



University College Dublin
An Coláiste Ollscoile, Baile Átha Cliath



Ireland's Global University

UCD Strategic Campus Development Plan 2016-2021-2026





President's Statement

Universities have always been drivers of economic growth and social change. In Ireland, our higher education system has played an invaluable role in contributing to the country's economic recovery, as well as enhancing its reputation abroad.

As a university we hold a unique place in society, offering an environment where information and knowledge are used to educate and develop highly skilled individuals, to stimulate innovation and to create new knowledge through research.

Our mission is to contribute to the flourishing of Dublin, Ireland, Europe and the world. We will achieve this through the excellence and impact of our research and scholarship, the quality of our graduates and our global engagement. We will also provide the supportive community and environment in which every single member of the University is empowered to achieve their full potential.

In order for UCD to provide the best education, we are planning developments in areas which reflect both our strengths and the needs of the global economy and society. This UCD Strategic Campus Development Plan 2016-2021-2026 sets out a ten year development framework for the Belfield Campus. The Plan focuses on providing the physical infrastructure necessary to achieve the University's mission in terms of state-of-the-art education, research and innovation, student residences, sports, recreation and support facilities.

We will promote the sustainable development of an attractive, friendly and accessible environment which encourages engagement with university life and local communities.

We are very fortunate to have such a unique landscape setting as the Belfield Campus, and this will be further enhanced to provide social and cultural amenities while also maintaining ecological diversity.

By adopting a holistic, student-focused and research-led educational experience, all of our development activities are driven by a vision for a world-class learning, working and living environment. This supports our goal of being a global top 100 university.



Professor Andrew J. Deeks
President, University College Dublin

Preface

The purpose of this UCD Strategic Campus Development Plan 2016-2021-2026 is to communicate the broad direction of future physical development of the Belfield Campus in terms of the facilities required to support the University's vision of being a global top 100 university.

As part of Ireland's largest and most globally engaged university, the UCD estate incorporates circa 389,000sq.m of building floor area with an insurance replacement value of €1.17 billion.

The estate facilities are predominantly based at the main Belfield campus with additional accommodation provided at Blackrock, Lyons Research Farm, Newman House, and various hospital locations.

The UCD Strategic Campus Development Plan 2016-2021-2026 seeks to:

- Deliver a Campus Development Plan to support the UCD Strategy 2015-2020.
- Support the delivery of world-class facilities designed to meet the evolving needs of a modern university.
- Deliver high architectural quality with a focus on sustainable design which minimises the impact of the campus on the environment.
- Strengthen and consolidate academic disciplines and the Character Areas of the Belfield Campus.
- Protect and develop the Belfield sylvan setting and biodiversity within the campus.
- Develop the campus community, improve public leisure and recreation areas and facilitate interaction between faculty, staff, students and the public.
- Reach out and foster engagement with the local community, both in the immediate environs of the campus and in the wider city.
- Facilitate the delivery of high quality residential accommodation to meet the needs of a growing student population.
- Support the new UCD Campus Travel Plan in order to maximise accessibility of the University in the most sustainable way in line with national policy.

We thankfully acknowledge the contributions of the following:

- UCD Capital Projects Group: Professor Andrew J Deeks, Professor Mark Rogers, Professor Orla Feely, Professor Michael Monaghan, Mr Gerry O'Brien, Ms Orla Tighe and Mr Aidan Grannell
- UCD Governing Authority
- UCD Finance, Remuneration and Asset Management Committee
- UCD University Management Team
- UCD University Relations
- UCD Community
- Dún Laoghaire Rathdown County Council
- National Transport Authority
- Local Residents Associations

This Report incorporates advice and input from:

Arup Consulting Engineers, McGill Planning Consultants, Mitchell Landscape Architects and MOLA Architecture

UCD Estate Services





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1. Context

1.1 Introduction

Since its foundation in 1854, UCD has made a unique and substantial contribution to the creation of modern Ireland.

UCD is ranked in the top 1% of higher education institutions in the world, and has become Ireland's largest and most globally engaged university. UCD attracts more first preferences from Irish students than any other university in the country.

A report¹ on the value and impact of UCD's activities to the Irish economy was undertaken in 2015, and highlights UCD's key role as a major economic actor and employer in Ireland. UCD generates €1.3bn in total economic output annually, making a very significant contribution to the national economy.

Enterprise Ireland estimates that a direct economic impact of around €345m resulted from expenditure by international students in Irish higher education in 2012, with a further €120m from related friends and family tourism. UCD has become the destination of choice for international students coming to Ireland. It is home to some 6,600 international students who add to the richness and diversity of the University community and contribute significantly to the local economy.

UCD continues to have a positive impact on innovation, employment and job creation through its teaching, research and outreach activities, and through UCD's technology transfer and enterprise development team at NovaUCD. Between 2003 and 2013, the University provided business development support to nearly 250 companies and early-stage projects through incubation services and supports provided at NovaUCD. Nearly 130 of these companies are or have been based at NovaUCD and availed of business unit facilities or bio-incubation units within the on-campus centre. In 2015, UCD won two of the four national Knowledge Transfer Ireland Awards, recognising the University's achievements in licensing technologies and in supporting successful spin out companies.

One of today's key challenges is to understand the impact of evolving trends across the university sector. As the changing student demographic shifts towards increasing international student numbers, postgraduate education and life-long learning, students develop more diverse expectations of UCD. The evolution of teaching programme delivery methods, self-directed learning, enhanced team-work, creativity and the use of technology, require a flexible range of facilities which can meet the changing needs of faculty and students.

A second key challenge focuses on student numbers: Higher Education Authority projections estimate that full-time student numbers in Ireland will increase from nearly 168,000 in 2014, to nearly 193,000 in 2024. This represents an annual increase of circa 1.5%. UCD will continue to experience growth over the next decade, further delivering on its responsibility to provide a high quality educational environment which will fulfil a national remit. With increased numbers of Irish and international students, it is projected that the UCD student population will grow from c.26,750 in 2015 to c.28,750 by 2020 and may reach 30,760 by 2025.

The priorities for campus development have been identified through consultation with University senior management, faculty, staff and students in conjunction with the Governing Authority and Finance Committee. External consultation with local resident groups, Dún Laoghaire-Rathdown County Council and the National Transport Authority also contributed to the preparation of this document.

The purpose of this Strategic Campus Development Plan is to communicate the broad direction of future physical developments of the Belfield Campus in terms of the facilities required to support the University's vision of being a global top 100 university, and to provide an informed context.

The UCD Strategic Campus Development Plan 2016-2021-2026 is guided by the regulatory County Development Plan 2016-2021, and is cognisant of the statutory planning processes remitted to Dún Laoghaire Rathdown County Council as Planning Authority for the County, including the Belfield Campus. The Strategic Campus Development Plan will be reviewed periodically to reflect on progress and changing University needs.

¹ Delivering Impact: The Economic, Social and Cultural Impact of University College Dublin, 2015



1.2 Vision

UCD seeks to deliver an educational experience that defines international best practice and to enhance its programme offering continuously.

Two key focal points of the University's vision for 2020 are:

- UCD will be a pre-eminent, diverse and inclusive scholarly community of students, faculty and staff who, while contributing to the development of Ireland, have global standing, understanding and impact. UCD will continue to be an excellent research-intensive university, where a comprehensive suite of strong disciplines forms the foundation for high quality interdisciplinary research, scholarship and innovation. Through world-leading disciplinary and interdisciplinary research, UCD will vigorously tackle significant global issues and challenges.
- UCD will be known around the world as Ireland's Global University. As such, UCD will be truly global in its comprehensive range of disciplines, in the reach and impact of its research and innovation, in its holistic educational experience, in the diversity of the University community, in its engagement with all sectors of society and the world, and in the quality and extent of the UCD campus and facilities.

The campus acts as a major recruitment tool not only for students but also for attracting the best faculty and staff.

Future investment in campus facilities will ensure that students and faculty have optimal access to new approaches to education, research and innovation, while advocating a sustainable healthy and living campus environment.

1.3 Evolution of the UCD Belfield Campus

The new UCD Strategic Campus Development Plan 2016-2021-2026 will build on the heritage and strategies outlined in earlier development plans.

The origin of the Belfield Campus dates back to the 18th century with the development of a number of estate houses and their associated lands. In the 1930s, the purchase of lands at Belfield enabled UCD sporting activities to commence. The strategic acquisition of lands since the 1930s has created a 133 hectare campus in a sylvan setting with primary access off the Stillorgan Road (R138).

When new science facilities opened at the suburban Belfield location in the 1960s, it was a first step in the vision to co-locate the majority of academic activities onto a single campus. In time this would enable the University to grow to its full potential.

From the 1960s through to today, the evolution of the Belfield Campus has been guided by a series of Campus Development Plans. The earlier formative development took place under the auspices of the Andrzej Wejchert Masterplan², first prepared in the 1960s. Since then the Campus Development Plan has been updated every 5-10 years to reflect the changing needs of a growing university.

Such plans have enabled UCD to establish a modern and integrated campus in a planned and coherent manner and to successfully relocate all undergraduate teaching to the Belfield Campus.

A key objective outlined in the UCD Campus Development Plan 2005-2010-2015 was the consolidation of the academic core of the Belfield Campus and, specifically, the redevelopment of the original UCD Science Centre, which is now over 50 years old. Other high level objectives such as the expansion of residential and recreation accommodation were also actively promoted.

The UCD Strategic Campus Development Plan 2016-2021-2026 recognises that future campus development will be a blend of both new construction to support future growth, and the extensive refurbishment of older buildings which have now reached a stage in their lifecycle when significant investment is required.

In this regard, it is envisaged that much of the future planned development will occur within the academic core of the campus, with minimal development at the campus periphery other than as outlined in the Residential Character Area (ref. Section 4.3).



² Following an international competition Polish-born architect Andrzej Wejchert was appointed in 1963 to develop a Masterplan for the development of the Belfield Campus. The keynote of his design is the arrangement of buildings at either side of a pedestrian mall of interesting and irregular shapes. His attention to geometry is most clearly expressed by his sculptural concrete water tower at Belfield





1.4 Recent Achievements

Significant developments have occurred over the lifetime of the UCD Campus Development Plan 2005-2010-2015, including the following:





Construction of the 6,300sq.m new **UCD Sutherland School of Law Building** at the heart of the academic campus, 2013.



Significant investment in the pedestrianisation of the heart of the campus, most visibly in the areas surrounding the **UCD Sutherland School of Law Building**, UCD O'Brien Centre for Science and the UCD Student Centre.



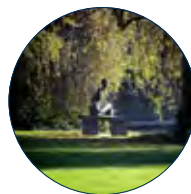
Although primarily designed as a storm water attenuation feature, the new **Upper Lake** incorporates careful consideration of ecological benefits to the indigenous wildlife and acts as a biodiversity hub.



Acquisition of the 5,000sq.m **NexusUCD Building** at Belfield Office Park on the campus boundary, delivering additional space for innovation and start-up companies, 2012.



Construction of 16,200 sq.m new **student residences** at Roebuck on the Belfield Campus and at Proby on the Blackrock Campus, with complete refurbishment of 27,300 sq.m at Merville and Belgrove Residences on the Belfield Campus, 2005-2014.



The introduction of **enhanced landscape and biodiversity initiatives**, such as woodland walks, water features and artwork, ensuring a variety of cultural, recreational and community amenities.



Enhanced **cycle networks and parking facilities**, including the standardisation of bicycle stands.

and more...

- Active tree management programme which has seen the expansion of the campus tree portfolio from circa 25,000 trees in 1998, to over 50,000 trees today.
- Development of external playing pitches including all-weather facilities, an enhanced Belfield Bowl and improved changing facilities.
- Increased engagement with Dublin Bus and the provision of new bus terminus and bus parking facilities designed to promote greater use of public transport.
- The introduction of parking demand management and shuttle bus services between the campus and Luas/DART facilities.
- UCD has made notable progress towards achieving ambitious Public Sector 2020 Energy Targets of 33% improved efficiency, improving its energy efficiency by 25.6% when compared to the 2006-2008 baseline.
- UCD has been awarded ISO50001, the international standard in energy management and is the first Irish University to achieve full organisational certification for the management of both energy and water.
- Acquisition of adjacent lands at Little Sister Convent.

1.5 Belfield Campus 2016



Map of Current Campus



2. Scope

2.1 Purpose of the Plan

In order to ensure sustainable growth, the campus should be an attractive place to study, live and work.

The purpose of this Strategic Campus Development Plan is both to guide physical expansion and to inform a range of internal and external stakeholders about the potential development direction of the Belfield Campus over the coming decade.

The continued growth of the University and the enhancement of its national and international reputation require a strategic planning approach to the physical environment.

This requires consideration of a broad range of issues, including the general quality of the environment, sustainable development, cultural and recreational facilities, interaction with neighbouring communities, and access to public transport networks.

The UCD Strategic Campus Development Plan 2016-2021-2026 promotes a sustainable, healthy and living campus community through the development of both academic and non-academic facilities, increased on-campus residences, greater social and cultural engagement, and the promotion of knowledge-based, industry-linked research and innovation facilities.

This Plan sets out a ten year development framework for the Belfield Campus. This focuses on the provision of physical infrastructure necessary to fulfil the University's mission and ambition to be ranked within the world's top 100 universities.

The framework supports key University objectives in terms of the student experience; strengthening the disciplines; strong interdisciplinary research, innovation and education; and attracting an excellent and diverse campus community.

The Plan articulates the principles underpinning the sustainable physical development of the campus in terms of:

- Supporting the University's strategic objectives.
- Ensuring strategic, coherent and integrated location of activities.
- Re-imagining the campus to provide enhanced support of the UCD community.

- Providing an attractive and friendly environment, to encourage engagement of faculty, staff, students and the wider local community to share in the benefits of the campus and the activities it houses.
- Promoting excellent building design, including sustainable use of campus lands.
- Fostering an accessible and sustainable campus environment, including a green infrastructure network which promotes landscape, biodiversity and heritage.
- Responding to regional and national level plans, policies and strategies and translating their vision at the University level.

Reflecting the successful evolution of the Belfield Campus, guided by earlier plans, the new Strategic Campus Development Plan introduces the concept of three significant campus 'Character Areas': the Education, Research and Innovation Area; the Residential Area; and the Sports and Recreation Area. Each Character Area will promote a primary use with complementary and ancillary uses as appropriate.

The Belfield Campus is a unique national resource, with the most diverse array of publically accessible educational, cultural, sports and recreation facilities. UCD is engaged in significant outreach programmes and as a focal point for the wider local community, Belfield provides playing pitches, swimming pool, woodland walks, sculptural art trails, exhibition, cultural and other recreation facilities.

Further to the investment in existing accommodation, expansion of both academic and non-academic facilities is planned and in particular, additional student residential accommodation.

Retaining the open character and recreational amenity of the campus landscape, the UCD Strategic Campus Development Plan 2016-2021-2026 will promote a coherent and integrated green infrastructure campus network. This will enhance biodiversity; provide readily accessible open spaces, sporting and recreational facilities; maintain the landscape character; and provide for the sustainable management of water.



2.2 Sustainable Development Overview

The University commits to the ideals of sustainability and to promoting the campus as an exemplar of sustainable development. This is a core theme of the UCD Strategic Campus Development Plan 2016-2021-2026, and is referenced throughout, while some of the key ideals are discussed below.

The effect of all developments on the environment, both in terms of initial construction and the life-time of the building, are carefully considered. The UCD O'Brien Centre for Science is an embodiment of this approach, achieving a BREEAM Excellent award in sustainability for the way in which the building was designed and constructed. The University's focus on sustainability can also be seen in the Roebuck Castle Student Residences which are certified to Passivhaus standard, and in the new Ashfield Residences which incorporate low-energy design, a significant solar energy installation, rainwater harvesting and features a "green" roof.

UCD is committed to delivering the Public Sector 2020 Energy Targets of 33% improved efficiency, having achieved a 25.6% reduction to-date. This ambitious target will be achieved through continuous improvement of the UCD energy management system in line with ISO50001, the integration of energy efficient design features in new construction and major refurbishment works, as well as through enhanced user behaviour facilitated by energy awareness and engagement campaigns. New developments and major renovations present a significant opportunity to improve the sustainability of the buildings on campus. Demonstrating UCD's continued commitment to sustainability, the University will promote innovative design features in new build and renovation projects. Buildings will be well insulated, use sustainable sources of materials

and integrate sustainable design elements. In addition, buildings will be attractive, comfortable and responsive to the needs of the occupant and a modern university.

A considerable proportion of the building portfolio was constructed in the 1960s and 1970s. As these buildings continue to age, issues such as building condition, functional suitability and regulatory compliance will arise. A modernisation programme will be put in place for these buildings. This will be undertaken in a sustainable way, upgrading and leveraging existing structures where possible in order to minimise materials and embodied energy. Consideration will be given to increasing the height of existing buildings to assist in the preservation of existing green areas.

The unique landscape and woodland setting of the campus is a major asset to UCD. It is an invaluable leisure amenity for the University community as well as a haven for a wide variety of flora and fauna. Incorporating input from staff and students, this unique environment will be protected and enriched, with landscaping initiatives designed to enhance biodiversity, the public realm and integration of the built and natural environments.

The UCD Campus generates significant levels of economic activity, stimulating employment and generating output across a wide range of sectors. With a population of approximately 31,000 (including students, faculty, staff and visitors) UCD is one of the largest originators of journeys in the Greater Dublin Area. In this regard, Smarter Travel arrangements to and from the Belfield Campus, which reduce dependence on the car, will be actively promoted. This will further enhance the sustainability of the campus and wider community.

2.3 Planning Context

The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 identify the education and skills sector as important competitiveness factors, and seek to "develop the Greater Dublin Area as a regional leader in the 'Smart Economy' and the Dublin Gateway as a 'Smart City'".

The Belfield Campus is located in the administrative area of Dún Laoghaire-Rathdown County Council (DLR). The importance of the University to the County is highlighted in the County Development Plan 2016-2022. Policy SIC9 of the DLR plan states:

"It is Council policy to support the development and ongoing provision of Further and Higher Level Institutions in the County including University College Dublin (Belfield and Blackrock campuses), Dún Laoghaire Institute of Art, Design and Technology and Blackrock Further Education Institute (Formerly Senior College Dún Laoghaire), Dún Laoghaire Further Education Institute (formerly Dún Laoghaire College of Further Education), Sallynoggin College of Further Education, Stillorgan College of Further Education, Dundrum College of Further Education and any new Further and Higher Level Institutions – including Irish colleges or major overseas universities whether within established campuses or in new campuses."

Section 7.1.3.4 recognises the significant role the University plays in making the County attractive for investment and the importance that UCD plays in employment creation at the Regional and National level.

The County Development Plan notes that the main objective of the Campus Plan is the *"advancement and promotion of UCD as a modern university, one that excels in both academic achievement and the built environment... This Campus Plan includes a vision for world-class architecture, a network of greened pedestrian walkways and a transformation of the academic infrastructure to reflect the ambitions of a leading European university."*

The Campus is zoned TLI³ *"to facilitate, support and enhance the development of third level education institutions"* in the County Development Plan 2016-2022. A wide range of educational and associated uses appropriate to a University of international standing are supported.

The UCD Strategic Campus Development Plan 2016-2021-2026 is a non-statutory document prepared by UCD and is informed by the regulatory County Development Plan 2016-2022. Cognisant of the statutory planning processes remitted to Dún Laoghaire Rathdown County Council, the Campus Plan will guide proposals for future UCD developments and provide a planning context for their informed consideration in the planning process.

UCD will continue to enhance interaction and communication with Local Authorities, transport agencies and the local community to maximise the socio-economic benefits and cultural impacts of the University and to coordinate the natural environment of the campus with green infrastructure and conservation initiatives in Dún Laoghaire-Rathdown.

³ Third Level Institute



3. Supporting the University Vision

With over 31,000 students, faculty, staff and visitors using the Belfield Campus on a daily basis, the Plan reinforces the University vision for a world-class learning, living and working environment.

3.1 University Strategic Objective

Re-imagining the campus is one of the major initiatives being undertaken to support UCD's strategic objectives.

A positive experience at UCD, for students, staff and visitors, yields a significant reputation and recruitment advantage which the University will continue to promote.

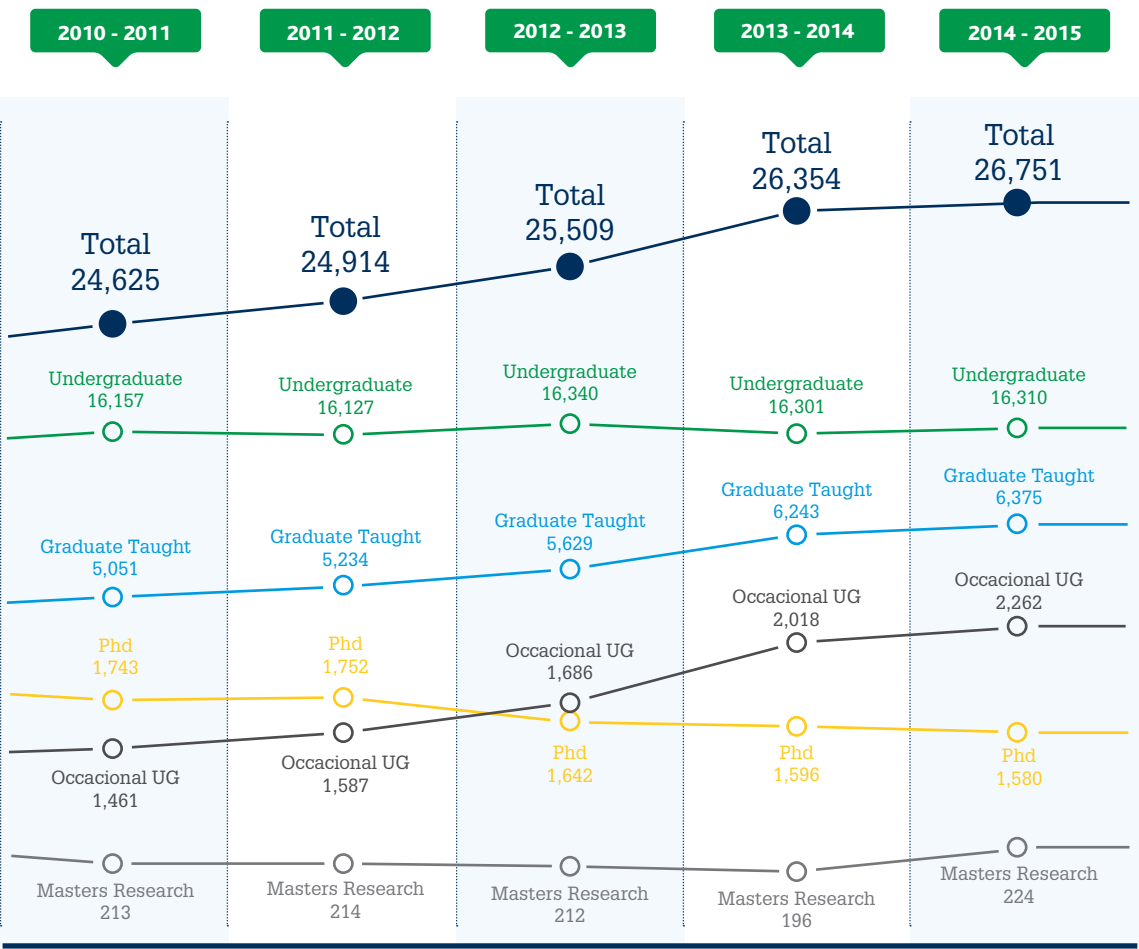
This supports UCD's goal of being a global top 100 university.



3.2 Population & Demographics

UCD will continue to grow over the next decade, further delivering on its responsibility to provide a high quality educational environment which will fulfil a national remit.

Student Growth Trends



It is projected that the UCD student population will grow from c.26,750 in 2015 to c.28,750 by 2020, and possibly 30,760 by 2025. As the destination of choice for international students, UCD is now home to some 6,600 international students who add to the richness and diversity of the University community and contribute significantly to the local economy.

Changing trends are impacting on the higher education landscape. An evolving student profile generates a more discerning student expectation of university life. UCD will develop the high quality facilities and support measures necessary to attract such students, as well as retain and grow the UCD community. This will ensure that the University continues to attract excellent and diverse students, faculty and staff from around Ireland and the world.



3.3 Estates Strategy

As part of Ireland's largest and most globally engaged university, the UCD estate incorporates circa 389,000sq.m of building floor area with an insurance replacement value of €1.17 billion. The estate facilities are predominantly based at the main Belfield campus with additional accommodation provided at Blackrock, Lyons Research Farm, Newman House, and various hospital locations.

Over 30% of the building portfolio was constructed in the 1960's and 1970's. It is estimated that 34% of the building portfolio is in need of major refurbishment with a concentration in the academic core of the Science and Newman Joyce Precincts.

The UCD Estates Strategy 2016-2021-2026 sets out capital investment requirements in the short term through a schedule of prioritised projects focussed on improving and maximising the use of existing buildings, with expansion planned in strategic areas.

The overarching estate management objective is to ensure the long-term sustainability of the estate in the context of the pressures on recurrent and capital funding. This objective promotes consolidation of activities, improved space utilisation and addressing backlog maintenance. Analysis has identified the need to:

- Modernise and enhance utilisation of circa 131,000sq.m accommodation classified as Building Condition C, i.e. as operational, but major repair or replacement is needed in the short to medium term. Particular emphasis will be placed on 74,000sq.m incorporating the historic Newman House and Roebuck Castle which date back to the 18th Century, elements of the Blackrock Campus built in the 1930's, and the Science and Newman Joyce Precinct buildings at the Belfield Campus which were constructed in the 1960's and 1970's.
- Provide circa 62,000sq.m new education, research and innovation, public engagement, recreation and University support accommodation to facilitate co-location of arts,

humanities and social science disciplines, engineering and architecture disciplines, health and agriculture disciplines, and to meet projected growth in University activities.

- Construct up to circa 3,000 additional student residence bedrooms bringing the total capacity to circa 6,000 bedrooms.
- Continue a 10 year rolling refurbishment programme for the existing student residence portfolio, focussing next on the Glenomena Student Residences.
- Develop sustainable green infrastructure including enhanced pedestrian and cycling networks, a campus legibility and wayfinding strategy, and improved public transport links and parking facilities.
- Address health and safety, statutory and regulatory requirements through a planned programme of works.
- Continue the roll-out of energy efficient and sustainable design measures in new construction and building refurbishment, incorporating features such as high performance facades, rainwater harvesting, energy efficient plant and systems, combined heat and power, green roofs, as well as solar photo-voltaic panels.
- Promote the principles of a sustainable and healthy living campus in education, research, innovation, sports, recreation, residences, operations and waste management, while fostering a culture of shared responsibility and efficient use of resources.

The above will be achieved through a comprehensive and integrated approach to capital investment, operation, maintenance and space utilisation.

A summary of the University priority projects which form part of the 2016-2028 Campus Capital Development Ambition Programme are provided below, in addition to other projects currently in planning or which may arise during the life of the UCD Estates Strategy 2016-2021-2026, subject to funding and periodic review over the life of the Plan.

UCD Estates Strategy 2016-2021-2026

Potential Developments

2016-2028 Campus Development Ambition	New (sq.m)	Refurb (sq.m)
Education, Research and Innovation Character Area		
UCD Newman Joyce Precinct	10,400	50,120
UCD Science Precinct	5,000	14,598
UCD Health and Agricultural Science Precinct	13,500	1,200
UCD Engineering and Architecture Precinct	13,000	6,000
UCD Lyons Research Farm	3,300	
Sports and Recreation Character Area		
UCD Sports and Recreation Multi-Purpose Facilities	10,000	
	55,200	71,918

Other Projects Currently in Planning	New (sq.m)	Refurb (sq.m)
Education, Research and Innovation Character Area		
UCD Confucius Institute	2,200	
UCD Business Future of Learning	2,500	
UCD Ulysses Centre at Newman House		2,000
UCD University Club	2,200	
Residential Character Area		
Additional Student Residence Masterplan – up to 3,000 Bedrooms	90,000	
	96,900	2,000

2016-2026 Other Potential Projects envisaged under this Estates Strategy	New (sq.m)	Refurb (sq.m)
Education, Research and Innovation Character Area		
UCD Tierney Building		4,808
UCD Agriculture Centre		9,203
UCD Gerard Manley Hopkins International Centre		2,000
UCD Merville House East Courtyard (NovaUCD Innovation Centre)	2,000	1,000
UCD Veterinary Science Centre		1,000
UCD Ardmore House		1,023
UCD Richview Building Conservation		3,326
UCD Blackrock Campus		6,624
UCD Hospital Site Locations		2,000
UCD Lyons Research Farm		2,000
Residential Character Area		
Roebuck Castle		3,943
Glenomena Residence		20,039
Blackrock East and West Hall		3,542
Sports and Recreation Character Area		
UCD Sports Centre		6,724
UCD Commuting Facilities		

The estimated investment to meet the capital development and maintenance refurbishment requirements of the UCD Estate is in the order of €775 million (including €300 million for new student residences). It is proposed that the funding model to support this Estates Strategy will require input from the Irish exchequer, industry, philanthropy and University resources.

4. Strategic, Coherent and Integrated Location of Activities

4.1 Character Areas

The UCD Strategic Campus Development Plan 2016-2021-2026 promotes the development of three Character Areas.

Each Character Area has a coherent identity but will be interconnected in a variety of ways. This approach facilitates contiguous space for education, research and innovation activities, and a dedicated sports and recreation area, while planning for a coherent and integrated student residential accommodation precinct.

The Character Areas as set out overleaf will concentrate on a primary use within the three given areas with the provision of other complementary and supporting uses as appropriate.

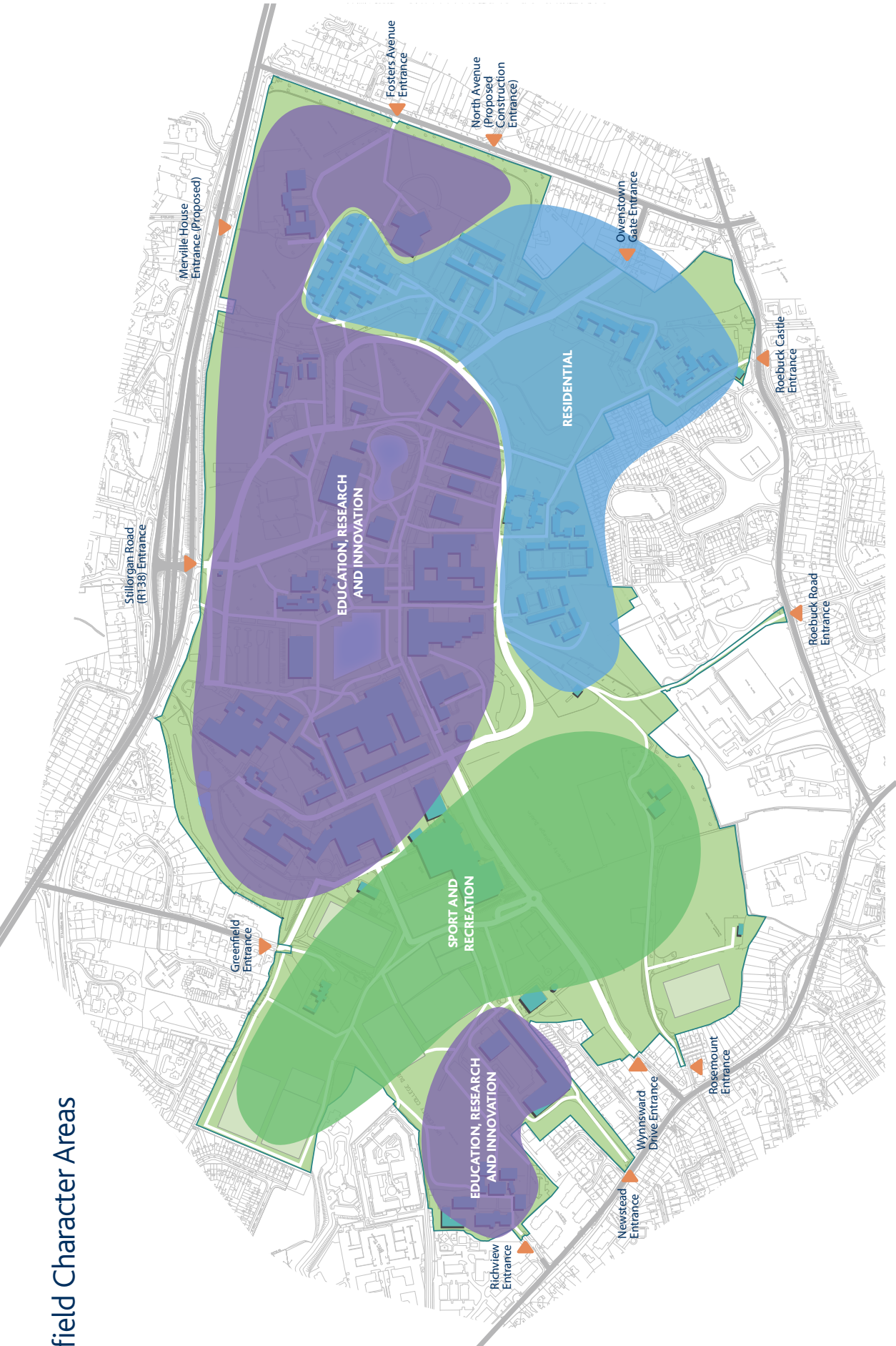
Character Areas will be linked through a network of green routes for cyclists and pedestrians.

Car parks will be located around the periphery of the campus in order to enhance the pedestrian zone at the academic core of the campus.

The campus contains a rich variety of built form, landscaping and pedestrian friendly environments and will be enhanced by future developments.



Belfield Character Areas



4.2 Education, Research and Innovation Character Area

This Character Area includes many world-class facilities which have been developed and enhanced since the establishment of the Campus.

The Education, Research and Innovation Character Area is well-established as the core of the Belfield Campus. Recent investment in UCD’s physical infrastructure is transforming the support for University activities. A key objective is the establishment of high quality architecture which creates a strong sense of place while also delivering an exciting environment for students, staff and the wider community.

The Character Area has developed around a number of smaller precincts which are focused on particular related disciplines such as the Science, Newman Joyce, and Business and Law Precincts.

New developments within the Education, Research and Innovation Character Area will be of appropriate mass and scale, ensuring the sustainable use of campus lands and the minimisation of single storey developments which do not make efficient use of the valuable space within this area.

Denser development and intensification of the existing built form will support the development of future landmark buildings of greater height and scale at strategic locations. The campus general height and massing strategy will respect the sensitive nature of a number of the Campus boundaries, and take due cognisance of neighbouring residential development. The height of each future building in the Education, Research and Innovation Character Area will be considered carefully to reflect the site specific location and the function of the campus core, to promote wayfinding and the creation of a greater sense of place.

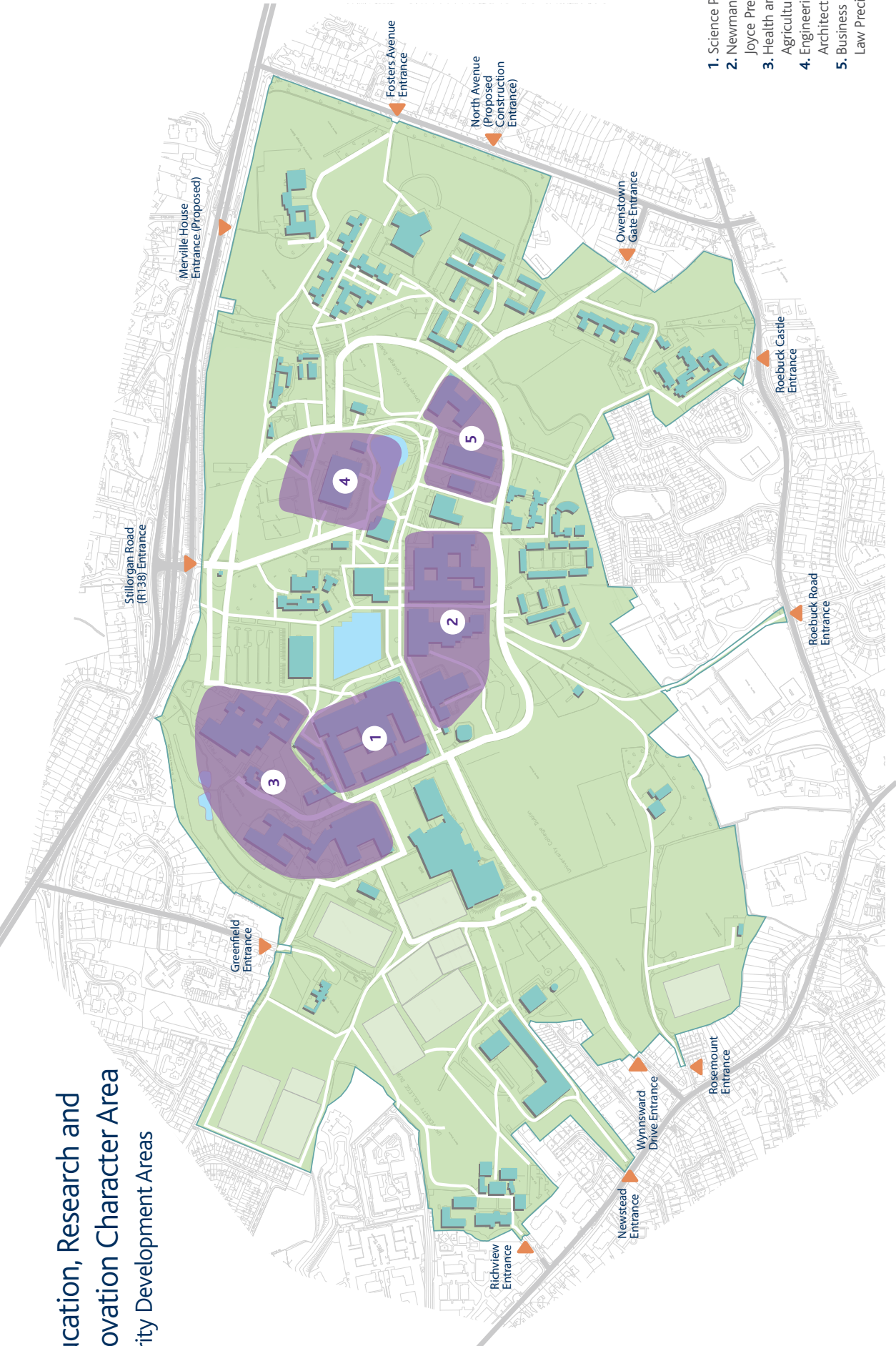
Priority developments identified within the Education, Research and Innovation Character Area are highlighted overleaf. Further details of potential future building locations and building heights across the Belfield Campus are provided in Appendix 2.

The campus lake and landscape features serve as a focal point for social interaction and provide a visually impressive setting for nearby buildings.



Education, Research and Innovation Character Area

Priority Development Areas



1. Science Precinct
2. Newman Joyce Precinct
3. Health and Agriculture Precinct
4. Engineering and Architecture Precinct
5. Business and Law Precinct

The scale and quality of design will reflect the strategic location of this part of the campus.

This Character Area has evolved from earlier campus development plans with a compact building layout linked by a pedestrian spine. The subsequent intensification and pedestrianisation of the core enabled enhanced connectivity and interactions between various academic disciplines and support activities within the campus.

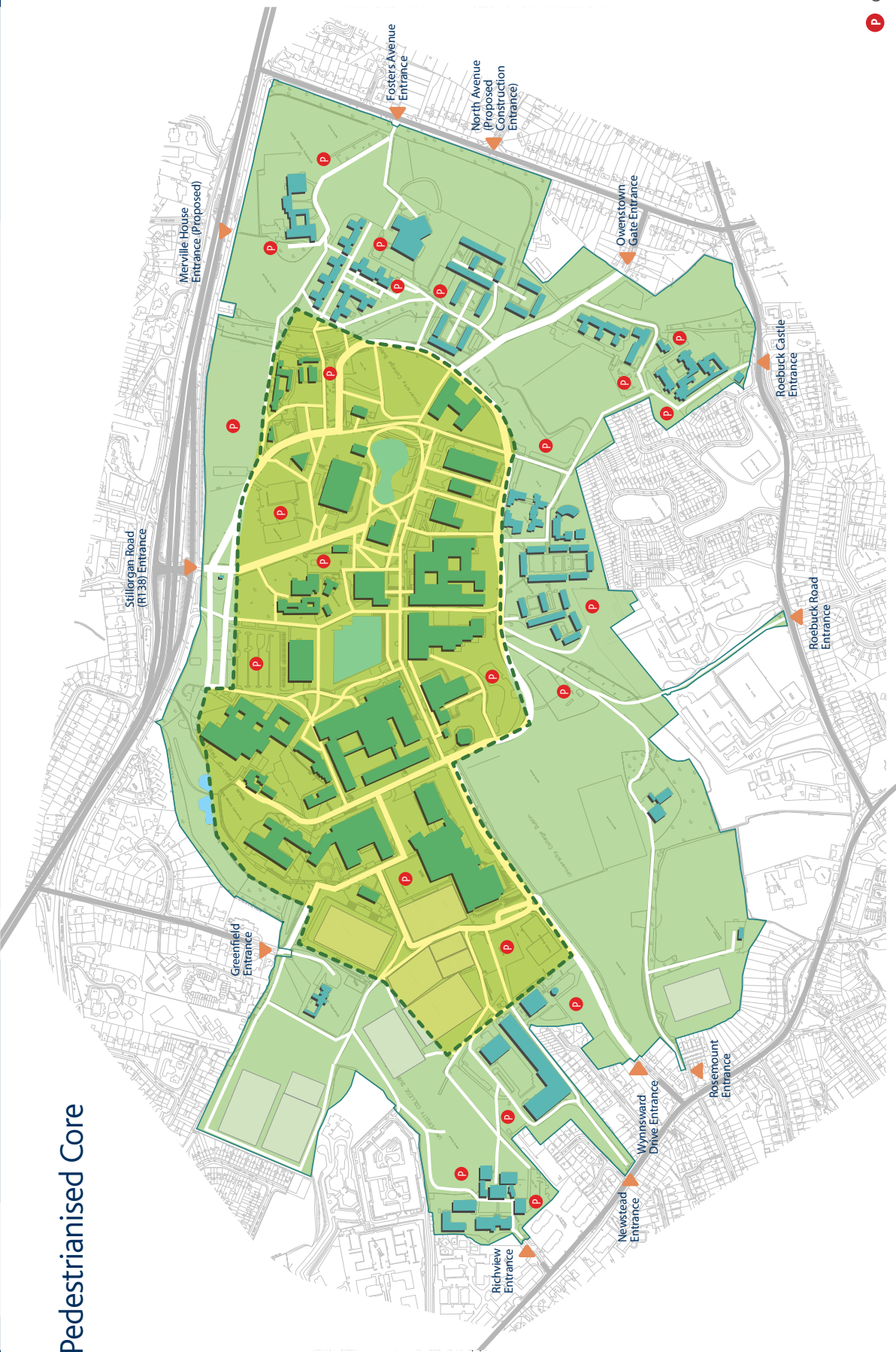
Enhancement of pedestrian and cyclist networks will consider the context of segregation from vehicular traffic, the efficient movement of people and access to public transport.

The development of underground and multi-storey commuting facilities at strategic locations will enhance the pedestrian core of the campus while supporting sustainable car parking developments which mitigate an over-reliance on surface car parking.

The lands adjacent to the Stillorgan Road (R138) campus entrance present an opportunity to raise the University's profile through a public realm landscape intervention which could provide a range of uses which will engage with the local neighbouring communities and wider City. These could be for cultural, community and commercial uses, and transport facilities, which will create a sense of arrival, interaction and welcome to the campus and University.

This area features a direct link to the strategically significant Stillorgan Road (R138), which acts as the primary entry and egress point of the campus. Development of this high profile area will consider future mobility management and transport plans carefully, including the facilitation of the future Bus Rapid Transport infrastructure as promoted by the County Development Plan 2016-2021, Transport Infrastructure Ireland and the National Transport Authority.

Belfield Pedestrianised Core





4.3 Residential Character Area

A series of residential courtyards, amenity spaces and leisure areas will combine to create a vibrant residential environment.

The creation of vibrant, socially engaging residential villages that enhance and integrate with the wider University is a central focus of UCD Strategic Campus Development Plan 2016-2021-2026. A series of residential courtyards, amenity spaces and leisure areas will combine to create an attractive and sustainable residential environment. The existing residential villages of Belgrove, Roebuck, Merville and Glenomena will be modernised as appropriate and integrated with new developments in order to create a cohesive Residential Character Area.

The provision of additional student residences on the campus is a significant ambition over the life of the Plan. It is proposed to increase existing accommodation from c.2,815 to c.6,000 bedrooms of which 354 rooms will be available for occupation in September 2016. This ambition is aligned with the recently announced Government Action Plan for Housing and Homelessness⁴.

Existing and new developments will be linked with enhanced physical and visual connections for cyclists and pedestrians.

The character of new buildings will complement a residential environment. Building design will respect the landscape of the area and inform wayfinding links to the academic core of the campus. An appropriate palette of materials and landscaping typologies will be promoted.

Ancillary and support facilities will be provided, with emphasis on meeting places, social interaction and fostering of the residential community.

Building form and height will complement the courtyard models with a mix of accommodation types to include both halls of residences and apartment style development. The campus height and massing strategy will respect the sensitive nature of a number of the Campus boundaries, and take due cognisance of the amenity of adjoining developments. The height of future residential buildings will be considered carefully to address sustainable land-use, the site specific location, boundary sensitivities, and the need to promote wayfinding and the creation of a greater sense of place. The height and massing strategy for future buildings in this Character Area will provide for a transition in scale to the neighbouring properties.

The area will contain local shop, catering, dining, laundrette and other facilities. The increase in student accommodation on campus will create the basis for a constant vibrant presence on the campus adding to the levels of activity and security.

Growing the on-campus residential accommodation will increase the University's pedestrian population and enhance the vibrancy and sustainability of the University.

Access to other transport modes for this population will include quality cycle parking, set-down and pick-up areas, and strategically located surface and structured car parking.

This Character Area will reinforce the healthy campus ethos, promoting the well-being of its inhabitants, and providing a safe and secure living environment through design elements such as legibility, external lighting and modern security technologies.

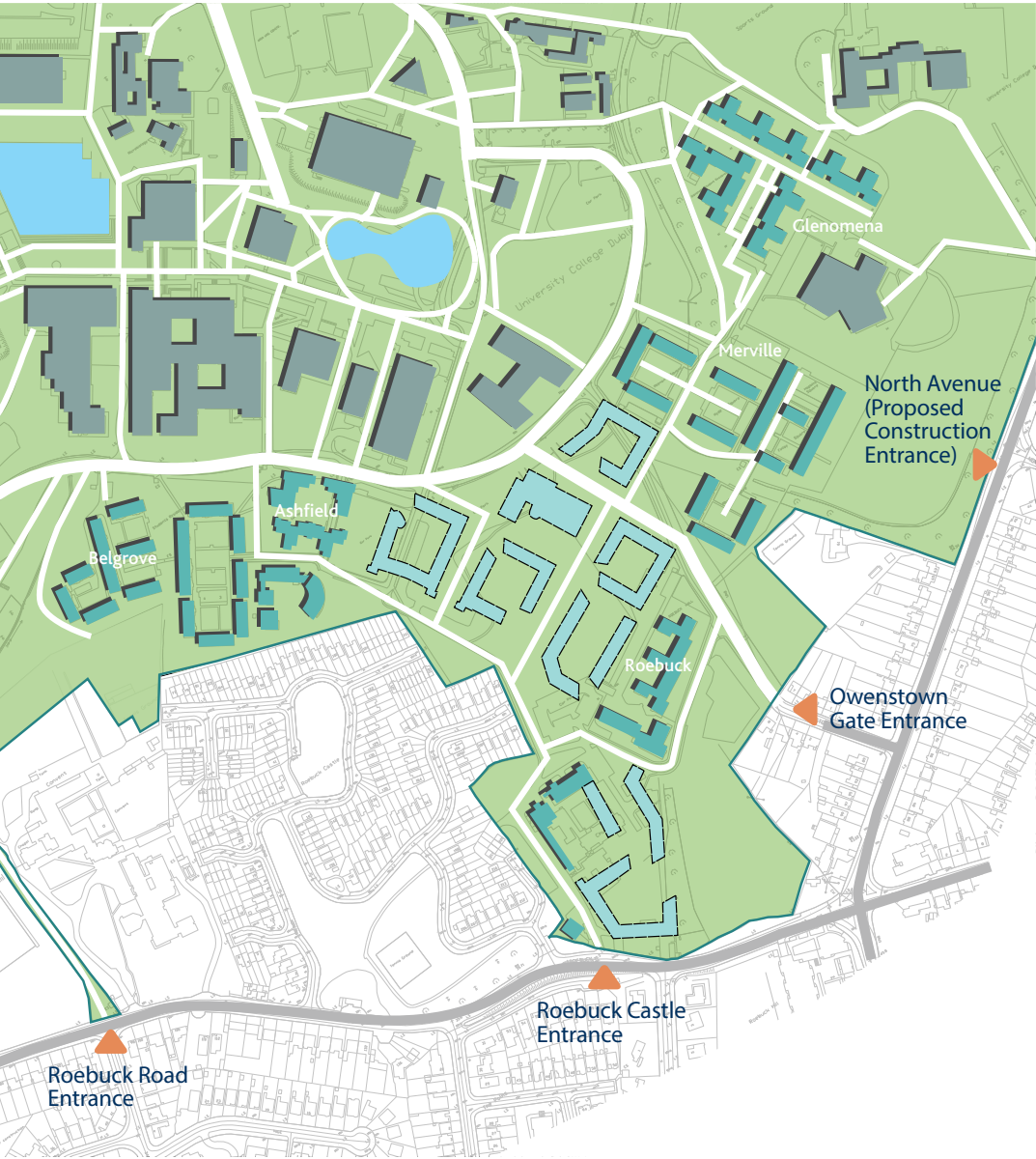
⁴ Action Plan for Housing and Homelessness. Rebuilding Ireland. July 2016

"Ireland's third-level student population is projected to grow by around 20,000 students (or 15%) to 193,000 students by 2024. The 2015 'Report on Student Accommodation: Demand & Supply' by the Higher Education Authority (HEA) estimates an existing level of unmet demand of about 25,000 student bed spaces nationally. Taken together, both of the statistics above highlight the importance of providing well designed and located student accommodation in order to avoid additional pressures in the private rental sector.

... an even greater level of provision of student accommodation is required and accordingly this Action Plan commits to the development of a national student accommodation strategy in 2017 by the Department of Education and Skills (DES) in conjunction with DHPCLG and other stakeholders including DPER and the Department of Finance. This will set out a broad framework for delivery of an enhanced level of accommodation and which will inform local authority housing strategies and the land management process in general in order to provide suitably located and affordable sites".



Residential Character Area



- Residential**
- Existing Building
 - Future Building

4.4 Sports and Recreation Character Area

This area showcases sporting talent and participation, social and cultural activities, and the natural landscape.

A key feature of a successful university campus is the provision of world-class sporting and recreation facilities. Such provision of publicly accessible, attractive and welcoming recreation facilities promotes a balanced, healthy life for students, faculty, staff and the wider local community.

The western section of the Belfield Campus has been designated as the Sports and Recreation Character Area. This Character Area encourages participation while also contributing to the development of social engagement. This Character Area incorporates pitches which stretch from the south-western verge of the campus across to the north-western section.

There are 30 full size external rugby, soccer, hockey and GAA pitches, as well as synthetic all-weather and 5-a-side pitches and tennis courts. Notable facilities include the Sports Centre, Student Centre, a 50m pool, gymnasium, the National Hockey Stadium and the UCD Bowl.

During the period of the previous Campus Development Plan, a consolidation of the University's external facilities was undertaken. This was a strategic decision to create a dedicated sport and recreation area. Amongst other initiatives, the UCD Bowl was developed to provide a high quality outdoor sports arena for both soccer and rugby, compliant with UEFA and FAI licensing and IRB standards, in relation to playing surface quality, spectator comfort and safety.

Playing pitches were consolidated in close proximity to the UCD Sports Centre, with enhanced changing and support facilities. This included the relocation of some turf pitches from the eastern end of the campus. Further synthetic all-weather pitches were developed and have greatly improved conditions for year-round training and matches.

Although significant work has been completed in order to locate the sports pitches in an efficient and legible manner, further opportunities exist to upgrade, consolidate or expand the Area during the life of this Strategic Campus Development Plan. The original Sports Centre, built in the 1980s, will also undergo further modernisation to ensure continued high levels of functionality and quality.

The University will continue to improve and expand the on campus sporting facilities, to create centres of sporting excellence and to promote physical activity in the student population and the wider community.

The campus lands provide a rich recreational, cultural and social resource with improved accessibility for the wider local community. Initiatives to enhance community engagement in the immediate environs of the campus will be fostered through access to the playing pitches, the sculptural art trail and the woodland walks for local clubs, families and visitors, in addition to public access to cultural exhibitions, seminars, the UCD cinema and theatre events.

Sports and Recreation Character Area



5. Building Design, including Sustainable Use of Campus Lands

Buildings in each of the Character Areas create a unique collection of Irish contemporary and period architecture. UCD will use the Plan as a template to build on its reputation for quality of design and development.

5.1 Objectives for Design

UCD will seek to be an exemplar in the design and development of new and existing University buildings. These will be of high architectural quality, employ sustainable design principles and adhere to the following objectives:



Appropriately located and considered in accordance with the principles of the Character Areas within the campus.



Contribute to improved legibility and wayfinding on the campus.



UCD is committed to the Government Policy on Architecture 2009-2015. UCD will continue to pursue and promote architectural excellence with all of its commissions.



Ensure sustainable development of the Estate, (examples include efficient site utilisation, sustainable redevelopment of existing buildings, integrated development with the natural environment of the campus, and designing for future flexibility and long life).



Appropriate height and density of development to protect and preserve green areas, woodlands and peripheral landscaping.



Incorporating amenities to enrich and enliven the campus as appropriate to each Character Area.



Promote easy pedestrian movement between buildings within a Character Area. This is particularly important for academic buildings as it benefits the modular and interdisciplinary nature of modern third level education. This was a core concept in the original Wejchert Masterplan.

For further details see:
Appendix 1. Building Design Principles
Appendix 2. Potential Future Building Locations and Building Heights
Appendix 3. Campus Landscape Principles
Appendix 4. Campus Commuting Principles

The Government Policy on Architecture 2009-2015, Towards a Sustainable Future: Delivering quality within the Built Environment provides a framework for the implementation of architectural policy. This Policy promotes awareness and understanding of the contribution of good design to the daily life and well-being of society as a whole. It places emphasis on sustainable development of the environment and urban design, continuing to encourage and support high quality modern architecture, incorporating architectural heritage in a holistic, integrated manner.

6. Fostering an Accessible and Engaging Campus Environment

The sylvan setting that defines the UCD Campus contributes both to the strong sense of place and identity, and the creation of a favourable image of the UCD Campus as a place of learning.

The integration of this sylvan setting with new developments will ensure it continues to contribute to the generation of spaces in terms of physical layout and character.

Guided by the Dún Laoghaire-Rathdown County Development Plan 2016-2021, this Strategic Campus Development Plan actively promotes green infrastructure as part of the development of each Character Area within the Belfield Campus, and will be considered under the following:



Accessibility, Recreation, Health and Well-Being



Landscape, Biodiversity and Green Infrastructure, Recreation, Health and Well-Being



Built and Cultural Heritage Recreation, Health and Well-Being



Commuting and Mobility Planning Well-Being

6.1 Accessibility, Recreation, Health and Well-Being

UCD's commitment to the promotion of education and learning through all aspects of university life including its built environment, is promoted through a campus which acts as a living laboratory.

As one of Europe's largest urban campuses, UCD simulates aspects of a scaled-down analogue of a city. It incorporates apartments, offices, laboratory and teaching facilities, restaurants, sports and parkland facilities, retail and entertainment services. It hosts a multitude of stakeholder groups on a daily basis and manages significant transport infrastructure.

A new UCD research initiative, UCD Mini City is a plan to develop a network of sensor technologies across the entire UCD Campus to act as a test bed and demonstrator of Smart City and related systems at scale. This will incorporate transport, lighting, heating, energy, security, parking, waste management, water, grounds-keeping, the environment and climate, as well as bespoke services for special target groups. It is hoped that UCD will be an enabler for research and rapid prototyping in: Smart City research; IoT (Internet of Things); Big Data; CyberPhysical systems; and the Sharing Economy.

The Belfield Campus will continue to be developed for faculty, staff, students and visitors and acts as a public engagement resource for the neighbouring community. The campus acts as a recreational, cultural and social resource with improved accessibility for the wider community through connections to local primary and secondary schools, combined with linkages to external sporting associations such as the National Hockey Association and Leinster Rugby. This fosters a positive interaction of the University while creating a permeable campus and synergies with the wider local community.

The Strategic Campus Development Plan 2016-2021-2026 advocates the development of enhanced publicly accessible open spaces, and pedestrian and cycling infrastructure. The pedestrian facilities within the academic core will continue to be improved.

UCD will continue to promote inclusivity, accessibility, equality, health and well-being, not only through its teachings and practices but in its built form.

The concept of universal access embraces a wider definition of accessibility, considering the needs of the ambulant disabled (eg. design of steps, handrails); vision impaired (eg. visual contrast); hearing impaired (eg. induction loops); and families (eg. baby changing).

The Plan promotes a strong integration and relationship within the network of green spaces and the three Belfield Campus Character Areas. The Plan promotes universal and inclusive design, whereby campus

facilities can be used to the greatest extent possible by all people, regardless of age, ability or disability.

The phased introduction of a coherent wayfinding strategy is an objective of this Plan, and presents an opportunity to enhance the campus experience. The main objectives include establishing clear focal points, a sense of arrival and a high quality welcome, while providing high-level direction and a public awareness and appreciation of unique campus amenities. The campus wayfinding strategy will consider how people orient themselves on the campus and how they navigate from place to place. The strategy will further facilitate and enhance public access through the site both in terms of legibility and providing interpretative information on areas of interest, such as the historic houses and sculptural trail.

A report published by the Department of Health, 'Healthy Ireland – A Framework for Improved Health and Well-Being 2013-2025', details the close relationship between physical and mental health and the environment, physical activity and social interaction. It emphasises the need to create a better environment for people to live in and to provide opportunities for healthy lifestyles to improve the overall health of the population.

There will be a holistic approach to campus development with multi-disciplinary procedures in the development of places and spaces to ensure that the design is state-of-the-art and integrated between environmental, social, legal and business needs. To date, the built environment has expanded in conjunction with the development of the public realm, incorporating pedestrian/cyclist paths, recreation areas and sports grounds, as well as aspects of the natural environment in the form of sustainable urban drainage features, woodland areas and waterbodies. In this regard, UCD is committed to the delivery of a healthy, green and efficient campus.

By endeavouring to reduce its carbon footprint through the promotion of renewable energies and energy efficient technologies, UCD will continue to implement initiatives aimed at reducing dependency on primary fossil fuels, in line with the National Energy Efficiency Action Plan, the White Paper "Ireland's Transition to a Low Carbon Energy Future – 2015-2030, and EU Directives.

The Strategic Campus Development Plan 2016-2021-2026 will deliver a stimulating, innovative and contemporary learning and working environment which is in keeping with standards of excellence synonymous with UCD.

6.2 Landscape, Biodiversity and Green Infrastructure

A key element of future development will be the enhancement of the campus landscape as a unique setting.

The Belfield Campus is renowned for its natural landscapes, sylvan wooded setting, and its native and exotic species. In conserving, consolidating and enriching this character

the University promotes biodiversity and recognises the importance of ensuring minimum adverse impact on the environment as the University develops.

Belfield Campus Landscape Typologies



Entrance Plazas



Cultural Meeting Spaces



Courtyards/Quadrangles



Garden Settings



Natural Habitats



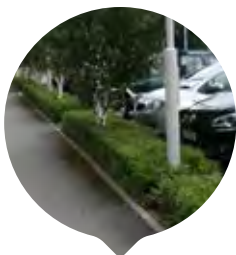
Sport Surfaces



Primary Circulation



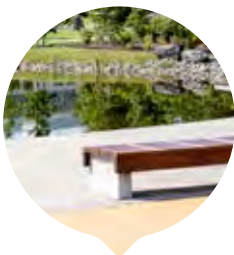
Roads



Carparks



External Breakout Spaces



Campus Furniture



Services Areas

Trees are a key component for maintaining a healthy environment, particularly for climate amelioration and a reduction in heat stress in urban areas.

In promoting a healthy living campus, over eight kilometres of walking, jogging and cross-country woodland paths have been introduced in recent years. This comprehensive network of attractive and meandering paths enables participation for every ability and fitness level. Students, staff and the wider community are encouraged to enjoy the parkland setting of the Belfield Campus, while discovering more about the University, the original estate houses including their surrounding landscape, and the UCD Sculpture Trail.

As part of the ongoing biodiversity and tree management programme the University has identified ecological resources on campus, including the various flora and fauna, landscapes and ecosystems. This identification process will be continued with the support of UCD experts and will serve as an educational tool and help to guide future initiatives. A biodiversity trail will be developed in addition to the development of improved wayfinding to help inform students, staff and visitors of the natural resources located on campus.

The trees planted along the boundaries of the original estates in the 18th and 19th centuries are still visible and contribute significantly to the amenity value of the campus and broader environs. The preservation and enhancement of the specimen trees and landscaping created during this period is crucial to maintaining the character of the campus.

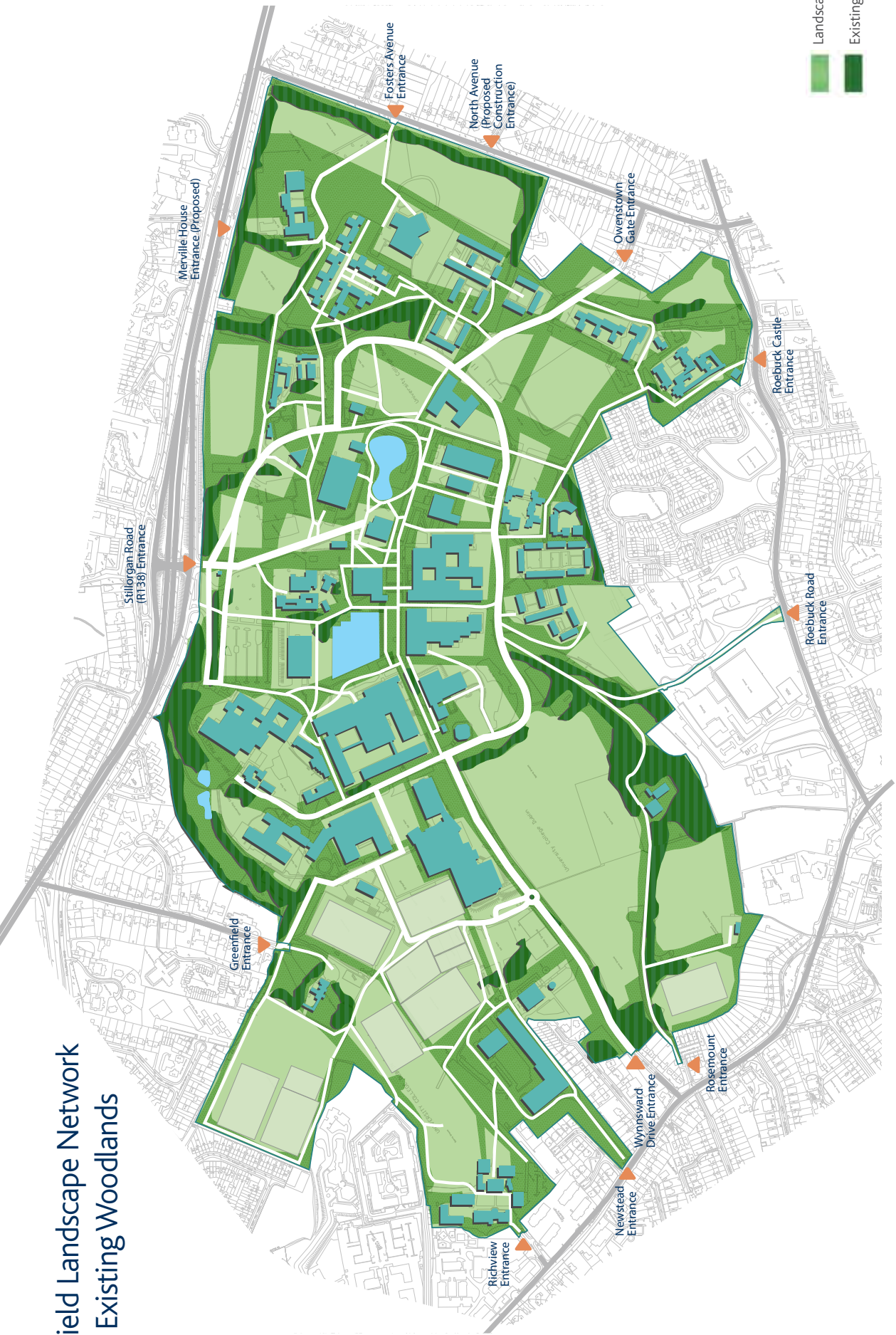
Many of the original specimen trees associated with the original estate houses will unfortunately be reaching their end of life within the term of this masterplan. An active tree planting programme will consider their replacement with similar specimen trees to ensure continuity of the original sylvan landscape.

By developing a process through which ecological and horticultural values can be integrated into landscape design and the planning of new buildings, UCD will ensure the continued advancement of the biodiversity of the campus.

One such example is the UCD Arboretum, which is regarded as a living museum and a refuge of great beauty where visitors can step away from their busy lives and reconnect with nature. Adjacent to the UCD Crèche, the UCD Arboretum has seen the inclusion of a new birch walk and incorporates a rare variety of variegated oak and cedar, as well as a rare Cupressus Macrocarpa. The UCD Arboretum enhances local biodiversity and promotes the aesthetic values of both indigenous and exotic species.



Belfield Landscape Network and Existing Woodlands



- Landscape Network
- Existing Woodlands

UCD actively promotes sustainable management of urban water.

Primarily designed as a stormwater attenuation feature, the new Upper Lake beside the UCD Sutherland School of Law Building is an exemplar of design strategy. Not only does it address SuDS (Sustainable Urban Drainage System) for this specific building, it is also designed to accommodate storm water runoff and surface water attenuation for future buildings.

The lake also incorporates careful consideration of ecological benefits to the indigenous wildlife. The design uses a selection of native shrubs, aquatic plants and trees planted around the perimeter to help attract wildlife and enhance bio-diversity, while new artwork enhances this campus focal point.

Water conservation programmes have also been a source of savings for the University, while delivering considerable environmental benefits. Collecting and using surface water, through rain water harvesting, the use of white water and smart conservation technologies, will further underpin the sustainable campus agenda.

The campus core is developed around two amenity water features: the formal lake in front of O'Reilly Hall; and the new attenuation lake (Upper Lake) located beside the UCD Sutherland School of Law Building.

Each new building on campus will be considered in the context of the overall landscape setting. It is the aim of the University to continue to develop a campus that enhances the living, working and learning environment that unifies and links different aspects of academic activity, University residences, biodiversity, and the surrounding community.

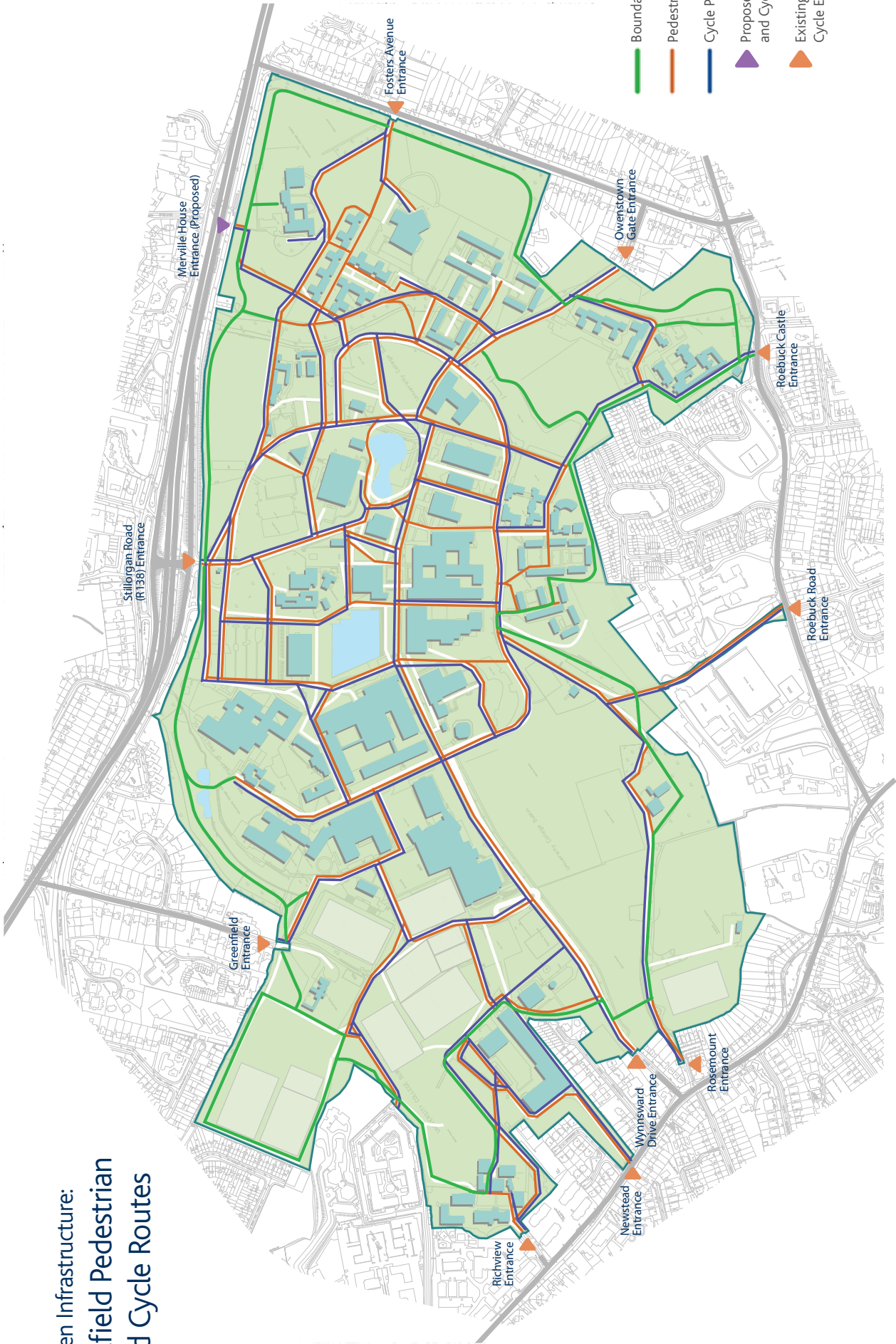
The University will continue to promote visual cohesiveness between architecture and landscape through consistent use of materials and colour, specific planting types, paving surfaces, lighting, and street elements.

The creation of campus heritage will help to promote, strengthen and support community and public engagement.

The Belfield Campus landscape strategy is informed by the Green Infrastructure Strategy set out in the County Development Plan 2016-2021, and in doing so emphasises the very positive contribution of the Campus to the amenity and recreational potential, while enhancing the general environmental sustainability and biodiversity of the wider environs.



Green Infrastructure: Belfield Pedestrian and Cycle Routes



6.3 Built and Cultural Heritage

Built Heritage: The Belfield Campus is home to a number of Protected Structures.

As part of successive Campus Development Plans, the University has advanced elements of the Programme for the Preservation of Period Houses, which included the restoration of Belfield House, Merville House and University Lodge.


Future phases of the Preservation Programme are expected to focus on the restoration of Newman House, Ardmore House, Woodview House, and Roebuck Castle.

The adherence to the highest standards of preservation and conservation will consider sensitivity to the existing form and fabric of the original estate structures to identify spaces of particular architectural, cultural and historic importance. Conservation plans will strive to strike a balance between maximising enjoyment and use of the buildings while preserving authenticity and the integrity of the heritage and setting.

The quality of the campus contemporary built environment will continue to be enhanced, both through the restoration of buildings, and through the quality of architecture, design and performance of new buildings which will be constructed during the life of the Plan.

Appendix 5 contains further information on the Belfield Campus planning context.





Cultural Heritage: Showcasing campus heritage will help to promote, strengthen and support community and public engagement.

It is envisaged that facilities will be developed to showcase unique special collections, including: the National Folklore Collection; the Irish Franciscan Archive, which incorporates some of the most valuable surviving Gaelic manuscripts and a volume of the Annals of the Four Masters; and the UCD Archives which contain the private papers of Eamon de Valera and Michael Collins, and papers associated with the formation of the Irish State, amongst others.

UCD has made a unique and substantial contribution to the creation of modern Ireland, counting amongst its graduates; Presidents, Taoisigh, Ministers and European Commissioners. UCD's contributions to business, science, the arts, culture and sport over this period are equally impressive, and the authors Maeve Binchy, James Joyce, Patrick Kavanagh, Rosaleen Linehan, Gerard Manley Hopkins, Edna O'Brien, and Colm Toibín are just a few of the renowned UCD Alumni and former lecturers.

UCD has a large catalogue of artwork and sculptures displayed across the Belfield Campus. These public works of art are an integral part of the urban fabric of UCD, enriching the sense of place and the physical beauty of the natural environment. Varying in style and material, the collection is representative of national and internationally renowned artists. Running throughout the campus, the UCD Sculpture Trail links to existing pedestrian routes and has been a positive addition to the identity of the University as an interesting, attractive and culturally rich community.

The University makes a significant cultural contribution to the wider area through the promotion of education, research and development, sporting and recreational activities. This will continue with the development of activities on campus which engage with the surrounding residential and economic communities.

6.4 Commuting and Mobility Planning

UCD is committed to the promotion of sustainable transport to, from and within the Belfield Campus.

UCD continues to actively implement a Commuting Strategy for the Belfield Campus. The latest UCD Commuting Survey (November 2015) indicated that 55% of the staff and students surveyed have a commuting distance of less than 10km. The survey also reported that 58% of students live at home. Over 30% of staff and students surveyed walk or cycle to the campus.

Public transport remains the single most important mode of travel to the campus, through bus, rail and Luas services representing 42% of people surveyed. High capacity and good quality public transport are the most effective ways to minimise the level of car usage on campus. Belfield Campus is currently well served by bus transport, especially by the Stillorgan Road (R138) QBC (Quality Bus Corridor). There are also links to the Luas light-rail on the western side of the campus, and the DART rail line to the east.

UCD is actively working with the National Transport Authority and Dún Laoghaire-Rathdown County Council, both to improve and promote sustainable transport to and from the University.

A recent survey indicated that 55% of people accessing the Belfield Campus on a daily basis, enter via the Stillorgan Road (R138) Entrance. Opportunities to enhance the University identity and sense of arrival will consider the establishment of a unique visible landmark and iconic feature at the Stillorgan Road (R138) Campus Entrance, and enhancement of pedestrian and vehicular traffic networks, landscaping and wayfinding.

There are, however, many external factors which affect travel patterns to and from the campus. In particular, the lack of affordable accommodation in the area has resulted in staff and students commuting from further afield. There is a need to improve campus accessibility with high quality public transport and quality routes from areas of poor public transport provision, in particular West Dublin.

The NTA's Transport Strategy 2016-2035 for the Greater Dublin Area and the Dún Laoghaire Rathdown County Development Plan 2016-2021 identify a number of schemes which, in time, will provide important transport infrastructure and improve wider public transport as well as accessibility to the UCD Campus. Bus Rapid Transit schemes such as the Blanchardstown to UCD Swiftway and the Blue Line connecting the DART at Sydney Parade to Sandyford Business District / Dundrum via UCD scheme are supported in the context of medium to long-term planning for the campus.

In 2014, UCD introduced a private shuttle bus service between Belfield and the Sydney Parade DART Station during college term which resulted in a 50% increase in the proportion of students using rail as part of their travel plan. The promotion of a similar public bus service would not only enhance the UCD community travel patterns throughout the year but would also be of great benefit to neighbouring communities and other significant workplace locations in the surrounding area, such as RTE, St Vincent's University Hospital and Blackrock. The proposed orbital bus route (175) will also further enhance public transport accessibility to UCD.

In addition, the Greater Dublin Area Cycle Network Plan identifies a number of primary and secondary cycle routes in the vicinity of the campus, including along the Stillorgan Road, Clonskeagh Road, Foster's Avenue, and Roebuck Road. UCD supports the proposals to upgrade such cycle facilities, as well as throughout the Greater Dublin Area. The development of an integrated and continuous network of cycle routes has the potential to significantly increase the number of students and staff cycling to the campus regularly.

The Plan also identifies a primary cycle route running through the campus itself, along Greenfield Park, through the campus core, and Wynnsward Drive. UCD recognises and supports the potential role of the Belfield Campus in contributing to the development of an integrated cycle network and, in particular, the orbital network, linking Clonskeagh Road with the Stillorgan Road.

Several initiatives by the University in recent years, including the introduction of permit parking, have reduced the proportion of staff and students driving to campus from 30% in 2010, to 23% in 2015. Increased growth in staff and student numbers, and management of car parking provision will be provided in tandem with continued improvements in public transport to the campus.

The University will continue to promote and support sustainable modes of transport to access the campus. A new UCD Campus Travel Plan will be developed in conjunction with the National Transport Authority and Dún Laoghaire-Rathdown County Council. In this way, the interpretation of key objectives will continue to be monitored and reviewed within a framework involving the relevant agencies over the life of the plan.



Gates Used to Access Campus: Belfield Access Points



55%
Stillorgan Road
(R138) Entrance

3%
Greenfield
Entrance

3%
Richview
Entrance

3%
Newstead
Entrance

18%
Wynnsward
Drive Entrance

10%
Owenstown
Entrance

2%
Roebuck Castle
Entrance

2%
Roebuck Road
Entrance

%
Breakdown of How
People Access Campus





Building Design Principles

A core objective of the UCD Strategic Development Plan 2016-2021-2026 is the development of a modern, sustainable, healthy and living campus.

The Plan promotes the following:

- Sustainable use of campus lands with an emphasis on high architectural merit and material quality in the redevelopment and reuse of existing buildings and construction of new buildings.
- Emphasis on the use of sustainable materials, systems and technologies in buildings and infrastructure, considering life cycle costs, quality of materials and durability.
- Increased engagement with neighbouring communities and the public, and the promotion of UCD as an amenity for recreation and leisure.
- Partnership activities with industry to further innovation and economic activity.
- Preservation of the cultural heritage of the campus.
- Facilitation of legibility and permeability through the campus.
- Efficient use of campus facilities and ensuring the physical infrastructure of the University supports projected expansion.
- Strive to become an exemplar in the field of sustainable development. This will be achieved through the efficient management of water, energy and waste, as well as through a commitment to the principles of environmental protection and sustainability in the design, construction and redevelopment of campus buildings and facilities.
- Communication and promotion of sustainability initiatives and the benefits of sustainable practices to staff, students, visitors and the wider community through general education and raising awareness activities.
- Continued measurement, benchmarking and reporting of KPI (Key Performance Indicators) relating to the sustainability of the campus.

Potential Future Building Locations and Building Heights

Complimentary architecture, building height, scale and mass will be considered carefully in the context of sustainable development whilst balancing the interaction between the built and natural environment.

The drawing overleaf outlines both short-term priority sites (red) for development and medium-long term potential future building locations (blue).

The Height Strategy of the County Development Plan 2016-2022 references the UCD Campus Development Plan 2005-2015 (UCD Masterplan) and identifies the Belfield Campus as a key centre in the County which can accommodate tall buildings, i.e. significantly taller than the prevailing building height for the area.

It would be unsustainable to continue to develop the Belfield Campus with 1-2 storey buildings. Generally, 5-10 storey residential developments for student accommodation will be considered depending on location while up to 6 storeys will be considered for educational buildings.

There is potential for landmark buildings at Belfield, for example at the Stillorgan Road (R138) campus entrance and the redevelopment of the Science Precinct.

The scale of existing and indicative future building heights are outlined overleaf. For future developments, building heights will be subject to detailed design and will be considered carefully to address sustainable land-use, the site specific location, boundary sensitivities, and the need to promote wayfinding and the creation of a greater sense of place.

Proposals for taller buildings will be subject to impact assessment at locations within and peripheral to the Campus. The development of the Campus with taller buildings will help meet the specific local objective of the County Development Plan *“to facilitate, support and enhance the development of University College Dublin including all associated and supporting facilities. A range of uses will be facilitated on Belfield campus lands to encourage and foster strong links between education, community and the business sector in the County.”*

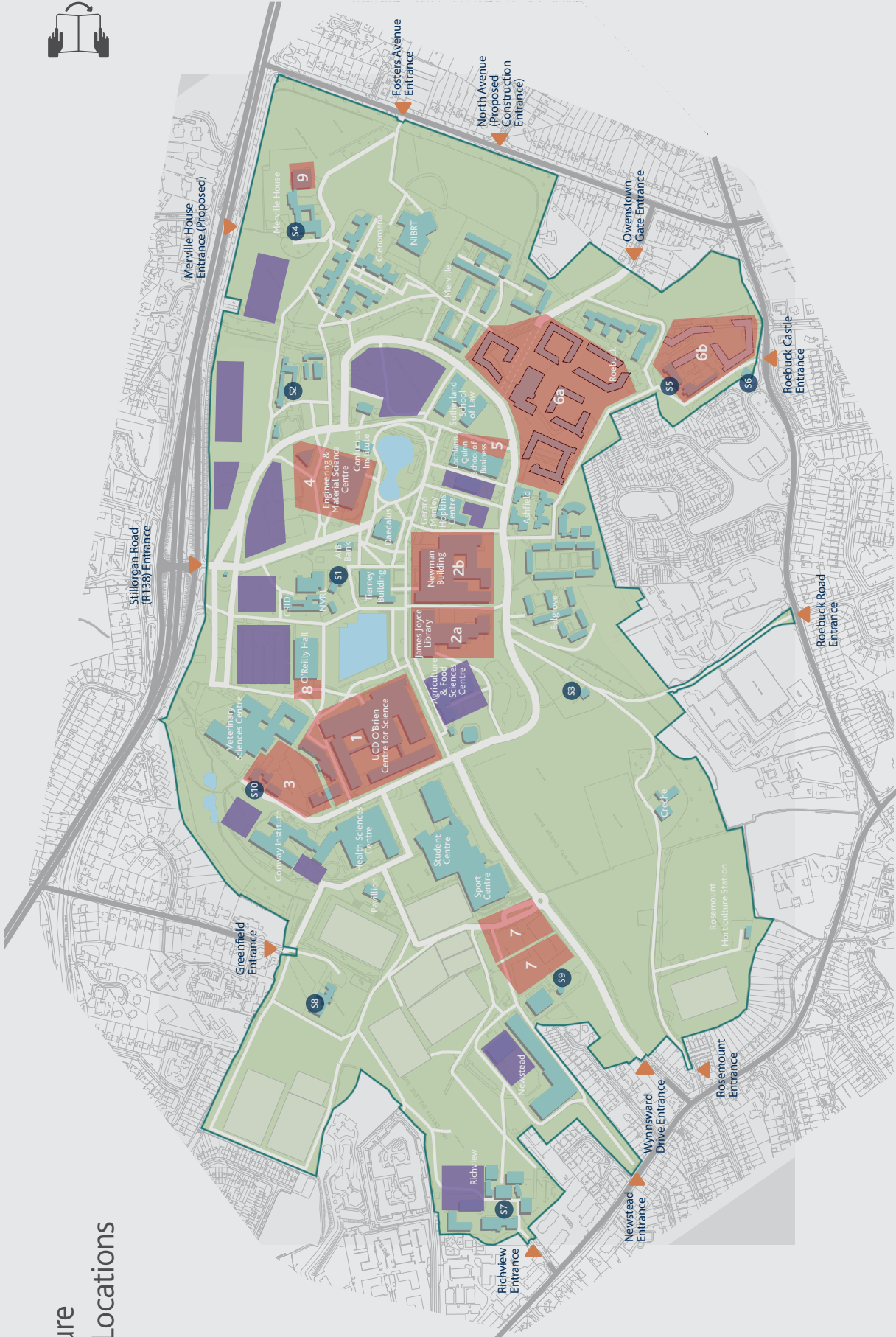


Potential Future Building Site Locations at Belfield



- 1 Science Precinct
- 2a James Joyce Library
- 2b Newman Building
- 3 Health and Agricultural Precinct
- 4 Engineering and Architectural Precinct
- 5 Business and Law Precinct
- 6 Residences Precinct
- 7 Sports Precinct
- 8 University Club
- 9 Merville House

- Protected Structures**
- S1 Ardmore House
 - S2 Belfield House
 - S3 Magnetic Observatory
 - S4 Merville House
 - S5 Roebuck Castle
 - S6 Roebuck Glebe
 - S7 Richview
 - S8 University Lodge
 - S9 Water Tower
 - S10 Woodview House





Existing and Potential Future Building Heights at Belfield

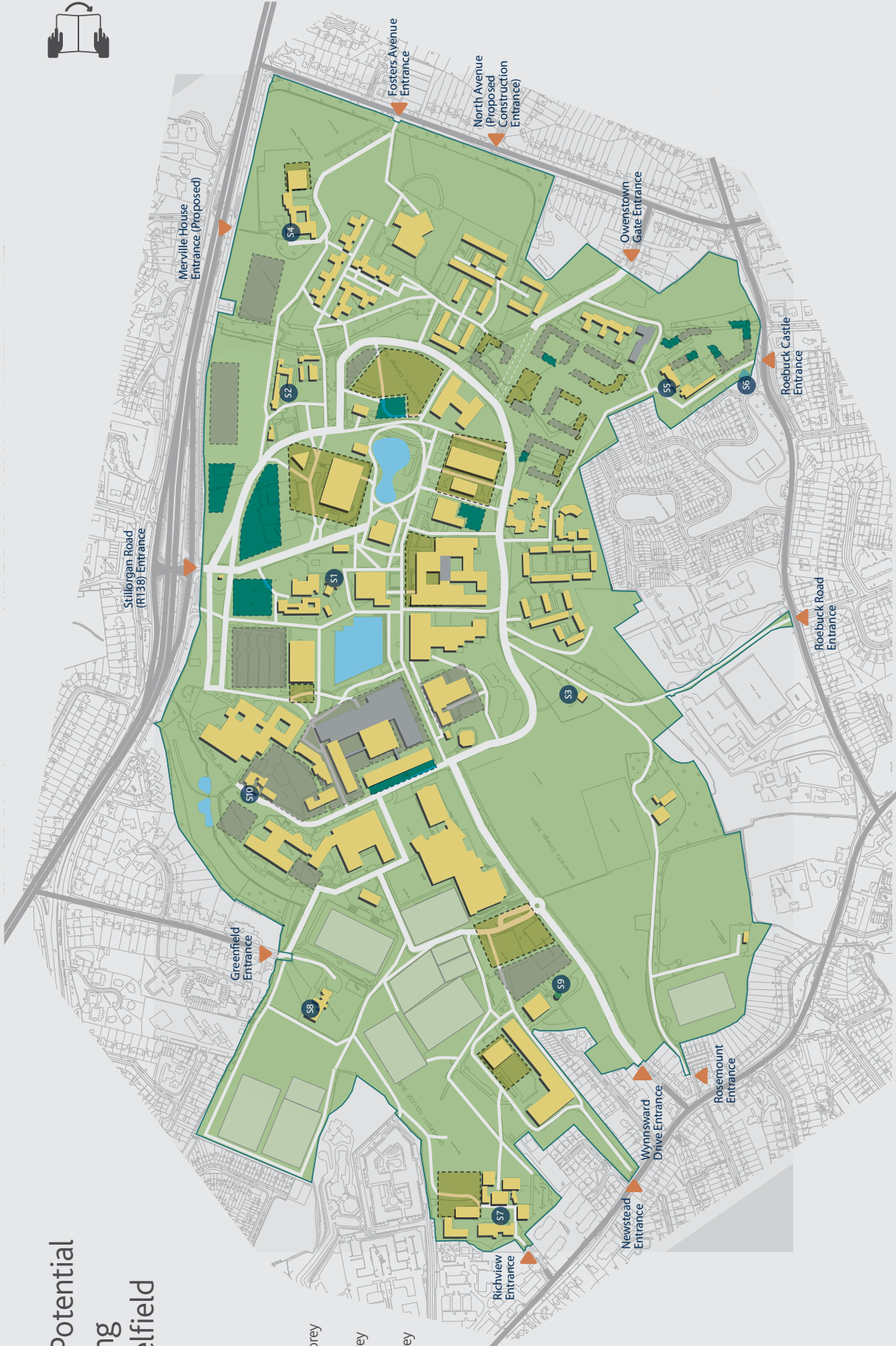


- Existing**
- 8 to 10 storey buildings
 - 6 to 7 storey buildings
 - 1 to 5 storey buildings

New

- Indicative building heights
- Subject to detailed design assessment

- Protected Structures**
- S1 Ardmore House
 - S2 Belfield House
 - S3 Magnetic Observatory
 - S4 Merville House
 - S5 Roebuck Castle
 - S6 Roebuck Glebe
 - S7 Richview
 - S8 University Lodge
 - S9 Water Tower
 - S10 Woodview House



Campus Landscape Principles

Future campus initiatives will carefully consider:

- Creation of spaces of beauty which encourage passive recreation, enjoying the environment and relaxing, opportunities to create good places to sit to enjoy the sun and to people watch.
- Social activities, places to meet and greet, exchange knowledge, accessible and inclusive spaces for the campus population and surrounding community to interact.
- Walking and cycling facilities – amenity, health and well-being, benefits to campus population and surrounding community, walking, dog walking, recreational cycling, mental space.
- Places for retreat and reflection, to view landscape features such as the lakes, parkland and garden setting, with microclimates which protect from wind and rain while acting as a sun trap.
- Events, campus outreach and celebrations, graduation and student open days.
- Heritage, to enable enjoyment of cultural assets associated with the landscape of the period houses, to create places that highlight, preserve and explain the historical aspects of the landscape setting contributing to the sense of place and identity of the campus.
- Active recreation – providing opportunities to take part in wide range of outdoor sport activities. Consider locating suitable sports areas throughout the campus to animate spaces and imbue active recreation throughout the campus landscape. Provide for spectator friendly areas at suitable pitches.
- Operational sustainability: establishing and managing vegetation with the minimum inputs and outputs of resources necessary to achieve the objectives of the planting, ensuring diversity in planting to counter pests and disease and environmental change, promoting diversity to create visual interest during different seasons.
- Planning ahead of the landscape structure to anticipate development, mitigate impact of development works and provide for more maturity within landscape structure for new development.
- Temporary treatment of future development lands, with meadows for biodiversity.





Campus Commuting Principles

UCD is committed to continued implementation of sustainable transport infrastructure, including pedestrian and cyclist directed amenities, commuting facilities, and the longer term development of Bus Rapid Transport Systems and other mass transportation initiatives.

The following is an outline of commuting related development principles to be implemented during the life of the UCD Strategic Campus Development Plan 2016–2021–2026. These principles will form the basis of the UCD Campus Travel Plan, which will be developed in conjunction with the National Transport Authority and Dún Laoghaire-Rathdown County Council. These principles will progress towards the implementation of key objectives and will continue to be monitored within the review group structure established between the agencies. The principles are:

- Sustainable transport and travel, ensure provision of necessary facilities to enable maximum usage of sustainable modes of transport, establish locations for visible bicycle parking, provision of shower, changing room and locker facilities in buildings. Promote awareness of car-sharing among staff and students.
- Consider interaction of pedestrian and cycle movement with vehicular traffic.
- Ensure strong, legible animated routes, within day and night environment.
- Enhanced mobility and shared surface principles adopting primary route with shared surface to accommodate pedestrians, cyclists with maintenance vehicles/waste collection as guests in space.
- Enhanced access points into campus, creating a sense of place and high visibility for the University.
- Promote vehicular movement at periphery, proposal to internalise cyclist movement along Stillorgan Road (R138).
- Continue to implement a strategy which relocates vehicular traffic and car parking from the core of the campus to the periphery, including multi-storey and underground parking at strategic locations.
- Facilitate electric-car drivers through the provision of e-charging points.
- Support Dún Laoghaire-Rathdown County Council and the National Transport Authority in the implementation of proposals outlined in the Greater Dublin Area Cycle Network Plan. Explore the potential of extending the Dublin Bike scheme to Belfield.
- Continued support of the National Transport Authority, Dublin Bus and other agencies in the delivery of high quality public transport services.



Planning Context

Regional Planning Policy Regional Planning Guidelines for the Greater Dublin Area 2010-2022

The RPGs identify the education and skills sector (including connections between firms and higher education institutes) as important factors of competitiveness in the Greater Dublin Area. The successfulness of the Gateway Core Economic Area, in which UCD is located, is dependent on the *“effectiveness of the education sector together with skills retention being aligned with, or imputing into industry and commerce. Therefore establishing business relationships between universities, third level institutes and firms should form part of the objectives in developing the SMART economy and cluster development.”*

Economic trends that have emerged from the ESRI Medium Term Review show that the educational sector, third and fourth level education attainment and innovation are important for developing the knowledge based economy. The GDA is fortunate in this regard as third level education rates in the GDA are above national average and higher than all other regions.

The RPGs recognise the various agencies and bodies involved in providing support for small enterprises including the Board of Irish Colleges and Higher Education Institutes (Campus Incubation).

As stated in Section 3.5.4 of the RPGs *“The GDA has a highly educated population, with the largest proportion of third level attainment in the country. The metropolitan region boasts wide ranging and diverse number of centres for learning and innovation, including universities, institutes of technology and specialist 3rd level institutes, which attract high levels of R&D investment and includes the highest levels of research activity by any region.”*

Policy ER5 of the RPGs seeks to “Develop the GDA as regional leader in the ‘Smart Economy’ and the Dublin Gateway as a ‘SMART City’ by:

- Supporting innovations in knowledge and technology flows through such initiatives developed between NUIM and Intel; the UCD/Trinity Innovative Alliance, and Enterprise Irelands Technology Transfer Strengthening Initiative and other forums.

Local Planning Policy Dún Laoghaire-Rathdown County Development Plan 2016-2022

The County Development Plan identifies UCD as a centre of education and academic excellence but also recognises its potential as a future economic growth and employment hub in terms of academic expansion and ‘Campus Company’ enterprise. UCD is the largest single employer on the County, with an approximate workforce of c.4,000 employees.

As stated in Section 7.1.3.4 (i) of the Plan, *“UCD is Ireland’s largest and most diverse university. The current population of UCD for the 2013/2014 academic year is circa 26,750 students and 4,000 direct employees. There are approximately 6,580 international students drawn from approximately 127 countries.”*

The Council recognise positive synergies that result from the close collaboration between universities and industries. This is reflected in the policies and objectives of the Plan, which specifically relate to UCD lands. Section 3.1.2.4 Policy E4 of the Plan states *“It is Council policy to work in conjunction with Further and Higher Institutions in the creation and fostering of enterprise through research, innovation and development activities and the commercialisation of such activities”*

“The Council has been closely involved in UCD’s ongoing plans to develop the campus – including significant additional incubator/ office space to commercialise hi-tech research projects,... which will introduce a greater mix of uses on the campus ...- to ‘open up’ the campus to the wider community. The Council will support the efforts of UCD to continue to develop as a world-class university”

“In addition to this, Section 7.1.3.4 Policy SIC9 of the Plan for instance states “It is Council policy to support the development and ongoing provision of Further and Higher Level Institutions in the County including University College Dublin (Belfield and Blackrock campuses)...”

Section 7.1.3.4 (i) of the Plan refers to the UCD Campus Development Plan and recognises its vision for the future of the campus in terms of *“world-class architecture, a network of greened pedestrian walkways and a transformation of the academic infrastructure to reflect the ambitions of a leading European University. ... primary aspiration of the Campus Development Plan is the advancement and promotion of UCD as a modern university, one that excels in both academic achievement and the built environment. UCD seeks to promote itself as a sustainable, healthy and living campus through the development of both academic and non-academic facilities, increased on-campus residencies and the promotion of knowledge based industry-linked research facilities.”*

The Planning Authority, in its Plan, confirms its continued support for the development of the Campus Plan in accordance with both the County Development Plan and National and Regional policies.

Land – Use Zoning

The overall University lands are zoned ‘Objective TLI’ (Third Level Institution) *“To facilitate, support and enhance the development of third level education institutions.”.*

The following uses are permitted in principle and open for consideration under the Objective TLI land-use zoning:

Objective TLI – Land-Uses	
Permitted in Principle	Open for Consideration
<p>Carpark, Community Facility, Childcare Service, Cultural Use, Doctor/Dentist etc., Education, Enterprise Centre, Health Centre/Healthcare Facility, Office less than 1000 sq.m (i), Open Space, Public House, Public Services, Residential(k), Restaurant, Science and Technology Based Industry, Shop Neighbourhood, Sports Facility.</p> <p>(k) In accordance with Department of Education and Science Guidelines on Residential Development for Third Level Students (1999) and subsequent supplementary document (2005).</p>	<p>Conference Facilities, Hotel/Motel, Refuse Transfer Station, Transport Depot, Travellers Accommodation, Offices, Shop District.</p>

Permitted land-uses indicated under the 'TLI' zoning objective are reflective of the broad range of services and facilities generated by third level campuses which not only provide education but also facilitate enterprise, research and development, leisure and recreation activities that are available to the wider community in Donnybrook, Clonskeagh, Friarland, Ardillea, Mount Merrion and lands along the Stillorgan Road.

Specific Local Objectives

In addition to the 'TLI' zoning objective, the Plan identifies Specific Local Objectives (SLOs 1, 6, 146 and 148) that are applicable to the UCD lands and surrounding area.

Specific Local Objectives (SLOs)	
Specific Local Objective	Description
SLO 1	"To facilitate, support and enhance the development of University College Dublin including all associated and supporting facilities. A range of uses will be facilitated on Belfield campus lands to encourage and foster strong links between education, community and the business sector in the County."
SLO 6	"To promote potential additional future uses of the Dublin Eastern Bypass reservation corridor, including a greenway/cycleway, a pedestrian walkway, biodiversity projects, recreational opportunities – inclusive of playing pitches – and public transport provision such as Bus Rapid Transit services, pending a decision from Transport Infrastructure Ireland/Central Government in relation to the future status of the Bypass. Any potential additional future short-term uses of the reservation corridor will be subject to a joint feasibility study to be undertaken by TII and the NTA."
SLO 146	To prepare a Local Area Plan for Clonskeagh/UCD.
SLO 148	"To identify and address the ongoing car parking issues within and surrounding UCD Campus. In particular, the Council will support and facilitate the on-going process of Mobility Management Planning for UCD, involving the University and the NTA, in order to achieve more sustainable travel patterns to and from the University and to work towards the development of the Campus Travel Plan."

Student Accommodation

UCD is the largest third level institution in the County, with a population in 2013/2014 of c. 26,750 students. The growing student body (including international students) requires the provision of additional student accommodation both on and off campus. Section 2.1.3.12 Policy RES12 of the County Development Plan facilitates the provision of student accommodation by stating:

"It is Council policy to facilitate student accommodation on student campuses or in locations which have convenient access to Third Level Colleges (particularly by foot, bicycle and high quality and convenient public transport) in a manner compatible with surrounding residential amenities. In considering planning applications for student accommodation the Council will have regard to the 'Guidelines on Residential Developments for Third Level Students' and its July 2005 Review (particularly in relation to location and design)."

When dealing with planning applications for such developments, Section 8.2.3.4 (xii) of the Plan states that a number of criteria will be taken into account including:

- The location of student accommodation within the following hierarchy of priority:
 - On campus
 - Within 1km distance from the boundary of a third level institute.
 - Within close proximity to high quality transport corridors (DART, Stillorgan Road (R138) and Luas), cycle and pedestrian routes and green routes.

- In all cases such facilities will be resisted in remote locations at a remove from urban areas.
- The potential impact on residential amenities. Full cognisance will be taken of the need to protect existing residential amenities particularly in applications for larger scale student accommodation, and such accommodation will not be permitted where it would have a detrimental effect.
- The level and quality of on-site facilities, including storage facilities, waste management, covered cycle parking and associated showers and locker, leisure facilities, car parking and amenity.
- The architectural quality of the design and also the external layout, with respect to materials, scale, height and relationship to adjacent structures. Internal layouts should take cognisance of the need for flexibility for future possible changes of use.
- The number of existing similar facilities in the area. In assessing a proposal for student accommodation the planning authority will take cognisance of the amount of student accommodation which exists in the locality and will resist the over-concentration of such schemes in any one area in the interests of sustainable development and residential amenity.
- In all schemes the applicants will be required to provide a written documentary confirmation for a 'Qualifying Lease' as defined in the Guidelines on Residential Developments for Third Level Students published by the Department of Education and Science in 1999 and – noting the supplementary review document in 2005 – to prove that the accommodation is let to students within the academic year.

Protected Structures

There are ten protected structures on the UCD lands recorded by Dún Laoghaire Rathdown County Council.

Record of Protected Structures			
RPS No.	Name	Location	Description
5	University Lodge	Greenfield Park, Donnybrook, Dublin 4	House
6	Richview (UCD)	University College Dublin, Belfield, Clonskeagh Road, Dublin 4	House, Main House, Memorial Hall, Old Infirmary and Library
9	Woodview House	University College Dublin, Stillorgan Road, Belfield, Dublin 4	House
19	Ardmore House	University College Dublin, Stillorgan Road, Belfield, Dublin 4	House
41	Belfield House UCD Clinton House for American Studies	University College Dublin, Stillorgan Road, Belfield, Dublin 4	House, Out Offices and Stable Yard
77	Magnetical Observatory / UCD O’Kane Centre for Film Studies	University College Dublin, Stillorgan Road, Belfield, Dublin 4	Magnetic Observatory (Former) and Pool
94	Merville House	University College Dublin, Foster’s Avenue, Dublin 4	House, Stable Yard, Entrance Gate and Piers
217	Roebuck Castle	University College Dublin, Stillorgan Road, Belfield, Dublin 4	Castle
236	Roebuck Glebe	University College Dublin, Stillorgan Road, Belfield, Dublin 4	Cottage
1901	Water Tower	University College Dublin, Belfield, Co. Dublin	Water Tower



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