Cyber
Central
Vision

/ A new cyber capital for the UK

/ A catalyst for growth and change in Gloucestershire

/ A pioneering new community for Cheltenham

Cyber Central Vision █

The UK is one of the largest, most concentrated and accessible cyber security markets in the world. It has a reputation for academic excellence and incident management that makes it a leading player in the global fight against cyber crime. The UK cyber security market is currently valued at approximately £5bn and is rapidly expanding in response to consistently increasing and evolving global cyber security threats.

In 2016, the UK Government launched its updated National Cyber Security Strategy with a vision to make the UK the safest place to live and do business online. To achieve this, the Government will invest £2.4bn to defend the critical national infrastructure, deter cyber-criminal activity and to develop the UK's cyber security capability.

As home to the national cyber security authority GCHQ, an existing cluster of over 200 cyber organisations, and the proposed location of one of two new cyber innovation centres, Cheltenham is a national centre of expertise in cyber security. There are few locations in the UK that have the heritage, existing expertise and ambition to encourage deeper cyber innovation and nurture cyber careers, all of which will be hugely beneficial to the local, regional, and national economy.

This document sets out our vision for the transformation of West Cheltenham into 'Cyber Central', and why we believe it has the potential to become the iconic focal point for the cyber security industry globally, nationally and locally, helping deliver a key component of the Government's Industrial Strategy.

We have developed this ambitious vision to illustrate the full extent to which Cyber Central can be a catalyst for positive change in the region – one which drives economic growth and strengthens Gloucestershire's reputation as a fantastic place to live and work.

Above all, we aim to bring to life what type of place we think Cyber Central should be. We envision a pioneering new community that combines world-class cyber business and academic facilities, exemplar housing and state-of-the-art amenity and leisure facilities in a highly accessible and environmentally sustainable development.
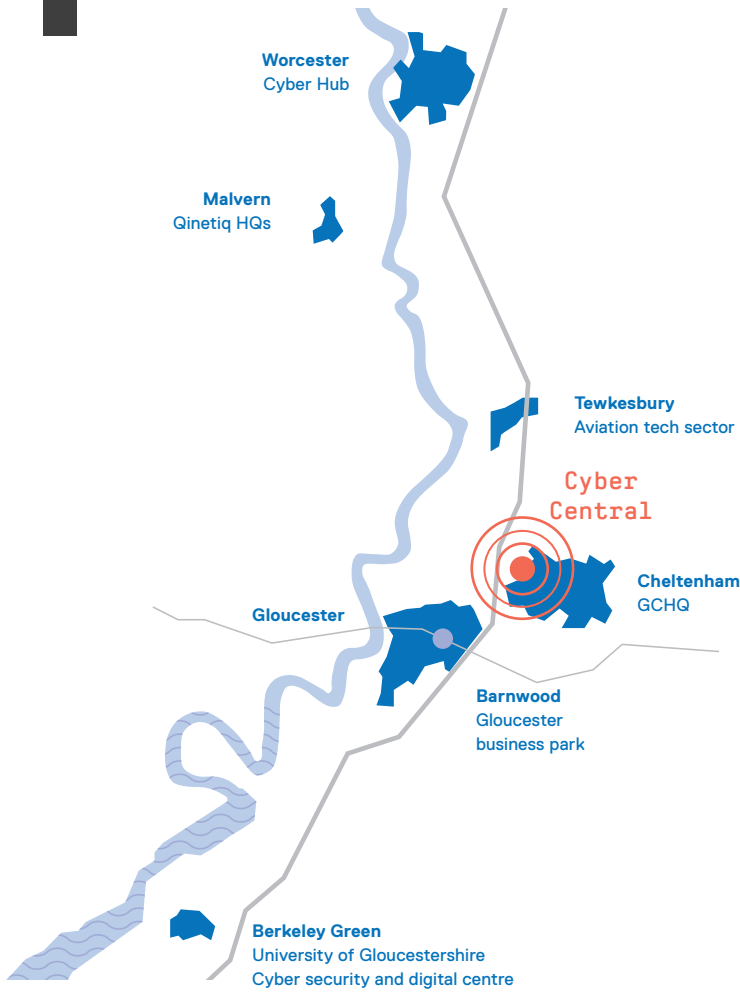
This document provides an overview of:

/ Why this is the best location for a new cyber community

/ Our vision and ambitions for the project

/ The strategies that will enable us to deliver our vision

CHELTENHAM
BOROUGH COUNCIL

Tewkesbury
Borough Council

Why Cheltenham? ▪

Central to the Cyber Valley_

Cyber Central will be located at the heart of the 'Cyber Valley' – a regional-scale cluster of cyber-related businesses running along the Severn Valley with Cheltenham at its core. Cyber Central will build upon an existing cyber hub to provide an iconic focal point for the whole Cyber Valley, supported by regional hubs at Malvern, Bristol and Berkeley.

Worcester
Cyber Hub

Malvern
Qinetiq HQs

Tewkesbury
Aviation tech sector

Cyber Central

Cheltenham
GCHQ

Gloucester

Barnwood
Gloucester business park

Berkeley Green
University of Gloucestershire
Cyber security and digital centre

Connected to a national network_

Cyber Central will have access to the best digital infrastructure required to support the development and incubation of cyber enterprise. The development is perfectly located to take advantage of the UK's dark fibre network, providing secure, ultra high-speed and unlimited fibre connectivity to the site.

Edinburgh

Newcastle

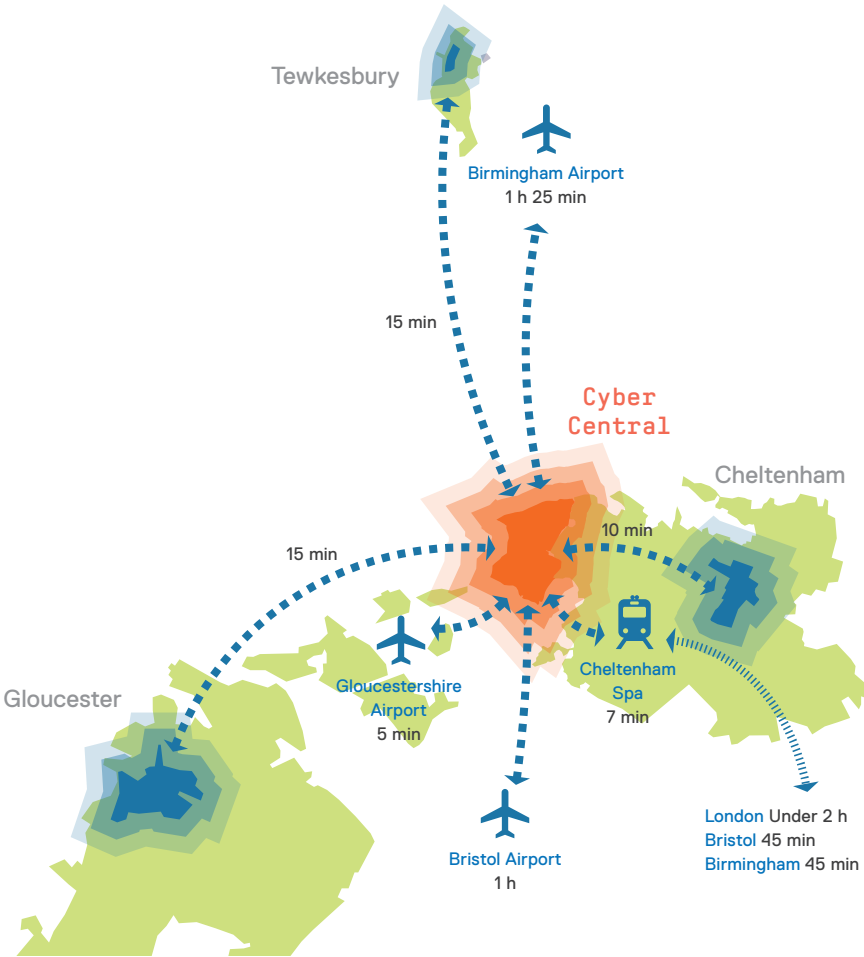Leeds

Liverpool

Cyber Central

Gloucester

London
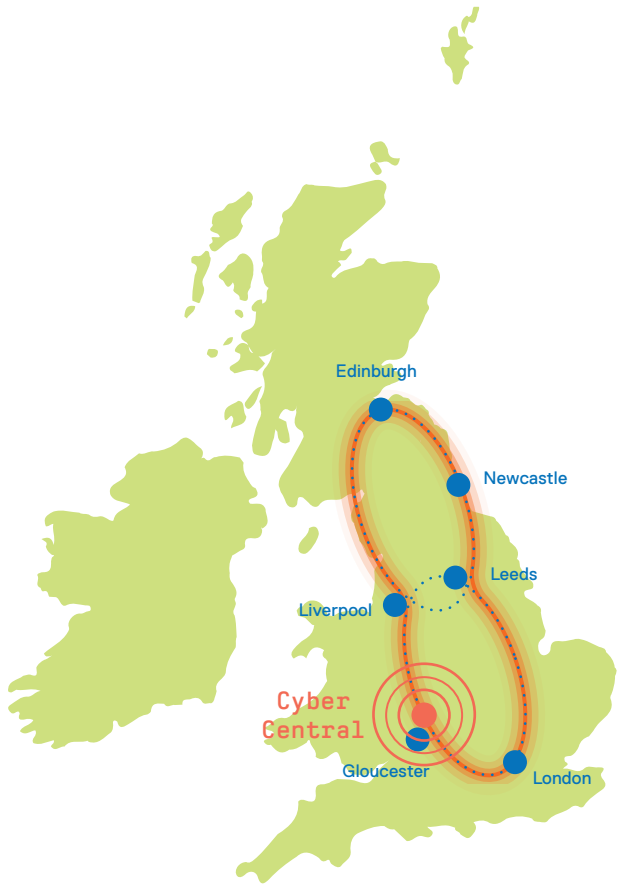
Surrounded by skills_

Cyber Central will have access to a network of leading academic institutions. The UK is home to 14 Academic Centres of Excellence in Cyber Security Research (ACE-CSR), including Oxford and Bristol, Birmingham and Warwick. The University of Gloucestershire also hosts a growing range of cyber-related higher education and degree apprentice programmes. Cyber Central will be designed to attract the best academic talent, whilst also providing the local skills development and training required to service a world-class cyber community.

Birmingham

Warwick

Milton Keynes

Cambridge

Gloucester

Cyber Central

Oxford

Cardiff

Bristol

Bath
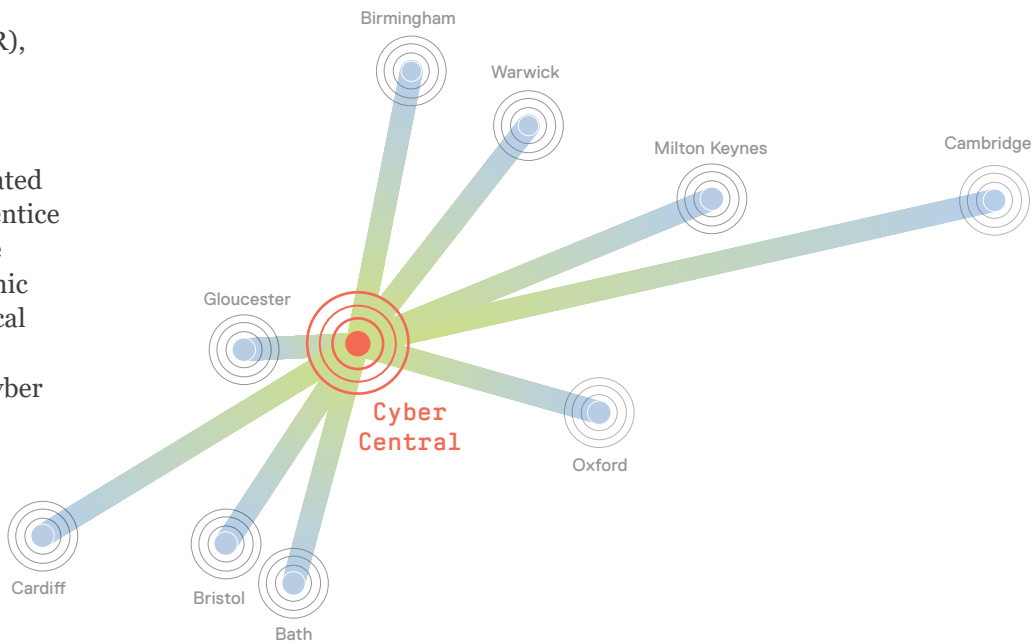
Available and accessible_

Cyber Central will be built on the greenfield land situated to the west of Cheltenham, easily accessible by road, rail and air. The development will benefit from upgraded highways infrastructure, providing easy access to and from the M5. Cheltenham Spa railway station is located close by and will soon undergo major improvement work, with wider network upgrades also planned to create faster and more regular intercity journeys to and from London. Gloucestershire Airport is located just 3 miles away with a greater range of destinations available from Bristol and Birmingham airports.

Tewkesbury

Birmingham Airport
1 h 25 min

15 min

Cyber Central

Cheltenham

15 min

10 min

Gloucester

Gloucestershire Airport
5 min

Cheltenham Spa
7 min

Bristol Airport
1 h

London Under 2 h
Bristol 45 min
Birmingham 45 min

Cyber Central Vision ▮

Cyber Central will be the first of its kind in the UK; a unique location dedicated to the development of cyber research, skills and capability to counter a threat estimated to cost the UK up to £30bn annually. Our ambition is to deliver one of the best places in the world to design, create, grow and operate innovative cyber security businesses of any scale. It will be a campus that integrates high-tech work places with academic facilities, accommodation and leisure, attracting and developing the best talent. Cyber Central will be a catalyst for positive change in the region by driving economic growth, increasing opportunities for skills and training and creating thousands of jobs.

The campus and community in which it sits will be an exemplar of social and environmental sustainability. It will include a diverse mix of high-quality housing, reflecting the requirements of people in the third and fourth decades of the 21st century but integrating with the existing communities to ensure the benefits of the investment are shared. Sustainable transport links, green space and features that minimise impact on the environment – and indeed enhance it - will help realise our ambition for Cyber Central to be the most healthy and responsible development in the country. A pioneering place where everyone thrives.

A world-class community

Intense and tranquil

A smart ecosystem

A place of cyber excellence

Inclusive

Healthy

An exemplar of social sustainability

Environmentally Innovative

Cyber Central

A place with a unique identity

A 24/7 campus

Connected

Diverse living options

Cyber Central Vision ■

Environmentally innovative
An ecologically friendly development that is restorative to its natural surroundings_

Healthy
A green and biodiverse development that encourages physical and mental wellbeing_

Inclusive
A transformational development that creates strong communities_

A smart ecosystem
A connected community that is digitally, environmentally and socially intelligent_

Intense and tranquil
A vibrant and thriving community located within a unique landscape setting_

Diverse living options
An inclusive community in the region of 3000 homes that provides varied, affordable and flexible tenancies_

Connected
An accessible development that is physically, digitally and culturally integrated_

A world-class campus
A collaborative community that brings together leading cyber businesses and innovators alongside academic facilities dedicated to cyber and digital technologies_

A 24/7 campus
A dynamic community that integrates a diverse mixture of uses and people_

M5 Junction 10

Gloucestershire Airport

Cheltenham Town Centre

A place of cyber excellence ▉

Our ambition is to establish Cyber Central as a globally significant location and focal point of the Cyber Valley. Cyber Central will be custom designed to create the optimum environment for cyber businesses and their partners to collaborate, innovate and thrive.
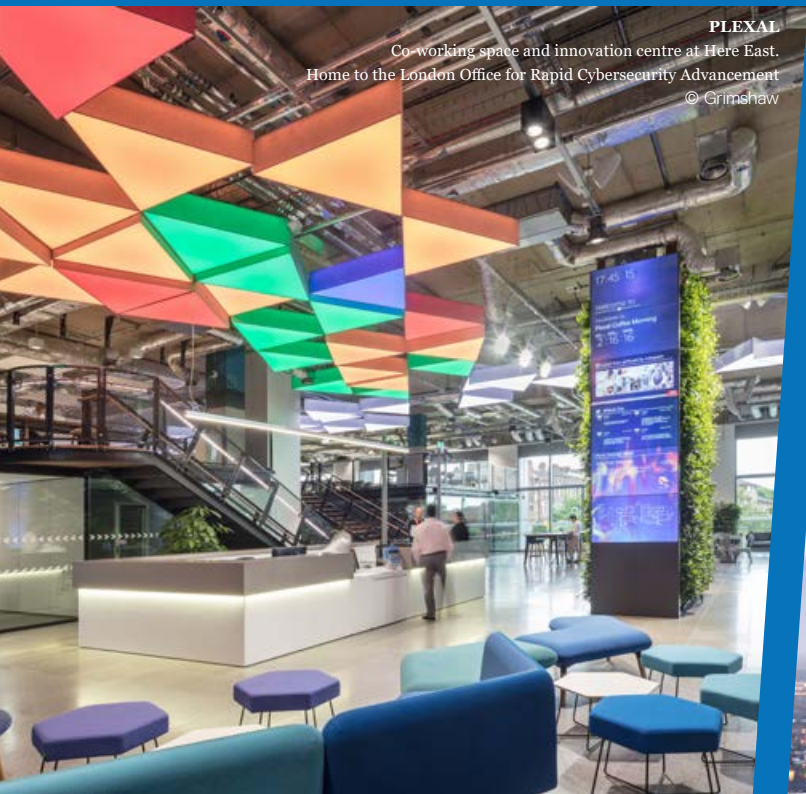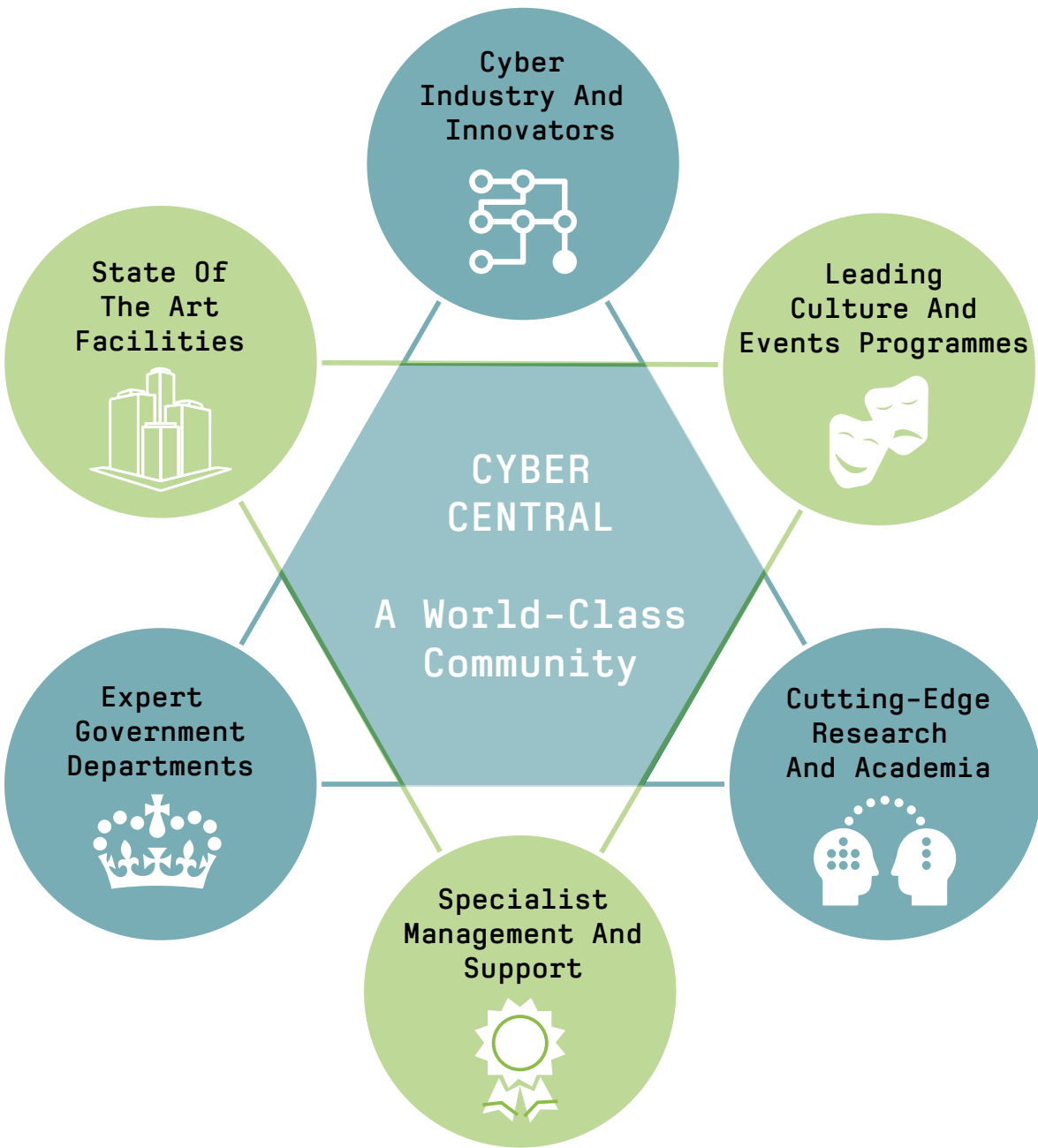
A world-class community

Intense and tranquil

A smart ecosystem

A world-class community ▮

PLEXAL
Co-working space and innovation centre at Here East.
Home to the London Office for Rapid Cybersecurity Advancement
© Grimshaw

Typical collaborative workspace
© Grimshaw

Here East. London, UK
Bringing together business, tech, media, education and data at the
site of the London Olympic Park in the pursuit of innovation
© Here East

A collaborative community that brings together leading cyber businesses, innovators and academics_

/ A custom designed campus that enables the co-location of a wide spectrum of organisations from large to small

/ World-leading anchor tenants capable of attracting the best global talent

/ A nurturing environment that integrates the specialist end-to-end support required by developing cyber businesses

/ University facilities and educational programmes that encourage industry-academic partnerships

/ Flexible accommodation that allows businesses to grow and change over time

/ Digital and physical infrastructure that is future-proofed and upgradable

/ A place that promotes creativity and innovation through leading cultural and event programmes

/ State of the art facilities, landmark architecture and inspirational surroundings

/ A hub for existing local cyber-related organisations, such as CyNam (Cyber Cheltenham)

Cyber Industry And Innovators

State Of The Art Facilities

Leading Culture And Events Programmes

CYBER CENTRAL
A World-Class Community

Expert Government Departments

Cutting-Edge Research And Academia
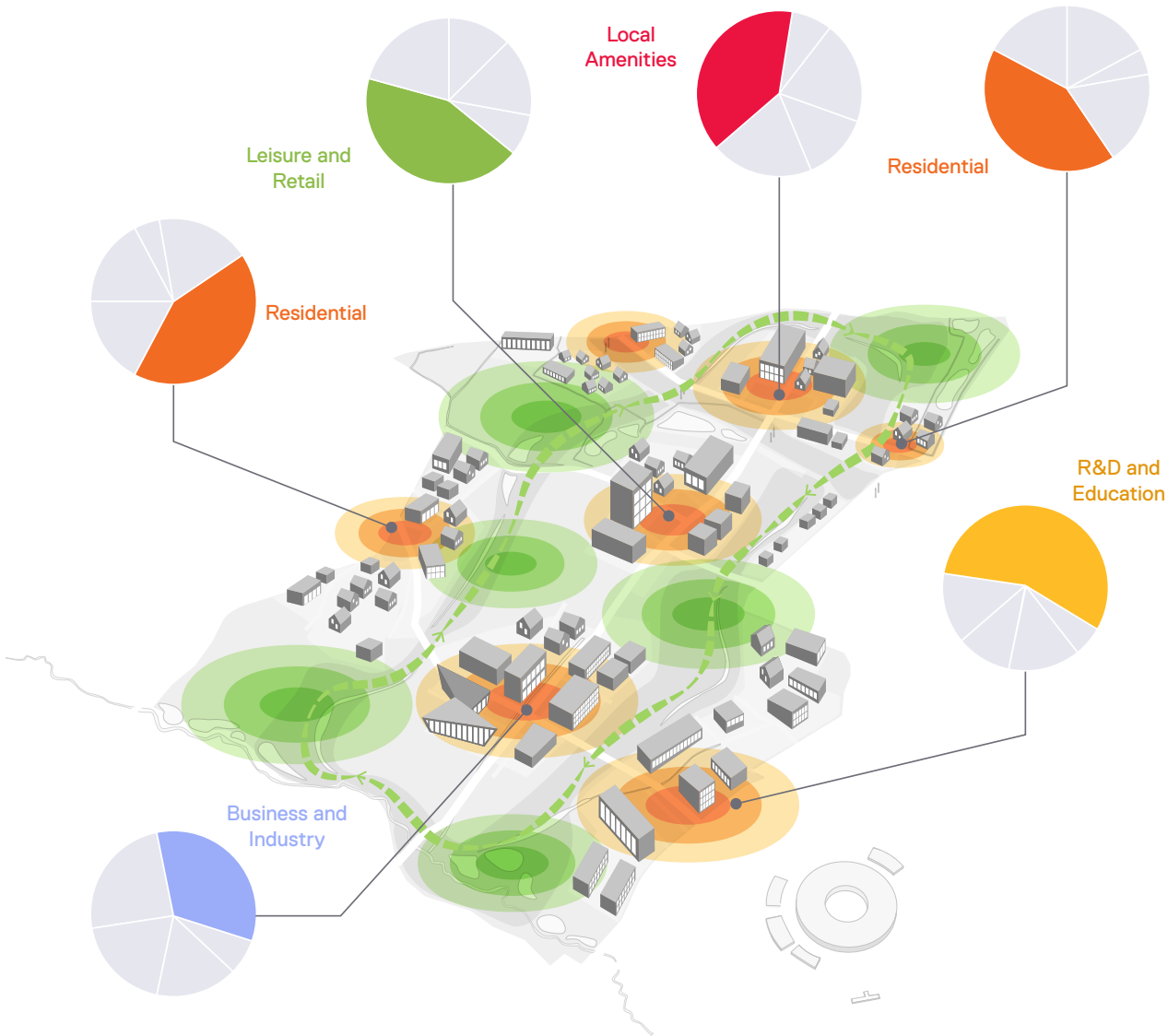
Specialist Management And Support

Intense and tranquil ▮

Gilston Park Estate
Proposed new garden town development, organised around a series of villages, each with distinct character

A vibrant and thriving community located within a unique landscape setting_

/ Intensification of activity around key areas of the site to encourage interaction and innovation

/ Compact, mixed-use communities that create active street life, a sense of community and improved security

/ Co-location of complementary functions within each community, contributing to a clear identity and sense of community

/ Lively and dynamic spaces that add to Cheltenham's vibrant character and contribute to its reputation as a cultural centre

/ Maximised potential for high-quality green spaces that support activity, biodiversity and community.

/ Outdoor spaces that benefit physical and psychological wellbeing

/ Potential for future growth centred around the main node points

Local Amenities

Leisure and Retail

Residential

Residential

R&D and Education

Business and Industry

A smart ecosystem ■

A connected community that is digitally, environmentally and socially intelligent_

/ A leading example of how the design of infrastructure can respond to changing technology

/ A digitally connected community designed to maximise knowledge sharing, social interaction and collaboration

/ Integrated Smart City technologies that improve the performance of transport systems, delivery of services and environmental performance

/ Data-informed phased development based on user feedback and input

/ Designed to accommodate future technology such as autonomous vehicles

/ Smart energy, water and waste solutions that minimize the developments impact on the natural environment

/ Embedded green and blue infrastructure and sponge city design principles

Stream of Senses Master Plan. Singapore
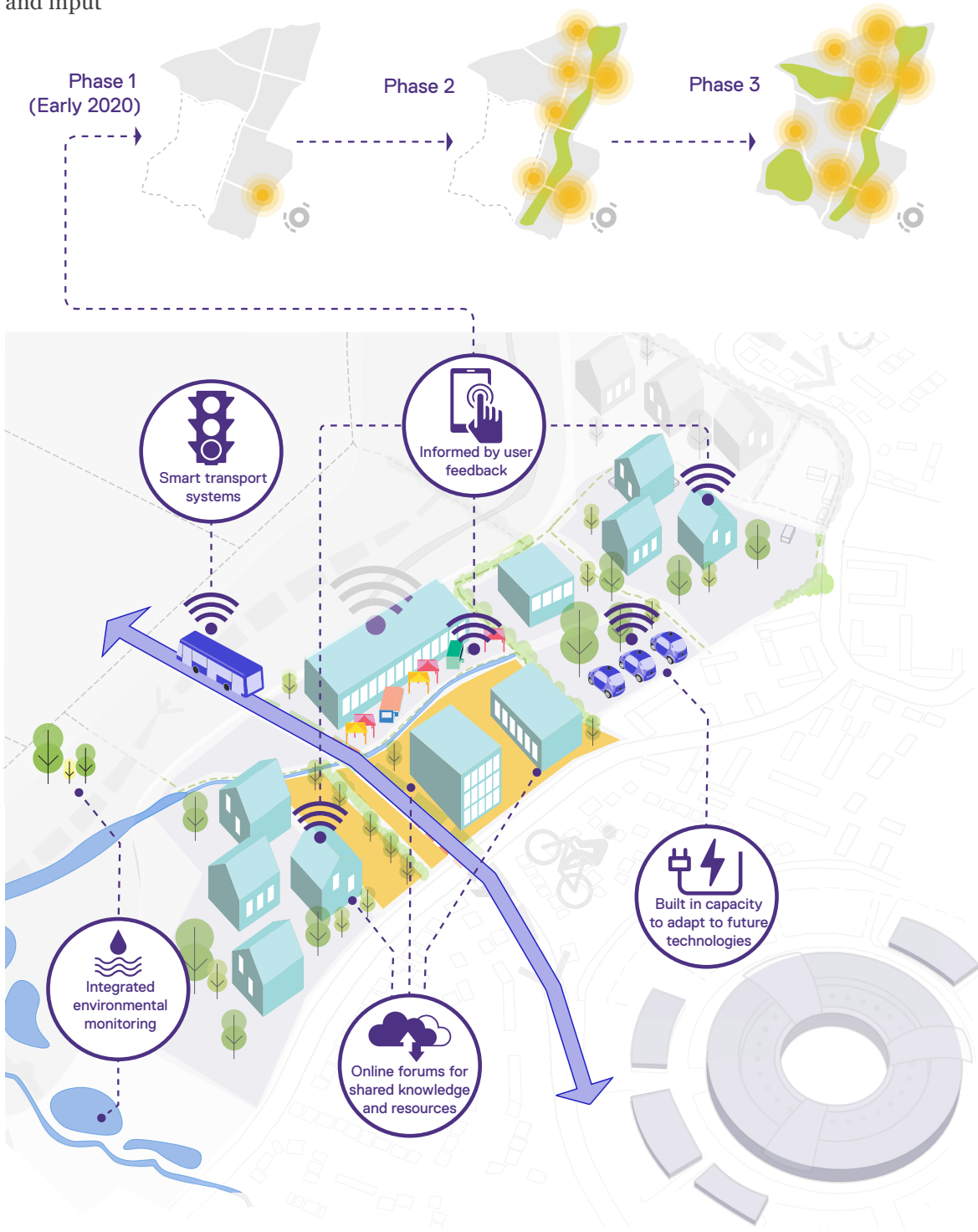A connected corridor integrating movement, biodiversity and information
© Grimshaw

Photo by Mikes Photos
from Pexels

Dubai Design District
A mixed-use development for the design sector, that integrates smart city principles
© Méthanoia

Phase 1 (Early 2020)   Phase 2   Phase 3

Smart transport systems

Informed by user feedback

Built in capacity to adapt to future technologies

Integrated environmental monitoring

Online forums for shared knowledge and resources

A place with a unique identity ■

We intend to build a vibrant new community, with a strong identity that helps to build Cheltenham's international reputation, promotes culture, creativity and social interaction, and that benefits the existing communities of West Cheltenham.

A 24/7 campus
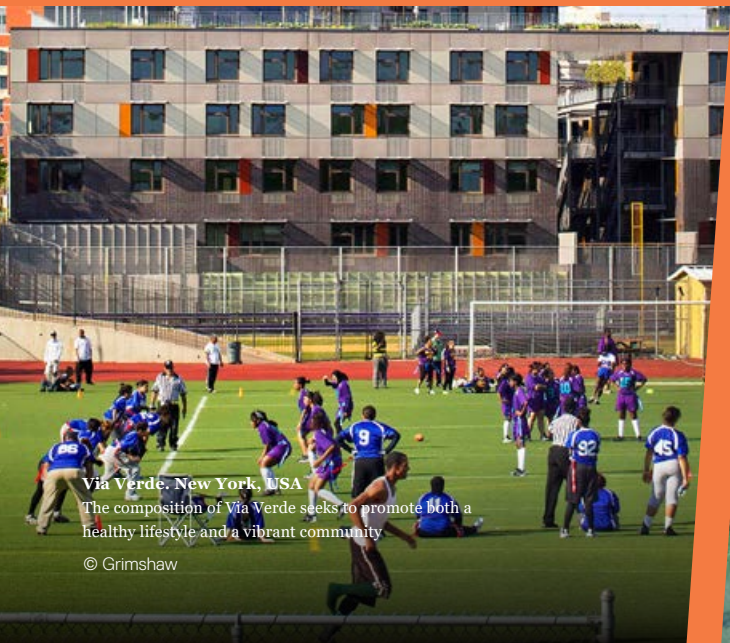
Connected

Diverse living options

A 24/7 campus ∎

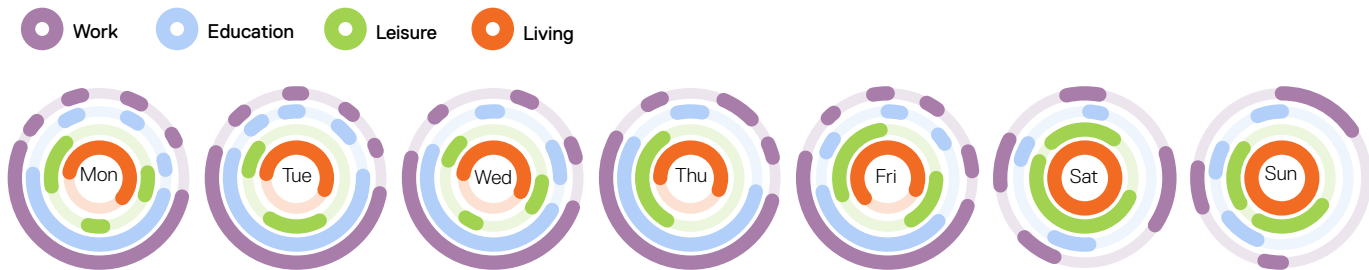## A dynamic community that integrates a diverse mixture of uses and people_

/ A campus that is occupied and active at all times of the day and throughout the week

/ A diverse distribution of living, working, education and leisure facilities across the development

/ Significant event and cultural facilities designed to attract a broader range of users

/ Integrated, high-quality amenities designed to serve new and existing communities

/ A contemporary character to the built environment that promotes innovation and creativity and supports Cheltenham's reputation as a 'design destination'

Research Campus Proposal
A variety of activities and uses to encourage interaction and maximise use throughout the day, week and year

© Grimshaw

Photo by Helena Lopes on Unsplash

North West Cambridge Development
A new district and extension to Cambridge, centered around a mixed academic and urban community

© NWCD

Via Verde, New York, USA
The composition of Via Verde seeks to promote both a healthy lifestyle and a vibrant community

© Grimshaw

Work   Education   Leisure   Living

Mon   Tue   Wed   Thu   Fri   Sat   Sun

Connected ■

Didcot Garden Town. UK
A walking and cycling link capable of accommodating autonomous vehicles in future
© Grimshaw

Photo by Rob Bye on Unsplash

Cheltenham Science festival
© www.stillmovingmedia.co.uk

© Marketing Cheltenham/2000 trees

Honeybourne Line
Prioritising of walking and cycling
© Marketing Cheltenham/Mikal Ludlow Photography

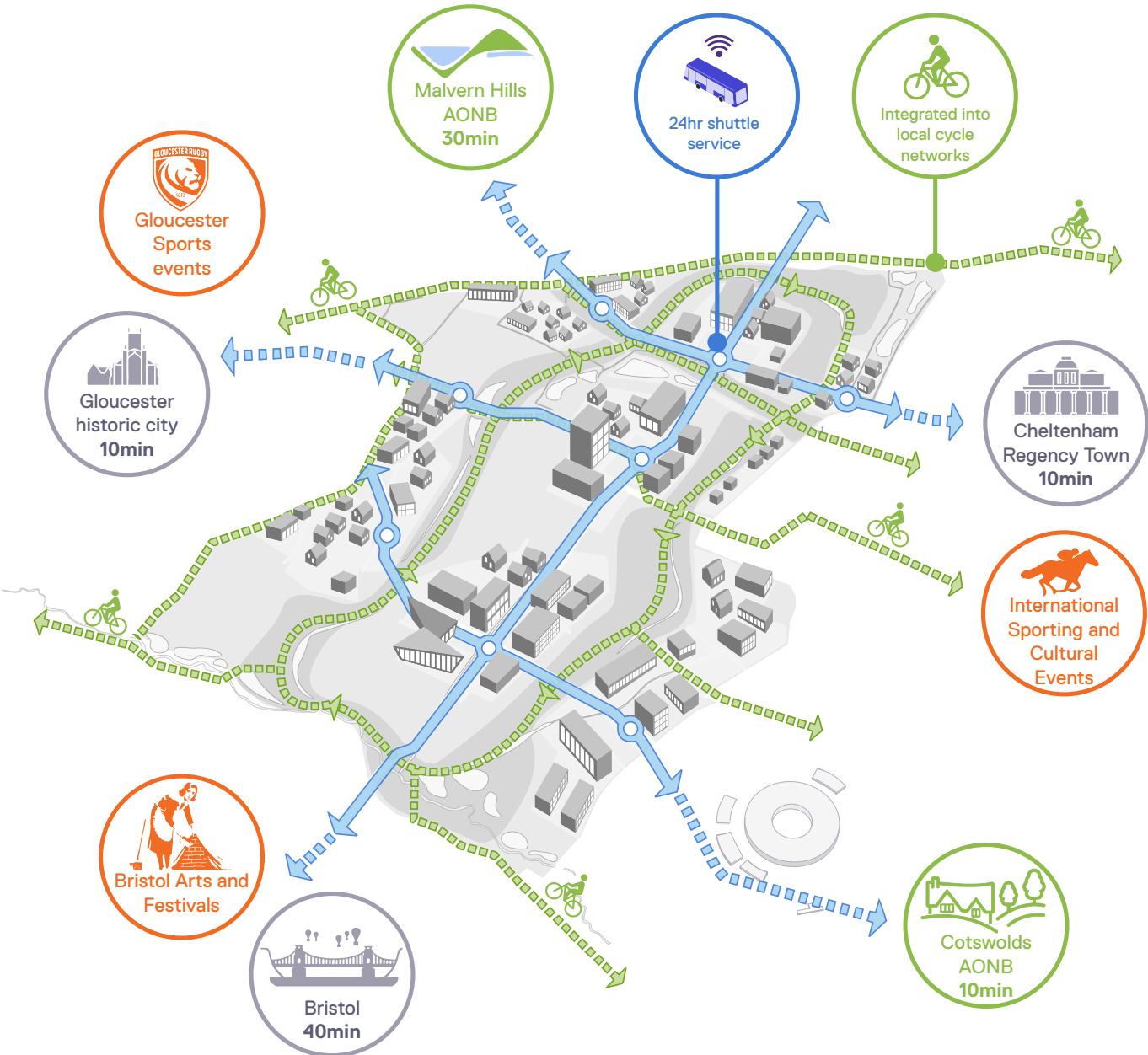## An accessible development that is physically, digitally and culturally integrated_

/ Excellent access into the heart of the site from national road, rail and air networks

/ A movement strategy that ensures local communities have direct and easy access to Cyber Central

/ Exceptional secure digital connectivity into and across the site providing global outreach and cutting-edge communication

/ A place that connects people and strengthens Cheltenham's cultural offer through its events and programmes

/ A place that connects people to the beautiful surroundings, through strategic views, and cycling and walking routes that provide easy access to the surrounding countryside

Diverse living options ■

An inclusive community in the region of 3000 homes that provides varied, affordable and flexible tenancies_

/ A unique and varied housing offer designed to create a diverse community

/ Housing that can attract a new and varied demographic and that supports contemporary ways of living and working

/ Secure and flexible tenancies that responds to the specific needs of those working on the campus

/ Integrated social and affordable housing supported by significant public investment

/ New social rented housing options that support existing local communities

/ Residential development that creates a strong sense of ownership and community, where people want to live and support one another

/ Supported by Cheltenham's innovative approach to new housing investment covering the entire housing spectrum

Atelio
A contemporary and affordable modular housing system, built from cutting-edge technology and recycled materials
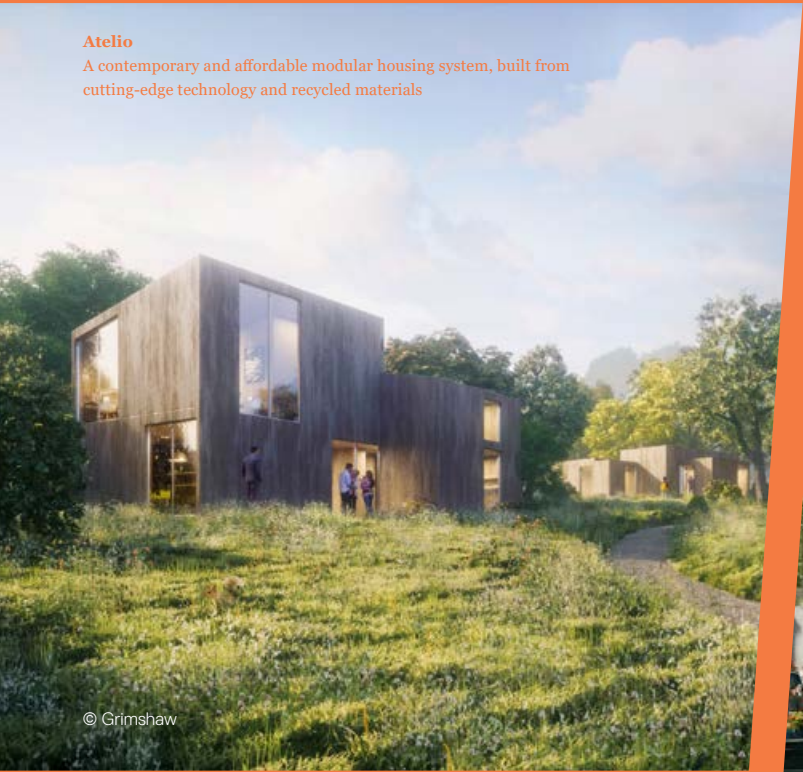
© Grimshaw

The Collective. London, UK
A co-living development designed for young professionals, containing private rooms and shared communal areas
© The Collective

Gilston Park Estate
A wide variety of housing including for first time buyers, homes to rent, affordable homes, and self-build plots for those wanting to build their own
© Grimshaw

Horsted Park. Chatham, UK
Award winning mixed-use, mixed-tenure development set in a suburban context
© Proctor and Matthews Architects / Tim Crocker

Family oriented housing options

Affordable housing options

Live-work units

Social Rented Accommodation

Student and temporary accommodation

Apartment living with urban densities

Housing designed for cyber professionals

An exemplar of social sustainability ■

Image © TBC

Inclusive

Healthy

Environmentally innovative

We intend to create a place where new and existing communities can thrive, which promotes wellbeing and has social and environmental sustainability at its heart.
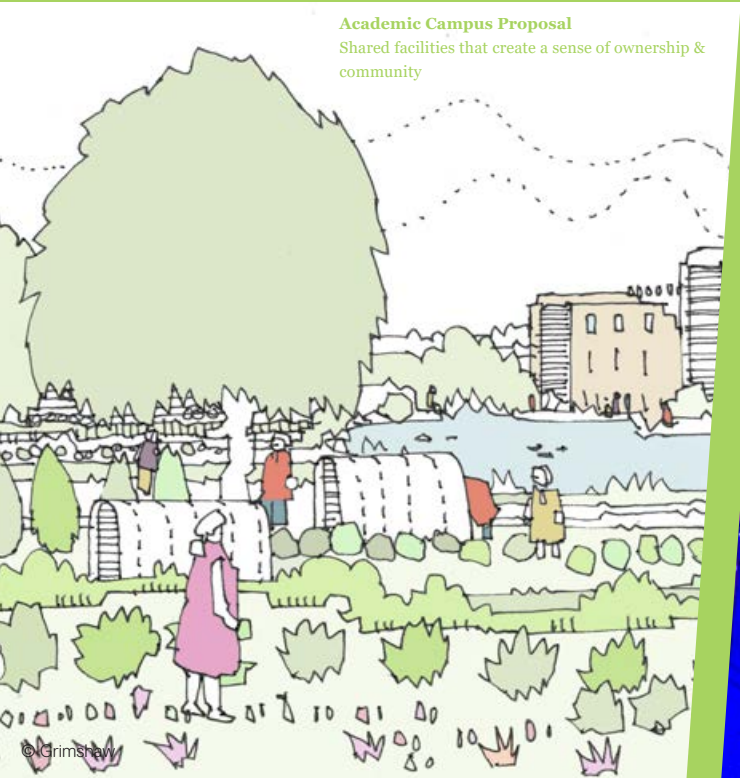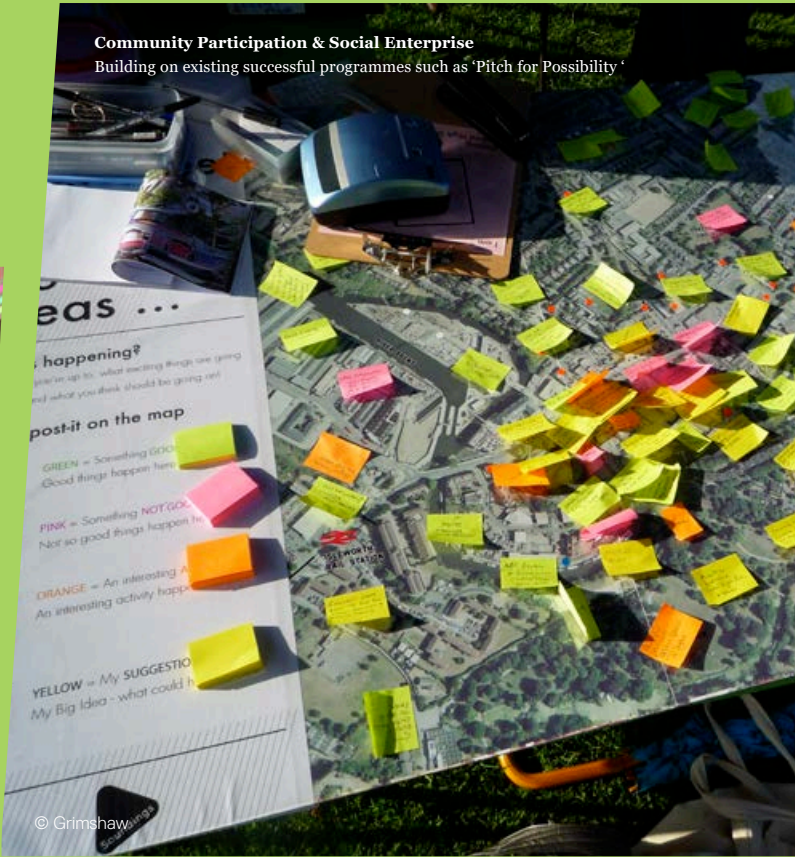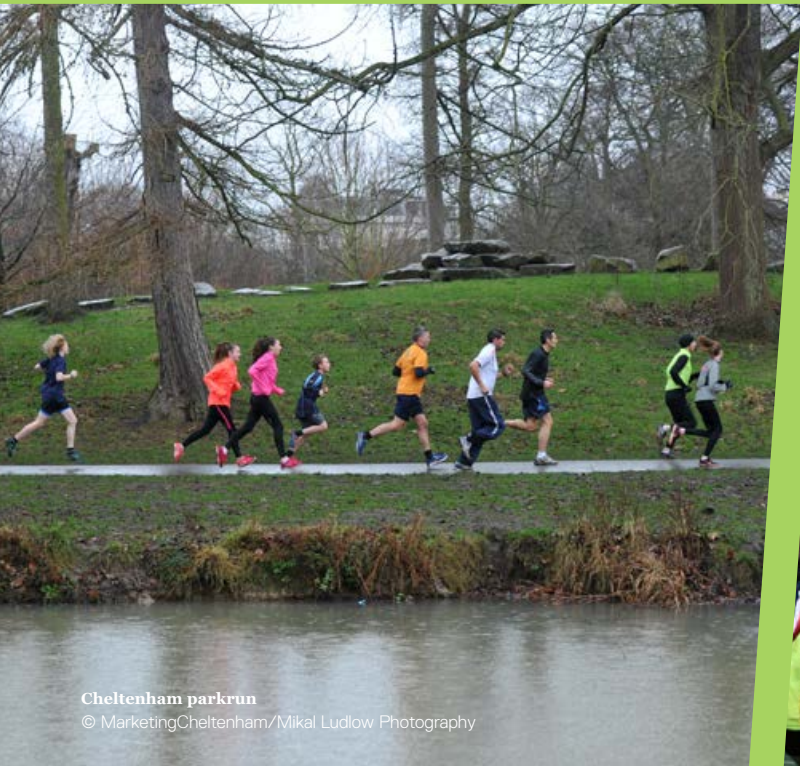
Inclusive ■

A transformational development that creates strong communities_

/ An active, permeable edge to the site that encourages integration and interaction

/ Leisure facilities and local amenities that serve a broad community

/ High quality learning, training and employment opportunities that attracts and nurtures the best talent, improving the economic prosperity of the wider area

/ Supports the cyber professionals of the future through active programmes that engage local schools and coding clubs

/ Encourages participation and collaboration through events and programmes that promote innovation and enterprise in the local community

/ New high-quality housing options that support regeneration of the wider area

Community Participation & Social Enterprise
Building on existing successful programmes such as 'Pitch for Possibility '

© Grimshaw

MakerShack at Cheltenham Science Festival
© Cheltenham Festivals/www.stillmovingmedia.co.uk

Academic Campus Proposal
Shared facilities that create a sense of ownership & community

©Grimshaw

Teaching and Visualisation Lab
North Carolina State University, James B Hunt Jr Library
©Jeff Goldberg/Esto

New housing models and typologies

Cutting edge entertainment and leisure

New civic spaces

Education and training opportunities

High quality employment

Healthy ■

A green and biodiverse development that encourages physical and mental wellbeing_

/ A site that encourages walking, cycling and public transport use

/ Generous outdoor space with high-quality facilities for leisure and sports

/ Green spaces which support community activity and social interaction such as allotments and playgrounds

/ Maximum biodiversity with a variety of landscape areas such as wildflower gardens and wetlands

/ Healthy buildings and outdoor spaces that reflect Cheltenham's heritage as a destination of health and wellbeing

Photo by Ryan Searle on Unsplash

Cheltenham parkrun
© MarketingCheltenham/Mikal Ludlow Photography

Photo by Kyle Pham on Unsplash

Via Verde, New York, USA
Integrated features designed to promote a healthy lifestyle and a vibrant community, through increased physical activity, shared common spaces and access to natural light and fresh air

© David Sundberg /Esto

Photo by Leah Kelley from Pexels

New allotment space

Healthy buildings

Generous public parkland

Supporting Biodiversity

Outdoor sports facilities

5km walking and cycling route

Environmentally innovative ■

An ecologically friendly development that is restorative to its natural surroundings_

/ An environmentally friendly development, that promotes sustainability best practice

/ Built-in efficiency, through intelligent master planning, architecture and smart energy solutions

/ A responsible approach to water management through incorporation of sponge city principles

/ Maximum use of renewable energy technologies such as solar, ground source heat

/ Multi-purpose green spaces that promote health, wellbeing and biodiversity

Gilston Park Estate. UK
Embedded sustainability features maximising the potential for self sufficiency

© Grimshaw

Photo by Tyler Butler on Unsplash

BedZED (Beddington Zero Energy Development) London, UK
A pioneering mixed-use sustainable community containing homes, office space, a college and community facilities.

© Tom Chance via Flickr

Soft landscaping to mitigate flooding

On site renewable energy networks

Site wide network of waterbodies

Green roofs for surface water retention

Wetland areas supporting biodiversity

Sustainable Urban Drainage systems

Energy efficient buildings

For further details
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CHELTENHAM
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Front & Rear Cover Photo
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