chapter three the dunedin master plan frameworks

3.1 Master Plan Intent

In contemporary society, the ways in which one accesses information, communicates with others, creates virtual links between remote locations, accesses entertainment and news, orientates and navigates space and geographies are all being profoundly changed by the ubiquitous availability of information and communication technology. These changes are profoundly impacting universities, in pedagogy, in how and where research is conducted and in the subjects and combinations of subjects studied. The "placeless" or online University, where all the course materials are delivered remotely through technology, is available and in use. The historic role of the University as custodian of rare and hard-to-access information is rapidly being overtaken. How then should the physical University respond to this new "virtuality"?

What is clear from the consultations with all parts of the University of Otago community is that the face-to-face interaction and the sense of collegiality engendered by encounters with peers and colleagues and with the place, adds an irreplaceable quality to the teaching and learning experience that can be delivered only through the physical campus. Ensuring outstanding campus environments and student experience is therefore a primary intent of this Master Plan.

The University of Otago Master Plan addresses four principal questions:

- In what ways can the campus assist in the realisation of the vision of a "research-led University with an international reputation for excellence"?
- What external challenges does the University face and how might the Master Plan address them?
- How can the campus be changed through the Master Plan process to assist in delivering the University's vision and the implementation of its Strategic Imperatives?
- How and where does the campus accommodate growth?

The Master Plan is structured as a number of interrelated frameworks covering various aspects of the campus organisation and structure, which have been informed by some key themes.

The compact, walkable campus

The growth of the University over the last three decades has resulted in the University campus becoming somewhat dispersed, with poor pedestrian connection between its parts.

The Master Plan addresses these shortcomings by:

- developing the banks of the Water of Leith as a major new pedestrian corridor that connects the eastern areas of the campus with the core;
- forming improved linkages between the southern areas of the campus with the core through a programme of site acquisitions, the creation of a new pedestrian mall to the Dunedin Hospital and potential realignment of the state highways;
- upgrades to the streets and open spaces of the campus to enhance the walking experience, including providing weather protected pathways where practicable in all new construction; and
- limiting the spread of academic accommodation and concentrating teaching and learning at the campus core.

Accommodating future growth

Previous periods of growth have been accommodated with the lateral expansion of the campus. This Plan envisages more modest rates of University growth focused in new buildings on land mostly already owned by the University, in locations that will build up the compact form of the campus around its existing centre and along the Water of Leith. The plan is flexible and also identifies land where growth could be accommodated in the very long term, or if the current growth projection proves to be underestimated.

Places for interaction and informal study

A fundamental premise of the Master Plan is that learning supported by information and communication technology will take place in all spaces of the University. The spaces outside and between the formal learning locations are therefore seen as being of equal importance to the development of collegial culture. The Information Services Building and Link already provide an excellent model of the type of gregarious space that characterises leading universities. This is space for meeting, interaction, discussion, argument and discourse, socialising and gossip, as well as informal study, group enquiry and solitary reading. The Master Plan addresses this need through a number of proposed initiatives:

- A network of three teaching and learning hubs complementing the central spaces at the ISB serving the southern, northern and eastern Precincts of the campus by expanding the Hunter Centre, the St David Lecture Theatres and creating a new hub on the Wickliffe Press site, respectively;
- Relocating all non-essential administrative functions from the ground and first floors of the ISB, together with an expansion at first floor level into the Union Building, to expand its capacity for informal learning activities;
- Expanding the foyers of the Castle and Burns Lecture Theatres and creating additional informal study space in a new podium to the Richardson Building; and
- A proposal to construct a major new teaching and learning centre between the Archway Building and Water of Leith (designated the Leith Bend site), facilitated by the demolition of the ITS Building and adjoining buildings.

The University in the city

The University has grown from a small courtyard of buildings contained within little more than one grid of the city plan to being a major quarter of the city. A major theme of the Master Plan is to improve the integration of the University and the city of Dunedin. The Master Plan outlines six interrelated proposals to achieve this improved integration:

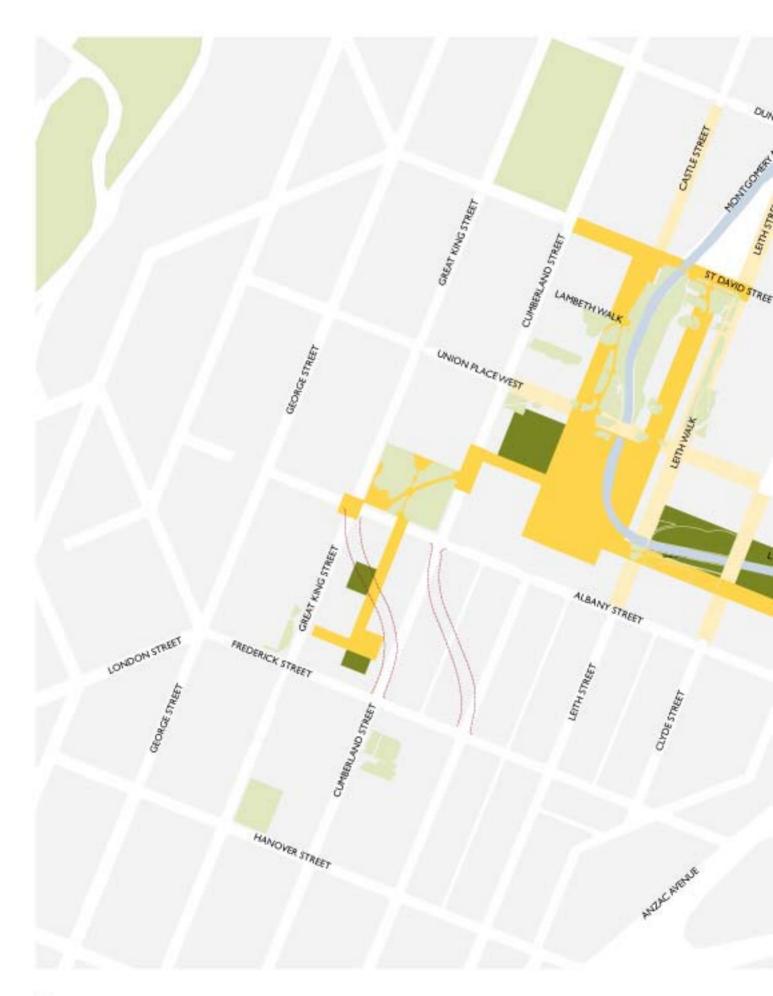
- Improvements to the landscape around the Leith to create a public waterfront accessible to the public;
- The provision of new facilities and services to attract the public to use the campus;
- More public use of the spaces around the Union Lawn for such events as markets, book fairs and the like;

- Street improvement to make for a more attractive public realm;
- Enhanced links to the University Plaza, the Forsyth Barr Stadium, and the Anzac Avenue Precinct, including the Hocken Library, to encourage public use of the campus space;
- Working with the city to regenerate the residential districts that surround the University campus.

Sense of place

Much of modern culture and economic endeavour is directed towards becoming "placeless" – being freed from the potential limitations of a particular location. Communications technology, the World Wide Web, low cost transportation and mass mobility all combine to constantly connect the world. And yet, paradoxically, it is rich face-to-face encounter that is constantly referred to during the consultations as being the unique and most attractive quality of the University of Otago. The Master Plan is directed towards reinforcing and extending the vivid sense of place that many parts of the campus already provide by:

- Promoting architecture that frames spaces and landscapes;
- Creating memorable and rich sequences of linked spaces connecting all parts of the campus;
- Promoting new buildings that reinforce the unique urban plan of Dunedin by working within the discipline of the original Kettle grid form;
- Making best use of the architectural heritage to reinforce the unique character of the University;
- Promoting buildings that respond to the local climate of Dunedin and creating good microclimate conditions in response to the place; and
- Establishing a Cultural Strategy that includes architecture and arts and that celebrates the local culture and history of the place.





3.2 Spatial Framework

The spatial framework provides the underlying spatial structure for the Master Plan into which all the other frameworks that make up the Master Plan are fitted.

The key elements of the spatial framework are:

- Working within the discipline of the Kettle grid by maintaining the street alignments and organising new buildings to align both with the street grid and the plot subdivision grid;
- Working with the Leith as a counterpoint to the Kettle grid and as the central landscape feature of the University;
- Interconnecting the internal and external public spaces of the campus to create clear and legible connections between all parts of the campus;
- Developing circulation space to provide locations for social interaction, informal learning communication and the provision of University services including retail, and catering space; and
- Working with the city and transport authorities to review the current "S bend" arrangements of the state highways on Cumberland Street and Great King Street. The Plan includes two options. One proposes the removal of the "S bend" one-way roads and a reinstatement of two way urban streets in line with the original Kettle plan of the city. The other maintains the current arrangements and infills the spaces between roads with buildings adapted to the traffic geometry.

3.3 Landscape Framework

The key landscape elements of the plan are as follows.

- Recognise, work with and promote an awareness of the underlying bio-physical and cultural landscapes.
- Encourage the use of bicultural naming of places, geographical features, flora and fauna.
- Where appropriate, promote the use of New Zealand indigenous and native planting to enhance the campus biodiversity and to create habitat for native birds, fish, invertebrates and plants.
- Conserve and reinforce existing spaces of value where exotic planting has been used. Manage and protect existing exotic trees which are valued by the campus



community.

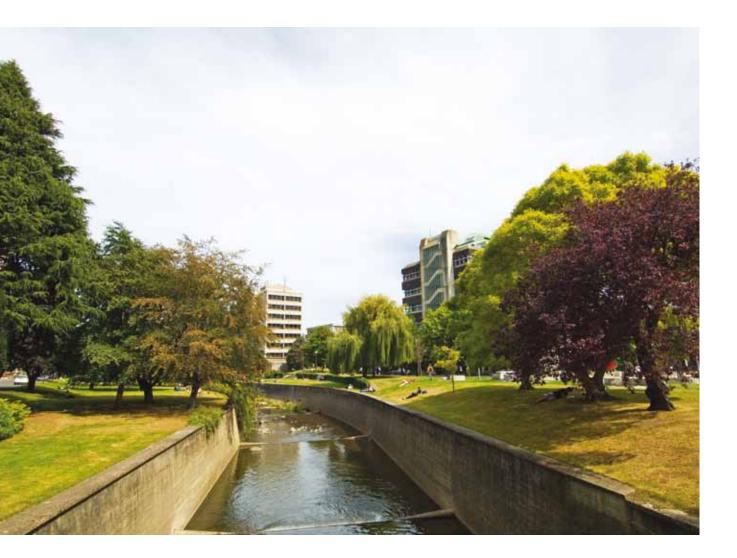
- Develop a strategy for memorial trees, items and places.
- Create a series of linked, quality external spaces throughout the campus so that each space has a sense of place. Identify existing and potential spaces and define the character of each. The design attributes of each space shall include a consideration of adjacent building uses, microclimate, amenity, access and important linkages to adjacent spaces. Designs for new buildings shall consider the quality of adjacent external spaces and plan for external uses to be integrated with internal uses.
- Prioritise pedestrian circulation patterns and provide the appropriate paved surfaces, amenity and furniture. Protect and improve pedestrian sightlines along all major pedestrian routes. In some cases this will mean clean-stemmed trees to a height in excess of two metres and removing existing plants with a shrub habit.
- All new external spaces to be capable of supporting service traffic and designed for flexibility of use.
- Agree campus-wide strategies for all public realm street furniture, lighting and paving. Wherever possible select local and sustainably-sourced materials.
- Provide locations for external sculpture, graphic art

and selected texts by alumni.

- Improve signage and way finding across the campus.
- Work with the Dunedin City Council on substantial upgrades to the public realm of the streets that pass through and around the campus.
- Promote the Water of Leith as an attractive destination for University staff, students and the public of Dunedin. Develop the Leith corridor for ecological and recreational uses, to facilitate access throughout the campus and to provide a primary link with external open spaces.
- Work with the Dunedin City Council, Otago Regional Council and other stakeholders to ensure there is a long term integrated plan for development.
- Develop the Leith corridor as a coordinated landscape project including professional engineering work for flood mitigation and civil works. Include town planning and user inputs.







The Leith Corridor

The proposed ORC flood mitigation work, the development of the Forsyth Barr Stadium and University Plaza, the proposed redevelopment of the Otago School of Art site by the Otago Polytechnic and the development of this Campus Master Plan coincide to offer a "once in a lifetime" opportunity to revision the Leith as a river, a spatial corridor and important urban and University campus amenity.

- The Leith is the only major river in Dunedin.
- The Leith is at the heart of the University of Otago
- The Leith combines the memory of biophysical and cultural landscapes.

The river was formative to the natural landscapes of North Dunedin. Most of the relatively flat areas are built over the alluvial outwash plain so that, if left unmanaged, the flooding of this plain is a natural consequence.

The Water of Leith emerges from Leith Valley and joins with Lindsay Stream from North East Valley. At that point the river is blocked by a basaltic spur and is forced to turn south. The river continues past the University Clocktower Building until it reaches the end of the spur and again turns east towards the harbour. Leith Bend is the point of turning and this is close to the perceived heart of the Dunedin campus.

The river has four principal characteristics.

- North of the campus the river descends from a large semi-alpine, tussock grassland catchment, through steep walled bush ravines and is then man-modified in a concrete channel at the northern edge of Woodhaugh Gardens. At Woodhaugh can be seen some remnant mixed podocarp - broadleaf forest typical of the Leith riparian vegetation in its natural valley state. The river then continues through the Dunedin Botanic Gardens with some bank planting in native and exotic species.
- In the North campus area the flow has again been channelled with high concrete embankments cutting through the park-like and exotic setting in front of the University Clocktower Building. On the true left (east) bank, the buildings and landscape context are considered to be iconic and sensitive to large scale changes. The true right bank runs adjacent to a major north-south pedestrian circulation route where amenity, microclimate and shelter are important. The water is generally visually and physically inaccessible.
- At the central campus and at Leith Bend the character of the Leith is both more natural and dramatic. Here the Leith is partially channelled but with a remnant, naturally-cut cliff face to the true left bank. Some native vegetation occurs at this point. Early plans show a natural ox-bow feature at the bend.
- To the eastern campus and extending to the harbour the river is contained within two split channels – a primary and high-flow channel. For most of the year these have the character of an industrial drain with large areas of exposed concrete the dominant visual characteristic.

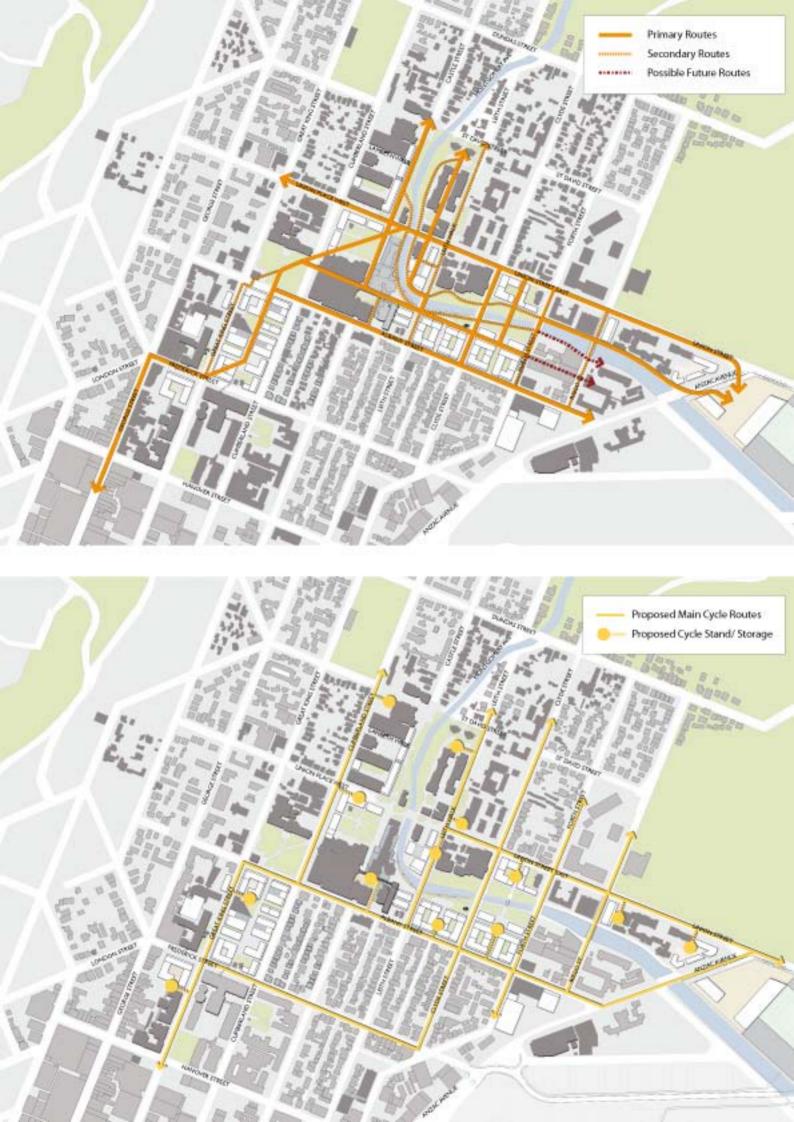
After heavy rain in the large montane catchment, the river can change and quickly assume the character of a violent torrent. The Otago Regional Council has hydraulically modelled the Leith system and is developing engineering proposals to mitigate the threat of flooding to the lower alluvial flood plain and the reclaimed areas on the edge of the harbour.

The Master Plan sees the Leith as a major landscape

element within the campus. The Leith corridor has multiple recreational and ecological uses and is at the heart of the University campus. It is therefore practicable to place the hydraulic mitigation proposals within a wider vision.

The Master Plan suggests a landscape-led, integrated, multiprofessional approach to deliver wider amenity values to the campus and the city. The Master Plan proposes:

- Working with the Dunedin City Council, Otago Regional Council and other stakeholders to ensure there is a long- term, integrated plan for development;
- Developing the Leith corridor as a coordinated landscape project including professional engineering work for flood mitigation and civil works, including town planning and user inputs;
- The removal of the ITS Building that spans the river and the consequent limitations on channel width at that point. This will open the way to new hydraulic modelling where greater width at critical points may reduce the risk of standing waves and higher channel walls;
- Widening the river with terraces to allow greater physical and visual access to the river bank;
- New bridges at Leith Walk and Riego Street;
- The potential for a half-tide barrier to increase the volume of water retained in the river during normal flows, and the removal of the mid-channel barrier;
- New landscape planting on both banks of the Leith;
- A greater focus on microclimate, uses and circulation on both banks;
- Between Union Street and the harbour, and on the true left bank, a focus on indigenous and native revegetation to improve wildlife habitat and biodiversity; and
- Beyond the campus area, improved public access along all parts of the river to the shoreline.



3.4 Movement framework

The movement framework sets out proposals for the pedestrian circulation, public transport and all types of vehicles accessing the campus. It has been developed following extensive analysis of current and potential pedestrian and vehicle movement in and around the campus by specialist consultants Space Syntax, whose report and recommendations are provided as an Appendix to this report.

In line with the general principle of promoting the University campus as a walkable environment, pedestrians are generally afforded priority over other transport modes in the campus core. The analysis by Space Syntax demonstrates that much of the area is already a good walking environment. The plan therefore focuses on upgrading the quality of connection in the less wellconnected areas. The following summarises the proposals for each transport mode:

Pedestrians

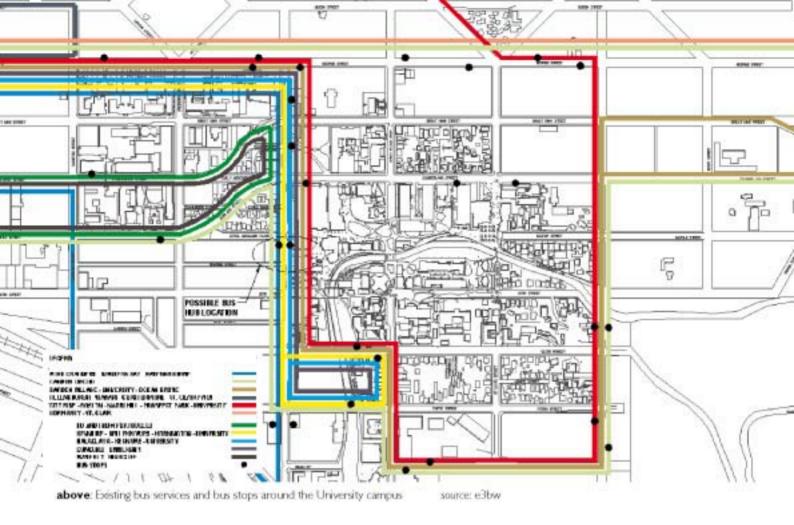
- Work with the Dunedin City Council and the Highways Authority to increase pedestrian priority at all road crossings;
- Improve clarity of pedestrian circulation as part of the landscape redesign; and
- Improve the quality and amenity of pedestrian routes along the Leith.

Bicycle

- Confirm the current campus cycling policy which identifies areas on campus where cycling is prohibited in order to assure pedestrian safety;
- Introduce a new policy for the provision of built-in bicycle racks as part of all new building works; and
- Strengthen existing, and provide new cycle paths as part of the street landscaping upgrades.

top: Primary pedestrian movement through the campus linking to George Street

bottom: Proposed Cycle Routes and Cycle Stand / Storage throughout the Campus



below: Proposed servicing routes and loading facilities



Public transport

Although other forms of public transport have been considered as part of the Master Planning process, the comparatively low population of the city, and the dispersed form of the suburbs points towards buses as the only viable form of public transport that might be envisaged during the life of the Plan. The Otago Regional Council is understood to be actively engaged in upgrading information, bus frequency and service routes.

The Master Plan proposals are therefore to support the initiatives already under way by:

- Providing improved waiting facilities and shelters as part of the street public realm upgrade;
- Providing additional bus stops at logical gateways or service points for the campus to provide convenient access to all parts of the campus and immediate environs;
- Improving signage and route / timetable information at bus stops; and
- Regularly reviewing student and staff passenger demand and travel itineraries to assist ORC to optimise bus services.

Tram / Light Rail

During the consultation process, a number of stakeholders raised the desirability of a tram service running the length of Union Street. Such a tram service was seen as being an ideal way of linking the University Plaza with the main campus. It was also suggested that the tram could be extended southwards down George Street to the Octagon and then loop eastwards to connect back to Anzac Avenue.

Philosophically this would be an ideal way of better connecting the University with the city, improving the accessibility of the eastern Precinct and providing incentive for the public to explore this part of the city.

However, the proposal requires substantial capital investment, especially since patronage would be dependent on the frequency of services. Other concerns related to the ability of the service to accommodate the peak loads generated by class changeover and event days at the Stadium and the ability of trams to be able to sustain the gradients in the centre of the campus.

In summary, there is no doubt that such a service would be of benefit to both the University and the City. However the feasibility of the service would need to be thoroughly examined. For this reason it is not promoted as a Master Plan initiative in the short to medium term.

Service Access

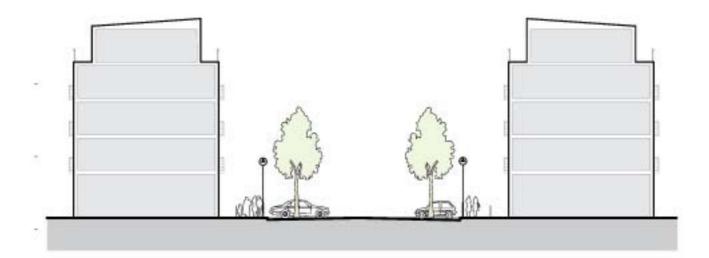
The location of the campus within the city grid means that most major campus service points are afforded convenient service access from the existing road network. The exceptions are where roads have been closed to through traffic, notably Castle Street and Leith Street. In these locations traditional service points have been cut off, requiring service vehicles to enter pedestrian zones, notably to access the loading docks of the Science II and Science III Buildings. Not only does this pose a pedestrian safety risk but it results in large trucks manoeuvring in the very heart of the campus opposite the Clocktower. It also encourages other vehicles to enter the pedestrian zones of the campus. Accordingly, the Master Plan proposes that servicing for the entire Science Precinct be undertaken from a new loading dock on Cumberland Street.

In other locations, servicing proposals comprise:

- Landscape improvement to provide robust designs capable of accommodating the heavier loads imposed by servicing traffic;
- New buildings serviced from the minor streets away from major pedestrian routes; and
- Landscape screening to loading areas



above: Proposed street network serving the campus linked into the surrounding street grid



Car access

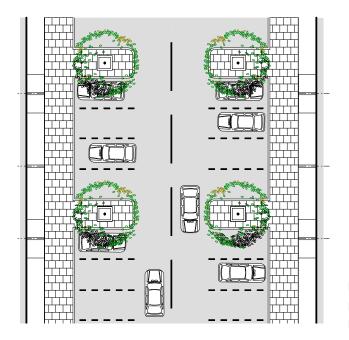
The dispersed urban form of Dunedin combined with its low overall population makes it a very convenient city for car access to all areas at almost all times of day. There is little congestion and when it does arise it is minor in extent and of short duration.

Car parking

In line with the sustainability directives of the University, it is proposed that the current level of parking be retained on campus and that no additional spaces be provided to accommodate future growth. It is proposed that car parking displaced by the closure of current open site car parks through new development, gardens and landscaped open space be accommodated by:

- Additional on street parking formed through the public realm upgrades of streets;
- Limited car parking provided for within new developments;
- The use of parking adjacent to the stadium; and
- The use of Park and Ride parking.

It is proposed that there be ongoing active promotion of alternative travel methods including walking and cycling, public transport, car sharing and active strategies to encourage an increase in the population density of residential precincts close to the University through managed development within achievable walking distance of the campus.



left and far left: Indicative Street Plan and Section to show how parking and landscaping can be incorporated to create a pleasant pedestrian friendly street



3.5 The State Highways ("S bends")

The initiative by the city and the University in the 1970s to create a traffic free centre to the University campus by the closure of part of Castle and Union Streets required the relocation of the main state highway westwards. The approach adopted in line with traffic planning conventions of the time was to create what became known as "the one way pair'. Cumberland Street South and Great King Street were designated one-way routes running north linked by a new serpentine connector road (the "S bend") within the block between Albany and Frederick Streets. Cumberland Street North and Castle Street were designated one-way southbound also linked by a new S bend connector street between Albany and Frederick Streets. From a road traffic engineering stand point the arrangement functions well. There is little or no congestion, the traffic flows freely at all times.

The arrangement does however adversely affect both the city and the University in three ways.

Firstly, for pedestrians moving between the core of the University campus and the Health Sciences facilities in the southern Precinct the arrangement creates:

- A multiplicity of confusing routes and road crossing points;
- Direct road crossing routes being at uncontrolled points in the traffic system that encourage 'jay walking' and risk-taking by pedestrians;
- Increased traffic speeds that are dangerous to other road users; and
- Blind spots for pedestrians and drivers that increase the risk to pedestrians

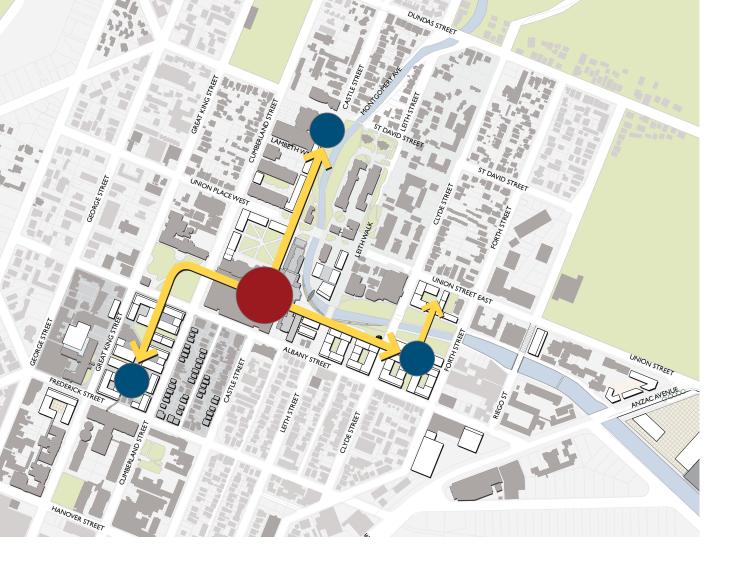
Secondly, in urban design terms the arrangement has resulted in the break up of the urban form of the city resulting in:

- Many plots of land remaining unused or functioning as open car parks;
- The scale of roads imposing a bleak appearance of low urban value;
- Sites that are in use being generally rundown, adding to the bleak appearance of this part of the city;
- Difficulties in bringing into beneficial use the vacant sites given the poor quality of address that the highways create; and
- The nature of the void in the city that this arrangement creates that breaks the University into two separate campus areas.

Thirdly, the economic and urban impacts of the one-way roads need to be considered. Current good practice in the fields of urban regeneration and urban design would suggest that high speed one-way roads in city centres have negative impact on local areas in terms of the perception of the value of the place. By inspection the one way pair seems to be attracting high car dependent uses that would more normally be associated with out of town locations – not the centre of an important city. While this consideration falls outside the scope of the Master Plan, it should also be considered as a reason for a re-examination of the "S bend" solution.

The development of alternative solutions to the S bends would require a separate and detailed study of all aspects of the issues outlined above which is beyond the scope of this Master Plan. Nevertheless, the Master Plan team considers the benefits of the removal of the S bends to be of such significant merit to warrant basing the Master Plan on that proposition.

However the magnitude of the cost of such an enterprise is understood and appreciated. Accordingly, an alternative Master Plan proposal for the affected Precincts has been prepared that retains the current road alignments. This alternate scheme is documented in the South Central Campus Precinct Plan (refer section 6.5).



3.6 Campus Hubs framework

A key strategy of the Master Plan is to support new forms of pedagogy such as self-directed learning ('e-learning'), small group teaching and group study. Under this approach, the circulation and break-out spaces between formal teaching settings are treated as space for active learning and not just movement between classes. To achieve this, the campus needs to be developed as a series of interlinked hubs, across which social, academic and administrative functions are arrayed, with the intention of creating an integrated learning community.

The Master Plan proposes the development of a network of such hubs across the University for formal and informal learning, knowledge and student services centres, social and recreation activities, retail, work and workspace; services and support, and community/public interaction; all as a connected network, blending local convenience with broader objectives of interaction and collaboration.

Some of these hubs already exist in some form. The ISB, Link, University Union and the Burns and Castle Lecture Theatres form a central hub serving the entire campus. At this location, students and staff are able to access services, information and library, a variety of food and beverage offerings, formal and informal teaching and study spaces, project spaces and recreation facilities. Three additional Precinct hubs will support this central hub so that all parts of the campus are within easy reach of shared facilities and services.

The recently-created Hunter Centre provides some hub services within the southern (Health Sciences) Precinct, and the Master Plan envisages the expansion of these services over time to include additional study and teaching spaces, more student services and expanded food and beverage facilities operating over extended hours. There is also potential for the relocation of the Medical Library from the Sayers Building to augment this hub.

The St David Lecture Theatre and Science Library provide the central facilities around which to develop a service hub location serving the northern part of the campus, with the expansion of the existing café spaces and the provision of more student services and informal study space.

In addition to these existing sites, a new Precinct hub is proposed to be located in the redeveloped Wickliffe Press site serving the eastern areas of the campus, with the facilities within the buildings in the University Plaza development providing limited amenities and services as a satellite to this.

3.7 Cultural Framework

An important initiative of the Master Plan is the recommendation that the University devise and implement a cultural strategy, for which there would be three streams: custodial, curatorial and narrational: preserving, interpreting and presenting the history of the University, its community, its achievements, the history and meaning of the land on which it sits and its relationship with the city in which it is located. A centrepiece of that strategy would be the creation of a University Interpretive Centre, but the strategy should be much more than this initiative alone.

The following are potential subject matters that may be manifested passively (exhibitions, art and craft) and actively (performance and events):

- Culture
- Heritage
- Site
- City
- Cultures Mãori, Pacific Islander, European / Scottish, contemporary / multicultural
- Institutional the University
- Alumni
- In memoriam

The Strategy should also include the development of a policy, frameworks and funding to access information and/ or sponsor research, either utilising internal resources or engaging with existing agencies such as the Hocken Library, the Otago Museum and the Settlers' Museum.

Memory

One of the characteristics of place that technology has not yet been able to replicate or replace is the ability of buildings, public spaces and landscapes to be the repository of memory. The memories of student days that were recounted during the consultation process were intimately connected to the experience of the buildings and place and to certain conditions of light and weather. Events, triumphs and tragedies of past staff and Alumni are all capable of being embedded in the place marked by art memorials, exhibits, landscapes and architecture. The Master Plan responds to this characteristic of place as carrier of memory or mnemonic place with three specific proposals. The concept should ideally be extended across the whole campus, as a way of enabling the place to communicate core values, knowledge and memories. These proposals are:

- To use the landscape design of the Leith as a vehicle to explore and celebrate Mãori culture and pre-European ecology and use of the land;
- That the University develop a strategy to address requests for on-campus memorials which are currently dealt with in a rather ad hoc way through plaques, trees, benches and the like;
- To develop an interpretive and exhibition centre celebrating the history, academic and research achievements of the University, potentially located within the Clocktower Building.

Heritage Buildings

An important component of the strategy should be to enhance the dignity, purpose and accessibility of the University's heritage buildings. The heritage buildings on the Dunedin campus are of national architectural and cultural significance, being the first purpose-built University buildings in New Zealand. They are icons of both the University and the city and should form a key part of the Otago experience of any student, staff member or visitor. Currently not all the buildings accommodate the most suitable functions, and some are limited in their accessibility to the public. It is recommended that the importance of these buildings should be reinforced as follows:

Clocktower

- Convert the basement to University Interpretive
 Centre/museum
- Consider improved access to the ground floor, potentially through the conversion of existing office space to teaching and learning or other more public functions

Professorial Houses (St David Street)

• Restore and consider more appropriate public use

Geology Building

• Convert to a Teaching and Learning Centre to be accessed by all departments by relocating Geology to new, purpose built accommodation.

Archway

 Restore the Allen Theatre as the University's "Great Hall" by stripping out latter-day theatrical equipment, false proscenium etc, and replacement of performance facilities elsewhere on the campus. Restore the integrity of other spaces.

Marama Hall

• Improve public access and diversity of use (e.g. public lectures and debates)

Home Science Building

• Restore and consider more appropriate (public) use

Performing Arts Centre

The Master Plan supports the concept developed by the Department of Music for the creation of a Performing Arts Centre, comprising two 200-seat performance venues one for music recital and one for theatre performance - to be integrated with the redevelopment of the former Radio Networks facility on Albany Street for the Department of Music. A key element of this proposal is that the Centre would provide significant support for the teaching and research programmes of the Department of Music and Theatre Studies.

Function / exhibition space

While it was not specifically raised as an issue during user engagement, it is considered that while the University has a number of facilities that can be used for functions and exhibitions, there are none other than the Hocken Gallery that are purpose-designed for such activities and which can be utilised for long-term display. Typically the other facilities used for exhibitions, which include the St David Complex, the ISB Link, the Staff Club, the atrium of the Commerce Building, the College of Education auditorium and Staff Centre, the University Council Chamber, the various residential colleges, and Marama Hall, all fulfil important roles within the University that are disrupted by function or exhibition use.

If the University is to strengthen its engagement with the community, and is to have appropriate facilities to manifest a cultural strategy, it is recommended that there be a dedicated function/exhibition space. This space may be utilised for other purposes, but its primary function should be as a venue for such external engagement.

This concept has not been fully investigated and it is a Master Plan recommendation that the University undertake a study to determine the potential demand, configuration, infrastructure and location for such a facility, noting that a principal issue with the Hocken Library is its remoteness from the centre of the University, and it is important that any new facility be not only centrally located but highly visible. Such locations could include the Union Lawn redevelopment, Clocktower Building, Archway or Leith Bend development.

Māori and Pacific Islander

The celebration of Māori and Pacific Islander heritage in the context of both the University and the land on which it is located should be a key component of the Cultural Strategy. A detailed strategy to enact this should be developed by the University in association with the Treaty of Waitangi Committee and Ngāi Tahu. The landscape treatment of the Leith, the augmentation of indigenous plantings and an active arts / crafts programme would be key elements of such a strategy.

3.8 Social / Retail Framework

Union Lawn redevelopment – reinforcing the social "heart" of the Campus

The Union Lawn has a special role in the Campus in the focus it provides for social interaction, visitor orientation and as a "cross roads" for campus circulation. Yet many of the buildings that surround it – Smithells Gymnasium, Union Court and the Richardson Building, contribute little to its amenity or patronage. Furthermore, the Lawn's landscape treatment of elevated grassed bunds discourages active use and offers little more than a pleasant outlook.

It is proposed to reinforce the importance of this part of the campus through a redevelopment of the Lawn and the buildings that surround it. The intention of this redevelopment would be to create a vibrant social heart for the University by capitalising on its geographic location with a range of people-attracting activities over a wide range of hours.

Retail

The vitality of the campus will be enhanced through the provision of services and amenities, particularly over extended hours, as a campus devoid of people is lifeless. This is a particular issue at nights and on weekends at present. Retail facilities can be particularly effective in stimulating activity, both in the form of convenience services: news agency, dry cleaning, travel agency, supermarket; and destinational offerings such as the Campus bookshop. It is a Master Plan recommendation that the University undertake a feasibility study to explore the opportunity for such facilities with particular regard to:

- Better/more on-campus retail services
- Better/more diversified food and beverage facilities
- Events and attractions, e.g. Farmers' Markets
- Precinct Hub services
- The creation of village centres in the residential Precincts adjacent to the University
- Union and OUSA facilities and services
- Strategies to complement rather than compete with current George Street outlets
- Strategies to assure outlet viability during semester breaks.

Albany Street

Albany Street forms an important interface between the campus and the city. It is also a major artery from the city to the Anzac Avenue Precinct. While controlled by the University only on its northern side, and even then only in part, it nevertheless has considerable potential to be an important adjunct to the social and commercial life of the campus, enabling private enterprise to contribute directly to and be involved in campus life without needing to be located on campus. Already there are a number of facilities there, notably the OUSA Clubs and Societies Building and a number of food outlets of which the famous "Flying Squid" fish and chip shop is an example. These types of facilities should be actively encouraged.

3.9 Teaching and learning framework

Teaching and learning spaces are the "engine room" of undergraduate education, accommodating the bulk of formal, timetabled student - teacher interface. Traditionally such spaces have comprised lecture theatres, seminar rooms and laboratories; although in recent times the menu of such spaces has broadened to include specialised facilities such as computer laboratories, media workshops and the like.

The provision of teaching and learning spaces in the context of a Master Plan must be considered in a number of ways:

- Typology specialised or generic
- Ownership departmental or general pool
- Format fixed or flexible
- Quantum and capacity
- Location

Key Master Plan issues associated with each of these are as follows.

Typology

Specialised teaching spaces support singular or a limited range of teaching functions that have particular requirements and are usually, but not always, embedded within a department. Examples include laboratories, music studios, medical testing facilities etc. Conversely, generic teaching facilities may be used by all departments and accommodate a broad range of teaching and learning activities. The Master Plan recommends that the range of teaching space typologies be broadened to provide choice of pedagogical format for both teachers and their students.

"Ownership"

Teaching and learning spaces may be embedded within a department, or groups of departments, or form part of a common pool that is centrally administered. "Ownership" in this context is defined through the allocation of responsibility for managing and timetabling the spaces. Most departments prefer to "own" their teaching and learning spaces as this provides certainty of availability and set-up. It is recommended that existing facilities that are embedded in departments be preserved as locally "owned" but that all new teaching and learning spaces be centrally managed to optimise utilisation.

Format

There are three fundamental variables that determine the applications to which teaching and learning spaces may be put:

- Flat or stepped floor the latter being used to provide sightlines to a central point
- Furniture configuration fixed or re-arrangeable
- Equipment configuration type and location.

Flat floored spaces with re-arrangeable furniture have the ability to accommodate a wide variety of teacher/student and student/student interfaces but are limited in size due to sightline considerations. Conversely, stepped floor spaces provide superior sightlines, particularly for large numbers but tend to be inflexible and are more suited to information delivery than discourse. Equipment levels are fundamental to both the functionality and flexibility of any teaching space. It is recommended that centralised teaching facilities offer as wide a range as possible of such facilities.

Quantum and capacity

The required number of teaching rooms and their capacities is directly related to the nature of papers being taught and the number of students involved. A further variable has recently emerged with the introduction of new pedagogies involving group work and multiple, simultaneous learning activities within the one space which is reducing the capacity of existing teaching spaces. Hence a space that has traditionally accommodated 40 students in a "classroom" configuration may accommodate considerably fewer if group tables are used instead.

There will be a number of drivers for additional teaching and learning facilities:

- Growth in undergraduate student populations
- Replacement of facilities affected by campus redevelopment
- Provision of facility types or configurations not currently available and required either to satisfy current demand or, as necessary, to support new pedagogies and/or technology.

This issue is examined in greater detail in an Appendix to this report.

Location

The location of teaching and learning spaces can be one of the most difficult issues to address in a campus Master Plan. Invariably, departments want the spaces they use for formal teaching to be close by for convenience. Those departments located at the perimeter of the campus understandably seek to avoid using spaces in other distant campus locations. However, this practice typically leads to significant facility under-utilisation. Locating such facilities centrally avoids this problem and allows a greater diversity of configurations. Furthermore, centralisation makes the teaching spaces easier to manage and service, enhances cross-departmental interaction and increases the daily population at the centre of campus that in turn enhances the viability of central support facilities and amenities and gives the campus vitality. It is for these reasons that the Master Plan recommends the provision of new teaching and learning spaces at central locations to be accessed by all departments on a shared basis.

3.10 Academic and Research framework

A fundamental requirement of the Master Plan is to identify strategies to accommodate demand for new academic and research space, be that demand generated by growth in the student population or the need for better, different or specialist facilities for teaching, learning and research.

The Campus currently comprises a series of distinct 'centre of activity' Precincts which are the foci of daily academic life for both students and staff. Two in particular, the southem (Health Sciences) and eastern (College of Education) Precincts, are significantly disconnected from the rest of the Campus. The size of the campus is such as to require a 10 - 15 minute walk from one end to the other, a distance that many Dunedin residents consider to be excessive. As a result, divisions and departments located at the campus perimeter have a sense of isolation, particularly when they are also spread across multiple locations. There is therefore a clear need to re-connect and consolidate the campus.

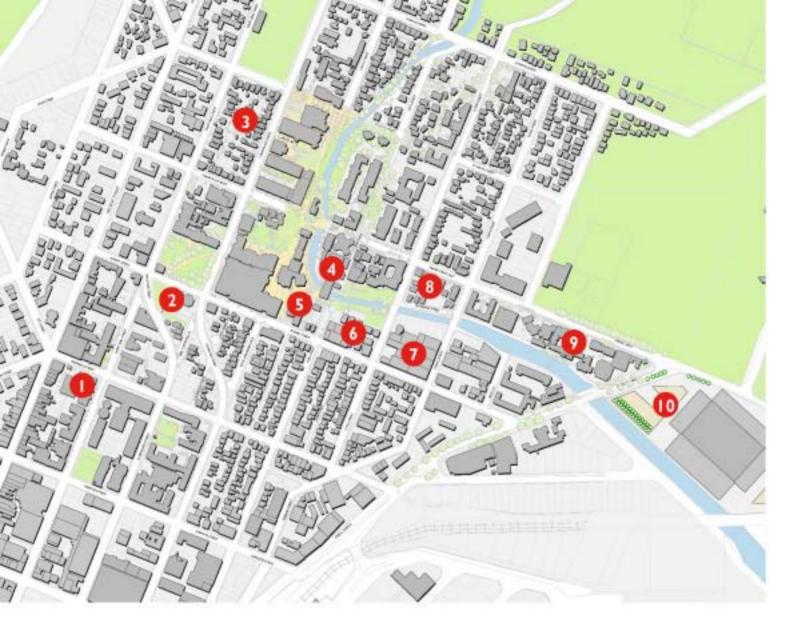
Principles for academic/ research accommodation

It is considered that connecting and consolidating academic and research activities in close proximity to the Campus core is an important objective. Such consolidation will ensure that the vibrant, connected academic community that already exists is preserved and enhanced as the University grows.

Opportunity expansion sites for academic/ research

The following opportunity sites have been identified for expansion of the University's academic and research accommodation based on the following criteria:

- Ownership the site is wholly or part-owned by the University;
- Condition of existing buildings site contains buildings that have only short-term value, are not the most appropriate use for the site, and/or are in need of major repair;
- Location the site is strategically located in facilitating expansion or augmentation of existing facilities;
- Connection the site integrates with and complements the campus in terms of activity, amenity and accessibility; and
- Capacity the site is capable of achieving a sufficient quantum of accommodation within city planning control and urban design principles.



While there are many potential development sites within and adjacent to the campus, the ones that meet the above criteria and have the potential to yield the most significant quantum of additional academic floorspace are as follows:

- 1. Health Sciences North Zone
- 2. South Central Precinct, facing the Museum Reserve.
- 3. Cumberland Court Zone
- 4. Leith Bend Zone
- 5. Arts Building Zone
- 6. Property Services Zone
- 7. Wickliffe Press Site
- 8. Union Street East Zone
- 9. College of Education
- 10. University Plaza

The opportunities for expansion in these development sites are outlined in the detailed Precinct Plans,

Collocation

While the Master Plan does not make specific recommendations for departmental locations, it should be noted that the expansion of the University over time has necessitated the provision of space on an ad hoc basis, accommodating growth with whatever space was available at the time. This has resulted in a fragmented academic community, with departments spread across multiple locations on campus. It is recommended, therefore, that the University develop a strategy to reconnect departments with their peers and colleagues, with each new development used as a means to achieve this over time.

3.11 Administration and Services framework

Service Divisions are also currently scattered across the campus. Some functions are appropriately located, such as student-facing functions in the centre of the campus, but many are not. Back-of-house functions currently occupy some prime space in the heart of the campus, such as in the Information Services building. There are other examples where the accommodation provided for administration and services staff is sub-optimal, such as in the basement of the Clocktower building. As the University grows, the opportunity should be taken to ensure that administration and services functions are appropriately located. The following principles for administration and services accommodation functions are proposed in this regard.

Locate student/ academic facing functions in Campus and Precinct Hubs

Administrative and service functions that require face-toface interaction with students and academic staff should be located in easily accessible centres of activity on campus – the hubs. Those functions relating to all students and staff should be centrally located in the central Campus Hub, while those functions that relate to students or staff only on a division or department basis should be integrated into the distributed Precinct Hubs.

Locate all non-student and non-academic-facing functions on the perimeter of campus

Functions that do not require daily face-to-face interaction with students and academic staff should be given a lesser priority in terms of central campus locations, except where specific adjacencies dictate otherwise (e.g. access to the Vice Chancellor's office.) While these are located on the campus perimeter, it is nevertheless important that these functions are still accessible and connected to the frontof-house functions at the centre of the campus and in the Precinct Hubs. Freed from the space pressures of the centre of the campus, this would allow a more appropriate quality and amount of accommodation to be provided. Provide a healthy work environment that supports flexibility, collaboration and interaction

It is important that Administration and Services Divisions are provided with a quality work environment, suitable for their functions. It should allow equitable access to natural light and fresh air, support collaboration and interaction, and allow flexibility to reconfigure and adapt to changing demands over time. It is also important that administrative functions be aggregated and co-located wherever possible to enhance operational efficiency.

Opportunity sites for Administration and Services accommodation

The Precincts surrounding the campus provide several opportunity zones for accommodating Administration and Services functions that require a substantial amount of floor area. While on the perimeter of the campus, these locations are still within easy walking distance of the core academic zone and the central and Precinct hubs.

3.12 Residential framework

A unique experience for undergraduate students at Otago is the opportunity to spend their first year living in one of the University residential colleges. Indeed the University takes pride in the quality of this experience and has a policy of maintaining close control over the pastoral care and academic support that these colleges provide.

However, not all first year students can be accommodated in the colleges as the demand for beds currently exceeds available places.

It is therefore necessary that the Master Plan identifies growth strategies for University-supplied residential accommodation not only to address this shortfall but to also accommodate the 1000 additional first year students that are forecast in the 25-year projections that have been prepared by the University for the Master Plan.

It is also recommended that a long-term residential strategy be considered by the University, that allows for an increase in the number of second and later year undergraduates returning to colleges and for the admission of first year Dunedin residents, as reinforcement of the 'student experience' that forms part of the University's competitive advantage.

Some of the demand can be satisfied by expanding the capacity of existing colleges. An analysis of the potential for growth of existing colleges by the University estimated that approximately 400 additional beds could be provided in this manner. New colleges will therefore be required to provide for the notional demand for 600 additional beds.

There are mixed opinions within the University about the

ideal size for a college, depending upon the perspective from which this is viewed: economic viability or pastoral care and collegiality. The consensus would seem to be no fewer than 200 and no more than 300 beds. On this basis it may be forecast that the equivalent of between two or three new colleges will be required during the period of the Plan. A number of options are available to the University to satisfy this demand including:

- Provision of new colleges, ideally located close to the campus core;
- Engagement of external service providers, providing that suitable commercial and service quality agreements can be secured;
- Student villages, whereby the density and service provision within existing student enclaves of the city would be increased, as part of a regeneration strategy for the city and to satisfy the expected demand for new space. In this model common services would be provided centrally while the bed spaces would be provided in a mix of private and University-owned accommodation

While no specific proposals are made on the nature of new accommodation required and of its procurement, eight potentially suitable sites for residential colleges have been identified. The key criteria for their identification has been proximity to the campus, avoiding the displacement of other University functions and availability, and the contribution that their redevelopment as colleges would make to the campus as a whole.

The eight sites have been identified under these criteria:

- Leith/Dundas Street
- 2 Clyde Street
- 3 Union Street
- 4 Wickliffe Press
- College of Education
- 6 Anzac Avenue
- O Abbey College

The merits of these locations are explored in the Precinct Plans. It should be noted that some of these sites are also identified as potential academic expansion locations. A decision about which sites to select for residential growth will therefore need to be taken in the context of current requirements for academic space.



