



Title	North West Cambridge
Author(s)	Topel, Heather
Issue Date	2013-11-06
Doc URL	<a href="http://hdl.handle.net/2115/53989">http://hdl.handle.net/2115/53989</a>
Type	conference presentation
Note	大学改革シンポジウム サステイナブルキャンパス国際シンポジウム2013 : 地域と連携したサステイナブルキャンパスの構築. 2013年11月6日(水). 北海道大学学術交流会館講堂. 札幌.
Additional Information	There are other files related to this item in HUSCAP. Check the above URL.
File Information	03_Heather_131027.pdf (発表スライド)



[Instructions for use](#)



# NORTH WEST **cambridge**



International Symposium on the Creation of Sustainable  
Campuses 2013

6 November 2013





- In top 6 of the World University Rankings
- First in The Complete University Guide, UK 2013
- More Nobel Prize Winners than any other institution – 85 since 1904
- 92% of permanent academic staff and 70% of volume were deemed 'world-leading' or 'internationally excellent' in the Research Assessment Exercise 2008
- Total income including University Press, Cambridge Assessment and Trusts exceeds £1 billion
- Research generates more income and employs more staff than teaching





- Over 300 buildings excluding the Colleges, some over 600 years old
- Over 600,000 m<sup>2</sup> (6,000,000 ft<sup>2</sup>) usable space
- Spread from the historic centre
- The City is full





The development of Cambridge's contribution to local, national and international economy and culture is currently constrained by a lack of adequate or affordable accommodation for:

- Postgraduate students
- Postdoctoral researchers
- Permanent staff
- Expansion space for research







- Many from outside UK
- Inadequate provision for students with families
- Academic pressure to increase numbers
- Many colleges lack capital and/or land to build additional accommodation





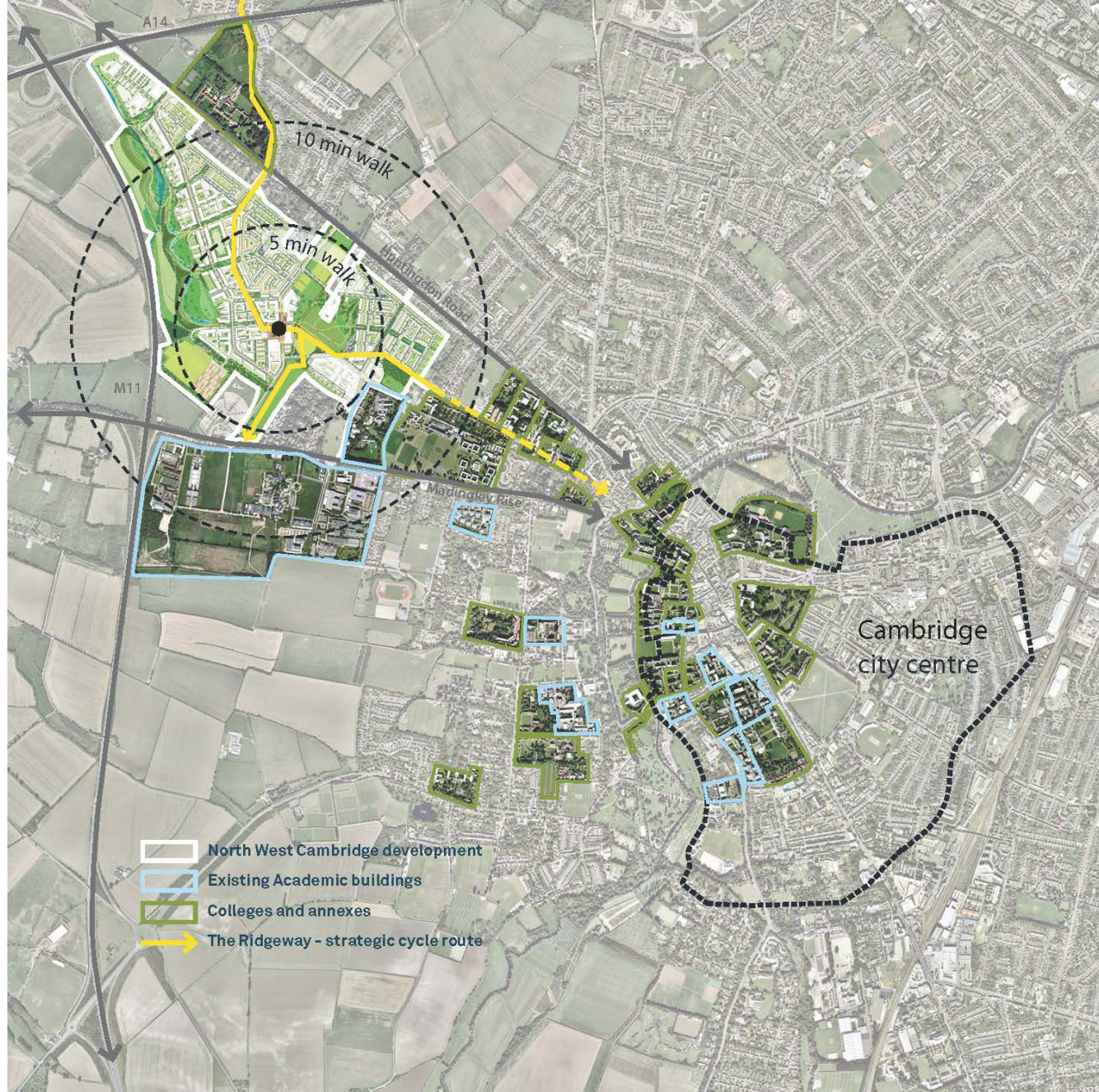
## Post-Doctorate Researchers, our Key Workers

- Usually spend 1–3 working after PhD before obtaining permanent role in academic or other environments.  
*Paid from supervisor's grant or on a personal fellowship*
- Currently 3500 and rising fast  
*Vital engine of our daily research success*
- Very few in University or college accommodation  
*Accommodation in city is poor quality and expensive*
- Mainly from outside UK
- Many with accompanying partners and children



**The vision for North West Cambridge is to create a new district and extension to the City, centred around a mixed academic and urban community: a place that is sustainable, long lasting and ambitious offering a high quality of life to enhance both the City and the University.**





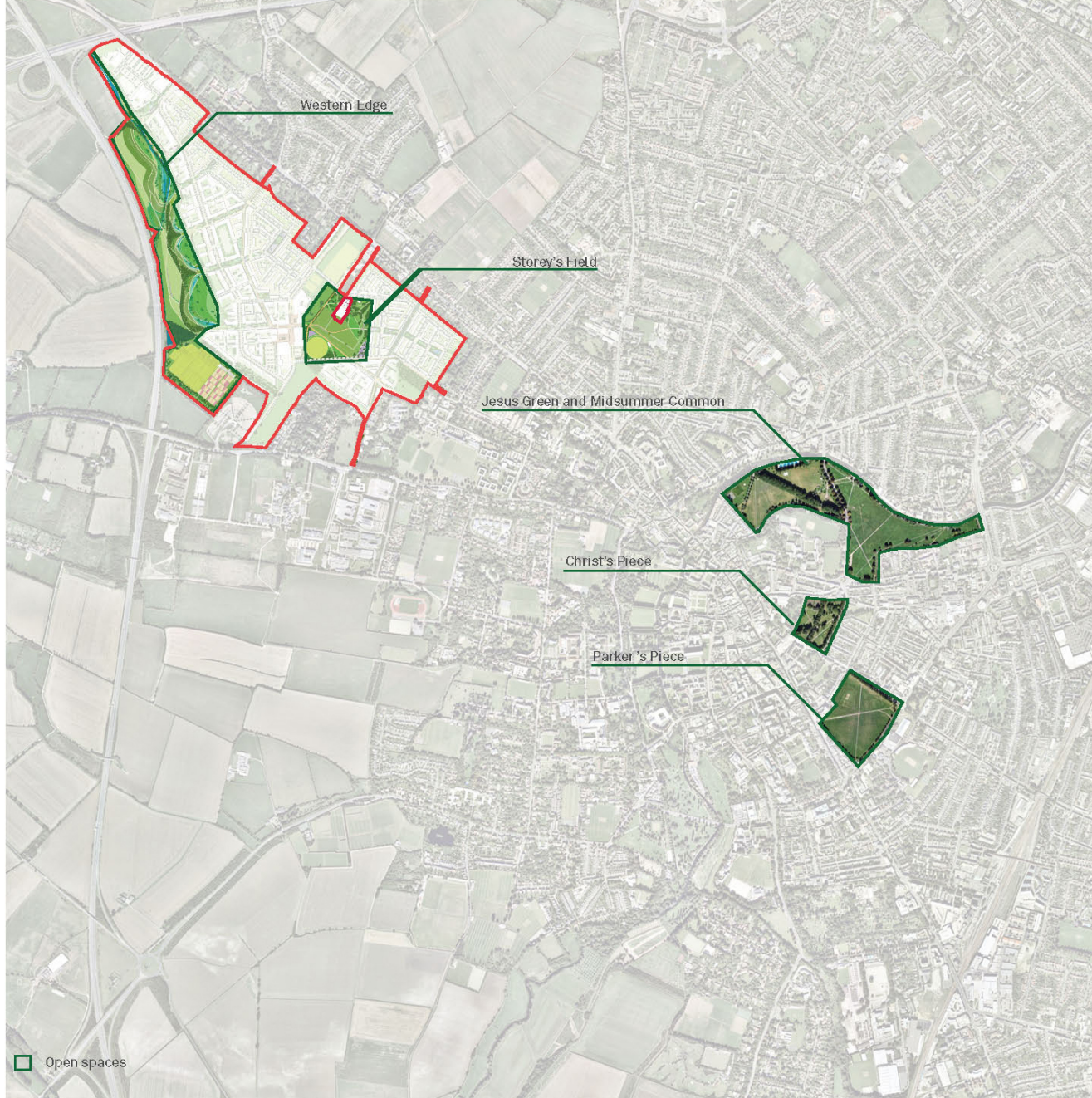
## North West Cambridge - Location





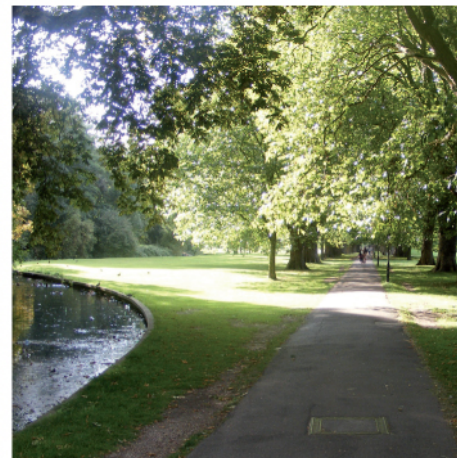
Creating a new, university-orientated urban quarter





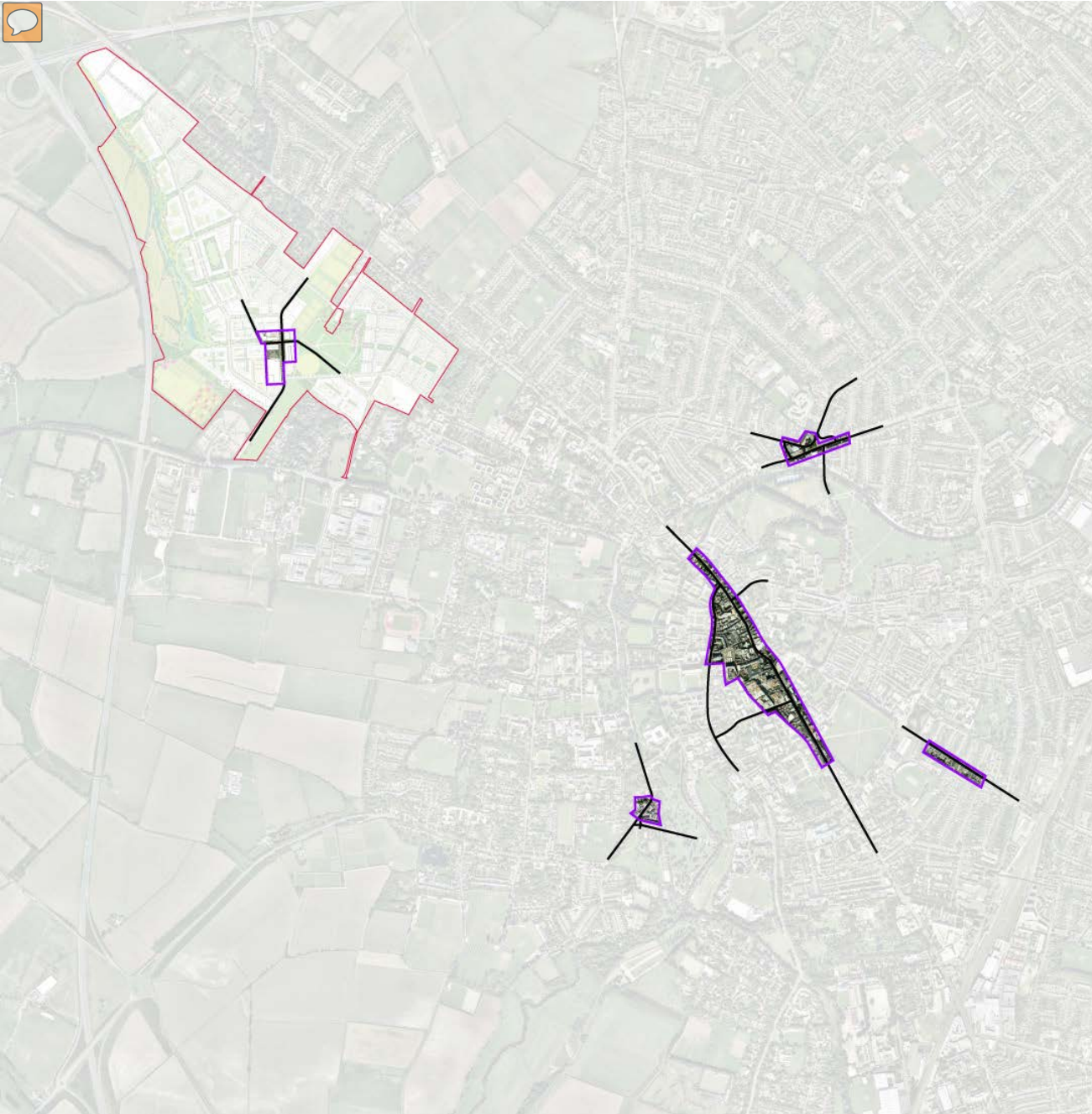
New landscapes and public open space





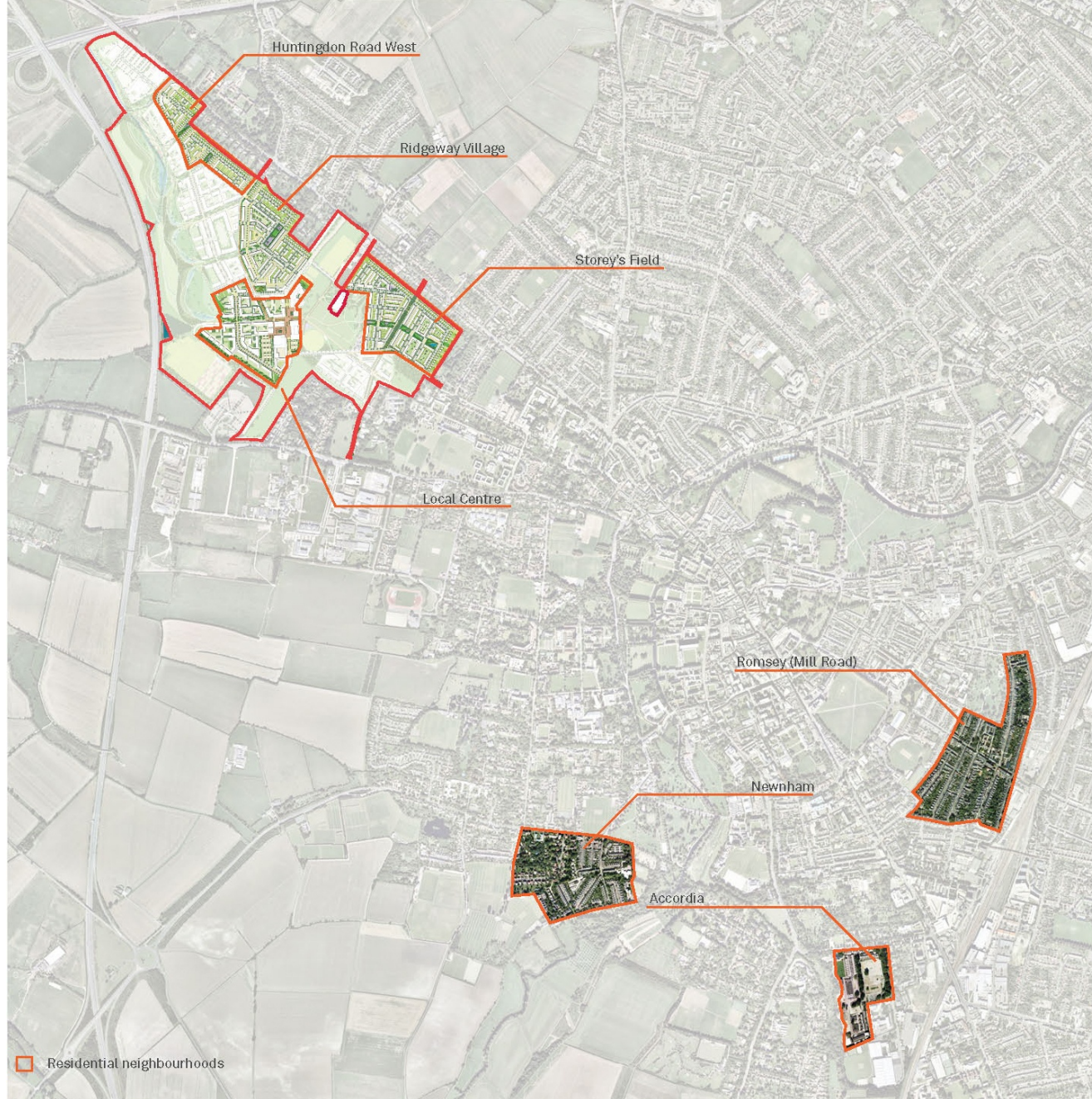
New landscapes and public open space





Local centre - shops, primary school, surgery, police, community centre, hotel





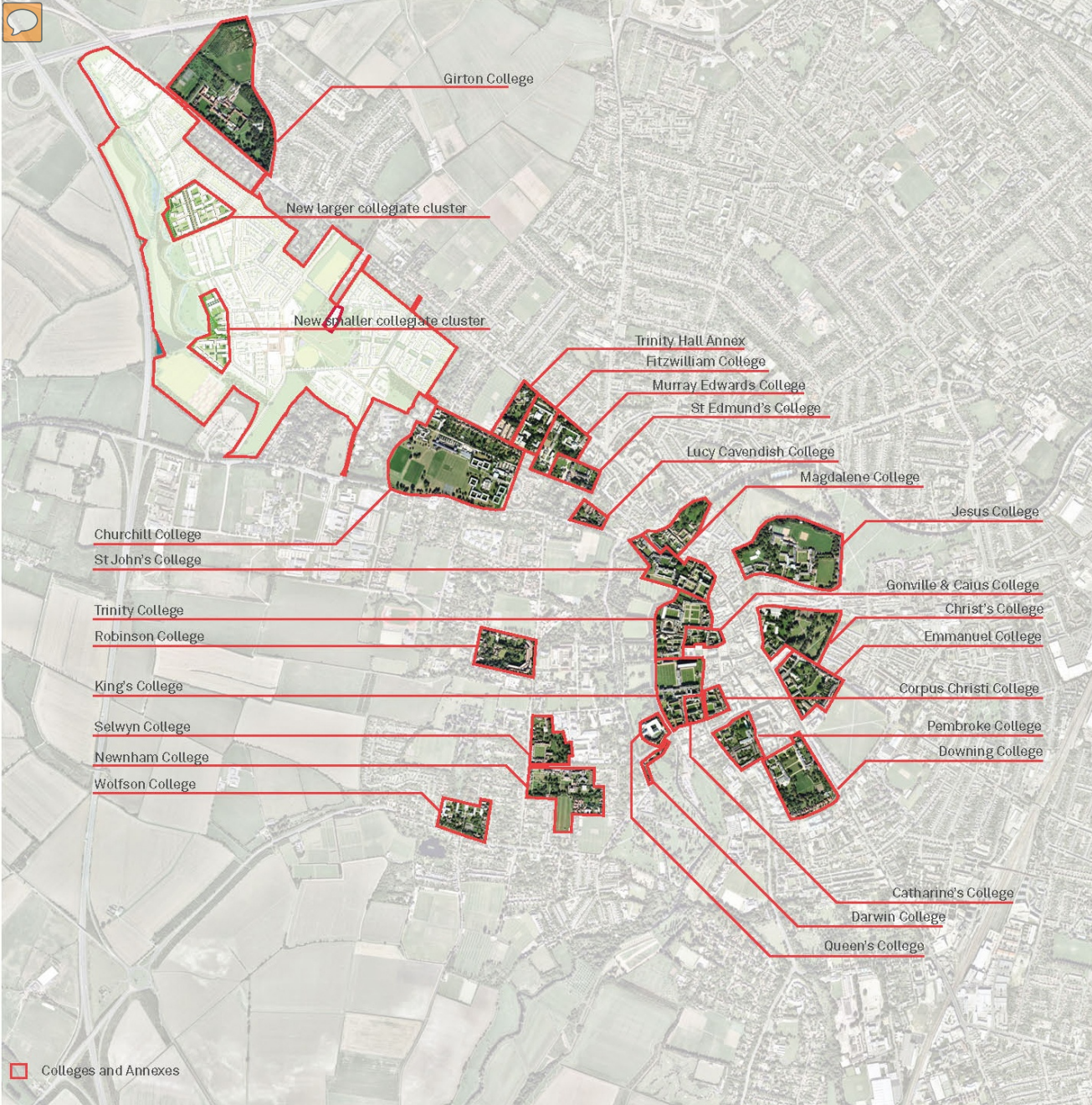
**3 new residential neighbourhoods – 1500 units for sale + 1500 key worker**





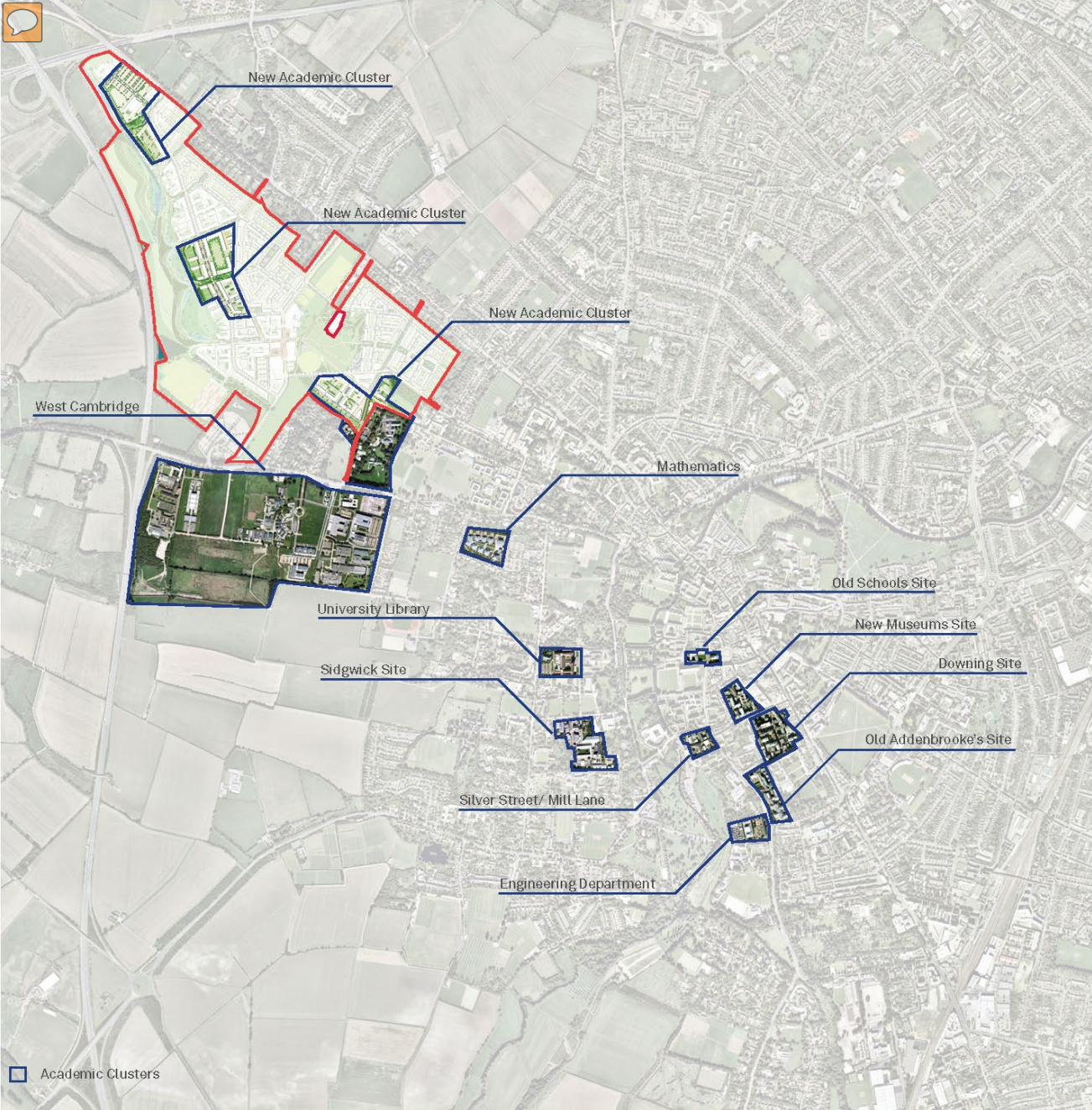
3 new residential neighbourhoods – 1500 units for sale + 1500 key worker





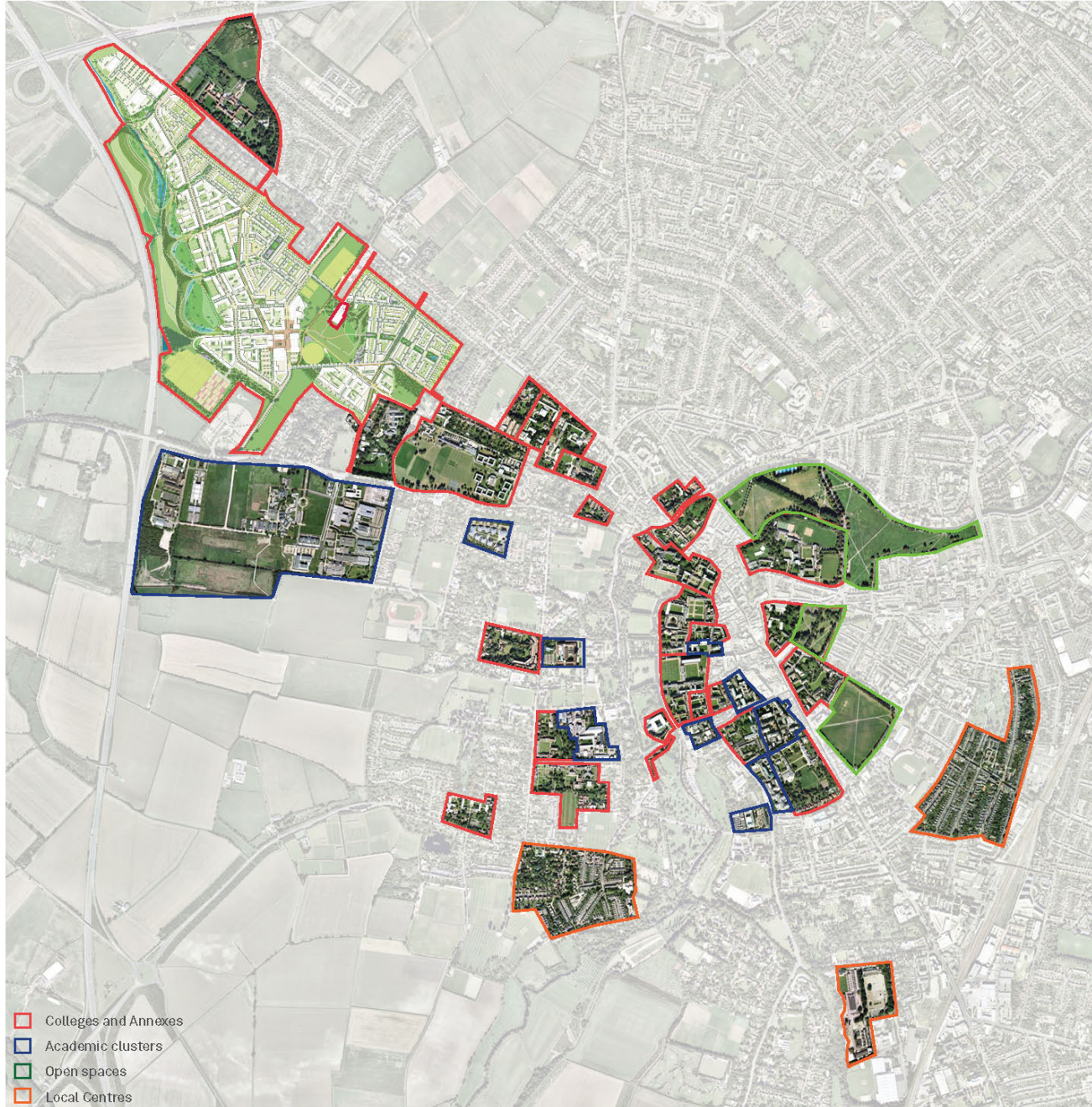
**2 new collegiate clusters - 2000 post graduates**





3 new academic clusters – 100,000sqm space or 20 years of academic R&D growth





## Cambridge qualities and an urban character





Cambridge qualities and an urban character





Character - What kind of place?





## CITY PARK



19

**What kind of place? – A Public Place**



## STREET LIFE



What kind of place? – Everyday Life





## COLLEGE COURTS



What kind of place? – Academic & Collegiate Life



## BACKS



27

What kind of place? – a sustainable way of life



# NORTH WEST **cambridge**



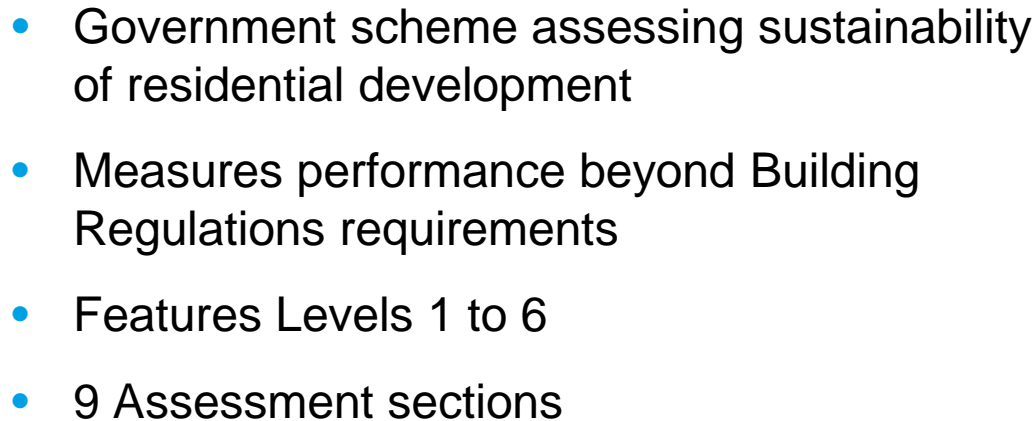
Sustainability



## **Sustainability**

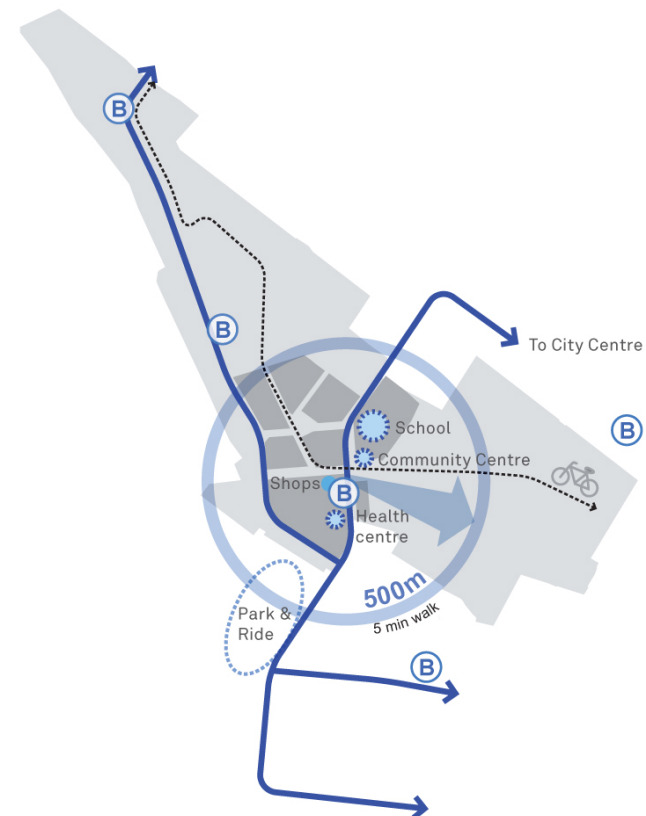
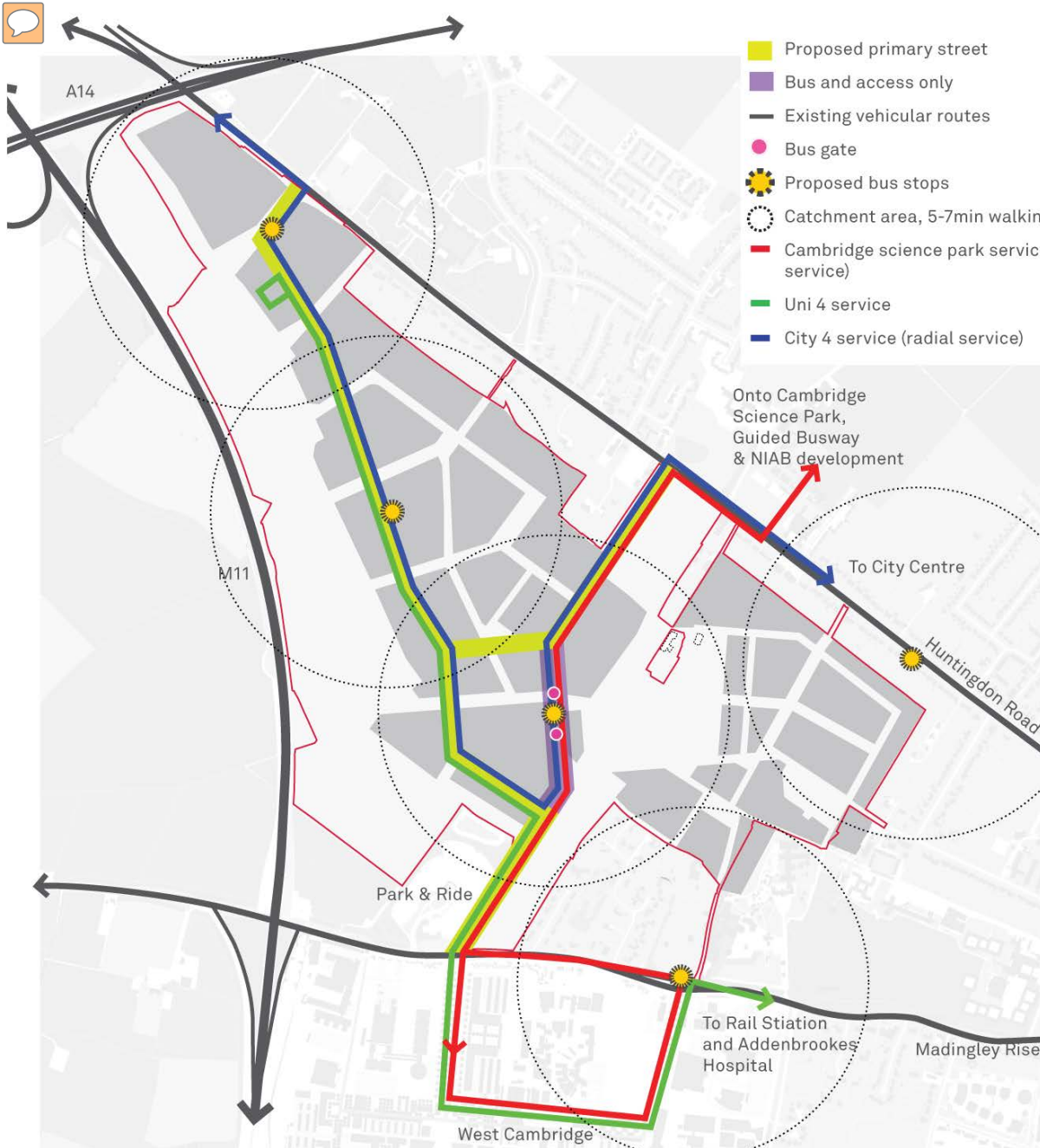
- Non-potable water recycling network
- Combined Heat & Power
- District Heating
- 20% renewable energy
- Extensive photo-voltaics
- < 40% journeys to work by car  
(compared to national average of 71%)
- < 80 litres per person per day potable water consumption  
(compared to Cambridge average of 150 l/p/d)
  
- Code for Sustainable Homes Level 5 (residential)
- BREEAM Excellent (non-residential)

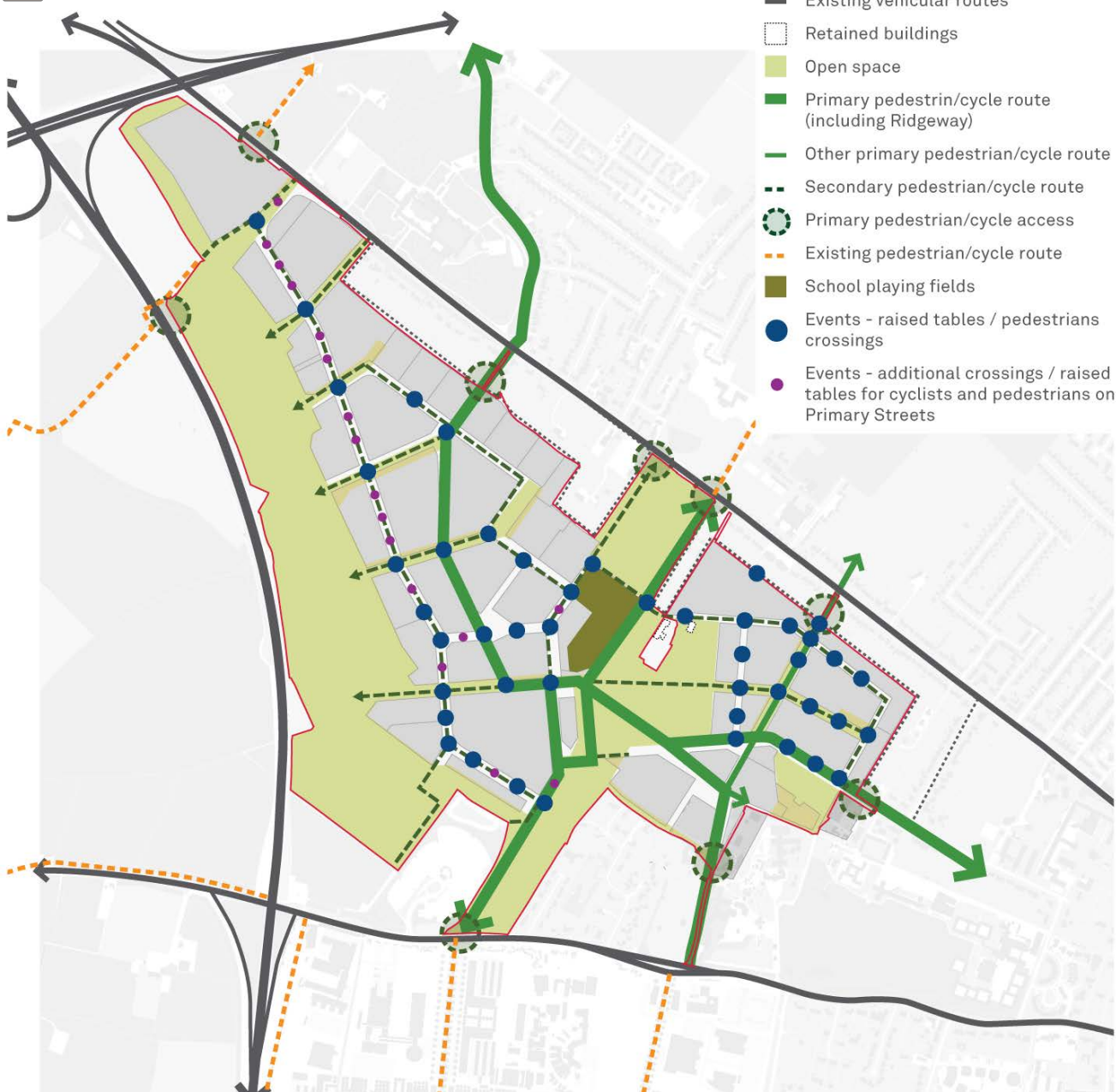




1. Energy and CO<sub>2</sub>
2. Water
3. Materials
4. Surface Water run off
5. Waste
6. Pollution
7. Health and wellbeing
8. Management
9. Ecology











**Connectivity - Approach from Madingley Road – View of Lot 9**





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. 100022305/2610



Western Edge





Western Edge





Western Edge





## Ecology - Biodiversity







Key Spaces and townscape – Green Corridor





**Key Spaces and townscape – Green Corridor**





**Key Spaces and townscape – Green Corridor**





Key Spaces and townscape – Green Corridor





Western Edge





Western Edge









Number of rooms	RECAP guide (litres)	Cambridge City Council guide (litres)	Proposed volume for North West Cambridge
1 room flat	240	200	240
2 room flat	340	320	340
3 room flat	440	440	440
4 room flat	540	560	560
5 room flat	640	680	680
House	775	720	775

(note – City council figures exclude green waste for flats).

Table 3.24 Underground Bins Storage Requirements



Figure 3.130 Underground Bin Waste Collection System



Different design of Underground Bin Waster Collection Systems







- 
- An aerial photograph of a planned community development. The image shows a central cluster of buildings, including a large community center, a health center, and a police station. Surrounding these are various open spaces, sports pitches, and recreational areas. A river or canal flows through the left side of the development. The overall layout is designed to be walkable and integrated with nature.
- **Open spaces and recreational amenities**
  - **Sports pitches and pavilions**
  - **Supermarket and local shops**
  - **Community Centre**
  - **Health Centre**
  - **Police provision**
  - **Primary School + early years provision**
  - **Nursery**
  - **High quality public realm**
  - **Faith worker units**





# NORTH WEST **cambridge**



Phase 1 Proposals





## Phase 1

**400+ market homes**

**530 homes for qualifying University/College Key Workers**

**325 units of Graduate housing**

**Senior living / Extra Care (75 rooms)**

**Faith worker homes**

### **Community facilities**

- **1 Form of Entry Primary School** (or 3FE UTS)
- **Community Centre and Nursery facility**
- **University-run social spaces**
- **Doctors' Surgery**
- **Police 'touchdown' facility**
- **Sports pitches**
- **Open space**
- **Play areas**

**Foodstore** (2,000 sq.m. net floorspace)

**Up to 8 local shops**

**130 room hotel**

**Energy Centre** (incorporating a gas fired combined heat and power (CHP) plant)





Phase 1 Proposals – Local Centre





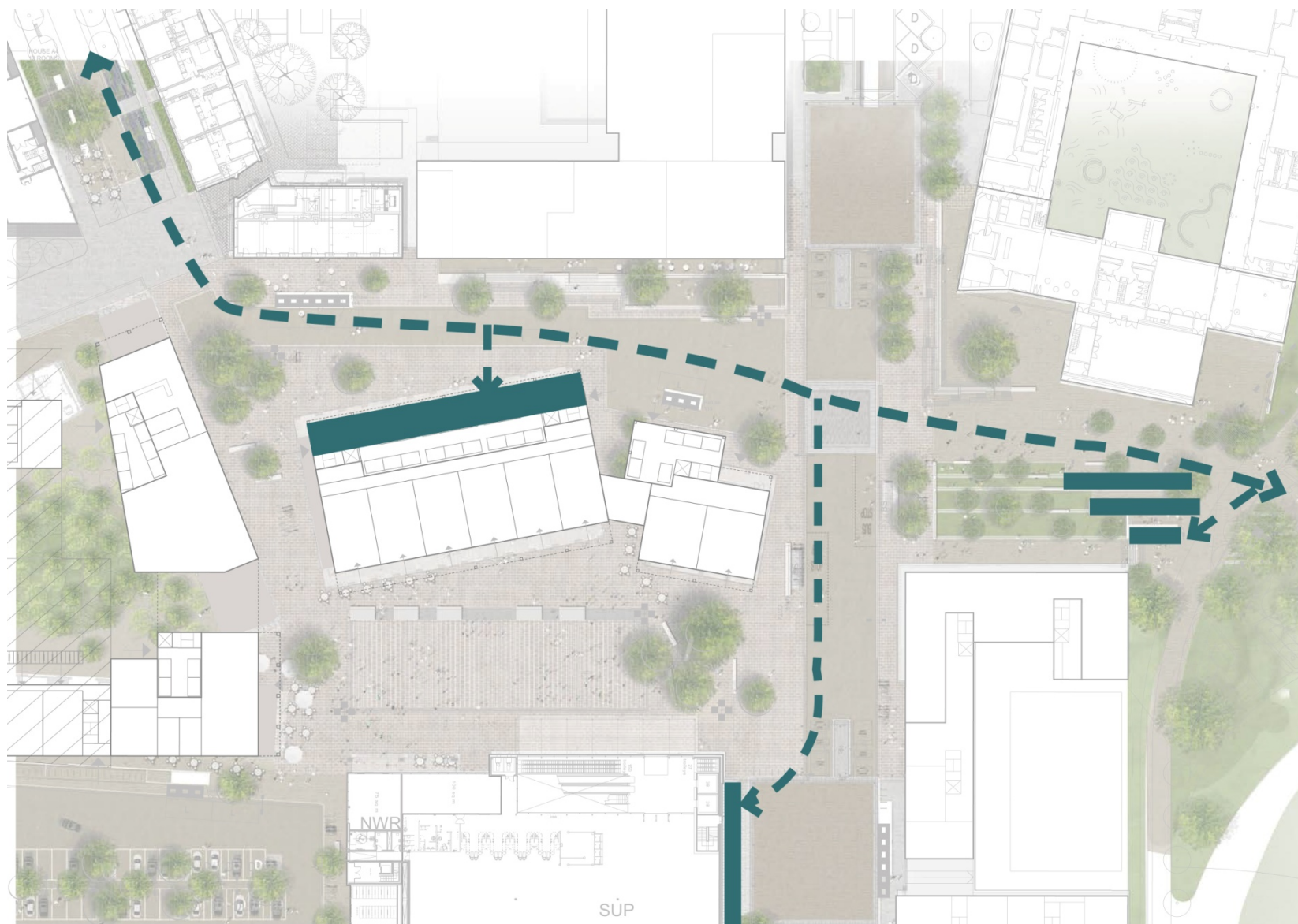
- 1 Wilkinson Eyre + Mole
- 2 Stanton Williams
- 3 Mecanoo
- 4 Cottrell Vermeulen + Sarah Wigglesworth + The AOC
- 5 RH Partnership
- 6 Marks Barfield
- 7 MUMA
- 8 Maccleanor Lavington + Witherford Watson Mann
- 9 Alison Brooks
- A Aecom Landscape
- B Townshend Landscape Architects





**Phase 1 Proposals – Land Use**





## Connectivity - Walking and Cycling









## Local Centre – Land Use





Local Centre - Key Spaces and townscape





Key Spaces and townscape – Ridgeway Place





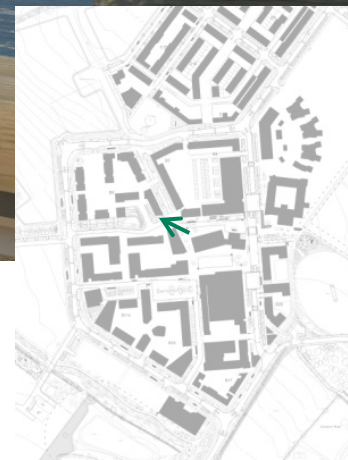
Key Spaces and townscape – Market Square





**Key Spaces and townscape – Residential lanes and courts**





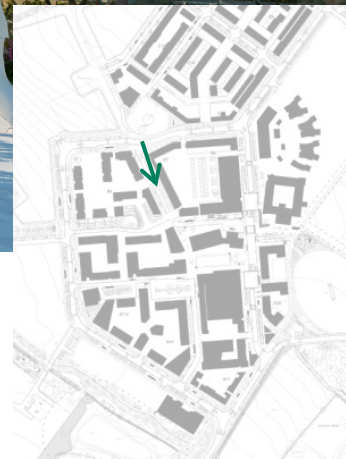
Key Spaces and townscape – Ridgeway Corner





**Key Spaces and townscape – Ridgeway**





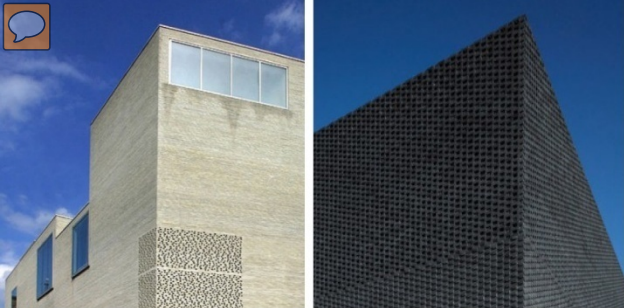
**Key Spaces and townscape – Ridgeway**





Character – Contemporary Cambridge





Brickwork - colours, texture and form

Natural materials in landscape setting



## Character - Materials





Responding to sun and wind



## Character - Technology





buildings in landscape



## Character - Nature





# NORTH WEST **cambridge**



International Symposium on the Creation of Sustainable  
Campuses 2013

6 November 2013