

# THE UNIVERSITY OF SHEFFIELD MASTERPLAN 2014

## FeildenCleggBradleyStudios

Feilden Clegg Bradley Studios  
Bath Brewery  
Toll Bridge Road  
Bath  
BA1 7DE  
+44 (0)1225 852545



Grant Associates  
22 Milk Street  
Bath  
BA1 1UT  
+44(0)1225 332664



AECOM  
2 City Walk  
Leeds, LS11 9AR  
T +44 (0)113 391 6800

# Contents

<b>FOREWORD</b>		
by the Vice Chancellor		
<b>1.0</b>	<b>INTRODUCTION</b>	
	<i>Defining the Masterplan Objectives</i>	
1.1	Purpose and Approach	
1.2	Reference Documents	9
1.3	The University's Brief	10
1.4	Estates Strategy 2010-2015	11
1.5	Masterplan Objectives	12
		13
<b>2.0</b>	<b>THE CAMPUS IN CONTEXT</b>	
	<i>Defining Opportunities and Constraints</i>	
2.1	Location	
2.2	The Wider Estate	16
2.3	Historic Context	18
2.4	The Growth of the University	20
2.5	The Campus and the City	22
2.6	Academic Shape	24
2.7	Central Campus	26
2.8	Advanced Manufacturing Research Centre with Boeing	28
2.9	University Buildings	30
2.10	Transport and Infrastructure	32
2.11	Topography and Density	34
2.12	External Realm Context	38
		42
<b>3.0</b>	<b>KEY STRATEGIES</b>	
	<i>Defining the Masterplan Strategies</i>	
3.1	Shaping a Response	
3.2	Concept	46
3.3	External Realm Character	48
3.4	Transport and Infrastructure	52
3.5	A Sustainable Campus	58
		62
<b>4.0</b>	<b>A MASTERPLAN FOR THE UNIVERSITY</b>	
	<i>Illustrating the Key Strategies</i>	
4.1	The University of Sheffield Masterplan	66
4.2	Phased Projects	68
4.3	Development Options for Hounsfield Site	70
4.4	Masterplan Aerial View	71
<b>5.0</b>	<b>KEY PROJECTS</b>	
	<i>Design Guidelines for the Urban Realm</i>	
5.1	Reconciling People, Place & Traffic	74
5.2	Arts Tower Court	86
5.3	Concourse	90
5.4	Leavygreave Road	92
5.5	St George's Green	96
5.6	University Square, Hounsfield	98
<b>6.0</b>	<b>CONCLUSIONS &amp; RECOMMENDATIONS</b>	103



The  
University  
Of  
Sheffield.



**Above: Firth Court**  
*(Photo University of Sheffield)*

# Foreword



***From the earliest days when local people and organisations made penny donations to establish a fund to ensure its establishment, the University of Sheffield has been clear about the importance of its roots in one of Britain's greatest cities.***

***More than a century on, we have seen enormous social and political change, not least in the field of Higher Education, especially over the last decade. Those changes create both massive opportunities and significant challenges for all universities, with increasing competition for home and international students, a more challenging environment for securing research funding and the need for an ever more globalised perspective.***

Developing an estate which allows us to provide world class teaching and learning facilities for our students and staff is certainly a major priority. But so too is the desire to be firmly part of our city and to create a safe and welcoming environment which encourages people from all walks of life to see it as their University.

We're proud of the city's heritage and our remarkable history of innovation and determination and we believe that we have an important role to play in contributing to city vibrancy. This Masterplan will help us to do that, by setting out an ambitious approach to improving the quality of the built environment in our part of the city and the spaces which tie the urban architecture together. We'll also invest in transport and travel networks so that everyone using our campus can enjoy a better, safer and healthier experience.

This Masterplan, which covers the period to 2025, sets out our vision for our estate. We've worked closely with staff, students, City Council colleagues and a team of internationally leading architects and transport planners to create a plan which responds to the needs of academic staff and students by providing the best possible spaces for teaching and learning – not just within the buildings, but across the campus, with attractive public spaces where people can meet, talk and share ideas – the ideas that are at the heart of what the University stands for.

The University's Campus Masterplan focuses on four main themes:

- To manage growth within the University
- To radically improve the public realm and the civic spaces within the built environment
- To develop an integrative transport strategy which improves safety and enjoyment of our campus, whether walking, cycling or using public transport
- And to make a positive contribution to the challenge of building, working and living in an environment which is more sustainable and has the least possible impact on the world's finite resources.

We want to foster our valuable links with the City of Sheffield and the wider region and its businesses, and to encourage our staff and students to achieve their full potential. Creating the right environment for that to happen is vital and we believe that this Masterplan shows our commitment to achieving that through collaborative and inspirational ways.

VC Professor Sir Keith Burnett CBE  
Vice Chancellor of the University of Sheffield

*Members of the University Masterplan Working Group*

Terry Croft, Director of Operations  
Andy Clayden, Department of Landscape  
Eckart Lange, Department of Landscape  
James Hitchmough, Department of Landscape  
Fionn Stevenson, School of Architecture  
Abdi Suleiman, Former Students' Union President  
Alasdair Buckle, Former Students' Union President  
Keith Lilley, Director of Estates and Facilities Management  
Andy Fallon, Head of Estates Development  
Kay Green, Space & Strategy Manager

David Caulfield, Director of Regeneration & Development Services Sheffield City Council



**The Arts Tower and Western Bank Library**  
*(Photo Henk Snoek)*

The background of the page is a detailed, light gray architectural site plan or floor plan. It shows a complex arrangement of buildings, courtyards, and walkways, typical of a large institutional or university campus. The plan is oriented diagonally, with the top-left corner of the page being the top-left of the plan.

# PART 1 INTRODUCTION



Above: Sir Frederick Mappin Building    Right: Cafe terrace at Jessop West  
*(Photo Ian Spooner / Shaun Bloodworth)*



# 1.1 Purpose and Approach

The University of Sheffield appointed FCBS, Grant Associates and AECOM Highways to undertake a Masterplan Study in February 2013, working with key representatives within the University.

The Masterplan is to build upon University Estates Strategy 2010-2015 and integrate with the Sheffield City Centre Masterplan and wider planning policies. These are listed in the following section 1.2.

This Masterplan is designed specifically to support the University's academic excellence through the built environment. It is informed by the University's mission, vision, identity and underpins our ambition to maintain and grow the success of the University.

The University is also changing; we are now operating at three principle sites

- Endcliffe and Ranmoor Student accomodation
- The Central Campus
- Our AMRC/Campus East

Our activities have changed and now include a much greater extent of research with the private sector, and teaching of apprentice engineers.

From the outset the specific aims of the Masterplan study are:

*A review of the development opportunities for future buildings to allow the University to grow over the next 15-20 years in line with academic/faculty plans*

*The development of a public realm strategy to establish the fundamental characteristics of the University quarter and reflect the high quality of the University's academic performance*

*The development of a transport strategy that complements the Masterplan principles, enhancing pedestrian routes and encouraging the use of bicycles and public transport*

*To work closely with Sheffield City Council to complement and enhance our city and promote Sheffield as a place to live and work*

*The development of a sustainability strategy for the public realm, and a wider review of the University Energy Strategy making a positive contribution to the University and the management of climate change.*

The overarching purpose of this study is to recommend a series of strategies for the creation of a unified University campus that is both identifiable and integrated with the city, providing an outdoor environment that enhances the experience of students, staff, visitors and the wider community, and encourages interdisciplinary opportunities by creating space for researchers, academics and students to meet. These interactions are essential activity in a successful University. The estate must provide spaces for this activity to occur.

The campus will also promote health and well being by providing environments that encourage healthy working and living.

Strategies for new or transformed spaces have been developed hand-in-hand with strategies for new or modified building opportunities. The output of this study in terms of recognised development potential is intended to help inform the University's capital project framework for the next 15-20 years.



## 1.2 Reference Documents

The following documents have informed this study:

### UNIVERSITY DOCUMENTS

TUoS Estates Strategy 2010-2015 + Appendices, January 2011

TUoS Energy Strategy, May 2102, by Arup

Masterplan Stage 1 Study 2012, by Hawkins Brown

Estates and FM List of Capital Projects 2012

Development Framework, January 2003, by Turnberry Consulting

TUoS Biodiversity Action Plan

TUoS Space Property Boundaries 2013

Integrated Transport Policy

TUoS Draft Travel Plan 2013

TUoS Pedestrian Surveys

Arts Tower and Library Conservation and Management Plan

### CITY DOCUMENTS

Sheffield City Centre Masterplan 2013 Consultation Draft

Sheffield City Centre Urban Design Compendium

Sheffield Economic Masterplan

Sheffield City Centre Breathing Spaces Strategy

City Centre Masterplan 2008

Sheffield Unitary Development Plan

The Gold Route - Sheffield City Centre Public Realm



**St George's Church**

*(Photo University of Sheffield)*

## 1.3 The University's Brief

*The following is an extract from the University Briefing Document for a New Masterplan 2012:*

Higher Education has seen significant changes to the funding regimes following the Lord Browne review. Increasingly our students will seek value in all aspects of their University life not just academic excellence. The introduction of full fees capped at £9,000.00 per annum will represent a significant investment for students and their families. With some courses extending to 5 years duration together with living expenses students could be investing up to £90,000.00 in their Higher Education.

Sheffield, as Times Higher Education (THE) University of the Year for 2011/12, has developed a strategy based on our values which are rooted in the founding principles of the University. The THE awards particularly praised the University's determination and grit in focusing on our local community. The University was assessed as a high quality research led, with values of confidence, flare and determination to 'roll our sleeves up'. In addition the University was voted Number 1 in THE Student Experience Survey 2014. This included the award of #1 for Facilities, Accommodation and Students Union. The University is determined to continue this success and to further enhance the experience of studying at Sheffield both academically and in all other aspects of the student experience.

The quality of the built environment at Sheffield has some very notable iconic buildings which are maintained to a high standard. The recent refurbishment of the landmark Arts Tower is one such building. Newer examples such as the Information Commons, Jessop West and the refurbishment of Jessop Victorian all represent varied style and design of the built environment but provide excellent high quality facilities for staff and students alike.

The increasingly interdisciplinary nature of the University's teaching and research has a significant impact on co-locating departments. This interdisciplinary approach also requires staff and students to move quickly, efficiently and safely across campus.

The previous Masterplans have provided a template for the organisation to progress in terms of the built environment. Significant challenges however remain with regards to cohesion of the campus, a genuine point of arrival, pedestrian movement, travel and access and in particular the public realm which is generally of poor quality with little provision of green space.

As a city centre campus the University is challenged by the lack of green space and in particular public open spaces which provide opportunities for informal meeting and gathering.

The University has in recent years provided increasing numbers of high quality informal meeting spaces particularly where interdisciplinary discussions can take place. These spaces are essential in a modern research based University which is relying upon innovation between disciplines in order to explore the potential for new research and development. Similar high quality external spaces are lacking and will form a vital component of our Masterplan.



**Jessop West**  
(Photo Shaun Bloodworth)

## 1.4 Estates Strategy 2010-2015

*From the Estates Strategy 2010-2015:*

### Vision

The Estates Strategy sets out the vision for the University estate through to 2015. It builds upon the previous strategy from 2007 and the development framework of 2003. The time span of the strategy is designed to address the challenges facing the University and its estate over the next five years. The strategy also considers the next tranche of government funding for capital investment which covers the period to 2014, should this allocation be realised. The strategy is designed to support the academic planning horizon to 2015.

### Academic Strategy

The University's academic strategy continues to focus on quality and growth. Home undergraduate student numbers have previously been constrained by government caps. The University has however achieved success in attracting additional home undergraduates following the changes to the recruitment regulations. Government announced in December 2013 the abolition to recruitment caps. This change underscores the need for the University to compete representing both an opportunity and a threat. The University has been successful in attracting increases in postgraduate taught and postgraduate research students. The University is pursuing growth in overseas undergraduate students, particularly in the faculties of Engineering and Science, where demand continues to grow.

### Carbon Management and Sustainability

The future direction of the estate is strongly influenced by the growing and urgent need to reduce our impact on the environment and in particular to reduce our CO2 emissions in response to climate change. This strategy is intended to focus the emphasis on efficient use of the University estate, with investment to refurbish existing accommodation representing a key tenet of investment. This approach will deliver improvement in space utilisation, environmental performance and will reduce CO2 emissions wherever possible.

### Condition

The condition of the estate has improved significantly over the last three years up to 2013. A total of 56 per cent of the occupied non-residential space was in good or excellent condition (RICS assessment A/B). The emphasis on refurbishment of existing accommodation rather than new build will continue and underscore this improvement in the estate. The Estates Strategy originally set out a target of achieving 65% of the estate at condition A/B by the end of 2015. With targeted investment and continued capital development of the estate, this is already exceeded and at the end of the academic year 2012/13 the assessed condition was 72.9%.

### Efficient and Effective Estate

The achievement of expansion in student numbers will place changing and increasing demands on the physical estate which will require new ways of working to deliver increasingly efficient use of space. In particular, the number and capacity of teaching spaces to support large cohort teaching to undergraduate students is being explored alongside changes to the delivery of the teaching timetable.



**Sir Frederick Mappin Building**

*(Photo Ian Spooner)*

## 1.5 Masterplan Objectives

This Masterplan will set the strategic context for the next Estates Strategy which will need to be developed for the academic year 2015/16 through to 2020/2021. The Estates Strategy articulates the framework for developing the University's capital investment programme and is written with detailed reference to academic faculty plans and faculty estate requirements. Set in the context of the Masterplan, the Estates Strategy will allow the University to develop a detailed delivery programme for the necessary changes to support the University's mission, vision and identity with specific reference to the estate supporting our academic plans and aspirations. The Masterplan will also focus on the campus external realm and development potential. The objectives for the Masterplan can be identified as follows:

### **IDENTITY**

To create a unique and unified identity for the campus public realm, that befits a world class university.

### **INTEGRATION**

To celebrate the campus setting within the City of Sheffield by being both an identifiable 'University Quarter', and an integrated and permeable part of the City.

### **COHESION**

To create an external realm that promotes the cohesion of all aspects of the campus, whether it be reconnecting a campus fragmented by roads, consolidating diverse buildings, or promoting inter-faculty connection around shared outdoor teaching spaces.

### **GROWTH**

To develop a framework for future acquisition and development that will safeguard the University's ability to grow and supply future demand with excellent facilities.

### **POSITIVE MOVEMENT**

To give precedence and ease in the campus to walkers and cyclists, to both encourage sustainable forms of transport and also enliven the campus spaces with positive forms of movement and support safe efficient movement across campus.

### **A SUSTAINABLE CAMPUS**

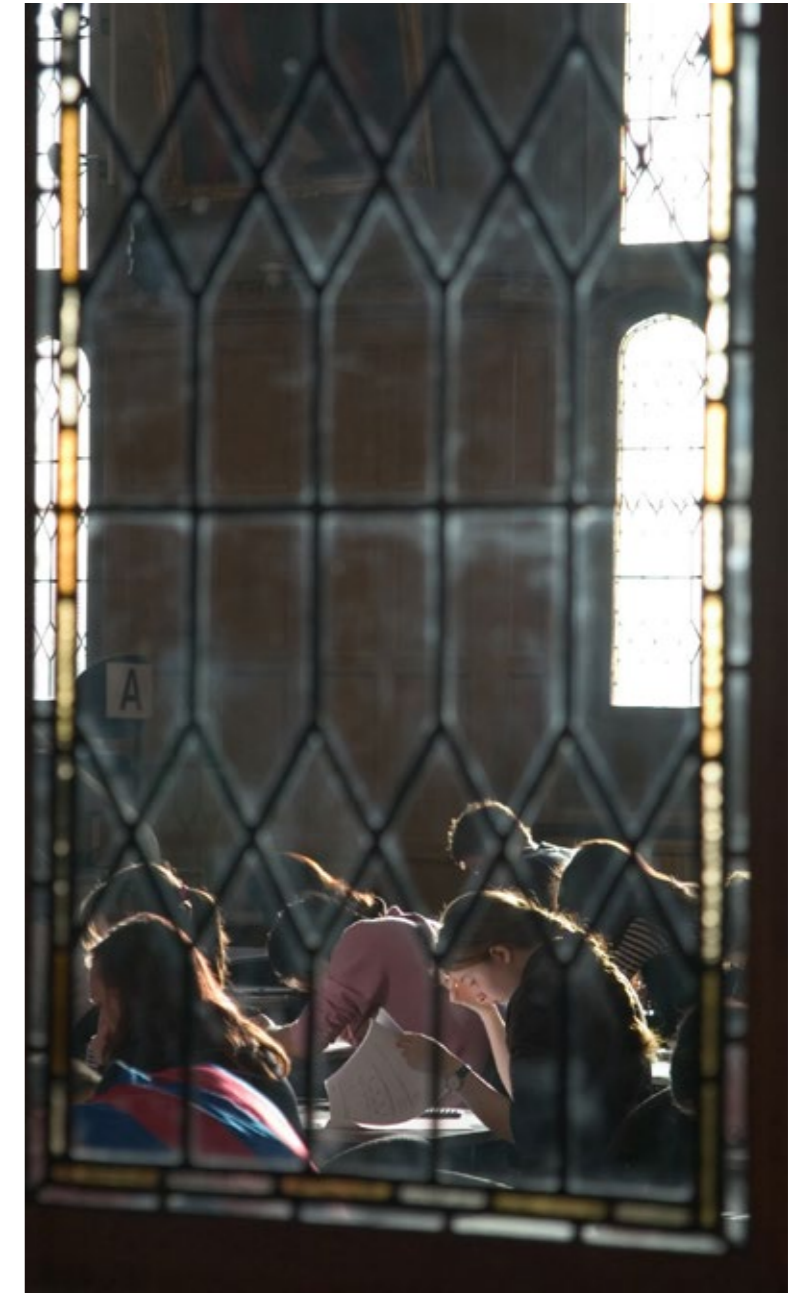
To create a campus external realm that truly embodies the University's ethos and ambition in environmental design, exemplified by their 2010-15 carbon reduction targets.

### **GREEN SPACE**

To create an external realm that is appropriate to an Urban Campus, but that is also rich with green spaces of all scales to help promote learning, well being and healthy lifestyles.

### **LEARNING SPACE**

To create a campus landscape that forms an integral part of the University's study and teaching assets; one that provides space and sometimes the subject matter for study and teaching.



**Firth Court**  
(Photo University of Sheffield)



**The Students' Union and Concourse**  
*(Photo Andy Brown)*