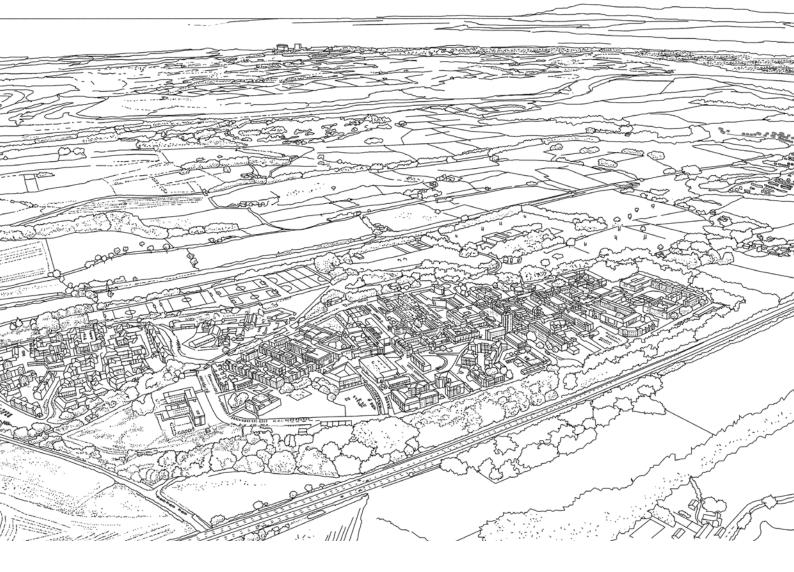
# LANCASTER UNIVERSITY MASTERPLAN 2017-2027



JOHN MCASLAN + PARTNERS NOVEMBER 2017

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Lancaster University 2020 Strategy maps out an ambitious future, as a "globally significant "university in the top 10 in the UK and the top 100 in the world. In order to achieve this and accommodate a corresponding increase in student and staff numbers in the next ten years investment in its core campus and the development of adjacent university land holdings needs to continue within a structured and coherent masterplan framework. Within this next critical stage of development. the University could reach a total student population of 17,000 at the Bailrigg campus by 2025 and resourcing this growth will require significant adaptation and expansion of most existing academic departments within the campus and also the creation of new and

exciting disciplines and services which will expand and update the University's global appeal. This document describes the evolving physical masterplan for the University which will accommodate this growth over the next ten years. Many of the broad strategic initiatives described were established in the original University of Lancaster Masterplan 2007 -2017 prepared by John McAslan and Partners but there are also important new departments and services being developed which will have a significant impact on the form and character of the University Estate.

The key principles and objectives of the masterplan are as follows:

#### 1 CAMPUS DEVELOPMENT 2012 - 2017

The task of co-ordinating and mapping the continuous programme of improvement of existing facilities integrated with the provision of new buildings is a fundamental purpose of the University Masterplan. The clear definition of the complex investment programme which describes multiple overlapping development initiatives across the campus in one unifying document is its fundamental and indispensable purpose. Without this overview it is impossible to understand the big picture and the key relationships and sequencing that will maintain the pattern and logic that underpins the University structure.

#### 2 CONSULTATION AND COMMUNICATION

Masterplanning is very much an activity fueled by outreach and communication and there is an important obligation of any sustainable masterplan to consult widely to ensure that its key objectives are understood and informed by all members of the University Community. To this end the current Masterplan has been prepared following an extensive programme of consultation which has enabled a wide range of opinions and observations to be integrated into its formulation.

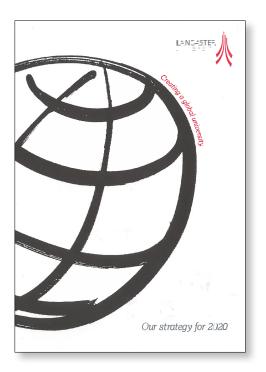
3 COLLEGIATE STRUCTURE AND IDENTITY The 2007 Masterplan identified the need for a significant

improvement to the definition of the presence and identity of

the Universities constituent colleges and faculties within the core campus. Lancaster is one of only a handful of universities with a collegiate system which has helped forge a strong sense of loyalty and identity, and continues to be a distinctive feature of student life in the university. In some regards the historic pattern of the original university and its consistent architectural expression flattened the college structure within an overarching urban form but subsequent development has created greater variety within the campus. The resultant complex is often confusing to navigate and there remains important work to be undertaken to resolve this confusion without diminishing the integrity of the whole. The Masterplan acknowledges that the complexity offers interest but that the student and visitor experience needs to be clear and easy to use.

#### 4 THE SPINE SPATIAL STRATEGY

In many regards this initiative is focused on the delivery of a public space strategy that concentrates on improvements to "the Spine," which is the organising central route running in an east -west axis through the main campus. The University is characterised by a very comfortable human scale and this spatial strategy aims to optimise the utilisation and legibility of spaces between buildings. The great hidden resource of the University is the potential of these spaces to encourage social interaction and performance.



### 5 THE LANDSCAPE, SETTING AND SUSTAINABILITY

Given the continuing growth of the University on its core campus and the current plans to extend Sports Amenities and initiate the first phases of the Health and Innovation Centre it is important to phrase and legislate some measures to protect the landscape that surrounds the University .The "green belt" around the campus is fundamental both to the original vision of the university and also to its continuing appeal as a unique pastoral setting of university life. The delicate balance between buildings and open spaces is fragile and the Masterplan suggests the establishment of clear demarcation and exclusion zones to ensure this precious asset is protected for future generations. This environmental appraisal also necessarily covers the energy and sustainable masterplan for the Campus which aims to reduce waste and minimise emissions and pollution.

#### 6 LINKAGES AND SITE ACCESS STRATEGY

A distinct issue related to the status of the landscape setting is the integration of new pedestrian and service routes to link proposed new buildings into the core campus. In particular this concerns the design of the new Health and Innovation Centre but it also impacts on the potential expansion of Sports Amenities and the need for an overarching strategy about site circulation under functional and recreational criteria. This study anticipates the potential linkages to adjacent blocks.

### 7 THE UNIVERSITY ENTRANCE AND RECEPTION

A consistent response from all consultations has concerned the need to create a more confident and clear point of entry and arrival to the University. Given the campus' size and relative complexity it is certainly true that the current arrangement offers a very understated and incidental tangential access into Alexandra Square which is the urban and social heart of the core campus. The Masterplan establishes the need to either enhance or relocate this important function in order to give proper status to the first impressions of admission into one of the countries leading centres of academic excellence and research. The consolidation of key reception, student and retail functions into this potential hub is real opportunity for the University to update its offer and attract new generations of graduates in what is an increasingly competitive educational market.

#### 8 THE UNIVERSITY AND THE CITY

Critically, the Masterplan acknowledges the profound social, economic, infrastructural and commercial relationships between the University and the City of Lancaster and the wider region. Acknowledging the University's role as the biggest employer in the area and a key stakeholder in its continuing growth and development, the Masterplan aims to integrate where appropriate with wider regional initiatives and maximise community engagement in the University's extraordinary cultural and recreational offers for the greater benefit of all the wider community. This is certainly a prime determinant in the placement and accessibility of many amenities which are open to public use.

# 9 KEY METRICS ILLUSTRATING PATTERNS OF USE AND GROWTH

It is also fundamental that the physical Masterplan for the University which describes buildings and spaces is augmented by key metrics which provide data on academic occupancies and utilisation. Clearly the Masterplan follows and supports the complex and varied patterns of growth of individual departments, which is directly related to student and staff resources and need. This document offers a simplified schedule of key numeric data and statistics to augment the overall campus plan.

# 10 THE WIDER CAMPUS AND FUTURE MASTERPLANS

Lastly but fundamentally any Masterplan is a dynamic process and this Masterplan anticipates the generation of future Masterplans on adjacent land plots. The strategic acquisition of significant land parcels directly adjacent to the University has almost doubled the area of the University Estate since 2006.The exploitation of these lands and their integration into the core campus will create new opportunities to grow the University offer and also reduce pressure on the existing campus. Whilst this edition of the masterplan does not give detail on these following plans it identifies their boundaries and establishes key infrastructural points of access and servicing to enable development. This wider estate mirrors the ambition and continuing success of the University and underpins its determination to become globally significant.

# 2.0 INTRODUCTION

This document describes the latest and updated Masterplan for the University of Lancaster. It is a development of the original Masterplan for the Campus prepared by John McAslan and Partners in 2007 and it supports the commitment of the University to establish itself as a global centre of academic excellence and continue to improve its national status and reputation.

The Masterplan aims to consolidate a complex series of strategic development initiatives into a legible and coherent framework which has been properly consulted and adopted by University Community to ensure its compliance with the Vision stated in the wider University Strategic Plan.

The Masterplan supports the University's commitment to become a globally significant leader in higher education providing the highest quality research and teaching. The quality of the University Estate and all its amenities is at the heart of its national and international reputation and the Masterplan aims to continue to improve and extend all its facilities and setting as it continues to grow and reflects its status as University of the Year 2017.







**Future Project: Health Corridor** 

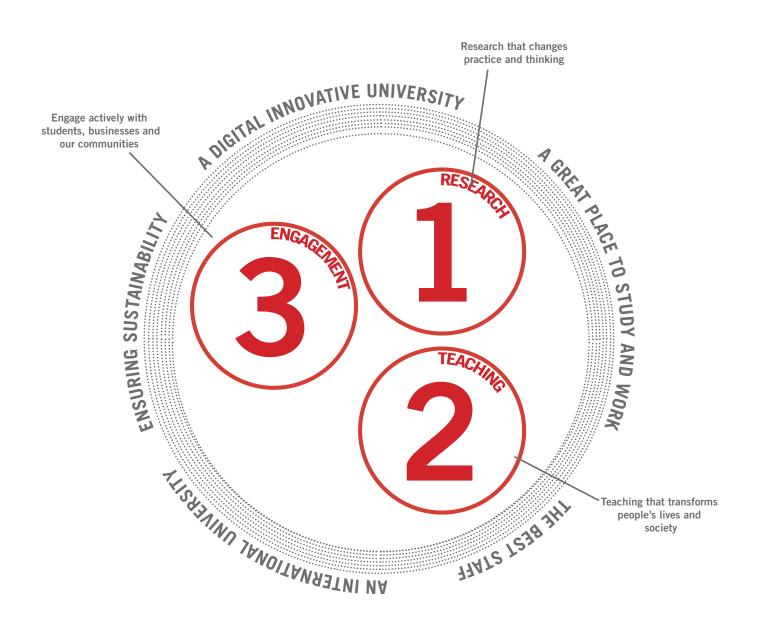
# 3.0 AIMS & OBJECTIVES

### LANCASTER UNIVERSITY STRATEGY FOR 2020 TOP 10 IN THE UK TOP 100 IN THE WORLD

The strategic vision for the University given in its *"Our strategy for 2020"* states that:

"We will become a university that is **globally significant** - a leader in higher education that provides the highest quality **research** and **teaching**, and **engages** locally and internationally in the issues and debates of the day and future. Driven by research, and stimulating learning, the globally significant university informs and changes practice and thinking worldwide".

This strategy has been updated to increase and strengthen the University's engagement with other organisations and networks, enhancing its use of digital technology, further improving its reputation and rankings, growing in scale and reaffirming its values and commitment to equality and diversity which have been identified as particular priorities. These are reflected in the new Key Performance Indicators, in the adoption of an additional 'dimension' around digital innovation, and in the updated actions under its three continuing priorities of research, teaching and engagement shown below.



### 3.0 AIMS & OBJECTIVES

### BRIEF

This document also ensures the vision for the campus is aligned to both key internal and external policies and strategies, many of which have been revised since the previous masterplans were prepared in 2007 and 2012.

Essentially, the masterplan needs to become a tool through which the University can develop the Estate to support the wider strategic vision, providing the spaces for teaching, research and engagement in an environment that allows for the best possible experience for students, staff and the public.

This masterplan accurately reflects the campus as it currently stands, acknowledging the projects that have been developed

over the last few years and those that have been planned or are under implementation now. It seeks to understand and clarify what is the impact and contribution of all these initiatives to Lancaster University.

Based on that understanding the masteplan makes a series of strategic recommendations to link together all these initiatives. It identifies key points of disconnect and proposes solutions, particularly for those spaces between buildings which are often overlooked. It also highlights opportunities for future development both within the existing campus and for the wider estate.

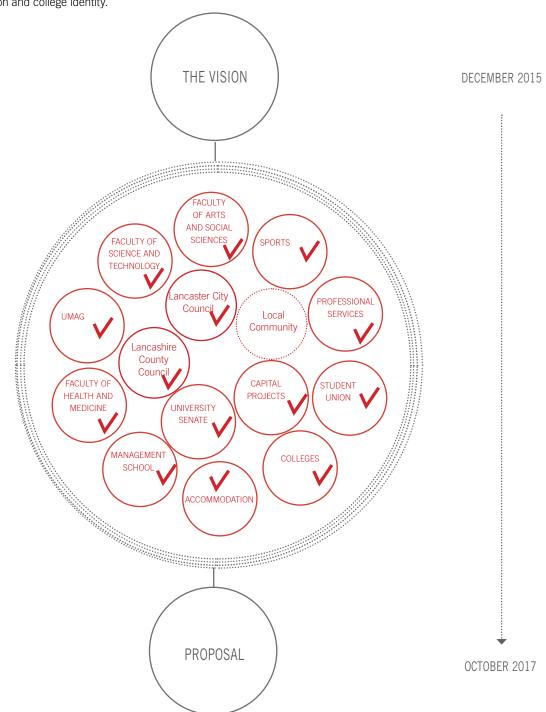


# 3.0 AIMS & OBJECTIVES

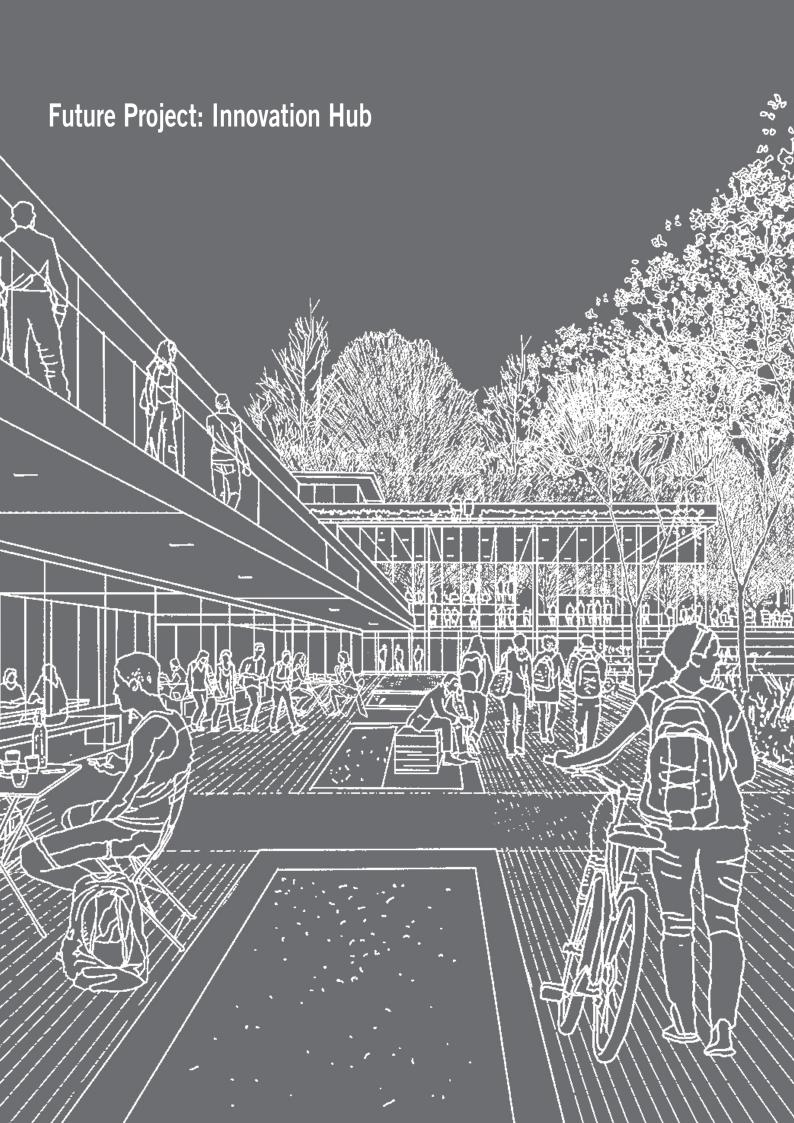
### CONSULTATION & COMMUNICATION

The current masterplan initiatives and themes have been widely presented and discussed in a series of workshops and reviews with many key university departments ,colleges and student groups.

A simple synopsis of the many and varied comments by colleagues is shown on the adjacent page but broadly speaking there are concerns to update and improve facilities, and also to improve the visibility and connections between all parts of the University. A consistent point of concern related to the sense of arrival and the need to improve the clarity of internal circulation and college identity.



UNIVERSITY SENATE	<ul> <li>Disability access</li> <li>Landscape preservation</li> <li>Cycling access and routes</li> <li>Sense of arrival</li> </ul>
SPORTS	<ul> <li>Intensive &amp; successful use by local community</li> <li>Capacity: 50% too small</li> <li>Access to the HIC via Sport centre</li> </ul>
LUSU (Student Union)	<ul> <li>Visibility - Student engagement - Front door</li> <li>Duplication- Colleges/Student Union</li> <li>Lack of flexible spaces</li> <li>LUSU in the city</li> <li>Lacking of central gathering space</li> </ul>
FACULTY OF HEALTH AND MEDICINE	<ul> <li>Health Innovation Centre connection with Main Campus</li> <li>International visibility</li> <li>Cycling routes and access</li> <li>Disability access</li> </ul>
ACCOMMODATION	<ul> <li>Empty rooms at Alexandra Park. Isolated area</li> <li>Accesibility</li> <li>Integration</li> </ul>
FACULTY OF SCIENCE AND TECHNOLOGY	<ul> <li>No room for expansion</li> <li>Refurbishment of Fylde College</li> <li>Conference facilities</li> <li>Cyclist routes</li> </ul>
FACULTY OF ARTS AND SOCIAL SCIENCES	<ul> <li>Identity of the University and our unique brand/DNA</li> <li>Glass roof / More space</li> <li>Entrance point</li> <li>Visibility and signage</li> <li>Great Hall needs to be replaced</li> </ul>
MANAGEMENT SCHOOL	<ul> <li>Make more cycling routes</li> <li>Pedestrians first and after cars</li> <li>In the new building,more transparency</li> <li>Waste service</li> <li>Engage with the landscape</li> </ul>
PROFESSIONAL SERVICES	<ul> <li>New flexible spaces</li> <li>Hotel accomodation should be improved</li> <li>Do not like hot desking</li> <li>Need to see more art</li> <li>Great Hall quite old and in bad state</li> </ul>
COLLEGES	<ul> <li>Wayfinding visibility, college identity</li> <li>Social consequences about the different types of accommodation</li> <li>Existing facilities should be re-planned</li> <li>Need of more colleges if the university expand</li> </ul>



### RELATION TO LANCASTER CITY CENTRE

The city of Lancaster is set in a rich and beautiful landscape close to the Irish Sea. The university campus lies about 3.5 miles out of the city and is set between landscape areas of outstanding beauty and the River Lune.

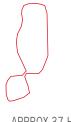
Originally developed during the 1960's, the campus is well connected to the countrywide transport network through the M6 and the A6 and through direct train links between London, Manchester and Birmingham going to Glasgow and the North. A bus runs every 5 minutes between the campus and the city centre, which is a 10 minute walk away from the train station.

The slight remoteness of the campus along with the size of the university (approximately 12,000 students and 3000 staff) imply that the campus is a small town or village in itself. There are independently run shops and restaurants alongside university and college outlets. A substantial number of students and staff live on campus.

The original estate has grown from 360 acres to 560 acres and the anticipated and potential growth in the student population above its existing 12,000 in the next 10 years will make the University one of the most important employers in the local region.



### SCALE COMPARISON



APPROX 37 Ha

These diagrams show the core campus superimposed at the same scale onto the plan of the City of Lancaster .The scale comparison gives a very clear indication of the physical size of the campus measured in terms of its relationship to the city and underlines the point that in many respects the University is very like a small city in terms of its complexity ,population and scale.

All the familiar urban characteristics of a City in terms of a pattern of linked districts ,routes ,landmarks , public and private spaces are applicable to the University Campus and in many regards the latest iterations of the masterplan aim to clarify and reinforce these patterns to improve the legibility

and connectedness of the campus.

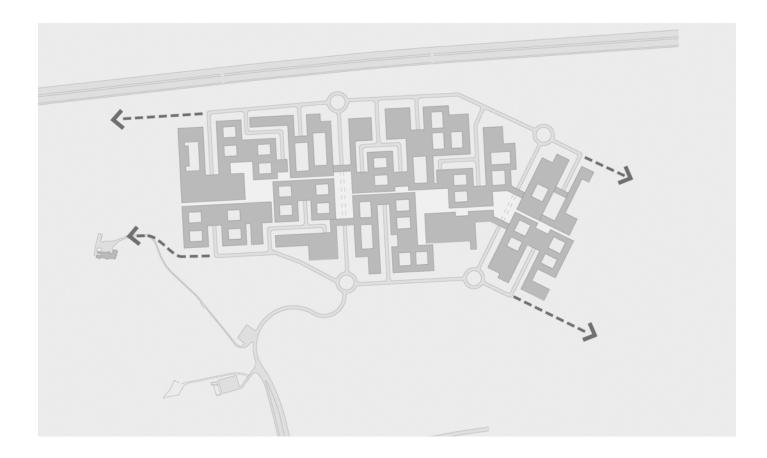
The original university plan was conceived as an abstraction of a walled city within a beautiful hillside landscape and this remarkable and resilient grain has continued to give the Campus its unique and enduring spatial form to the current day. We believe the continuing growth of the university and the acquisition of significant lands adjacent to its core campus will lead to a new generation of development which will allow growth whilst maintaining the University's special landscape setting.



### ORIGINAL MASTERPLAN 1965

#### SHEPHEARD EPSTEIN HUNTER MASTERPLAN

- Buildings were designed to absorb as much natural light as possible.
- Buildings were designed to be as multi functional as possible: "A fruit salad of functions".
- Building were designed to have white rendered top floors. Mediterranean hill top village.
- A main pedestrian connection through the cluster of buildings "THE SPINE" was designed to follow the natural gradient of the land.



### CAMPUS DEVELOPMENT 1965 - 2007

Lancaster University was established following the second world war after 1961 as one of the 'new' universities to be announced by the government. The Bailrigg site was chosen as the proposed location for the campus during Lancaster's bid to win the university, because it was feared that an inner-town campus would lessen the chances to win against competing local towns.

The selection of the architects Gabriel Epstein and Peter Shepheard took place in June 1963 and the planning of the campus started at once.

By November 1964, work on the new site had begun. The first teaching and administrative buildings were opened two years later. In 1968, the students started to move into their new campus rooms, although the construction of the site was a gradual process. The architects designed the university and its buildings so that they would absorb as much natural light as possible. Greenery was also important, seen most typically in the designs of County College and Cartmel College.

The buildings were designed in order to be as multi -functional as possible. According to Epstein, they would fulfil "a fruit salad of functions" and there would be no segregation of different buildings. To support this aim, and the collegiate system, buildings were designed to integrate a mixture of learning, living and social spaces.

With its white rendered top floors it was intended that the campus would look like a Mediterranean hill top village. The geometrically square, cloistered typology for the buildings was chosen to provide protection against the inclement weather and the site's exposed hill-top location.

The Spine was designed so that it would follow the natural gradient of the land. Gabriel Epstein believed that steps would hinder the flow of conversation between pedestrians and the design integrated ramps wherever possible.

Vehicular access was intentionally restricted to the perimeter road, which circumvents the campus with a series of secondary service roads providing access to buildings. This was an intentional move to allow unrestricted pedestrianised access through the core of the campus. By 1975 the main body of the campus, as it stands today, had been constructed. This included major buildings; the Great Hall complex, the Chaplaincy, Alexandra Square, the original University Library and eight of the nine Colleges. Later additions to the campus including the George Fox Building, the Bowland Hall and Pendle College Residences, the Ruskin Library and the Library Extension followed between 1985 and 2002.

Development between 2003 and 2006 saw a period of intense expansion at Lancaster University not seen since the construction of the original campus between 1965 and 1975.

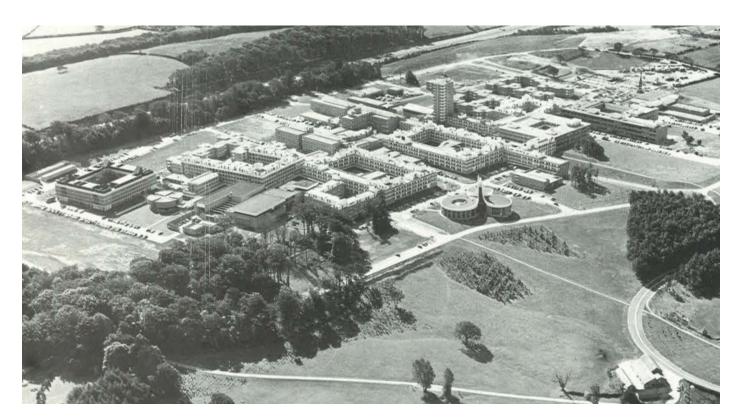
New, high quality, academic facilities included the construction of the Management School Leadership Centre and the phased development of the Lancaster Environment Centre. On the southern fringe of the campus InfoLab 21 was a visible statement of the university's expansion into the 21st century.

The nature of development during the four year period is characterised by moves that depart with the original ethos of the founding masterplan. New buildings generally exceeded the maximum 4 storey heights of the original buildings and residential and academic facilities were disconnected from each other. This was most significantly demonstrated with the construction of Alexandra Park, a large residential expansion of Graduate College beyond the southern boundary of the perimeter ring road. Within the core campus, circumvented by the perimeter road, the original orthogonal geometry of the campus was also moved away from, most notably in the Furness and Fylde College residences on the eastern edge of the campus.

This period of development also saw the start of the refurbishment of the original campus buildings that continues to the present day. Both University House and Bowland College North were significantly modernised with improvements to both internal spaces and the external fabric to bring them in line with modern requirements.





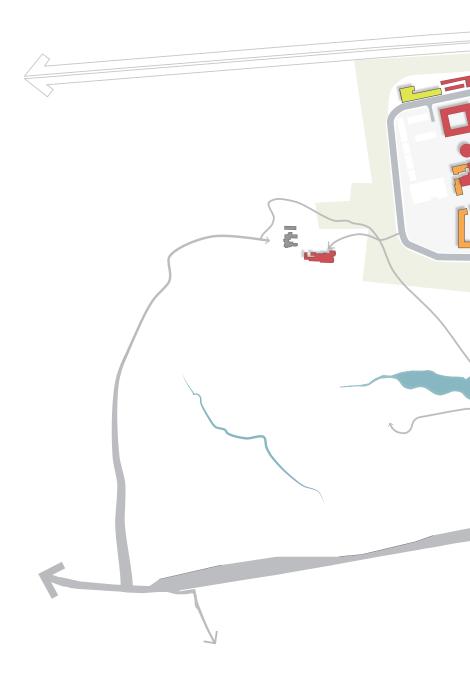






### CAMPUS DEVELOPMENT 1965 - 2007

This diagram illustrates the relative scales and patterns of development of the core campus from its inception in 1965 to 2006. This shows the profound extension of the core campus during this period and the particular challenge of finding a geometric consistency which unified its building forms and related spaces into a legible pattern of urban development. The search for peripheral building plots outside the constraints of the main campus started in this period and consistently reinforced the need to maintain the central spine as the university's circulatory organising backbone.





Buildings constructed 1975-2002

Buildings constructed 2003-2006

### CAMPUS DEVELOPMENT 2007 - 2012

The aims of the campus masterplan 2007-2017, as defined by John McAslan + Partners, were a return to the original ethos of the 1960's masterplan. The masterplan identified 23 possible building plots and incorporated an already planned series of additions to the University. It also recommended a series of landscaping schemes that would help to improve the experience of the campus including its point of arrival for visitors.

A key recommendation of the 2007 masterplan was the selective demolition of expedient additions to the original buildings which sought to open up the secondary routes, and improve east-west cross-porosity along the Spine route. This move was also intended to help define the identity of the original college buildings and bring aspects of the surrounding greenbelt landscape into the heart of the campus.

The period between 2007 and 2011 has seen the execution of a capital investment programme of circa £300 million which has developed both a range of new buildings and the refurbishment of many of the original 1960's structures.

New academic facilities have included the LICA Building, the Charles Carter Building and the Postgraduate Statistics Centre, with new residential developments at County Fields and Grizedale College. All these projects, which are unpinned by strong sustainable credentials and innovative design, are testament to Lancaster University's tradition of creating high quality buildings.

The refurbishment of the original building stock has also continued with the updating of Bowland College, County South, County College and the Faraday Lecture Theatre amongst other projects. Significant infrastructure improvements in the form of the refurbished Boiler House and the new ISS Building, together with improvements in campus drainage and services distribution, ensure the university continues to meet modern demands. Major landscaping schemes have been implemented including the refurbishment of George Fox Square, the Bonington Step and most notably Alexandra Square at the heart of the campus.

Investment in student-facing facilities has seen the creation of the Learning Zone and the construction of the new £20m Sports Centre, together with a rolling programme modernising the collegiate facilities with Fylde, Grizedale, Pendle and Bowland Bars all recently updated.

- 1. The Lica Building
- 2. The Post-Graduate Statistics Centre
- 3. Grizedale College
- 4. The atrium iinside Charles Carter Building



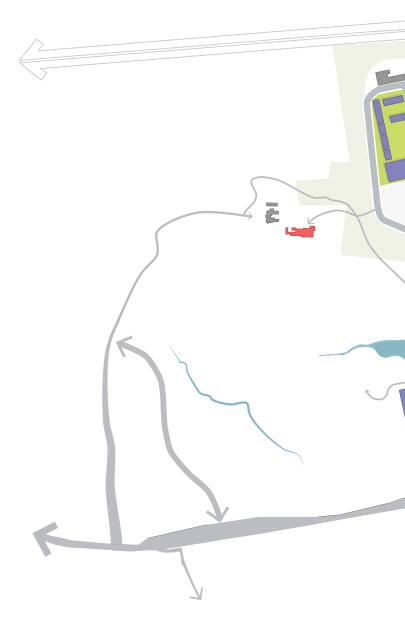






### CAMPUS DEVELOPMENT 2007 - 2012

In many regards this period created a reinforcement and repair of the core campus and saw the begininings of significant investment to create a new generation of signature academic facilities linked to the University's ambitious programme of progression and growth.







### CAMPUS DEVELOPMENT 2012-2016

The most recently completed phase of development saw an ambitious series of refurbishments, new buildings and public space initiatives clustered along the organising central axis of the university. These have been in response to academic growth and the continuing need to update and improve teaching and residential amenity. It is becoming clear that the core campus has reached a certain development capacity and that future new buildings of scale will need to be located outside the core within the existing primary campus or on new lands for the next phases of expansion.

This diagram illustrates the establishment of key future developments outside the core campus for Health Innovation and Sports Activities. The location of these in the wider landscape will enable public and community engagement but has created a need to begin to strategise improved linkages back to the main campus to ensure connectivity. It had also established the need to begin to protect the landscape setting and amenity of the University in order to maintain the delicate balance between buildings and landscape that is a unique aspect of its character and appeal.

#### RECENTLY BUILT

- 1. CTAP
- 2. Health & Medicine Furness College (Academic)
- 3. Engineering (Academic)
- 4. Pendle & Grizedale (Residences)
- 5. Wind Turbine
- 6. Car park behind the Sports Centre
- 7. Ash House (Academic and Residences)
- 8. Isolab- Physic (Academic)
- 9. Chemistry (Academic)
- 10. Physics (Academic)

#### UNDER CONSTRUCTION

- 1. Roundhouse
- 2. Moot Room
- 3. Library
- 4. The Spine

#### FUTURE PROJECTS

- 1. Bowland Hall (Residences)
- 2. Bowland Annex (Residences)
- 3. County John Creed (Residences)
- 3. Health Innovation Campus (Academic and Business)
- 4. Great Hall
- 5. Fylde College (Academic)
- 6. Lancaster Environment Centre (Academic)
- 7. Science and Technology Building
- 8. Management School Redevelopment
- 9. George Fox Building (Academic and Residences)
- 10. Engineering Phase 2



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(5)





### REFERENCE DOCUMENTS

There are a number of documents that influence the foundations of these masterplan proposals. These have been produced by a variety of sources, both within and external to the university and include policy documents, strategies, studies, masterplans and initiatives.

The following documents have been reviewed and their relevance / key messages and implications on this campus masterplan are as follows;

#### **CARBON MANAGEMENT PLAN 2015**

The CMP provides a strategic route map, detailing how the University proposes to reduce its carbon emissions by using a range of policies, education initiatives and projects.

#### LANCASTER UNIVERSITY TRAVEL PLAN 2010 - 2015

The Travel Plan aims to support University developments and increase the travel choice of students, staff and visitors to and from the University, whilst reducing cabon emissions.

#### WASTE STRATEGY REPORT 2011 - 2012

The purpose of this Waste Strategy is to set out an overarching framework for waste management at Lancaster University from 2012 to 2020.

#### **ENVIRONMENTAL PERFORMANCE REPORT 2013 - 14**

This report summarises the University's environmental performance in the year 2013-2014. During this time the University has implemented a range of exciting environmental projects, leading to major improvements in environmental performance.

#### PREVIOUS LU MASTERPLAN 2007 - 2017

Originally published in 2007 the LU Masterplan, developed by John McAslan + Partners together with LU Facilities, sets the framework for the development of the campus over a ten year period up to 2017.

#### LU MASTERPLAN REFRESH 2012-2022

This document is a "refresh" of the Lancaster University Masterplan 2007-2017, by John McAslan + Partners. Compiled at this halfway stage through the original work plan this new document is a re-examination of the campus five years on from the original proposals.

#### LU SPORTS CENTER EXTENSION PROPOSALS. FEASIBILITY REPORT. JUNE 2014

FaulknerBrowns began to explore the sports centre expansion on a more strategic and grander scale in March 2014. This Feasibility Study summarizes the consequent options.

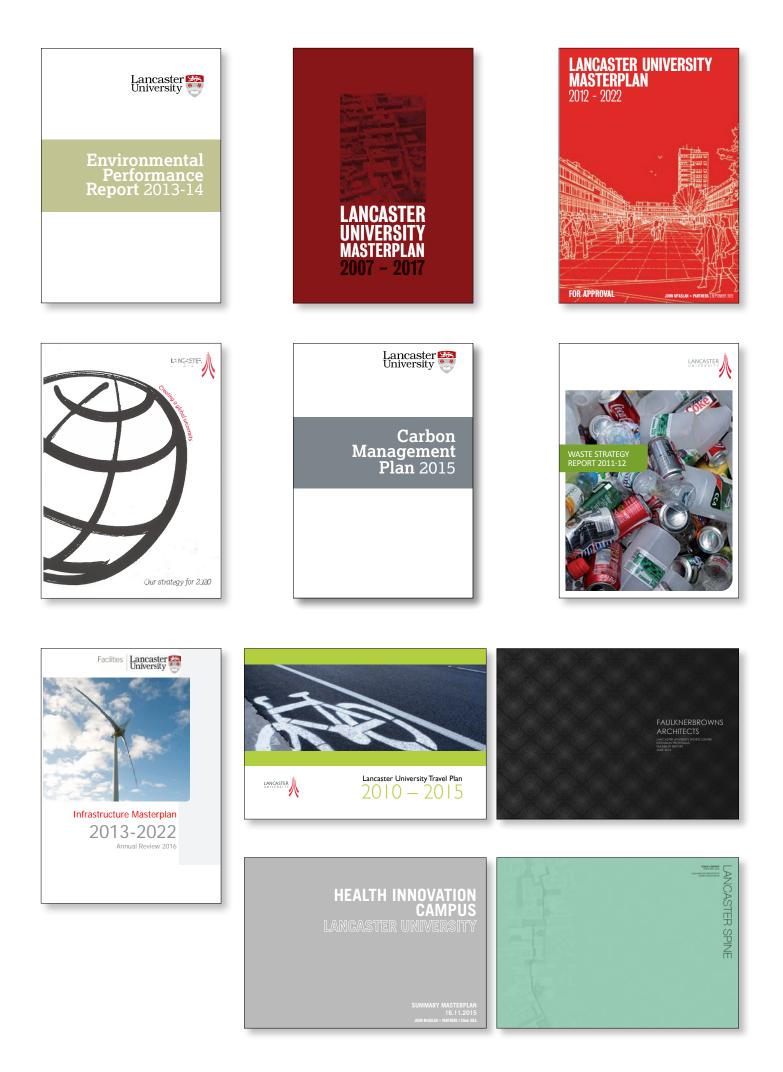
#### LANCASTER SPINE. STAGE 2 REPORT RICK MATHER ARCHITECTS. SEPTEMBER 2015

Rick Mather Architects and Grant Associates prepared this summary document following the completion of RIBA Stage 2 work on the Lancaster University Spine project.

# LU HEALTH INNOVATION CENTRE MASTERPLAN SUMMARY

LANCASTER UNIVERSITY STRATEGY 2020

**INFRASTRUCTURE PLAN 2013-2022** 



# Alexandra Square

Sur ans

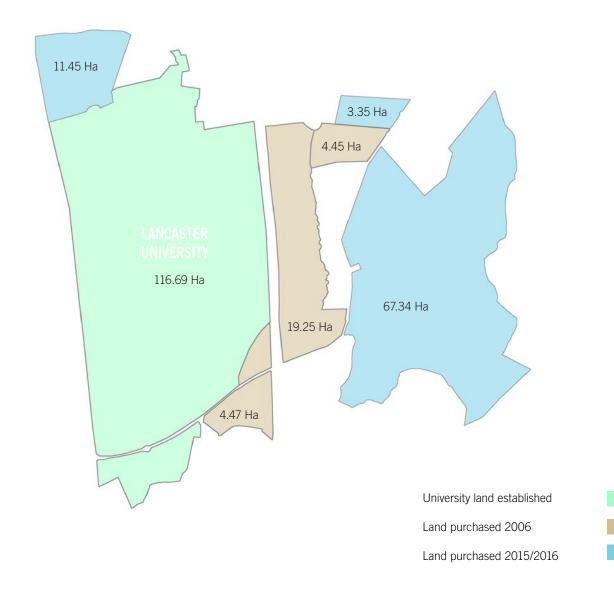
### **5.0 CAMPUS ANALYSIS**

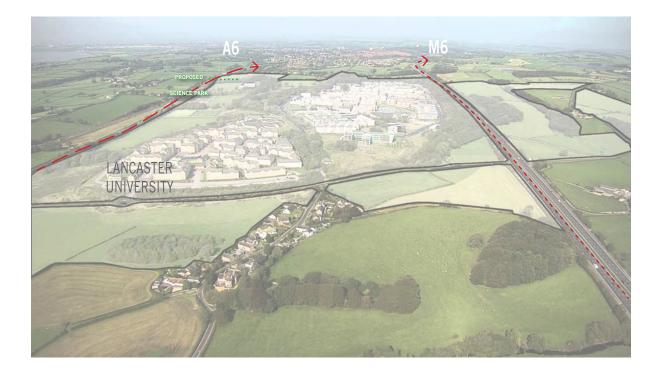
### OWNERSHIP

Through strategic acquisition of significant land parcels directly adjacent to the University, the Estate has almost doubled in area since 2006 to 560 acres. This additional land mirrors the ambition of the University and seeks to secure its future growth needs.

At this point in time the Masterplan does not give detail on the plans for these growth parcels, but it identifies its boundaries to establish key infrastructural needs in terms of access and servicing to enable future development as part of an overall strategy.

Another key consideration in this wider context of growth is the care and protection of the Estate's landscape setting, as explained in the following section.







# 5.0 CAMPUS ANALYSIS

### PROTECTING THE LANDSCAPE SETTING

The semi-rural parkland setting of the university is a unique and beautiful backdrop to the rhythm of life at the University; and it remains a touchstone of the 'hill top' village concept that drove the original design of the campus in the 1960s. Whilst the university has continued to add to its land holdings around the central core, there is now an urgent need to recognise the importance of this setting, both in terms of presenting the university to the public, and as a unique asset that requires protection from development pressures both inside and outside the campus boundary – essentially the establishment of a 'Green Belt'.

The diagrams show how development is spreading from the

central core and is beginning to erode the character of the parkland areas. In particular the development of Alexandra Park, the Sports Centre and now the planned Innovation Campus are significant physical and visual interventions into the landscape.

This Masterplan does not suggest that further development should be halted, but in light of recent significant land purchases east of the M6 at Forest Hill, instead suggests that this is the appropriate time to evaluate the character, significance and future of 'Green Belt' land. The recommendation is that a combined landscape character assessment and site development strategy should be undertaken to assess the following:

- 1. The landscape character and quality of the campus setting
- 2. Significant views, vistas, landscape character areas that are worthy of protection and enhancement
- 3. Opportunities for how the landscape setting can contribute further to campus life and function e.g. art walks, biodiversity, environmental and ecology gardens, sustainable drainage etc.
- 4. Establish a 'Green Belt' development plan that might be both defensive (visual protection from external development impact) and provide recommendations for the best locations and limits of future campus development.

#### CAMPUS LAND HOLDINGS 1965-2000

Campus core





#### CAMPUS LAND HOLDINGS 2000-2007

Campus core Addition of Alexandra Park

#### CAMPUS LAND HOLDINGS 2007-2015

Campus core Alexandra Park Addition of Sports Centre



#### CAMPUS LAND HOLDINGS 2016

Campus core Alexandra Park Sports Centre Addition of Innovation Campus

### LANDSCAPE AND SETTING

#### Landscape Character

The Landscape at the University consists of four key character areas:

- 1. Central Core
- 2. Woodland Belts
- 3. Sports Courts and Lawns
- 4. Outer Agricultural Land

#### 1. Central Core

Essentially an urban landscape, consisting of interlinked courtyards, streets, plazas and gardens. Characterised by the intimate relationship between architecture and landscape, and supporting life and learning on the campus. The central core landscape facilitates the movement of students, staff and visitors between buildings whilst also providing a setting for meetings, events and other external activities.

#### 2. Woodland Belts

Significantly scaled planted buffers and ecological corridors that enclose the campus and offer protection from the wind and rain. They also limit the visual impact of the M6 and the A6, and from potential future development occurring outside the campus boundary. The woodland buffers make a significant and crucial contribution to the parkland character.

#### 3. Sports Courts and Lawns

A mix of hard and soft landscape courts that contribute to the overall parkland setting of the campus, and provide a vital resource for students, staff and the local community.

#### 4. Outer Agricultural Land

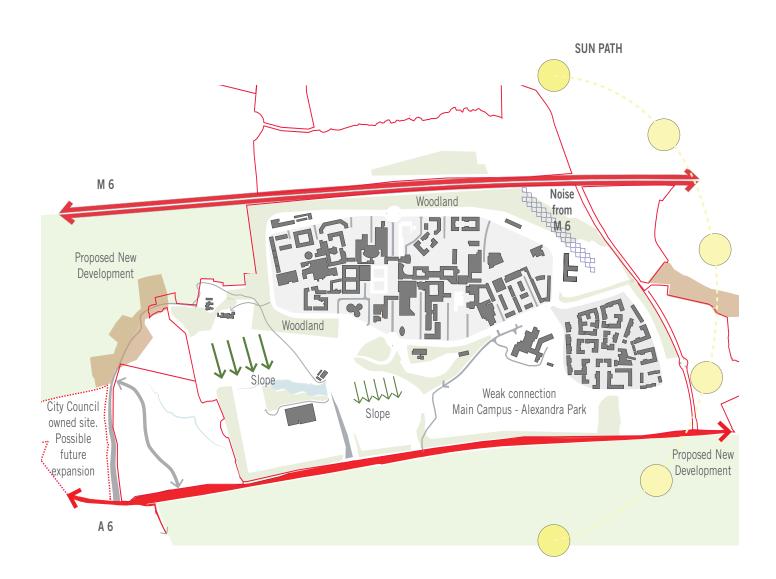
Land which is predominantly agricultural in character and lacks the refinement and manicured character of the established campus areas. These areas are not immediately or currently recognisable as being part of the campus.





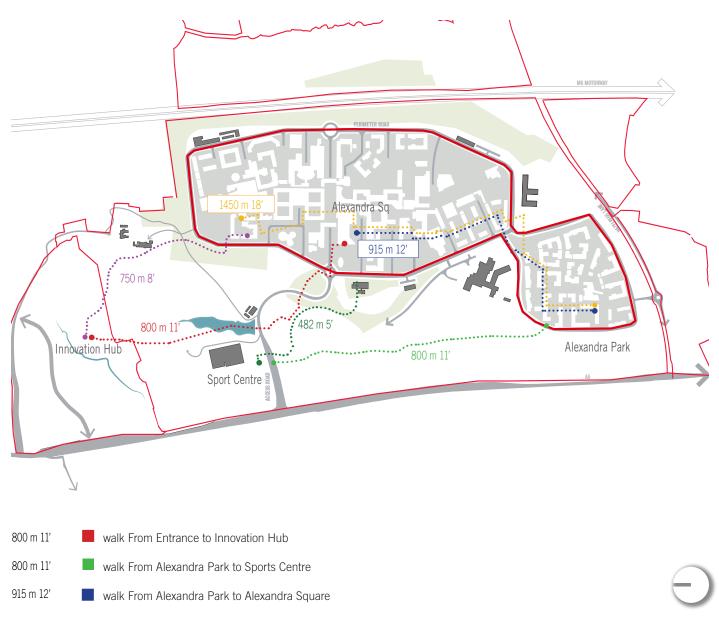
### CONSTRAINTS

Clearly the main campus boundaries to the east and west are defined by the M6 and A6. Both of these roads create a barrier which has to be bridged in order to access adjacent plots and both create a measure of noise and pollution. The Masterplan has responded to this circumstance through the creation of woodland buffers. The the status of these, their reinforcement and ecological utilisation is a significant part of the landscaped conservation study which the current Masterplan proposes as a fundamental initiative. This study also needs to treat the topographic characterisation of the site in order to protect the picturesque setting of the original campus and carefully review the integration of new additions into its landscape silhouette.



### SCALE

This diagram gives an indication of key distances and times under normal walking speeds to travel around and between buildings and amenities within the core campus. An important issue given the scale of the University is to ensure that new perimeter developments are carefully connected back into the core campus through well designed and attractive pedestrian and cycle routes. The ambulation through the landscape is in fact a positive virtue, and the journey between amenities located inside and outside the campus give a important dynamic to student life and constantly reinforces the unique locale of the campus.



#### DISTANCES

The main campus at 37 Ha is only a third of the wider landscape area around it at 108 Ha. Although the majority of development sits within the main campus, itself contains over 26 Ha of open space as pure space between buildings, routes and primary and secondary public spaces. Improving the characterisation and distinction between inside and outside spaces is a key aspect of the next generation of masterplanning for the university. It is both important that green spaces within the central core are reinforced and it is also important that green spaces outside the central core are protected and enhanced



Open Area: 26.1 Ha\_ 70%

### LANDSCAPE

The visual and physical connection with the landscape is a key feature of the experience of Lancaster University and ensuring the qualiy and accessibility of this precious resource from all points of campus is a key imperitive of the masterplan for the next generation of development.







Main Campus Area 37 Ha approx

Built Area

Green space outside main campus is more than 108 Ha



### FACULTY STRUCTURE

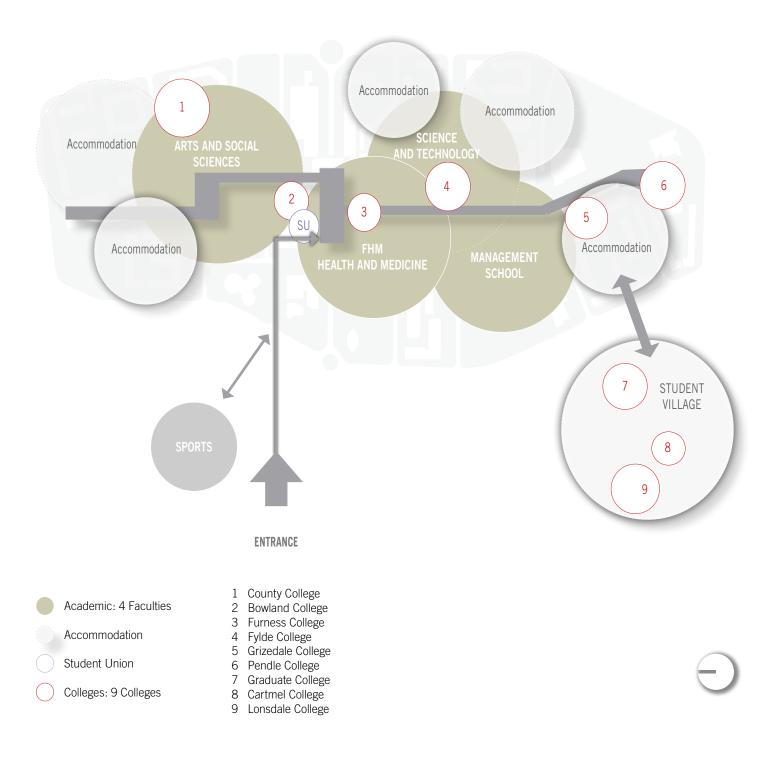
There are four faculties at the university; Health & Medicine, Science & Technology and Arts & Social Sciences. Together with the Management School these faculties form the core academic structure at Lancaster. Academic Faculty led spaces are supplemented on the campus with a range of buildings supporting ancillary, infrastructure and residential activities. Additional centrally bookable teaching space, available to all of the faculties is located across campus.





### USES

The campus is a complex and diverse place where lots of academic and social uses interact. This diagram illustrates the complexity of the uses and how they are organising within the main campus including the 9 collages, 4 faculties and the student accommodation.



#### TRANSPORT

The main vehicular access into the campus is via the A6 to the west. The perimeter road which surrounds the core built area has car parking along most of its length and provides access to additional parking and service bays on the secondary roads; the short cul-de-sacs that generally run east west into the campus.

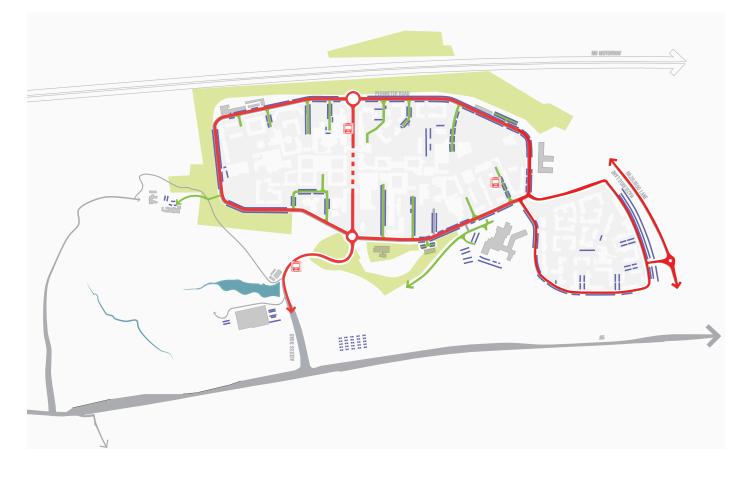
The main bus stop on campus is situated in the underpass below Alexandra Square. This efficient arrival point by public transport has recently been upgraded with a new access lift and improved staircase routes from above. There are also additional bus stops along the southern half of the perimeter road and around Alexandra Park.

Visitor parking is typically found on the secondary routes

running from the perimeter road towards the Spine. This parking needs better signposting in order to improve wayfinding.

Equally important is the need to create a sense of arrival and first point of contact for people unfamiliar with the university. The current arrival point, centred around the security lodge is underwhelming particularly for first time visitors. This can be attributed to the understated nature of the facility which needs greater visibility both to vehicles and pedestrians.

Cycle parking is also available and it is supported by showering and changing facilities found in multiple buildings across the campus.





Primary vehicular routes

Secondary vehicular routes

Car parking

Central Bus stop

#### LINKAGES

The Spine forms the main route for pedestrian movement through the core campus, running north and south from Alexandra Square at the heart of the university. Most buildings, particularly academic and faculty spaces are entered directly off the Spine.

Proposals for a rejuvenated Spine have been developed by Rick Mathers Architects and Grant Associates and are described in some detail in Section 6.

A series of secondary routes also exists on campus connecting outlying areas and buildings to the Spine and key spaces. However many east-west connections from the Spine can be difficult to identify they are often disguised by low walls and unexpected bends. Much of this wider pedestrian network, especially on the avenues seems subordinated to vehicular systems. Sometimes pavements along the roads are narrow or missing at the expense of parking spaces and access to the Spine is blocked by buildings.

Orientation on the campus can be difficult, notably for visitors. There is no clear access point between the arrival point next to the Chaplaincy and the main Spine route.

While improvements to University House have improved links between the drop-off and Alexandra Square a better physical and visual link to the Spine would improve access and wayfinding.



#### The Spine

Secondary routes across campus

Cycle paths into campus

## CYCLING

Commuting by bicycle to Lancaster University is very popular, for both students and staff. About 14% of staff and 7% of off-campus students cycle to the campus as their main mode of travel. These figures are well above average because the two designed cycle routes between the campus and the city centre. The cycle storage facilities across the campus were improved after Lancaster City was made a Cycling Demonstration Town from 2006-2011.

Lancaster University also has a new bicycle parking policy from 2015-2016 and provides a bike workshop and shower facilities.

The new masterplan extends the cycle route to ensure the Health Innovation Campus is connected direct into the link to Lancaster City Centre.





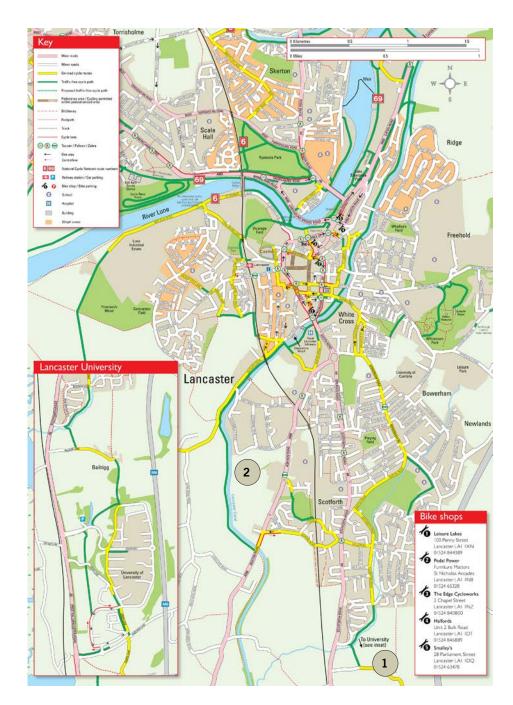
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## CYCLING : CONNECTION WITH LANCASTER CITY

The cycling connection with Lancaster City at the moment is via two signed cycle paths:

#### 1: Eastern Route via Bowerham

The southerly section of this route uses a mixture of trafficfree cycle paths and quiet roads. It enters the campus at the northern end, close to Bailrigg House. The northerly section of the route through Bowerham is more hilly and moderately trafficked. It is a very popular and well-used commuter route by both staff and students. 2: Western Route along the Lancaster Canal Towpath This route runs along the canal towpath - great for students living at Chancellors' Wharf or west of the city centre. This less-direct route offers a lovely scenic ride along the canal towpath as far as Deep Cutting Bridge on Ashton Road. The route then proceeds along Ashton Road and up Ashford Road to cross the A6 at The Boot & Shoe pub/Booths and join the remainder of the eastern cycle route from Hala to the University. The problem in this one is the canal towpath is unlit and it shouldn't be use at night.

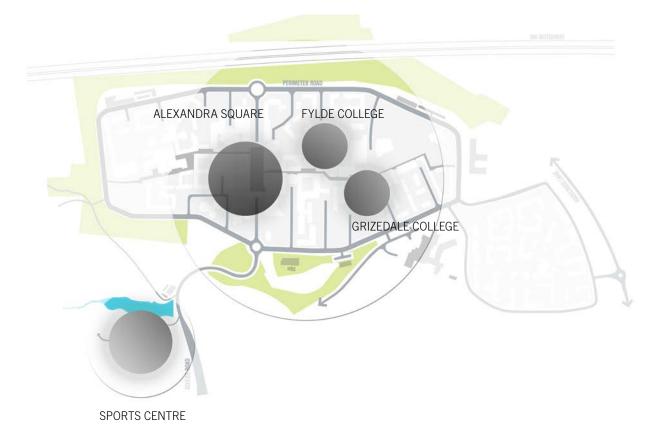


### FOCUS OF ACTIVITY IN THE CAMPUS

There are some key locations where activity is concentrated on the campus.

In particular the students and staff tend to use more Alexandra Square, the Sports Centre, and some of the colleges close to the Spine that make the rest of the campus, specially north and south part where the student accommodation is allocated, quiet and in some regards isolated during determinate hours of the day. The diagram shows where are located the most popular areas

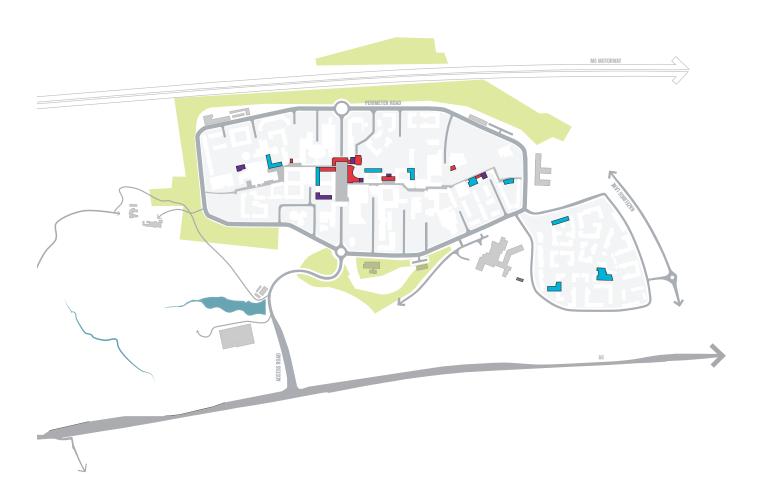
The diagram shows where are located the most popular areas inside the main campus.



### MAIN SOCIAL USES

The principal student and social spaces are located around the precincts of Alexandra Square and its main approaches along the spine.

The visibility and accessibility of these services and the quality of the public realm which connects them are being improved in the masterplan through the Spine Initiative and the proposal described later to improve and consolidate the main entrance to the Campus.



#### STUDENT UNION

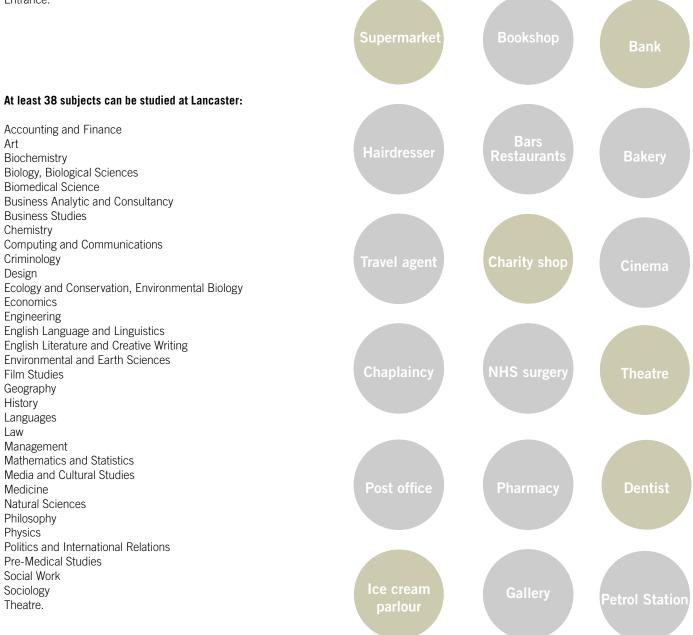
Student Union Living LUSU SU Shop Central LUSU Radio Station 87.7 LUSU Store

#### COLLEGES

County College Bowland College Furness College Grizedale College Pendle College Graduate College Cartmel College Lonsdale College RETAIL Cafe Food Shop Banks Bookshop Farmacy

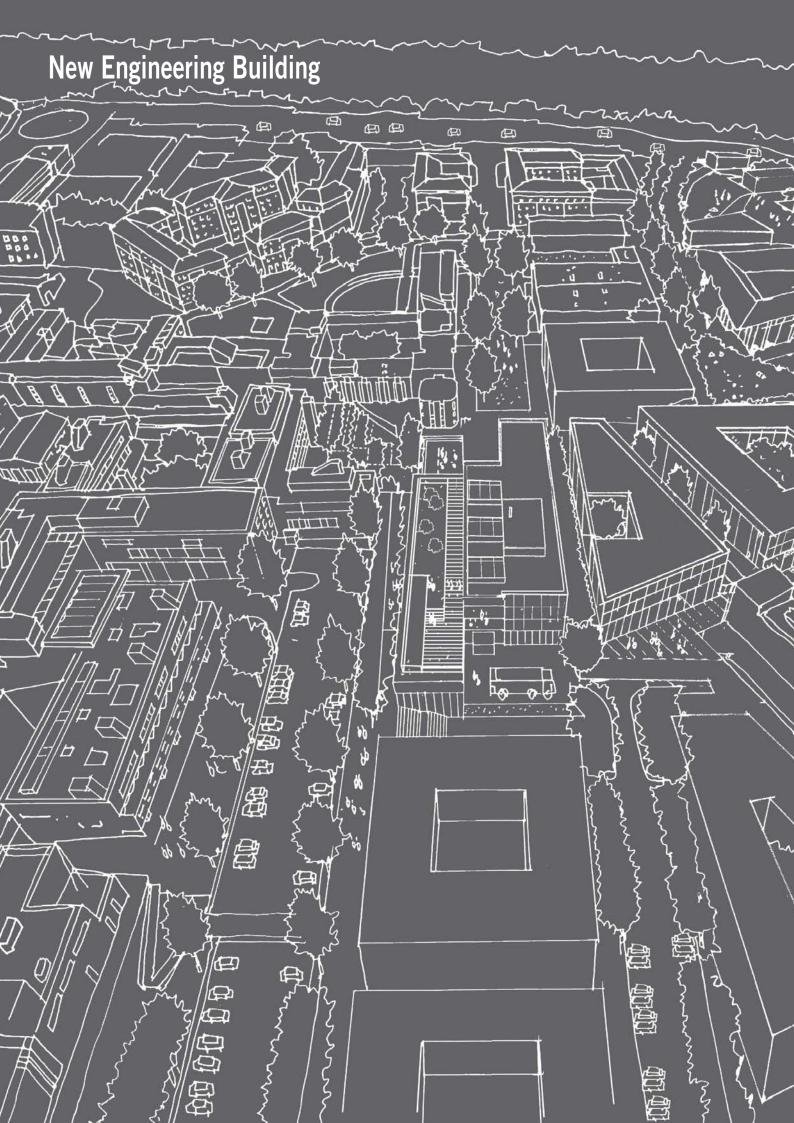
### AN ANIMATED AND EXCITING PLACE TO BE

There are many social and retail services within the campus which functions like a small town and this complex matrix of uses is being further improved and consolidated through further investment in the public realm and main Spine and Entrance.









## CAMPUS DEVELOPMENT 2017-2027

The plan on the following pages illustrates the anticipated disposition of the core campus at Lancaster University approaching 2027.

The existing arrangement has been updated to include all the proposals described in the previous diagrams and the plan illustrates the reinforcement of the green landscape infrastructure around the core campus to maintain its setting, amenity and improve pedestrian connections between new developments into the core campus. We believe the plan shows that the critical balance between development and landscape can be maintained in this next critical period of growth but also that the arrangement should promote the development of new lands and adjacent plots in order to maintain its balance and composition in keeping with the original conception of University established fifty years ago.

#### Projects completed/ under construction

- Chemistry Academic , Refurb
- Physics Academic, Refurb
- Library, Refurb
- The Spine Relandscape by Rick Mathers Architects
- New Management School, New Built + Refurb
- Sport Masterplan by Faulkner Browns
- Health Innovation Campus

#### Pipeline + Future Projects

- Bowland Hall, Refurb
- Bowland Annex, Refurb
- County John Creed Residences, Refurb
- George Fox Building, Refurb
- Great Hall, Refurb
- Lancaster Environmental Centre
- Old Engineering Building, New Built + Refurb
- Fylde College, Refurb
- Increase in campus residential capacity
- Hotel acquisition and upgrade
- Main University Entrance & Reception Hub
- Potential new entry from M6 and impact on college entrance
- Environmental sustainability trial on East side of motorway
- Bailrigg Garden Village
- Residential Accommodation Strategy

#### Strategic Masterplan of extension to Campus Estate

#### Spatial utilisation analysis

- Accommodation Scheduling
- Existing Space Mapping
- Space for next 5 years
- % Increase in space
- BIM documentation of Campus

#### Branding Strategy

- Signage strategy
- College Identity

### CAMPUS DEVELOPMENT 2017-2027





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## 6.0 LANCASTER UNIVERSITY MASTERPLAN 2017 - 2027

- 04. Chemistry Refurbishment 05. Physics Refurbishment
- 06. Entrance Plaza
- 07. Alexander Square Refurbishment 08. Library Refurbishment

17

- 11. Fylde College 12. Old Engineering Building 13. George Fox Building Refurbishment

18

21

- 16. Development Plot
- 17. HIC Development 18. Cricket Pavilion
- 19. Conversion of Bailrigg House into a Conference Facility

02

23

24

05

26

- 26. Stadium
- 27. Hotel Refurbishment
- 28. Outdoor Sports Pavilion
- 29. Residential Development Plot
- 30. Proposed New Access from M6 31. Land Purchased 2016 / Sports Facility
- 32. Extension to cycle route to Lancaster City33. Potential Residential Accommodation

12

- 34. Potential Residential Accommodation
- 35. Multi Storey Car Park

- 37. Phase 2, Engineering 38. Phase 3, Library
- 39. Potential Residential Accommodation
- 40. ISO LAB

16

Under construction/Immediately Planned

Pipeline/Future Projects/Masterplan initiatives

- 41. CTAP / New Development Plot42. Potential Residential Accommodation
- 43. Potential Residential Accommodation

TRUTTER

44. Bailrigg Garden Village

# 

27

44

11

13

12

11

37

08

09



29

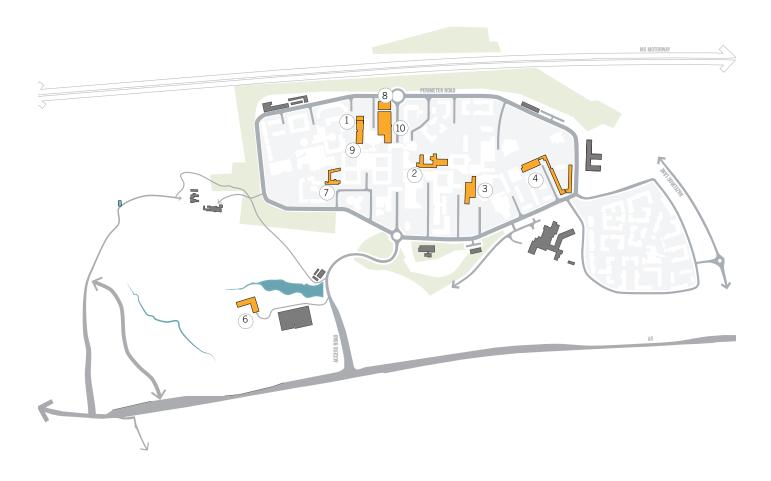
### CAMPUS DEVELOPMENT 2017-2027

Recently Built

The following pages describe the evolution of the projects in the campus

- 1. CTAP ( Centre for educational technology
- and distance learning)
- 2. Health & Medicine Furness College (Acad)
- 3. Engineering (Academic)
- 4. Pendle & Grizedale (Residences)
- 5. Wind Turbine
- 6. Car park behind the Sports Centre
- 7. Ash House (Academic and Residences)
- 7. Ash House (Academic and Residences)
- 8. Isolab- Physic (Academic)
- 9. Chemistry (Academic)
- 10. Physics (Academic)





Recently Built

### CAMPUS DEVELOPMENT 2017-2027

Recently Built, Under construction/Immediately Planned

0

- 1. Roundhouse
- 2. Moot Room
- 3. The Spine
- 4. Library
- 5. Management School
- George Fox Building
   Health Innovation Hub





Under construction/Immediately Planned

### CAMPUS DEVELOPMENT 2017-2027

Recently Built, Under construction/Immediately Planned, Pipeline /Future Projects

- 1. Health Innovation Campus
- 2. Great Hall
- 3. Fylde College
- 4. Lancaster Environment Centre
- 5. Science and Technology Building
- 6. Sport Centre Extension
- 7. New Sports Track

- 8. Bigforth Barn
- 9. Bowland Hall (Residences)
- 10. Bowland Annex (Residences)
- 11. County John Creed (Residences)





Recently Built

Under construction/Immediately Planned

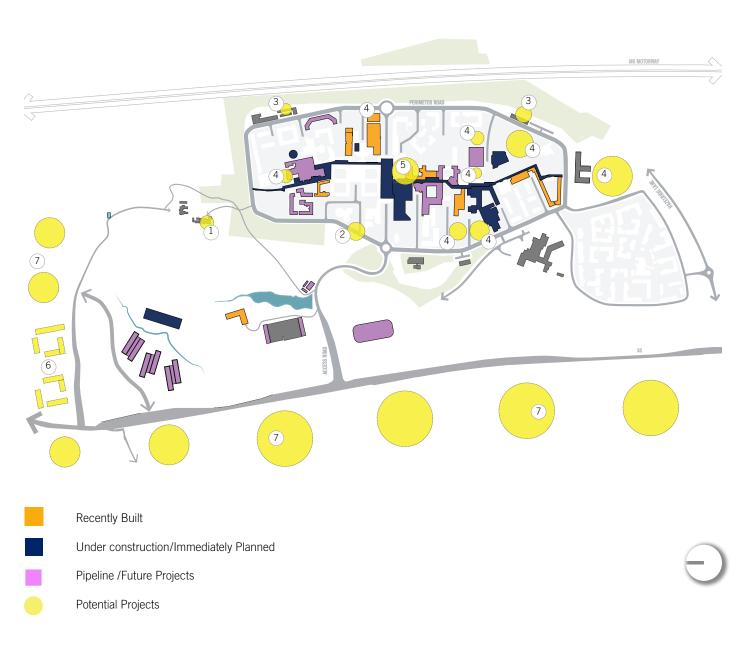
Pipeline /Future Projects

### CAMPUS DEVELOPMENT 2017-2027

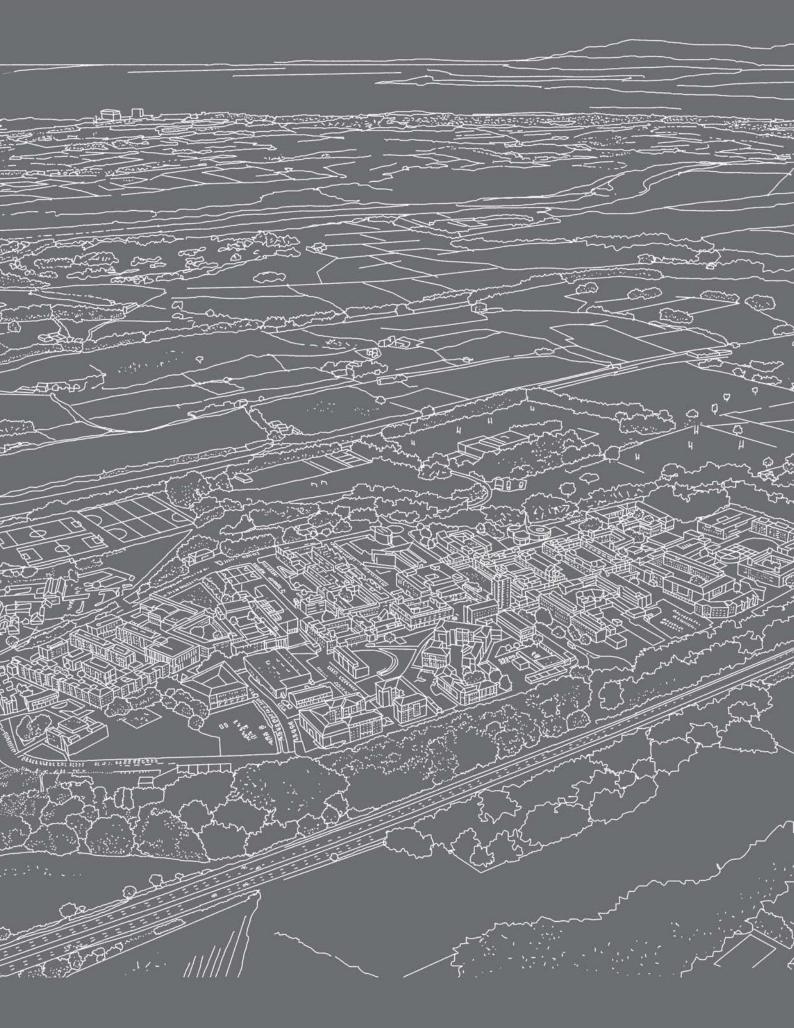
Recently Built, Under construction/Immediately Planned, Pipeline /Future Projects, Potential Projects

0

- 1. Redevelopment of Bailrigg House into a conference facility
- 2. Amendments to the entrance
- 3. Expanded area of parking
- 4. Development Plots
- 5. FHM existing buildings
- 6. HIC development
- 7. Bailrigg Garden Village



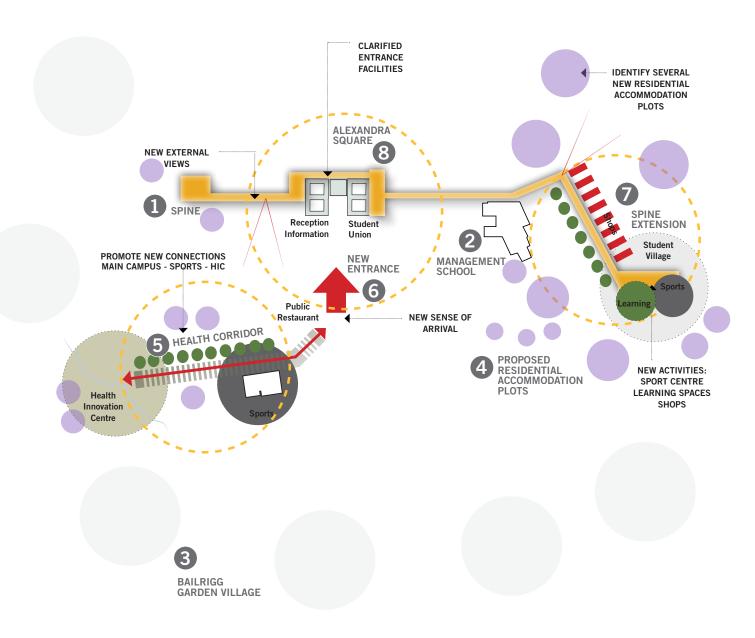
# The Main Campus



### KEY INITIATIVES

This diagram describes the fundamental connective initiatives required to ensure all the projects identified in the Masterplan are fully integrated into the Campus and College structure. The "space between" projects is often the missing piece in any development programme and it is important that proper significance and priority is given to these linkages to ensure that the complex of individual initiatives are properly connected both physically and socially into Campus and University life.

- 1. SPINE
- 2. MANAGEMENT SCHOOL
- 3. BAILRIGG GARDEN VILLAGE
- 4. PROPOSED RESIDENTIAL ACCOMMODATION PLOTS
- 5. HEALTH CORRIDOR
- 6. NEW ENTRANCE
- 7. SPINE EXTENSION
- 8. ALEXANDRA SQUARE



## 6.1 MASTERPLAN. SPINE RENOVATION 2017

An initiative is underway to renovate the Spine, with proposals being developed by Rick Mathers Architects:

"Our proposals for a new spine are informed by the 1960s scheme and a sense of the original rich design concepts. Bringing this to the 21st century we envisage a rejuvenated spine that is firstly about space and variety whilst providing shelter and protection. It is recognised that solutions and materials need to be robust and durable with a focus on use, maintenance and longevity."

The proposals include a new canopy, landscape integration, signage and wayfinding, structure, lighting and services for an overall renovation of the Spine.



Plan view

# 6.1 MASTERPLAN. SPINE RENOVATION 2017



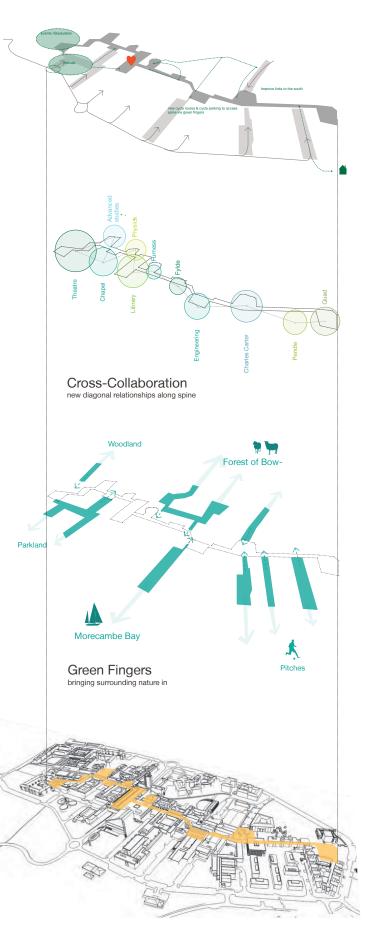
View of typical canopy bay at Bowland North



View of Great Hall Square



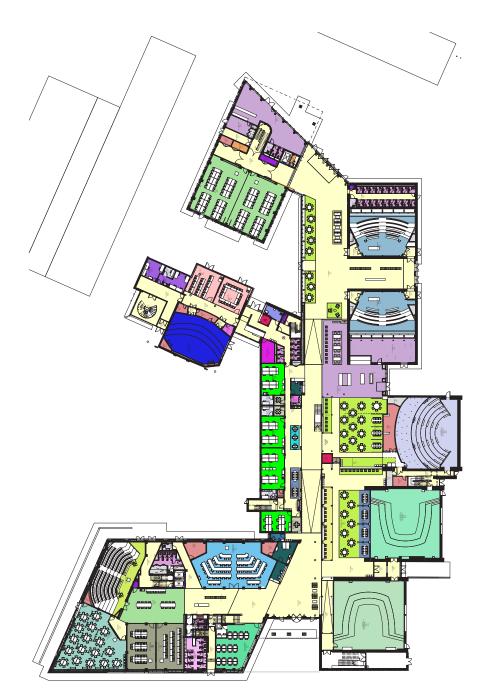
View of Engineering Wetland Canopy

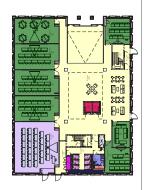


The next major new build development project within the core campus is the redevelopment of Lancaster University Management School builds by Feilden Clegg Bradley Studios in collaboration with Buro Happold engineering and LT Studio. "The building will provide a balance of open and individual research facilities to support the needs of international academics, including open and inviting accommodation conducive to a range of study and social learning patterns. The Management school facility will have a transformative affect upon both the University and the Campus.

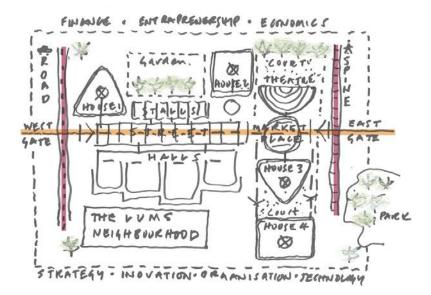
The design utilises the three existing faculty buildings and three new building elements at nodal points on the site connected by a linear Hub to give a clear, coherent identity across entire of the

School. The Hub provides a circulation link between the central campus pedestrian spine and the perimeter road to create a district neighbourhood within the Lancaster University campus."

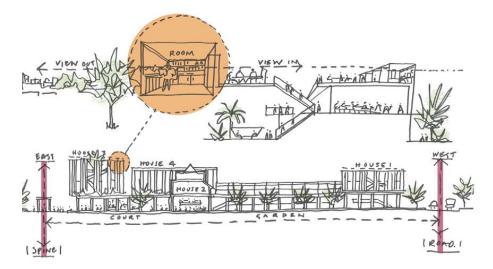




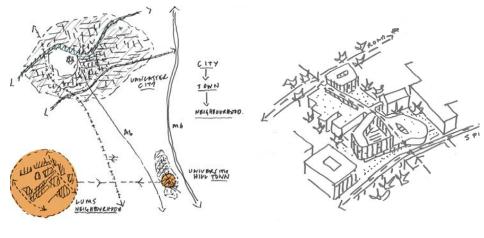
Room Type Plan



The "LUMS" Neighbourhood



Neighbourhood Crossection



Urban Strategy

Site Strategy

The design brief highlights the importance of the informal Hub space within the existing Lancaster Leadership Centre. It is notable at present that the Hub does not have a strong connection to the pedestrian spine on the east end of the site. The new scheme proposes an extension to the Hub, in which the space for gathering, meeting informally and hosting a wide range of activities is significantly extended. The key idea behind the new pavilions is that individual

workspaces should be balanced and permeated by places for informal meetings, encourage 'casual collisions' and foster a collaborative research culture.

The architectural language should promote the values and support the many layered priorities of the management school and its world class reputation for academia wherever possible.



East Spine Approach



East Charles Carter



Entrance View

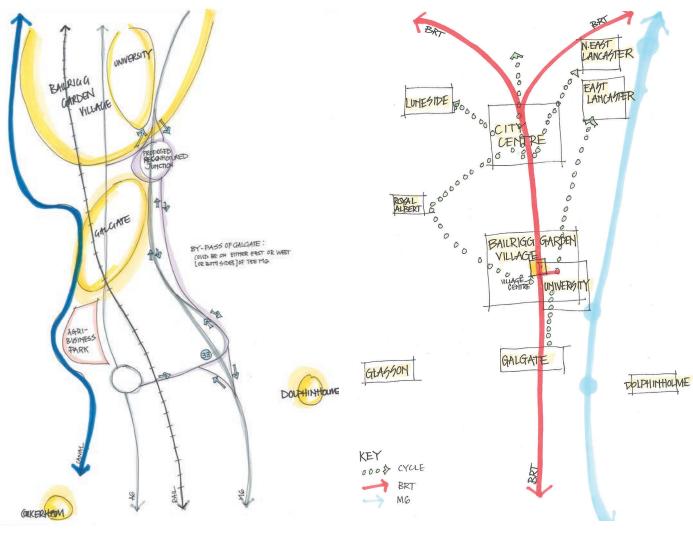
## 6.3 MASTERPLAN. BAILRIGG GARDEN VILLAGE

A site close to the University has been chosen as one of the first in a new wave of 'garden villages' to be backed by the Government.

The garden village plans form part of the draft local plan and a public consultation will take place in the coming months. The proposals would see the development of 3,500 new homes built in the Bailrigg area.

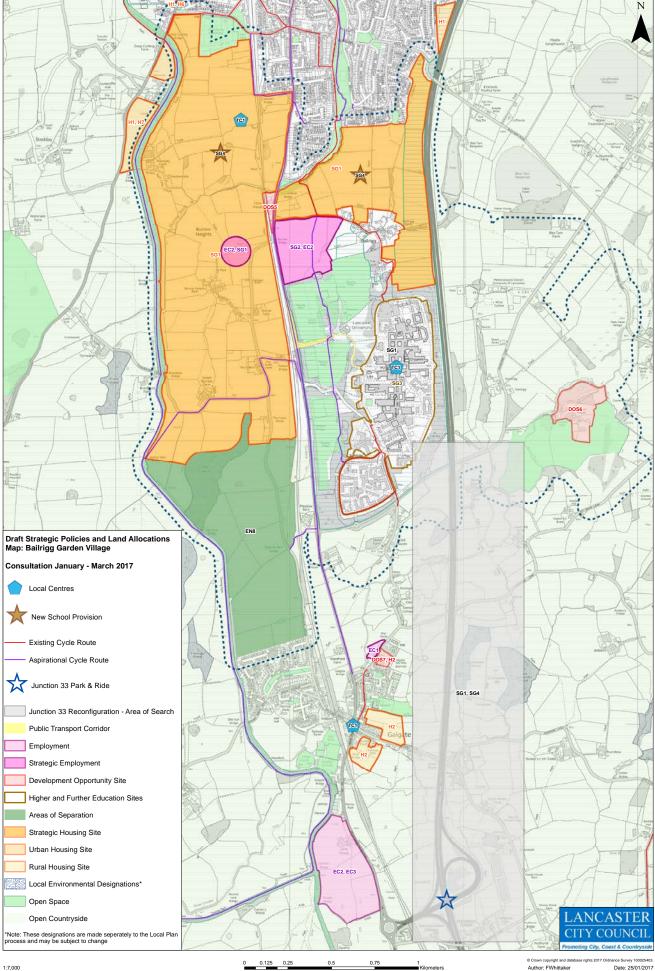
Vice-Chancellor, Professor Mark E. Smith said: "The University is pleased to be working in close partnership with Lancaster City Council to develop a Masterplan for this exciting garden village opportunity for the Lancaster community." Lancaster City Council will now receive tailored government support to help deliver the proposals, which aim to accommodate new homes without seriously harming the very character and feeling of scale which makes Lancaster so special.

Coun Janice Hanson, Cabinet Member responsible for Regeneration and Planning, said: "This is a once in a generation opportunity to extend Lancaster's housing supply in a manner which respects and reflects the ethical beliefs of the local community.



South Lancaster Schematic

Sustainable Transport Context



## 6.4 MASTERPLAN. RESIDENTIAL ACCOMMODATION STRATEGY

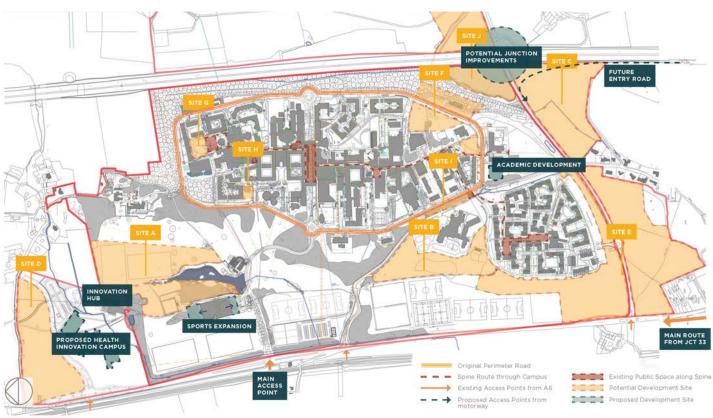
Lancaster University's residential accommodation strategy is primarily focused on undergraduate and postgraduate student accommodation, but also references residential accommodation for staff, families and visitors. The University has set out ambitious growth plans for the next 10 years (based on The Future Configuration of Student Numbers at Lancaster University paper dated September 2016), with a target of 17,000 students at the Bailrigg campus by 2025. Such an expansion will require significant additional student accommodation either on and/or off campus. This strategy is based upon those expansion plans.

The HE Sector has expanded significantly since the year 2000 both in terms of undergraduate and postgraduate students and across all fees statuses.

The accommodation and colleges on our Bailrigg campus have a strong reputation with multiple awards won across service, sustainability and architectural design categories. Around 90% of the University accommodation has been built or refurbished over the last 13 years and a rolling schedule of refurbishment is planned.

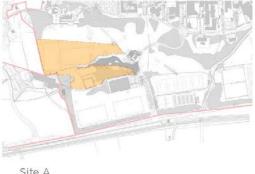
The off campus market is currently sufficient to service the student market to a reasonable standard, in the main through private housing and agencies, with very few medium sized private hall Purpose Built Student Accommodation (PBSA) schemes.

The current supply will not meet projected future demand, although there is potential for an increased number of new PBSA schemes to be realised that have recently gained planning permission, or are in the process of seeking it. In 2014, Lancaster University launched Lancaster University Homes, an accreditation scheme for student housing: it aims to ensure high standards for properties and landlords and good value for students, raising standards, particularly for Student Housing and Houses in Multiple Occupancy (HMOs)2.



Potential Sites in Campus

### Capacity Comparison Phase1 and Phase 2 Opportunities



#### Site A

• Area: 38,000 m2

### Site Capacity:

- 4 Storey 1,000+ beds
- 6 Storey 1,000+ beds
- 8 Storey 1,000+ beds

### Opportunities:

- Strengthens a connection from the Health and Innovation Campus back to the main campus
- Counterbalances Graduate, Cartmel and Lonsdale colleges



### Site C

• Area: 47,000 m2

### Site Capacity:

- 4 Storey 1,000+ beds
- 6 Storey 1,000+ beds
- 8 Storey 1,000+ beds

### Opportunities:

- Capacity for future expansion
- Could be used to extend the spine route
   to the South Campus



### Site B

Area: 26,000 m2

### Site Capacity:

- 4 Storey 1,000 beds
- 6 Storey 1,000+ beds
- 8 Storey 1,000+ beds

### Opportunities:

- Strengthens a connection from the Graduate, Cartmel and Lonsdale colleges back to the main campus
- Creates an active street alongside the sports fields



#### Site D

• Area: 40,000 m2

### Site Capacity:

- 4 Storey 1,000+ beds
- 6 Storey 1,000+ beds
- 8 Storey 1,000+ beds

#### Opportunities:

- Reinforces presence of Health and Innovation Campus
- Potential for future expansion
- Potential Gateway site for university

Capacity Comparison Phase1 and Phase 2 Opportunities



### Site G

• Site Area: 2,600 m2

### Site Capacity:

- 4 Storey 150 beds
- 6 Storey 200 beds

### Opportunities:

- Site is part of original 'Italian Hill Town' masterplan
- Height could be used on the site to reinforce the presence of the spine, similar to Bowland Tower



### Site F

• Site Area: 17,000 m2

### Site Capacity:

- 4 Storey 500 beds
- 6 Storey 750 beds
- 8 Storey 1,000+ beds

### Opportunities:

- Site is part of original 'Italian Hill Town' masterplan
- Activation of the perimeter road



### Site H

Site Area: 1,200 m2

### Site Capacity:

- 4 Storey 100 beds
- 6 Storey 150 beds

#### **Opportunities:**

- Site is part of original 'Italian Hill Town' masterplan
- Building could activate the 'welcoming front' of the University

Capacity Comparison Phase1 and Phase 2 Opportunities



 Initiating a connection between the main and south west campuses



#### Site J

Site Area: 74,000 m2

### Site Capacity:

- 4 Storey 1,000+ beds
- 6 Storey 1,000+ beds
- 8 Storey 1,000+ beds

### Opportunities:

- Space for future expansion
- Creation of a University presence from the motorway

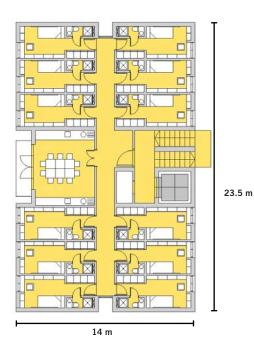
### Potential Combination Option 01



## JOHN MCASLAN + PARTNERS : ILLUSTRATIVE BUILDING TYPOLOGY

These diagrams illustrate an indicative student accommodation flat arrangement. This planning cell has been used to assist the evaluation of the two potential residential development sites identified in the Masterplan. There are many other layouts and configurations available and the following massing diagrams are only preliminary studies to enable a numeric appraisal of site capacity. Nonetheless the plan show is highly efficient and is based on the combination of a 12 room flat with on suite bedrooms of 14sqm and a dedicated shared kitchen dining facility. The basic building unit is a 23.5mx14m building block which with one lift could be arranged up to 9 floors.

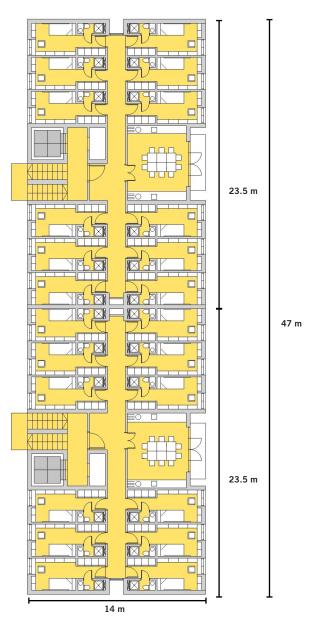
#### **BUILDING CELL**



Each cell gives 12 rooms per floor with a communal space and kitchen to share

Combination of different cells will give us different configurations and flexibility.

### COMBINATION OF TWO CELLS: IDEAL BUILDING TYPOLOGY



## JOHN MCASLAN + PARTNERS : ILLUSTRATIVE BUILDING TYPOLOGY

The adjacent plan type can combined to form a terrace or linear accommodation block. The advantage of the single stair and lift arrangement is it gives significant flexibility in adjusting the massing and silhouette of the building to suite its context and relatiotship with adjacent buildings.

### **BUILDING TYPOLOGY VIEW**



STUDENT ACCOMMODATION PRECEDENT







### JOHN MCASLAN + PARTNERS : ILLUSTRATIVE PHASE 1

The proposal is located in the site B of the Residential Accommodation Strategy. The idea is combine the cell described previously to create a more lively and vivid student residence environment with a cluster of buildings around the Hub and the majority of building looking that the sport fields. Some of the spaces at the Ground Floor and also in the Hub could be sport changing accommodation due the proximity of the games pitches.

The new residences would be connected to the main campus, to the Spine, via the Management School, Engineering building but also with direct access to Alexandra park and the rest of the residential accommodation. The scheme is also arranged to maintain the setting of the existing Hotel.



The site will accommodate 7 building types with 24 rooms in each floor. With an average of 5 floors each buildings the site will provide to the university with **840** students rooms.



## JOHN MCASLAN + PARTNERS : ILLUSTRATIVE PHASE 1

The following massing diagrams are only preliminary studies to enable a numeric appraisal of site capacity.

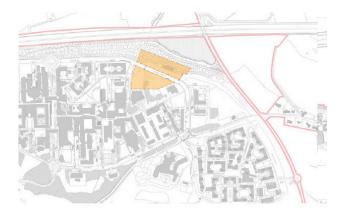
PHASE 1 VIEW



### JOHN MCASLAN + PARTNERS : ILLUSTRATIVE PHASE 2

The proposal is located in the site F of the Residential Accommodation Strategy. With the combinations of the cell described previously the proposal creates a vivid landscape heart giving a green onto look for the students. The Hub is located in the middle of this area creating a social focus to the college.

The proposal is located on the Spine giving easy access to the rest of the Campus.



The site will accommodate 6 building types with 24 rooms in each floor except one that it will have 12 rooms per floor. With an average of between 7 and 9 floors each buildings the site will provide to the university with **1056** students rooms.



### JOHN MCASLAN + PARTNERS : ILLUSTRATIVE PHASE 2

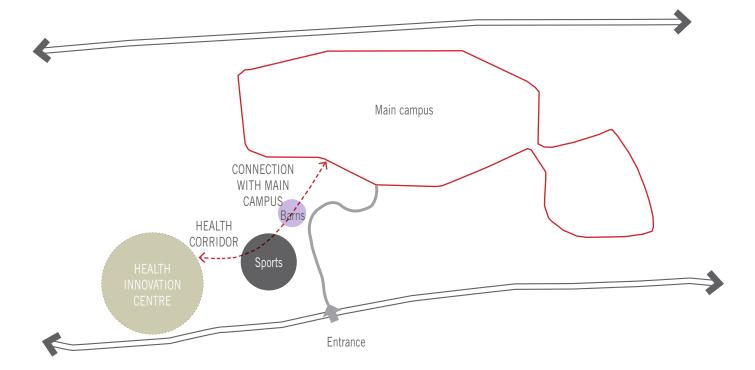
The following massing diagrams are only preliminary studies to enable a numeric appraisal of site capacity. **PHASE 2 VIEW** 

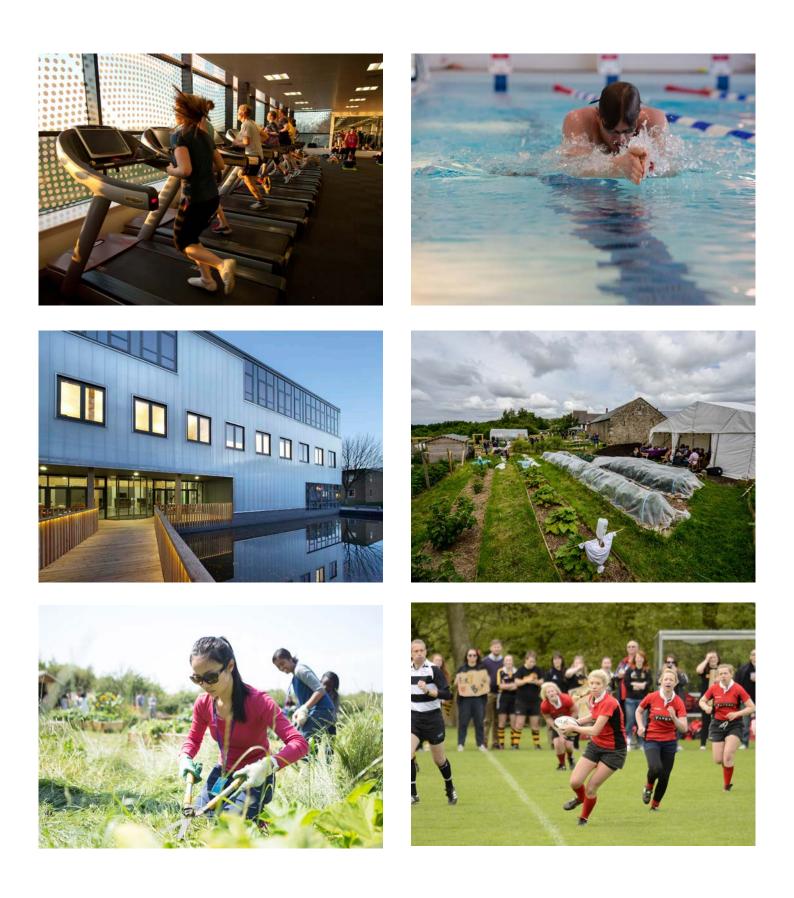


The investment in new departments and facilities located outside the core campus will demand an equal investment in the pedestrian and cycle connections that will ensure a positive, convenient and interesting linkages between all parts of the university.

The Health Corridor aims to exploit the sports and recreational dynamic of many of the open spaces to create a pedestrian spine animated with exercise equipment and information aimed at promoting physical exercise and health for all who use it.

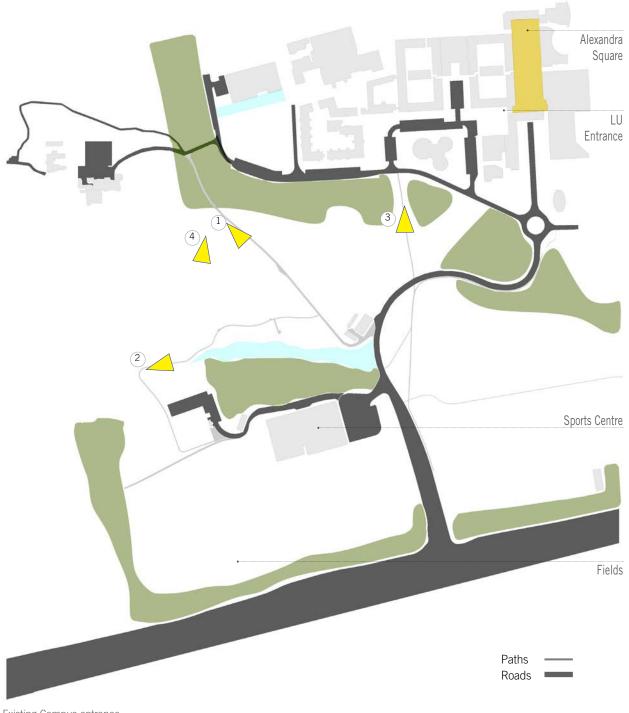
Exercises and outdoor classes and activities along this trail synchronised to personal sports data applications for all its participants is a fascinating opportunity to make the daily journey informative, enjoyable and part of an evolving personal sports programme for all its users. It begins to further exploit and develop the great resource of the university which is its remarkable setting and grounds.





## EXISTING

These diagrams illustrate the disparite and disconnected sequence of entrances and routes that characterise the pedestrian routes outside the main campus. Whilst undoubtably the views and setting are impressive the Health Corridor Initiative aims to unite these important links into a coherent and stimulating student experience.



Existing Campus entrance









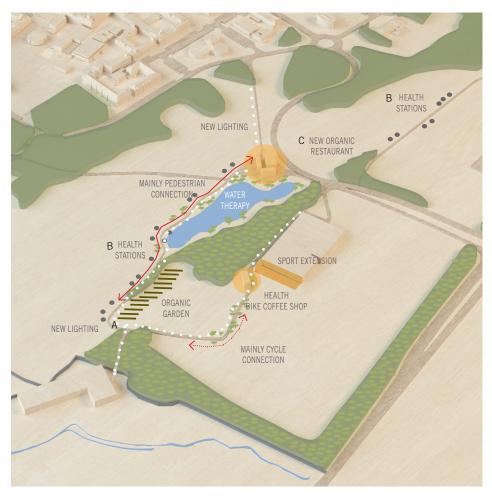


### PROPOSALS

The idea is to create a Health Corridor that connects the main campus with the new proposed Innovation Hub (A). The new connection will be mainly pedestrian and cycling with vehicular access limited to the immediate precincts of the Sport Centre and Innovation Hub.

The pedestrian connection is reinforced with the location of several health stations (B) that will promote activity and sport and will continue with the existing ones located along the pitches from the Sport centre and Alexandra park. The creation of a new lighting and a new organic garden will increase the use and the activity around the health corridor. Another important aspect of the idea of health is the relationship with water. The health corridor will promote the use of water therapy around the existing pond areas route adjacent to its.

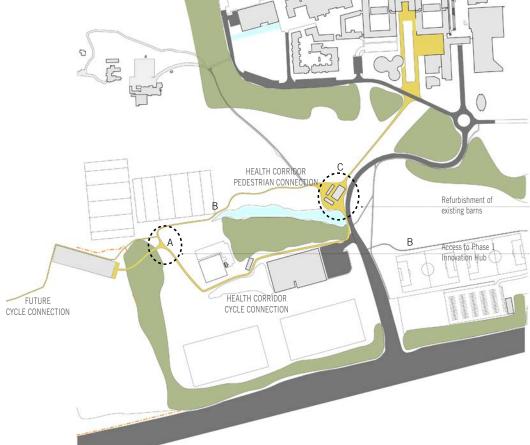




Proposal diagram of the Health Corridor

The other interesting initiative in this part of the campus will be the refurbishment of the existing barns (C) to allocate there a new organic restaurant that will serve the people from the main campus but also will be a welcome focus to the health corridor.





Proposal diagram of the Health Corridor

## SPORT MASTERPLAN

A related and significant part of the Health Corridor Initiative is the Faulkner Brown Architects Sports Masterplan which aims to develop, unify and connect the important array of sports amenities located outside the main campus core. These enormously popular amenities extend the appeal of the university and improve its connectivity to the wider community.



Sport Masterplan







7 8 x Outdoor Tennis Courts



10 3 x grass football pitches + 1 X 3G pitch



2 Bowling Green

1 Cricket pitch and Pavilion



3 'Carter Bar'



5 2 x grass rugby pitches

8 High Ropes facility



6 8 Lane Athletics track with 3/4G infield pitch 9 2 x STP football pitches



12 Indoor tennis centre

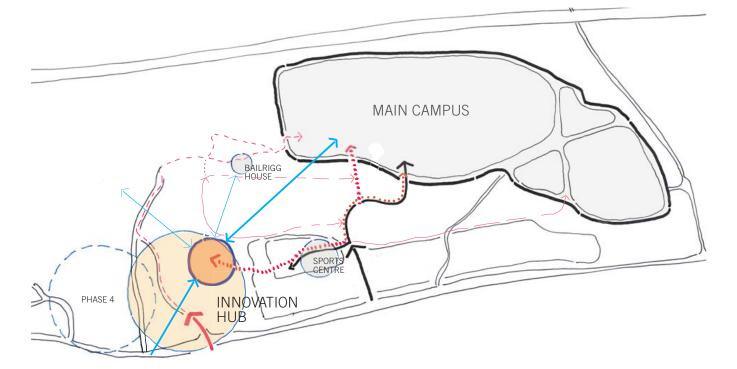


Sport Masterplan Landscape

## HEALTH INNOVATION HUB

The University has established an ambitious challenge; to develop Lancaster University as a major international presence in the field of Health and Medicine through the design of a new Innovation Campus. The new campus, sited a 10 minute walk to the north west of the main Bailrigg University Campus, will bring together businesses, the NHS, students and academics from a broad range of disciplinary backgrounds. Central to this campus is the 8,000m2 Innovation Hub, Phase 1 of the development. The design of the Innovation Hub is underway and is due to be submitted for planning in August 2016 and to start on site in early 2017 by John McAslan + Partners.

The Innovation Campus site and surroundings is a rich and beautiful landscape of rolling hills, mature trees and lush greenery. The considered setting of the building within this landscape will be fundamental to the project's success. The connection of the building and its users to the external environment is a core design driver when developing a healthy building with the emphasis on the users wellbeing. The linear street form of the building also acts to bring people together and encourage greater collaboration. A street reflects all that is vibrant and dynamic about a city. It democratically brings people together and provides the day-to-day space for interaction and life. The street stretches across the site. It opens up into public squares formed as large, light filled atria and encloses to become more intimate perching points or lead into private meeting rooms. Numerous differing scales of space and forms of usage line the street, from large teaching spaces to private offices. The street provides the space to sit and chat, to bump into colleagues and share a journey.



Innovation Hub Location



Innovation Hub Plan





Innovation Hub Model

## HEALTHY BUILDING DESIGN

The Design Team are currently working closely with the Faculty of Heath and Medicine to develop proposals that achieve the University's ambitions for the Innovation Hub project. Central to these aims is a building that will embody the health and innovation ethos of the new campus. Through maximising flexibility, the promotion of inter-disciplinary working and collaboration, and the provision of exceptional working and learning environments, a holistic building design is being developed which is sustainable and energy efficient.

Architecture can have a significant effect on the health and wellbeing of building users. It is essential therefore that in designing buildings careful consideration is given to the experience of all building users, and how spaces can be designed to positively contribute towards the wellbeing of visitors.

Spaces should be designed to reduce environmental stress and provide comfortable environments which promote health and happiness. Buildings should be designed to maximise natural daylighting and where possible use natural ventilation. Deep plan layouts should be avoided which often relying too heavily on mechanical ventilation systems and artificial lighting systems.

Many spaces, especially communal spaces, should feel spacious and open, with both connections to and views of the surrouding landscape and nature. The use of natural materials and careful colour selection are other principles which can be used to create an internal environment in which the user feels comfortable.



Health Innovation Hub plan



Health Innovation Hub interior



Health Innovation Hub interior

## HEALTHY BUILDING DESIGN



Health Innovation Hub settings



Health Innovation Hub settings

## VISUAL : ARRIVING TO HEALTH INNOVATION HUB

### Landscape and Wellness

The rural context of an active stream, rolling topography, woodland and fields, provides the unique opportunity and ingredients for an inspiring and innovative blend of landscape and architecture that delivers the two core objectives of the HIC: innovative design, and a multi faceted academic and business environment promoting the idea of health and wellbeing.

Design innovation will require the careful articulation of architecture and landscape into a single integrated tableau; a health campus environment on which both architectural and landscape innovation can be embedded.

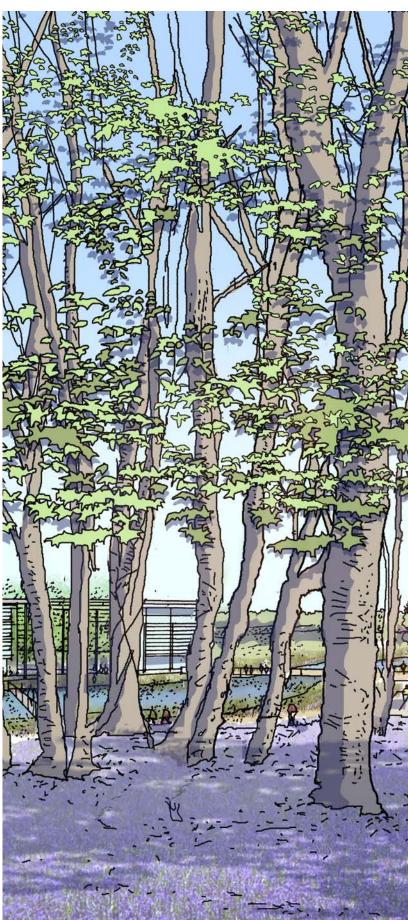
A core consideration in the proposed layout of the campus and the siting of the hub building is the presence of water in the form of the Ou Beck. This linear, aquatic landscape element will be enhanced to create an ecological and amenity landscape ribbon that meanders through the site, connecting visually and physically with the hub - and in time the adjacent campus buildings.

Like any moving body of fresh water, the stream has physical and spiritual association with life, health and well being and is an inspirational source from which a campus design narrative can be developed.

The architecture will also unfold around and over the landscape to create buildings that respond to the changing topography, rural views and adjacent natural assets such as the adjacent woodland belts and Ou Beck. The landscape will be the significant element that stitches phased development into a cohesive whole and the platform by which users of the campus will move between and around adjacent buildings. On warm sunny days this will be a delightful experience but on a typical wet and windy January adequate shelter and canopies will be required to help maintain these links. Welcoming and outward looking thresholds between buildings, that blur the boundary between interior spaces and the outdoors will also be essential in fostering physical and intellectual exchange.

Key Landscape Innovations:

- Working with and enhancing ecological systems
- Low maintenance ecological planting
- Sustainable urban drainage systems
- Use of vegetation for solar shading and protection from inclement weather.
- Outdoor rooms and teaching/meeting spaces



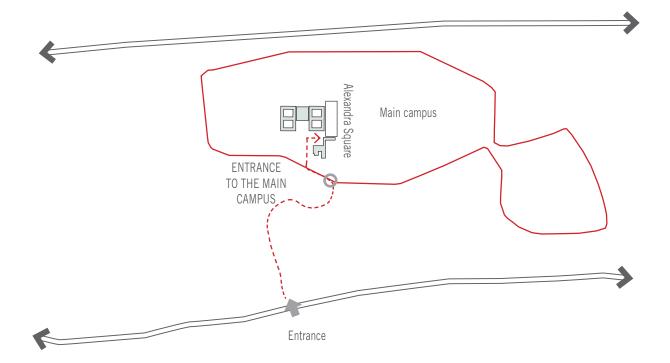


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A consistent observation raised during many of the consultations was the underwhelming and confusing entry sequence into the University for all users and visitors. Also given the proposed investment in new facilities outside the core campus the need to improve and reinforce linkages into the heart of the university around the precincts of Alexandra Square and the central spine are even more important.

The masterplan identifies a series of alternative strategies at different scales to address this issue as a key initiative going forward. Arrival and orientation is an important moment as the critical first impression and introduction to a complex campus for all its existing and future users. In a increasingly competitive market this point of arrival is not to be underestimated as an opportunity to showcase the University's global ambition and achievements.

In many regards the external setting and presentation of the University is magnificent and also the intimate human scale and detail of the interior spaces remains one of the great attractions of the Campus.The missing element is an entrance volume that links these two positives into a perfectly resolved sequence.







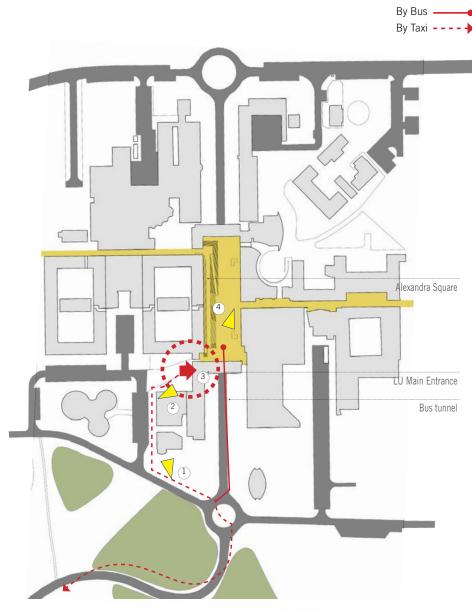
### EXISTING

The existing main entrance and reception into the campus are located on the north western corner of Alexandra Square, highlighted by a red wall.

It is an underwhelming sense of arrival, particularly for first time visitors. The access route, off the main entrance road and though a courtyard requires signposting and can be easy to miss.

The importance of a first point of contact for visitors and students-to-be is significant, and there are opportunities to

improve this experience by providing an obvious, comfortable reception space. Three options are proposed by the masterplan and are described in more detail in the next few pages. The views show in the following page set up an idea that how the entrance is form at the moment.



Existing Campus entrance

VIEWS









## EXISTING

The current entrance delivers visitors into the heart of the campus, Alexandra Square. The proposals seek to maintain this relationship but providing an actual arrival space, a threshold, and a positive first impression.

The diagrams shown in the following pages illustrate the three different options for a new entrance.



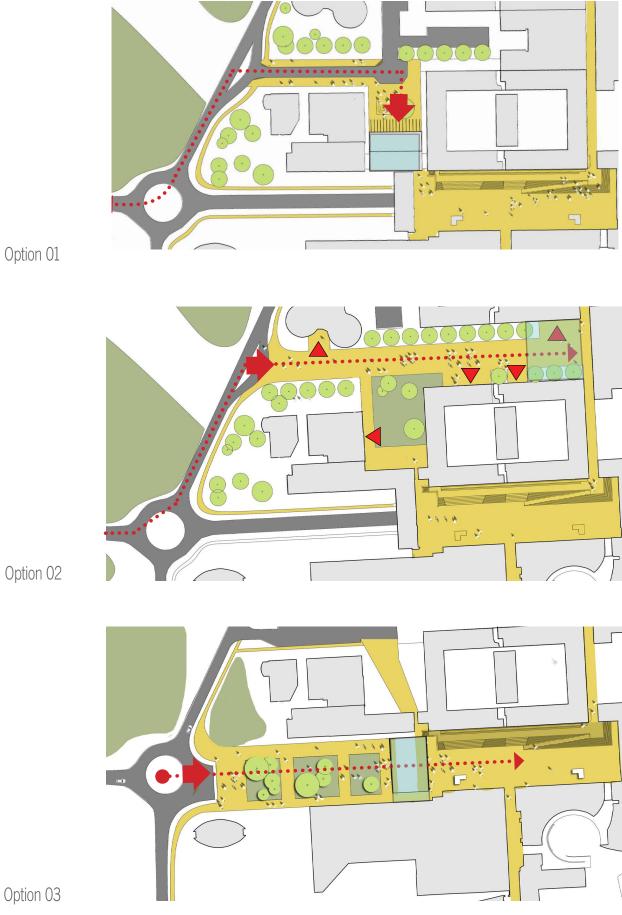


• • • • • Underwhelming sense of arrival



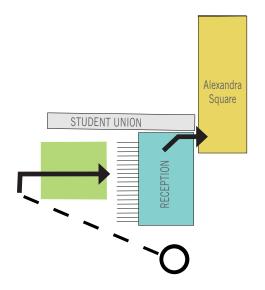
Close diagram of the existing main campus entrance

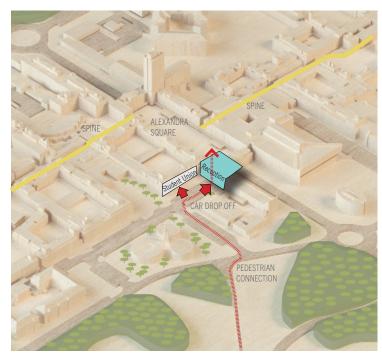
## OPTIONS



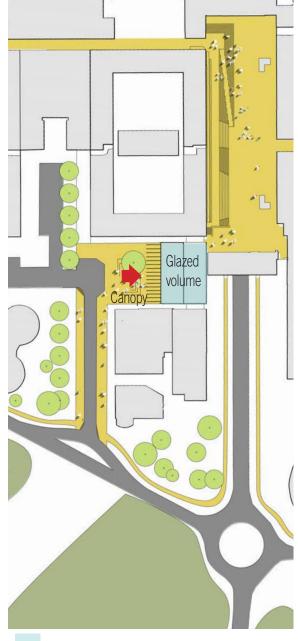
## OPTION 1

This option creates a bold new multi height glazed volume and canopy over the existing entrance square. This volume then leads via a modified ground floor arrangement directly in Aexandra Square and provides an impressive orientational point of arrival at the very social heart of the campus.





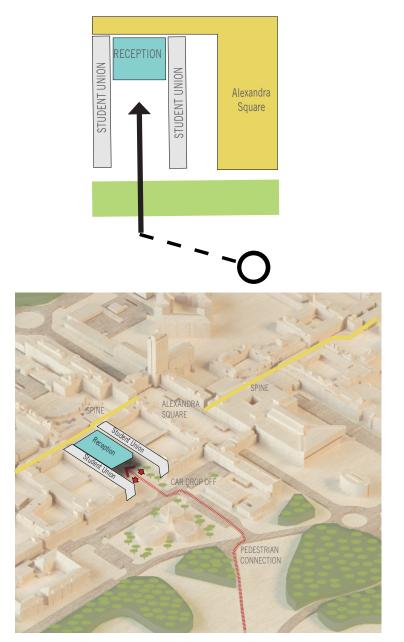
Proposal diagram for Entrance Option 1



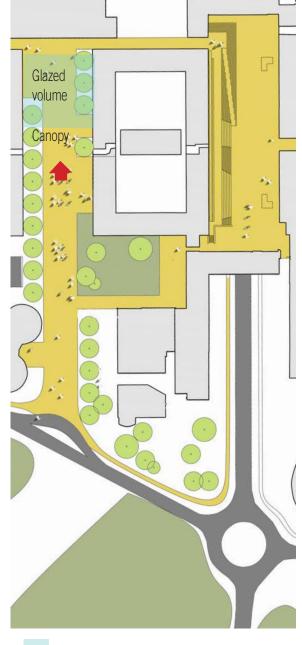
Reception and Welcoming Area

## OPTION 2

This option locates a glazed entrance volume directly to the east of the existing entrance. It would require the demolition of the existing one storey building between the Bowland Main and Bowland North buildings but offers the opportunity to integrate student union facilities around the new entance and creating a new welcome square directly on the axis of the main approach road and drop off. Its disadvantage is the relatively remote connection to Alexandra Square.



Proposal diagram for Entrance Option 2



Reception and Welcoming Area

## OPTION 3

This third option requires the most change. It involves decomissioning the existing underpass (photograped below) and creating a forecourt right off the main roundabout at the entrance to the campus. A new building would then sit at the end of this new forecourt, to function in manner similar to the two previous options.

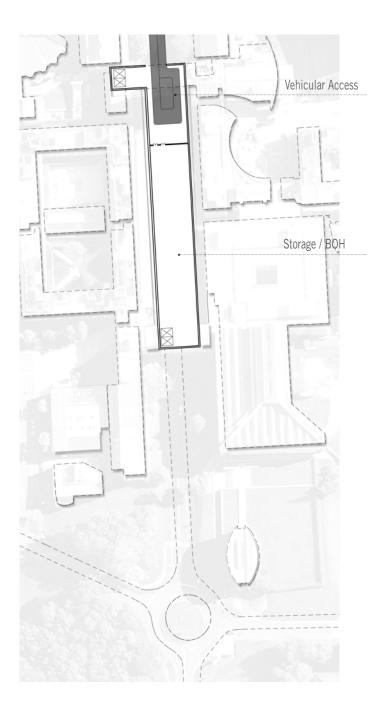
It proposes decommissioning the underpass and creating a new roundabout and drop off /arrival square terminated by a new entrance volume on the axis of Alexandra Square. The undercroft could be utilised as new lecture and service accommodation and the option extends and unifies







Alexandra Square into one flowing experience and movement. It is however a profound interuption of a key east west infrastructural link that may delimit flexible connections to next stages of the masterplan beyond the core campus.



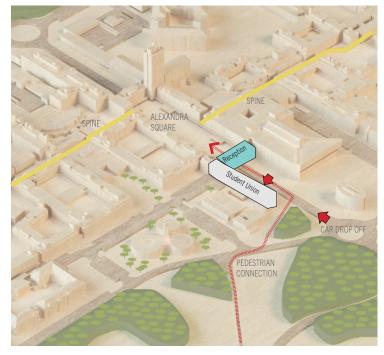
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## OPTION 3

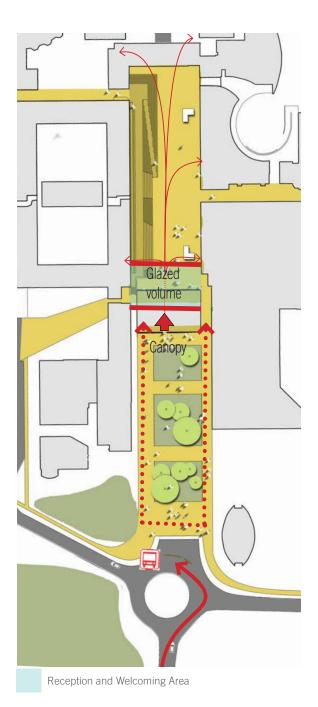
A car drop-off point and bus stop would leave visitors at the beginning of a new landscaped forecourt. The front door to the campus would become a pedestrian friendly environment and a visible, welcoming statement and an excellent arrival point.

Vehicular access to the underground space can be retained from the back end of the tunnel, becoming an excellent back entrance also for deliveries and other services.



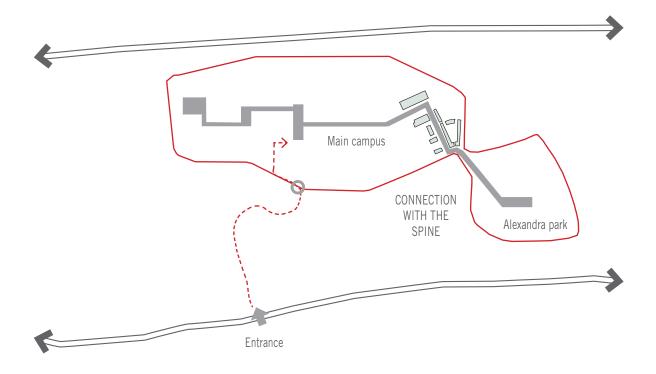


Proposal diagram for Entrance Option 3



## 6.7 MASTERPLAN. SPINE EXTENSION

The great north-south pedestrian axis that unifies the core campus is the organising spine of the University. It extends from the LICA Building (Lancaster University Institute of Contemporary Arts )in the Faculty of Arts And Social Science to the Student Village at Alexandra Park connecting all faculties and colleges together along its extent. The design quality and clarity of this route is being addressed in the developing "Spine Strategy" by Rick Mather Associates but in some regards the route needs extension and elaboration as it progresses towards Alexandra Park. This important connection conflicts with peripheral parking and road infrastructure and the sense of arrival and the ground floor animation and use of buildings in Alexandra Park could offer more to its users. The Spine Extension will address these issues and proposed strategies to ensure this important part of the campus is seamlessly integrated into the University's natural high street and social thoroughfare.



# 6.7 MASTERPLAN. SPINE EXTENSION



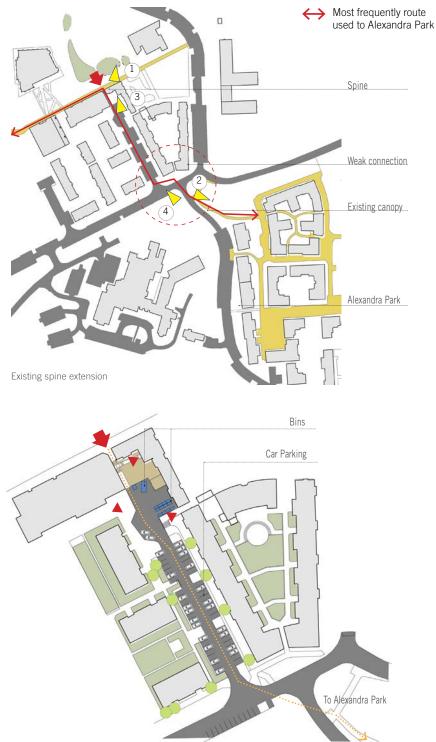
# 6.7 MASTERPLAN. SPINE EXTENSION

## EXISTING

The spine links the north and south part of the campus and connects all the facilities in the main campus. When arrives to the link with Alexandra Park, the spine gets diluted and the connection with the student village is bit fragile.

These diagrams illustrate the connection most used between the spine and Alexandra Park .

Currently this link is used as back of house with lots of bins and a car parking. The following page shows the views of that connection and its situation at the moment.



Close diagram of the existing of the connection between Alexandra Park and the Spine that is most used

VIEWS







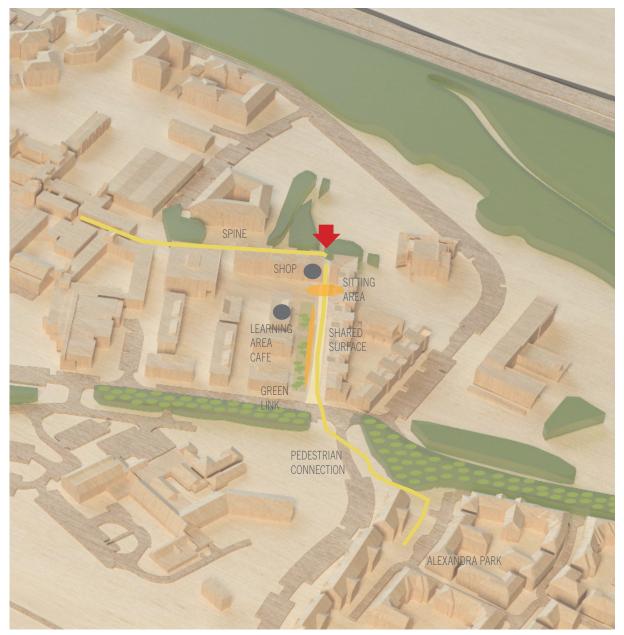


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## 6.7 MASTERPLAN. SPINE EXTENSION

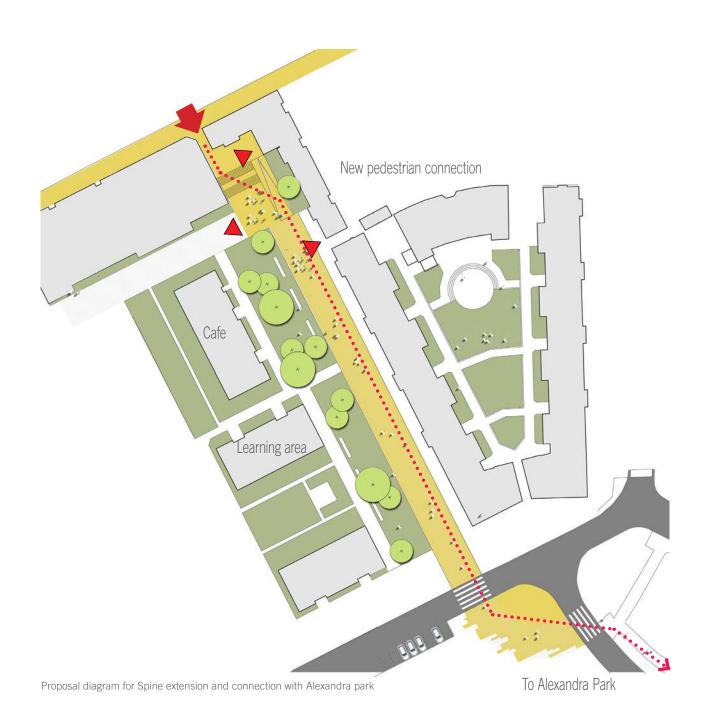
### PROPOSAL

The main idea is to improve the connection that it is used currently by removing all the clutter that obstructs the clarity of the link. The scheme proposes to remove the car parking to create a bigger green link with a shared surface and using the ground floor of the adjacent buildings with different uses such as Learning Space or Cafe areas in order to activate this connection and make it more vivid and beneficial for students.

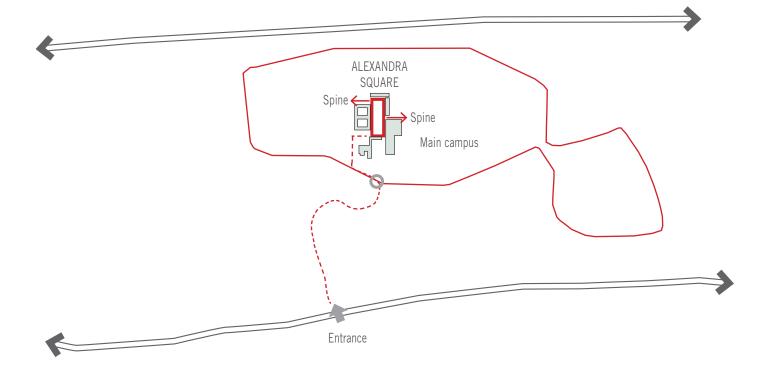


Proposal diagram for Spine extension and connection with Alexandra park

This diagram illustrates the idea of creation a new pedestrian connection with green link that allows for more sitting space. With a ground floor full of new social different uses it will give this connections the activity and animation necessary.



The natural heart of the university is Alexandra Square and on many days this interesting urban space is a hive of activity and recreation for many and all of the University Community. It is often enlivened by markets ,events and performances and it is a sunny and generous space. That said, however the arrival into the space from the main entrance is an oblique tangential movement and many of the buildings and their activities do not clearly express themselves to contribute to the experience of the space for its users. We believe there are opportunities to continue to exploit the utilisation of Alexandra Square to improve its status as the natural centre of gravity of the campus and its main social hub. There are possibilities to improve entrances and movement into and through the space and also bigger ideas to explore its partial cover and enclosure. This initiative in concert with the ongoing investment in the Spine and Entrance is a key opportunity to further improve orientation and arrival at the heart of the campus.











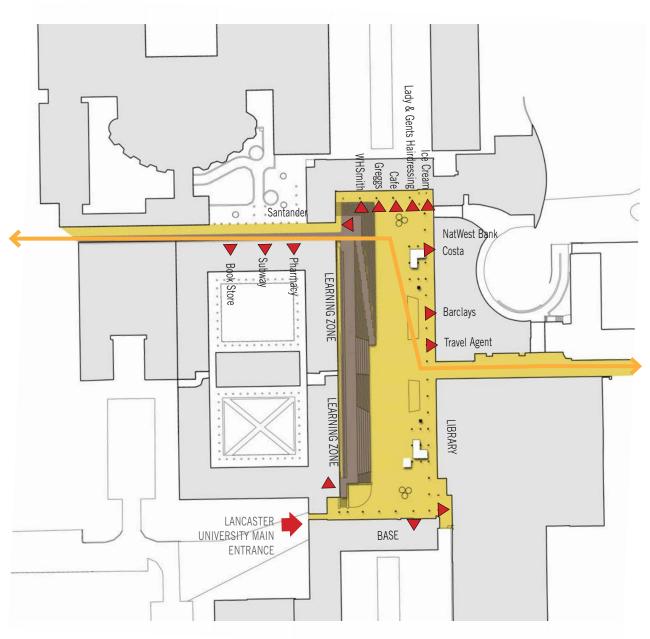




### EXISTING

Alexandra Square sits in the heart of the main campus. It was conceived as the main urban square and it locates most of the social uses. The campus was planned as a town where the spine was the high street and Alexandra Square was the piazza.

This feeling of a town is still evident and Alexandra Square is one of the most popular places in the campus.



Existing Alexandra Square

These views show the vivacity and use of Alexandra square. It is a point of meeting for the students and also the University organised markets and different activities.



View of Alexandra Square towards the Learning Zone



View of Alexandra Square in a market day



View of Alexandra Square towards the Learning Zone



View of the steps of Alexandra Square



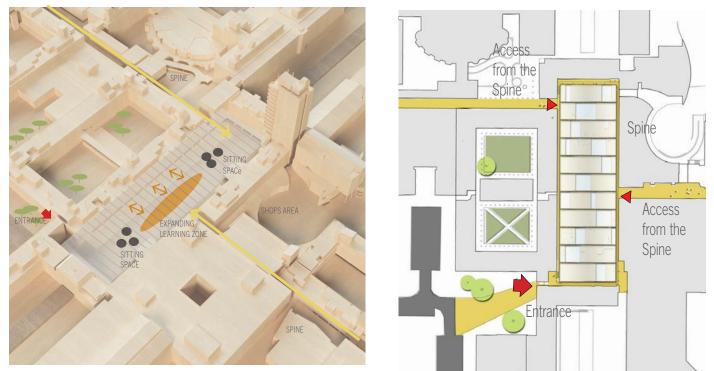
View of Alexandra Square in a market day

### PROPOSAL OPTION 01

Option 1 proposes the idea of cover Alexandra Square creating a big hall that it would be use regardless the weather conditions. That would allow to expand the existing uses in the ground floor of the buildings surrounding the square and colonise the new cover space. The precedents in the following pages show the idea of the cover space as a place for people to gather and do casual meetings.

I WY \$ 40

CREATING A REAL SENSE OF ARRIVAL! A REAL VOLUMETRIC SOCIAL HUB FOR THE UNIVERSITY COMMUNITY



Proposal diagram for option 01 of Alexandra Square

### PRECEDENTS OPTION 01



Exeter University



Liecester University



Primark HQ



Exeter University



Liecester University



Primark HQ

### **PROPOSAL OPTION 2**

Option 2 is a more conservative scheme than the previous one. This option proposes smaller interventions inside Alexandra square. The idea is the creation of different pavilions inside the square that will animated it and will offer cover when the weather is poor.

One of the pavilions will be focus in the social aspects of the university with a cafe inside and when the weather allows it will expand the sitting area on the square .

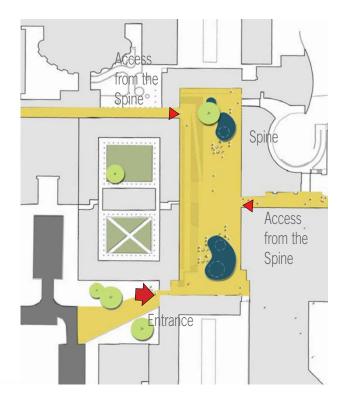
The second pavilion will be focus in the academic part of the university creating an extension of the popular learning zone.

This idea will create a different dynamic in the square more vivid and social during all times of the day.

This diagram illustrates the configuration of Alexadra square, the possible location of the new pavilions and how they will interact with the existing entrances in the square from the spine and from outside the campus.



Proposal diagram for option 02 of Alexandra Square



### PRECEDENTS



Market pavilion in an urban square



Market pavilion in an urban square



Organic pavilion



Urban bar pavilion



Urban bar pavilion



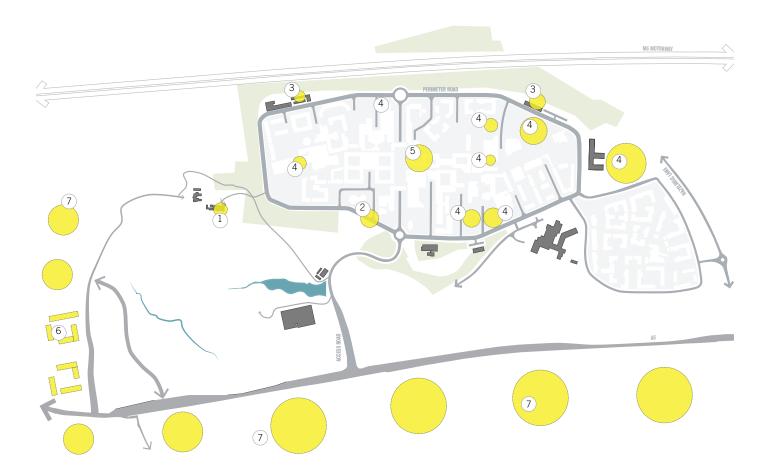
Urban bar pavilion

## 7.0 MASTERPLAN. PROPOSED FUTURE DEVELOPMENT PLOTS

### POTENTIAL PROJECTS

The diagram below and the adjacent one show the potentiality of several different plots available within the university ownerships . These could support some academic , residential and ancillary purposes. The ideas shown here are only indicative and each plot should be considered in detail itself with the specific needs.

- 1. Redevelopment of Bailrigg House into a conference facility
- 2. Amendments to the entrance
- 3. Expanded area of parking
- 4. Development Plots
- 5. FHM existing buildings
- 6. HIC development
- 7. Bailrigg Garden Village



Potential Projects

## 7.0 MASTERPLAN. PROPOSED FUTURE DEVELOPMENT PLOTS

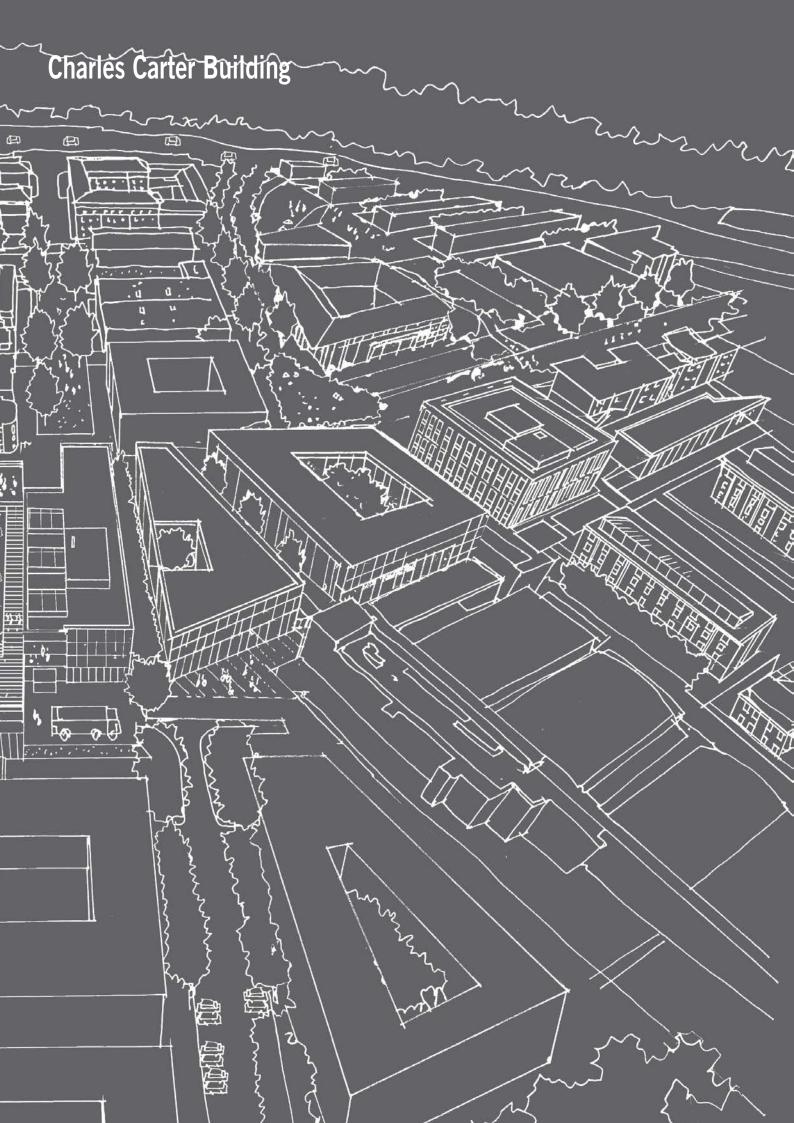
### POTENTIAL PROJECTS

1. Redevelopment of Bailrigg House into a conference facility

- 2. Amendments to the entrance
- 3. Expanded area of parking
- 4. Development Plots
- 5. FHM existing buildings
   6. HIC development
- 7. Bailrigg Garden Village



Potential Projects



## 8.0 THE WAY FORWARD

## **8.0 THE WAY FORWARD** THE NEXT FIVE YEARS PLAN

The next generation of projects and masterplanning of this critical period of growth for the University are absolutely aligned to its committed ambition to establish itself as a global centre of academic excellence.

Each of a complex series of initiatives will, in different ways, continue to reinforce and improve the quality of teaching accommodation and the public realm at the University. Many of these projects will bring innovation and real progression to the Universities remarkable teaching environment offering new academic initiatives and new types

of spaces in which to learn and engage with the college community. At the heart of this ambitious masterplan is the commitment to retain all elements that give Lancaster University its unique identity and appeal in terms of its setting and ambience but at the same time offer a real and exciting investment in its future.

### 2017/2018

- Management School Major Redevelopment
- Health Innovation Campus Phase 1
- Spine Project
- Sports Facilities Phase 1
- Retained Residences (Refurbishment)
- Furness Lecture Theatre
   (Refurbishment)
- Way Finding (External Signage & LEC)
- LEC Atrium CEH
- Moot Room
- Roundhouse
- Great Hall Complex Phase 1
- Bailrigg House
- George Fox Lecture Theatre
- FASS, LICA
- New Build Accommodation
- New Colleges
- Professional Services workspace review

### 2018/2019

- Management School Major Redevelopment
- Health Innovation Campus Phase 1
- Spine Project
- Engineering Phase 2
- Sports Facilities Phase 1
- Library Phase 3
- Retained Residences (Refurbishment)
- Arrivals & Welcome Venue
- Great Hall Complex Phase 1
- Bailrigg House
- George Fox Lecture Theatre
- FASS/ LICA
- FASS. Project 2
- New Build Accommodation
- New Colleges
- Car Parking Provision
- Professional Services workspace review

### 2019/2020

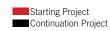
- Management School Major Redevelopment
- Engineering Phase 2
- Sports Facilities Phase 1
- Sports Facilities Phase 2 (Expand changing facilities & WC)
- Library Phase 3
- Retained Residences (Refurbishment)
- Arrivals & Welcome Venue
- FASS Project 2
- FASS Project 3
- New Build Accommodation
- New Colleges
- Car Parking Provision
- Professional Services workspace review

### 2020/2021

- Management School Major Redevelopment
- Health Innovation Campus \_ Phase 2
- Engineering Phase 2
- Sports Facilities Phase 2 (Expand changing facilities & WC)
- Library Phase 3
- Retained Residences (Refurbishment)
- Fylde Redevelopment & Refurbishment
- Phase 3Bowland Annexe
- Bowland Annexe
   FASS Project 3
- FASS Project 4
- New Build Accommodation
- Conferences & Residential
- New Colleges
- Institutes Growth Space

### 2021/2022

- Management School Major Redevelopment
- Health Innovation Campus \_ Phase 2
- Sports Facilities Phase 3
- Retained Residences (Refurbishment)
   Fylde Redevelopment & Refurbishment Phase 3
- Landscaping Phase 2
- Bowland Annexe
- FASS Project 4
- FASS Project 5
- New Build Accommodation
- Conferences & Residential



## A GREAT PLACE TO STUDY AND WORK

A university that is globally significant – a leader in higher education that provides the highest quality research and teaching, and engages locally and internationally on the issues and debates of the day and future. Driven by research, and stimulating learning, the globally significant university informs and changes practice and thinking worldwide.

> "Our strategy for 2020" Lancaster University

# **KEY MEASURES OF SUCCESS**

UK World	Top 10 Top 100
UK World	Top 15 Top 100
Surplus as per cent of income Turnover	>6% as average trend £300 million by 2020
Research Excellence Framework	Top 15 in UK
Grant income	£45 million
Number per academic and completion	Top 15 in UK
A level tariff points on enrolment HEFCE access indicators	460 by 2020 2% above benchmarks for HEFCE PIs
NSS	Top 10 in UK
Employment Average salary	>75% graduate employment Top quintile
Income earned from employers	20% of total income
Economic impact assessment	Multiplier >2.5x University income
Staff satisfaction survey	Top 10 UK HĘI
Staff recruitment & retention	>60% staff appointed from top 100 universities or departments
'User' satisfaction surveys	>60% re-engage with Lancaster in 12 months
	World UK World Surplus as per cent of income Turnover Research Excellence Framework Grant income Number per academic and completion A level tariff points on enrolment HEFCE access indicators NSS Employment Average salary Income earned from employers Economic impact assessment Staff satisfaction survey Staff recruitment & retention

"Our strategy for 2020" Lancaster University

Supplementary papers:

1. FUTURE CONFIGURATION OF STUDENT NUMBERS

Professor Andrew Atherton, Deputy Vice Chancellor.

### FUTURE CONFIGURATION OF STUDENT NUMBERS

Direction of travel for the next 10 years (Paper wrote by Professor Andrew Atherton 10th May 2016)

Lancaster University has the ability to grow its student numbers over the next ten years.

The University could reach a total student population of 17,000 at the Bailrigg campus and 12,000 students overseas by 2025. Combined with circa 3,000 students at our partner colleges, a total student body of 32,000 is achievable.

This growth will not be uniform across the University, with departments demonstrating different recruitment patterns and trajectories.

This represents a significant expansion of the University's student population, and hence size and income over the next ten years. Resourcing this growth will help achieve 'critical mass' in many academic departments, but will require proper investment in order to generate and deliver on this scale of student expansion.

#### **Overview: Framing the Question**

- The University's 2020 strategy maps out an ambitious future, as a "globally significant" university in the top 10 in the UK and the top 100 in the world.
- Underpinning these strategic goals is growth, particularly in terms of "subject mix and portfolio", as well as building on our "existing subject strengths" and "growing transnational activities" (All extracts from the strategic plan). We have also committed to increase annual turnover to at least £300 million by 2020.
- In many subject areas, growth will produce opportunities for investment to enhance the capacities of academic departments.
- The aim of this paper is to provide key assumptions around growth that can inform planning and development discussions across the University and within Faculties and Departments.

#### Applications to Lancaster University and Demand Patterns

- 'Gross', or market, demand in HE can be defined as the number of applications a University attracts during a UCAS recruitment cycle. 'Net', or actual, demand can be defined as the number of these applicants that accept, and hence enrol at, a particular university.
- The ratio of applications to enrolments captures the desirability of a university, and its ability to both generate high gross demand and actual net demand.
- Lancaster's 'gross' demand, as measured by all undergraduateapplications, has increased significantly in recent years from 13,880 to 19,420 between 2010 and 2015 (UCAS data). This equates to a 39.9% rise over the period, which was the 10th highest increase of 121 HEIs.
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- Of our competitor set, only Surrey received a greater level of increase in applications over the period.
- However, we have not converted that increase in gross demand into acceptances, which rose from 2,995 in 2010 to 3,110 in 2015, an increase of only 115 enrolments, or +3.7%, over that five-year period.
- Over the period, our ratio of applications to acceptances increased from 1 acceptance for every 4.5 applications to a 1:6 ratio. By way of comparison, our ratio improved from 8th/121 to 32nd. The highest ratio in 2015 was 1:9.
- We can conclude therefore that there is scope to grow UG student numbers in particular, because:

Applications to Lancaster have increased more than most universities since 2010 and continue to be buoyant.
 Our applications to acceptances ratio has improved, from a vulnerable position to one that is close to many of our competitors, although not still sector leading. We have in other words created a 'bigger pool' of applicants.
 The lower number of acceptances compared with applications indicates a conversion opportunity. We now have many more applicants and so have more a larger applicant group to attract to Lancaster.

• Our strategic recruitment challenge, therefore, is to convert much higher application numbers into actual enrolments. This does not remove the need to continue to grow applications to more sustainable levels.

#### Note: Data provided by Lancaster University on June 2016

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#### Student Numbers at Bailrigg

- In 2014/15, Lancaster University hadjust fewer than 13,000 students (UG, PGT and PGR) at the Bailrigg campus (Table 1).
- This reflects little overall growth since 2004/5, when total Bailrigg numbers were 12,330. As such, the overall size of the student body on our home campus has not seen substantial growth over the last decade.
- Tuition fee income, in contrast, has increased. This is mainly because of the 2012 increase in fees to £9,000, reinforced by a shift from part-time to full-time numbers.
- Longer-term trend data, from 1994-95 to 2014-15, indicates that growth in student numbers has been almost solely in full-time undergraduate students, and this growth occurred between 1994/95 and 2004/5.

		-						
		0.1/05	00/00		11.5	a 1/4 E	Variation	Variation 04-14
	Year	94/95	99/00	04-May	11-Dec	14/15	94-14	04-14
	Full Time	6,886	6,812	8,160	8,990	9,246	2,360	1,086
UG	Part Time	194	762	529	343	82	-112	-447
	Full Time	2,021	1,579	2,103	2,108	2,169	148	66
PG	Part Time	904	1,468	1,538	1,164	1,421	517	-117
	Total	10,005	10,621	12,330	12,605	12,918	2,913	588

#### Table 1: Student Numbers 1994-2014

#### Table 2: Student Numbers 2011-2014

	Year	11-Dec	Dec-13	13/14	14/15	Variation
UG		9,333	9,268	9,591	9,328	-5
PGT		2,070	1,955	1,893	2,002	-68
PGR		1,202	1,295	1,441	1,588	386
	Total	12,605	12,518	12,925	12,918	313

- Both UG and PGT numbers remained broadly static between 2011 and 2014, at headcounts that fluctuated slightly around 9,300 and 2,000 respectively in most years apart from an upward spike in UG recruitment in 2013/14 (see Table 2).
- The increase in student numbers between 11/12 and 14/15 has been in PGR students, a significant proportion of which are partially or fully funded by the University. The financial viability of 'self-funded' PhDs merits review.
- Undergraduate applications were up significantly in 2015/16 and recruitment has increased in this cycle. If sustained in future cycles, there is potential for further UG full-time student growth.
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- The increase inintake has been the result of Home/EU growth. Overseas student numbers have not met target and there appears to be a softening of demand. There may be displacement effects, as growth in Home/EU is offset partly by softer overseas recruitment.
- Postgraduate taught recruitment has been static, not only since 2011 but also since 1994 for full-time students and since 1999/2000 for part-time students.
- This is in contrast to our competitor set, all of which have increased PGT numbers. As a result, there is scope to increase PGT numbers, and implementing the PGT review will help this.

### FUTURE CONFIGURATION OF STUDENT NUMBERS

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Future growth to 2020. The summary above suggests the following trends:

#### Table 3: Student growth trends

UG Ho	ome/EU	Likely future growth in UG Home/EU numbers from next year and over the short- to medium-term.
Overs	seas	Overseas UG and PG numbers likely to be static, or may even dip, in the short- to medium term.
PGT H	Home/EU	Home/EU PGT numbers to grow, on implementation of the PGT review, especially over the medium-term.
PGR		Future growth of PGR numbers subject to review of their funding and development of sustainable funding.

For ease of projection, the following growth assumptions were used: +5% year-on-year growth in UG recruitment (Home/EU & OS); a 2% increase in PGT in 16/17 and then +5% each year after that; PGR flat.

Applying these assumptions to projected 15/16 student numbers produces the following growth trajectory:

#### Table 4: Student number projections 2015-2019 (2015 base, +5%)

		2010 20	(2010)	00001 000	5)	
	Year	15/16	16/17	17/18	18/19	19/20
UG		9,500	9,658	9,900	10,395	10,915
PGT		1,800	1,836	1,928	2,024	2,125
PGR		1,600	1,600	1,600	1,600	1,600
	Total	12,900	13,094	13,428	14,019	14,640

If some growth (+1%) for Overseas students is factored in, student number projections rise to +6% annually, producing the following:

#### Table 5: Student number projections 2016-2020 (2015 base, +6%)

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	Year	15/16	16/17	17/18	18/19	19/20
UG		9,500	9,690	9,981	10,580	11,214
PGT		1,800	1,836	1,946	2,063	2,187
PGR		1,600	1,600	1,600	1,600	1,600
	Total	12,900	13,126	13,527	14,242	15,001

On the basis of these two scenarios, our student body would grow from under 13,000 in 2015/16 to circa 15,000 by 2020.

However, these growth estimateswould not alter the balance between UG and PGT numbers over the period.

Further growth from 2020 to 2025.By 2020/21, there will bean undergraduate student population of almost 12,000, up from 9,500 in 2015/16. The implications of this growth for student accommodation, student services, colleges and facilities, including sports, will be significant. This could be a 'tipping point' where the size of our undergraduate body could damage the positive campus experience cited by students as a key reason for high student satisfaction at Lancaster.

As a result, there is a broad case to place a (provisional) ceiling on undergraduate student numbers at a certain point.

This would also help re-balance UG-PGT proportions in our student body, increasing the proportion as well as number of postgraduate taught students.

By 2020/21, PGT numbers are more likely to grow at a higher rate, on the back of implementation of the PGT review and a period of 3 to 4 years during which new awards could be created and become established.

#### Note: Data provided by Lancaster University on June 2016

### FUTURE CONFIGURATION OF STUDENT NUMBERS

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Table 6 provides a framework for re-balancing the university from 2020 to 2024, by holding UG numbers at 12,000 and increasing PGT by 6% per year and PGR by an additional 100 students per year, and then capping at 2,000.

#### Table 6: Student number projections 2020-2025

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	Year	20/21	21/22	22/23	23/24	24/25
UG		11,887	12,000	12,000	12,000	12,000
PGT		2,340	2,504	2,679	2,866	3,067
PGR		1,700	1,800	1,900	2,000	2,000
	Total	15,927	16,304	16,579	16,866	17,067

- Holding UG students constant could be managed by raising tariff, and so would have a positive impact on our league table positioning and ability to select students. This would increase the number of applications per enrolment, improving the stability of annual student recruitment.
- Growth in PGT would be a direct result of effective implementation of the PGT review.
- Growth in PGR from 2020/21 is based on an assumption that a sustainable model for funding doctorates will have been developed by then, and so expansion will be funded.
- Off-campus growth in the UK. The University awards degrees to students studying at three colleges in the UK.
- In 2014/15, 3,213 students graduated from our two key partner colleges in the UK Blackpool and the Fylde, and Blackburn. In addition, a small number of (circa 75) engineering students graduate through Furness College.
- These partnerships engage a wider population of students who would not necessarily enrol at a university and move away from their local community, due to local ties and family obligations. They therefore represent an important way of enhancing access to Higher Education (although not one that is measured through our OFFA agreement or HEFCE WP PIs).
- As such, there should be ongoing commitment to offering opportunities to these wider groups through our partner colleges. For the purposes of this paper, these numbers are assumed to stay constant over the period, with income indexed to inflation.
- There may be scope to explore increased levels of progression from both partner colleges onto Lancaster degrees at Bailrigg in the future.
- Off-campus growth outside the UK. Lancaster has approximately 6,500 students in its four non-UK ITP and campus locations. The approximate distribution is as follows: Ghana campus (450); India ITP (500); Malaysia ITP (2,600); Pakistan ITP (3,000).
- Both Ghana and Malaysia are expected to grow and demand is high for provision in both locations. For both, the key constraint will be teaching and study space, i.e. capital limitations.
- India has been static for some time, and so is unlikely to grow beyond current numbers.
- The University has not accepted new intakes of students in Pakistan, because of uncertainty about the dual degree. As such, no assumption of student numbers is included in this analysis.
- In addition, the University is exploring additional offshore campus presences, in China and the Gulf.
- We can assume growth in both Malaysia and Ghana, and Sunway's projections in particular are very positive.
- India will be flat, as evidenced by recent student enrolments.
- There are wider developments that would also lead to growth in international student numbers. These are incorporated into projections, albeit at smaller numbers.
- As a result, we can project between 10,000 and 12,000 students studying for Lancaster degrees outside the UK in a campus setting. Table 7 offers indicative student number projections.

	Year	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Ghana		450	600	900	1200	1400	1700	2000	2300	2500	2500
Malaysia		2800	3300	3900	4600	5400	6300	6600	6900	7000	7000
India		450	500	500	500	500	500	500	500	500	500
Other				250	500	750	1000	1250	1500	1750	2000
	Totals	3700	4400	5550	6800	8050	9500	10350	11200	11750	12000

#### Table 7: Indicative Student Projections Studying Outside the UK

### FUTURE CONFIGURATION OF STUDENT NUMBERS

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- Distance and open learning. There has been growth in distance learning in certain departments across the University in recent years, and this is seen as both an opportunity and necessity for future development in many parts of the University.
- There are opportunities to develop an institutional framework and platform for distance learning that in turn would enable online registration of students. As such, enrolments will increase for distance learning.
- Calculating the numbers and income from expanding distance learning is at this stage speculative. As such, projected student numbers are not included, although there may be a need to recruit specialist staff with expertise in DL.
- Overview. Overall, these projections indicate that Lancaster could move from circa 20,000 students in 2015/16 to 32,000 students by 2025. Of this growth, 4,000 would be at the Bailrigg campus, generating a student body by 2024/25 of 17,000. There would be overseas growth of 8,000 students, primarily in Ghana and Malaysia.
- his would represent a significant increase in our total student population, and would also generate income related to tuition fees and other sources of revenues associated with these increases.

#### Departmental Growth:

- The growth postulated in this paper will be driven by departmental strategies and approaches to course development and enhancement, recruitment, as well as overall positioning strategies.
- Overall, student recruitment growth looks set to increase across the University.
- However, patterns vary between departments.
- Growth assumptions for departments are presented in Table 8. These assumptions are based on actual student recruitment at subject and departmental level over the last few years, as well as departmental growth strategies as submitted to the planning cycle.
- Where there is a tension between actual recruitment patterns, on the one hand, and departmental strategy, on the other, the assumptions have moved towards actual performance and in particular recent outcomes.
- The growth assumptions in Table 8 represent likely future performance based on recent trends and outcomes. They are not 'hard wired' recruitment targets, and should not be seen as such.
- There is scope for departments with future growth plans that have not expanded in recent years to stimulate growth through their own interventions and actions. In these cases, as growth comes through, we will amend that department's growth assumptions as laid out in Table 8, Annex 1.

### FUTURE CONFIGURATION OF STUDENT NUMBERS

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Table 8 indicates that most departments assume either stable recruitment or managed growth for UG and PGT students

Table 8: 'Baseline' Department Growth Assumptions, 2016/17-2019/20
Note: these figures are assumptions relating to growth projections laid out in this paper, and so are polither targets per defined numbers for departments

Note: these figures are assumptions relating	g to growth p	projections la	id out in this paper, and so are neither targets nor defined numbers for departments.
Unit	UG	PGT	Overall postulated growth
EdRes	N/A	ñ	Development of PGT portfolio to complement taught doctorates.
English	é	ñ	Growth sustained in UG numbers and some increases in PGT.
DELC	≈	ñ	Potentially growth in UG, but sectoral trends downwards. New Masters produce PGTgrowth
History	é	ñ	Growth sustained in UG numbers and some increases in PGT.
LICA	~	~	Recovery against recent falls over next 2 years to give stability to recruitment.
Law	~	~	Recovery against recent falls to give stability to recruitment.
Linguistics	~	ñ	Some growth in PGT recruitment, and stability in UG numbers.
PPR	ñ	~	Continued growth in UG.
Sociology	~	Û	Stable UG but some continued fall in PGT.
BLS	ñ	Û	Recovery in UG numbers to some growth but some continued fall in PGT.
CETAD	N/A	ñ	Increased WBL and post-experience.
DHR	N/A	ñ	Development of PGT portfolio produces some growth.
Medical School	~	ñ	Assume no new UG numbers but growth in post-experience and WBL.
Chemistry	ñ	~	Incremental growth in UG.
Computing	é	ñ	Strong continued UG growth and consolidation of PGT increases.
Engineering	é	ñ	Strong continued UG growth and consolidation of PGT increases.
LEC	Û	~	Some ongoing falls in UG.
Maths & Stats	ñ	~	Some growth in UG.
Natural Sciences	$\hat{U}$	~	Continued falls in UG.
Physics	Û	~	Continued falls in UG.
Psychology	~	~	Recruitment stabilised.
AccFin	ñ	ñ	Managed growth in UG and PGT.
Economics	~	ñ	UG and PGT stable, with developments in PGT coming through later.
ESI	~	ñ	Recruitment stabilised.
Leadership & Management	N/A	*	Recruitment stable.
ManagementSci	~	ñ	Recruitment stable.
Marketing	ñ	é	Some UG growth and expansion of PGT.
OWT	~	ñ	Some PGT growth.
LUMS	≈	~	Recruitment stable.

### FUTURE CONFIGURATION OF STUDENT NUMBERS

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#### Implications

- Growth comes with consequences. In particular, there will be a need for additional investment of resources in order to accommodate such growth. In addition, there will be a need for organisational development, in order to ensure our processes and approaches are still fit for purpose as the student body grows.
- This section maps out the most likely implications of growth, and is intended to be a guiding framework for supporting future institutional expansion of student numbers.
- Financial. The student growth projections will increase the University's revenues. Assuming surpluses are sustained, or projections exceeded, student growth will enable investment in the University, so increasing its size.
- Staffing. The immediate investment requirement will be in staff, both academic and administrative. Given growth is through student recruitment, new academic staff will need to be appointed to service the additional teaching requirement. Detailed analysis will be needed to determine overall numbers and distributions across departments (given the increase in student numbers will not be uniform).
- By way of illustration, at an SSR of 13.7 –our reported SSR in the Times/Sunday Times University Guide the number of academic staff would increase by 350 between 2015/16 and 2024/25, and by 173 by 2020.
- REF scale and size of return. This increase will be particularly important for future REF exercises, given the focus on power and levels of research intensity. Assuming an 80% return of academic staff, this growth would equate to an additional 138 returned staff in the 2020 REF, and 280 additional staff who could be returned by 2025.
- Departmental growth. Some departments will grow more quickly than others, and so will need investment to manage this growth. Departments that see repeating falls in student recruitment may have to review their costs.
- Space. Additional students will need more space for teaching, study, lab and studio work, and for extra curricula activities such as sports and societies. In order to increase student numbers, in other words, the University's capital plan will need to be aligned to projections in order to provide the space to cater for increases in student numbers.
- 73. Equipment and infrastructure. Recruitment of additional students is likely to have an impact on subjects that are expensive because they are lab-based and use equipment for teaching as well as research. Student growth in expensive subjects will need to be considered in terms of the impact on surpluses.
- Professional services. As well as growth in academic staff, there will need to be an increase in administrative support. Central services such as admissions and student-based services will have more applications, enrolments and students to support. Work needs to be done on determining the appropriate proportions of administrative and support staff per student and academic.
- Colleges. The increases in UG recruitment outlined in this paper will require creation of additional colleges in order to ensure the collegiate experience is open to all students. The number of additional colleges needs to be determined based on the appropriate and optimum size of a college.
- Course development.Student growth is unlikely to arise only from existing courses. As such, an essential component of this growth will be development of new courses. These could be in existing subject areas, through diversification of degree awards.
- There is also scope for development of new subject areas, either in sub-disciplines or in new subject areas. Examples taken from the Guardian include: archaeology, architecture, building, classics, dentistry, engineering (civil, electronic, materials and mineral), health professions, journalism, sports science, town and country planning, veterinary science.
- Entry into multiple new subjects could be risky and costly. However, it could also generate net additional revenue streams and lead to new areas of research and subject expertise emerging at Lancaster. As such, there is a need to consider which possible new subjects could present opportunities for extending our portfolio of courses by establishing academically and financially viable new programmes.
- Scale effects. The growth projected in this paper is focused on student recruitment. There are other opportunities for growing income and overall scale of organisation, including in particular research grant acquisition and diversification, as well as enterprise (business partnerships, regeneration and structural funding, knowledge exchange and IP development).

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- This raises a key question, namely: will student growth, as projected, create the scale effects pursued by Lancaster in order to increase its overall capacity and ability to invest in further growth?
- Environment. Growth brings with it environmental considerations and potential concerns. Development of new facilities, for example, can increase our carbon footprint in many ways. There is a need therefore to consider how we can 'design in' good practice in environmental impact and management into expansion of our estate.

#### Testing the proposition

- Viability. The projections in this paper appear logical, in the sense that they assume reasonable but not excessive growth and are based on data that has been analysed to assess for growth potential.
- A key next step will be to examine and test these projections to determine their likelihood and credibility. In particular, we should consider:
- Are student growth projections realistic and achievable?
- What changes to curriculum and portfolio will be required to underpin growth?
- What effects to student and learning support will we need to consider?
- What space and infrastructure needs will be needed?
- Are our current processes effective to deal with this growth?
- What sensitivities and influences will affect student growth?
- We should also consider reviewing on a regular basis growth parameters and recruitment to determine whether this framework needs amending.

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