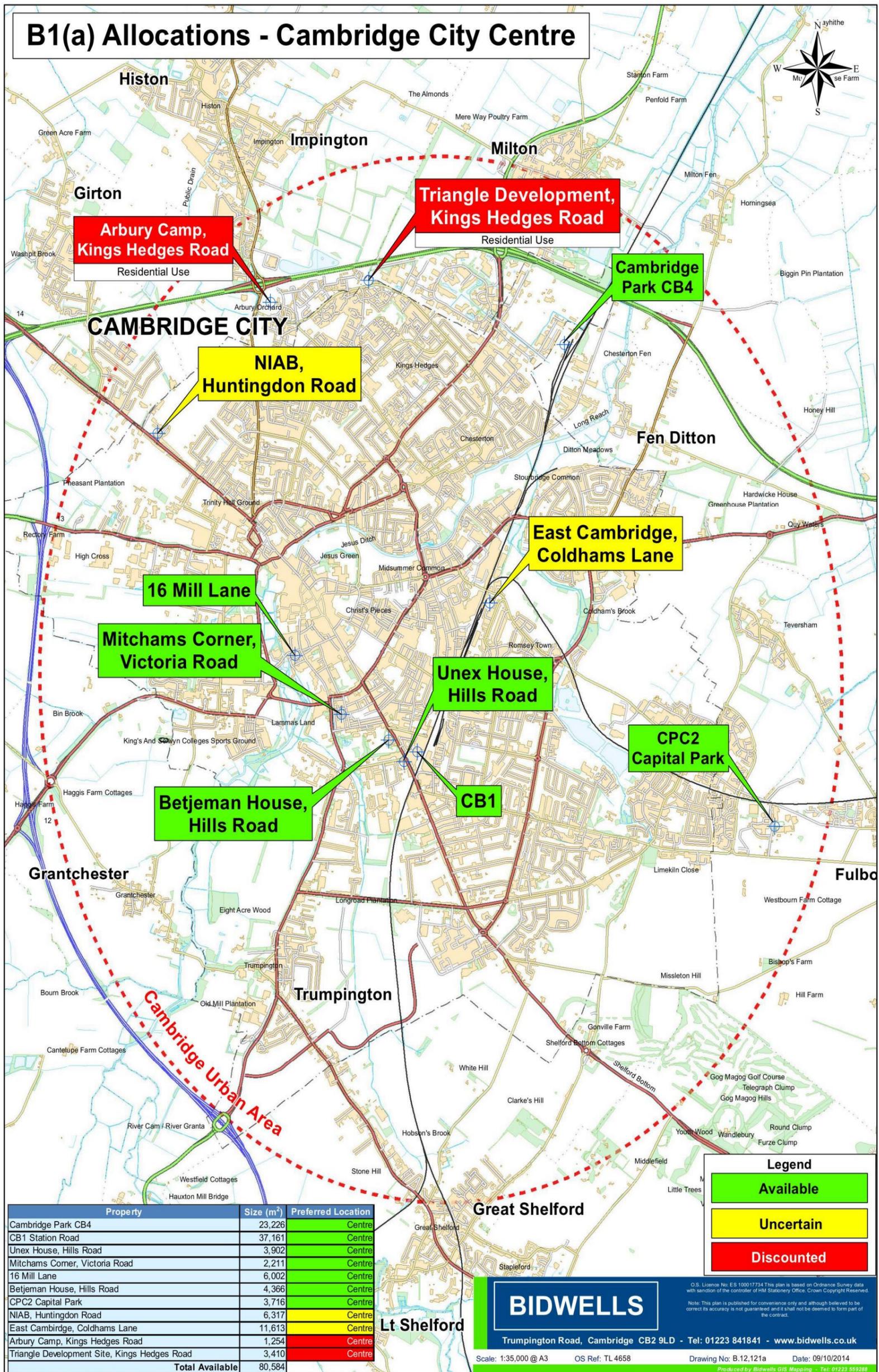
BIDWELLS
 Trumpington Road, Cambridge CB2 9LD - Tel: 01223 841841 - www.bidwells.co.uk
 Scale: 1:100,000 @ A3 OS Ref: TL 4557 Drawing No: B.12.121 Date: 09/10/2014



Annex 4

B1(a) Allocations Cambridge City Centre

B1(a) Allocations - Cambridge City Centre



Property	Size (m ²)	Preferred Location
Cambridge Park CB4	23,226	Centre
CB1 Station Road	37,161	Centre
Unex House, Hills Road	3,902	Centre
Mitchams Corner, Victoria Road	2,211	Centre
16 Mill Lane	6,002	Centre
Betjeman House, Hills Road	4,366	Centre
CPC2 Capital Park	3,716	Centre
NIAB, Huntingdon Road	6,317	Centre
East Cambridge, Coldhams Lane	11,613	Centre
Arbury Camp, Kings Hedges Road	1,254	Centre
Triangle Development Site, Kings Hedges Road	3,410	Centre
Total Available	80,584	

Legend

- Available
- Uncertain
- Discounted

BIDWELLS
 Trumpington Road, Cambridge CB2 9LD - Tel: 01223 841841 - www.bidwells.co.uk

Scale: 1:35,000 @ A3 OS Ref: TL 4658 Drawing No: B.12,121a Date: 09/10/2014

O.S. Licence No: ES 100017734 This plan is based on Ordnance Survey data with permission of the controller of HM Stationery Office. Crown Copyright Reserved.
 Note: This plan is published for convenience only and although believed to be correct its accuracy is not guaranteed and it shall not be deemed to form part of the contract.
 Produced by Bidwells GIS Mapping - Tel: 01223 559268

BIDWELLS



Cert No 8542
ISO 9001, ISO 14001



INVESTORS
IN PEOPLE | Bronze

bidwells.co.uk