

RD/FM/013

**Additional Evidence Relating to Bourn Airfield
New Settlement Major Development Site
Boundary**

Appendix 2 Presentation to the Cambridge Quality Panel and Report of Panel Meeting 29th June 2016 (Presentation sections 3 to 7) (Part 5 of 8)



Employment space

Possible employment locations

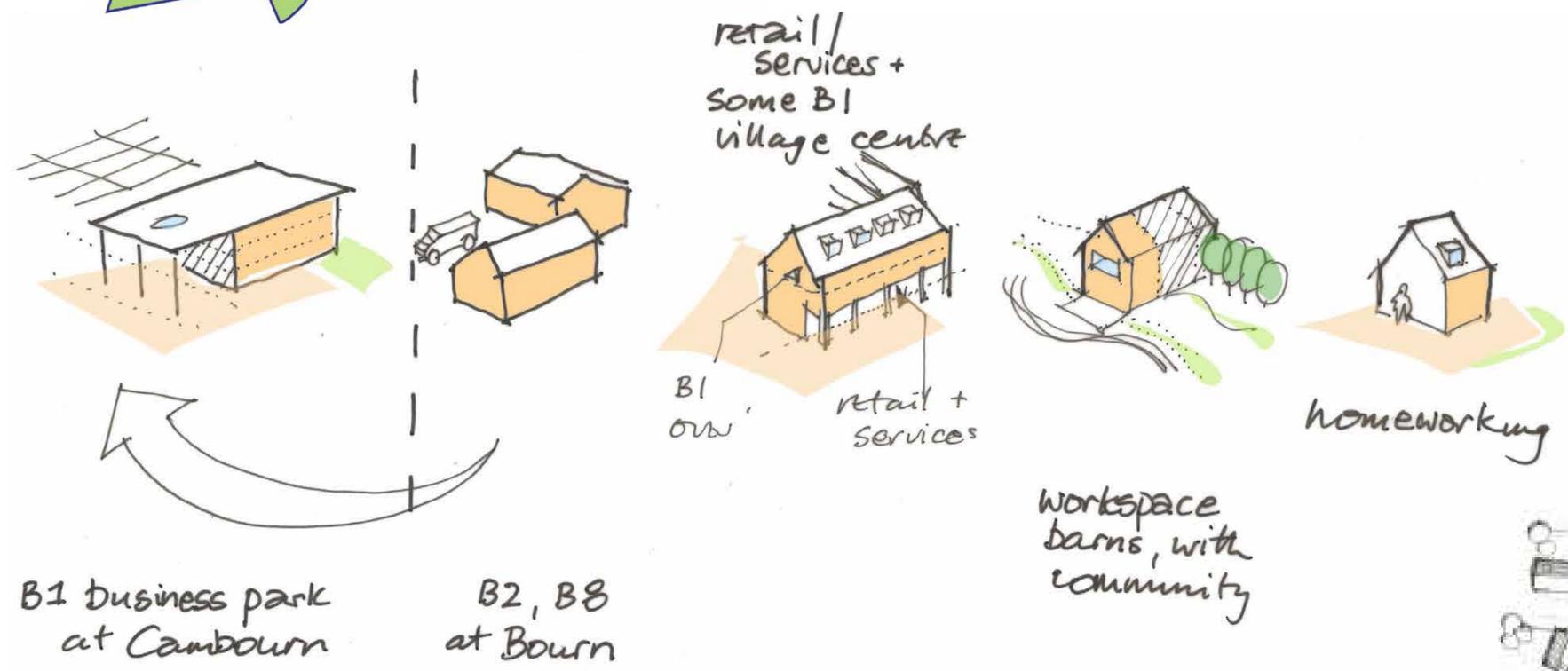
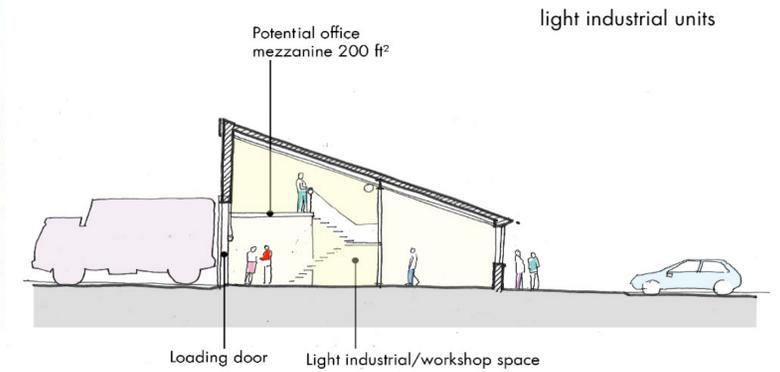


Bourn Airfield is part of an integrated employment offer at different scales. This range of opportunities underpins the masterplan and is:

- related to vehicular access
- vitality of the Centre
- walkable distances
- the Rural Hub/community/mixed-use



employment area - B2 and B8

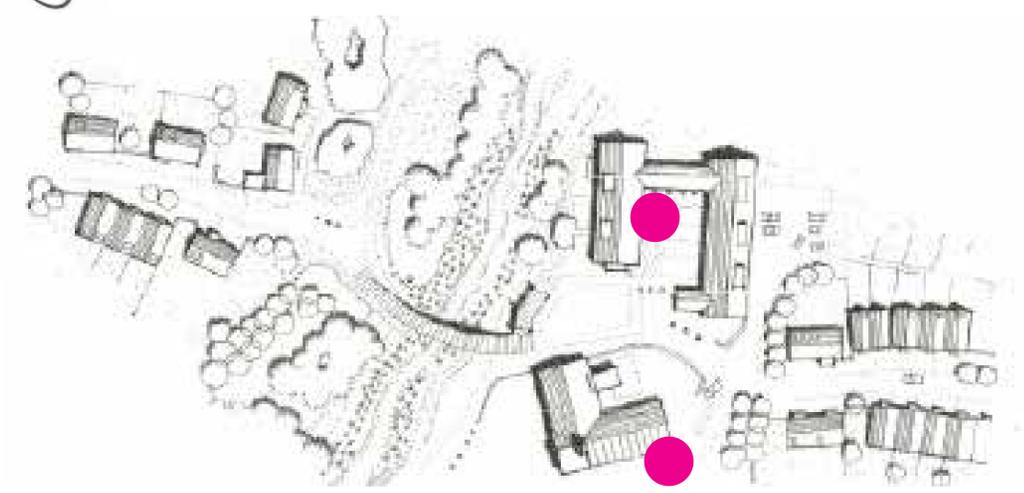


small-scale B2/B8 employment space



A mix of flexible employment spaces to complement the Cambourne offer

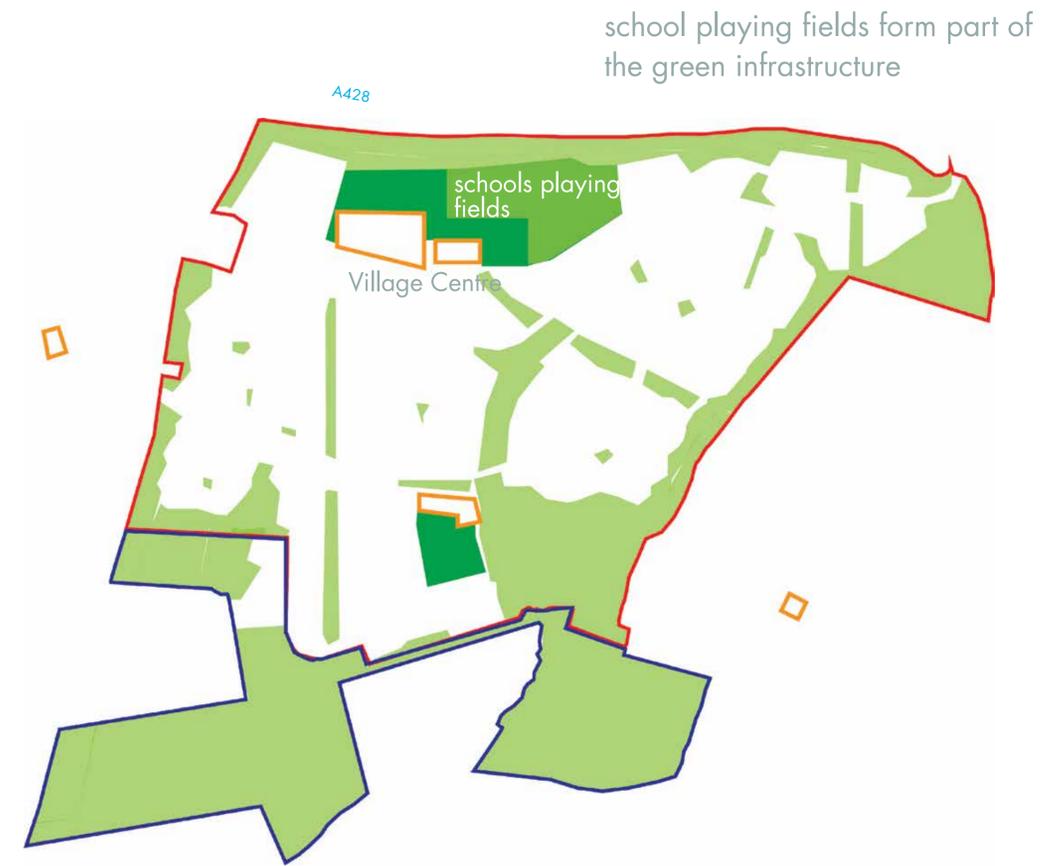
Employment space currently on the site will be retained and integrated into the scheme and a further employment land will be provided. Countryside is keen to facilitate home-working and a key part of this is ensuring that all homes have superfast broadband from the outset. Communal-type business facilities for smaller businesses could be incorporated into workspace 'barns'.



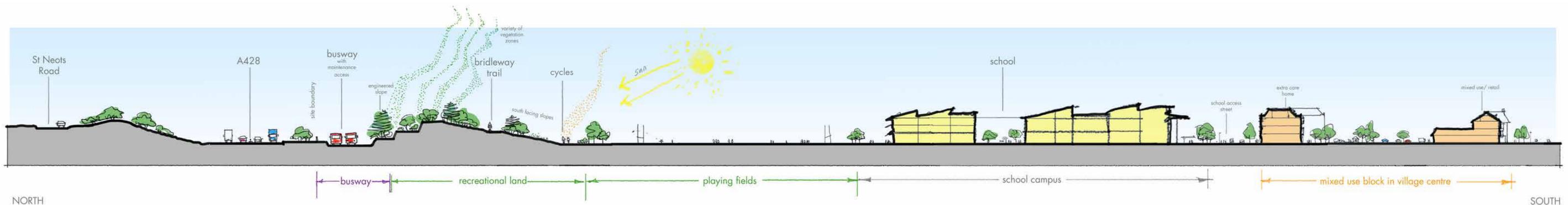
workspace is part of the Village Hub

Schools

Schools are located close to the Centre, the earliest and largest population area and separately, further south. Viewed within the Cambourne/Highfields context they are roughly equidistant. The location of the secondary school provides good coverage to most of the site.



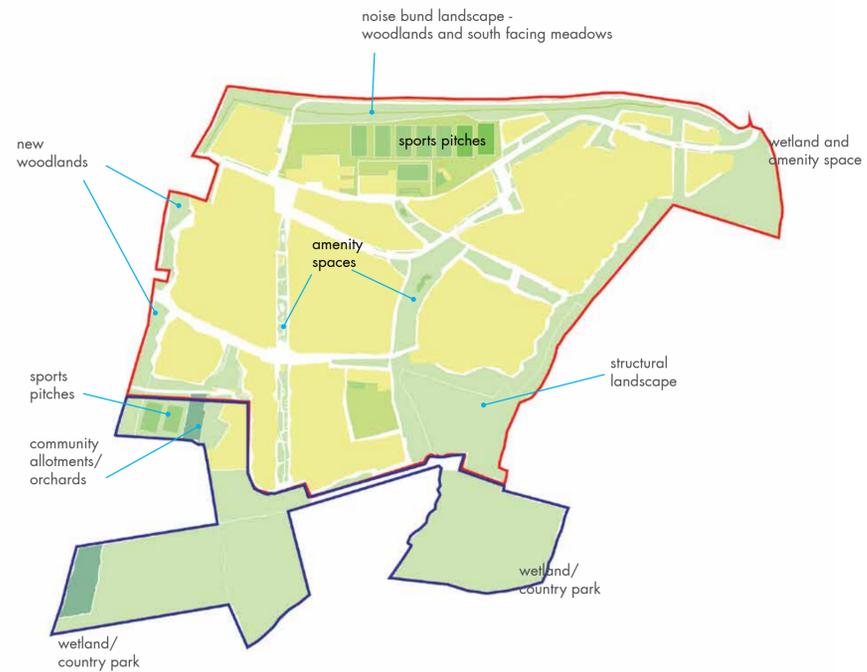
Primary and secondary schools related to Village Centre and fast bus stop



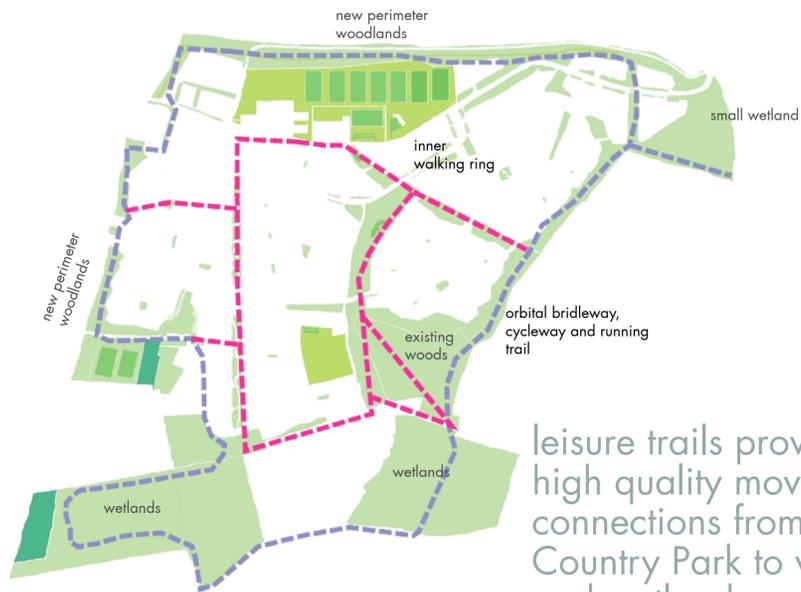
long section north/south



Multi-tiered open spaces and recreation



the green and blue infrastructure provides a strong and varied landscape framework

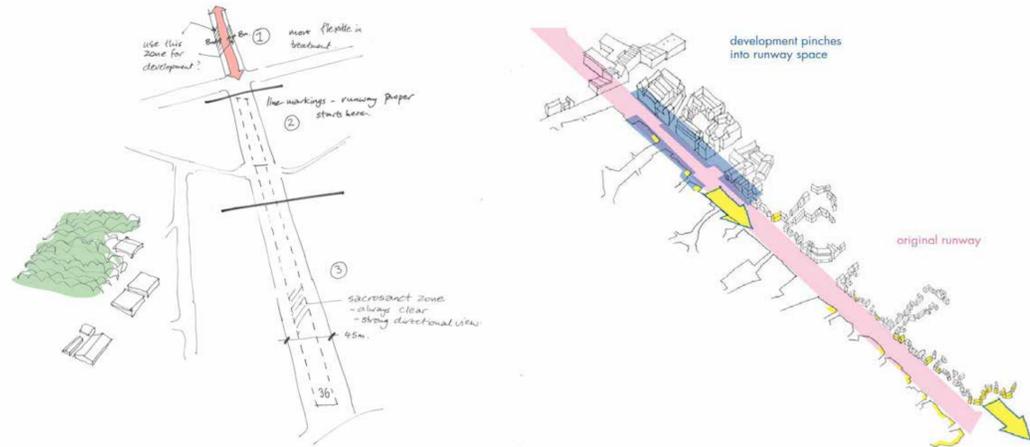


leisure trails provide high quality movement connections from Country Park to woods and wetlands

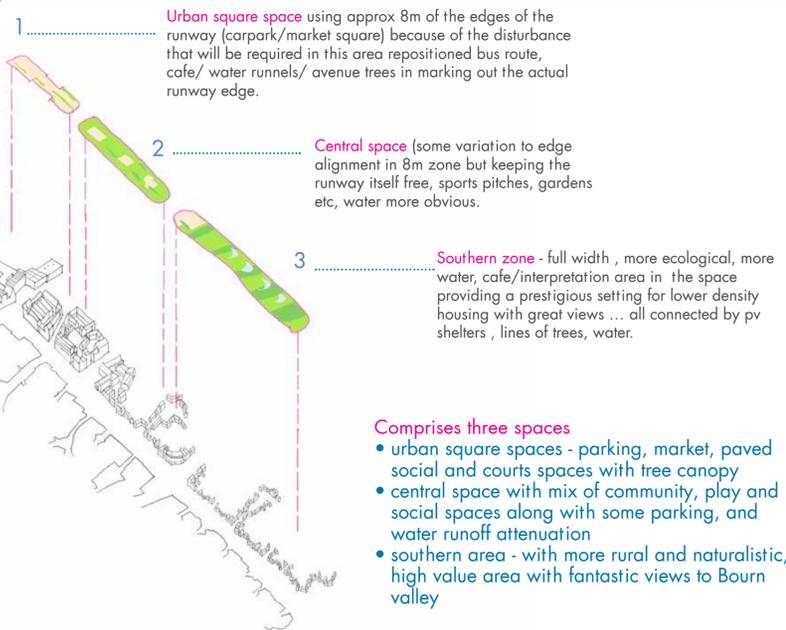
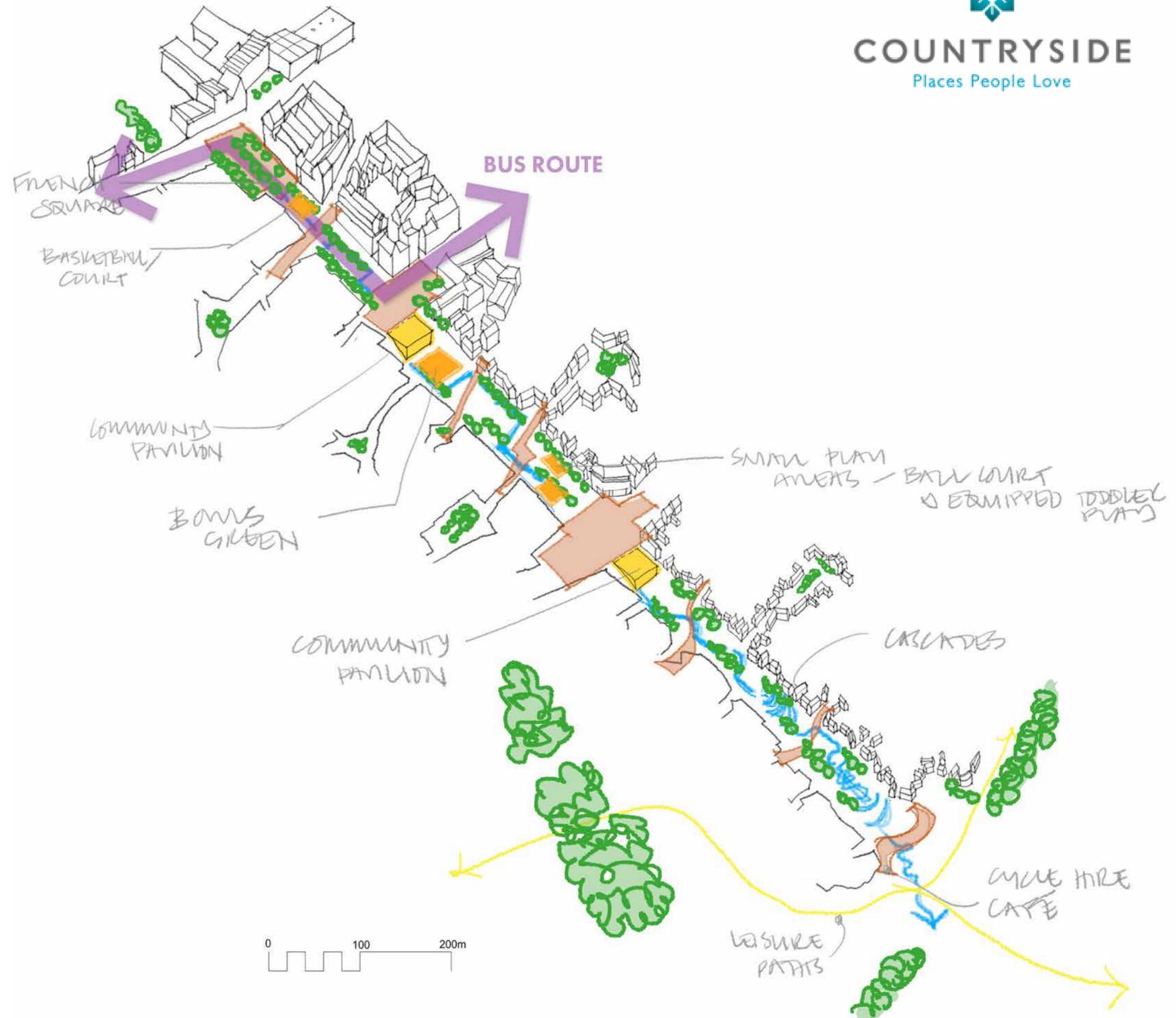


the landscape provides opportunities for healthy living and recreational lifestyles

Runway Corridor and leisure



Runway Corridor is a structuring element in the plan providing attractive long distance views to Bourn Valley. It provides a strong reminder of the WW2 airforce history since this was the principal route for bomber pilots taking off, using the distant landscape as a navigation device. The runway has an 8 metre fall from north to south and potential for a south-facing sequence of 'events' related to community, sport and leisure, biodiversity and water.



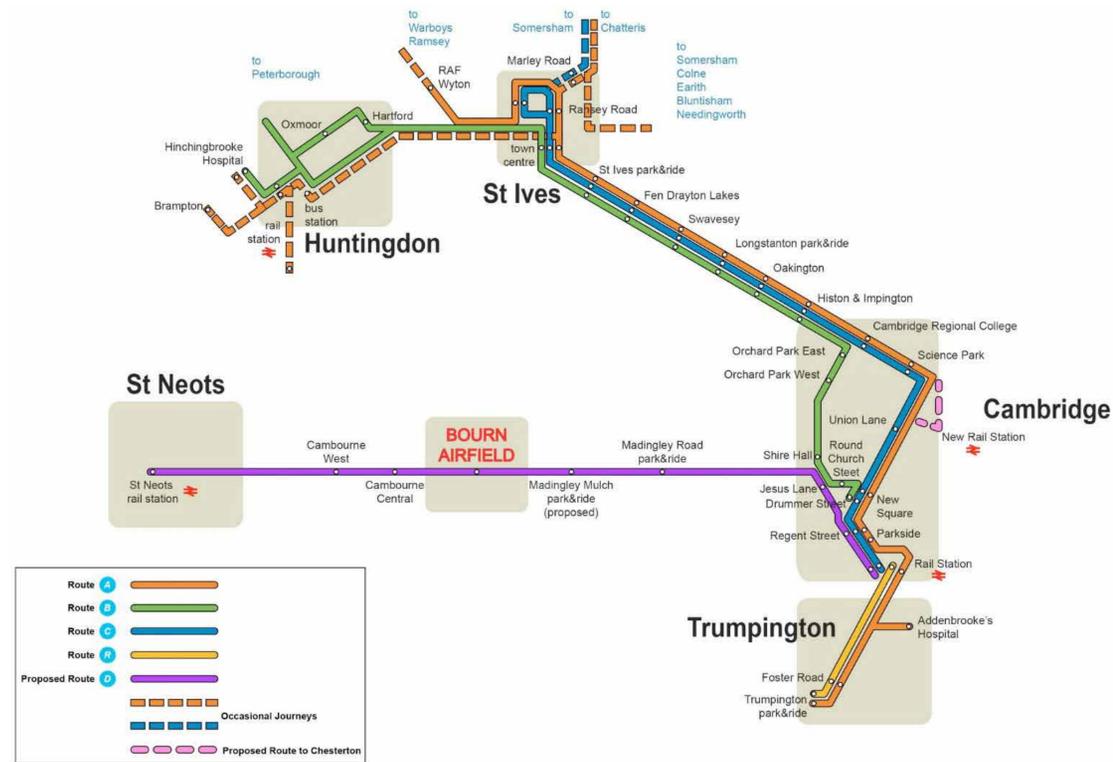
- Comprises three spaces**
- urban square spaces - parking, market, paved social and courts spaces with tree canopy
 - central space with mix of community, play and social spaces along with some parking, and water runoff attenuation
 - southern area - with more rural and naturalistic, high value area with fantastic views to Bourn valley



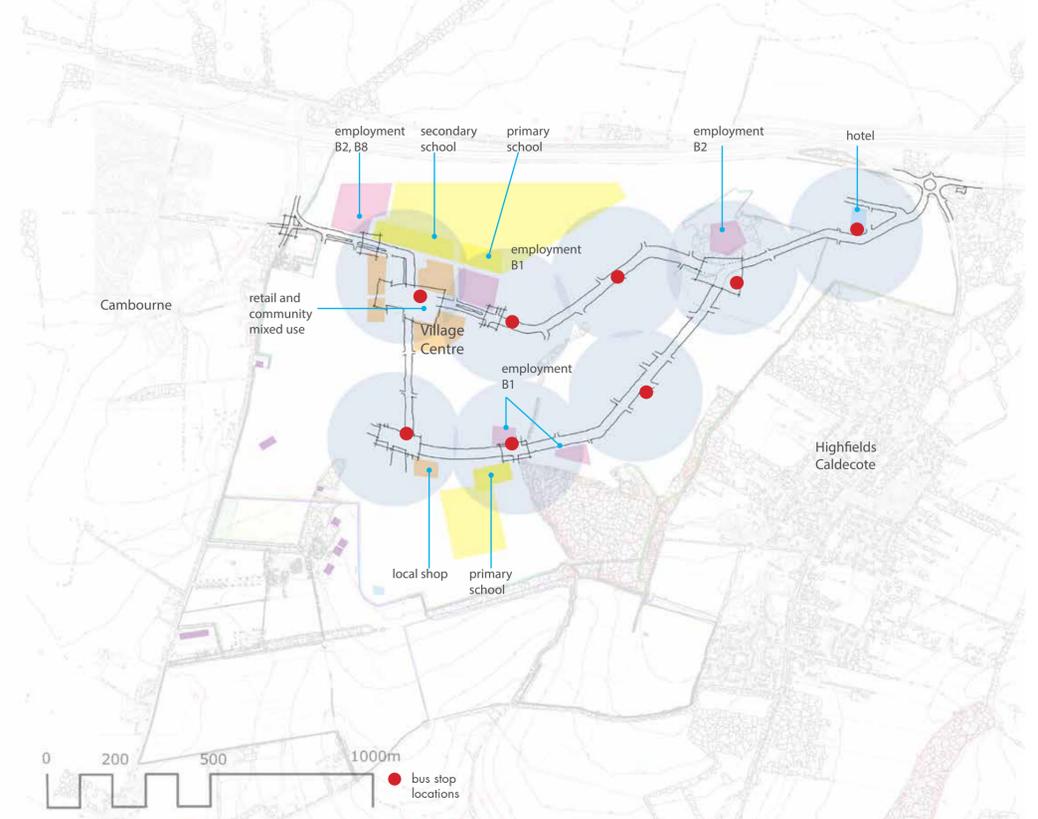
Cafés, lively social spaces, parking, market square, courts, play features, gardens, walkways, seating, water, reed beds and photovoltaic shelters as walkways could be components of the 'new' runway.

4 Connectivity

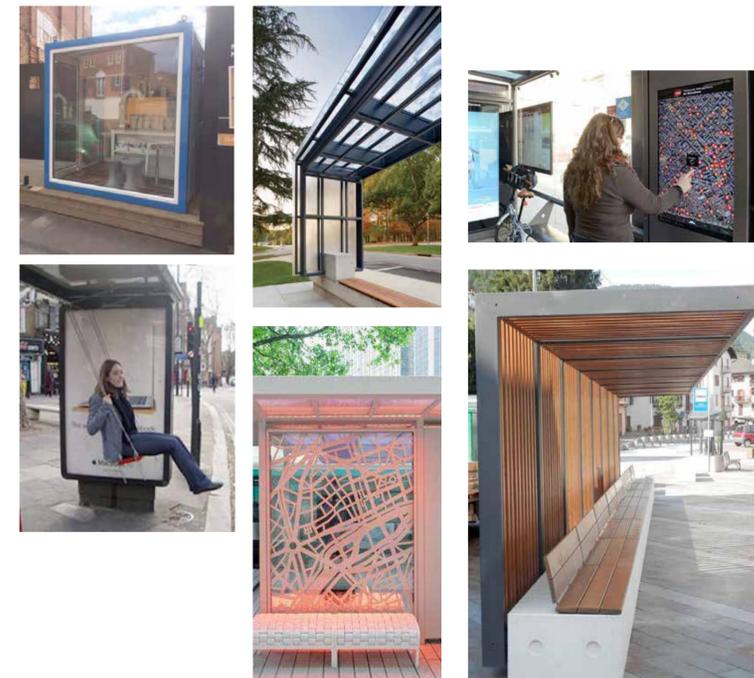
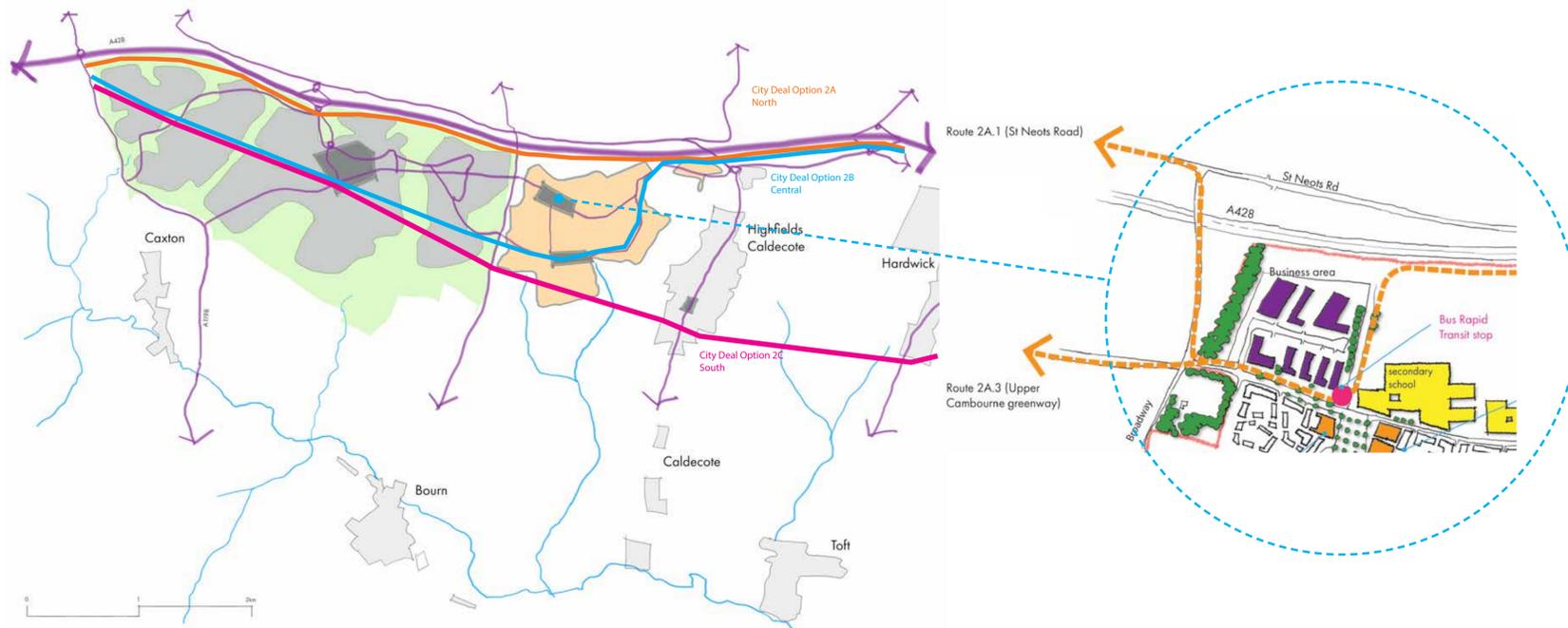
The location is part of the emerging Rapid Bus Network for Cambridge. The emerging masterplan also aims to provide maximum permeability through the local bus network and to embed this in the Centre, the Rural Hub and surrounding street networks.



Neighbourhood bus



City Deal / Bus Rapid Transit options



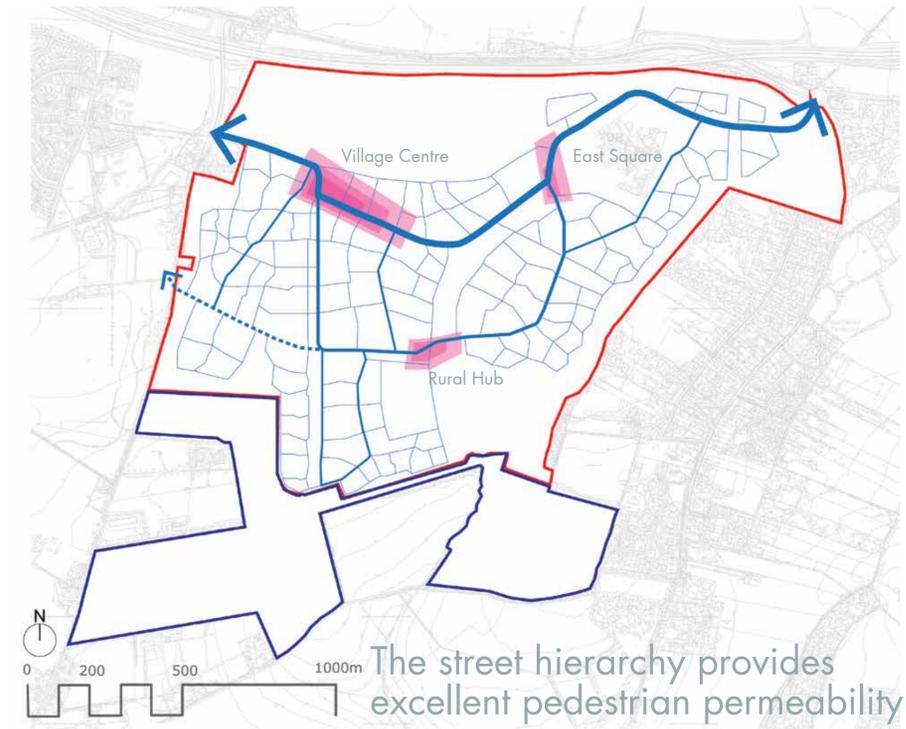
Local bus stops take many forms; smart stops, coffee stops, photovoltaic stops, exercise stops and friendly stops.



Pedestrian and cyclist network



The new cycle and leisure trails link to the public right of way network



The street hierarchy provides excellent pedestrian permeability



East Square centre pedshed



Rural Hub centre pedshed



Pedsheds assembled

pedshed analysis has shown good pedestrian access to the main centres and bus stops



- light segregated cycleway
- segregated cycleway





Vehicular access

Access is being developed to provide clear priority to Cambridge for journeys by bus, cycle and on foot

The strategy of an east and west access ensures that:

- priority can be given to non-car journeys, and
- traffic is distributed to avoid rat-running



Link street junction

Vehicle flow with two vehicle accesses

- maximum flow from completed development, not allowing full effect of mitigation measures proposed



Place street junction

Using link and place environments to fashion the street types

5 Climate

Countryside’s response to climate change is to incorporate into the emerging plan a range of mitigation and adaptation measures from the outset.

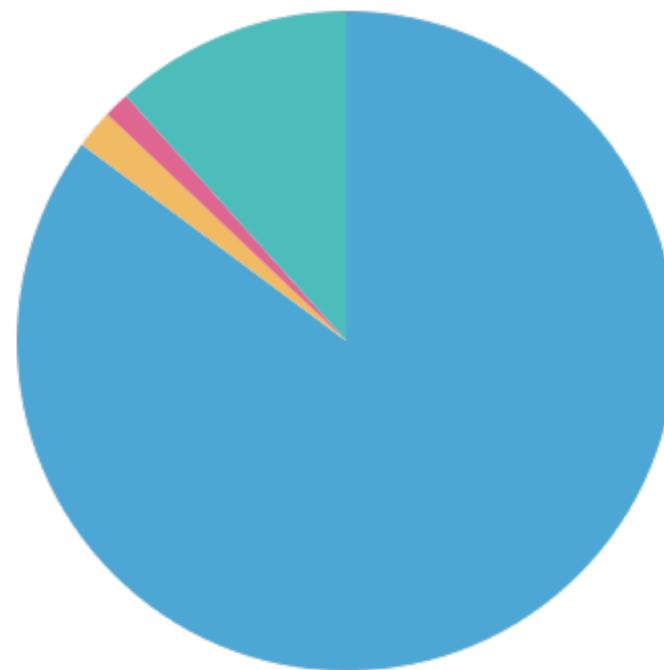
Adaptation measures include the development of an Integrated Water Strategy that;

- creates a multifunctional blue and green infrastructure network across the site capturing and moving water through a series of drainage networks. This will provide ambient cooling and new features such as a wetlands to the south, and possibly in the north east, of the proposed development with ponds, rills and channels in Runway Corridor
- is capable of accommodating the increase in rainfall from climate change
- utilises SuDs to move and reduce water discharge by up to 60%
- provides areas of water need (eg allotments) adjacent to water sources such as the wetland to facilitate water capture and storage subject to technical design
- meets emerging policy with regards to water efficiency

Energy and Carbon Reduction Strategy

Reducing energy demand and carbon emissions is a key Climate Change mitigation measure. In response, a Strategic Energy Strategy has been prepared to investigate the options for deploying renewable energy technologies in the infrastructure, domestic and non-domestic buildings.

Estimated annual carbon emissions, by proportion



- Residential development
- Primary Schools
- Secondary School
- Offices/retail/business

Waste Strategy

The design team are currently liaising with the Council to confirm the extent of waste management infrastructure required for Bourn Airfield.

At this stage it is thought likely that 3 /4 ‘Bring Recycling Sites’ will be located across the development in the communal areas such as the Village Centre and Rural Hub. No Household Recycling Centres are required.

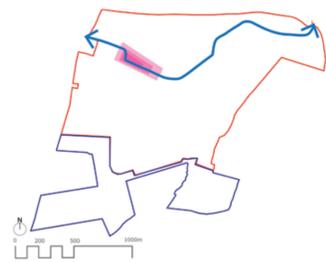
The RECAP Waste Management Design Guide SPD adopted in 2012 provides guidance on the design of waste management infrastructure for residential and commercial development. Where feasible, it is being used in the design of the settlement to ensure opportunities to minimise waste and maximise recycling are included.

Building	Solar PV	Solar Thermal	ASHP	GSHP	Biomass boiler	WWHR
Primary Schools	Yes	No	Yes	Yes	Yes	Yes
Secondary School	Yes	Yes	Yes	Yes	Yes	Yes
Community Buildings	Yes	No	No	No	No	No
Retail	Yes	No	No	No	No	No
Food and bars	Yes	Yes	Yes	No	No	Yes
Leisure facilities	Yes	Yes	No	No	No	Yes
Offices	Yes	No	Yes	Yes	No	No
Industrial buildings	Yes	Yes	Yes	No	No	No
Distribution warehouses	Yes	Yes	Yes	No	No	No

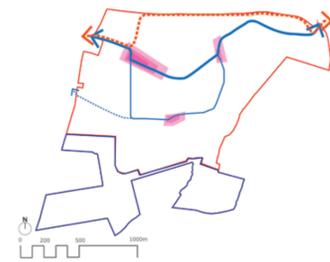
Non-residential buildings LZC suitability

6 Character ... a summary

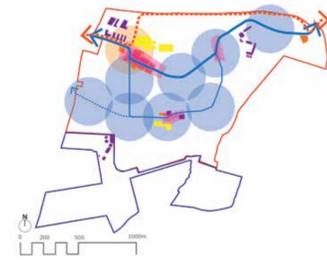
Neighbourhoods and their characteristics emerge from a variety of functions already described; location on the site, topography and relationship to local landscape, density and scale, intensity of use and mixed use, transport, connectivity etc. We have also studied local precedents and where appropriate we will aim to incorporate their characteristics. A number of neighbourhood characters will emerge.



the plan form emerges from a movement framework suggesting an inline village centre



... the BRT and southern momentum for spreading to the south ...



...and anchors the secondary hubs ...



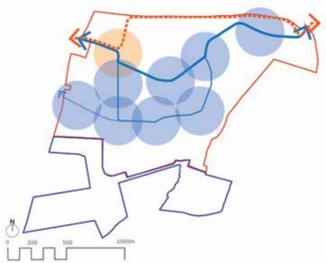
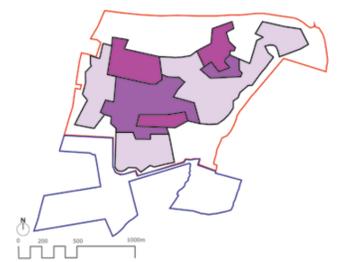
... which provide linkages to schools ...



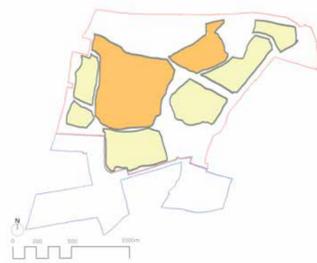
...and other facilities including employment areas, all within easy walking distance



density profiles match accessibility and irrigate services, retail ...



... and public transport ...



... suggesting a series of neighbourhoods of differing character



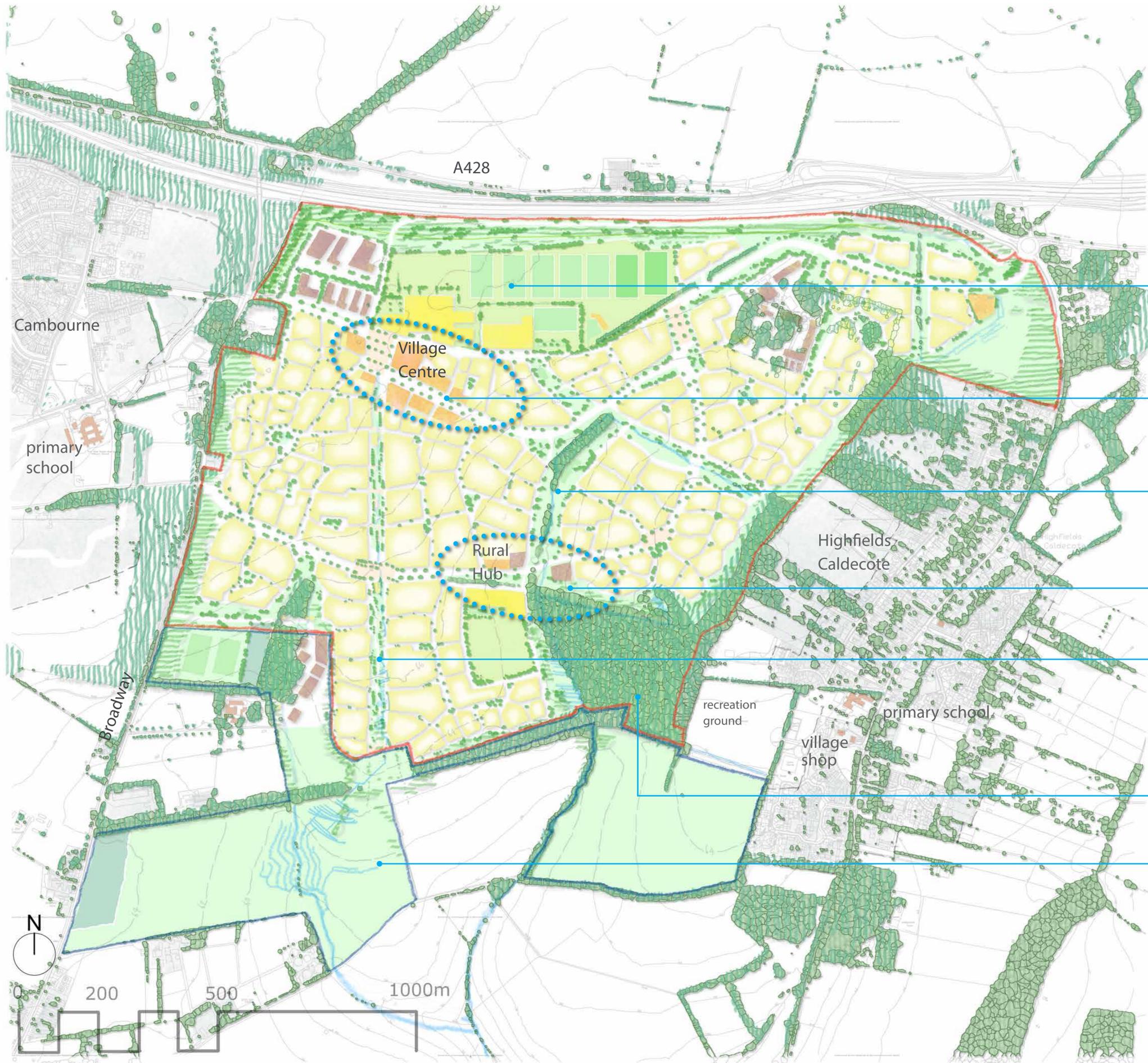
local precedent



An emerging framework



COUNTRYSIDE
Places People Love



education campus with adjacent secondary and primary school with linked community sports area and playing fields allowing flexible shared/partitioned use

village centre - provides high street, foodstore and other retail, services, community facilities and civic space

core green space in valley around watercourses and existing woodland forming key village park

rural hub - lower intensity local facilities based around primary school and work/community spaces

runway 36 space reinvented as mixed social, park and play space with walkways, courts, PV shade canopies and rain gardens

Bucket Hill Plantation retained and actively enhanced and conserved, with wildlife management areas, natural play, glades and rides

country park with wetland /fens, ponds, scrapes and shallow bogs, alongside meadow and scrub. walkways provide leisure trails and links to Bourn valley footpaths

7 Points for discussion

- The integration of bus rapid transit on a segregated route whilst maintaining people focused streets.
- The location of the village centre and its orientation. We have considered a traditional high street form, continental squares and medieval type clustering.
- Facilitating home working and providing flexible employment space for SMEs and/or business incubation space / starter units.
- Facilities that are missing from Cambourne and the local area that would benefit future and existing residents.
- Connections to neighbouring settlements whilst maintaining separation.
- USPs for the development in the Cambridge context. Concepts that we are considering are Home-working, Smart City connectivity, education specialisms, social spaces and cultural facilities around the general theme of Live, Work and Play.
- Ideas for community development.