

MACQUARIE UNIVERSITY DESIGN EXCELLENCE STRATEGY AND URBAN DESIGN GUIDELINES

DATE: AUGUST 2018



MACQUARIE
University

Amendment	Date	Changes
1	May 2010	<ul style="list-style-type: none"> - Detailed design controls for lots in Precinct E, general site structure plans.
2	August 2015	<ul style="list-style-type: none"> - Submission of a comprehensive set of detailed design controls for each lot on the campus, excluding Precinct E and lots in Precinct D which were impacted by potential changes associated with finalisation of the Herring Road Priority Precinct.
3	September 2017	<ul style="list-style-type: none"> - Provide a consolidated set of detailed design controls for each lot, including Precincts E and D which were excluded. - Provide for increased heights and floorspace along Herring Road to align with the outcomes of the Priority Precinct process. - Translate the FSR controls under Ryde LEP 2014 to maximum GFA caps for key sites along Herring Road, to align with the terminology used in the approved MU CP and to provide greater clarity for the University. - Align the Guidelines to reflect recent changes to road layouts across the Campus, which have been undertaken as part of various applications under Part 5 of the EP&A Act. - Detailed design controls updated for lots in Precinct A.
4	August 2018	<ul style="list-style-type: none"> - Creation of new Lot D08 and insertion of new provisions and controls for the lot. - Insertion of Design Excellence provisions to align with amendments to the EP&A Act. - Minor boundary adjustment to Lot B03. - Update to Built Form Design Principles to support the design excellence process.



MACQUARIE
University

MACQUARIE UNIVERSITY PROPERTY

Macquarie University, NSW 2109
Telephone: +61 2 9850 7111

context
LANDSCAPE ARCHITECTS

Context Landscape Design
Level 2, 52 - 58 William Street
East Sydney, NSW 2001
Telephone: +61 2 8244 8900

ETHOS
URBAN
URBAN SOLUTIONS

Ethos Urban
173 Sussex Street
Sydney, NSW 2060
Telephone: +61 2 9956 6962

CONTENTS

VOLUME 1

1. INTRODUCTION	1	4. BUILT FORM	129
1.1 Macquarie University Location and Context	2	4.1 Design Principles	130
1.2 The Macquarie University Concept Plan	4	4.2 Building Heights	132
1.3 Position of Guidelines in the Planning Framework	5	4.3 Articulation	134
1.4 The Macquarie University Campus Master Plan 2014	6	4.4 Activation	136
1.5 Herring Road Priority Precinct (PP)	7	4.5 Materials	137
1.6 Scope and Precinct Definition	8	4.6 Building Lighting	138
1.7 Concept Plan Requirements	10	4.7 Building Signage	139
1.8 Current Projects	13	4.8 Sustainability	140
		4.9 Lot Landscaping	141
2. PRECINCT PLANNING FRAMEWORK	15	5. LOT CONTROLS	143
2.1 Plan Development	16	5.1 Legacy Building Lots	144
2.1.1 Structure Plan	16	5.2 Individual Lots	146
2.1.2 Precincts	18	5.2.1 Precinct A	147
2.1.3 Development Parcels	22	5.2.2 Precinct B	173
2.1.4 Open Space Framework	24	5.2.3 Precinct C	182
2.2 Access and Movement	26	5.2.4 Precinct D	185
2.2.1 Access Corridors	28	5.2.5 Precinct E	191
2.2.2 Illustrative Accessway Sections	30	5.2.6 Precinct F	201
2.2.3 Pedestrian Network	32	5.2.7 Precinct G	206
2.2.4 Public Transport	34	5.2.8 Precinct H	212
2.2.5 Cycle	35		
2.2.6 Lot Access	36		
2.2.7 Parking	38		
2.2.8 Accessibility	39		
2.3 Rail Easement	40		
3. PUBLIC DOMAIN	43		
3.1 Landscape Structure	44		
3.2 Primary Walkways and Thoroughfares	50		
3.3 Primary Parks and Plazas	58		
3.4 Secondary Parks and Plazas	66		
3.5 Creek Corridors and Parklands	82		
3.6 Sports Fields and Facilities	88		
3.7 Campus Gateways	90		
3.8 Primary Roads	98		
3.9 Secondary Roads	106		
3.10 Shared Ways	110		
3.11 Secondary Pedestrian Connections	111		
3.12 Planting Schedules	113		
3.13 Water Management	120		
3.14 Lighting, Safety and Security	122		
3.15 Paving	123		
3.16 Street Furniture	126		
3.17 Public Art	127		
		VOLUME 2	
		6. SUPPORTING DOCUMENTS	
		6.1 Landscape Management Plan (incorporating Weed Management Plan)	
		6.2 Vegetation Management Plan (incorporating Threatened Species Plan)	
		6.3 Utilities Management Plan and Stormwater Management Plan	
		6.4 Transport and Accessibility Report	
		6.5 Consultation Report	



MACQUARIE
UNIVERSITY
2014



1

INTRODUCTION

1. INTRODUCTION

1.1 MACQUARIE UNIVERSITY LOCATION AND CONTEXT

The Macquarie University campus is located 17km to the northwest of the Sydney CBD at the western end of the Macquarie Park Corridor - a major employment and research business precinct bounded by Culloden Road, Herring Road, the M2 Motorway and Epping Road.

The 126ha University campus is bounded by Epping, Herring, Talavera and Culloden Roads. The main components of the campus are:

- The Academic Core which contains the main University buildings ranging in height from 1 – 8 storeys.
- Macquarie University Research Park which is located in the eastern corner of the campus fronting Herring Road and Talavera Road. Commercial tenants are located in buildings typically four to eight storeys in height.
- University housing located west of Culloden Road.
- University housing along Herring Road.
- Playing fields and open space located in the northern quadrant of the campus and north of Culloden Road (accessible from the M2 Motorway).
- New commercial and research space on University Avenue: Cochlear and the Australian Hearing Hub.

Other land-uses on campus include:

- Macquarie Graduate School of Management (MGSM) accessed from Talavera Road.
- A Travelodge Hotel (off Talavera Road).
- A service station on the corner of Epping and Culloden Roads.
- An Aquatic and Sports Centre.
- Macquarie University Hospital off Talavera Road.
- Macquarie University Observatory.

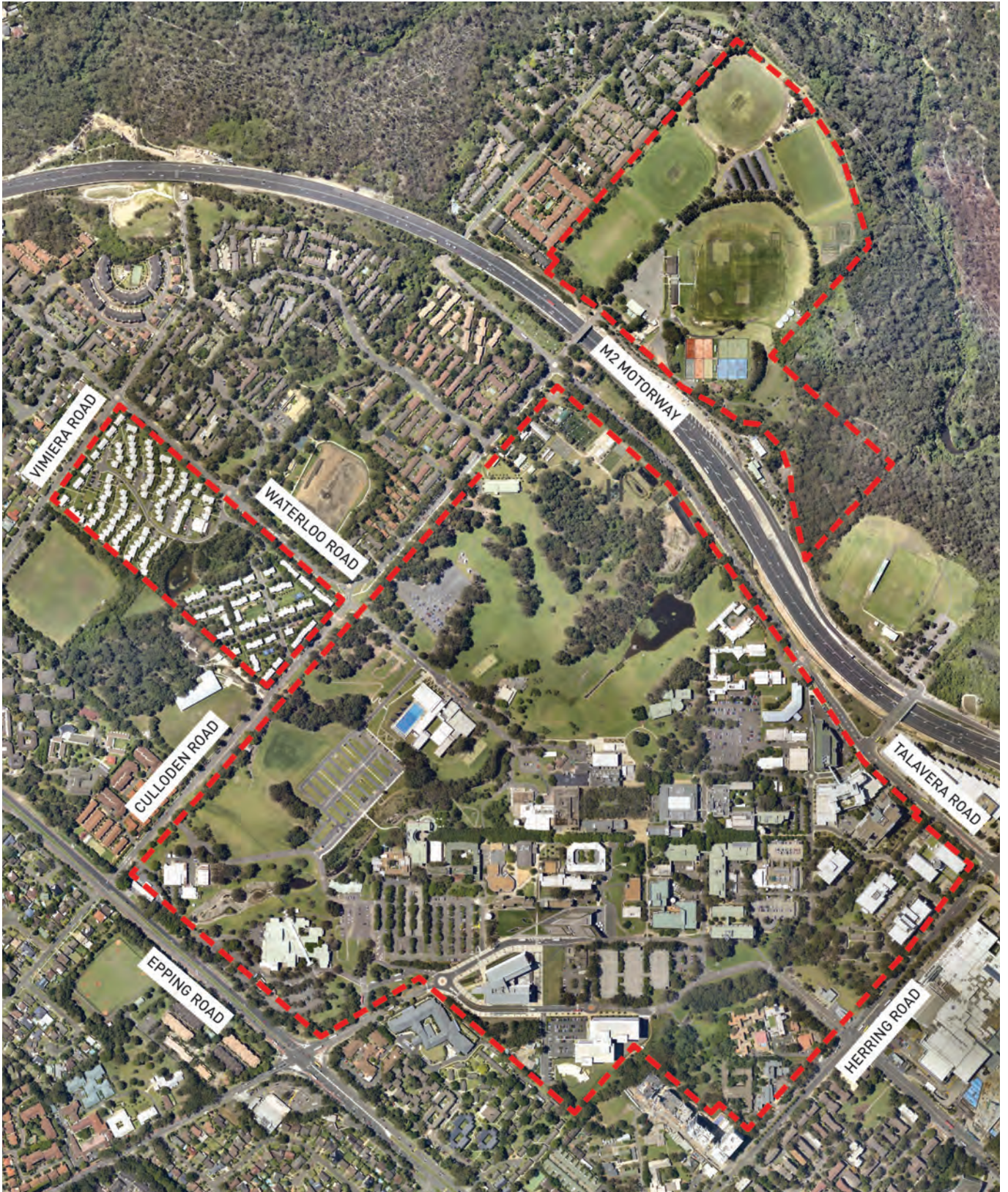


FIGURE 1: MACQUARIE UNIVERSITY SITE

1. INTRODUCTION

1.2 THE MACQUARIE UNIVERSITY CONCEPT PLAN

The Concept Plan approval was granted to Macquarie University on 13 August 2009 for the carrying out of development across the campus.

The Concept Plan approval was activated in December 2010, with the approval of the Australian Hearing Hub. The Concept Plan approval is now retained in perpetuity.

The conditions of approval set out areas of detail where the originally exhibited version of the Concept Plan and development parameters (together with the subsequent Preferred Project Report and the Statement of Commitments) are to be modified.

Condition B4 of the Concept Plan approval requires the preparation of a Design Excellence Strategy and Urban Design Guidelines for the campus. These Guidelines have been prepared to satisfy this condition.

1.3 POSITION OF GUIDELINES IN THE PLANNING FRAMEWORK

The current statutory planning regime governing the planning for, and development of, the MQU campus is the approved Part 3A Macquarie University Campus Concept Plan. Whilst the State Significant Site (SSS) listing under the State Environmental Planning Policy (Major Development) 2005 (Major Development SEPP) no longer applies, the Concept Plan continues to apply. The approved Concept Plan, by virtue of Clause 3B(2)(f) of Schedule 6A - Transitional arrangements—repeal of Part 3A under the EP&A Act, will continue to have effect and apply despite any provisions in either any environmental planning instrument (SEPPs, LEPs) or a DCP.

The Design Excellence Strategy and Urban Design Guidelines are required by, and form part of, the Concept Plan approval.

Given the existing planning regime applying to the University, the University campus has been excluded from Part 4.5 of the Ryde Development Control Plan 2014. These Urban Design Guidelines now provide the 'controls' and detailed design measures against which future development on the campus will be assessed, and are to be considered instead of Council's DCP controls.

The Design Excellence Strategy and Urban Design Guidelines will be managed and maintained by Macquarie University. When variations to the Guidelines are proposed, the Guidelines will be updated by the University and reviewed by the University Design Excellence Committee, University Executive and University Council for their endorsement. A copy of the revised Guidelines will be issued to Council for information.

Using These Guidelines

The Guidelines have been formulated to capture the overall principles and key requirements for sites across the campus.

The Guidelines are not prescriptive and variations are possible where appropriate justification is provided. Any proposal that departs from the overall intent of the Guidelines, lot controls or overall planning principles should provide clear justification for any proposed changes. Supplementary reports or assessments (eg. Landscape, Urban Design etc) may need to be prepared.

Design Excellence and Review

Amongst recent changes to the *Environmental Planning and Assessment Act 1979* (EP&A Act), a new design object elevates the role of design promoting good design and amenity of the built environment.

Aligned with the objectives of the EP&A Act, Macquarie University is invested in achieving quality design outcomes and undertakes its own rigorous design procurement process for development across the campus. In particular, the University acknowledges the Government Architect's and the City of Ryde Council's interest in quality design outcomes, particularly for major developments along Herring Road (Lots E09 to E11 and D01 to D03), at the interface of the University and the state nominated Herring Road Priority Precinct. For major projects (typically those with a development value over \$30 million), the procurement of good design is delivered through an Expression of Interest (EOI) and Tender process followed by the involvement of the University's External Design Review Panel in a robust design review process undertaken periodically as the design progresses.

Expressions of Interest are sought from a large field of invited and prequalified consultants to ensure project compatibility and alignment with the design objectives. A short-list of up to five (5) consultants are then invited to participate in the Request for Tender (RFT) process in accordance with University Procurement Policy.

1. INTRODUCTION

1.3 POSITION OF GUIDELINES IN THE PLANNING FRAMEWORK

Design Excellence and Review

The RFT requires the consultant to submit both price (i.e. fee) and non-price criteria for assessment. The non-price requirements for submission are prepared specific to each project, with the intention to have the proponent present both an understanding of the project and their approach - therefore allowing Macquarie University to align objectives with the design.

Whilst the non-price criteria may differ from project to project, it would typically include a 'design' response specific to the 'task', be it design, graphical imagery, diagrams or words - i.e. to give the Client an understanding of what the proponent is going to design. To acknowledge the time and effort required to prepare the design response, Macquarie University typically offers a stipend contribution (to a capped amount) to each proponent.

The assessment considers both Price and Non-Price criteria, with the design response forming a significant portion of the Non-Price criteria assessment. Should a number of outstanding submissions be made, Macquarie University may elect to engage two proponents separately and work with them to develop concept designs which can then be brought back to the Design Review Committee for further assessment.

A formal Design Review Committee made up of internal and external experts, typically including Macquarie University Executive and external architects, urban designers and landscape architects, is engaged during the design process to review the design as it progresses, ensuring the delivery of good design.

1.4 THE MACQUARIE UNIVERSITY CAMPUS MASTER PLAN 2014

In 2014, Macquarie University revisited the campus vision to address the next 50 year phase of the University's growth. This is reflected in the recently completed Macquarie University Campus Master Plan 2014, which was approved and adopted by the Macquarie University Council in March 2014. The Master Plan does not seek to replace the approved Concept Plan, rather it represents an internal guiding document which will be implemented via the Concept Plan.

Importantly, the Master Plan does not represent a significant change to the development potential achieved by the approved Concept Plan. Whilst

there are some changes proposed (for example, student housing is now considered within the Academic Core) the Master Plan reflects a duration longer than that of the Concept Plan, a vision for growth over the next 50 years to 2064, rather than proposing growth within the Concept Plan's timeframe of 2034.

Whilst it was originally requested that the Concept Plan guide development on the campus for a 40 year period, a 25 year timeframe was preferred by the then Department of Planning to ensure parity with Metropolitan Planning objectives and targets to 2031.

In effect, the Master Plan confirms the original long-term plan for capacity, spatial planning and development potential.

As noted above, the Master Plan will continue to be implemented via the Concept Plan, so there is no change proposed to the current planning regime applying to the site. These Urban Design Guidelines have been prepared in accordance with the Concept Plan approval, while being informed by the 2014 Master Plan.

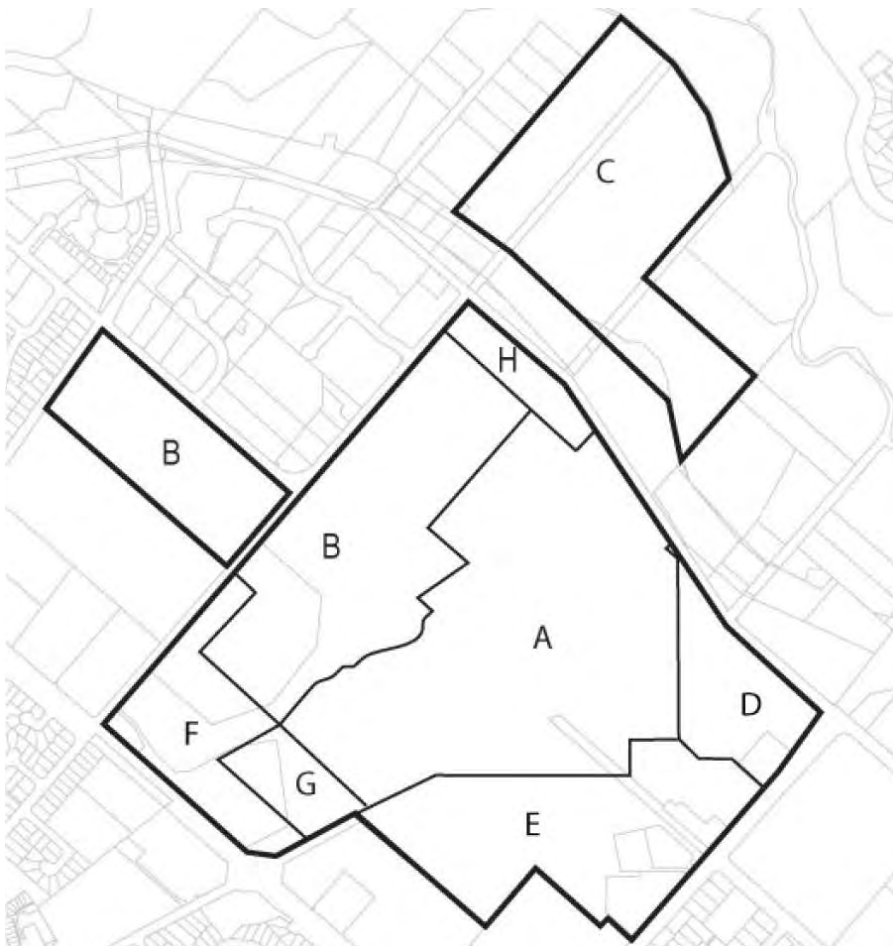


FIGURE 2: CONCEPT PLAN PRECINCTS

1. INTRODUCTION

1.5 HERRING ROAD PRIORITY PRECINCT (PP)

The Priority Precinct (PP) program, announced in March 2013, is a State Government initiative aimed at delivering more homes and jobs in places with access to infrastructure, transport and services, together with increased amenities, services and improved public spaces. New land use and transport plans will be matched by the development of Growth Infrastructure Plans.

Part of Macquarie University is within the Herring Road PP. The Herring Road PP provides for the renewal and revitalisation of the Herring Road precinct, consistent with *A Plan for Growing Sydney*. The Herring Road precinct proposal comprises of the following:

- A mix of land uses to transform the precinct into an active place for living and working.
- A quality higher density urban community that utilises excellent transport infrastructure and access to job markets, educational facilities, retail, local services and recreational assets.
- Increased building heights and densities that can improve housing supply and choice.
- A transformation of Herring Road into an active street, with wider pavements, new landscaping and new places to meet.
- Better connected and finer-grained streets and pedestrian/cycle and networks provide safer, more convenient and pleasant access.
- Opportunities for new and improved parks, spaces, playgrounds and community facilities.

The PP rezoned the majority of the campus to B4 Mixed Use to provide greater flexibility in land use distribution across the campus. The PP also allows heights of up to 120m along the Herring Road frontage, and a maximum FSR of 6.0:1 at this important transport interface zone.

The Guidelines for Precinct E and the part of Precinct D which falls within the PP areas have been amended to reflect these new controls. While it is intended that a DCP will be prepared for the wider PP area, these Design Guidelines will form specific controls for the University's lands and would override any future DCP.



FIGURE 3: DRAFT PP PLAN 2013 (SOURCE: DEPARTMENT OF PLANNING AND ENVIRONMENT)

1.6 SCOPE AND PRECINCT DEFINITION

The conditions of approval of the Concept Plan require the preparation of Design Excellence Strategy and Urban Design Guidelines and Landscape Management Plan on a precinct by precinct basis.

As described in the Concept Plan, the campus is divided into several precincts. They are:

- **Precinct A**
Academic Core
- **Precinct B**
North West Precinct
- **Precinct C**
University Open Space and Playing Fields
- **Precinct D**
Macquarie University Research and Health Precinct
- **Precinct E**
Station South
- **Precinct F**
Epping Road West
- **Precinct G**
Epping Road Precinct Expansion
- **Precinct H**
Talavera Road North

The precinct boundaries (see Figure 4) are based on broad land use areas, both existing and proposed, as well as natural and man-made boundaries.

This Design Excellence Strategy and Urban Design Guidelines document covers Precincts A, B, C, D, E, F, G and H.

The recently gazetted Precinct E and a part of Precinct D along Herring Road have been incorporated into this document with the guidelines of Precinct E updated.

The Design Excellence Strategy and Urban Design Guidelines for Precinct E have been previously submitted.

The Guidelines for Precinct E were endorsed by the then Department of Planning in 2010. Precinct E represents the main opportunity for growth under the Concept Plan, as it has an interface with the campus' key Herring Road boundary and at the time was likely to be developed by third parties. As a result, the Precinct E Guidelines were required to be clearly defined in terms of footprints, heights, massing, access and GFA distribution in order to manage the growth in this precinct, and reinforce and define development opportunities.

The remaining precincts within the campus serve a different purpose to Precinct E, and the approach to the campus-wide Guidelines reflects this. The Guidelines for the remaining precincts are more succinct than those prepared for Precinct E. This is based on the University's need for greater flexibility across the remainder of the campus, and the recognition that the remaining precincts do not require the same level of assessment or scrutiny due to their long standing land uses, location and spatial separation from the key interface with Herring Road.

This position was accepted by the Department during the preparation of the Concept Plan and is reflected in the way these precincts are addressed in the Concept Plan.

Minor changes to the precinct boundaries from the Concept Plan have occurred due to further refinement of the Master Plan. Adjustments following development of the Master Plan reflect new road alignments and further definition of lots. Following major upgrades, the Arts Building (the previous Australian Film, Television and Radio School) has been nominated for retention.

Key changes to the original precinct boundaries are:

- **Precinct G**
Inclusion of the retention of building Y3A/Faculty of Arts and car park provision on Hadenfield Road.
- **Precinct F**
Adjustment of the boundary due to Precinct G changes.
- **Precinct H**
Minor adjustment of the boundary to Precinct B to regularise the precinct.
- **Precinct A**
Adjustment of the boundary due to Precinct G changes.
- **Precinct B**
Adjustment of the boundary adjacent to Precincts F, G and H.

1. INTRODUCTION

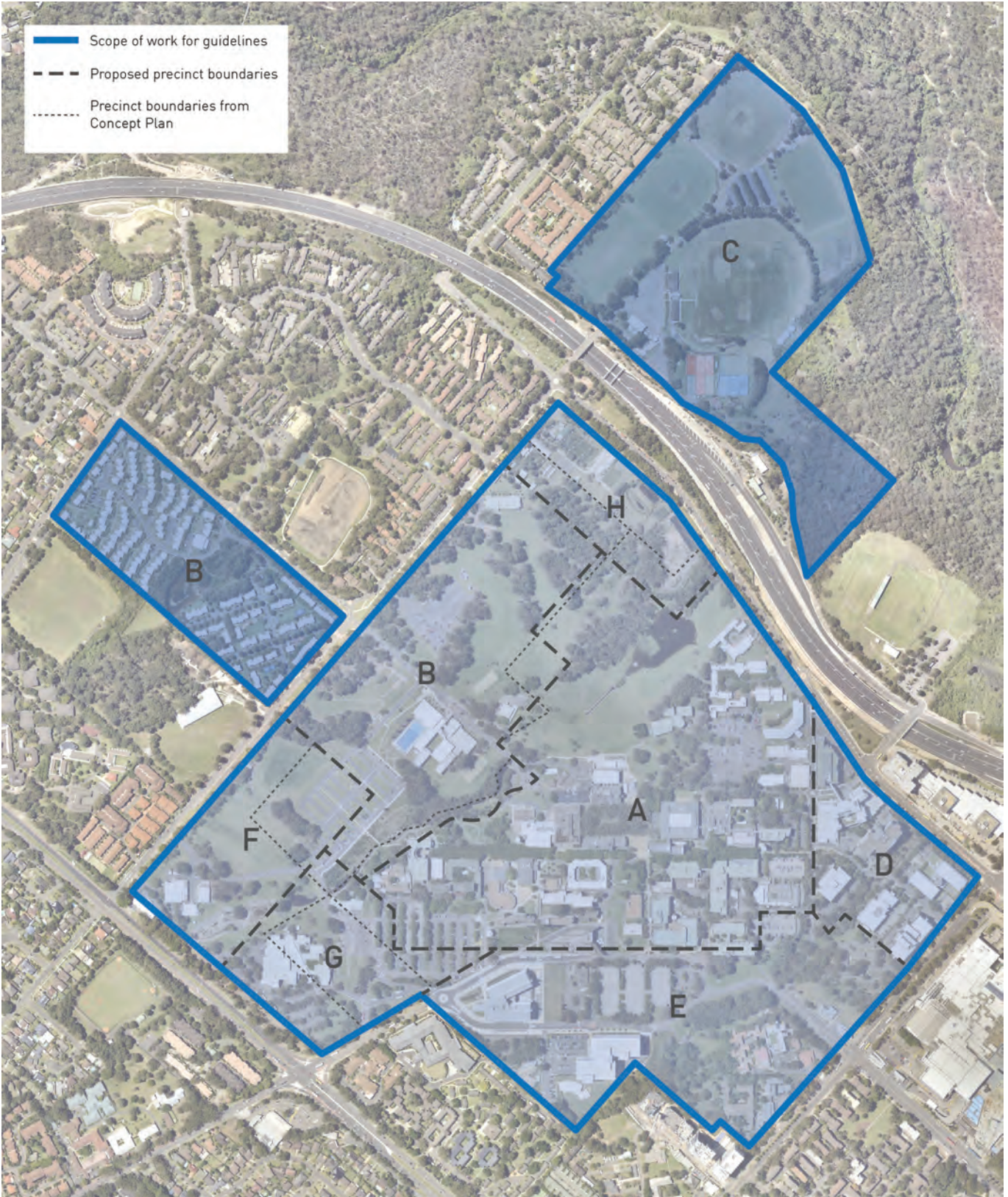


FIGURE 4: PRECINCTS

1.7 CONCEPT PLAN REQUIREMENTS

The Design Excellence Strategy and Urban Design Guidelines, together with specialist consultant reports, address the relevant conditions of the Concept Plan Approval.

These elements are contained either within the document or are appended as Supporting Documentation.

Separate submissions have now been made for:

- Micro simulation modelling (undertaken)
- Child Care Strategy (finalised)
- RMS Agreement (subject to agreement of micro-simulation modelling and VPA with RMS)
- Council Agreement (finalised).

Supporting Documentation includes the following plans and reports:

- Landscape Management Plan
- Vegetation Management Plan (incorporating Weed Management Plan, Threatened Species Plan)
- Stormwater Management Plan
- Utilities Management Plan
- Transport Accessibility Constraints and Design Solutions Report
- Consultation Report.

CONDITION	REQUIREMENT	RELEVANT CONSULTANT REPORT	COMMENT
B3 – Roadworks	Indicative timing or staging plans for nominated intersection upgrades and development triggers for those upgrades.	Micro-simulation modelling	<p>The micro-simulation modelling was submitted to RMS for endorsement in July 2011 and the University is continuing to work with RMS to reach an agreement. The micro-simulation model has not yet been endorsed.</p> <p>However, some agreement has now been reached on the intersection upgrades, with RMS acknowledging that only the Epping/Herring and Epping/Balaclava Roads intersection upgrades remain outstanding. A VPA is being prepared between the University and Transport for New South Wales to finalise this agreement.</p>
B4 – Design Excellence Strategy and Urban Design Guidelines	Preparation of Design Excellence Strategy and Urban Design Guidelines in consultation with Council and the RMS (as relevant) on a precinct basis.	<p>Macquarie University Precinct E:</p> <ul style="list-style-type: none"> – Precinct Plan – Design Excellence Strategy and Urban Design Guidelines <p>Consultation Report</p> <p>Macquarie University Design Excellence Strategy and Urban Design Guidelines (Note that these Guidelines seek to satisfy this requirement for the remaining precincts)</p>	Refer Section 3 - Design Excellence Strategy and Urban Design Guidelines

1. INTRODUCTION

CONDITION	REQUIREMENT	RELEVANT CONSULTANT REPORT	COMMENT
B5 – Setbacks	Amendment to Concept Plan (for Precinct E only) for any setbacks that may be required along Balaclava and Waterloo Roads, in consultation with Council and the RMS, for additional capacity improvements.	Macquarie University Precinct E: – Precinct Plan – Design Excellence Strategy and Urban Design Guidelines Consultation Report	Based on the results of the micro-simulation modelling, the University is of the view that the setbacks to Waterloo Road are not required. This is still pending final agreement from the RMS as part of the micro-simulation modelling exercise. The University is separately proposing changes to the University's Balaclava Road Gateway to satisfy safety concerns and redesign of the Herring Road Gateway to improve pedestrian access.
C1 – Staging of Development	Adequate servicing and infrastructure and access for pedestrians and vehicles.	Macquarie University Design Excellence Strategy and Urban Design Guidelines (note that these Guidelines seek to satisfy this requirement for the remaining precincts) Macquarie University Precinct E: – Precinct Plan – Design Excellence Strategy and Urban Design Guidelines Transport Accessibility Constraints and Design Solutions Report Utilities Management Plan	Utilities Management Plan expanded to include the remainder of the campus.
C2[2] – Urban Design Details	Station North (parcel E11) 43m setback with elevations and sections.	Macquarie University Precinct E: – Precinct Plan – Design Excellence Strategy and Urban Design Guidelines	Elevations and sections to be updated with gazettal of the Priority Precinct (PP) and with individual development application for E11 site.
C3 – Landscaping	Preparation of a Landscape Management Plan incorporating (on a precinct basis) Vegetation Management Plan, Weed Management Plan, Threatened Species Plan, and Stormwater Management Plan.	Landscape Management Plan Landscape Rehabilitation Plan and Vegetation Management Plan Stormwater Management Plan Utilities Management Plan	Previous studies expanded to include the remainder of the campus.
C4 – Riparian Zone, Flooding and Stormwater	Preparation of a Stormwater Management Plan, incorporating a Vegetation and Threatened Species Plan (on a precinct basis as required via C3).	Landscape Rehabilitation Plan and Vegetation Management Plan Stormwater Management Plan Utilities Management Plan	Previous studies expanded to include the remainder of the campus.
C5 – Bushfire Protection	Bushfire Management Plan to be prepared for development in Precinct B, with each application for building works, as relevant.	Bushfire Management Plan	To be provided with future development applications in Precinct B, as relevant.

CONDITION	REQUIREMENT	RELEVANT CONSULTANT REPORT	COMMENT
C6 – Flora and Fauna	Vegetation Management Plan, Weed Management Plan, Threatened Species Plan to address responsibilities for each action under those plans.	Landscape Rehabilitation Plan and Vegetation Management Plan	Previous study expanded to include the remainder of the campus.
C9 – Heritage/ Archaeology	Aboriginal Archaeology Strategy to be prepared in liaison with the Metropolitan Local Aboriginal Land Council, and submitted for approval prior to or with the first application for new building works within each precinct.	Aboriginal Archaeology Strategy	A Due Diligence Aboriginal Heritage Assessment has been prepared for the entire campus by Mary Dallas Consulting Archaeologists. The study found no evidence of past Aboriginal use within the subject lands, however did identify areas of potential archaeological sensitivity. The areas identified as possibly retaining archaeological potential are those comprising relatively undisturbed land surfaces on the shale and sandstone formations. These areas generally coincide with areas that will be retained for other environmental values (significant remnant vegetation).
C10 – Access, Traffic, Transport and Parking	C10(1) Prepare a University Travel Plan prior to, or with the first application for building works in the Academic Core. C10(2) – Micro-simulation modelling in liaison with Council, the RMS and MoT. C10(3) – new M2 access exclusion from modelling.	Transport Accessibility Constraints and Design Solutions Report University Travel Plan (UTP)	As above, note that modelling has been undertaken, but still awaiting sign off from RMS. UTP prepared in 2012 (currently being updated to reflect Master Plan and changes to the transport network, eg. Opal Card).
C11 – Child Care Strategy	Child Care strategy to be submitted following consultation with Council.	Child Care Strategy	The child care strategy has now been finalised, and was submitted to the Department in November 2013.
C14 – Utilities	Preparation of: – A detailed water supply infrastructure analysis – Services masterplan – Water supply needs analysis. Prior to the submission of the first application for building works.	Utilities Management Plan	Previous study expanded to include the remainder of the main campus.
C15 – Agency and Council Agreements	Agreement with RMS and Council for roadworks and contributions, respectively.	VPA and RMS Agreement	The RMS agreement is yet to be finalised. Finalisation of the agreement is dependent on several matters being resolved, including the micro-simulation modelling. The VPA between Council and Macquarie University has now been executed, and is in operation.

1. INTRODUCTION

1.8 CURRENT PROJECTS

Currently Macquarie University has a number of projects in various stages of development and under consideration (see Figure 5). Some of these projects will require a Development Application to either council or the Department of Planning and Environment and others would fall under a Review of Environmental Factors (REF) depending on the extent and type of development.

The list of projects as of June 2018 is as follows:

- 1 Gateway and Crossing
- 2 Arts Precinct
- 3 Engineering Building
- 4 Biological Research Centre
- 5 8-12 University Avenue
- 6 University Common
- 7 Central Courtyard
- 8 Central Courtyard Precinct
- 9 E4A
- 10 2 University Avenue
- 11 Law School
- 12 Physics and Astronomy Precinct
- 13 Clinical Education Building
- 14 RIDBC

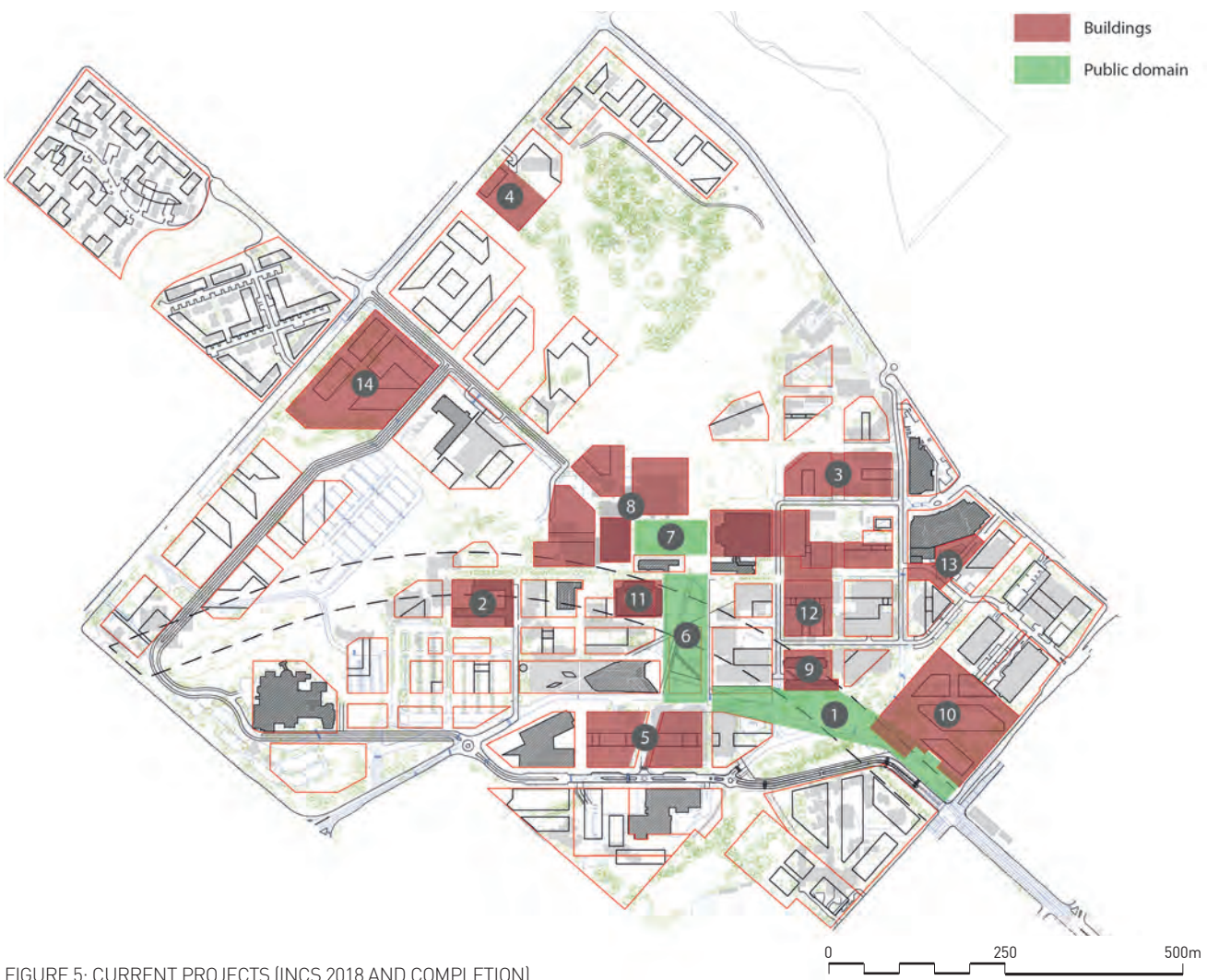


FIGURE 5: CURRENT PROJECTS (INCS 2018 AND COMPLETION)



Graduation

E5A



2

PRECINCT PLANNING FRAMEWORK

2. PRECINCT PLANNING FRAMEWORK

2.1 PLAN DEVELOPMENT

2.1.1 Structure Plan

The central campus is organised around the north-south grid of the Academic Core and a tight cluster of buildings. On the edges of the site, the predominately non-academic buildings follow the external street pattern.

The design principles set out in the Concept Plan are:

- Extension of the existing geometric layout
- Creation of clear orientation and efficient formation of streets
- Reinforcing the open space network
- Provision of pedestrian links that generate freedom of movement and a sense of place
- Defining major spaces and circulation spines by built form
- Reinforcing important vistas to help students, staff and visitors with orientation and to create a strong connection to the landscape environment
- Focusing the movement network on pedestrian amenity, landscape treatment with the control of traffic to reduce vehicular impact.

This guideline document aims to build upon the Concept Plan principles.

2.1.2 Academic and Administrative Structure

The faculty structure will continue to form a major guiding aspect of the physical campus structure. Within the existing distribution of offices and faculties across the campus however, the faculties are indistinct and no obvious 'home' is apparent.

The Master Plan builds on a clear framework within the University where a central core of shared learning spaces is flanked by eastern and western precincts housing each of the faculties. Distinct academic precincts are created around open space hubs:

- Arts in the west of the Academic Core
- Human Sciences to the west of the University core
- Science/Medicine in the north around the Hospital
- Business towards the Herring Road gateway.

The Plan anticipates increased flexibility of uses however in principle, the Academic Core has been extended to the northeast, towards Research Park Drive, and westward to include the Arts building. The introduction of new 'hubs' as centres of activity is a means to reinforce the faculty identities and provide a home for each faculty.

The Master Plan responds to the new faculty structure through:

- clustering multiple faculties and common functions around special places within the plan
- creating a stronger identity for faculties and sense of place within all areas of the plan
- creating new open spaces as the focal point of faculties and address points in the campus
- flexibility to accommodate a range of facilities in each faculty hub which could include faculty administration, student services including enrolment, careers and food and beverage outlets

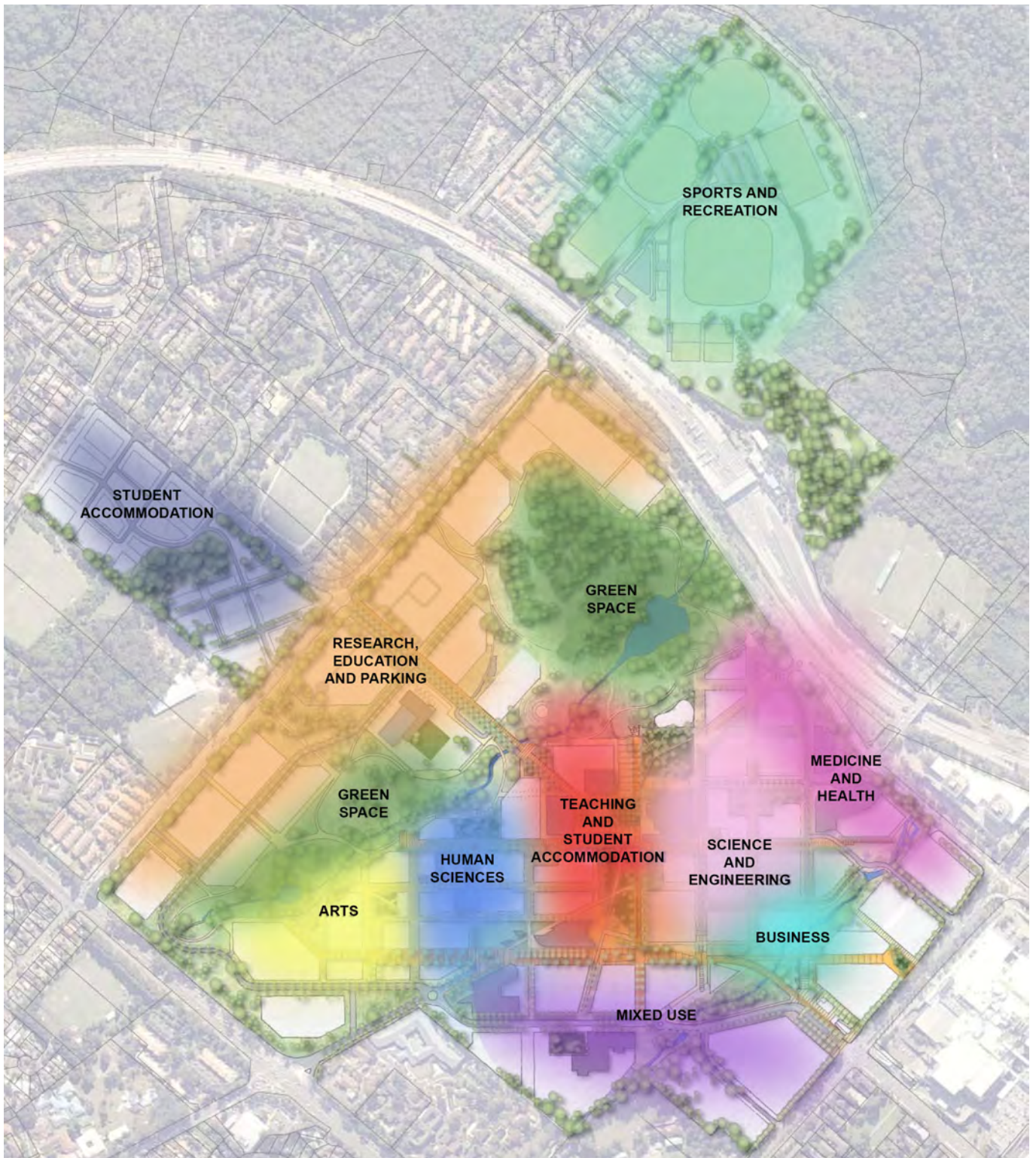


FIGURE 6: INDICATIVE LAND USE PLAN

2. PRECINCT PLANNING FRAMEWORK

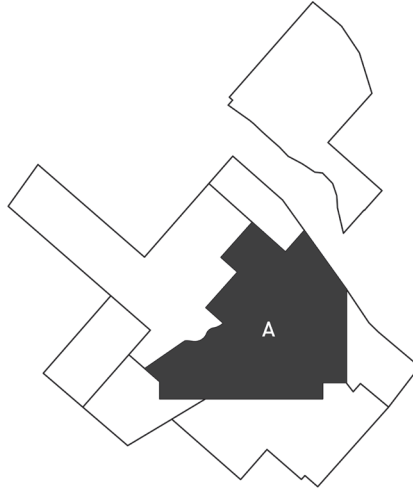


FIGURE 7: STRUCTURE PLAN

2. PRECINCT PLANNING FRAMEWORK

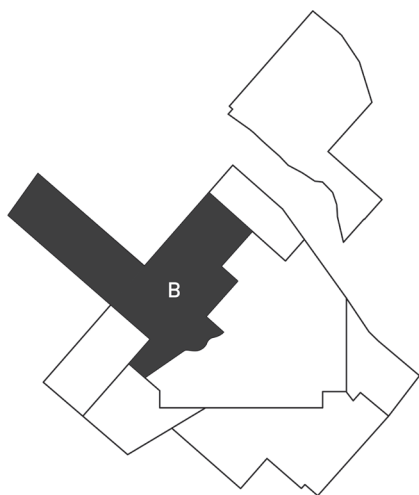
2.1.2 Precincts

Key elements from each precinct are derived from the Concept Plan.



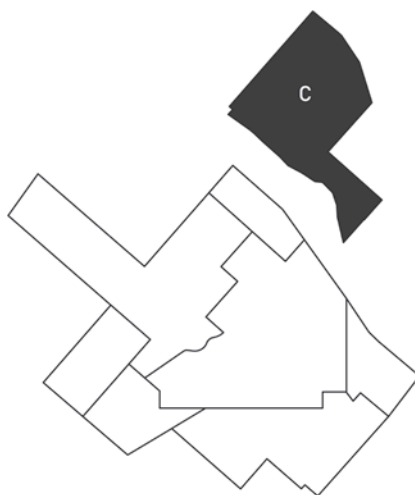
Precinct A **Academic Core**

- Develop the new University Common on the new north-south spine as the main public open space in the Academic Core.
- Incorporate student housing and commercial/research uses.
- Establish a new north-south pedestrian corridor through the Academic Core adjoining the new University Common.
- Establish a predominant building height with taller buildings located at landmark locations.
- Consolidate existing low-rise multi-deck and on-grade parking into peripheral above and below ground multideck parking at the University's key entry points with no increase in car parking for academic uses.
- Upgrade and visually strengthen the arrival and entry points to the precinct with landscaping and signage.
- Improve legibility and permeability by maximising pedestrian links between buildings and introducing new cross-campus circulation and cycle routes.
- Continue to explore landscape themes that highlight and interpret the current and former uses and character of the campus.
- Adopt Crime Prevention through Environmental Design (CPTED) principles for new development.
- Activate pedestrian zones within the Academic Core with ground floor activities, cafes and shops where appropriate.
- Enhance the Mars Creek Valley area for use as passive open space whilst protecting the visual and environmental qualities of the woodlands and watercourse/pond.
- Open up vistas from the Academic Core to the Mars Creek Valley area wherever possible.
- Retain significant native woodland areas in this precinct.



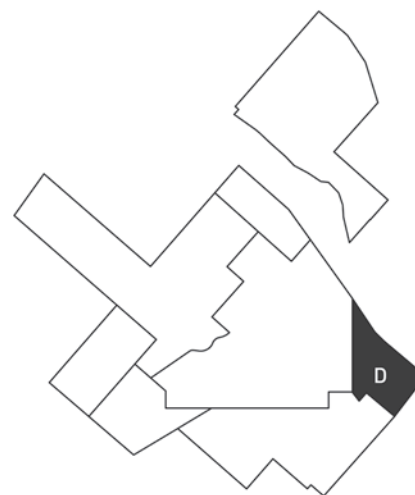
Precinct B **North West Precinct**

- Strengthen the activity axis along Gymnasium Road to provide a more distinguished entrance and avenue link to the Academic Core.
- Retain significant native woodland areas in this precinct.
- Protect and enhance the Mars Creek and Culloden Creek riparian corridors.
- Incorporate a new green space leading down to Mars Creek. This space is to address a new north-south road, the Gymnasium, and respond to views of the creek and Academic Core.
- New buildings should be screened with similar tree species so that they blend with the backdrop when viewed across from the Academic Core. The existing parkland character should remain as the primary focus of this view.
- New buildings setback from Culloden Road.
- Incorporate a mix of uses - student housing, commercial/ research, academic uses and car parking.



Precinct C **University Open Space and Playing Fields**

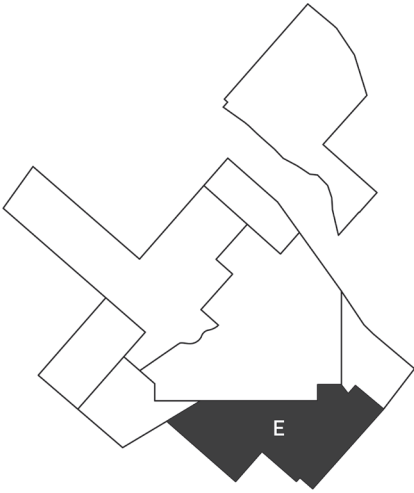
- Retain and manage the natural landscape setting of the playing fields precinct.
- Extend the indigenous vegetation to the south to mitigate the impact of the M2 Motorway.
- Expand/improve support facilities as required.
- Allow replacement and development of low rise structures and development of new support facilities (ancillary to the playing fields and/or University uses).



Precinct D **Macquarie University Research Park and Health Precinct**

- New development to provide an address to an internal or external road or significant open space area.
- Overshadowing impacts to be considered in the development of new buildings.
- Appropriate stormwater measures to be incorporated in the development of new buildings.
- Allow for flexible teaching and academic space.

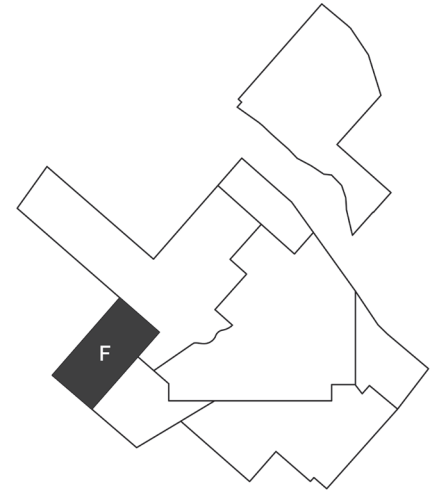
2. PRECINCT PLANNING FRAMEWORK



Precinct E Station South

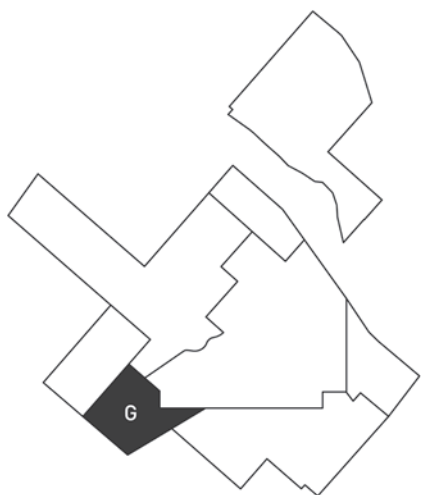
- Link new public spaces (eg. station forecourt and new University Common) with major pedestrian routes.
- Allow for a range of uses including academic, research and commercial.
- Establish view corridors along primary pedestrian routes.
- Upgrade and visually strengthen the arrival and entry points to the precinct with landscaping and signage.
- Allow for the progressive demolition of parking structures.
- Locate two landmark buildings on Herring Road in close proximity to the train station.
- Minimise adverse overshadowing on adjoining properties.
- Provide a 'forecourt' to the two development parcels at the intersection of Waterloo and Herring Roads.
- Protect and enhance the University Creek riparian corridor.
- Incorporate Water Sensitive Urban Design (WSUD) principles within new development.

- Establish 'entry statements' at the Balaclava Road and Herring Road entrance to the campus.
- Create a sense of open space and allow a visual link towards the Academic Core through building setbacks on Herring Road and Waterloo Road.
- Locate active uses such as retail shops, cafes, and restaurants around the station portal area.
- Create an address to the Academic Core within the established grid pattern of the campus.
- Minimise vehicular impacts on the pedestrian network and the Academic Core.



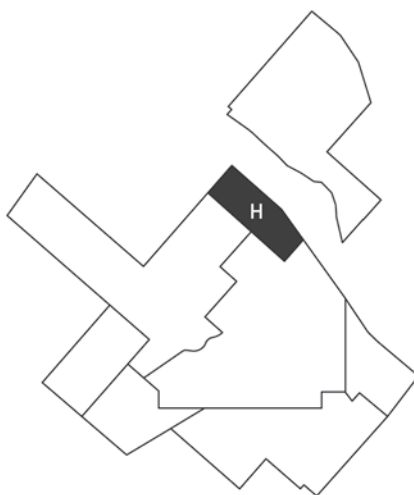
Precinct F Epping Road West

- Incorporate Water Sensitive Urban Design (WSUD) principles within new development.
- Create landscape buffer along Culloden and Epping Roads.
- Provide new formal public open space associated with new commercial development.
- Upgrade and visually strengthen the arrival and entry points to the precinct with landscaping and signage.
- Improve legibility and permeability by maximising pedestrian links between buildings and introducing new cross-campus circulation and cycle routes.
- Mark the University entrance at Epping and Balaclava Roads.
- Vehicular impacts on the pedestrian network and the Academic Core are to be minimised.



Precinct G
Epping Road Precinct Expansion

- Encourage a variety of uses including academic, research and commercial activity.
- Protect and enhance the Mars Creek riparian corridor with new native planting.
- Link new public space (Mars Creek Plaza) with major pedestrian routes.
- Protect and enhance the Mars Creek riparian corridor with new native planting.
- Incorporate Water Sensitive Urban Design (WSUD) principles within new development.
- Mark the University entrance at Epping and Balaclava Roads.



Precinct H
Talavera Road North

- Encourage a variety of uses including academic, research and commercial activity.
- Protect and enhance the Mars Creek riparian corridor with new native planting.
- Create landscape buffer along Culloden and Talavera Roads.
- Incorporate Water Sensitive Urban Design (WSUD) principles within new development.
- Improve legibility and permeability by maximising pedestrian links between buildings.

2. PRECINCT PLANNING FRAMEWORK

2.1.3 Development Lots

Although development lots were identified in the Concept Plan for Precincts E and F, they were not identified for the whole campus.

Through the detailed plan development and refinement process an indicative Lot Plan showing illustrative development parcels has now been prepared for the whole campus.

The Concept Plan identifies principles for development across the campus and a structure for public domain and access elements. The Master Plan process formalised this framework and defined lot locations and outlines. The Lot Plan is a development of and is consistent with the principles established under the Concept Plan.

Lot definition has taken into account road and pedestrian corridors and the realignment of links through better integration with the open space and pedestrian network. Lot boundaries are intended to be flexible to allow architecture to respond to university requirements. A number of significant buildings are retained within the lot structure.

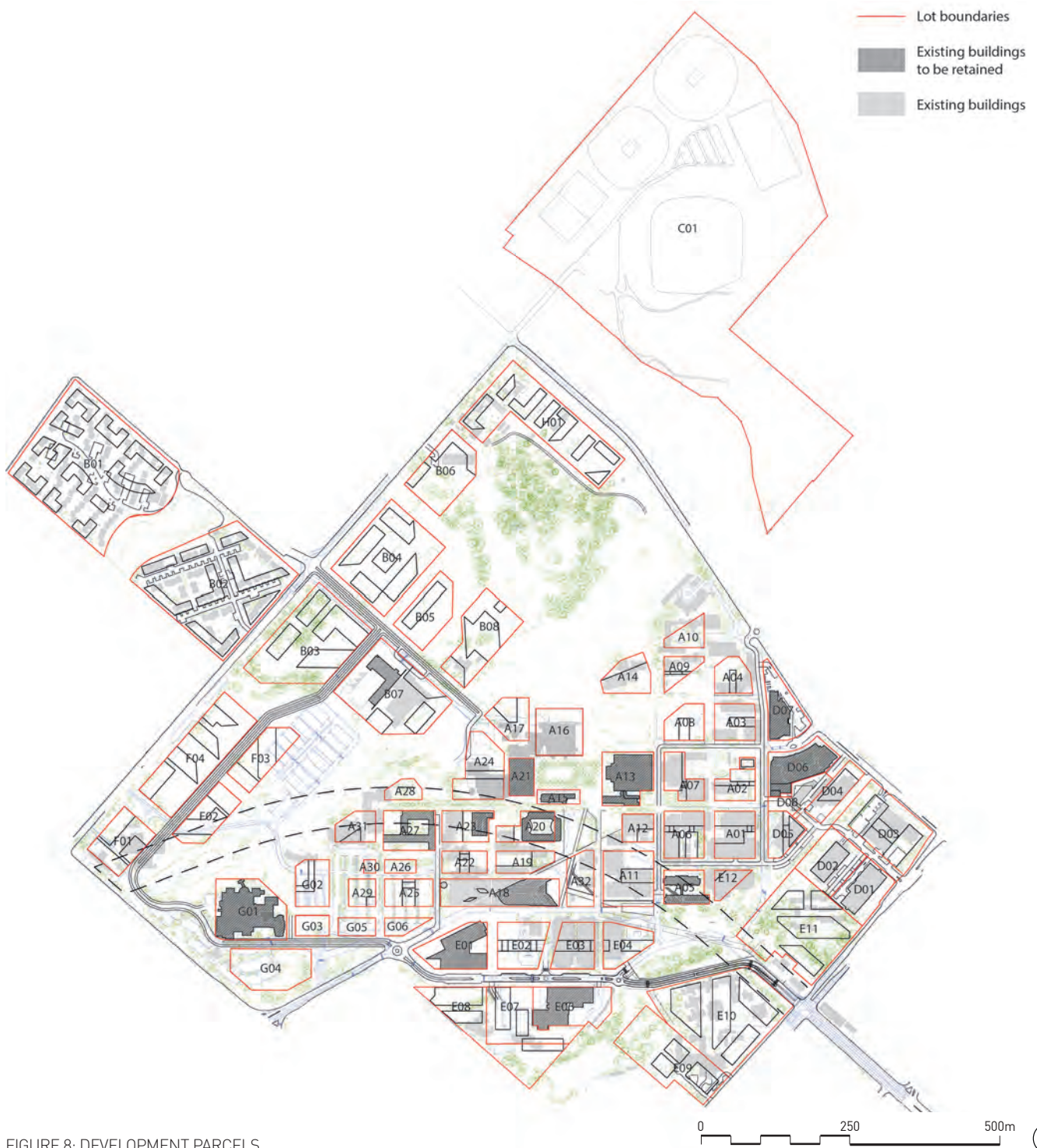


FIGURE 8: DEVELOPMENT PARCELS

2. PRECINCT PLANNING FRAMEWORK

2.1.4 Open Space Network

Macquarie University is recognised for its high quality landscape setting, with its academic buildings and colleges set amongst pocket parks, courtyards, natural creek lines and parkland corridors.

The structure of its open space network is fundamental in defining the experience of the campus. Integration of all of the Precincts into this network will ensure the quality of the campus landscape continues to thrive in the future.

As a development of the Concept Plan, the 2014 Campus Master Plan is structured around the public domain as the primary organising element of the campus. The Master Plan recognises the importance of the campus landscape through the following principles:

- Reinforce the concept of a ‘campus in a park’
- Create green gateways to the campus
- Develop a distinctive formal landscape theme within the core
- Integrate landscape and public domain
- Enhance the landscape definition of streets
- Develop a strong maintenance and management policy

Key elements of the open space network will include:

- A comprehensive network of major open spaces, including the University Common, Central Courtyard, Arts Lawn and The Grove, together with numerous minor open spaces, courtyards and pocket parks.
- Strong green pedestrian links along major thoroughfares such as Wally’s Walk, Macquarie Walk and Sir Christopher Ondaatje Avenue together with shared streets, vehicular thoroughfares and service roads to link key destinations.
- Major creek corridors of University Creek and Mars Creek and associated riparian and parkland areas.
- Green gateways punctuating areas of buffer planting along the boundary of the campus.



FIGURE 9: OPEN SPACE NETWORK

2. PRECINCT PLANNING FRAMEWORK

2.2 ACCESS AND MOVEMENT

The ability to efficiently access the campus and encourage pedestrian movement across the precinct is a fundamental driver of the plan.

The Concept Plan identifies a number of opportunities for direct access to and from the surrounding regional road network. These include:

- Existing access arrangements from the surrounding main roads into the University, (Epping and Herring Roads), are to be maintained and upgraded.
- The intersections on the regional road network including Epping/Balaclava Roads and Herring/Waterloo Roads could be upgraded to improve accessibility to the University, and provide for the future development within the surrounding Macquarie Park Corridor.

Upgraded access to and from the M2 Motorway (new east-facing on and off ramps at Herring and Christie Roads) has improved access to the Macquarie University site.



FIGURE 10: EXISTING ROAD NETWORK AND SITE ACCESS

2. PRECINCT PLANNING FRAMEWORK

2.2.1 Access Corridors

The precinct guidelines allow for access corridors with a range of widths that permit varying configuration of roads and pedestrian zones within them.

Roads have changed from the Concept Plan based on traffic studies. The primary roads are no longer 3 or 4 lanes as described in the Concept Plan, they are now 2 lanes. The secondary roads and shared ways are the same as the Concept Plan.

The final configuration that best meets the University's priorities and access requirements while preserving pedestrian amenity will be developed by Macquarie University over time.

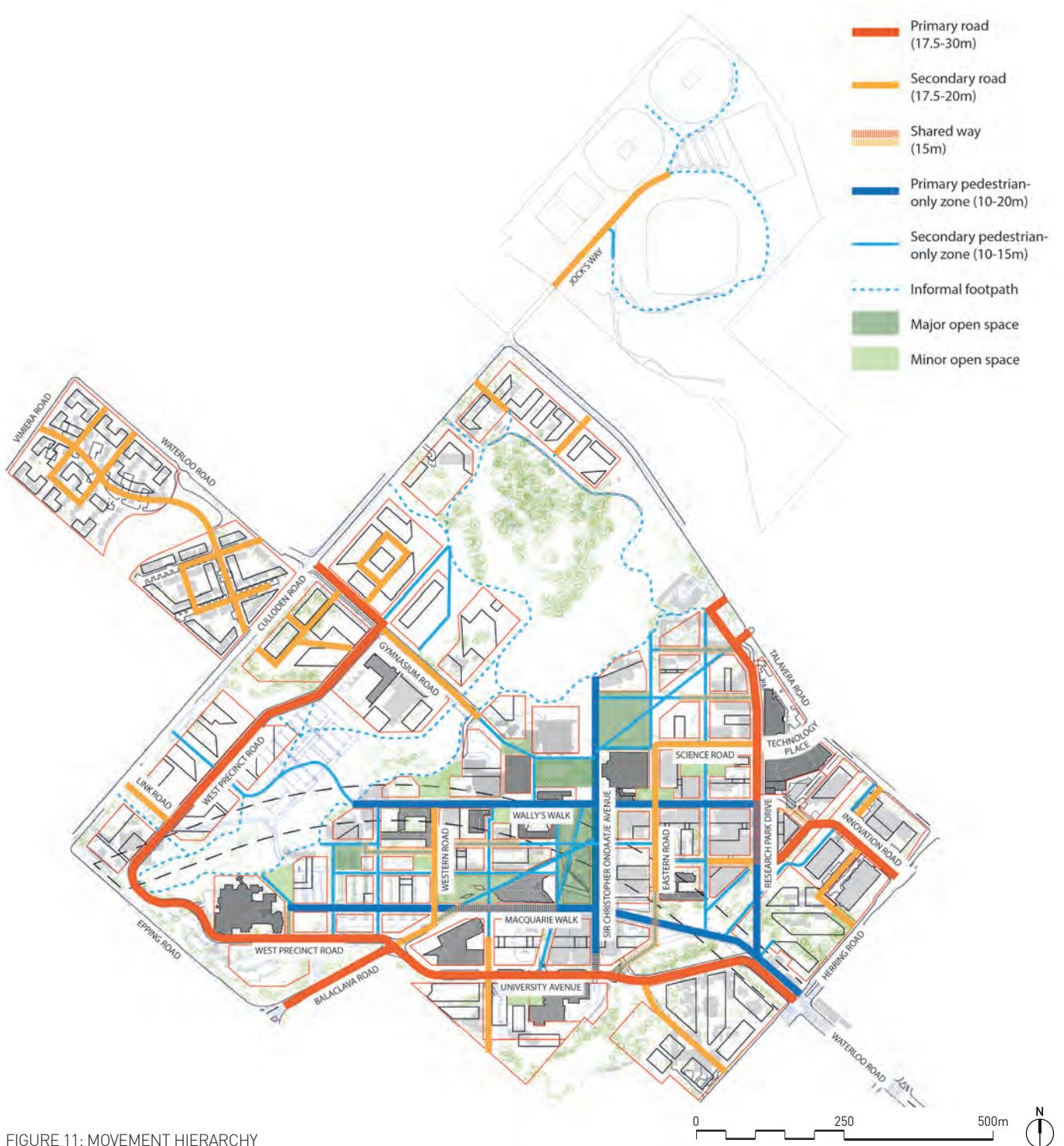


FIGURE 11: MOVEMENT HIERARCHY

2. PRECINCT PLANNING FRAMEWORK

2.2.2 Illustrative Accessway Sections

These typical sections illustrate the character of the different accessway typologies. As there is a range of possible widths for the accessway corridors, these sections are flexible to accommodate the variations, mainly within the pedestrian/landscape zones.

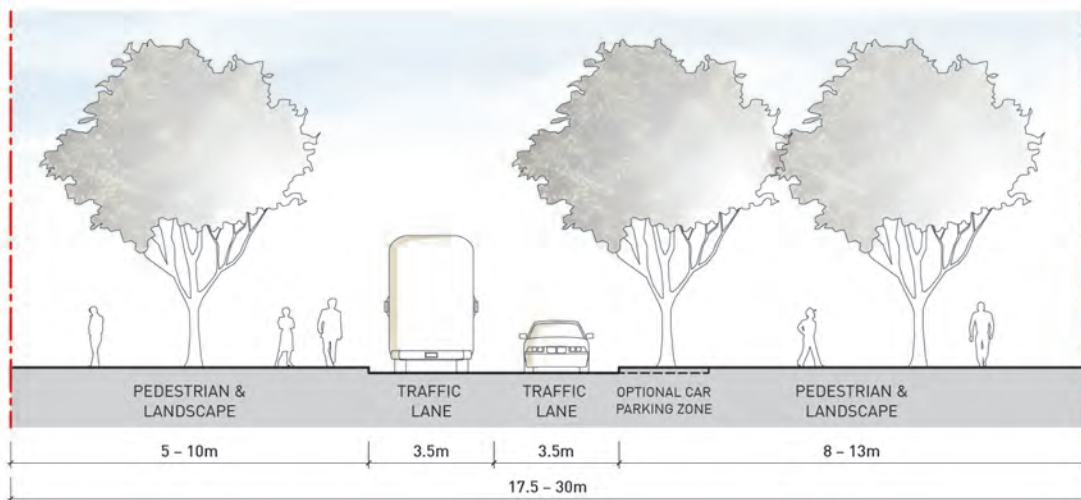


FIGURE 12: PRIMARY ROAD (17.5 - 30M)

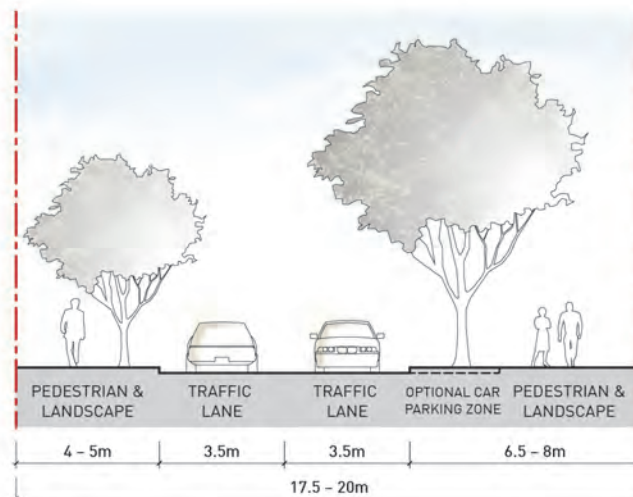


FIGURE 13: SECONDARY ROAD (17.5 - 20M)

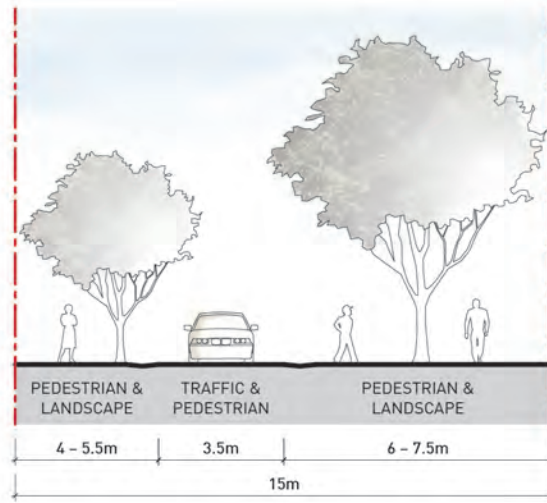


FIGURE 14: SHARED WAY (15M)

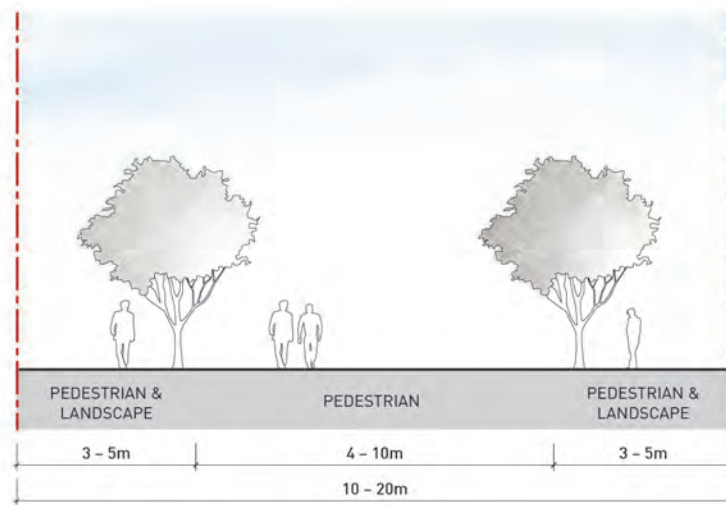


FIGURE 15: PRIMARY PEDESTRIAN (10 – 20M)

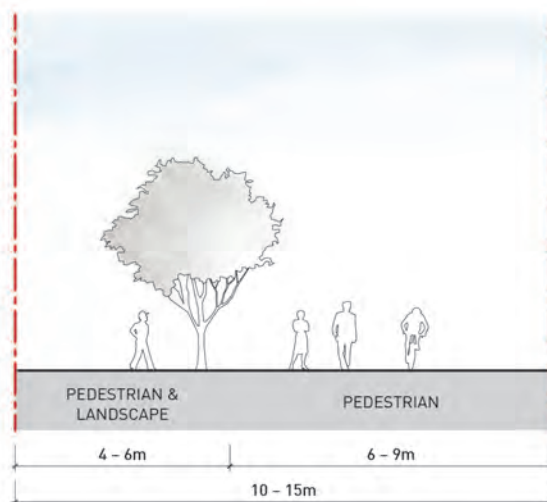


FIGURE 16: SECONDARY PEDESTRIAN (10 – 15M)

2. PRECINCT PLANNING FRAMEWORK

2.2.3 Pedestrian Network

Macquarie University is noted for its landscape environment and the quality of the pedestrian environment around the campus.

Fundamental to the planning of the University was the establishment of the Academic Core as a pedestrian precinct, with vehicular access north of Macquarie Walk generally limited to service and emergency vehicles.

A series of alternating north-south pedestrian and vehicle access ways are generated.

At the heart of this network, a new proposed central north-south green open space, University Common, creates a pedestrian zone that links the traditional heart of the campus with the new development zones to the south and the parklands to the north in the Mars Creek zone.

New buildings will be oriented to address and activate this pedestrian zone and open space.

Pedestrian access from the station to the Academic Core is along a planned pedestrian bridge crossing over University Creek.

LEGEND

- 1 Central Courtyard
- 2 University Common
- 3 The Grove (East Common)
- 4 Arts Lawn (West Common)
- 5 University Creek
- 6 Mars Creek
- 7 Culloden Creek

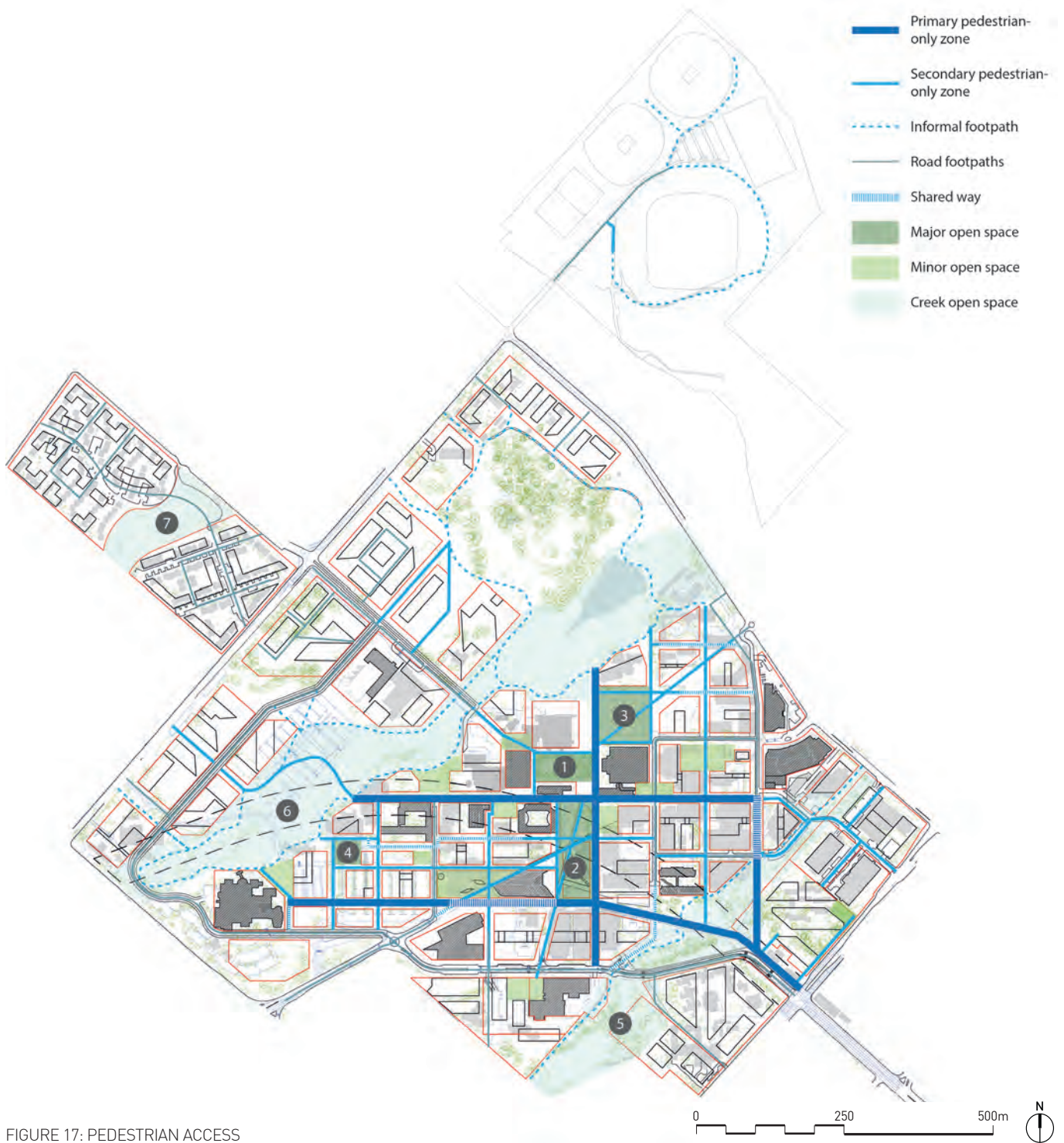


FIGURE 17: PEDESTRIAN ACCESS

2. PRECINCT PLANNING FRAMEWORK

2.2.4 Public Transport

The opening of the Epping to Chatswood Line on the Sydney Trains network, including the provision of a new station at Macquarie University, has seen a dramatic shift in access to the campus from private vehicle to public transport. While private cars were previously the primary transport option to the University, the new rail link has significantly improved access opportunities to the campus – with close to half of all students and staff now arriving via either bus or rail.

Note that the Macquarie University station is to be converted to a fully-automated rapid transit rail system as part of Sydney Metro Northwest, with train services arriving every 4 minutes. This will further enhance access to the campus.

The free internal University shuttle bus service is provided to students, staff and visitors. Shuttle bus access remains important and planning has identified adjusted routes and stops on the new road layout to maintain service to the Academic Core.

An upgrade to the public transport interchange at Macquarie Square on Herring Road adjacent to the Macquarie Centre is proposed to enhance access opportunities for those arriving by bus.

Pedestrian access to the train station will be improved by the construction of a pedestrian bridge from the new University Common across University Creek.

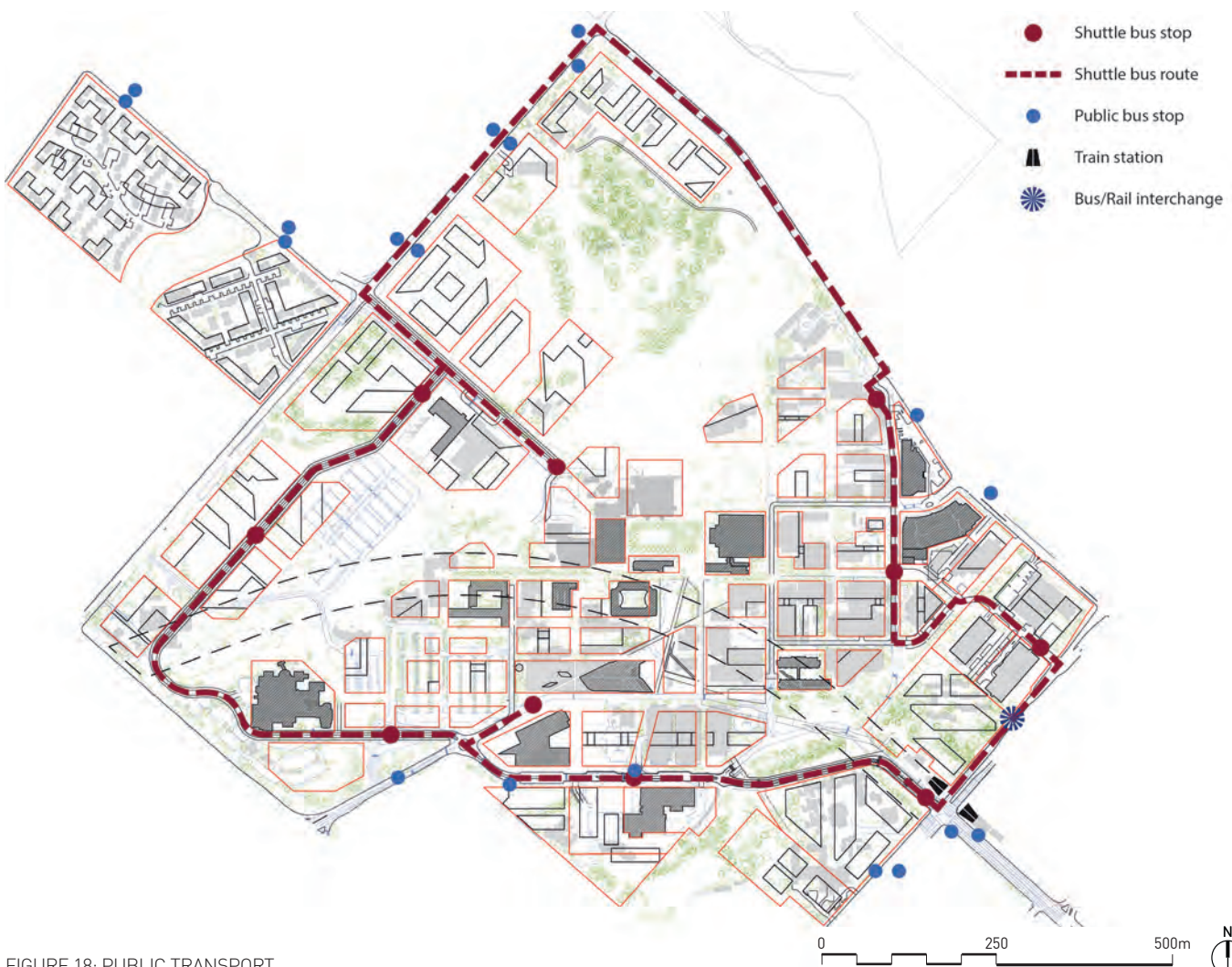


FIGURE 18: PUBLIC TRANSPORT

2.2.5 Cycle

Macquarie University has long promoted cycle access to and within the campus. The Master Plan formalises the main cycle corridors around the campus and provides links to regional and district networks.

Within the Academic Core area, cycling is discouraged as this is a high-pedestrian-use area. Bike hubs are located on the fringe of the Academic Core so that cyclists can conveniently park their bikes close to where they need to go.

This is in line with a fundamental driver of these Guidelines, promoting the ability to efficiently access the campus and encourage pedestrian movement across the precinct.

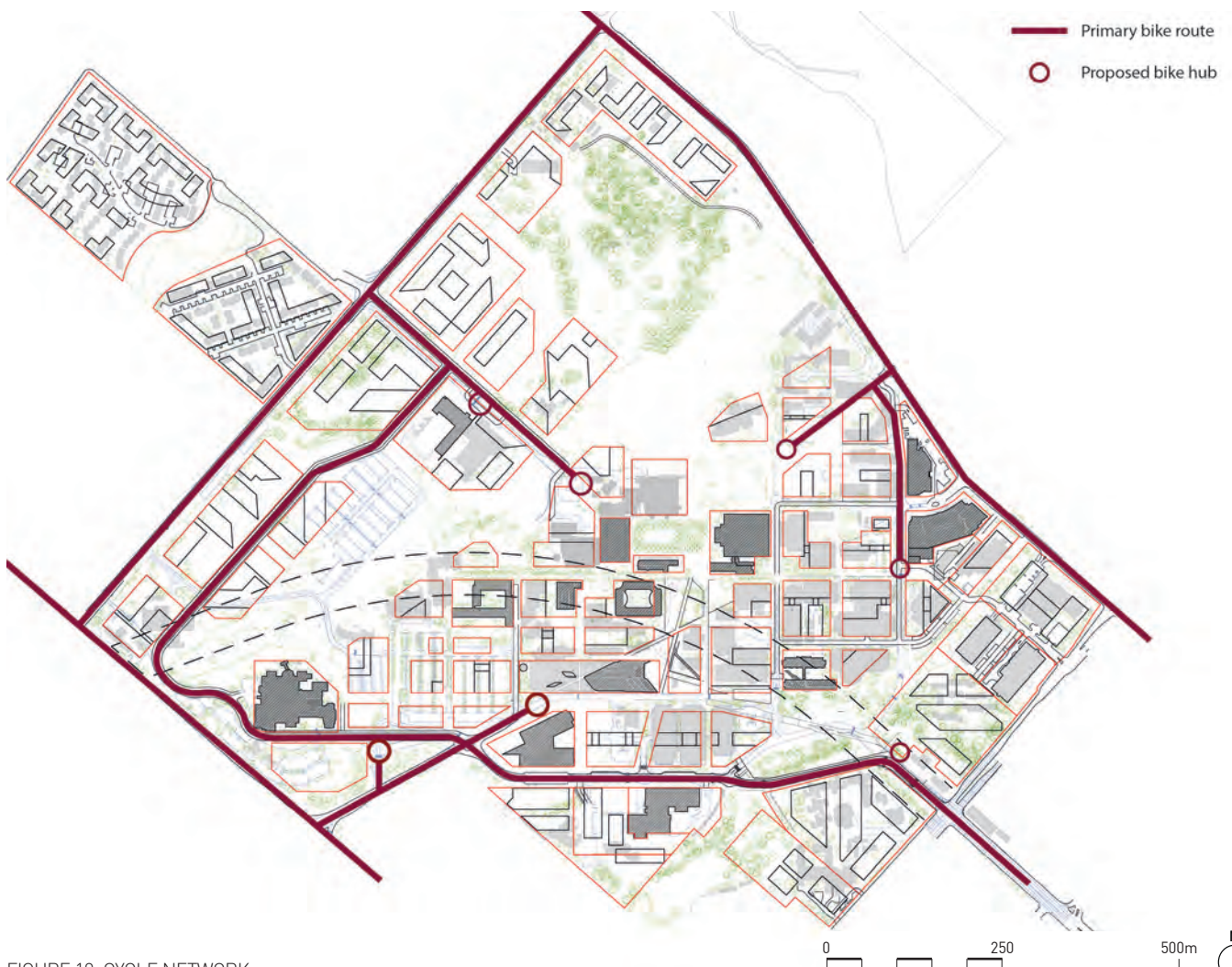


FIGURE 19: CYCLE NETWORK

2. PRECINCT PLANNING FRAMEWORK

2.2.6 Lot Access

Access to lots will be controlled to minimise impacts of garage and loading dock entries on major streets. Access off Macquarie Walk and University Avenue is minimised in the Master Plan.

The guidelines identify access zones off the minor road network where access to sites is permitted. These zones anticipate setbacks from street corners to ensure that service or carpark entries are located so that they are not visually apparent from the main streets.

The key principles are:

- Site entries are recommended to be a maximum of 6 metres wide.
 - Ensure vehicular crossings create a safe footpath environment.
 - Allow safe vehicular access to the property.
 - Facilitate access for emergency vehicles.
 - Exit and entry points should be rationalised and clearly articulated.
 - The design of the vehicular access to each of the sites must be clear and not intrusive in order to minimise any potential conflicts between pedestrians and vehicular traffic.
- Conflicts between pedestrians and vehicles, at entrance points to parking areas, must be minimised.
 - Entrance points to parking and loading areas have clear and unobstructed visibility of pedestrian zones.
 - Pedestrians to have priority at crossing points.
 - All transitions between levels outside and inside sites (both pedestrian and vehicular) must take place within lots.
 - The service hubs are central stores where goods can be delivered and stored.



FIGURE 20: LOT ACCESS

2. PRECINCT PLANNING FRAMEWORK

2.2.7 Parking

Both the Concept Plan and the Master Plan propose to consolidate University car parking within parking structures on the periphery of the Academic Core. The parking structures will be linked directly to the pedestrian network, providing convenient and safe access to and from the Academic Core.

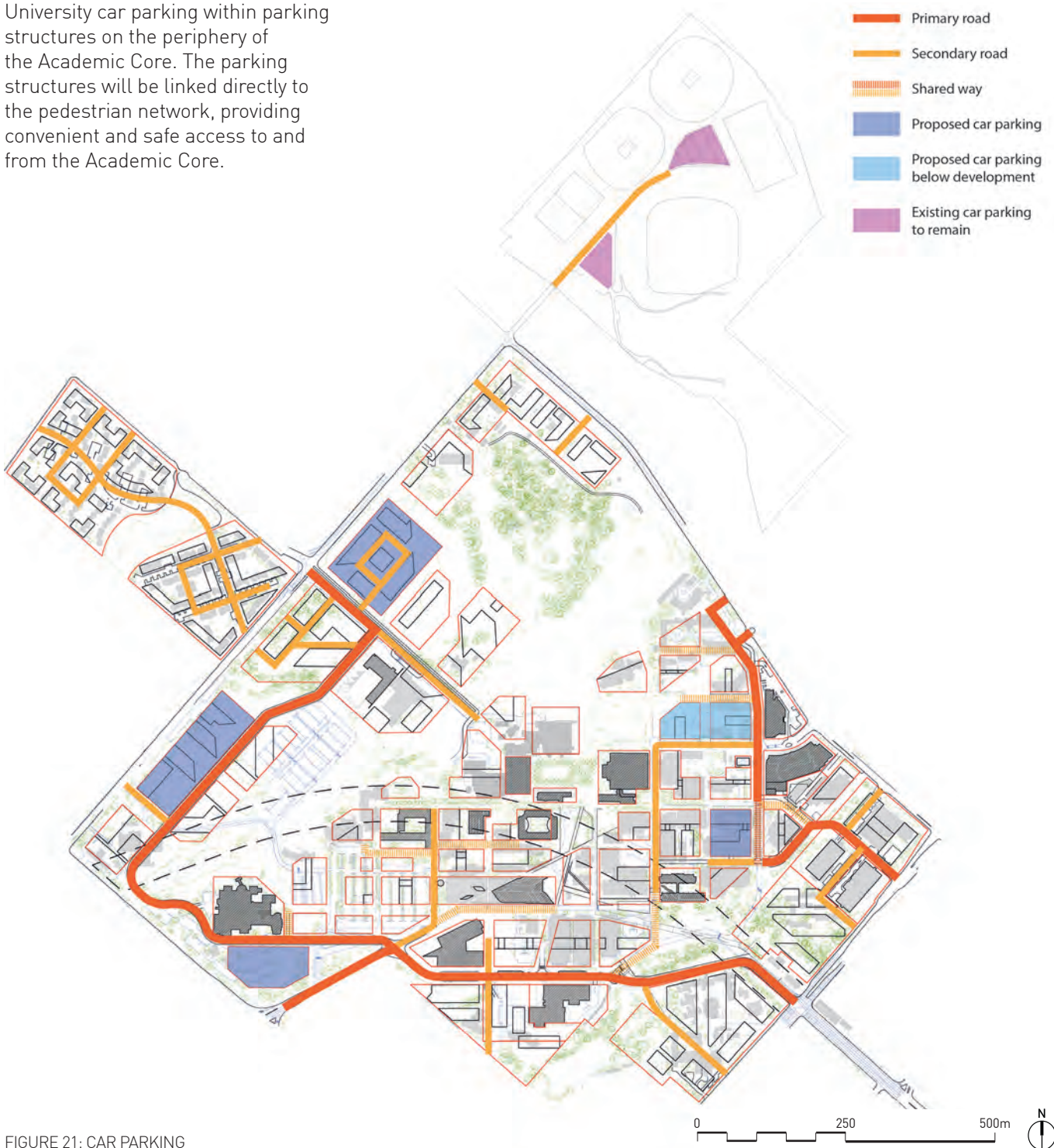


FIGURE 21: CAR PARKING

2.2.8 Accessibility

Macquarie University aims to achieve fully compliant disabled access across most of the campus. This includes accessibility from transport nodes to all buildings, accessibility within buildings and accessibility across the public domain.

The pedestrian network facilitates access through the extended grid. In areas of steep topography, initiatives are to be introduced to mitigate impediments with alternate routes to all destinations.

The key initiatives are:

- New buildings should achieve level access at major entries.
- Accessible gradients should be achieved wherever possible throughout the public domain.
- Major level changes on significant public paths should be negotiated by lifts or ramps in the same course of travel.
- Development should be considerate of the University's Disability Action Plan.

2. PRECINCT PLANNING FRAMEWORK

2.3 RAIL EASEMENT

The construction of the Epping to Chatswood Rail Line has had enormous benefits to the University. Macquarie University is the only major university in Australia with a train station on campus.

The planned construction of the North West Rail Link will extend the Epping to Chatswood Rail Link north-west to Castle Hill and Rouse Hill and dramatically increase patronage to and through the Macquarie University station.

Transport for NSW limits development within the zone of influence of the tunnels and any significant development above the tunnel reserves will need formal approval:

- No development of structural elements within the tunnel zone (First Reserve).
- Structural elements are permitted in the Second Reserve (and in the First Reserve outside the Support Zone) within 3m of grade.
- Structural elements are permitted in the Second Reserve (a zone struck at 45 degrees from the bottom and 20m to the side of the First Reserve).

	1st RESERVE WITHIN SUPPORT ZONE	1st RESERVE OUTSIDE SUPPORT ZONE	2nd RESERVE WITHIN ZONE OF INFLUENCE	2nd RESERVE OUTSIDE ZONE OF INFLUENCE
Excavations	Not permitted	Excavation less than 3m require no assessment Excavation more than 3m require assessment	Excavation less than 3m require no assessment Excavation more than 3m require assessment	Excavation less than 3m require no assessment Excavation more than 3m require assessment
Shallow Footings	Not permitted	Shallow footings require assessment	Shallow footings require no assessment	Shallow footings require no assessment
Deep Foundations	Not permitted	Deep foundations require assessment	Deep foundations require assessment	Deep foundations may not require assessment
Tunnels and Underground Excavations	Not permitted	Tunnels and underground excavations require assessment	Tunnels and underground excavations require assessment	Tunnels and underground excavations require assessment
Demolition of Existing Subsurface Structures	Not permitted	Demolition of existing subsurface structures require assessment	Demolition of existing subsurface structures require assessment	Demolition of existing subsurface structures require assessment

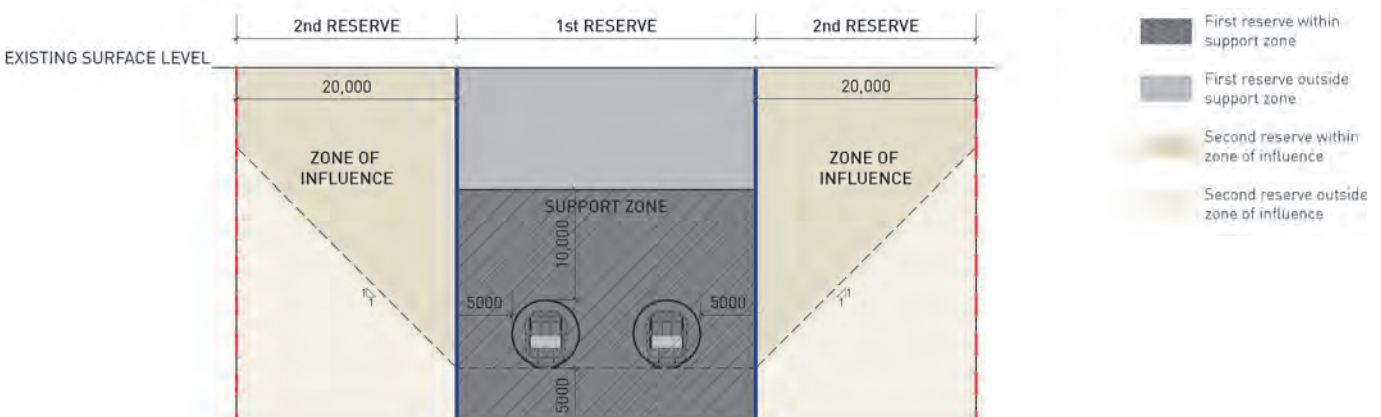


FIGURE 21: RAIL CORRIDOR SECTION

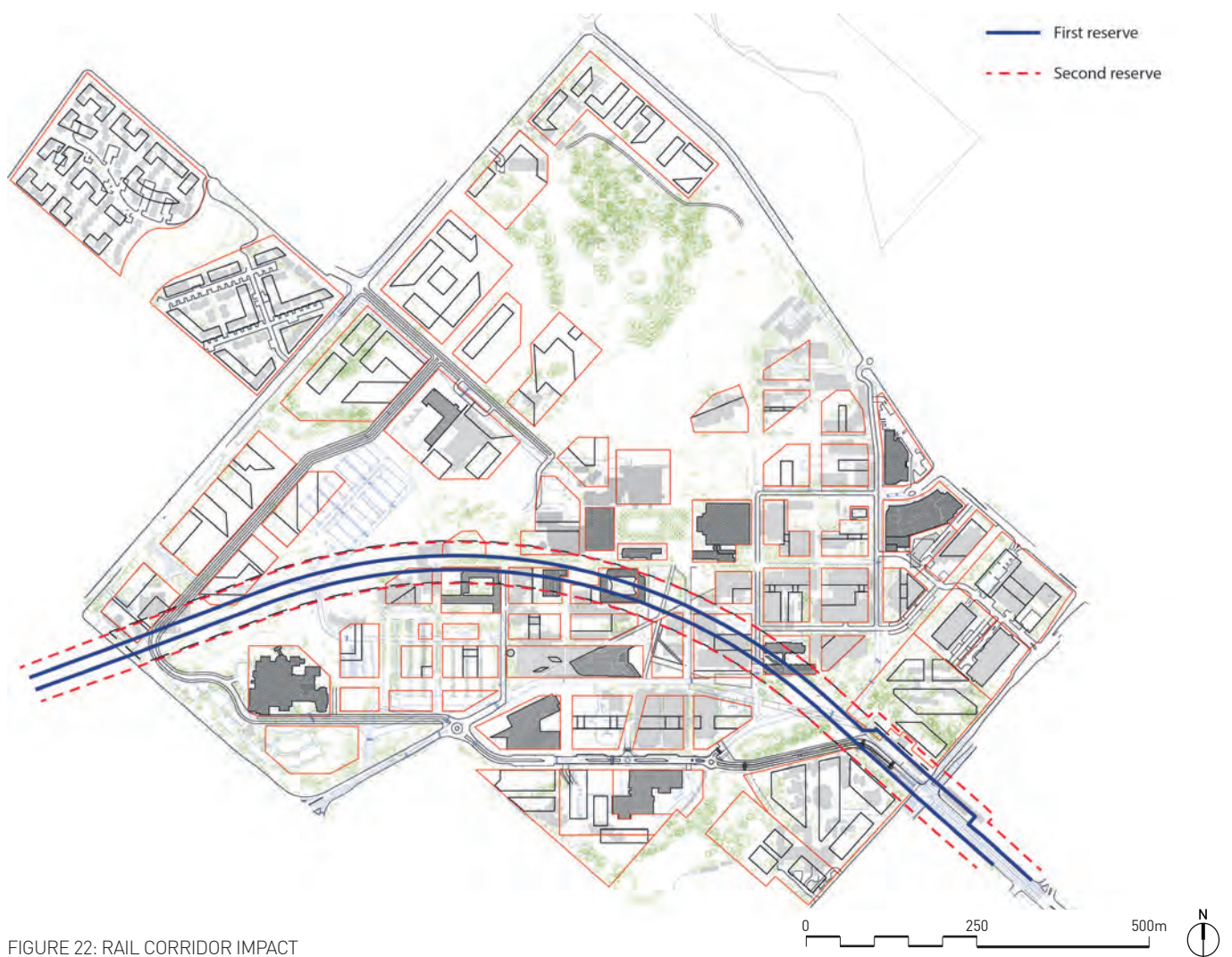


FIGURE 22: RAIL CORRIDOR IMPACT





3

PUBLIC DOMAIN

3. PUBLIC DOMAIN

3.1 LANDSCAPE STRUCTURE

Fundamental to the future landscape of Macquarie University will be the vision created for the overall public domain within the campus. The identity of the campus will be reinforced by a landscape structure of walkways and thoroughfares, parks and plazas, creek corridors, gateways and edges together with a strong palette of colours, textures and plants.

Sustainable landscape principles underpin all aspects of the public domain, in particular the consideration of climate and microclimate, soil and water regimes, recycling, endemic planting and provision of ecological and habitat areas.

In developing the open space response for the precincts, a series of landscape objectives have been identified:

- Establish a structured hierarchy of public domain and open space defined and reinforced by the urban form.
- Create a comprehensive landscape setting and distinctive visual identity.
- Create an environment that is in harmony with local environmental conditions.
- Ensure that climate and microclimate defines the landscape response.
- Plan for an evolving and gradually maturing natural and urban ecology.
- Ensure the efficient use of resources and natural systems in the creation of sustainable soils and irrigation methods.
- Instil user awareness of coexistence with natural systems and environments.
- Establish endemic ecologies where appropriate.
- Continued integration of significant areas of native and locally indigenous plant species within formal and informal landscaped areas.

LEGEND

Primary public domain spines

- a. Wally's Walk
- b. Macquarie Walk
- c. Sir Christopher Ondaatje Avenue

Primary parks and plazas

- d. University Common
- e. Central Courtyard
- f. The Grove (East Common)
- g. Arts Lawn (West Common)

Secondary parks and plazas

- h. Frank Mercer Biological Sciences Garden
- i. Jim Rose Earth Sciences Garden
- j. Mars Creek Plaza
- k. Wally's Walk Park
- l. Western Road Park
- m. Macquarie Theatre Courtyard
- n. Faculty of Science Garden
- o. Cochlear Forecourt
- p. Library Lawn

Creek corridors and parklands

- q. University Creek
- r. Mars Creek
- s. Culloden Creek

Sports fields and facilities

- t. Macquarie University Sports Fields

Campus gateways

- u. Herring Road Gateway
- v. Balaclava Road Gateway
- w. Gymnasium Road Gateway
- x. Talavera Road Gateway

Primary roads

- aa. University Avenue
- bb. Research Park Drive
- bb. Innovation Road
- cc. West Precinct Road
- dd. Shared Ways

Secondary roads

- y. Eastern Road and Science Road
- z. Western Road

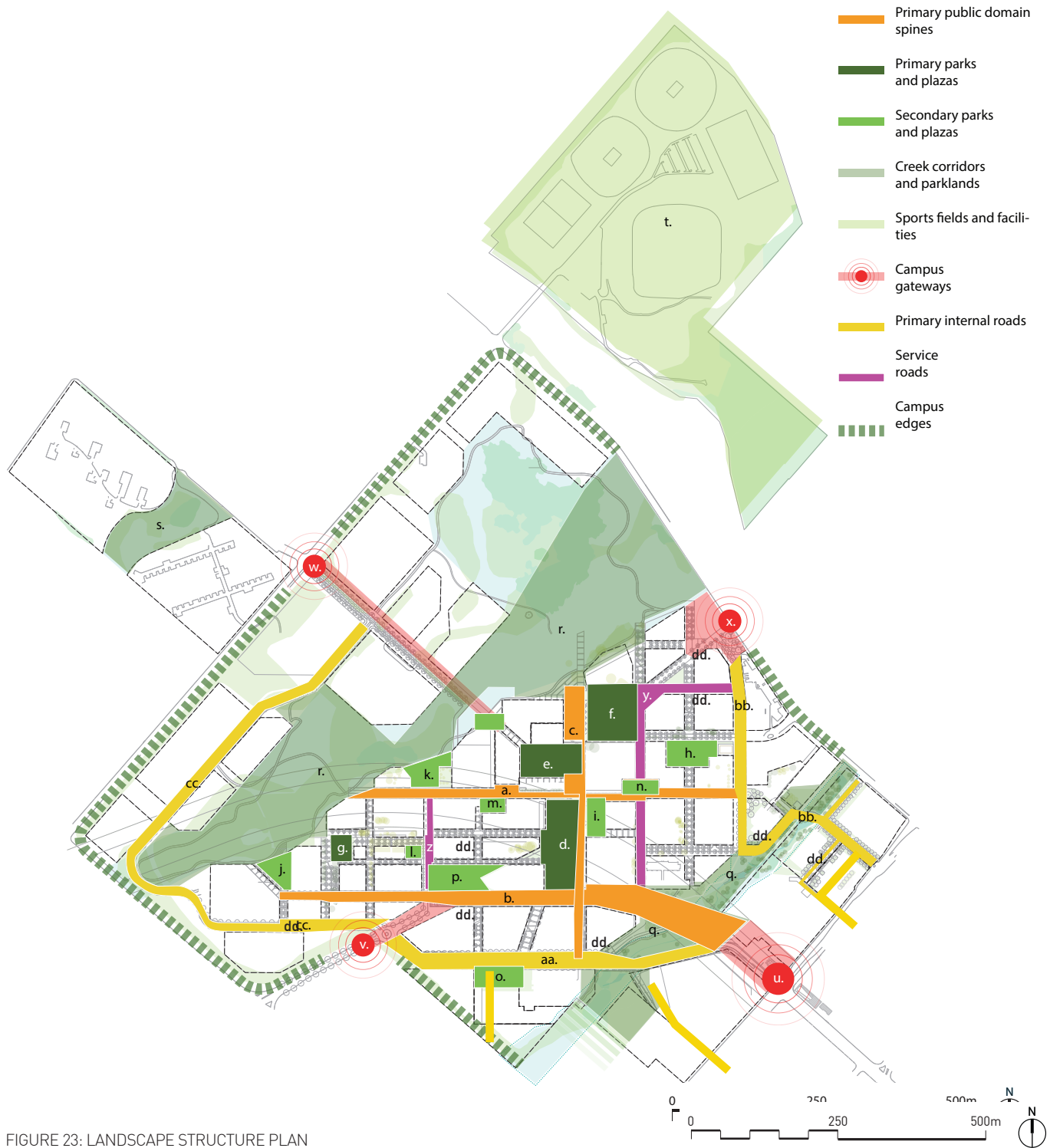


FIGURE 23: LANDSCAPE STRUCTURE PLAN

Connectivity

The new public domain will create a high level of connectivity throughout the campus, integrating open spaces with a network of footpaths, cycleways and shared paths. Buildings will address streets, footpaths and open spaces to help make places feel safer and improve legibility. Extension of the green network will be achieved through improved pedestrian and visual linkages with surrounding developments and open spaces.

Activity

Open spaces will have a degree of flexibility and versatility to allow for a variety of uses over time and enable people to enjoy different activities in the same space.

Legibility

Creating views and vistas will assist with legibility across the precinct and help integrate new development into the overall campus structure. The definition of these visual links with themed planting and materials palettes will help with wayfinding throughout the campus.



FIGURE 24: VIEW SHEDS

3. PUBLIC DOMAIN

Environmental Sustainability

The public domain must showcase environmentally sustainable design through environmental initiatives such as water sensitive urban design, managing and controlling the runoff from construction sites and encouraging the return of aerial and terrestrial wildlife through improved landscape linkages.

Macquarie University Arboretum

The Macquarie University Arboretum comprises all the trees and plants on campus. These trees, growing in natural and planted habitats, provide a valuable resource for teaching and research and a pleasing and relaxing environment for the enjoyment of staff, students and visitors to the University. The arboretum also provides habitat for many native birds and animals.

Maintenance

The public domain will reinforce a robust landscape infrastructure that is easily managed to reduce maintenance requirements.

Significant Trees

The distinctive, predominantly native landscape at Macquarie University is the result of both the preservation of key areas of inherited landscape and over 40 years of continuous planting, radically transforming the site of former market gardens and orchards into a 'Campus in a Park'. Where possible, existing trees are to be retained as the nucleus of the new public domain network.

3. PUBLIC DOMAIN

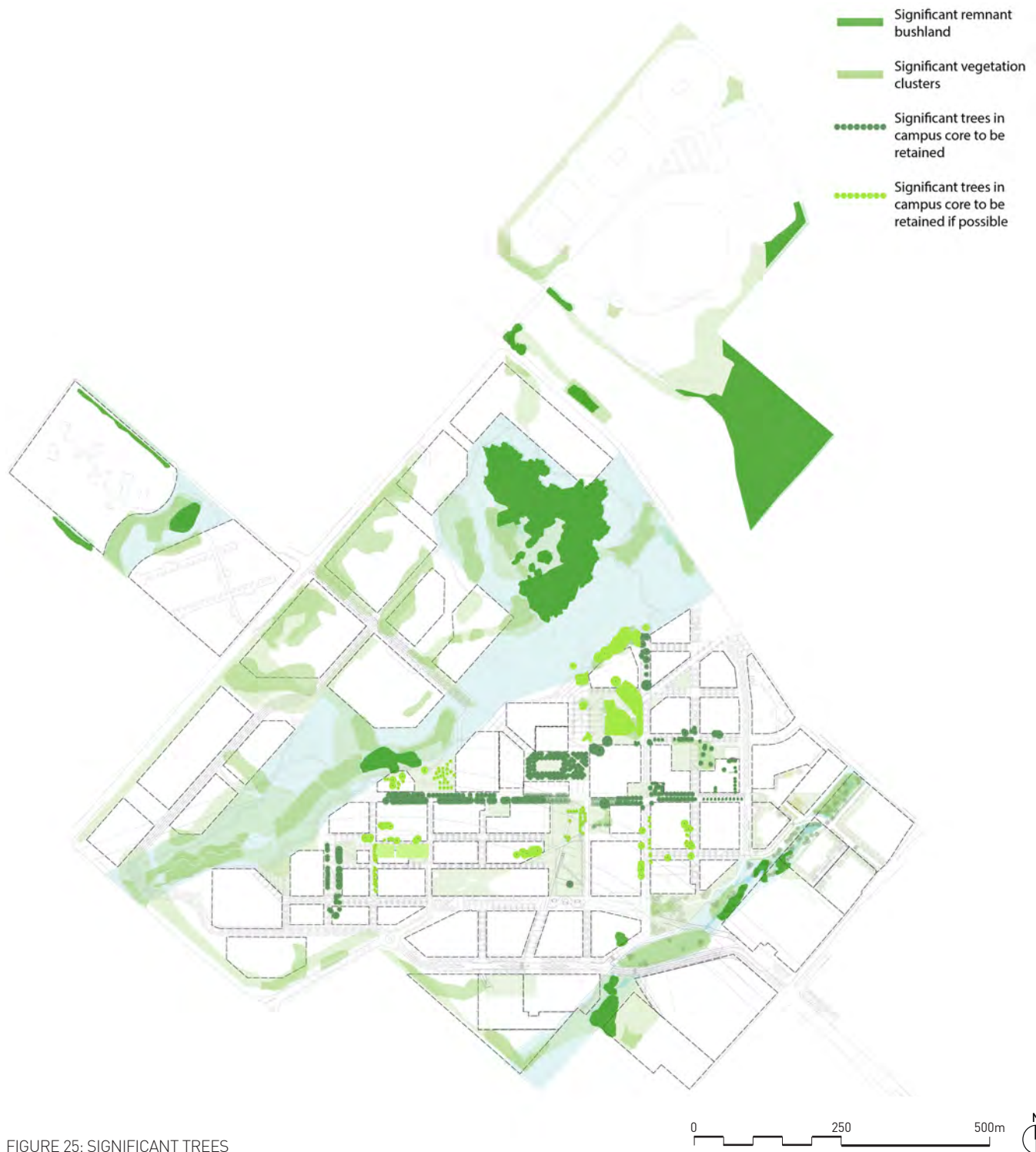


FIGURE 25: SIGNIFICANT TREES

3.2 PRIMARY WALKWAYS AND THOROUGHFARES

3.2.1 Wally's Walk

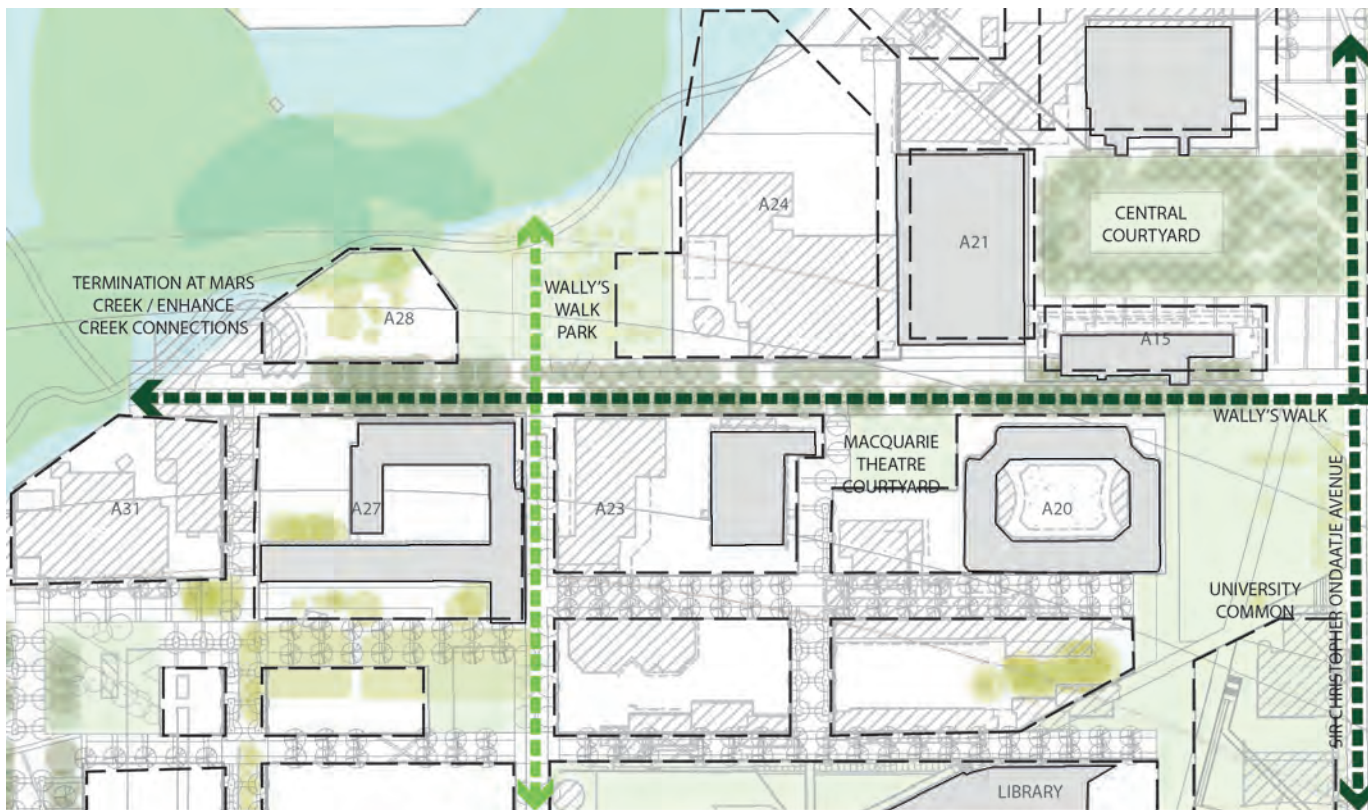
Wally's Walk is one of the campus' most enduring images, with its established canopy of London Plane Trees defining a memorable and unique space. Linking the east and western ends of the Academic Core, it should remain important as an address for many campus buildings and a connector to the open spaces at Mars Creek and University Creek.

Wally's Walk is primarily a transitory space that ebbs and flows with activity as students travel between classes and to other destinations on campus. It is a place for short stays and waiting rather than socialising in large groups.

The Walk also serves as an infrastructure service network with its underground service tunnels. This role should be preserved in the future and extended through the Academic Core.

Principles

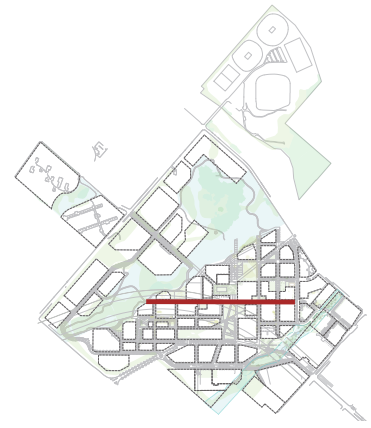
- Retain and build on the distinctive London Plane Tree planting along the Walk to reinforce its traditional boulevard character, distinguishing itself as a place that remains connected to the University's rich history.
- Complement the existing functional aspects of the pedestrian boulevard with new carefully located staying places along its edges to not obstruct the flow of people along its length.



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		

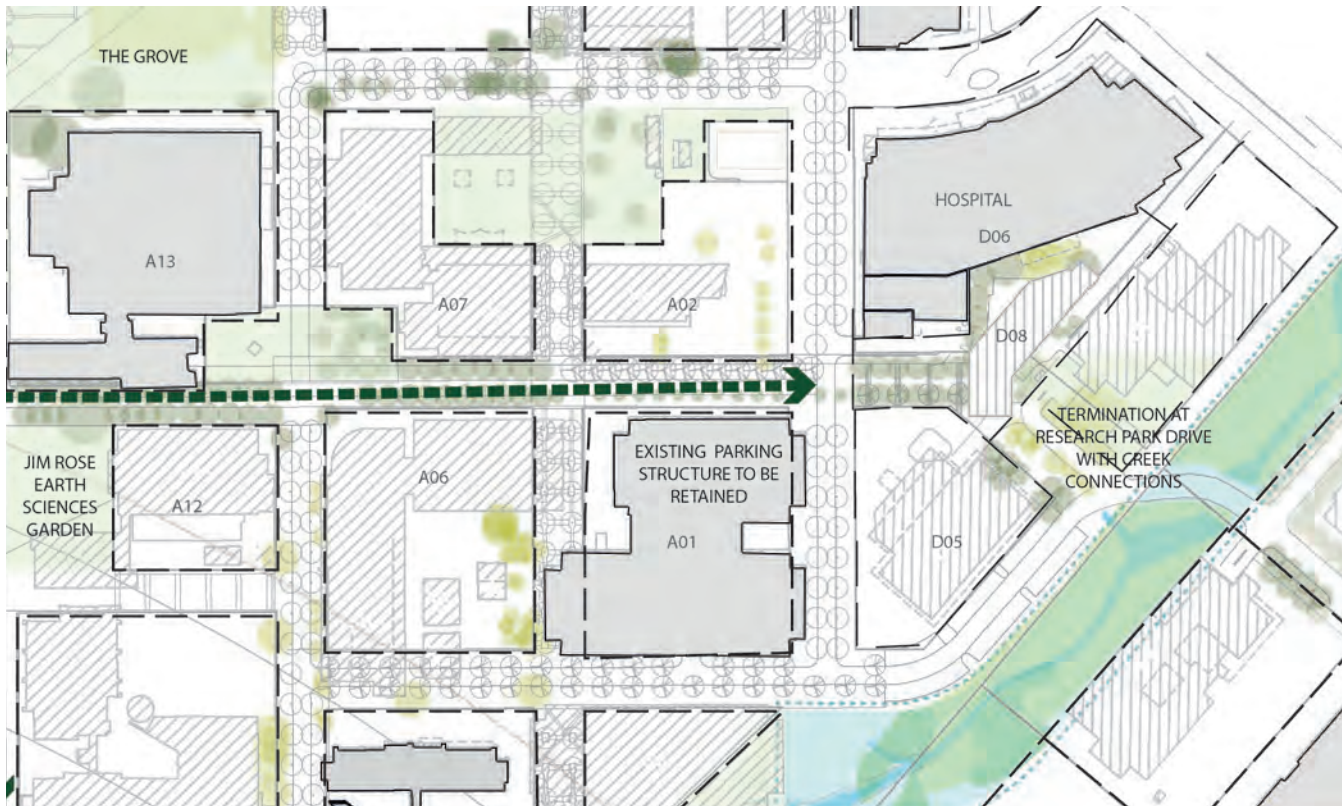
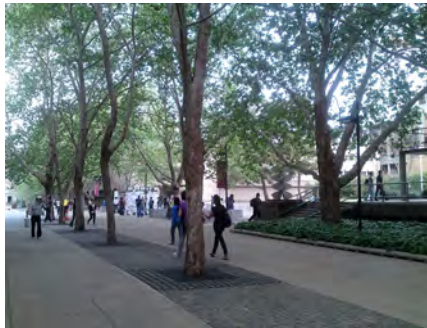
3. PUBLIC DOMAIN



- Enhance the relationship with Mars Creek and University Creek at each end of the Walk.
- Reinforce active uses with high visibility into each building from the Walk by locating accessible entries and building address points along the Walk with discrete servicing points only on side roads and access ways.
- Retain and enhance understorey plantings and undertake maintenance of the existing London Plane Trees to ensure longevity.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Platanus x acerifolia</i>	London Plane Tree	14 x 10 m



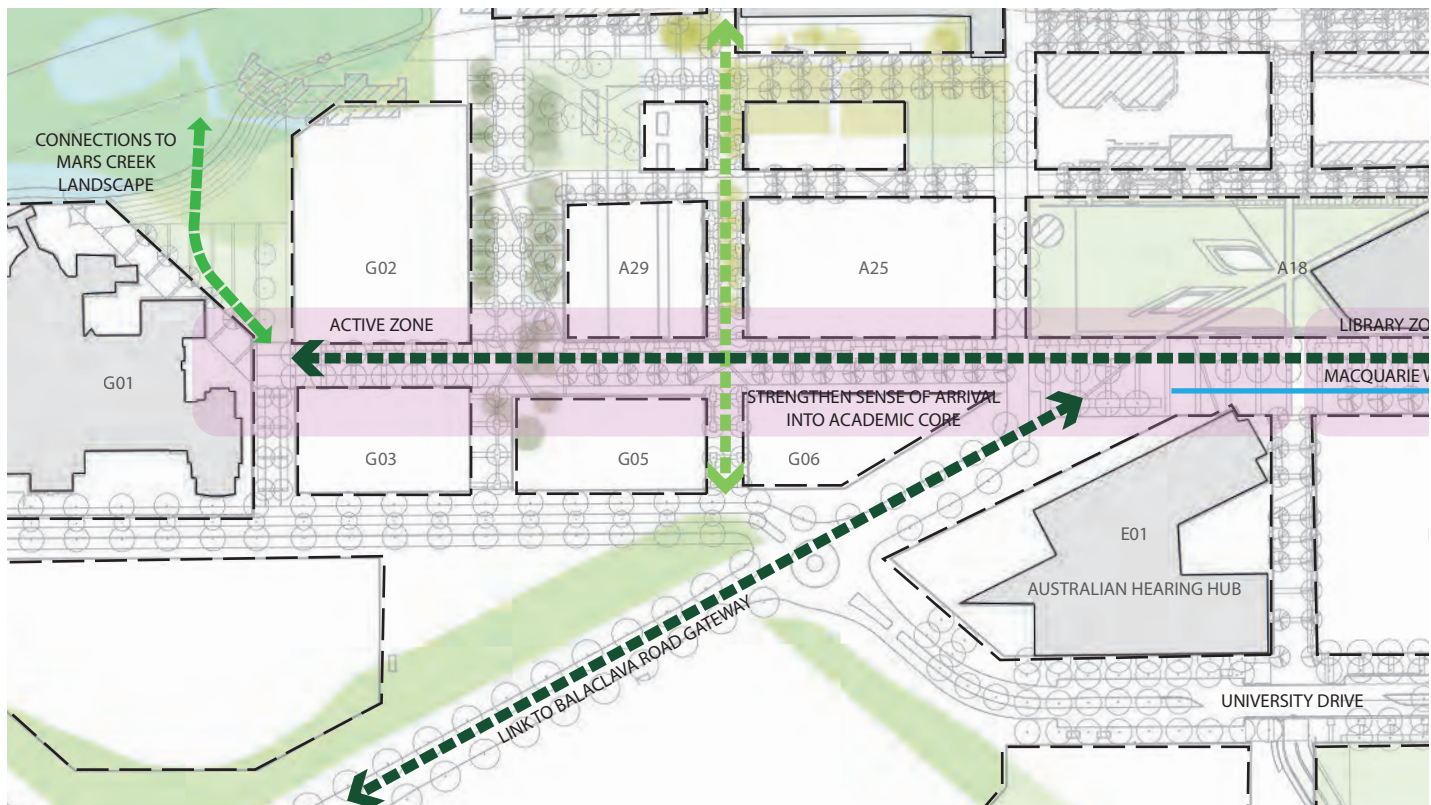
3.2.2 Macquarie Walk

The pedestrianisation of Macquarie Drive and its extension to the west will form the basis of a new high quality public domain space and walkway to compliment Wally's Walk.

Linking the east and west ends of the Academic Core, it will be important as an address for new campus buildings that are to form part of the arts and human sciences faculties.

Principles

- Create a generous central walkway bordered by activated edges, water sensitive urban design (WSUD) rain gardens and canopy landscape.
- Develop a distinctive deciduous tree planting along the Walk, drawing on the character of the creek landscape with predominantly indigenous planting and trees, as well as colour and movement.
- Provide strong connections with Mars Creek and University Creek at each end of the Walk.
- Provide high visibility into each building from the Walk by locating accessible entries and building address points along the Walk with discrete servicing points only on side roads and access ways.
- Develop shelter elements along the Walk or at adjoining buildings.
- The Walk should offer easy and clear connections with all key nodes offering University-wide directional signage including campus maps and general information.

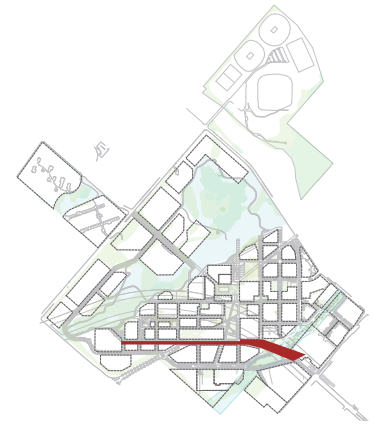


LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3. PUBLIC DOMAIN



- Macquarie Walk, particularly between the Library and the station, should be well lit and monitored for safe movement between destinations.

The Terminus

The visual termination to the axis at the western end of Macquarie Walk will transition into the future Mars Creek Plaza. The landscape response is to feature strong avenue planting, feature paving design and a sophisticated planting palette.

The Active Zone

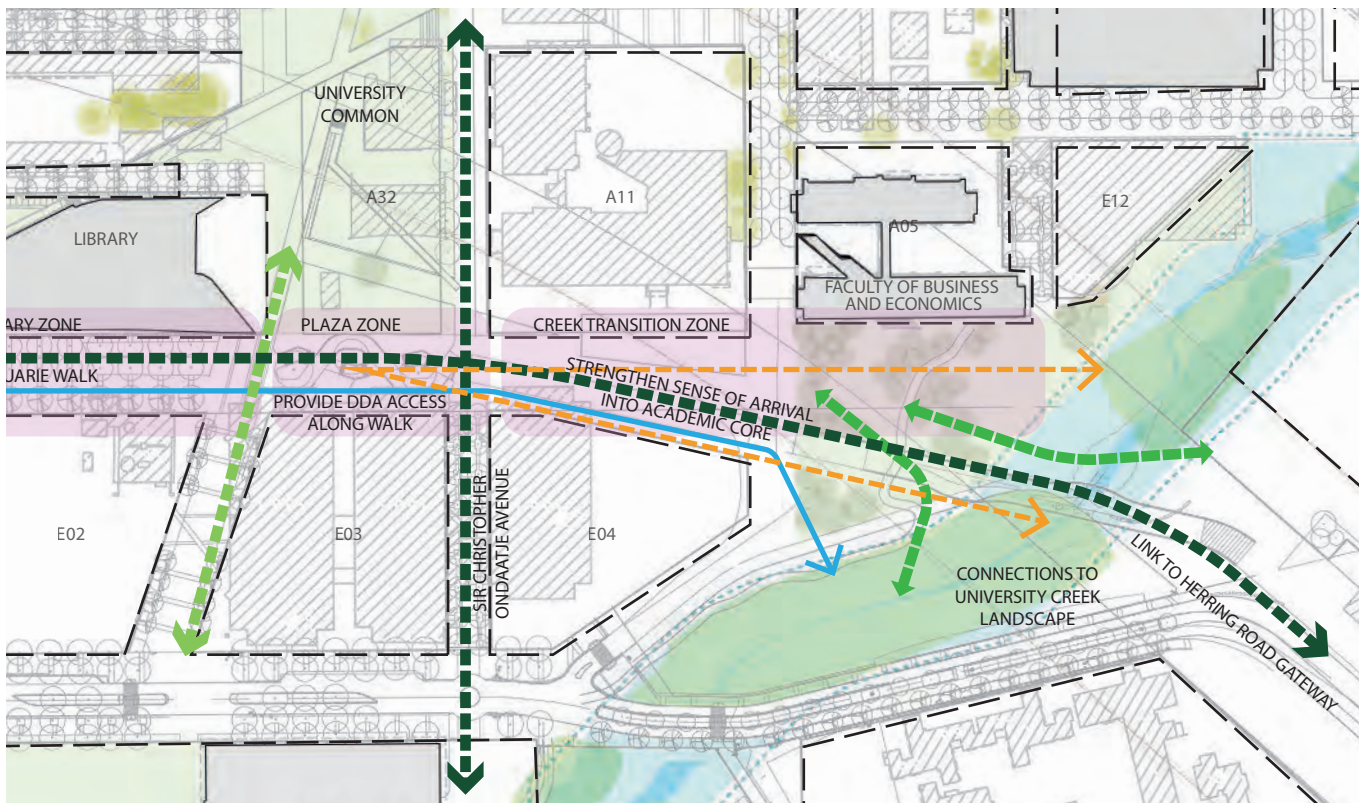
The active zone will stretch through the flat area west of the library towards Mars Creek Plaza with a continuation of strong avenue planting. The ground floor should be activated by building entries and lobbies, cafes and communal spaces.

The northern edge should be characterised by seating nooks, raised turf beds, rain gardens and a contemporary indigenous and non-indigenous colourful planting

palette. The southern edge should be enhanced by deciduous planting to control solar access.

The Library Zone

The library zone marks the point where Macquarie Walk begins to slope down towards University Creek in the east. The space should feature a continuation of strong avenue planting. A series of smaller spaces will mediate the level changes along building frontages and will create informal meeting places.



The landscape treatment should include an activated southern edge enhanced by deciduous planting to control solar access, a northern edge characterised by seating nooks, raised turf beds and rain gardens, and a contemporary planting palette with a large proportion of native species.

The Plaza

The plaza zone is the area adjacent to the new University Common. It should be a transition space between

the east-west flow along Macquarie Walk and the strong north-south movement into the University Common and along Sir Christopher Ondaatje Avenue.

Landscape elements should include a plaza edge to the University Common forming a meeting node with the space to be characterised by complex paving, the creation of informal and formal seating areas and an activated southern edge to be enhanced by deciduous tree planting.

The Creek Transition

The area between University Creek and the new University Common, the Creek Transition zone, will be an active space that mediates between the formality of the Herring Road entry, the riparian zone and the new open spaces at the heart of the campus.

The landscape treatment should include strong avenue planting west of Eastern Road, the creation of seating nooks, raised turf beds



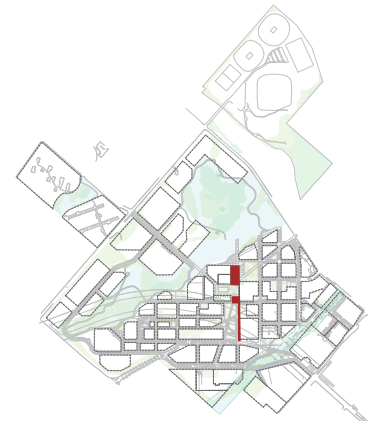
3. PUBLIC DOMAIN

and rain gardens as the spaces step down from the University Common, informal rain garden planting feathered into pedestrian plazas, complex paving design to characterise plaza spaces, a sophisticated riparian planting palette including native grasses at the creek and opportunities to create terraced plaza spaces adjoining the cultural building.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Nyssa sylvatica</i>	Black Gum	11 x 6 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Ulmus parvifolia</i>	Chinese Elm	10 x 11 m





3.2.3 Sir Christopher Ondaatje Avenue

Sir Christopher Ondaatje Avenue forms the primary north-south corridor through the campus core between the Mars Creek and University Creek, connecting the Central Courtyard, the new University Common, Wally's Walk, Macquarie Walk and University Avenue and the parkland corridors associated with both creeks.

It will form a major address point for important campus destinations.

Principles

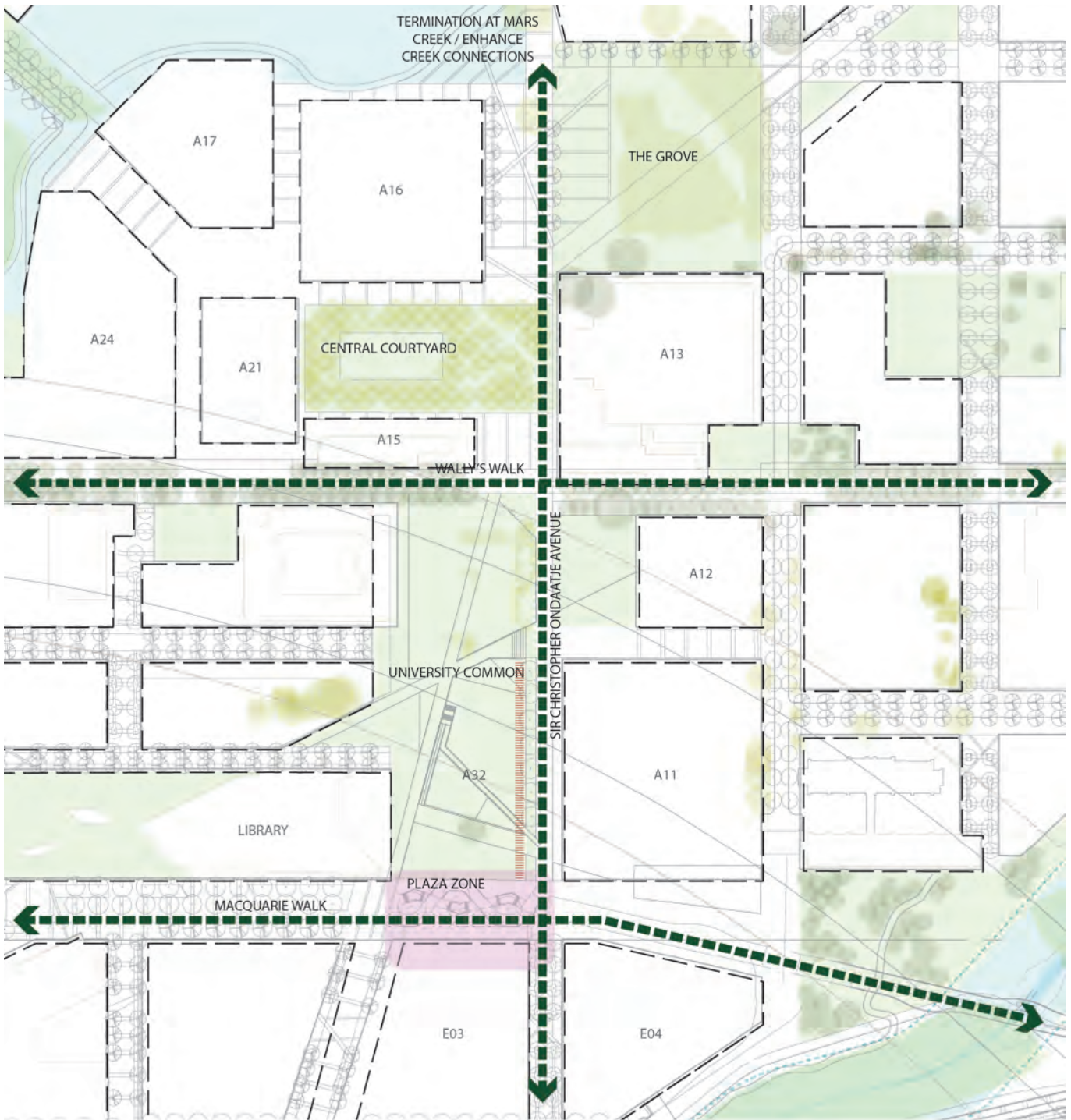
- Provide a variety of landscape experiences that reflect Asian sensibilities regarding edge and centre, introversion and extraversion, enclosure and openness providing a physical representation of the transformative culture of the University.
- The preferred location for history plaques or other memorials or markers, the Avenue is to be a highly managed and manicured space, retaining a certain distinction and respect.
- Provide a strong visual connection to Mars and University Creeks.
- Reinforce the clarity of the spine through a double row of feature trees.

Tree Schedule

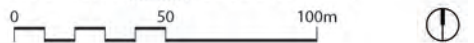
BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Flindersia australis</i>	Crows Ash	10 x 8 m
<i>Syzygium smithii</i>	Narrow-Leaved Lilly Pilly	10 x 6 m
<i>Toona ciliata</i>	Red Cedar	20 x 10 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m

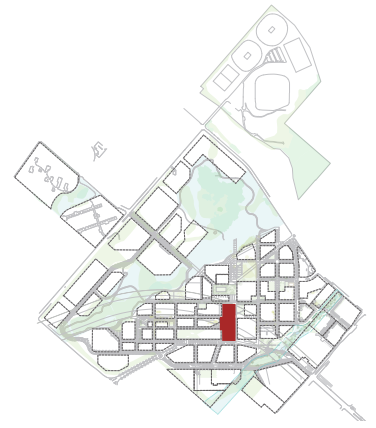


3. PUBLIC DOMAIN



LEGEND





3.3 PRIMARY PARKS AND PLAZAS

3.3.1 University Common

The University Common will be a significant new space that will become a focal point for Macquarie University. It will have few parallels at other university campuses. With generous dimensions and addressed by major buildings such as the Library, it will unite Wally's Walk with Sir Christopher Ondaatje Avenue and create legibility within, and a focal point for the campus. It will receive good solar access throughout the year.

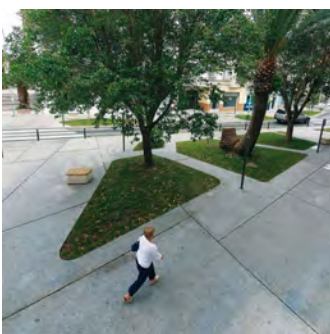
The Library will provide 18-hour a day activity. The Common and the locality of other major campus functions facing the Common will extend activity in this space.

Principles

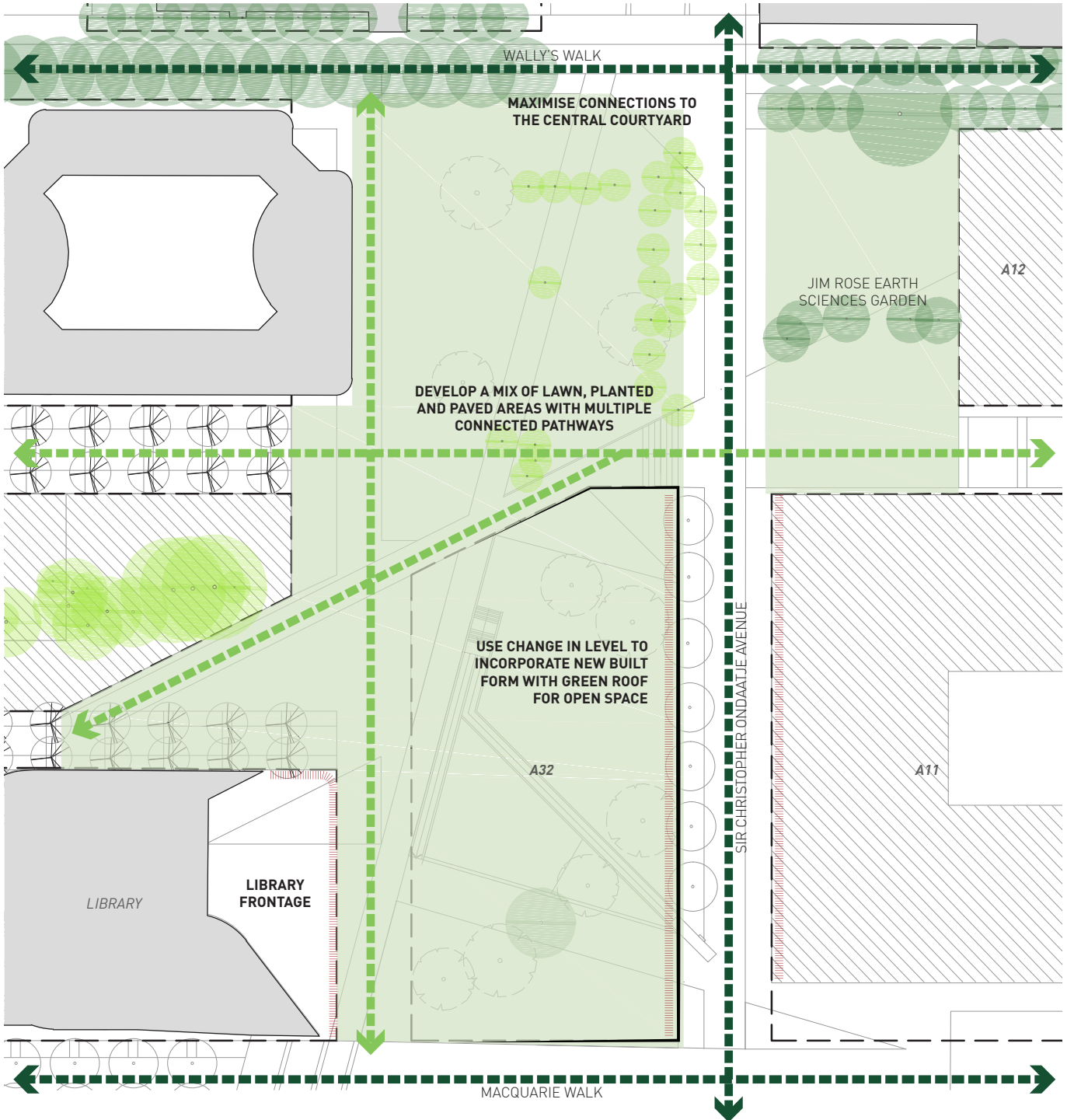
- Create a clear space for the new University Common with the removal of buildings C4A and C4B.
- Develop a mix of lawn, planted and paved areas with multiple connected pathways across the space, demarcating the major pedestrian pathways with new tree planting.
- Accommodate pavilion buildings within the space that can serve as orientation centres or social meeting points.
- Develop the Common as part of a sequence of spaces from Mars Creek to University Creek.
- Create a place of assembly and celebration within the campus.
- Maximise connectivity and accessibility between the new Common and the existing Central Courtyard.
- Significant trees to be retained.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia citriodora</i>	Lemon Scented Gum	20 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Sapium sebiferum</i>	Chinese Tallow	8 x 8 m



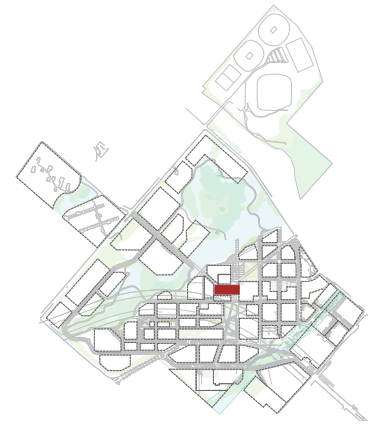
3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		





3.3.2 Central Courtyard

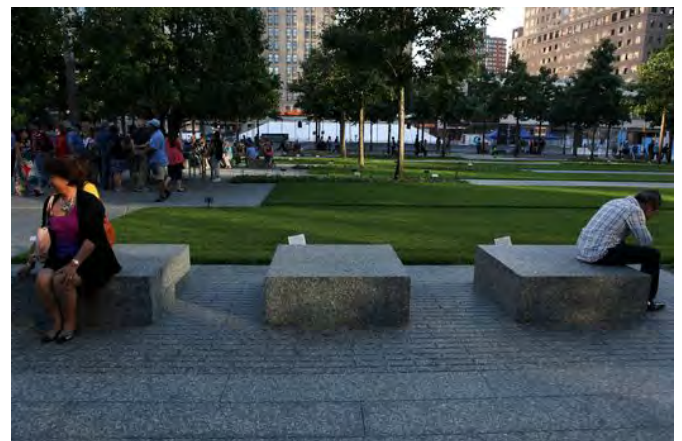
The Central Courtyard will remain an important space within the University. While some central functions of the Courtyard such as the Library have relocated, administrative and civic functions of the University should remain focused in this area. There are plans to activate the edges of the space with additional food and beverage uses.

Renewal of the buildings framing this space will revitalise the Courtyard. Creation of a new direct link to Mars Creek towards Gymnasium Road in the north-west of the space will mean a much more accessible connection to the north and to the student housing areas.

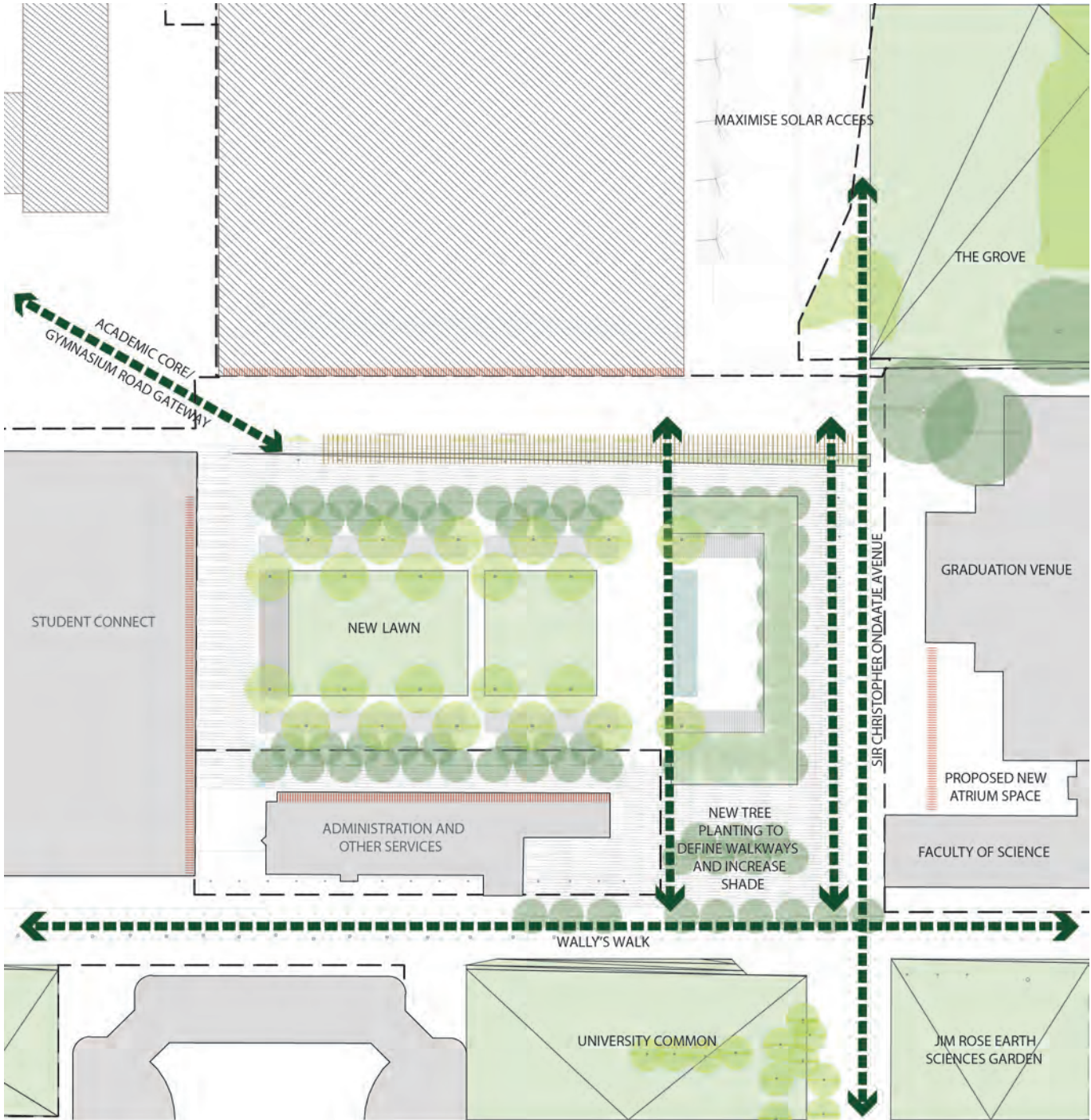
Principles

- Build on the existing informal and unstructured character to create a place that is bold and iconic but also comfortable, relaxed, fun and changeable.
- Co-locate food and services with a high quality experience of the public realm: north facing, sheltered, people watching, vista framing for indoor/outdoor dining, ensuring that the best outdoor playing/eating/relaxing spaces are free, i.e. not commercial.
- Support and encourage student activation of the place with appropriate services such as power, water, seating and shelter that can be used for a variety of event scales and types.
- Celebrate the original 1960s and 1970s architecture as appropriate.
- Improve access to and

- functionality of the Lincoln Building and the former Library.
- Develop links to adjacent spaces and the northern campus entry points.
- Maximise visual and spatial links between the Central Courtyard and the four key campus entry points.
- Incorporate trees and landscaping into the public domain to provide green relief and shading.

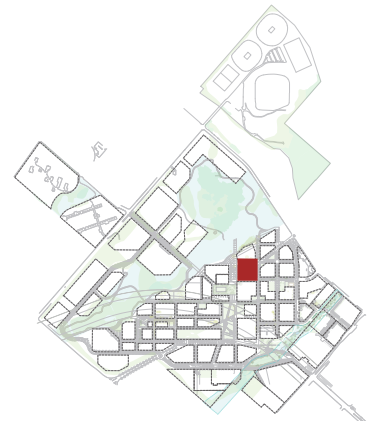


3. PUBLIC DOMAIN



LEGEND





3.3.3 The Grove (East Common)

As the activity in the University increases around the Hospital and new science programs, there will be a need for a new open space in the north-east of the Academic Core. This large space has a framework of existing trees and forms an extension of the Mars Creek landscape. The space is located on generally level ground and will have good solar access.

The grove of mature trees creates a forest like atmosphere and a sense of mystery and discovery. It is a place of contemplation and enjoyment of the arts, through the careful placement of appropriate sculpture and nature through the arboretum planting.

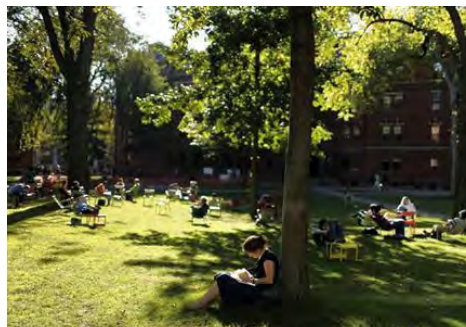
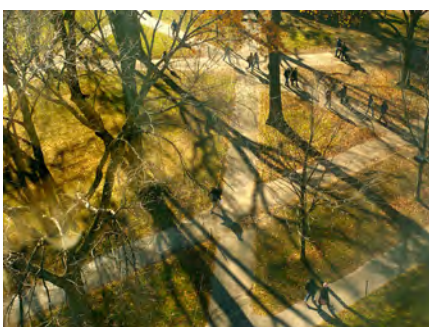
Principles

- Develop the Grove as an extension of the Mars Creek open space, retaining and enhancing the existing vegetation and providing interesting areas of open space for passive recreation and cultural campus events.

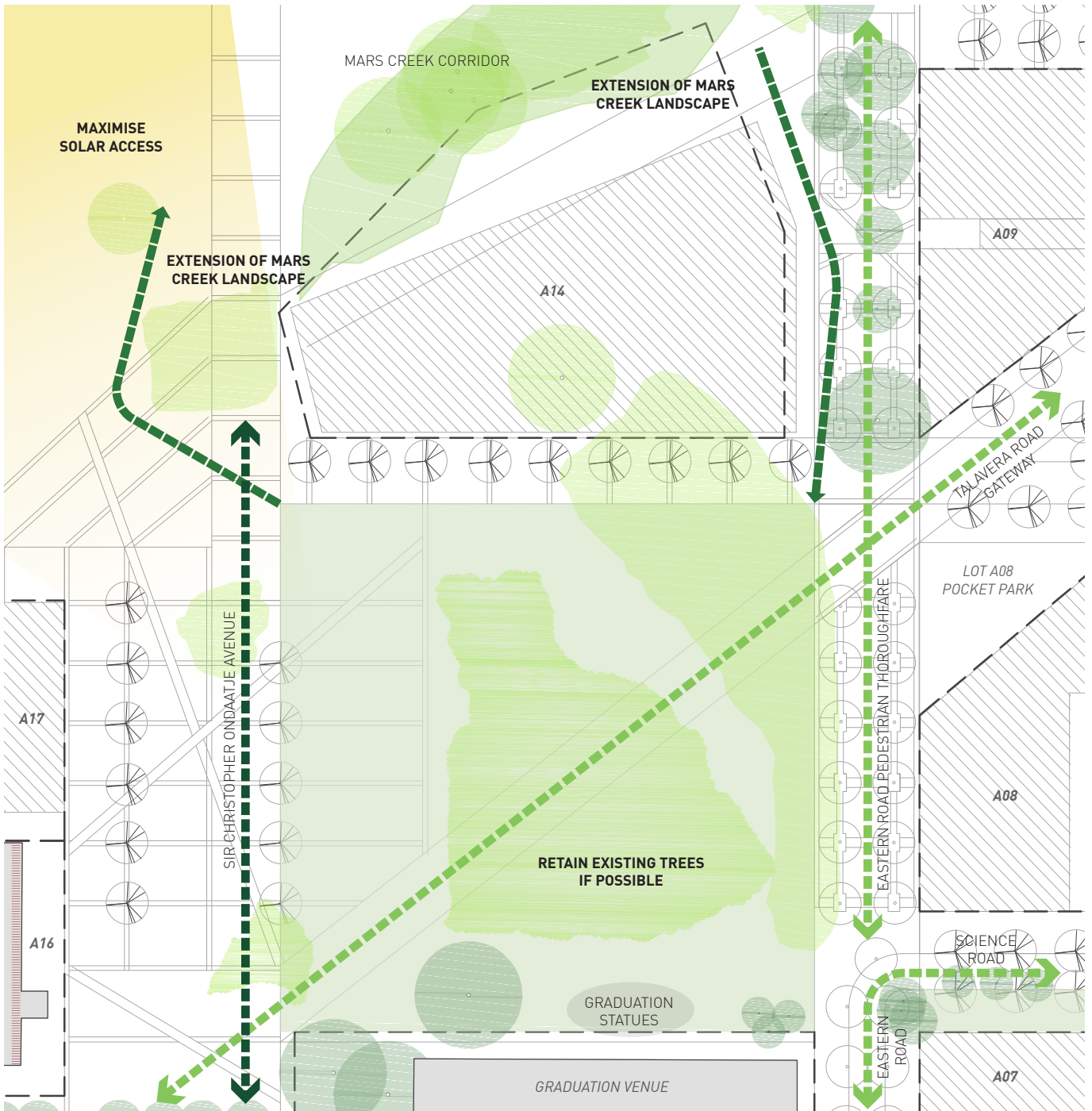
- Provide an informal open space focus in the north of the Academic Core, enhancing the existing forest experience with soft and unstructured paths leading through and down to the creek, and more local species of vegetation.
- Key artworks from the University collection should be integrated into the detailed design of both the path ways and the tree plantings.
- Provide a walking track that connects to the creek and lake, vegetation pockets and cultural spaces.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus notabilis</i>	Mountain Mahogany	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.3.4 Arts Lawn (West Common)

The Arts Lawn lies in the Arts Precinct and is linked to the University Common along an east-west path past the new Library. Located largely on land currently used for parking, the Arts Lawn will form a link between Wally’s Walk and the new Macquarie Walk. This more intimate space is close to the Mars Creek corridor and should form an extension of the Mars Creek landscape.

The Arts Lawn should provide both soft and hard areas suitable for flexible uses including outdoor art installations and other creative performances or endeavours. The base design should be quirky and flexible enough to be transformed with low cost and resources.

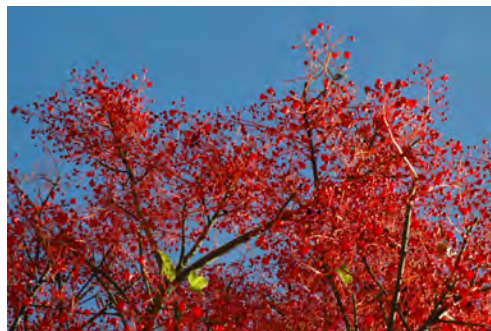
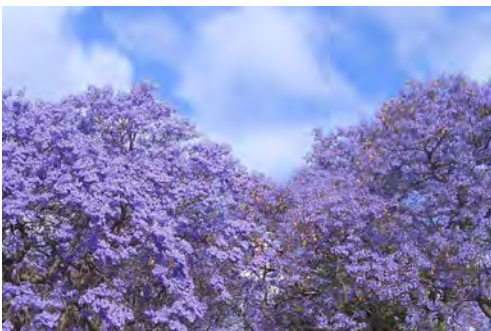
Principles

- Provide a defined open space focus in the west of the Academic Core, building on the close access to the informal landscape of Mars Creek.

- Link to the University Core along the new Macquarie Walk that also links to the train station.
- Deliver a place that can function on a day to day level as a local social activity hub but also has the built in infrastructure to allow for multiple flexible uses e.g. power, lighting, catenary structure etc.
- Focus amenities such as cafes, student or staff services etc. around the edge of the space, even mural walls.

Tree Schedule

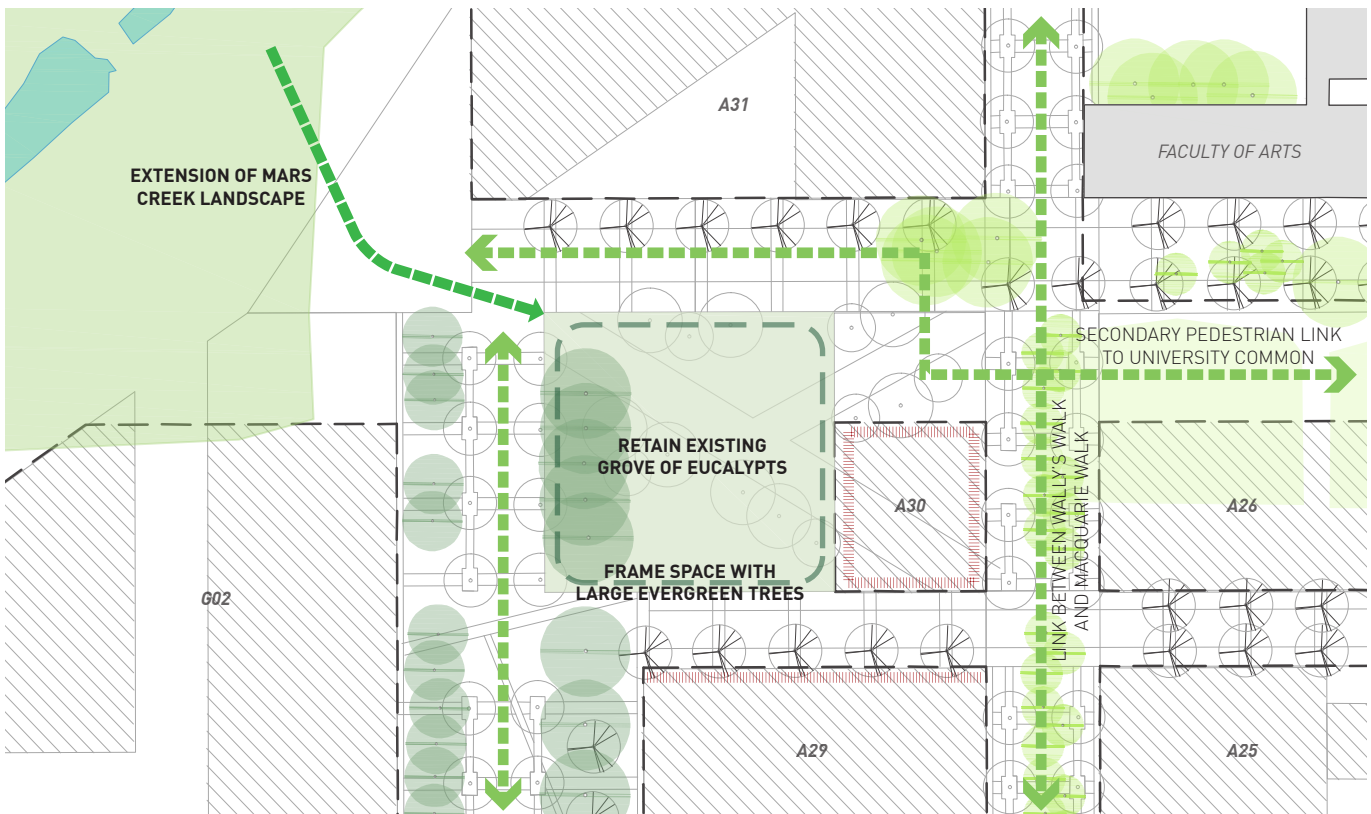
BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m



3. PUBLIC DOMAIN



- Loosen management structures over the space and invite student ownership of the creative programming of the area.
- Mediate the landform through a series of stepped levels to the north.
- Create an important termination in the west of the Academic Core and Macquarie Walk.
- Provide large evergreen trees to frame the spaces while deciduous trees delineate plaza areas.



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.4 SECONDARY PARKS AND PLAZAS

3.4.1 Frank Mercer Biological Sciences Garden

The Biological Science Garden was developed by Professor Frank Mercer in collaboration with the Architect's Planner Office. Garden beds were designed to showcase particular plant biological characteristics; a fern bed, a pond for algae and mosses, a bed displaying monocotyledons, another for dicotyledons, a dry land bed with cacti and succulents, and yet another with plants from two closely related

families, the Epacridaceae and the Ericaceae.

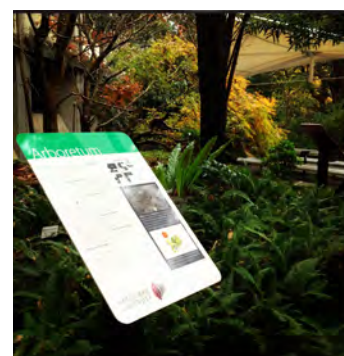
Many of the species planted are either uncommon or sourced from unique locations and there is an opportunity to revive the scientific, educational and thematic display enriching the landscape experience of the University. The proximity to the Hospital means that the space has potential as an open space accessible by patients and staff.

Landscape Principles

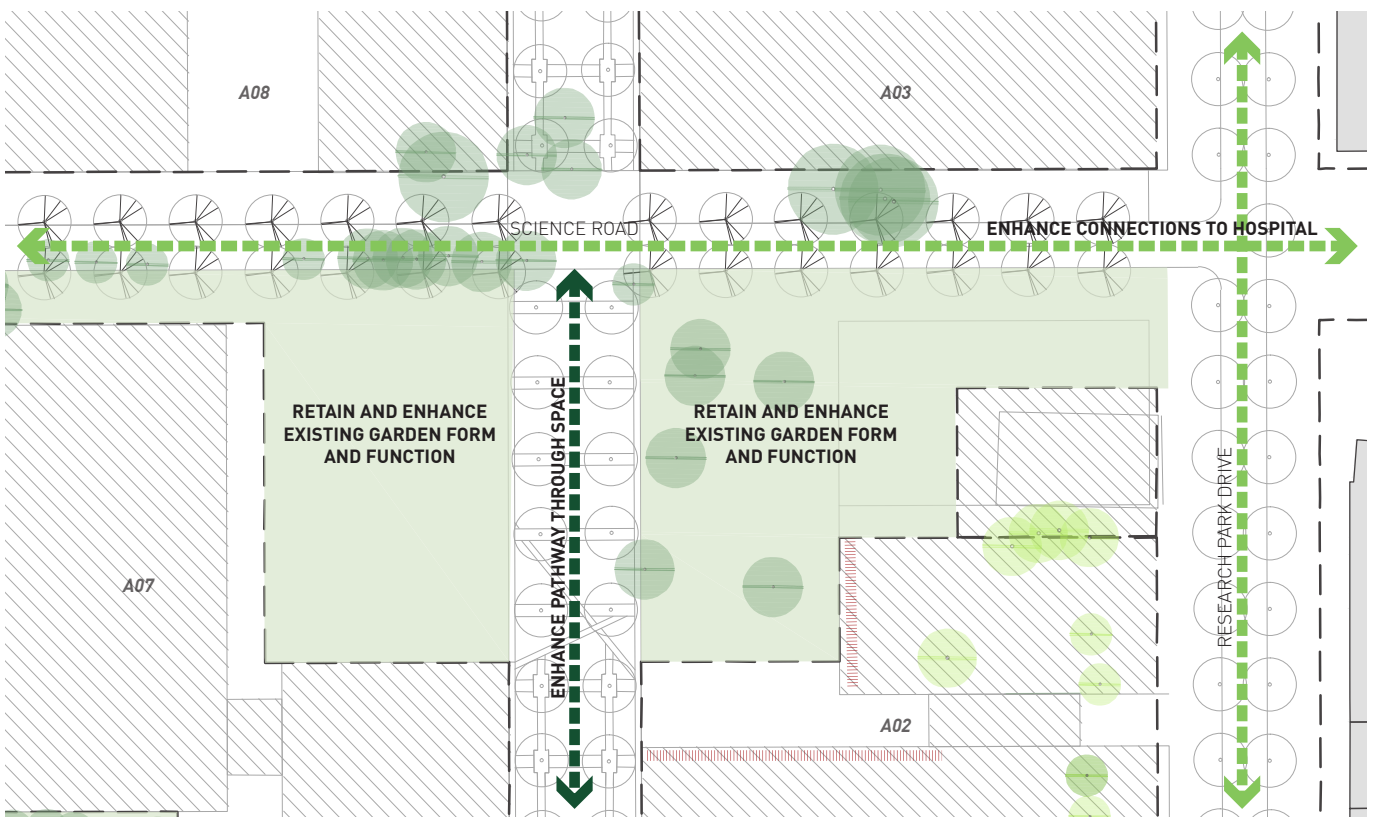
- Retain and enhance existing garden form and function including arboretum signage.
- Provide additional paths through space taking into account new desire lines.
- Explore opportunities for the garden to contribute to the biodiversity corridor between University Creek and Mars Creek along Science Road.
- Retain existing trees.
- Provide informal seating.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus notabilis</i>	Mountain Mahogany	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m



3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | 0 25 50m | |

3.4.2 Jim Rose Earth Sciences Garden

The Jim Rose Earth Sciences Garden is an existing open space with an important role both as educational plantings and as a memorial to Jim Rose. The courtyard is divided into two sections, with the gardens on the north and west planted with Laurasian (predominantly) northern hemisphere species while the gardens on the eastern and southern sides are planted with Gondwanan (predominantly) southern hemisphere species.

The space lies at the junction of Wally's Walk and the upgraded Sir Christopher Ondaatje Avenue – one of the highest trafficked spaces in the campus' pedestrian network. Planned as a retreat, the landscape treatment is to upgrade the space while preserving the sense of relief from the main pedestrian network.

Landscape Principles

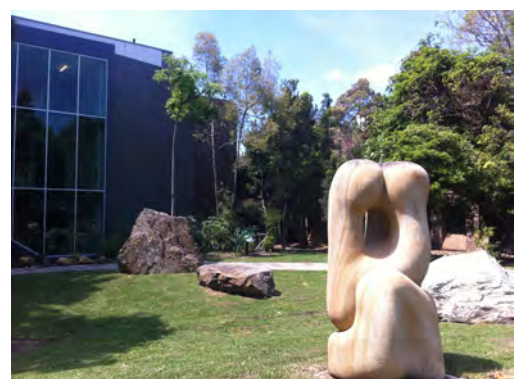
- Retain and enhance existing courtyard planting concept, form and function.
- Ensure expansion of the space to the south builds upon the

existing Gondwanan planting already in the southern area of the courtyard.

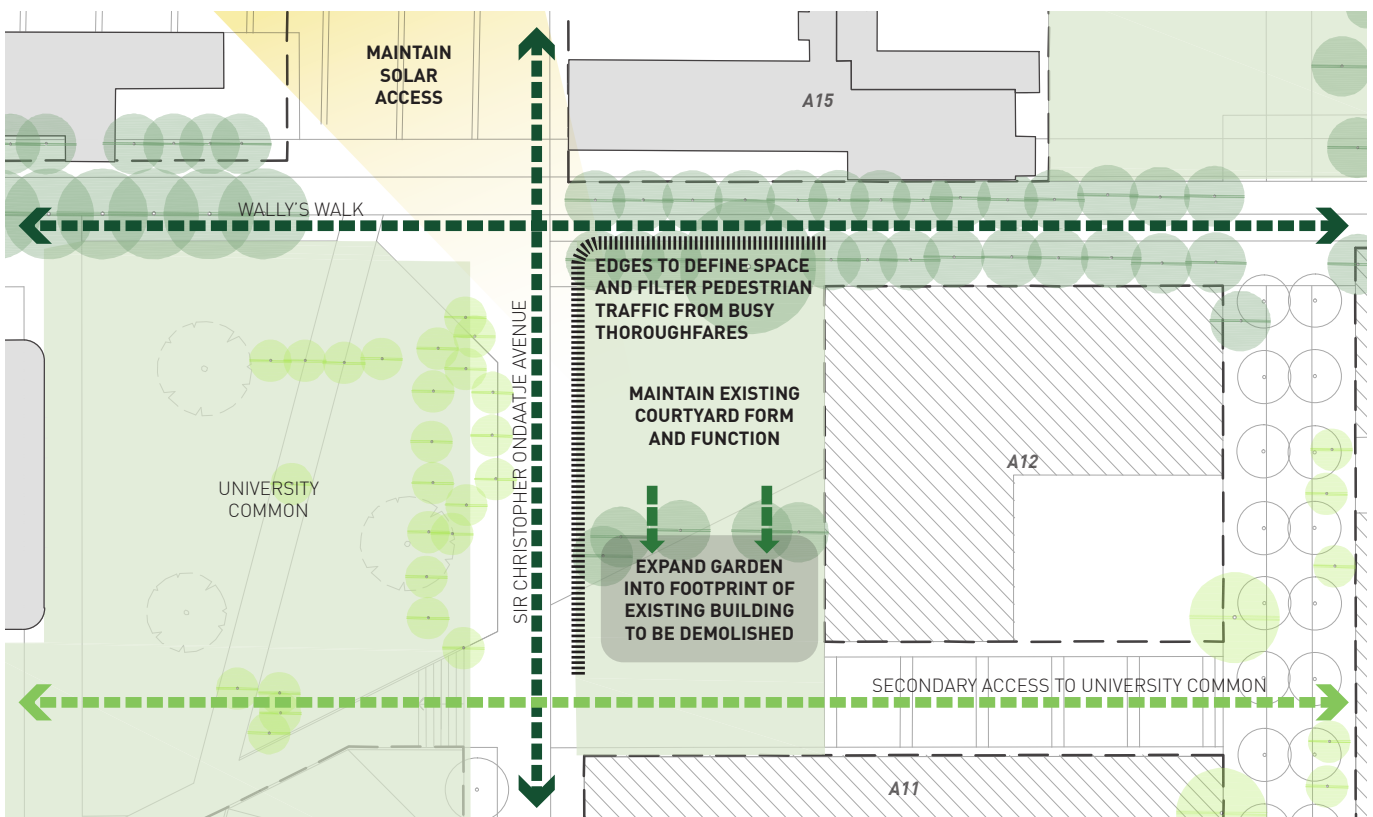
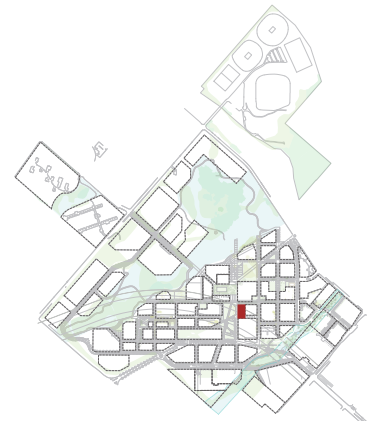
- Maintain and enhance the connection to Wally's Walk.
- Provide additional paths through space taking into account new desire lines.
- Retain existing trees where possible and if trees are required to be removed, the same species should be replanted elsewhere in the courtyard to ensure the original design intent and integrity of the space is maintained.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Araucaria cunninghamii</i>	Hoop Pine	25 x 10 m
<i>Araucaria heterophylla</i>	Norfolk Island Pine	25 x 10 m
<i>Buckinghamia celsissima</i>	Ivory Curl Tree	8 x 6 m
<i>Protea caffra</i>	Common Sugar Bush	5 x 5 m



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.4.3 Mars Creek Plaza

Mars Creek Plaza is located at the western termination of Macquarie Walk, providing a transitional space from the urban aesthetic of the Walk to the parkland character of the Mars Creek corridor.

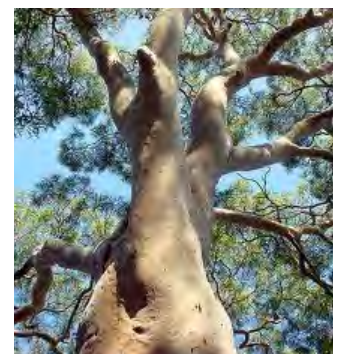
The space is to be integrated with the Mars Creek landscape while the orientation will provide opportunities for access to the winter afternoon sun.

Landscape Principles

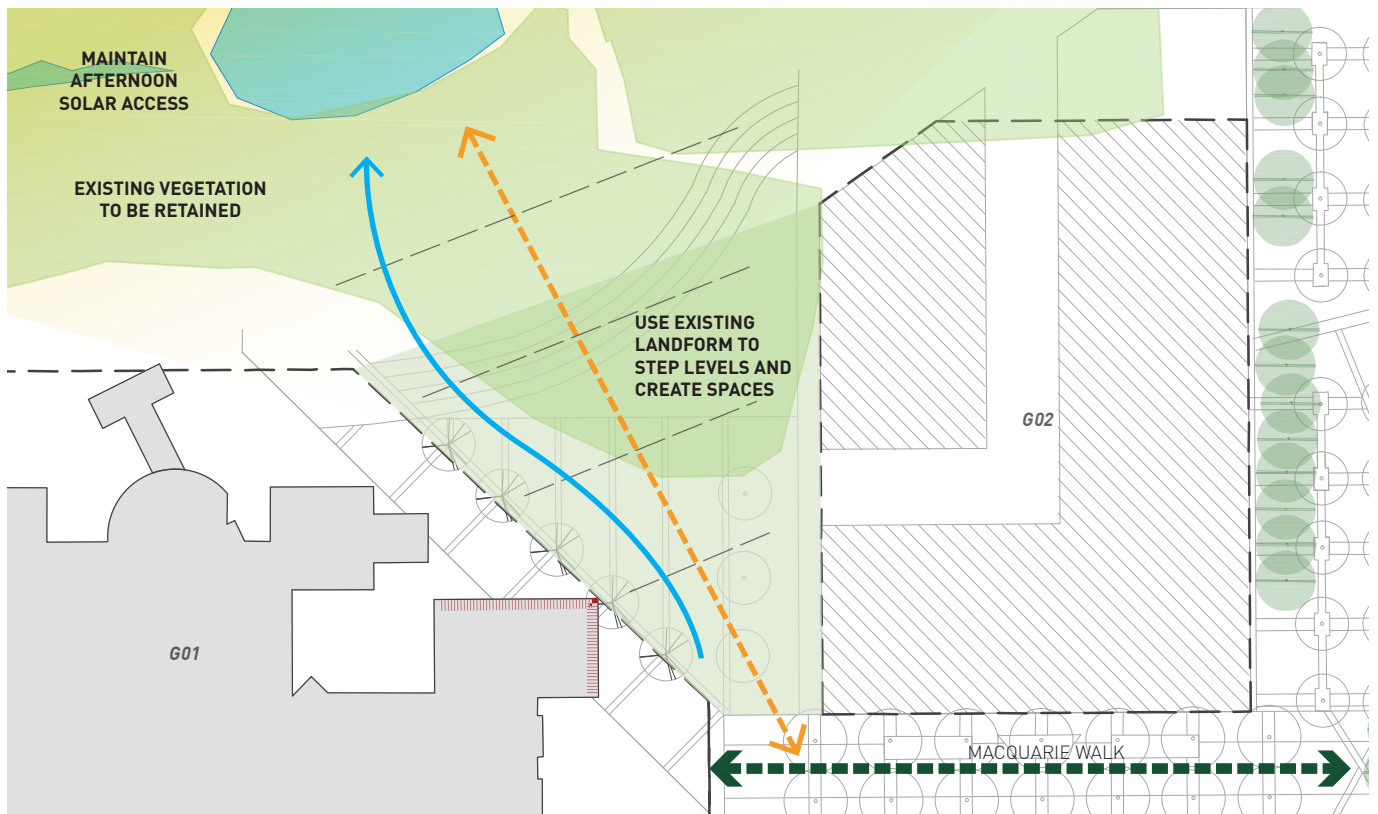
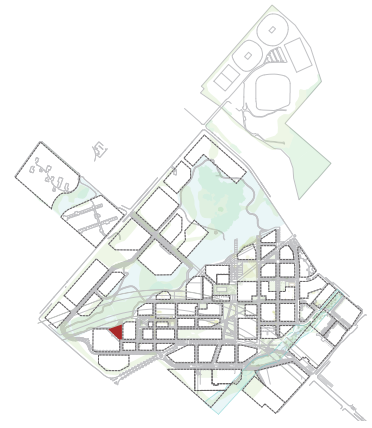
- Enhance the relationship between Macquarie Walk and Mars Creek by providing an urban edge to the Academic Core that incorporates the landscape character of the creek riparian corridor.
- Develop a mix of lawn, planted and paved areas with multiple connected pathways across the space, allowing for the natural grade of the landform towards the creek by stepping the landscape to create a range of dwelling spaces and opportunities.
- Retain and enhance views through the plaza between Macquarie Walk and Mars Creek.
- Characterise space with accent paving forming engaging patterns, retaining existing trees where possible.
- Explore opportunities for public art and Water Sensitive Urban Design (WSUD) integrated within the space.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Ulmus parvifolia</i>	Chinese Elm	10 x 11 m



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.4.4 Wally's Walk Park

This existing north-facing open space provides excellent views into the parkland corridor of Mars Creek, while the existing lawns are popular with students and staff.

New development to the east and west of the park will frame the space and provide an opportunity to extend the space towards the creek with new seating and landscaped elements.

Landscape Principles

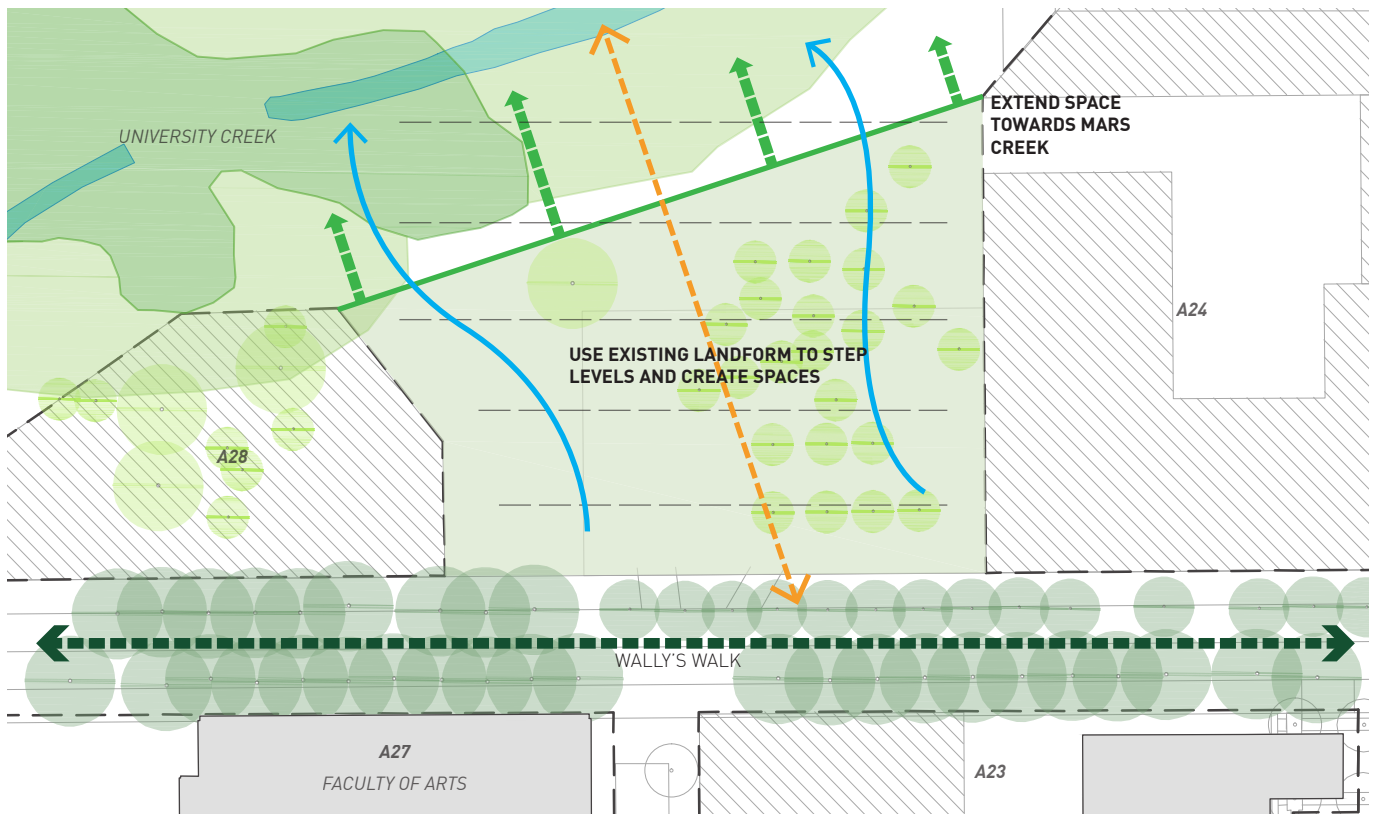
- Provide new paths that address existing and future pedestrian desire lines while providing opportunities for formal and informal seating.
 - Retain and enhance views through the park between Wally's Walk and Mars Creek.
 - Allow for any change in level toward the creek by stepping creating informal seating and gathering nooks.
- Explore opportunities for public art and Water Sensitive Urban Design (WSUD) integrated within the space.
 - Retain existing trees where possible.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Ulmus parvifolia</i>	Chinese Elm	10 x 11 m



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.4.5 Western Road Park

Western Road Park will be a new public space along Western Road adjoining Lot A26 to the west. The park will need to allow for potential secondary pedestrian access to the Lot A26 building.

Landscape Principles

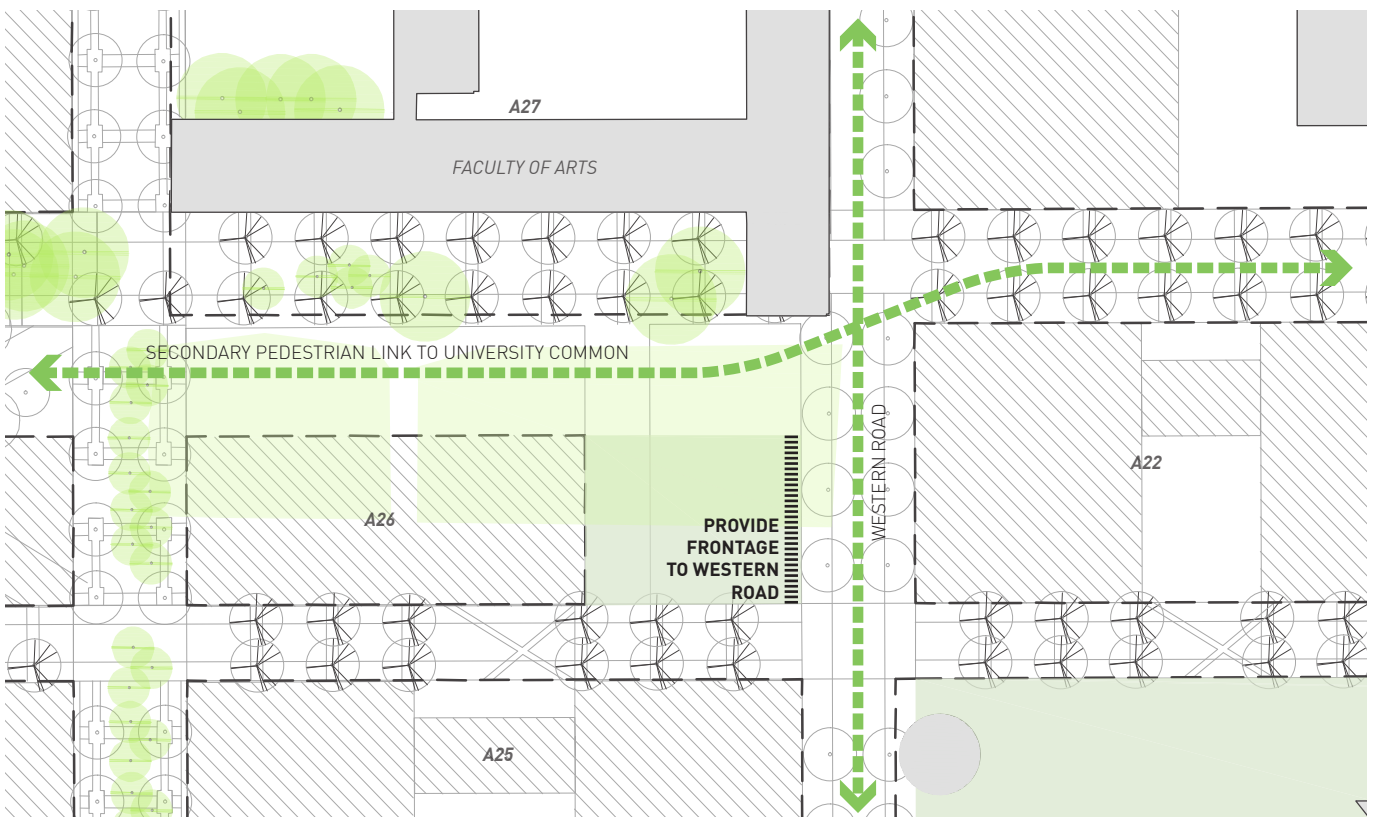
- Address potential secondary pedestrian access requirements to adjoining building.
- Explore opportunities for the Park to contribute to the biodiversity corridor between University Creek and Mars Creek along Western Road.
- Provide deciduous tree planting for summer shade and winter sun.
- Provide an appropriate frontage to Western Road.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.4.6 Macquarie Theatre Courtyard

The recent upgrade of the Macquarie Theatre has seen upgrade work undertaken on the spaces around this focal point on the campus. The existing courtyard is used extensively through the day both as a leisure space and informal teaching. The plaza provides break out spaces from the theatre before and after performances and lectures.

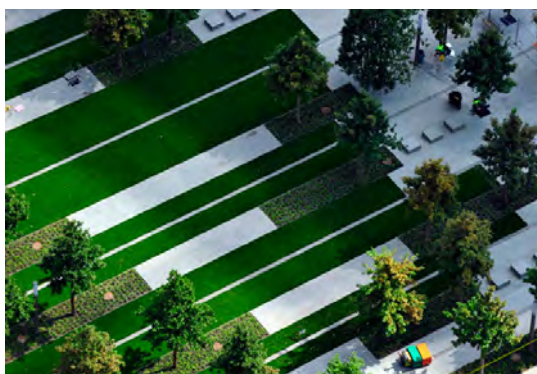
Future development of the Theatre site and surrounding parcels may see new paths introduced and some reworking of the spaces.

Landscape Principles

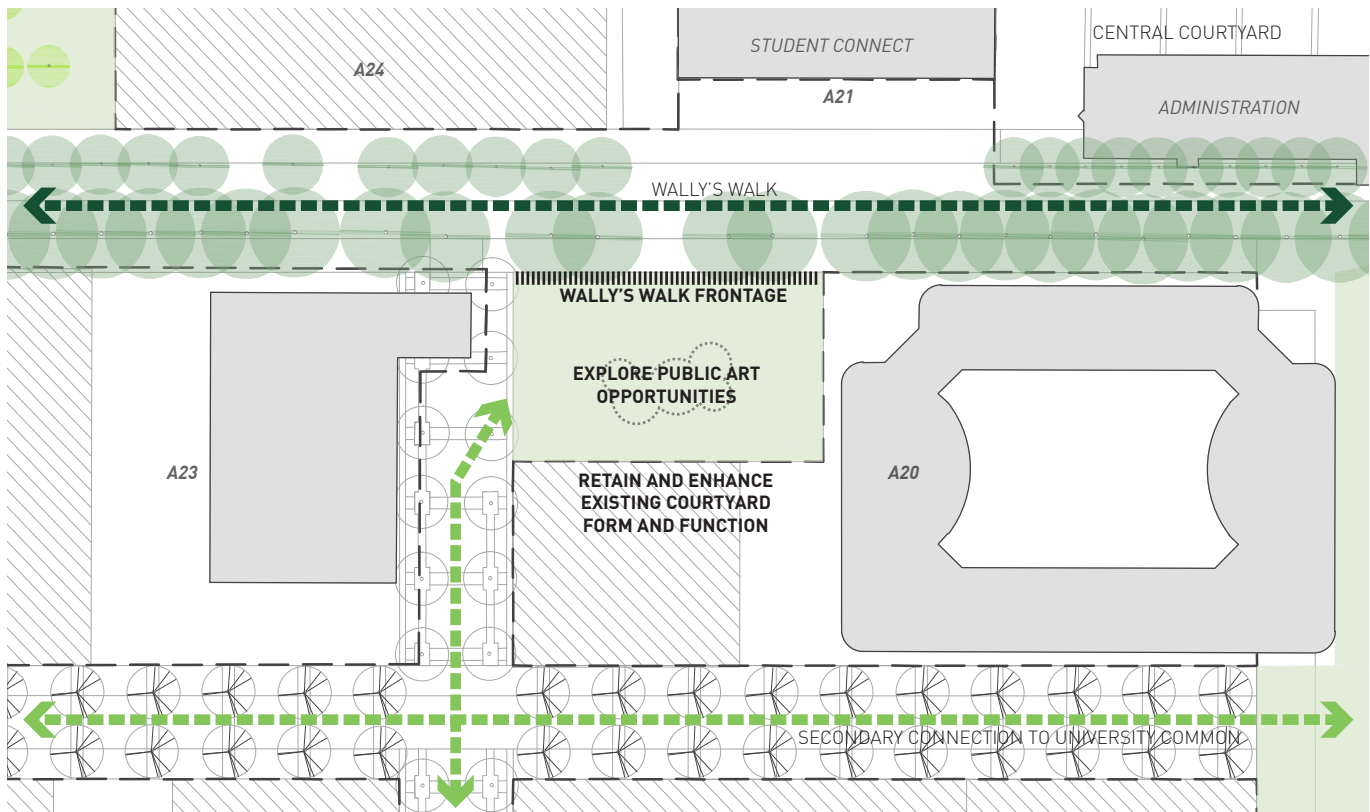
- Retain and enhance existing courtyard form and function.
- Address popular/informal walking routes.
- Maintain and enhance the connection to Wally's Walk.
- Provide additional paths through space.
- Provide opportunities for public art to enhance space.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		





3.4.7 Faculty of Science Garden

A new garden along Wally's Walk at the Faculty of Science will provide a new breakout space for both the Faculty building and a staying place along the edge of Wally's Walk.

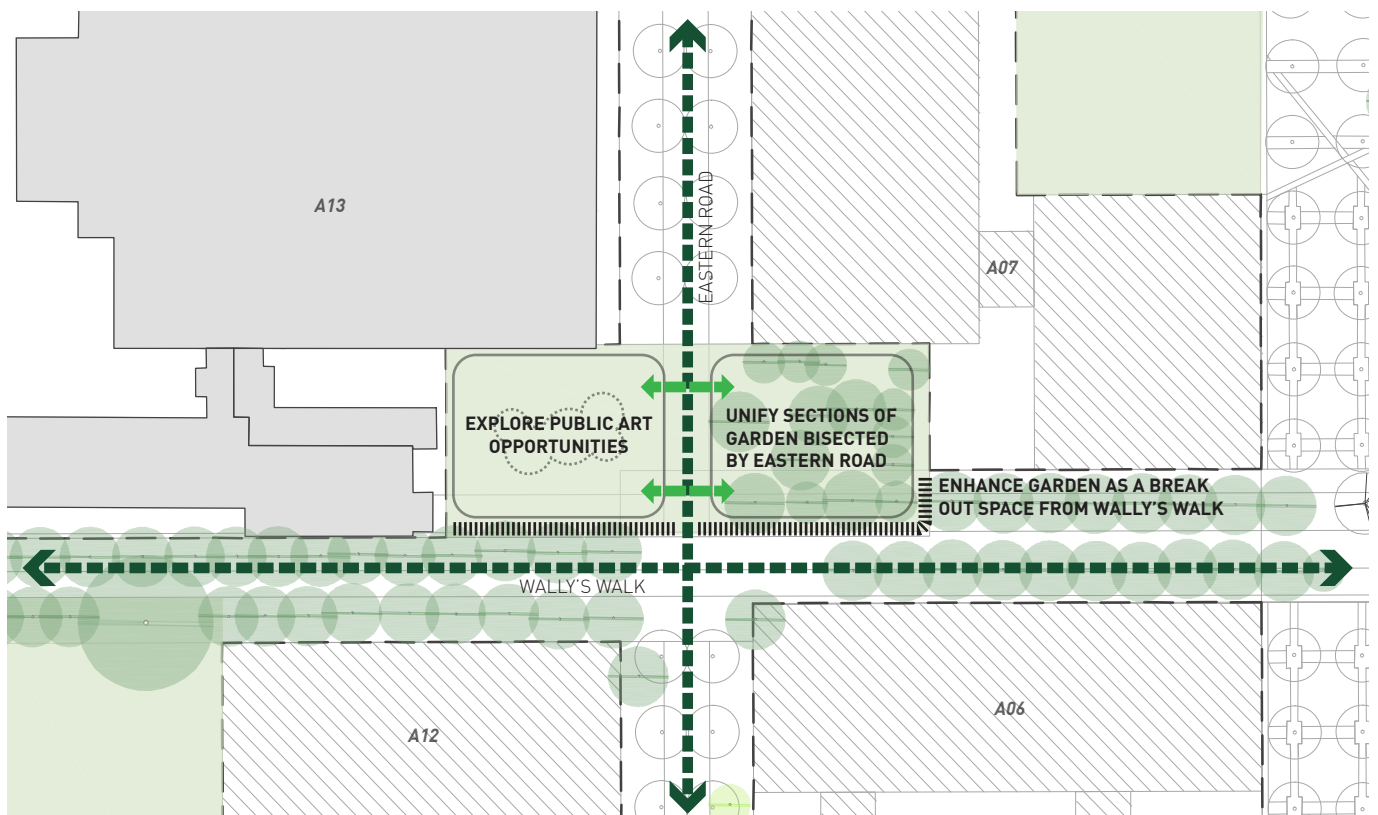
- Provide opportunities for public art to enhance space.
- Provide deciduous tree planting for summer shade and winter sun.

Landscape Principles

- Use ground plane treatments and planting to unify sections of the garden that will be bisected by Eastern Road.
- Maintain and enhance the connection to Wally's Walk.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m

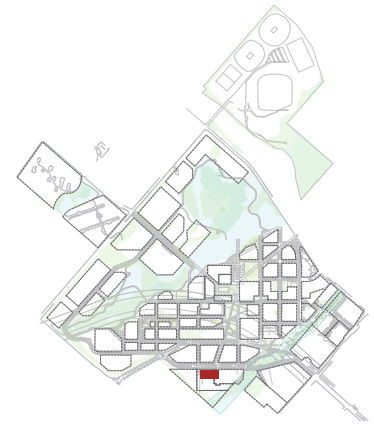


LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3. PUBLIC DOMAIN



3.4.8 Cochlear Forecourt

The Cochlear Forecourt will be a new major public open space adjoining the Cochlear Building at the end of the pedestrian link from the University Common.

- deep soil planting.
- Recognise the termination of the north south diagonal link.
- Allow for suitable pedestrian movement in and around the plaza.

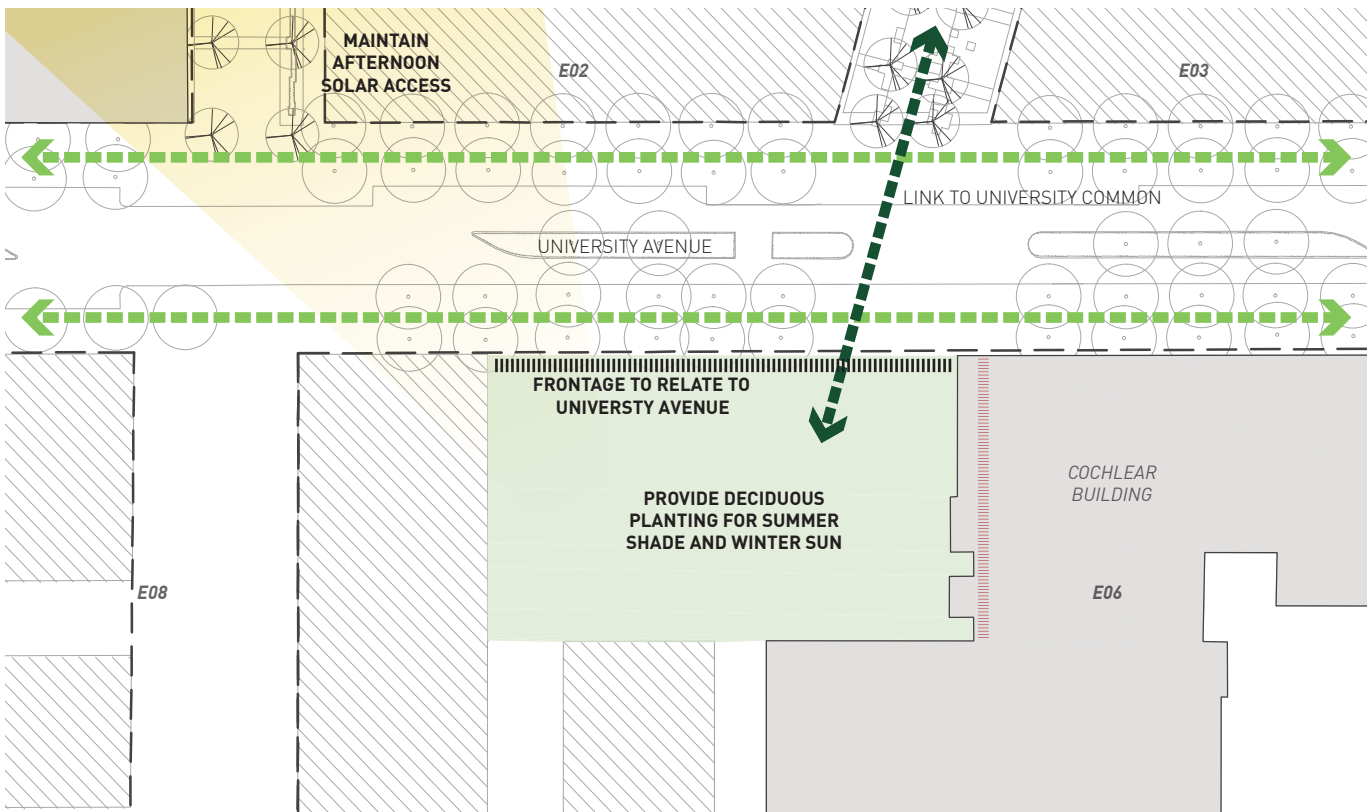
- Relate plaza design to both University Avenue and the adjoining development.
- Ensure a comfortable space by providing shade from the afternoon sun.

Principles

- Provide a suitable break out space for the Cochlear Building and any adjoining future development.
- Provide a mix of both hard and soft landscape to allow for versatility.
- Raise areas to accommodate

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m



LEGEND

- OPEN SPACE / PUBLIC DOMAIN
- EXISTING BUILDING TO BE RETAINED
- NEW BUILDING PROPOSED WITHIN MASTERPLAN
- LOT BOUNDARIES
- PRIMARY PEDESTRIAN LINK
- SECONDARY PEDESTRIAN LINK
- GREEN LINKS
- GROUND FLOOR ACTIVATION
- WATER SENSITIVE URBAN DESIGN (WSUD)
- SOLAR ACCESS TO OPEN SPACE
- IMPORTANT VIEW CORRIDORS
- SIGNIFICANT TREES TO BE RETAINED
- SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
- EDGE TREATMENT



3.4.9 Library Lawn

The new Macquarie University Library, opened in 2011, incorporates two floors below ground covered by a ground-level green roof. This area provides a substantial open space within the Academic Core of the campus.

The Lawn is predominantly open turf areas affording long distance views to the new library building, with areas of planting beds including Kangaroo Paw, Sawsedge, Blue Flax-Lily and Spiny-Headed Mat-Rush.

Principles

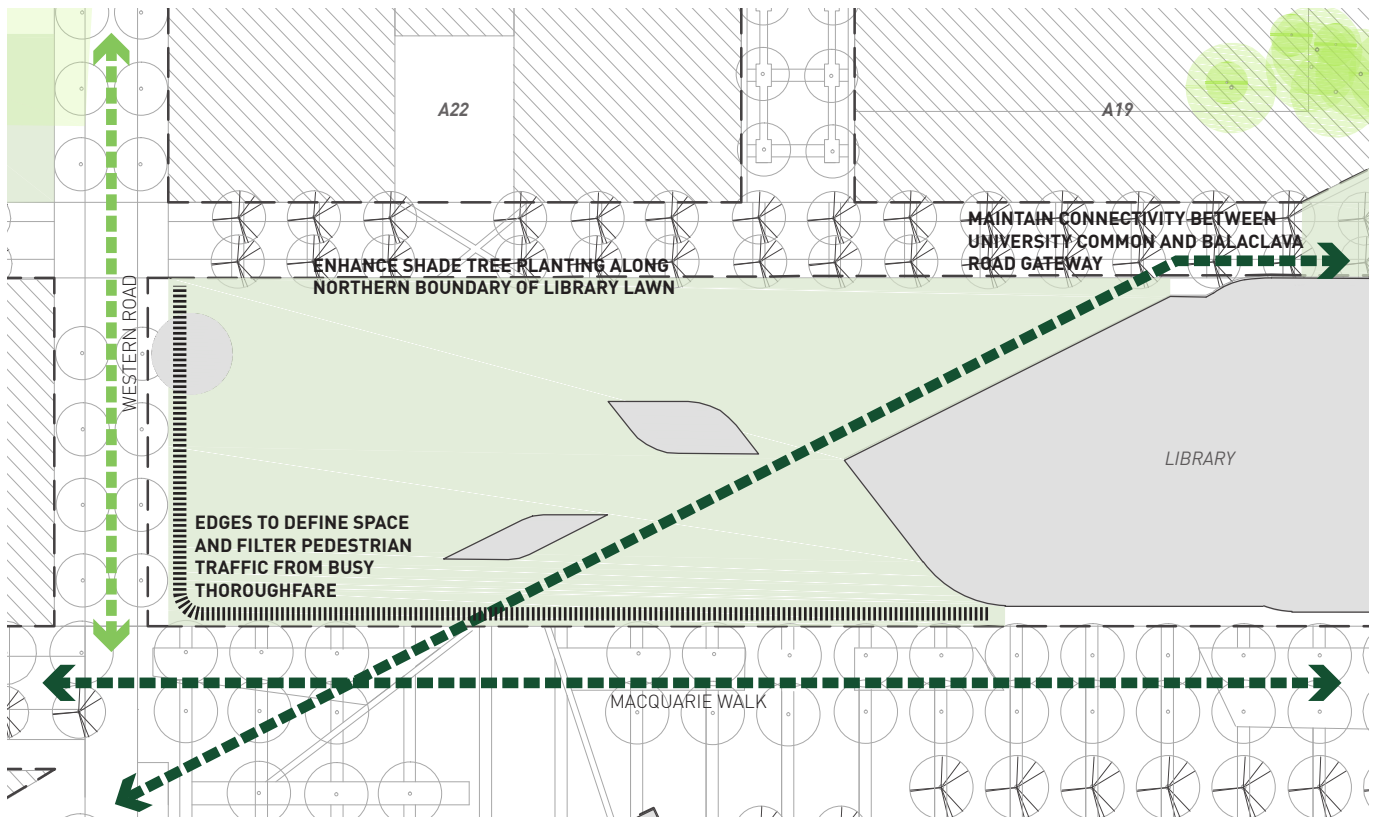
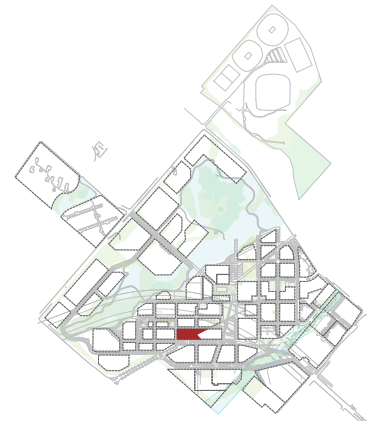
- Retain existing open character of the lawn.
- Explore opportunities for the western end of the Library Lawn to contribute to the biodiversity corridor between University Creek and Mars Creek along Western Road.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Eucalyptus haemastoma</i>	Scribbly Gum	15 x 10 m
<i>Eucalyptus microcorys</i>	Tallowwood	20 x 10 m
<i>Eucalyptus saligna</i>	Sydney Blue Gum	20 x 10 m



3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |



3.5 CREEK CORRIDORS AND PARKLANDS

3.5.1 University Creek

University Creek is to be improved under existing plans to mitigate flood risk, ensure conservation and enhancement of the habitat in the creek corridor and contribute as an important element of the principal entry into the University. The creek landscape is seen as a defining edge of the Academic Core and as a landscape frame for the campus.

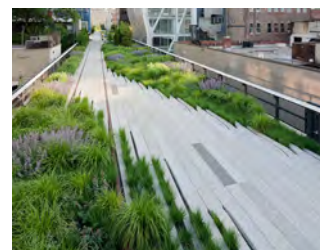
The redesigned University Avenue entry will improve gradients and ease of movement from the train station to the campus heart. The arrival walk along an elevated pathway through the creek habitat, within the shade of its tall tree canopy, will be a unique and memorable experience in a major university campus.

Landscape Principles

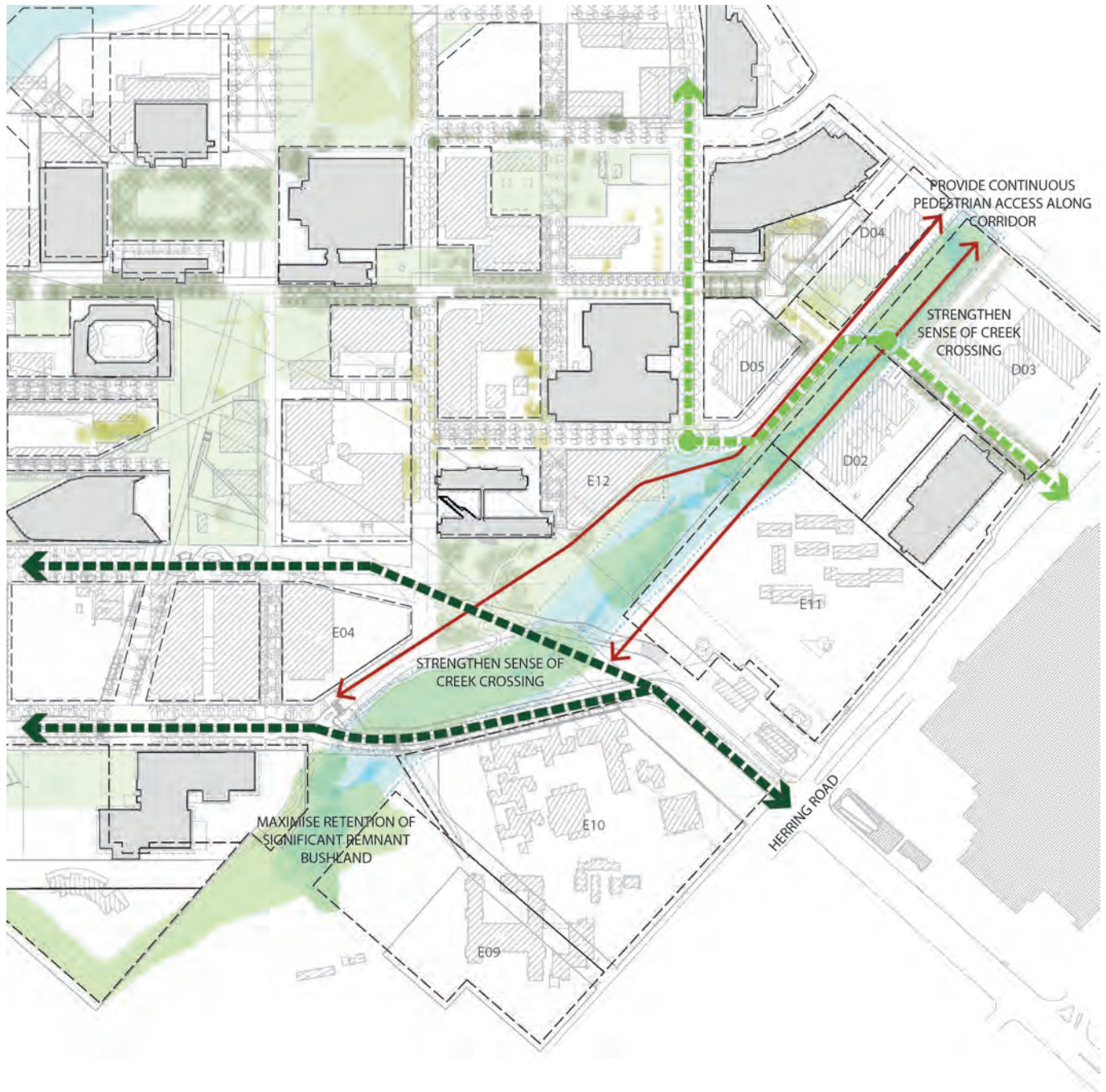
- Implement the landscape rehabilitation plan for University Creek.
- Adopt the full 20 metre riparian zone, with wider setbacks to buildings, throughout the creek corridor.
- Provide an urban plaza that emphasises the termination of Wally’s Walk at the creek zone.
- Extend the Sir Christopher Ondaatje Avenue axis south from Macquarie Walk to engage the creek zone.
- Take advantage of progressive phases of the Master Plan to remove buildings such as car park F3A from the creek zone.
- Provide continuous accessible pedestrian paths along the edges of the creek zone.
- Review the 200ARI flood risk to existing buildings in the Research Park and plan for long-term improvements.
- Redesign storm water catchment and outflows to minimise catchment run-off from the developed campus core areas.
- Rehabilitate and naturalise creek lines in accordance with the NSW Office of Water requirements.
- Provide interesting areas of open space for passive recreation and campus events.
- Create a terraced urban plaza that integrates the creek landscape with the University Avenue campus gateway.
- Provide a walking track that relates to the creek, plazas and pedestrian nodes.
- Provide opportunities for and encourage art installations in and around the creek landscape.
- Provide interesting and sensitive creek crossings and elevated walkways.
- Consider the opportunity to create a water feature to enhance the campus entry experience.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Allocasuarina littoralis</i>	Black She-Oak	8 x 4 m
<i>Allocasuarina torulosa</i>	Forest Oak	8 x 4 m
<i>Ceratopetalum apetalum</i>	Coachwood	12 x 8 m
<i>Eucalyptus globoidea</i>	White Stringybark	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus saligna</i>	Sydney Blue Gum	20 x 10 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Synoum glandulosum</i>	Scentless Rosewood	8 x 4 m
<i>Tristaniopsis laurina</i>	Water Gum	7 x 5 m

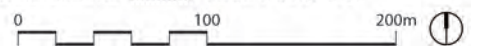


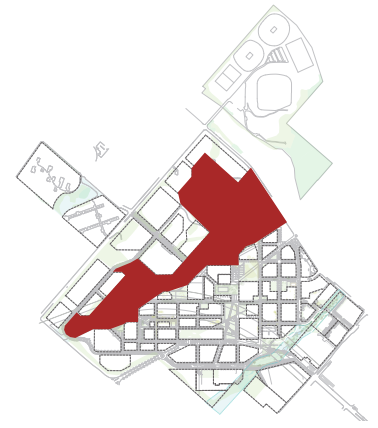
3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		





3.5.2 Mars Creek

Mars Creek is to be celebrated as a substantial natural resource within the campus. It is to be rehabilitated with a modified watercourse and new planting along the corridor boundary to enable important biodiversity regrowth, establishing a maturing habitat for the University population to enjoy.

Landscape Principles

- Retain the open character of the creek corridor, with planting focused along the corridor boundaries and existing long distance vistas retained.
- Create a defined riparian landscape adjoining the Academic Core and development parcels to the northern bank with perimeter pedestrian paths to the creek space.

- Rehabilitate and naturalise the creek line, retain and rehabilitate existing vegetation pockets and create a more natural sinuous creek alignment at the upper reaches.
- Ensure that buildings address the open space.
- Realign perimeter pathways to promote continuity of the watercourse with small crossings and pathways encouraging visitation.
- Create a variety of landscapes and water forms, ranging from smaller quieter spaces at the higher western reaches, down to the lake expanse and toward Lane Cove River across the M2 Motorway.
- Ensure that satisfactory pollution control measures are installed at appropriate locations.

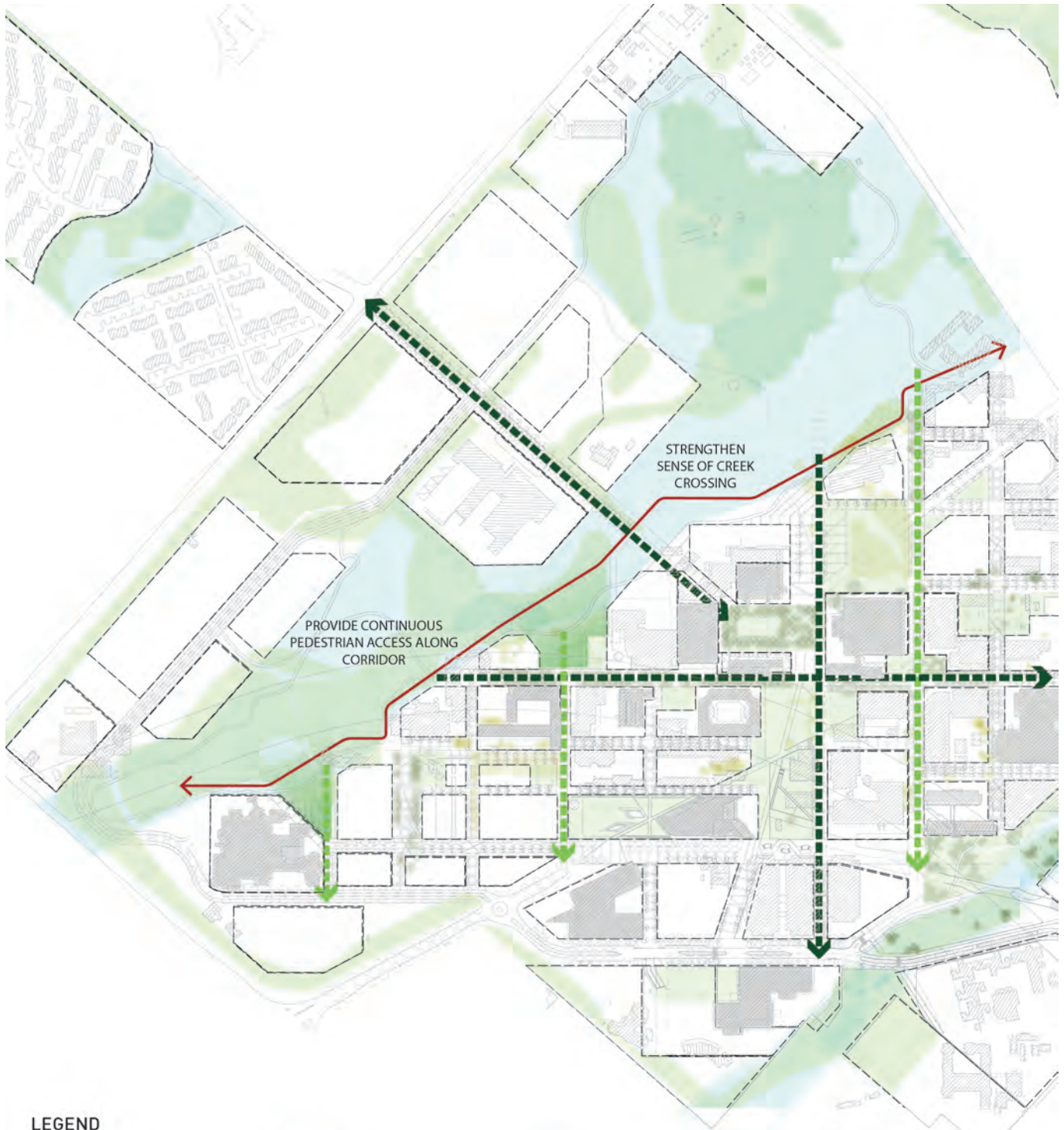
- Complete flora and fauna studies for the habitat within the creek corridor.
- Redesign stormwater catchment and outflows to redirect surface catchment from the Academic Core away from the parkland.
- Provide interesting areas of open space for passive recreation and cultural campus events.
- Provide a walking track that relates to the creek, vegetation pockets and cultural spaces.
- Provide further opportunities for and encourage art and sculpture installations within the landscape that relate to the different precincts around Mars Creek.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus eugenioides</i>	Thin-Leaved Stringybark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus globoidea</i>	White Stringybark	20 x 10 m
<i>Eucalyptus notabilis</i>	Mountain Mahogany	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m

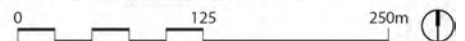


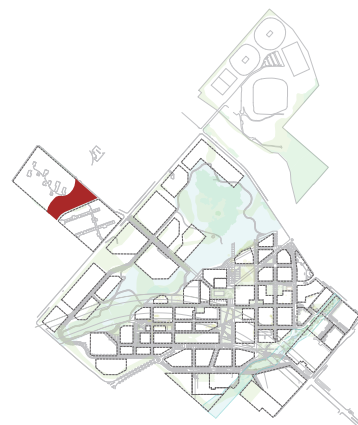
3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |





3.5.3 Culloden Creek

Culloden Creek is located in the central area of the Macquarie University Village. The creek corridor has the potential to build upon the existing Sydney Turpentine-Ironbark Forest located to the south-west of the Village, and will play an important role within the future increase in density of the Village.

Landscape Principles

- Ensure that the future development of the Macquarie University Village does not negatively impact the ecological health of the creek corridor.
- Consider the opportunity for future development to address the creek corridor with shared open space along its fringe.
- Enhance the future recreational amenity of the creek corridor to provide for the future needs of the Village.

Tree Schedule















BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus eugenioides</i>	Thin-Leaved Stringybark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus globoidea</i>	White Stringybark	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Eucalyptus resinifera</i>	Red Mahogany	25 x 10 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m



3. PUBLIC DOMAIN



LEGEND

 OPEN SPACE / PUBLIC DOMAIN	 PRIMARY PEDESTRIAN LINK	 WATER SENSITIVE URBAN DESIGN (WSUD)	 SIGNIFICANT TREES TO BE RETAINED
 EXISTING BUILDING TO BE RETAINED	 SECONDARY PEDESTRIAN LINK	 SOLAR ACCESS TO OPEN SPACE	 SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
 NEW BUILDING PROPOSED WITHIN MASTERPLAN	 GREEN LINKS	 IMPORTANT VIEW CORRIDORS	 EDGE TREATMENT
 LOT BOUNDARIES	 GROUND FLOOR ACTIVATION		



3.6 SPORTS FIELDS AND FACILITIES

3.6.1 Macquarie University Sports Fields

The Macquarie University Sports Fields are located on the corner of Talavera Road and Culloden Road. This sporting precinct provides approximately seven hectares of high quality specialist playing areas that can be configured to a variety of uses.

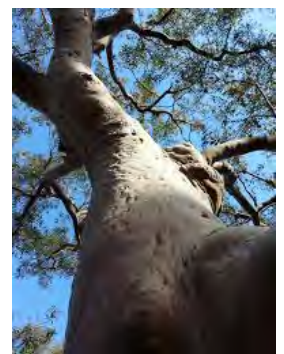
Landscape Principles

- Maintain, enhance and consider opportunities to expand the existing Hornsby Enriched Sandstone Exposed Woodland.

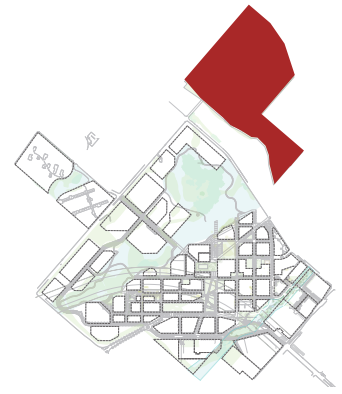
Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i> *	Smooth-Barked Apple	15 x 10 m
<i>Corymbia gummifera</i> *	Red Bloodwood	25 x 10 m
<i>Eucalyptus haemastoma</i> *	Broad-Leaved Scribbly Gum	15 x 10 m
<i>Eucalyptus piperita</i> *	Sydney Peppermint	20 x 10 m
<i>Eucalyptus racemosa</i>	Scribbly / Snappy Gum	20 x 10 m
<i>Eucalyptus sclerophylla</i> *	Hard-Leafed Scribbly Gum	20 x 10 m
<i>Eucalyptus squamosa</i> *	Scaly Bark	12 x 7 m

* denotes species from the broader Sydney Sandstone Ridge-top Woodland community.



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.7 CAMPUS GATEWAYS

3.7.1 Herring Road Gateway

As the primary point of entry to the campus, the Herring Road Gateway has assumed an increased importance since the construction of the Macquarie University train station and is now the 'front door' to the University. The pedestrian environment remains challenging with high volumes of pedestrian flows and traffic converging around this intersection.

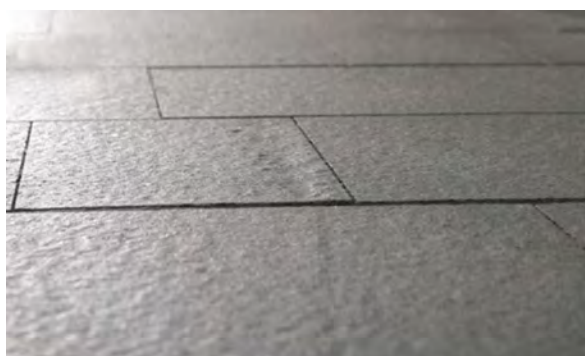
Responding to the potential of future growth in the Macquarie Park corridor, the Master Plan seeks to reinforce the entry and the quality of the arrival experience and accommodate increased flows of students from the station and bus interchange on Herring Road.

Landscape Principles

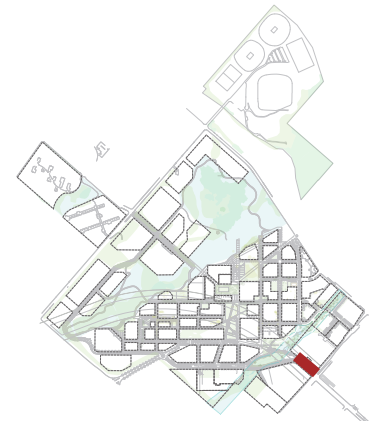
- Create a dramatic and iconic landscape entry to Macquarie University.
- Improve the pedestrian experience and flows into the campus.
- Provide a material palette consistent with the adjoining public domain of Macquarie Park.
- Maintain a clear vista into the campus from viewpoints along Waterloo Road to the south-east.

Tree Schedule

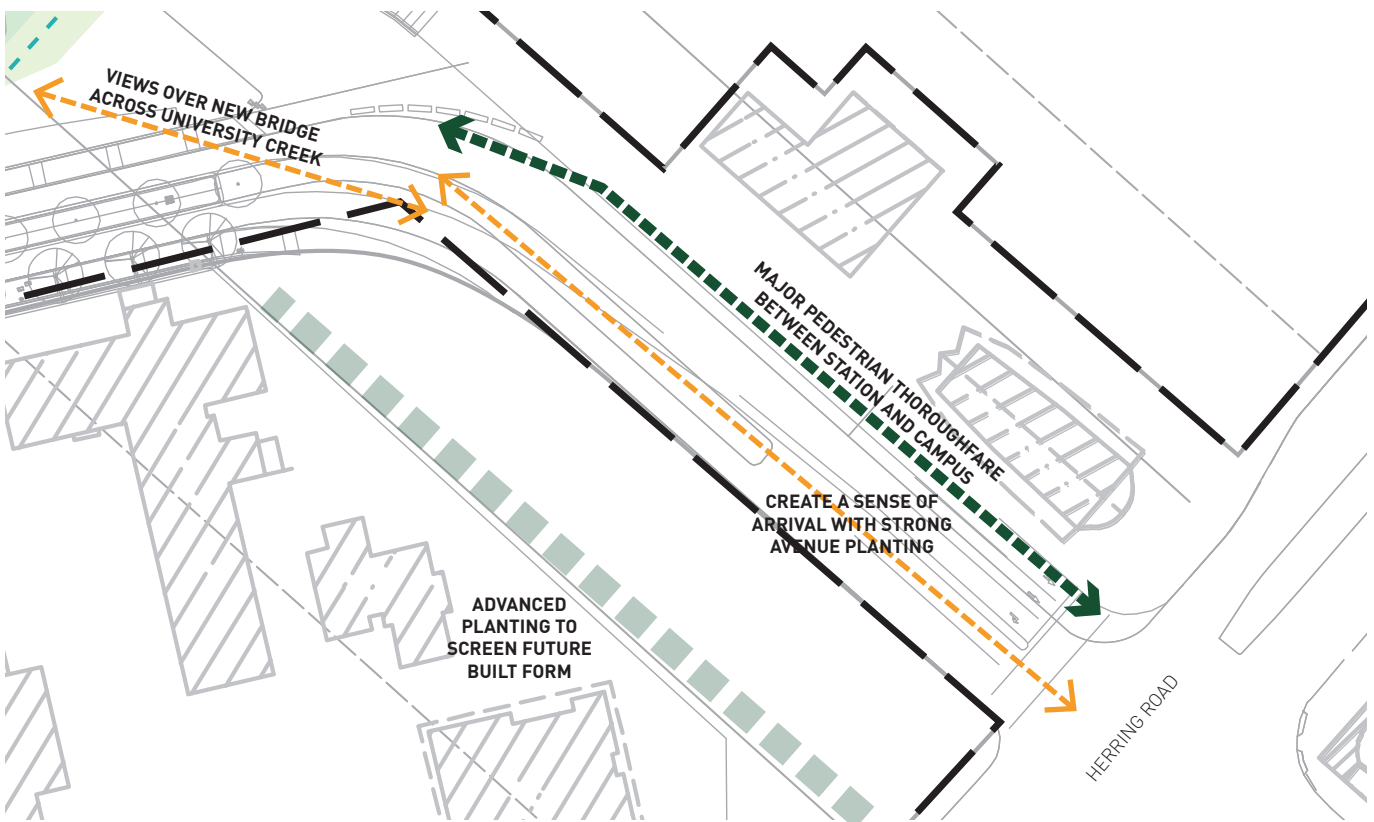
BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Agathis robusta</i>	Queensland Kauri Pine	20 x 10 m
<i>Malus ionensis</i> 'Plena'	Bechtel's Crabapple	6 x 5 m
<i>Pyrus calleryana</i>	Chanticleer	8 x 5 m
<i>Syzygium anisata</i>	Ringwood	12 x 6 m
<i>Tristaniopsis laurina</i>	Water Gum	7 x 5 m



3. PUBLIC DOMAIN



- Direct pedestrian flows into the new University Common.
- Manage student traffic across Herring Road to Macquarie Centre.
- Improve the awareness and relationship to University Creek.
- Develop the built form to reinforce the pedestrian entry experience.
- Entry to have a sense of arrival created by strong avenue planting of large evergreen trees.
- Formality and structure of the streetscape planting to contrast with the informality and deep green foliage of the vegetation around the water courses.
- Avenue planting to recognise and enhance the view corridor through to the campus heart
- The landscape setting is to be activated by the use of raised planting beds with informal and formal seating nodes



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.7.2 Balaclava Road Gateway

While pedestrian traffic on the original western entry at Balaclava Road entry is low, the gateway remains important for vehicular traffic including many bus routes. The entry from Epping Road is dominated by informal stands of indigenous vegetation at the intersection, which changes to formal street planting in toward the new Library. A new sculptural element may be located at the end of the entry axis.

Landscape Principles

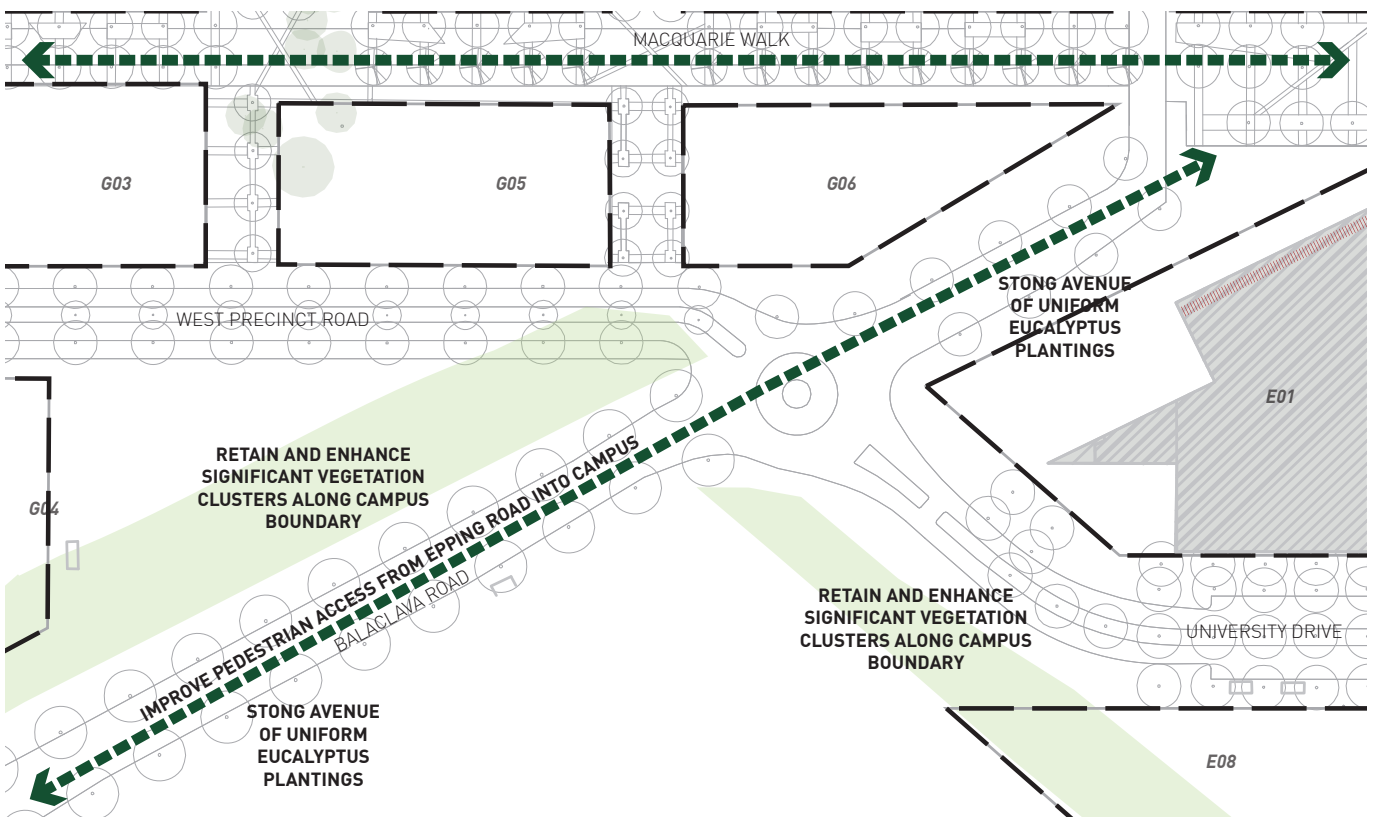
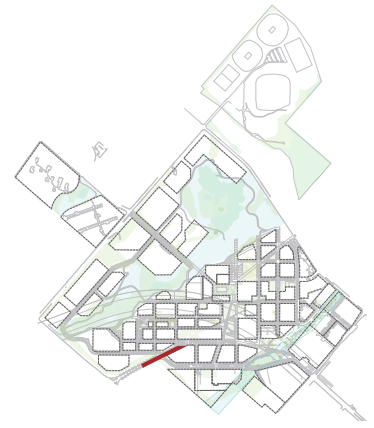
- Provide a strong eucalyptus framed entry to the University.
- Retain and enhance the informal tall eucalypts planting at the Epping Road intersection to provide a distinctive character to the campus.
- Improve pedestrian access from Epping Road into the campus and extend past the Library into the University Common.
- Maintain appropriate setbacks to future development.
- Anticipate impacts from increased regional traffic growth and major upgrades to the Balaclava/Epping.
- Road intersection is part of an RMS bus priority project.
- Ensure detailed design of the western car park is screened behind the existing vegetation facing Epping and Balaclava Roads.
- Entry to have an urban bushland aesthetic strengthened with a strong avenue of uniform eucalyptus plantings.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Eucalyptus pilularis</i>	Blackbutt	20 x 10 m
<i>Eucalyptus saligna</i>	Sydney Blue Gum	20 x 10 m



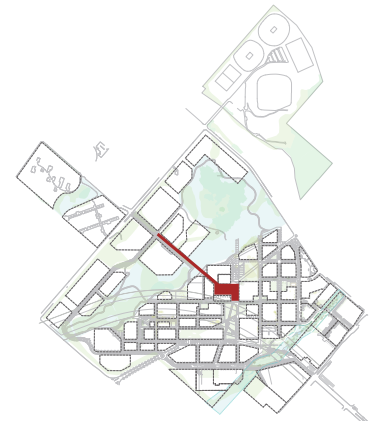
3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |





3.7.3 Gymnasium Road Gateway

Gymnasium Road off Culloden Road provides the main path of travel for students residing in on-campus accommodation in the north-west quadrant of the campus. As housing provision and academic uses increase in this precinct, the Master Plan seeks to reinforce this corridor as a major access point.

Landscape Principles

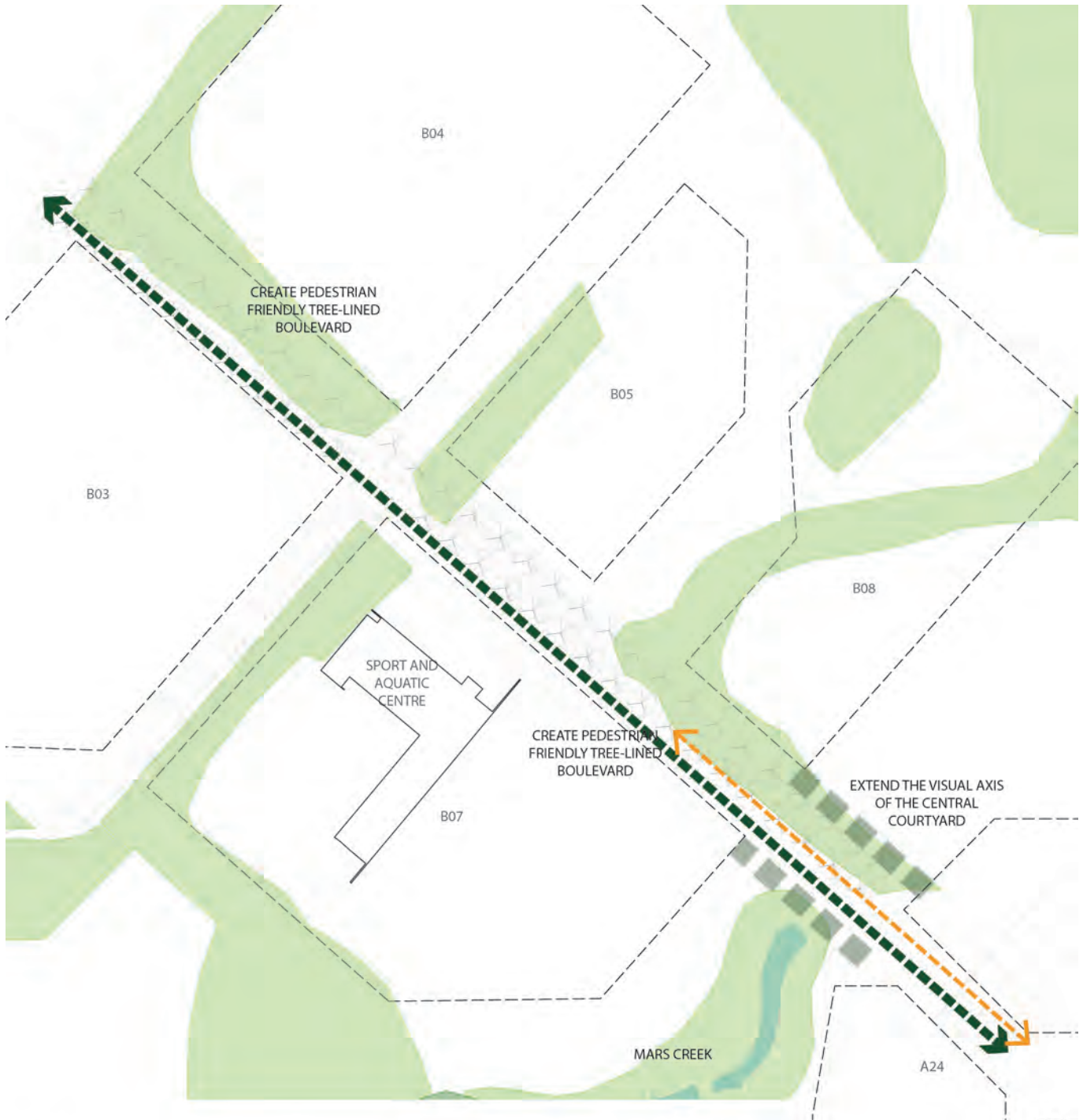
- Create a new pedestrian-friendly boulevard from Culloden Road to the Academic Core with wider pedestrian paths and formal tree planting.
 - Extend the visual axis to the Central Courtyard.
 - Create a transition space between Mars Creek and the Central Courtyard.
 - Consider amending the north-west corner of existing Library building (C7A) to create a clear visual link between entry and Central Courtyard.
 - Review the Master Plan for the Sport and Aquatic Centre to facilitate access to the facility and address on Gymnasium Road.
- Initiate works to the Hub and former Library building to present an improved arrival sequence into the Central Courtyard.
 - Replace the existing open service yard for Central Courtyard facilities with access via a discrete loading entry at the lower end of Gymnasium Road.
 - Entry to be punctuated by colourful plantings to juxtapose the existing bush land character.
 - Planting style to complement the domestic garden setting of Culloden Road and beyond.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m



3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |



3.7.4 Talavera Road Gateway

With widening and improved access to and from the M2 Motorway, traffic along Talavera Road is expected to increase. The Talavera Road Gateway will create a consolidated point of access for the Research Park precinct, the Private Hospital and the eastern parts of the Academic Core.

Landscape Principles

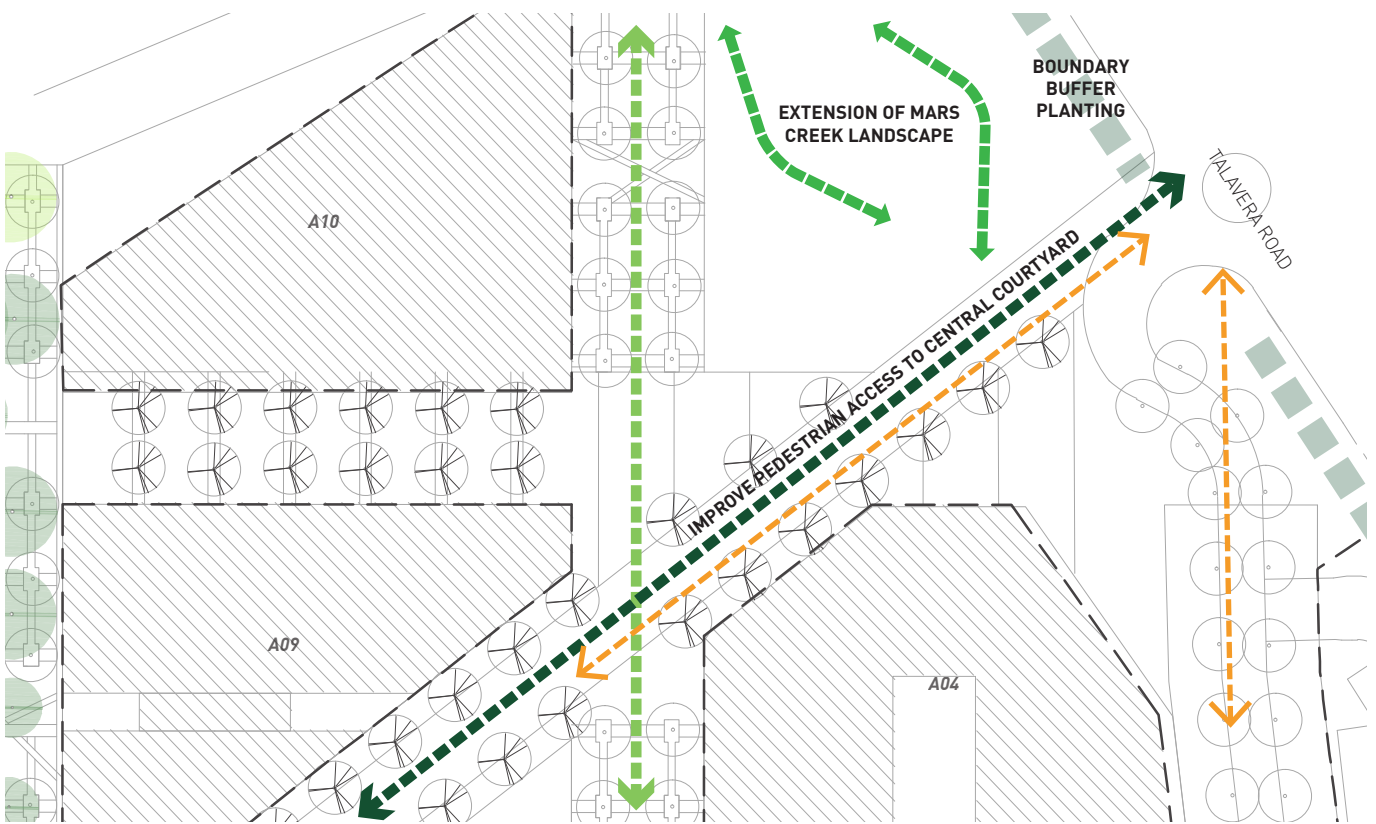
- Create vistas into the campus.
 - Facilitate wayfinding through the north-east quadrant of the Academic Core.
 - Facilitate pedestrians' access into the Central Courtyard.
 - Create new address points to development parcels in the northeast.
 - Separate pedestrian and vehicular movements.
 - Widen the Talavera Road entry.
- Separate the new pedestrian avenue from vehicle traffic including hospital vehicles.
 - Extend the landscape scheme for Research Park Drive to this entry.
 - Contemporary urban plaza style landscape to provide a strong entry experience into the campus.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Trees within adjoining open space		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
Street trees		
<i>Koelreuteria paniculata</i>	Golden Rain Tree	7 x 7 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m



3. PUBLIC DOMAIN



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		



3.8 PRIMARY ROADS

3.8.1 University Avenue

The pedestrianisation of Macquarie Walk and the closure of Research Park Drive at the main campus entry will see a change in the role and focus of University Avenue.

University Avenue has long been a major route through Macquarie Park with buses and local traffic using the road as a route between Epping Road and the Macquarie Centre. The closure of Macquarie Walk to traffic will require the relocation of east

bound buses and should assist in reducing the volume of local through traffic.

The most significant change will be the increase in development density along this corridor.

Previous plans identified the need to upgrade University Avenue. The new plan formalises the road treatment, develops new paving and planting, and introduces water sensitive urban design (WSUD) elements in the median. University

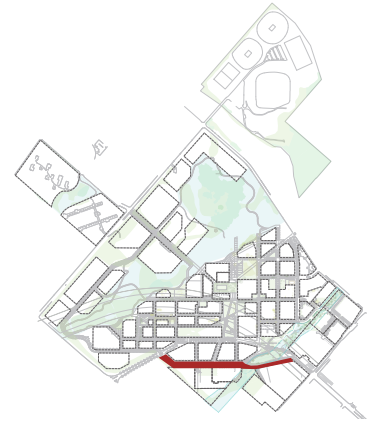
Avenue is relocated to the east side of University Creek before sweeping around to Herring Road.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
University Creek riparian planting <i>Characteristics - Evergreen riparian planting to the median, complimentary to creek vegetation, no planting along creek frontage</i>		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Allocasuarina littoralis</i>	Black She-Oak	8 x 4 m
<i>Ceratopetalum apetalum</i>	Coachwood	12 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Synoum glandulosum</i>	Scentless Rosewood	8 x 4 m
<i>Tristaniopsis laurina</i>	Water Gum	10 x 8 m
Non-riparian planting <i>Characteristics - Strong double avenue of deciduous street tree planting</i>		
<i>Agathis robusta</i>	Queensland Kauri Pine	20 x 10 m
<i>Flindersia australis</i>	Crows Ash	15 x 7 m
<i>Malus ionensis</i> 'Plena'	Bechtel's Crabapple	6 x 5 m
<i>Pyrus calleryana</i>	Chanticleer	8 x 5 m
<i>Tristaniopsis laurina</i>	Water Gum	10 x 8 m

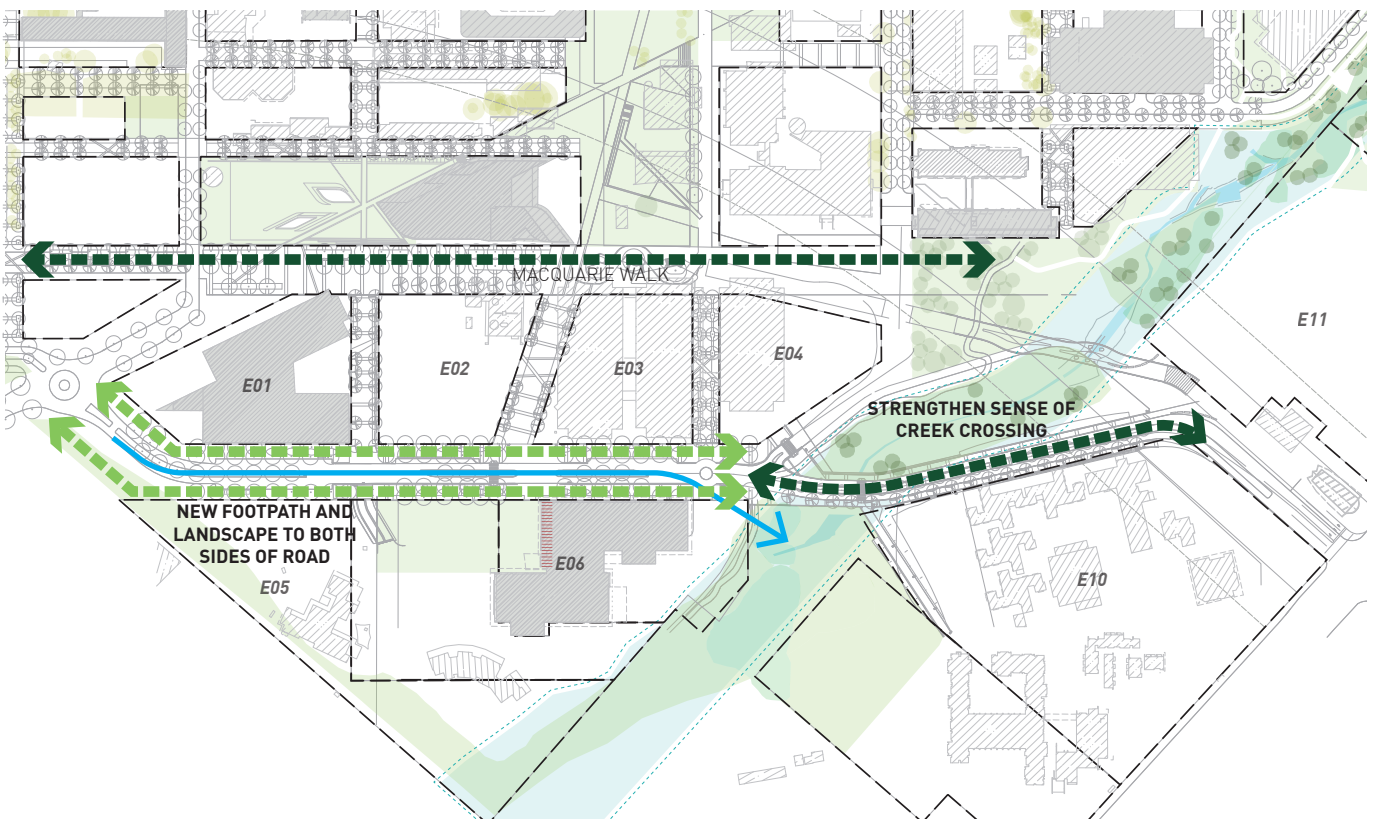


3. PUBLIC DOMAIN



Principles

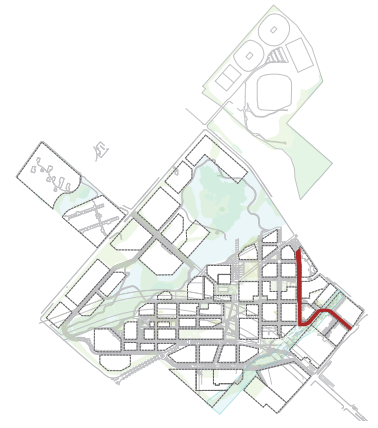
- University Avenue is relocated to the east side of University Creek.
 - Widened road reserve.
 - New footpaths and landscaping to both sides.
 - Median planting and water treatment.
 - New right turn lanes to access development sites.
 - Upgraded lighting and signage elements.
- Three zones of distinct planting with common elements:
 1. Entry zone – Strong avenue of deciduous and evergreen tree planting.
 2. Creek zone – Evergreen riparian planting to the median and southern edge.
 3. Commercial zone – to extend the contemporary planting themes at Hearing Hub, street tree planting to continue as a strong avenue.



LEGEND

OPEN SPACE / PUBLIC DOMAIN	PRIMARY PEDESTRIAN LINK	WATER SENSITIVE URBAN DESIGN (WSUD)	SIGNIFICANT TREES TO BE RETAINED
EXISTING BUILDING TO BE RETAINED	SECONDARY PEDESTRIAN LINK	SOLAR ACCESS TO OPEN SPACE	SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
NEW BUILDING PROPOSED WITHIN MASTERPLAN	GREEN LINKS	IMPORTANT VIEW CORRIDORS	EDGE TREATMENT
LOT BOUNDARIES	GROUND FLOOR ACTIVATION		





3.8.2 Research Park Drive

Research Park Drive marks the eastern edge of the Academic Core and the edge of major ancillary uses on the campus – Research Park, Macquarie University Hospital and the development of the new commercial buildings adjacent to the train station.

The closure of the road at its southern end will result in reduced traffic and will allow public domain upgrades.

Principles

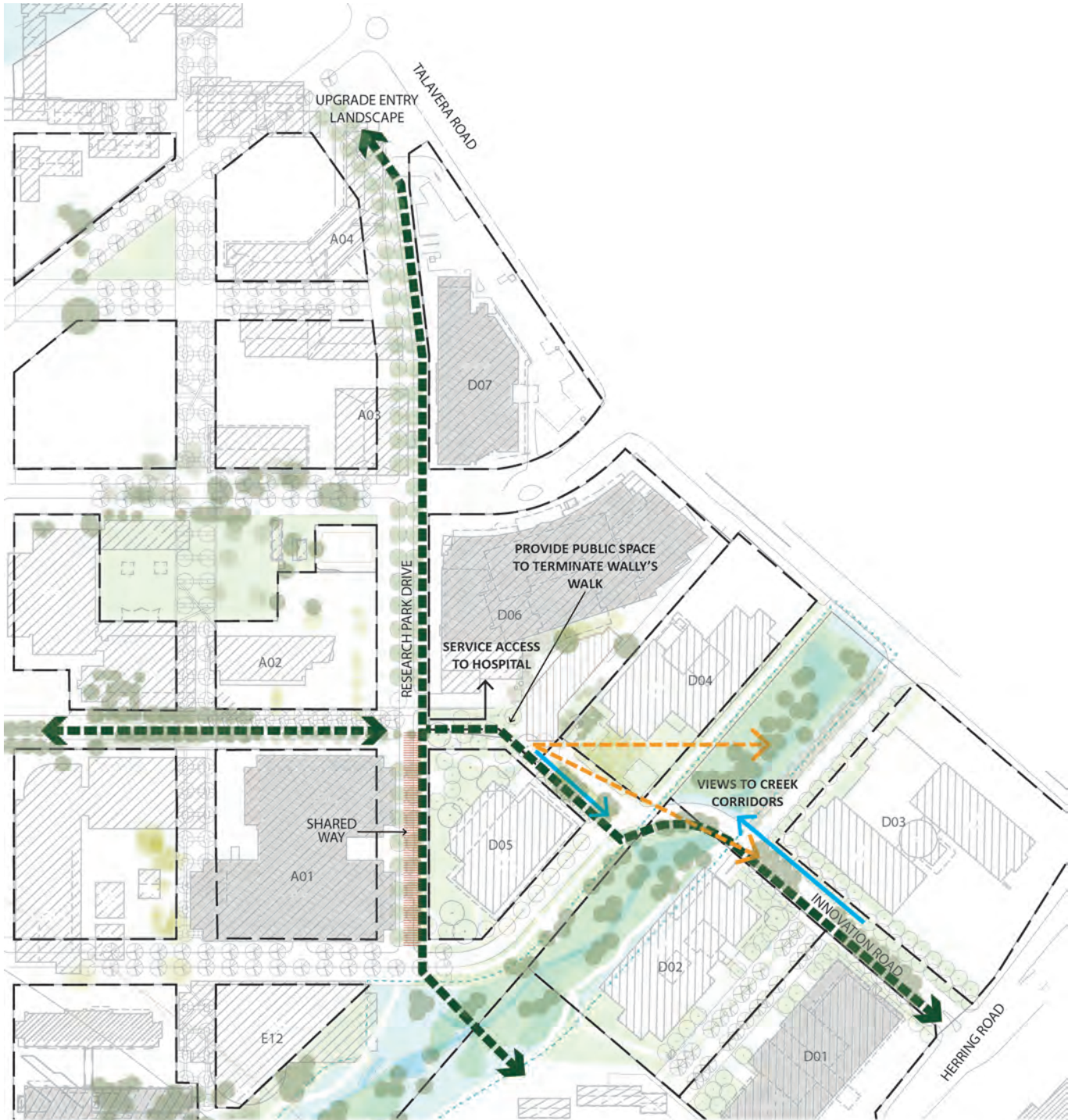
- Closure of the road at University Creek to improve amenity and safety for pedestrians walking to and from the train station.
 - New footpaths and landscaping to both sides.
 - Extensive planting.
 - Redevelopment of carpark sites as new academic buildings with potential for parking below.
 - Create a strong green corridor to frame the campus core and provide a visual boundary.
 - Provision of a shared way environment in the southern section between A01 and D05.
- Street tree planting to be evergreen medium sized trees to visually link the Research Park Drive with the University Creek landscape.
 - Where possible building setbacks to include buffer planting to strengthen green corridor concept.
 - Upgrade landscape adjacent to the Talavera Road entry.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Characteristics - Dark green foliage, dense crown, complimentary to creek vegetation</i>		
<i>Flindersia australis</i>	Crows Ash	10 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Acmena smithii</i>	Lilly Pilly	10 x 6 m
<i>Toona ciliata</i>	Red Cedar	20 x 10 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m



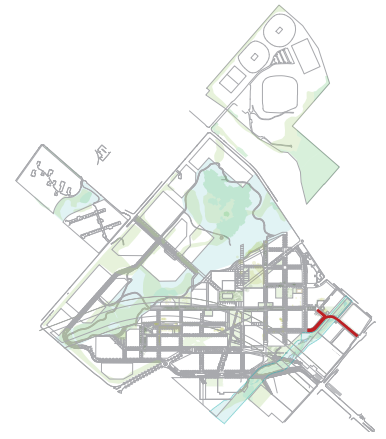
3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |





3.8.3 Innovation Road

As new development is delivered in Precinct D and the population increases, there will be increased demands on the public domain.

Four key initiatives have been identified:

- The realignment of Innovation Road along the creek edge south of Lot D05.
- The widening of the footpath zone at Lot D03 to improve pedestrian amenity and connections from the Hospital to Herring Road.
- Upgrade of Wally's Walk

adjacent to the Hospital to better terminate this important axis with an outlook to the University Creek corridor and to improve accessible links down to Innovation Road.

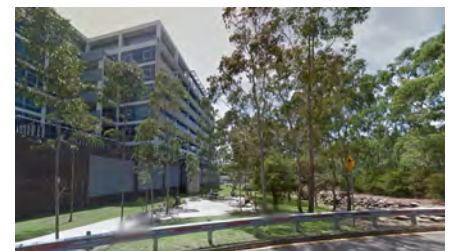
- Provision of a secondary road between D01 and D02.

Principles

- Improve pedestrian access along Innovation Road and connection to Wally's Walk.
- Explore opportunities for the realigned road to contribute to the biodiversity in the University Creek corridor, for instance by

using endemic creek species as street trees in proximity to the creek.

- Provide tall evergreen tree planting to reduce the visual impact of the building and strengthen the connection to University Creek.
- Upgrade creek pathway to the south of Innovation Road to create a continuous path.



Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Corymbia maculata</i>	Spotted Gum	25 x 12 m
<i>Waterhousia floribunda</i>	Weeping Lilly Pilly	18 x 12 m

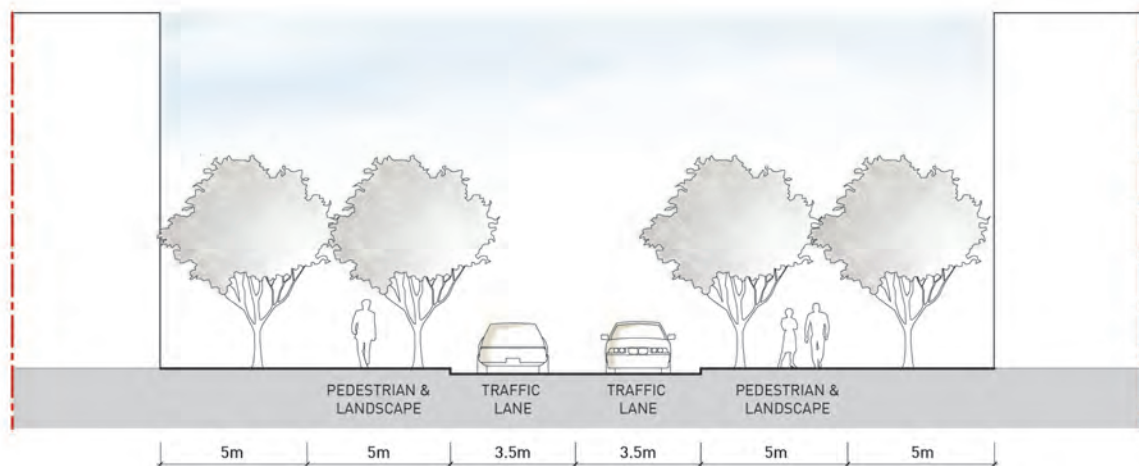


FIGURE 26: SECTION THROUGH INNOVATION ROAD

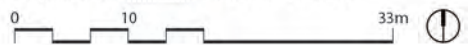
3. PUBLIC DOMAIN

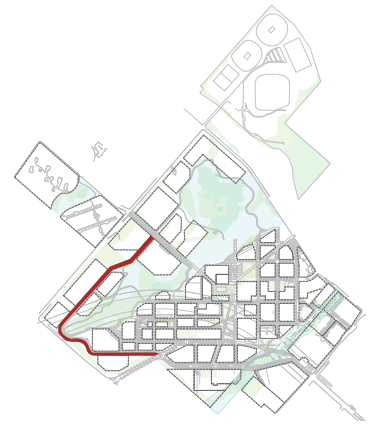
FIGURE 12: SECONDARY ROAD (17.5 - 20M)



LEGEND

- | | | | |
|---|---------------------------|---|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) BAN | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |





3.8.4 West Precinct Road

A new road is to be constructed in the zone west of Mars Creek. Much of the car park traffic will be on Culloden Road allowing the new road to deal with campus traffic and providing access to new development in the west of the site. The street will be a simple two-lane street (one lane each way) with parking recessed into a landscape zone.

Principles

- Ensure the footprint of the road is kept to a minimum, particularly where it passes through the Mars Creek corridor.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Characteristics - small, evergreen</i>		
<i>Backhousia myrtifolia</i>	Grey Myrtle	6 x 4 m
<i>Cupaniopsis anacardiodes</i>	Tuckeroo	8 x 6 m
<i>Tristaniopsis laurina</i> 'Luscious'	Water Gum	10 x 8 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m



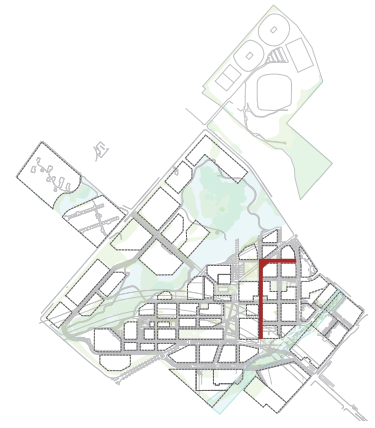
3. PUBLIC DOMAIN



LEGEND

 OPEN SPACE / PUBLIC DOMAIN	 PRIMARY PEDESTRIAN LINK	 WATER SENSITIVE URBAN DESIGN (WSUD)	 SIGNIFICANT TREES TO BE RETAINED
 EXISTING BUILDING TO BE RETAINED	 SECONDARY PEDESTRIAN LINK	 SOLAR ACCESS TO OPEN SPACE	 SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE
 NEW BUILDING PROPOSED WITHIN MASTERPLAN	 GREEN LINKS	 IMPORTANT VIEW CORRIDORS	 EDGE TREATMENT
 LOT BOUNDARIES	 GROUND FLOOR ACTIVATION		





3.9 SECONDARY ROADS

3.9.1 Eastern Road

Eastern Road currently serves as a secondary service road that is also heavily used by pedestrian traffic. Future works should improve the quality of this street using unit paving to designate it as a shared access route, levelling undulating levels at the southern end, removing open parking areas and screening service yards.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Characteristics – strengthen biodiversity connection between University Creek and Mars Creek</i>		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m

3.9.2 Science Road

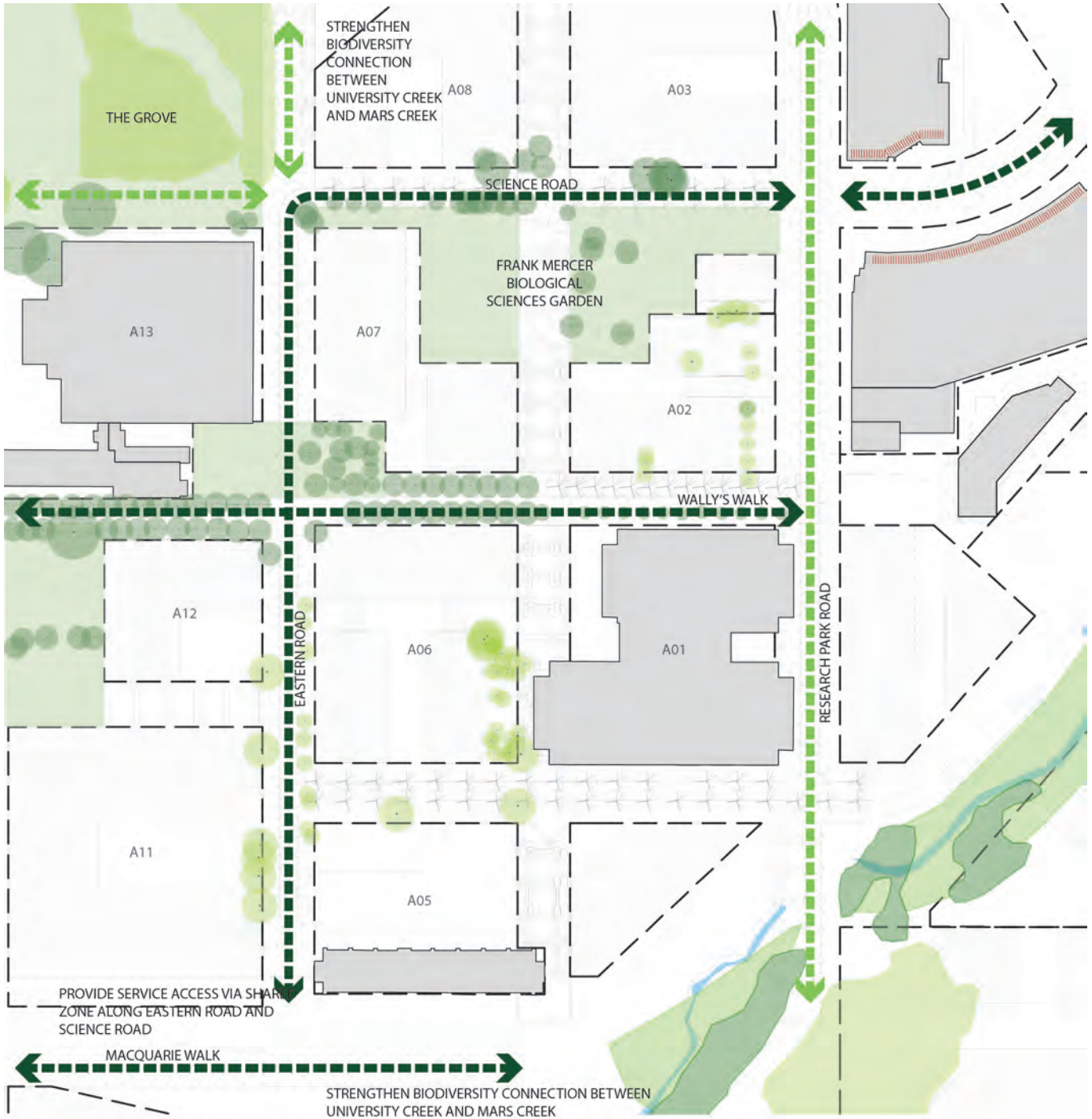
Science Road currently serves as a secondary service road, also used heavily by pedestrian traffic. Future works should improve the quality of this street by developing it as a paved shared access route, removing open parking areas and screening of service yards.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Characteristics – small, evergreen</i>		
<i>Backhousia myrtifolia</i>	Grey Myrtle	6 x 4 m
<i>Cupaniopsis anacardioides</i>	Tuckeroo	8 x 6 m
<i>Tristaniopsis laurina</i> 'Luscious'	Water Gum	10 x 8 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m



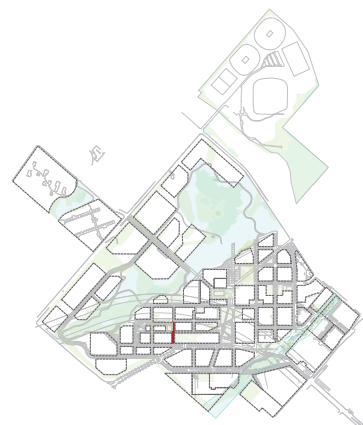
3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |





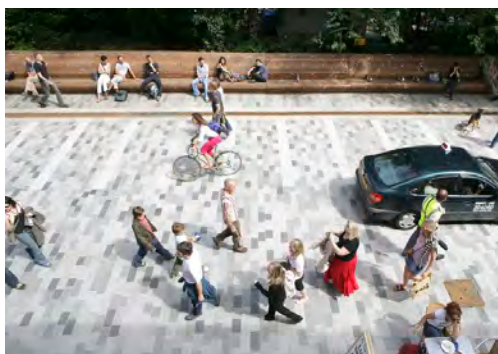
3.9.3 Western Road

Western Road will be widened, straightened and paved areas upgraded. It should be a shared way with access for service vehicles only, with open parking areas removed and service yards screened.

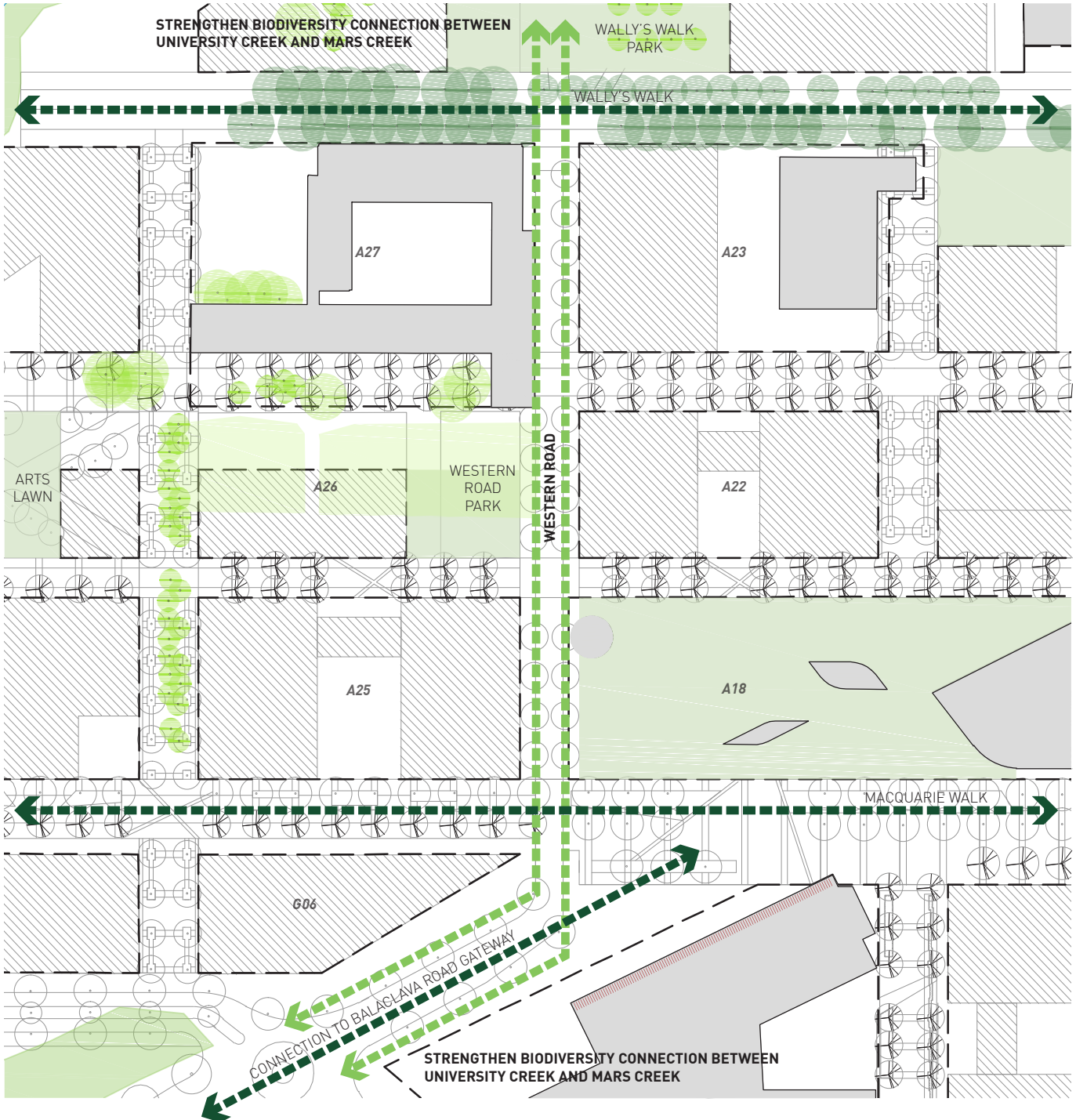
Western Road also provides an opportunity to form a biodiversity corridor together with the buffer vegetation along the south-western boundary of the campus to create a north-south ecological connection between University Creek and Mars Creek. The planting palette of Western Road should therefore reflect the ecological communities of the creek corridors.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Characteristics – strengthen biodiversity connection between University Creek and Mars Creek</i>		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m



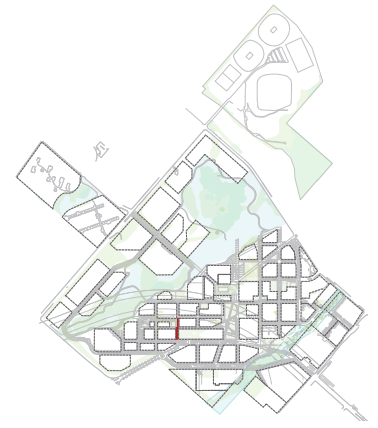
3. PUBLIC DOMAIN



LEGEND

- | | | | |
|---|---------------------------|-------------------------------------|--|
| OPEN SPACE / PUBLIC DOMAIN | PRIMARY PEDESTRIAN LINK | WATER SENSITIVE URBAN DESIGN (WSUD) | SIGNIFICANT TREES TO BE RETAINED |
| EXISTING BUILDING TO BE RETAINED | SECONDARY PEDESTRIAN LINK | SOLAR ACCESS TO OPEN SPACE | SIGNIFICANT TREES TO BE RETAINED IF POSSIBLE |
| NEW BUILDING PROPOSED WITHIN MASTERPLAN | GREEN LINKS | IMPORTANT VIEW CORRIDORS | EDGE TREATMENT |
| LOT BOUNDARIES | GROUND FLOOR ACTIVATION | | |





3.10 SHARED WAYS

A Shared Way is a road where the road space is shared safely by vehicles and pedestrians. The maximum speed limit is always 10 km/h. and vehicles must give way to pedestrians. The minimum trafficable width is 2.8 metres. The minimum total width of the corridor is 15 metres (refer Section 2.2.2 Figure 13). There are no road lines and no kerb or gutter in a Shared Zone to show that pedestrians and vehicles are equal. Drivers must give way to pedestrians at all times.

The pavement surface shall be changed to highlight the difference in the street environment from the surrounding road network. It must be clearly distinguishable by colour, texture and materials.

At the entrance and exit points there is usually a raised threshold to bring the road surface and pedestrian surface levels together, and prominent features such as signs, architectural or landscape features must be provided to indicate a change in the street environment and highlight the start / end of the scheme.

Traffic calming or a suitable treatment must also be provided to reduce speeds within the zone. Other features such as architectural and landscaping may also be provided to enhance the scheme.

Provide deciduous trees for summer shade and winter sun. The size and species of all proposed trees should

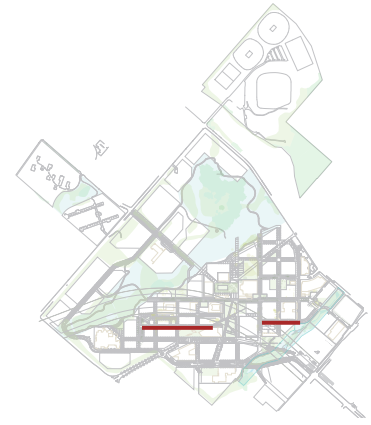
be selected to respect the scale of the surrounding buildings and the width of the shared way.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Pistacia chinensis</i>	Chinese pistachio	8 x 6 m
<i>Acer freemanii</i> 'Jeffersred'	Autumn Blaze	13 x 10 m
<i>Lagerstroemia</i> 'Natchez'	Crepe Myrtle "White"	6 x 4 m
<i>Malus ioensis</i>	Bechtel's Crab Apple	5 x 3.5 m



3. PUBLIC DOMAIN



3.11 SECONDARY PEDESTRIAN CONNECTIONS

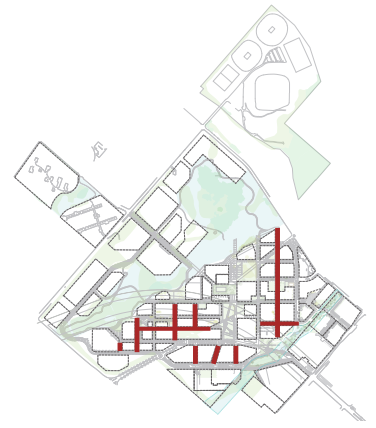
3.11.1 Secondary East-West Pedestrian Connections

The existing network of minor links will be formalised and upgraded across the campus. These pedestrian spaces will have a simple central path with a zone for landscape buffers and open spaces on either side.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Characteristics - small, deciduous</i>		
<i>Pistacia chinensis</i>	Chinese pistachio	8 x 6 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Ulmus parvifolia</i>	Chinese Elm	10 x 11 m



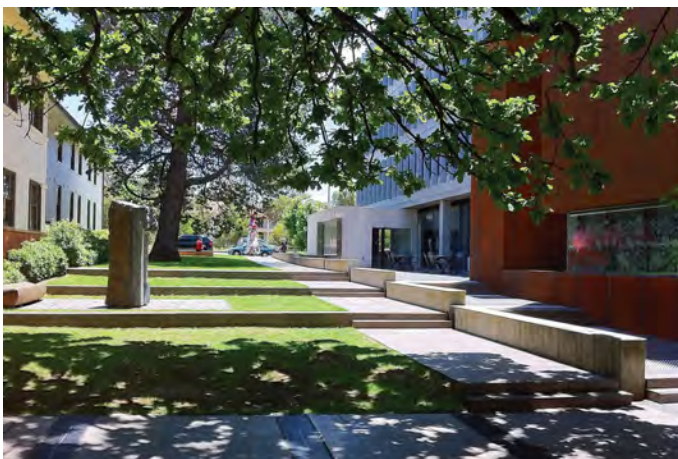


3.11.2 Secondary North-South Pedestrian Connections

Like the east-west links, the existing network of north-south pedestrian links will be formalised and upgraded across the campus. The links are planned to have a central path with areas for landscape and open spaces on either side.

Tree Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
<i>Characteristics - small, evergreen</i>		
<i>Backhousia myrtifolia</i>	Grey Myrtle	6 x 4 m
<i>Cupaniopsis anacardiodes</i>	Tuckeroo	8 x 6 m
<i>Flindersia australis</i>	Crows Ash	10 x 8 m
<i>Tristaniopsis laurina</i> 'Luscious'	Water Gum	10 x 8 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m



3. PUBLIC DOMAIN

3.12 PLANTING SCHEDULES

The campus will be defined by open space planting and tree lined avenues that soften and scale the built areas of the public domain.

The proposed road reserves have been designed to prioritise pedestrians, then cyclists, public transport and lastly private vehicles. The landscape design of each streetscape has given way to this hierarchy

Primary Public Domain Spines Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Wally's Walk		
<i>Platanus x acerifolia</i>	London Plane	14 x 10 m
Macquarie Walk		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Nyssa sylvatica</i>	Black Gum	11 x 6 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Ulmus parvifolia</i>	Chinese Elm	10 x 11 m
Sir Christopher Ondaatje Avenue		
<i>Flindersia australis</i>	Crows Ash	10 x 8 m
<i>Syzygium smithii</i>	Narrow-Leaved Lilly Pilly	10 x 6 m
<i>Toona ciliata</i>	Red Cedar	20 x 10 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m

Primary Parks and Plazas Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
The University Common		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia citriodora</i>	Lemon Scented Gum	20 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Sapium sebiferum</i>	Chinese Tallow	8 x 8 m
The Central Courtyard		
<i>Corymbia citriodora</i>	Lemon Scented Gum	20 x 10 m
The Grove (East Common)		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus notabilis</i>	Mountain Mahogany	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
Arts Lawn (West Common)		
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m

Secondary Parks and Plazas Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Frank Mercer Biological Sciences Garden		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus notabilis</i>	Mountain Mahogany	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
Jim Rose Earth Sciences Garden		
<i>Araucaria cunninghamii</i>	Hoop Pine	25 x 10 m
<i>Araucaria heterophylla</i>	Norfolk Island Pine	25 x 10 m
<i>Buckinghamia celsissima</i>	Ivory Curl Tree	8 x 6 m
<i>Protea caffra</i>	Common Sugar Bush	5 x 5 m
Mars Creek Plaza, Wally's Walk Park		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Ulmus parvifolia</i>	Chinese Elm	10 x 11 m
Western Road Park		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
Macquarie Theatre Courtyard, Faculty of Science Garden, Cochlear Forecourt		
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m
Library Lawn		
<i>Eucalyptus haemastoma</i>	Scribbly Gum	15 x 10 m
<i>Eucalyptus microcorys</i>	Tallowwood	20 x 10 m
<i>Eucalyptus saligna</i>	Sydney Blue Gum	20 x 10 m

3. PUBLIC DOMAIN

Creek Corridors and Parklands Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
University Creek		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Allocasuarina littoralis</i>	Black She-Oak	8 x 4 m
<i>Allocasuarina torulosa</i>	Forest Oak	8 x 4 m
<i>Ceratopetalum apetalum</i>	Coachwood	12 x 8 m
<i>Eucalyptus globoidea</i>	White Stringybark	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus saligna</i>	Sydney Blue Gum	20 x 10 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Synoum glandulosum</i>	Scentless Rosewood	8 x 4 m
<i>Tristaniopsis laurina</i>	Water Gum	7 x 5 m
Mars Creek		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus eugenioides</i>	Thin-Leaved Stringybark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus globoidea</i>	White Stringybark	20 x 10 m
<i>Eucalyptus notabilis</i>	Mountain Mahogany	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
Culloden Creek		
<i>Eucalyptus crebra</i>	Narrow-Leaved Ironbark	20 x 10 m
<i>Eucalyptus eugenioides</i>	Thin-Leaved Stringybark	20 x 10 m
<i>Eucalyptus fibrosa</i>	Red Ironbark	20 x 10 m
<i>Eucalyptus globoidea</i>	White Stringybark	20 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Eucalyptus resinifera</i>	Red Mahogany	25 x 10 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m

Sports Fields Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Macquarie University Sports Fields		
<i>Angophora costata</i> *	Smooth-Barked Apple	15 x 10 m
<i>Corymbia gummifera</i> *	Red Bloodwood	25 x 10 m
<i>Eucalyptus haemastoma</i> *	Broad-Leaved Scribbly Gum	15 x 10 m
<i>Eucalyptus piperita</i> *	Sydney Peppermint	20 x 10 m
<i>Eucalyptus racemosa</i>	Scribbly / Snappy Gum	20 x 10 m
<i>Eucalyptus sclerophylla</i> *	Hard-Leaved Scribbly Gum	20 x 10 m
<i>Eucalyptus squamosa</i> *	Scaly Bark	12 x 7 m

* denotes species from the broader Sydney Sandstone Ridge-top Woodland community.

Campus Gateways Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Herring Road Gateway		
<i>Agathis robusta</i>	Queensland Kauri Pine	20 x 10 m
<i>Malus ionensis</i> 'Plena'	Bechtel's Crabapple	6 x 5 m
<i>Pyrus calleryana</i>	Chanticleer	8 x 5 m
<i>Syzygium anisata</i>	Ringwood	12 x 6 m
<i>Tristaniopsis laurina</i>	Water Gum	7 x 5 m
Balaclava Road Gateway		
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Eucalyptus pilularis</i>	Blackbutt	20 x 10 m
<i>Eucalyptus saligna</i>	Sydney Blue Gum	20 x 10 m
Gymnasium Road Gateway		
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	10 x 8 m
<i>Jacaranda mimosifolia</i>	Jacaranda	12 x 10 m
Talavera Road Gateway – adjoining open space		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Corymbia maculata</i>	Spotted Gum	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
Talavera Road Gateway – street trees		
<i>Koelreuteria paniculata</i>	Golden Rain Tree	7 x 7 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m

3. PUBLIC DOMAIN

Shared Services Roads Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Eastern Road <i>Characteristics – Strengthen biodiversity connection between University Creek and Mars Creek</i>		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
Science Road <i>Characteristics – Small, evergreen</i>		
<i>Backhousia myrtifolia</i>	Grey Myrtle	6 x 4 m
<i>Cupaniopsis anacardiodes</i>	Tuckeroo	8 x 6 m
<i>Tristaniopsis laurina</i> 'Luscious'	Water Gum	10 x 8 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m
Western Road <i>Characteristics – Strengthen biodiversity connection between University Creek and Mars Creek</i>		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus paniculata</i>	Grey Ironbark	20 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m

Primary Internal Roads Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
University Avenue (University Creek riparian planting) <i>Characteristics - Evergreen riparian planting to the median, complimentary to creek vegetation, no planting along creek frontage</i>		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Allocasuarina littoralis</i>	Black She-Oak	8 x 4 m
<i>Ceratopetalum apetalum</i>	Coachwood	12 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Synoum glandulosum</i>	Scentless Rosewood	8 x 4 m
<i>Tristaniopsis laurina</i>	Water Gum	10 x 8 m
University Avenue (non-riparian planting) <i>Characteristics - Strong double avenue of deciduous street tree planting</i>		
<i>Agathis robusta</i>	Queensland Kauri Pine	20 x 10 m
<i>Flindersia australis</i>	Crows Ash	15 x 7 m
<i>Malus ionensis</i> 'Plena'	Bechtel's Crabapple	6 x 5 m
<i>Pyrus calleryana</i>	Chanticleer	8 x 5 m
<i>Tristaniopsis laurina</i>	Water Gum	10 x 8 m

Primary Internal Roads Planting Schedule (continued)

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Research Park Drive <i>Characteristics - Dark green foliage, dense crown, complimentary to creek vegetation</i>		
<i>Flindersia australis</i>	Crows Ash	10 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Toona ciliata</i>	Red Cedar	10 x 6 m
<i>Acmena smithii</i>	Lilly Pilly	18 x 12 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m
Innovation Road <i>Characteristics - Dark green foliage, dense crown, complimentary to creek vegetation</i>		
<i>Angophora costata</i>	Smooth-Barked Apple	15 x 10 m
<i>Eucalyptus punctata</i>	Grey Gum	15 x 8 m
<i>Syncarpia glomulifera</i>	Turpentine	25 x 12 m
<i>Corymbia maculata</i>	Spotted Gum	25 x 12 m
<i>Waterhousia floribunda</i>	Weeping Lilly Pilly	18 x 12 m
Western Precinct Road <i>Characteristics - Small, evergreen</i>		
<i>Backhousia myrtifolia</i>	Grey Myrtle	6 x 4 m
<i>Cupaniopsis anacardioides</i>	Tuckeroo	8 x 6 m
<i>Tristaniopsis laurina</i> 'Luscious'	Water Gum	10 x 8 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m

3. PUBLIC DOMAIN

Secondary East-West Links Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Secondary East-West Streets <i>Characteristics – Small, deciduous</i>		
<i>Pistacia chinensis</i>	Chinese pistachio	8 x 6 m
<i>Pyrus ussuriensis</i>	Manchurian Pear	9 x 7 m
<i>Ulmus parvifolia</i>	Chinese Elm	10 x 11 m

Secondary North-South Links Planting Schedule

BOTANICAL NAME	COMMON NAME	MATURE SIZE (H x W)
Secondary North-South Streets <i>Characteristics – Small, evergreen</i>		
<i>Backhousia myrtifolia</i>	Grey Myrtle	6 x 4 m
<i>Cupaniopsis anacardioides</i>	Tuckeroo	8 x 6 m
<i>Flindersia australis</i>	Crows Ash	10 x 8 m
<i>Tristaniopsis laurina</i> 'Luscious'	Water Gum	10 x 8 m
<i>Waterhousia floribunda</i> 'Green Avenue'	Green Avenue Lilly Pilly	15 x 9 m

3.13 WATER MANAGEMENT

Water management strategies across the campus have been developed to improve both the flow of water on the site and its quality.

A number of principles and objectives have been identified:

- The identification and control of flood and public safety issues.
- Limitation of frequent creek flows and creek flow velocities to avoid creek bed/bank erosion and sedimentation.
- Enhanced ecological health and biodiversity within the riparian corridors.
- Integration of bio-retention systems with the overall landscape strategy for the campus.
- Enhancement of visual amenity.
- Intergenerational equity attained through the provision of a healthy, functioning riparian corridor.
- Provision of site based, street level and corridor edge bio-retention systems.
- Extensive vegetation of lots and streetscapes.
- Provision of extensive deep rooted vegetation in strategic areas.

Flood Management

Extensive studies have been undertaken on the performance and management of University Creek. The plan formulated by TTW seeks to manage flows within the creek corridor and develop solutions that are environmentally and hydrologically sustainable.

Modifications in the creek zone have been designed to manage flood conditions, at Talavera Road in particular, while ensuring that low flow figures for 5-year storm events are not increased.

Two other stakeholders have been consulted in the process – the New South Wales Office of Water and the City of Ryde.

The New South Wales Office of Water has confirmed that their objectives are to achieve the following:

- Soft engineering solutions.
- Bank stabilisation with emphasis on fully structured planting solutions.
- Protection of endangered communities.
- Extent of in-stream storage to remain neutral.
- Existing inlets to be addressed to limit erosion.
- Proposed relocation of stream course not an issue.

Ryde Council's particular areas of interest are reducing flooding over Council assets and water quality and biodiversity.

Key outcomes of the strategy are:

- Raising in-stream storage capacity generally and reducing flows rates at crossings.
- Raising the level of University Avenue at the creek crossing to allow management of flows in the creek corridor.
- Raised crossing levels to limit overflow at crossings.
- Return creek reaches to natural wetland environment.
- Reconfigure existing stormwater outflow pipes throughout the creek where undercut by water flows and cause erosion.
- Localised widening of the creek to maintain low velocities and enable in-stream planting with no change proposed to stream depth.

3. PUBLIC DOMAIN

Water Sensitive Urban Design

The proposed stormwater management strategy focuses on minimising the impacts of development on the total water cycle and maximising the environmental, social and economic benefits achievable by adopting responsible and sustainable stormwater management practices. The stormwater management strategy consists of the following elements.

On Lot Treatments

Adoption of appropriate waterwise landscaping practices and maximisation of pervious areas.

On-site stormwater detention in accordance with Council's DCP requirements.

Street Level Treatments

Gross pollutant traps will be used on all site outlets to remove litter and vegetative matter, and 80% of sediment load. This strategy keeps litter and sediment out of the bio-retention swales and the University Creek riparian corridor.

Bio-Retention Systems

Selected zones of bio-retention swales and "raingardens" will be integrated within targeted open space areas to achieve nutrient reductions. They will also function to assist in detaining first flush flows to replicate the natural wetting and drying regime discharging to University Creek and Mars Creek Corridors.

Edge Treatments

Additional bio-retention systems are proposed along the edge of corridor perimeter roads to attain higher than nominated Council nutrient reductions. They are to be integrated with the riparian corridor as an edge buffer.

The above treatments form a treatment train to reduce sediment and nutrient loads to meet Council's stormwater quality targets.

3.14 LIGHTING, SAFETY AND SECURITY

Successful precincts work both during the day and at night with lighting a crucial element that both attracts people and helps navigate precincts. Very often, the highest usage is actually after hours and it is essential that lighting is functional and inviting.

Energy efficiency in light selection and operation will be important to the sustainability goals of the University.

There are three areas where lighting plays a role:

Identity

Lighting can reinforce the identity and character of an area or precinct at night. Through effects, lighting can highlight key elements or simply unify a precinct through a common approach.

Safety

Security lighting is essential. Lighting main circulation paths and adjoining areas so that there are no dark spots or shadows that could harbour threats will add to the enjoyment of users.

Variety

Lighting can be used to change the character and mood of a place on a seasonal or special event purpose. The lighting of elements to reflect a holiday or season is an effective and popular device to add variety or interest to a place.

A number of principles have been identified. These include:

Precinct Lighting

In order to unify the precinct, a common lighting colour is proposed.

Iconic Building Lighting

The lighting of key building facades reinforces the University's identity and creates landmarks within the campus. Selected buildings can be lit with coloured lights to emphasise entry points.

Illuminated advertising is not permitted.

Approach Lighting

The introduction of specialised lighting on the approaches to entry points reinforces the sense of the precinct as a unique place. This sense of identity and anticipation will enhance the experience and perception of all precincts.

Open Space Lighting

Each space will have its own character and identity and lighting of these spaces at night for safety and legibility is important whether they are in use or not.

Pedestrian zones can use animated or moving projections over horizontal (and some vertical) planes.

Temporary lighting can also be used before and during special events to further highlight the occasion.

Each space will have the minimum level of security lighting needed through the later night hours.

Solar lighting is encouraged.

Street Lighting

Street lighting shall be provided to at least City of Ryde standards. Metal halide lamps that provide a white light that better renders flesh tones are to be used across the campus.

Public lighting is divided into smart poles and pedestrian poles. Smart poles and pedestrian poles will be used for public lighting.

Bus shelters will have integrated lighting.

Security

Feeling safe and secure, even at night or when people are on their own, is important on the campus. Crime Prevention Through Environmental Design (CPTED) guidelines should be used for all developments and projects. It aims to reduce the opportunities for crime by increasing the effort and risks for offenders, as well as reducing the rewards.

Principles include:




- Occupied buildings with windows overlooking public spaces and streets.
- Quality street lighting, and lighting to public places, that enhances visibility and safety.
- Prominent, well-located and well-lit pedestrian entrances.
- Public places that attract people rather than discourage people from gathering.

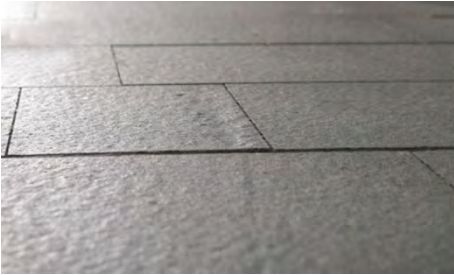


3. PUBLIC DOMAIN

3.15 PAVING




Paving materials in the precincts are to match existing campus areas. The paving will be patterned to delineate the different character and use of areas within the streetscape and public domain. The palette will be a mix of honed concrete pavers, insitu concrete paths and granite paving.

The surface treatments through the riparian corridor will take a softer organic approach and will consist of timber, sandstone and decomposed granite as juxtaposition to the urban campus environment.

LOCATION	PAVING TYPE	IMAGES	ADDITIONAL NOTES/ COMMENTS
Primary public domain spines			
Wally's Walk	Paving Body: <ul style="list-style-type: none"> – Insitu coloured concrete with saw cut paving pattern to match existing Wally's Walk paving 	<i>Existing Wally's Walk Insitu concrete</i> 	All new paving works as per existing specifications.
Macquarie Walk and Sir Christopher Ondaatje Avenue	Paving Body: <ul style="list-style-type: none"> – Insitu off-white concrete with exposed aggregate finish – Aggregate: 10mm Nepean River Gravel – Finish: Exposed aggregate Header Course/Banding: <ul style="list-style-type: none"> – 300 x 300mm precast concrete paver – Colour: Dark grey, equal to Adbri Masonry 'Charcoal' – Finish: Standard 	<i>Insitu concrete</i>  <i>Precast concrete paver</i> 	-

LOCATION	PAVING TYPE	IMAGES	ADDITIONAL NOTES/ COMMENTS
Campus gateways			
All	Paving Body: <ul style="list-style-type: none"> - Equal to G684 Black Fuding (dark grey) granite pavers - Finish: Flame exfoliated - Size: 600 x 300 x 60mm and 300 x 300 x 60mm 	<i>Black Fuding granite pavers</i> 	-
Shared ways and service roads			
All	Paving Body: <ul style="list-style-type: none"> - Ecotrihex® 181 x 88 x 80mm - Colour: 'Charcoal' - Finish: Standard Header Course/Banding: <ul style="list-style-type: none"> - Ecotrihex® 181 x 88 x 80mm - Colour: 'Natural' - Finish: Standard 	<i>Ecotrihex® 'Charcoal'</i>  <i>Ecotrihex® 'Natural'</i> 	Unit paving to communicate shared spaces.

3. PUBLIC DOMAIN

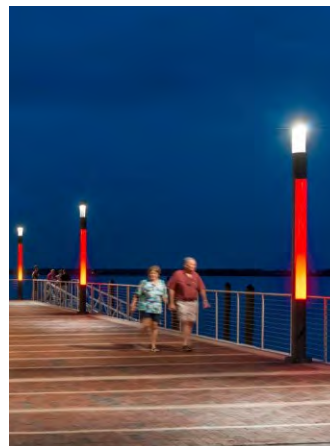
LOCATION	PAVING TYPE	IMAGES	ADDITIONAL NOTES/ COMMENTS
Primary internal roads			
All	Paving Body: <ul style="list-style-type: none"> - Insitu asphaltic concrete paving Header Course/Banding: <ul style="list-style-type: none"> - 300 x 300mm precast concrete paver - Colour: Off-white or light grey, equal to Adbri Masonry 'Ivory' - Finish: Standard 	<p data-bbox="695 981 868 1008"><i>Asphaltic concrete</i></p>  <p data-bbox="695 1317 916 1344"><i>Header course/banding</i></p> 	Header and body paving to pathways only. Carriageway as per Engineers specifications.
Secondary east-west and north-south links			
All	Paving Body: <ul style="list-style-type: none"> - Asphaltic concrete paving 	<p data-bbox="695 1706 868 1733"><i>Asphaltic concrete</i></p> 	-

3.16 STREET FURNITURE

Although a relatively minor element of the campus landscape, street furniture has a significant influence on the experience of the public domain. A uniform suite of street furniture is to be used throughout the campus to ensure that the various precincts are integrated with a discrete background language. The palette of street furniture will need to include benches, tables, bins, bollards, bicycle racks, bubblers and water refill stations, tree pits/guards, lighting and bus shelters.

Street Furniture Principles

- High quality street furniture should provide a fresh and contemporary appearance appropriate to the environmental requirements of the campus.
- Furniture should be robust, with minimal maintenance requirements and the ability to withstand heavy use.
- Maintain consistent materials, layout and geometry in sourcing and installing street furniture.
- With the exception of individually designed elements, street furniture should be readily commercially available to ensure a consistent palette can be sourced in the future.
- The suite of street furniture will need to include DDA compliant elements and options.
- Minimise clutter by grouping streetscape elements together to maximise legibility and usability of the public domain.



3. PUBLIC DOMAIN

3.17 PUBLIC ART

Macquarie University is committed to the introduction of public art across the campus. The provision of public art within the campus is an important step to contributing to the identity of the campus' public domain and establishing a sense of 'place' at Macquarie University.

These installations will provide the visitors with an intellectual aspect to the environment to complete the cultural enrichment that can be gained by enjoying what the campus open spaces have to offer.

Public Art Principles

- Public artworks are to be integrated into the public domain.
- Artworks should provide interest, create engagement and be the expression of contemporary culture.
- A description of each artwork and its concept should accompany the artwork as a story of its installation.



C8A LINCOLN

Campus Wellbeing
Career Service





4

BUILT FORM

4. BUILT FORM

4.1 DESIGN PRINCIPLES

The success of the campus plan will be subject to the quality of development realised. Overarching Design Principles ensure the relationship between buildings and spaces, the built form and the quality of public spaces collectively achieve good design. Design Principles establish a frame of reference for all development to ensure the equitable and responsible transformation of the campus over time.

Urban Form

Macquarie University's success as a built environment has been largely through the quality of its landscape and parkland setting. New development should be consistent with the overall identity of the campus while creating a distinct identity for key precincts.

The plan aims to maintain the overall character and environment of the campus while responding to changing technologies and education pedagogies, as well as the surrounding built form context. Principles underpinning the built form strategy are:

- Definition of major spaces by built form.
- Encourage consistent facade alignments on major thoroughfares, to reinforce the edges of major spaces.
- Focused activation of ground levels on major spaces with retail, cafes or student services.

- Buildings to have a clear address to either a road or a main open space.
- Locate tallest development at the train station.
- Increased height in the Academic Core to contain the size and increase the vitality of the Core.
- Preservation of solar access to key open spaces.
- Lower buildings located furthest from the train station.

The public domain will be defined through the creation of built edges to streets and open spaces.

A range of setback types including fixed build-to lines that define an 'urban edge' for high activity, high density environments, and minimum setbacks that allow more flexibility and can incorporate landscape for a less formal 'open space edge'.

The plan seeks to create a defined scale to the public domain through active podium edges with taller elements setback from street, open space and building edges. Articulation zones provide interest and variety as well as modulation in form, rhythm and scale.

Design Outcomes

To meet these expectations, high quality design is required. Innovative design that maximises the potential of sites and their location must add to the overall quality and character of the campus.

Within this strong public domain setting, the challenge is to create a consistent built form approach that while reinforcing a common language, creates opportunities for diversity and variety within the campus. Just as the environment has played an important role in the public domain, new buildings on campus will be expected to adopt innovative environmental initiatives.

Key considerations for the new buildings are:

- Respond to the strong landscape setting.
- Adopt key built form elements that define the public domain.
- Allow for individual expression in building design within a common language of materials and finishes.
- Use colours and materials that are consistent and/or responsive to the design palette of common materials, colour and finishes within the precinct.
- Embody environmentally sensitive design principles.
- Ensure that building facades are environmentally responsive.
- Windows with northern, eastern and western aspects are to incorporate shading elements.

4.1 DESIGN PRINCIPLES

Transitional Development

Macquarie University comprises a mix of character across a large campus. It shares interfaces both internally and externally and buildings should respond to their context. New development should be considerate of its existing and future surroundings and designed having regard to:

- Transitional scales and form and building types.
- Appropriate height relationships between buildings.
- Complementary land uses
- Different edge treatments and orientation of buildings.
- The way that materials and finishes, window openings, and entries can create compatibility between transitional building forms.
- Building mass and form that preserves and enhances amenity and character.

Building length and depth

The pattern and spacing between buildings, as well as their width and depth, contribute to the visual and physical permeability of the campus. Buildings should be designed to promote a physical structure that is legible with adequate separation to encourage activity, accessibility and landscaping.

- Ensure adequate separation is provided between buildings to allow for visual and physical permeability, landscaping and activity.
- Through-site links are encouraged to promote permeability and pedestrian activity.

Solar access

The design of buildings should be considerate of impacts upon access to sunlight. New development should allow good sunlight access to public spaces to ensure amenity, comfort and usability of public space.

- Design buildings to minimise overshadowing to public open spaces.
- Consider the scale of development and setbacks adjacent to key public open spaces to allow good sunlight access.
- Consider landscaping which maximises shade during summer and maximises sunlight during winter.

Active Ground Floor Plane

Pedestrians are vital to the character and function of the university. Vibrant ground floor uses promote pedestrian activity and encourage the use of outdoor spaces, particularly along key paths of travel.

- Avoid blank edges and walls to buildings.
- Encourage a diversity of uses on the ground floor plane.
- Provide uncluttered paths of travel.
- Ensure equitable and accessible paths connecting the ground floor plane.
- Provide well designed lighting and street furniture that promotes activation.

4. BUILT FORM

4.1 DESIGN PRINCIPLES

Typologies

A mix of institutional and pavillion style buildings in a landscped setting characterises the Macquarie University campus. New typologies, including mixed-use buildings, particularly along the edges of the campus, should respond to the topography and ensure floorplates, heights and bulk and scale, are responsive to the setting. New buildings should:

- Be considerate of scale in relation to height and bulk and provide appropriate transition to surrounding development
- Contribute positively to the streetscape.
- Provide a sense of openness or enclosure relative to its surroundings.
- Be designed on all interfaces.
- Locate landmark buildings at key locations and entires.
- Respond to the topography and reinforce the spatial hierarchy of the campus.
- Be adaptable.

Environmental Amenity

The natural environment of Macquarie University is an important contributor to its character and enhances the amenity for its users. New development should be sustainable and resilient and be designed in response to the topography, ecology, micro-climate and natural features of the site. Impacts upon noise, wind turbulence and overshadowing should be minimised.

Public Space

The space between buildings is as important as the buildings themselves. A network of formal and informal open spaces should be integrated into the campus, serving as connections and places for recreation. Positive public spaces should be faced by buildings and be active. They should provide a feeling of safety and an ease of movement and be legible. The public space on the campus should be as much about the journey as the destination and be designed to:

- Provide opportunities for formal and informal interactions.
- Enhance the natural landscape characteristics of the campus.
- Provide clear and easily navigable routes.
- Incorporate public art and wayfinding
- Be attractive
- Include planting and landscape elements
- Be considerate of a range of users.

Land Use Mix

As Macquarie Unversity continues to provide a mix of land uses to create a vibrant and resilient campus, that responds to its context, new development should:

- Locate compatible land uses close to each other.
- Provide a diversity of uses.
- Incorporate flexible and adaptable spaces.
- Be considerate of the relationship between buildings and spaces.



FIGURE 27: BUILDING DEFINITION

4. BUILT FORM

4.2 BUILDING HEIGHTS

As described in the Concept Plan, the key principles of building heights across the campus are:

- Highest development at the train station.
- Increase the height in the Academic Core to contain the size and increase the vitality of the Core.
- Preservation of solar access to key open spaces.

There are two levels of control on the building heights. The zone of development along Herring Road which falls under the Herring Road Priority Precinct has nominated maximum FSR and heights under the LEP, and the rest of the campus has 'Illustrative Heights' outlining the recommended heights proposed.

Controls to limit overshadowing of key open spaces are identified in individual lot controls. The definition of heights are taken from existing ground level.

At the Herring Road Gateway, heights are managed to create a symmetry around the Waterloo Road axis. The scale of the adjacent buildings is limited on the street frontage to create a human scale to the entry.

Roofs that are visible from surrounding buildings should be activated.

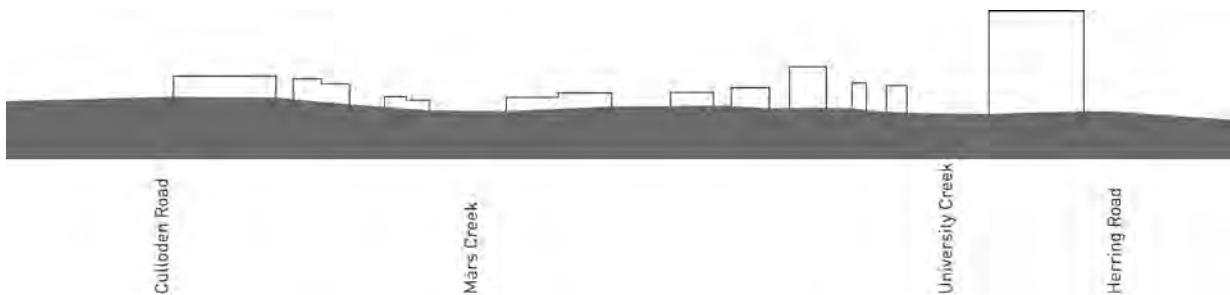


FIGURE 27: SECTION THROUGH CAMPUS SHOWING TOPOGRAPHY AND INDICATIVE BUILDING HEIGHTS

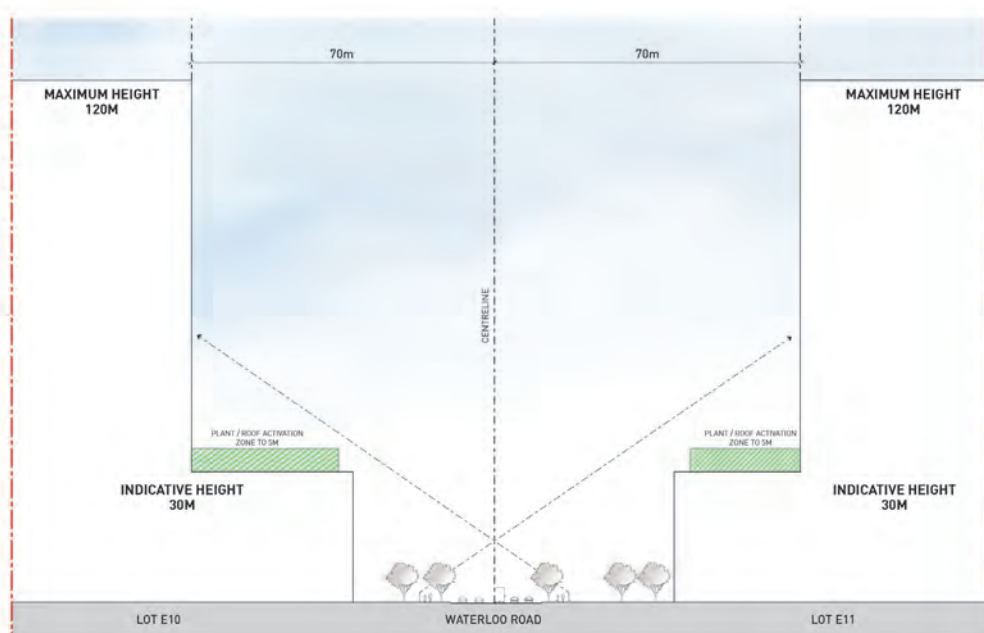


FIGURE 29: SECTION THROUGH HERRING ROAD GATEWAY AND MAXIMUM/INDICATIVE BUILDING HEIGHTS



FIGURE 30: INDICATIVE BUILDING HEIGHTS

4. BUILT FORM

4.3 ARTICULATION

The key architectural objective of the precinct guidelines is the development of a high quality architecture that responds appropriately to its environmental and site context. The development of a rich and interesting architecture on sites is dependent on both the massing of buildings and their detailing and articulation.

The key principles for the articulation of buildings across the campus are:

- Buildings must demonstrate contemporary expression and environmental responsiveness and function must respond to place, environment and the urban character of each precinct.
- Elements such as balconies and sun shading that create a sense of scale or rhythm on the facades are to be employed to add to the richness of the architectural expression.
- To mediate the level changes across a number of the sites, a masonry base (brick, stone or terracotta) is recommended on all sites.
- Building entries must be clearly articulated and be visible from the public domain.
- Building articulation is to be generated through the expression of overall massing as well as separate parts of a building, such as entries, access stairs, walkways, sun shading and balconies. Elements that are required to moderate environmental conditions, such as sunlight, breezes and screening, are to be designed to enliven a building's facade.

Basements

With significant level changes occurring across a number of sites, the treatment of basement parking and the design resolution of these frontages to major pedestrian spaces is an important issue.

Designs are to ensure:

- Minimise the extent of parking levels that extend above grade.
- Basement parking on commercial and academic buildings should not extend by more than one level above adjoining grade levels.
- All parking to be screened where possible by active uses or by high quality facades.
- Treatment of frontages to major pedestrian spaces to ensure a high quality pedestrian experience.



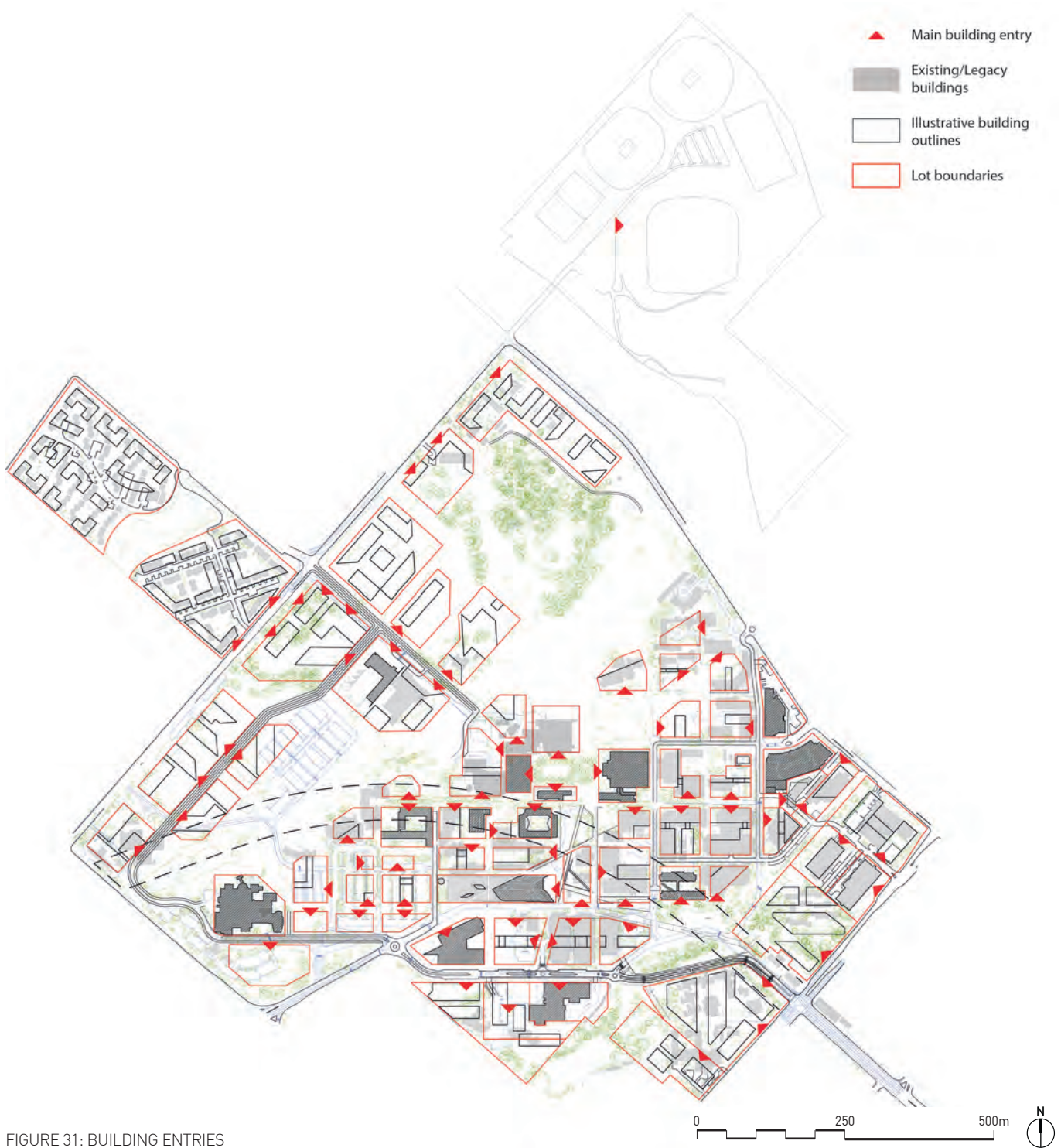


FIGURE 31: BUILDING ENTRIES

4. BUILT FORM

4.4 ACTIVATION

Ground floor active uses promote a sense of vibrancy and safety throughout the campus. Activity zones have been identified along the major pedestrian frontages and around key open spaces. Uses include student services, food, retail and information centres. Activation is also provided by building entries, windows and foyers.

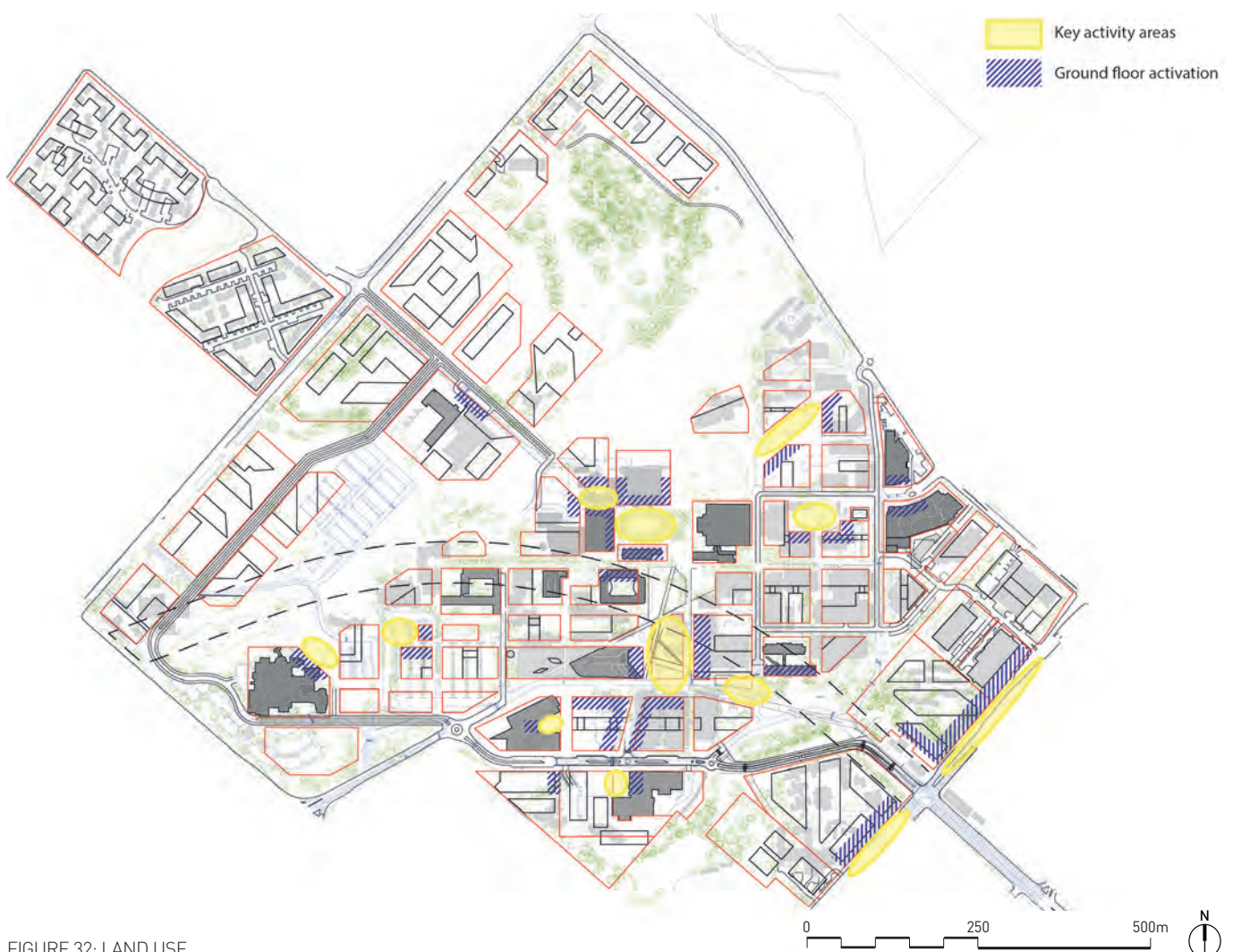


FIGURE 32: LAND USE

4.5 MATERIALS

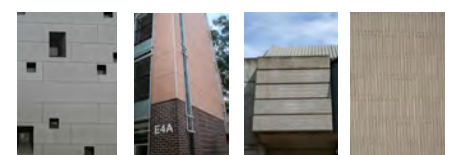
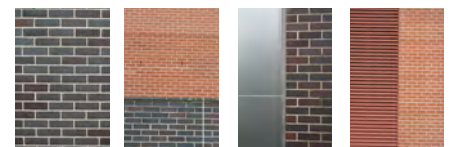
The guidelines seek to apply a common palette of materials appropriate to place and environment that will unify the differing building characters within various precincts. As highlighted in the Concept Plan, buildings should express different characters for the various precincts within a common language of materials and finishes.

These guidelines seek to encourage a common language and reinforce the contemporary and modern expression of buildings within the different precincts.

The key principles are:

- A common materials palette across the campus, with a clear distinction between low rise and high rise areas.
- Predominantly white or off-white/ silver or grey base colours and a series of accent colours with emphasis given to key locations including important corners and vistas.
- Western facades should be predominantly solid or screened to reduce solar gain.
- Northern facades should be predominantly glazed with sun shading.
- Glass with a reflectivity greater than 20% is not permitted.
- Low glare roof materials must be used.
- Develop a contemporary architectural expression that creates a human scale to the public domain enlivened by smaller scale articulation elements such as louvres, balconies, roof overhangs.
- Use a range of materials that are appropriate to function,

- maintenance, and scale.
- Low rise podium facades that can easily be seen by the pedestrian should comprise high quality durable materials with developed architectural details.
- Materials for higher elements that are more difficult to service and maintain should be low maintenance, while less detail may be required.



4. BUILT FORM

4.6 BUILDING LIGHTING

Successful developments work both during the day and at night. Lighting is a crucial element that both attracts visitors and assists them in navigating sites.

The careful illumination of buildings and open spaces for access, accents and building identification within individual lots will contribute to the success and night time experience of the campus. Lighting also assists with safety. Main circulation paths and adjoining areas should be sensibly lit so that there are no dark spots or shadows that could shelter threats.

Internal illumination should be allowed to shine through the glazing, thereby offering a 'glowing jewel' effect. Such lighting is to be carefully controlled to avoid excess energy use.

The key principles are:

- Buildings must have a strong night-time building presence and entries to be visible from their primary vehicular and pedestrian access points.
- Lighting should integrate fixture style with the building's architectural character.
- Visible point sources of building illumination must be minimised.
- Investigate opportunities to utilise solar (photovoltaic) technology, high efficiency fixtures or alternative energy sources as energy saving measures.
- Across the site, white metal halide light or white LED must be used for external lighting rather than yellow sodium vapour lamps.



4.7 BUILDING SIGNAGE

The adoption of signage objectives is aimed at creating a cohesive, attractive and informative signage package that allows identification of buildings but does not impact the character and quality of the campus.

The key principles are:

- Building identification signage should relate only to tenants within the building, the building name or names of donors where appropriate.
- On sites within Precinct E and F, building identification signage is to be a maximum size of 25m² and should not be on any frontage facing the Academic Core.
- Signage lighting is to be arranged and maintained so that the light source is not directly visible from a public right-of-way or adjacent property.
- As part of the detailed proposal submission, a plan is to be submitted for approval by Macquarie University showing the location of the proposed signage and detailing dimensions, proposed colour, material, and method of illumination.



4. BUILT FORM

4.8 SUSTAINABILITY

Macquarie University is committed to incorporating sustainability into its actions and practices as part of its responsibility to the community and the environment, as well as promoting a healthy workplace and campus for staff and students.

New development within the campus is required to:

- Maintain, respect and restore biodiversity
- Create quality, comfortable, healthy and safe environments
- Ensure responsible resource use (especially non-renewable resources)
- Explore energy collection, energy conservation and waste re-use
- Consider adaptation, recycling, and deconstruction of buildings and materials
- Minimise pollution and environmental impacts
- Balance capital, efficiency and building lifecycle costs.

The Statement of Commitments in the Concept Plan approval identifies several key conditions to be met by each development:

- Commercial development on the site shall be capable of achieving the following targets:
 - Buildings should achieve a minimum 4-star Green Star rating.
 - Buildings should achieve a minimum 4.5-star NABERS rating.
 - Retail development will comply with any reasonable future rating tool provided by the Australian Greenhouse Rating Scheme.
 - Each development is to provide measures to capture, retain, and minimise litter, oil, sediment, nutrients, and pollutants prior to stormwater runoff discharge to the receiving creeks.

All campus development will consider the University's Sustainability Guidelines.



4.9 LOT LANDSCAPING

The guidelines seek to ensure that planting within development lots enhances the quality of the private domain and is consistent with and contributes to the landscape quality of the public domain.

Visual extension of the public domain landscaping through to the private domain is encouraged.

A series of requirements have been established for on-site planting and landscaping:

- Landscape within the lots must complement the public domain character through the selection of plant species, materials and finishes.
- All development sites must be suitably landscaped and contribute towards the overall character and quality of the precinct.
- The landscape is to be maintained to a high level, including the proper pruning, weeding, removal of litter, fertilisation and replacement of plants to ensure that the intended character and quality is retained.
- All landscape materials and finishes shall be selected with consideration to the whole of life costs, maintenance requirements and longevity.
- Landscaping is to be designed to enhance water quality and conservation. Particular attention shall be given to the prevention of nutrients entering any water body via run-off or ground water.
- No landscaping will be permitted, which in any way endangers health or public safety by creating a traffic or fire hazard, obstructing vision, or which is detrimental to the use of surrounding private property or the public domain.
- Landscaping is to be completed prior to building occupation.
- A landscaping plan prepared by a suitably qualified landscape architect must be prepared for the development of each lot and describe:
 - Landscape design rationale and concept.
 - Location, extent and type of all materials and finishes including all hardscape, softscape and feature elements.
 - Plant species, numbers, installation, mature sizes and positions of all trees, shrubs, ground covers and turf areas.
 - Finished levels.
 - Irrigation system specifications.
 - Location and type of all structures and amenities within the landscape.
- Where there is planting on slabs, the structural load must accommodate a minimum of 800mm depth for tree planting, 450mm depth for shrub and 150mm for ground cover planting and turf.
- A maintenance schedule is to be prepared and implemented for all developments ensuring that the intended character and quality is retained. The plan should detail the schedule and method of pruning, weed and litter removal, fertilization, plant replacement and irrigation.







5

LOT CONTROLS

5. LOT CONTROLS

5.1 LEGACY BUILDING LOTS

A number of buildings across the campus have been identified as Legacy Buildings. These are recent buildings that are unlikely to be redeveloped in the short term or buildings that may have architectural or cultural importance to the university. No specific controls have been developed for these lots.

These buildings may be upgraded or refurbished over time or may be demolished and redeveloped after review and justification.

Depending on the extent of the alterations and additions proposed, these buildings may require a Development Application or a Review of Environmental Factors (REF).

Some of the legacy buildings are located on lots that have space for new development. These lots, A20, A23 and B07, have design controls outlined in this section.



FIGURE 33: LEGACY BUILDING LOTS

5. LOT CONTROLS

5.2 INDIVIDUAL LOTS

Indicative controls have been proposed for the individual lots, supporting the key principles and objectives for each. The controls are intended to be flexible to allow and encourage design excellence and innovation.

5.2.1 Precinct A

Precinct A, the Academic Core, is located in the centre of the campus and adjoins Talavera Road. The precinct contains several legacy building lots (shown in grey).

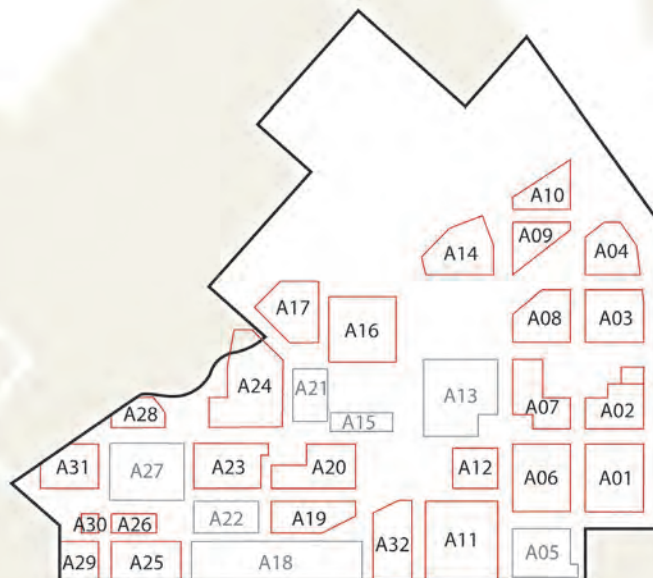


FIGURE 34: LOTS WITHIN PRECINCT A

5. LOT CONTROLS

LOT A01

Architectural Principles

Lot A01 is located on the eastern end of Wally's Walk at the junction of Research Park Drive. The lot has been identified for car parking along with other uses.

Built Form

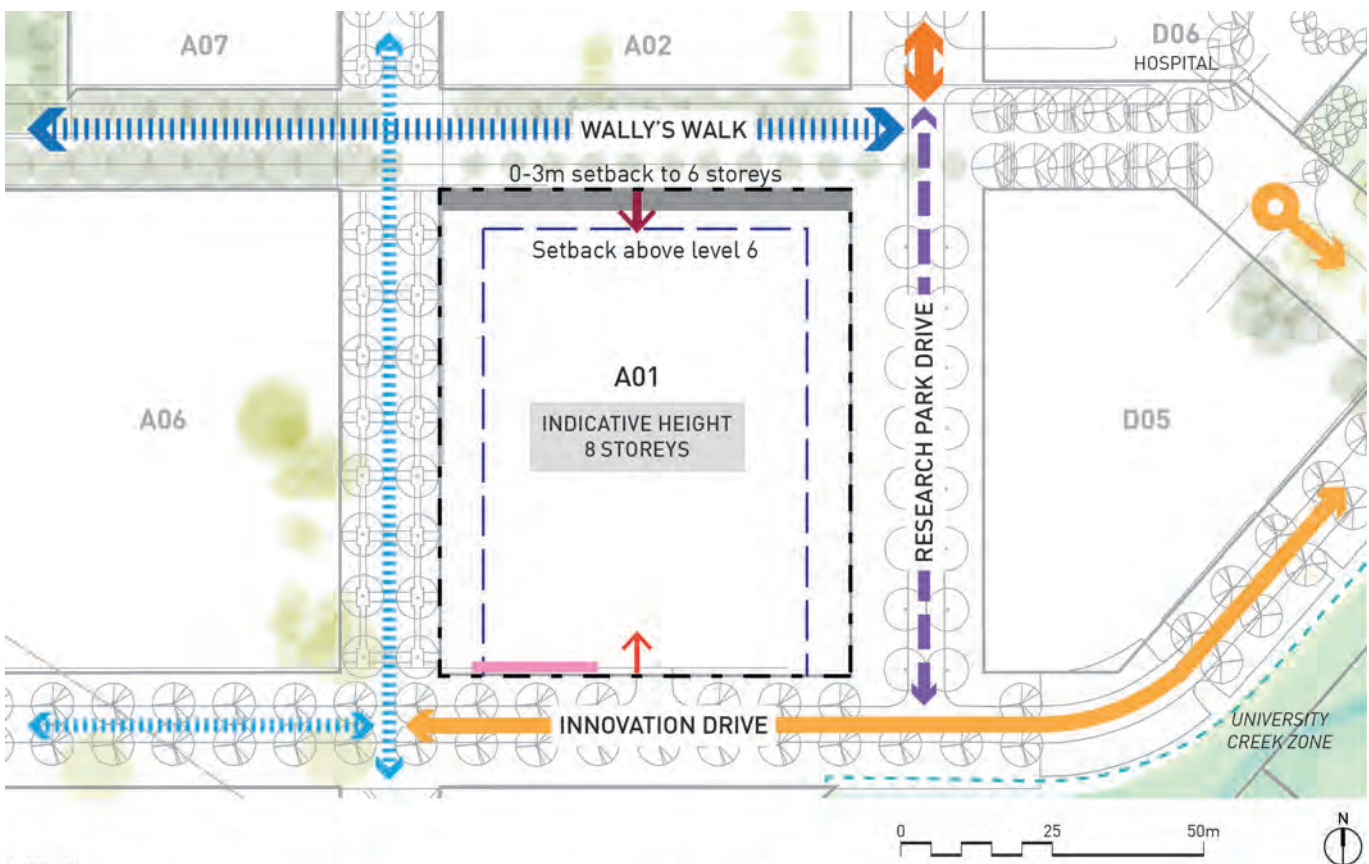
- Indicative height 8 storeys.
- Reinforce street wall to a recommended height of 6 storeys along the northern frontage to Wally's Walk.

Access

- Primary address located indicatively on Wally's Walk along the northern boundary.
- Secondary address located indicatively on Innovation Road along the southern boundary.
- Service access from Innovation Road along the southern frontage.

Landscape

- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Wally's Walk and University Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A02

Architectural Principles

Lot A02 is located on the eastern end of Wally's Walk at the junction of Research Park Drive. The lot is located opposite Macquarie University Hospital. A substation is located directly to the north of the lot. The lot is abutting the Frank Mercer Biological Sciences Garden.

Built Form

- Indicative height 8 storeys.
- Reinforce street wall to a recommended height of 6 storeys along the southern frontage

to Wally's Walk as well as the Frank Mercer Biological Sciences Garden.

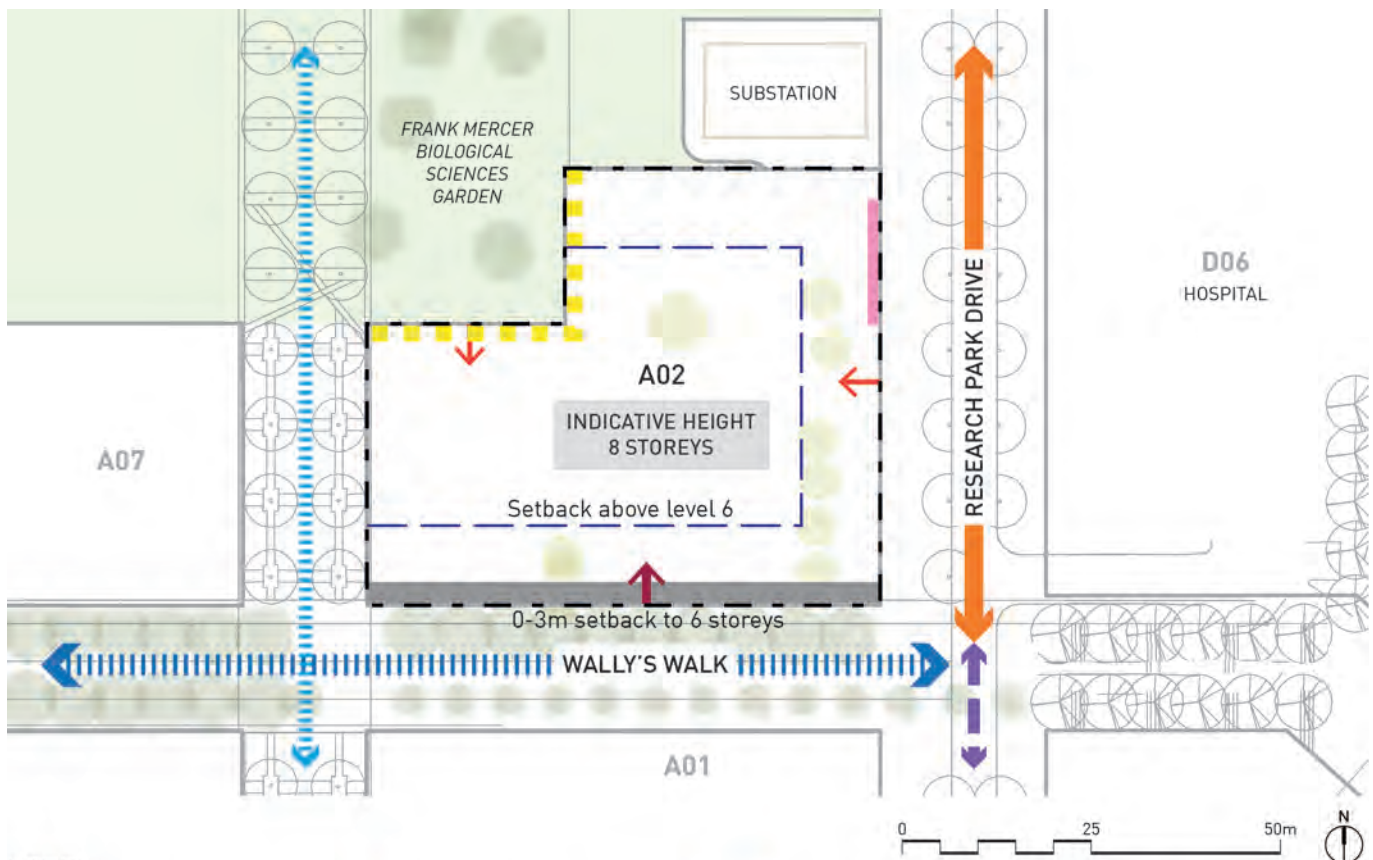
Access

- Primary address located indicatively on Wally's Walk along the southern boundary.
- Secondary address located indicatively on Research Park Drive along the eastern boundary and from the Frank Mercer Biological Sciences Garden.

- Service access from Research Park Drive along the eastern frontage.

Landscape

- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Frank Mercer Biological Sciences Garden, Wally's Walk and Research Park Drive landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A03

Architectural Principles

Lot A03 is located north-east of the Academic Core near the Talavera Road Gateway and opposite the Australian School of Advanced Medicine (ASAM).

Built Form

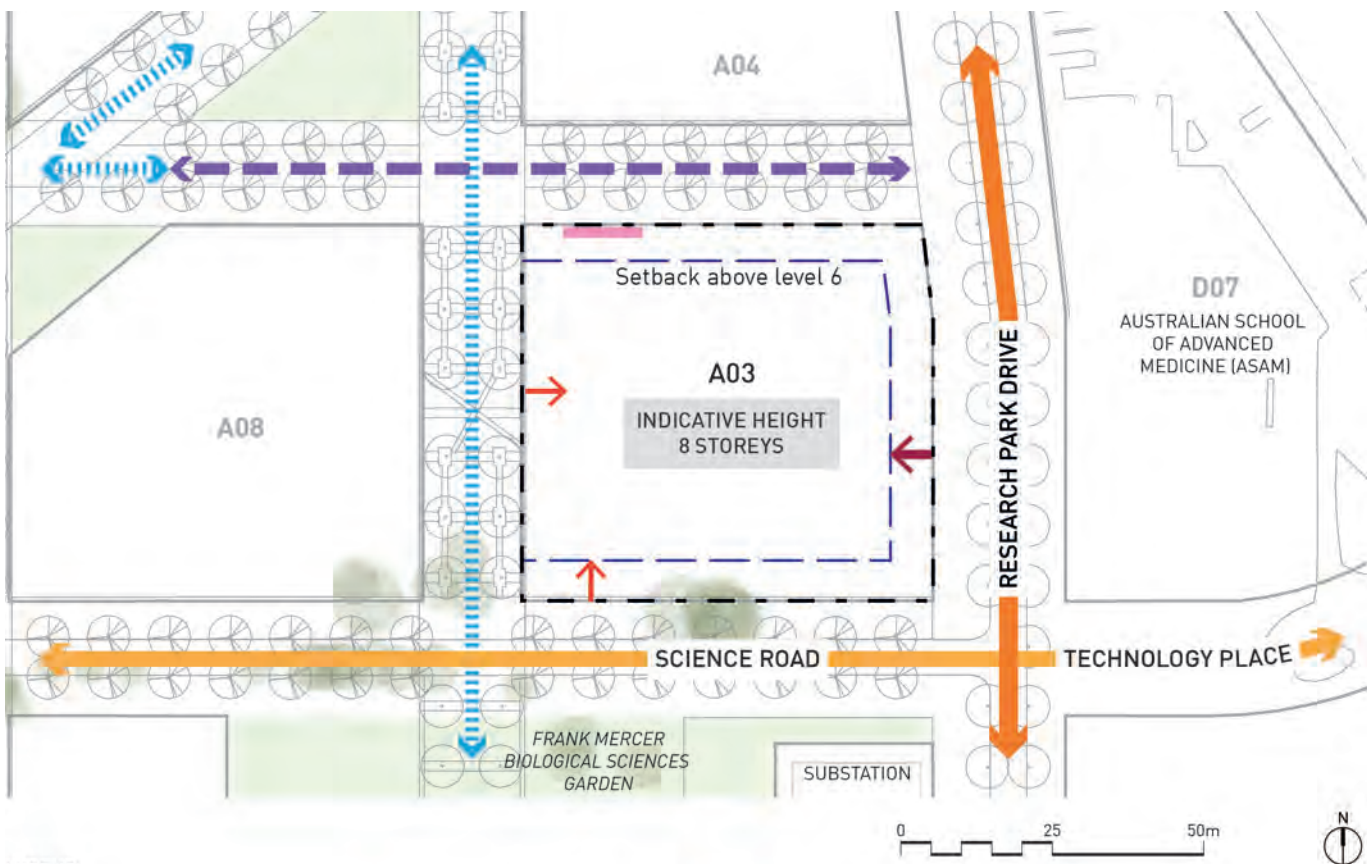
- Indicative height 8 storeys.
- Setback above level 6.

Access

- Primary address located indicatively on Research Park Drive along the eastern frontage.
- Secondary address located indicatively on the pedestrian route along the western frontage and/or along Science Road.
- Service access from the shared way along the northern frontage.

Landscape

- Review and retain significant trees if possible.
- Refer to the Research Park Drive and Frank Mercer Biological Sciences Garden landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A04

Architectural Principles

Lot A04 is located in the north-east corner of the campus at the Talavera Road Gateway and adjacent to the Macquarie University Hospital. This gateway location is suitable for a taller building.

Built Form

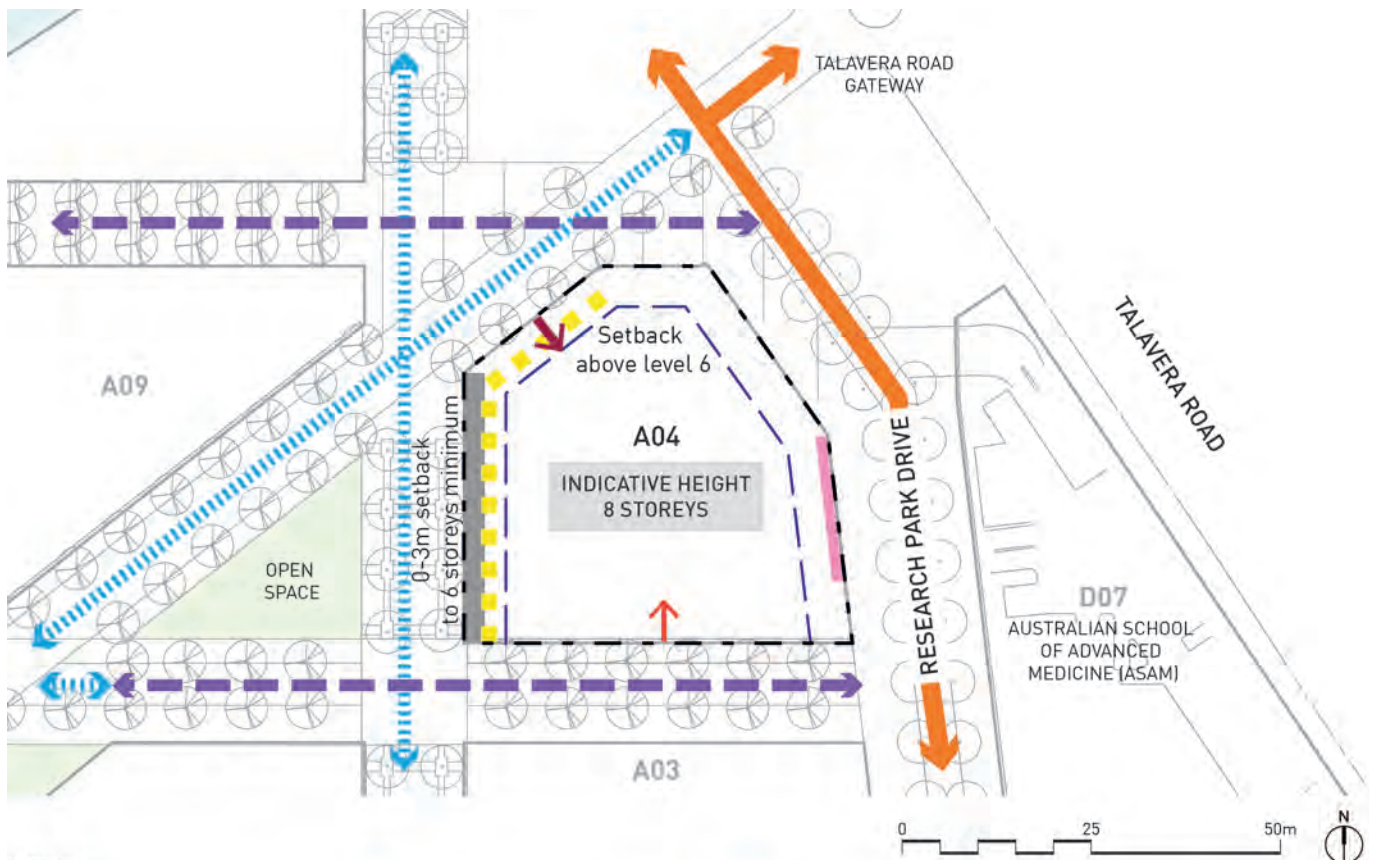
- Indicative height 8 storeys.
- Reinforce street wall along the western frontage to a recommended height of 6 storeys.
- Building to address the open space adjacent to the west.

Access

- Primary address located indicatively on the pedestrian route near the Talavera Road Gateway.
- Secondary address located indicatively on the pedestrian route along the southern frontage.
- Service access from Research Park Drive along the eastern frontage.

Landscape

- Relationship to open space to the west.
- Refer to the Research Park Drive and Talavera Road Gateway landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A06

Architectural Principles

Lot A06 is located on the corner of Wally's Walk and Eastern Road, east of the Academic Core. The lot is situated above the rail corridor.

Built Form

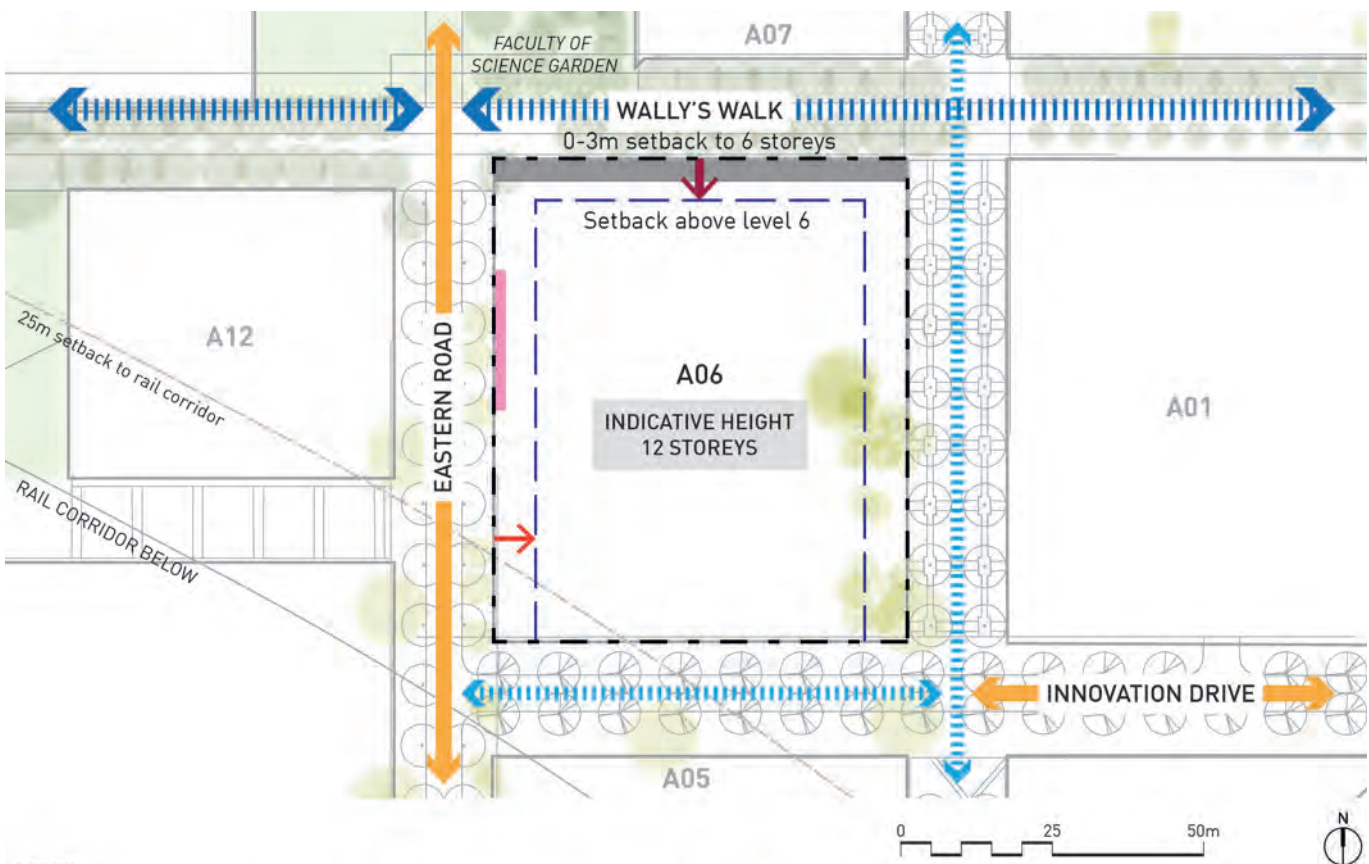
- Indicative height 12 storeys.
- Reinforce street wall along northern frontage on Wally's Walk to a recommended height of 6 storeys.
- Built form to address Wally's Walk.

Access

- Primary address located indicatively on Wally's Walk along the northern frontage.
- Secondary address located indicatively on Eastern Road along the western frontage.
- Service access from Eastern Road along the western frontage.

Landscape

- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Wally's Walk and Faculty of Science Garden and Wally's Walk landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A07

Architectural Principles

Lot A07 is located along Wally's Walk in the east of the Academic Core. It is adjacent to the Frank Mercer Biological Sciences Garden in the north-east corner and the Faculty of Science Garden along Wally's Walk in the south-west corner.

Built Form

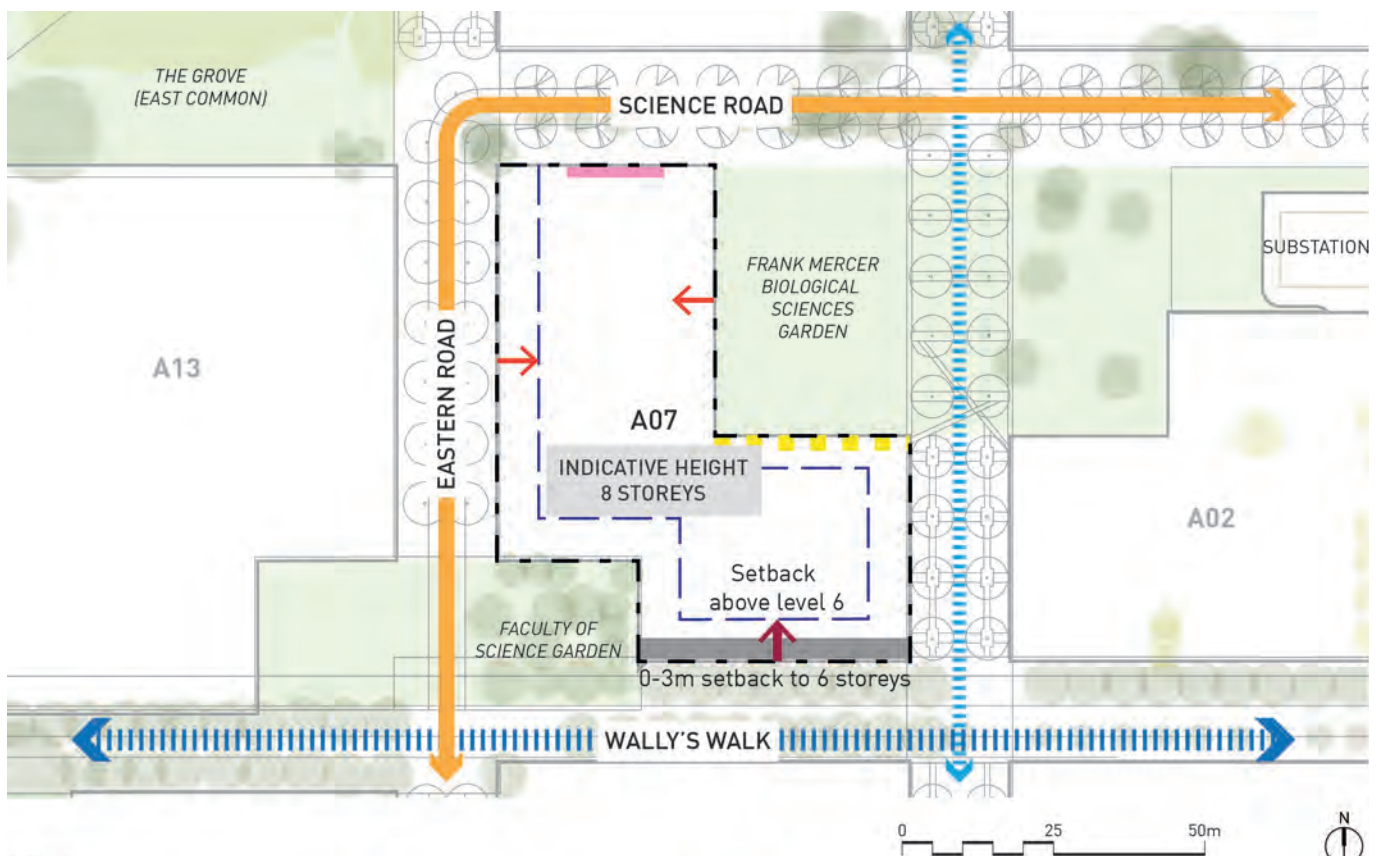
- Indicative height 8 storeys.
- Reinforce street wall to an indicative height of 6 storeys along the southern frontage to Wally's Walk.

Access

- Primary address located indicatively on Wally's Walk along the southern frontage.
- Secondary addresses located indicatively on Eastern Road along the eastern frontage and from the Frank Mercer Biological Sciences Garden.
- Service access from Technology Place along the northern frontage.

Landscape

- Establish a relationship to the Frank Mercer Biological Sciences Garden as well as the Faculty of Science Garden.
- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Frank Mercer Biological Sciences Garden, Faculty of Science Garden and Wally's Walk landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A08

Architectural Principles

Lot A08 is adjacent to The Grove (East Common) open space on the corner of Technology Place and Eastern Road.

Built Form

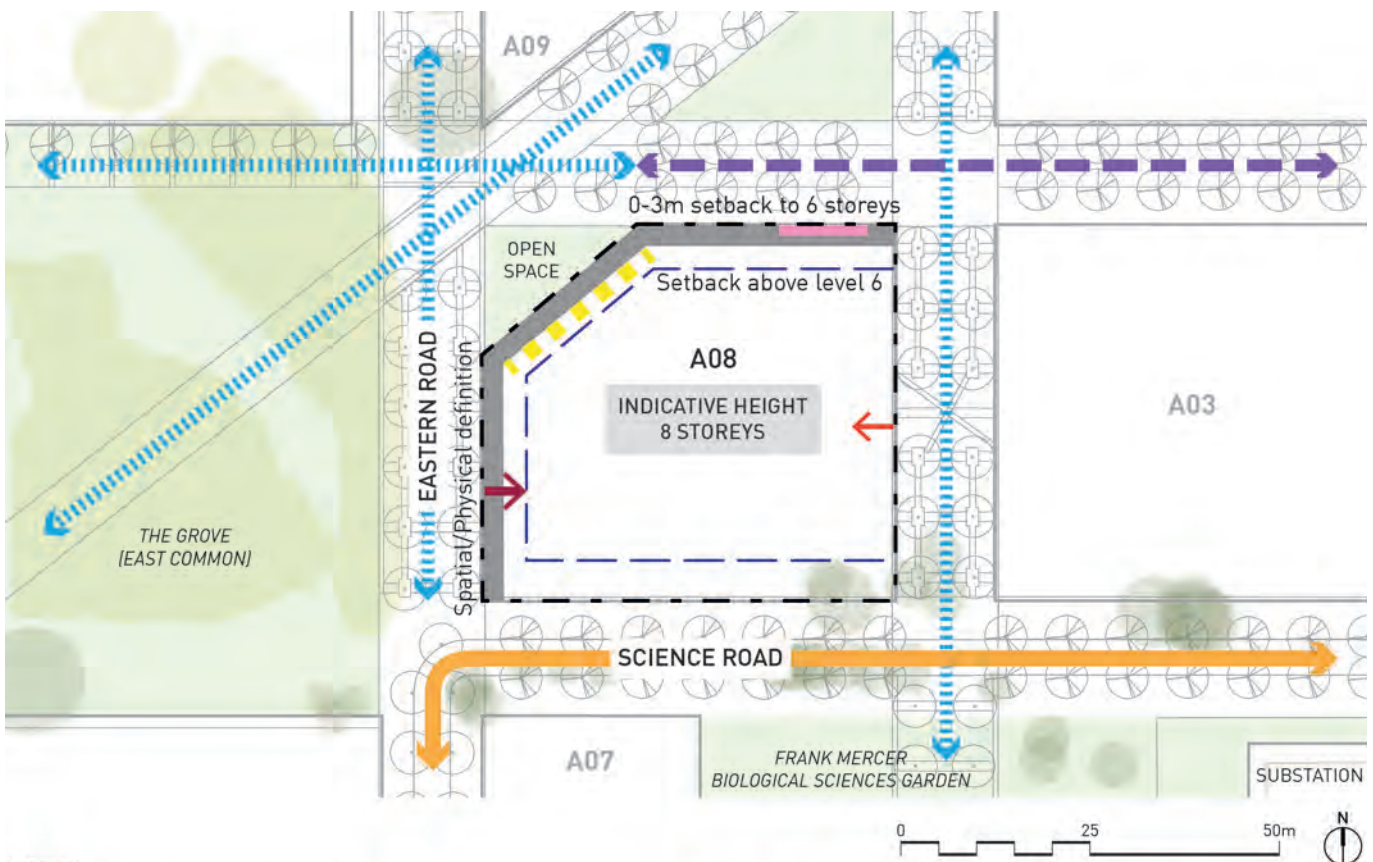
- Indicative height 8 storeys.
- Reinforce street wall along the western, north-western and northern frontages to a recommended height of 6 storeys.
- Building to address the Eastern Road primary frontage and The Grove (East Common) opposite.

Access

- Primary address located indicatively on Eastern Road along the western frontage from The Grove (East Common).
- Secondary address located indicatively on the pedestrian route along the eastern frontage.
- Service access from the shared way along the northern frontage.

Landscape

- Landscape forecourt to relate with walkways and The Grove (East Common).
- Review and retain significant trees if possible.
- Refer to The Grove (East Common) and Frank Mercer Biological Sciences Garden landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A09

Architectural Principles

Lot A09 is located in the north-east corner of the Academic Core along the diagonal footpath from Talavera Road Gateway to The Grove (East Common).

Built Form

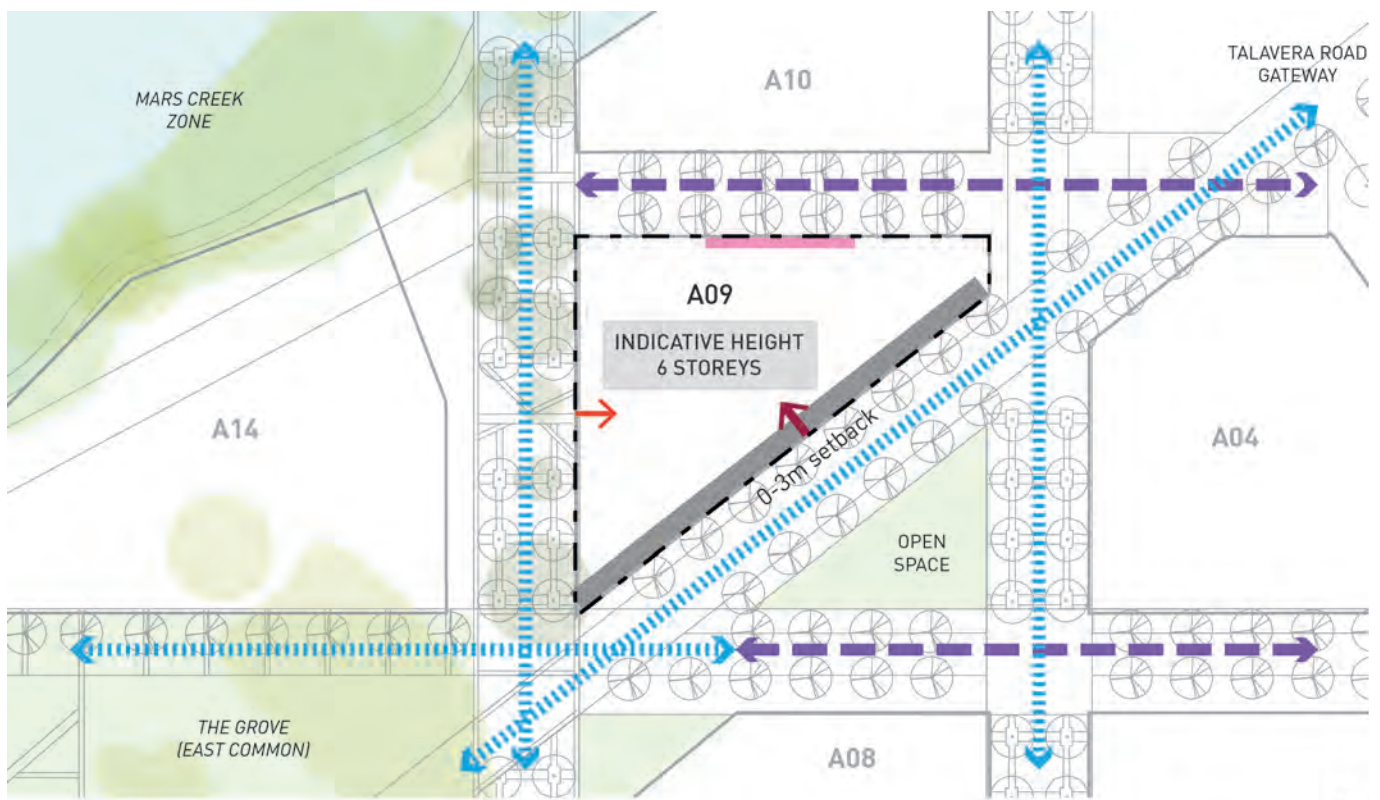
- Indicative height 6 storeys.
- Reinforce street walls facing the diagonal pedestrian route from Talavera Road Gateway to The Grove (East Common).

Access

- Primary address located indicatively on the diagonal pedestrian route along the south-east frontage from the open space.
- Secondary address located indicatively on the pedestrian route along the western frontage.
- Service access from the shared way along the northern frontage.

Landscape

- Significant trees on pedestrian route along western frontage to be retained.
- Review and retain significant trees if possible.
- Refer to the Talavera Road Gateway landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A10

Architectural Principles

Lot A10 is located in the north-east corner of the Academic Core at the Talavera Road Gateway and Mars Creek.

Built Form

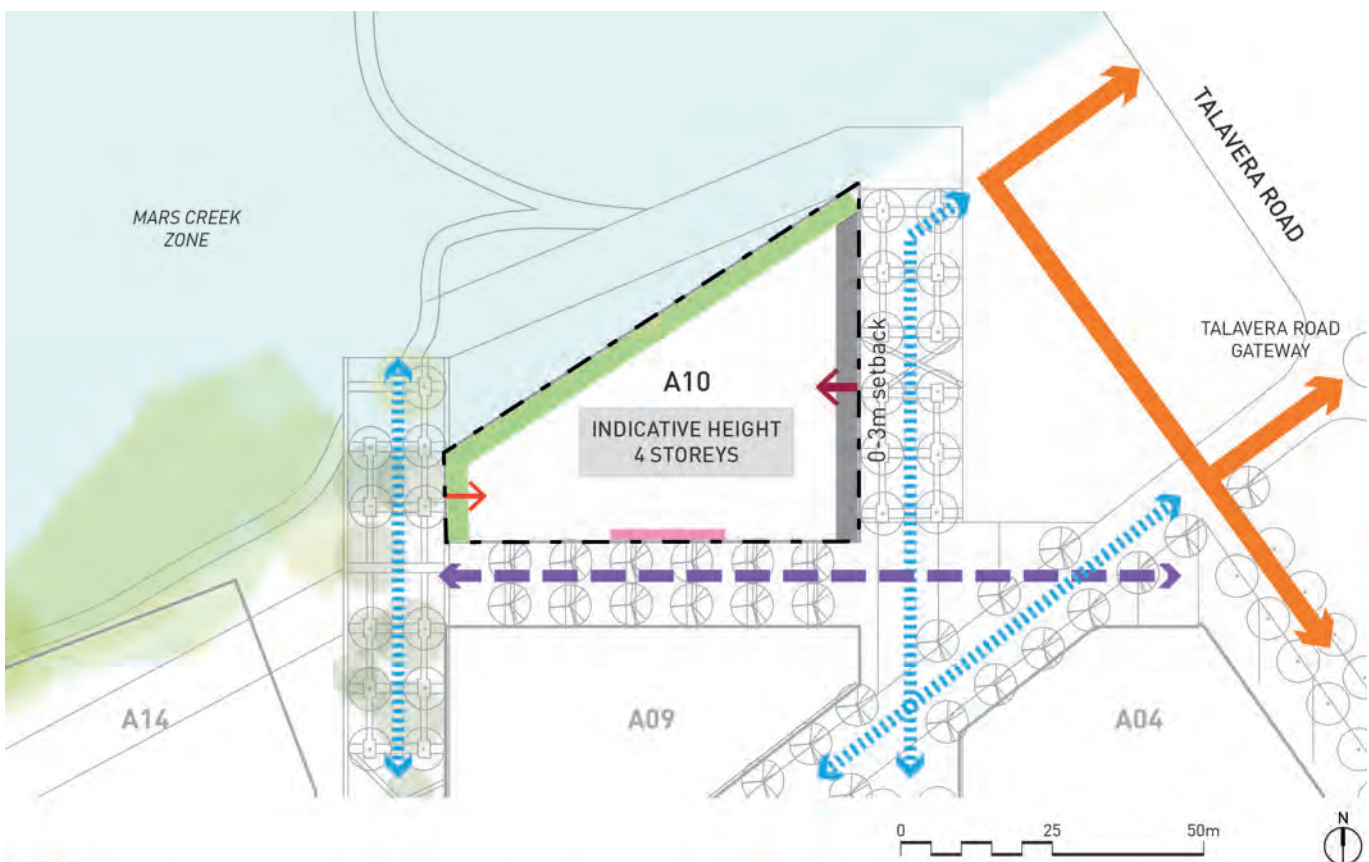
- Indicative height 4 storeys.
- Reinforce street walls on eastern boundary addressing the Talavera Road Gateway.
- Building to address Mars Creek.

Access

- Primary address located indicatively on the pedestrian route along the eastern frontage.
- Secondary address located indicatively on the pedestrian route along the western frontage.
- Service access from the shared way along the southern frontage.

Landscape

- Interface with Mars Creek.
- Review and retain significant trees if possible.
- Refer to the Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

LOT A11

Architectural Principles

Lot A11 is a large lot located on the corner of the primary pedestrian routes Sir Christopher Ondaatje Avenue and Macquarie Walk. The lot is situated above the rail corridor.

Built Form

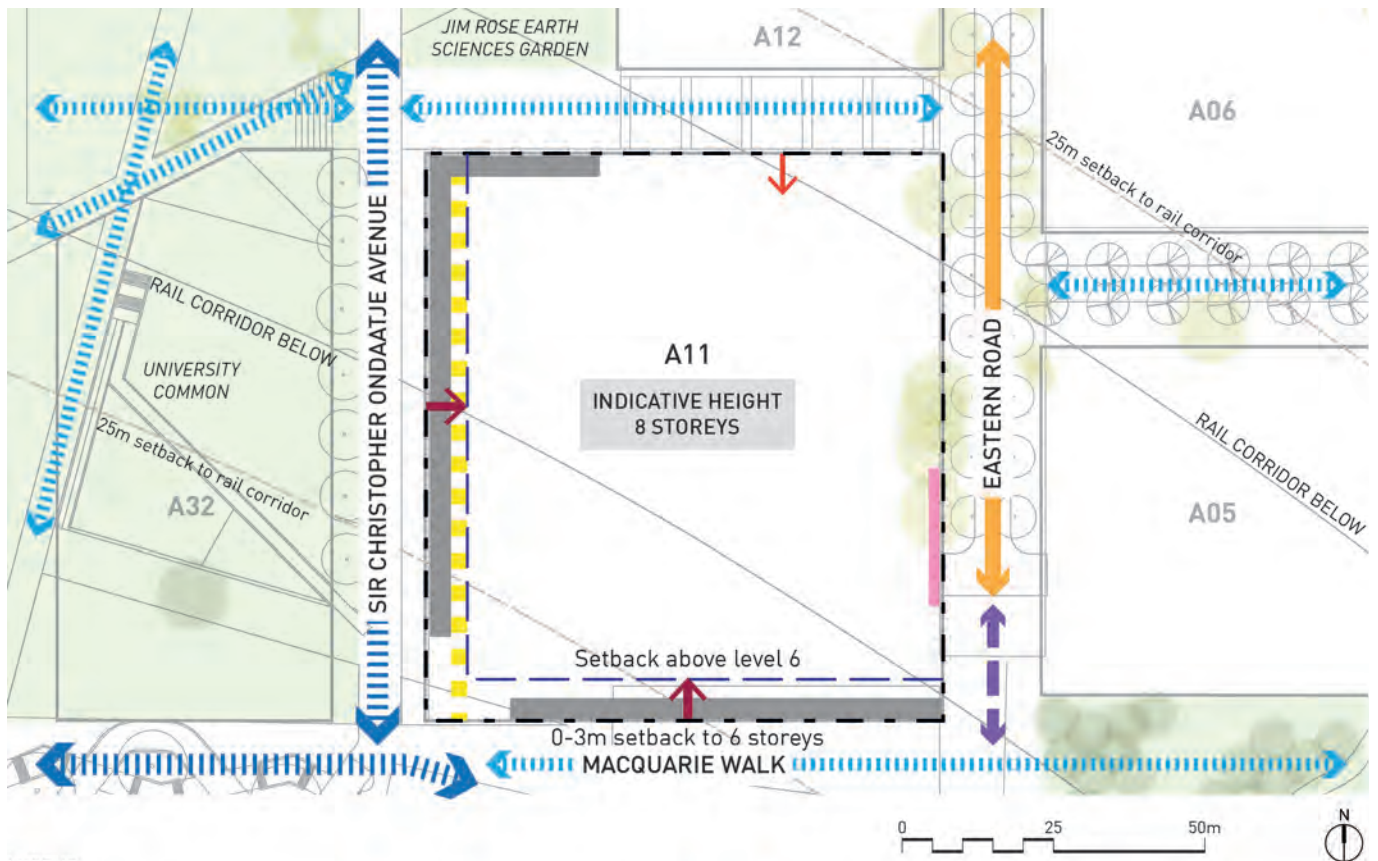
- Indicative height 8 storeys.
- Reinforce street wall along Sir Christopher Ondaatje Avenue and Macquarie Walk.

Access

- Two possible primary addresses located indicatively on Sir Christopher Ondaatje Avenue along the southern frontage and/ or Macquarie Walk along the western frontage.
- Secondary address located indicatively on the pedestrian route along the northern frontage.
- Service access from Eastern Road along the eastern frontage.

Landscape

- Create a landscaped interface with Sir Christopher Ondaatje Avenue and Macquarie Walk.
- Consider interface with Jim Rose Earth Sciences Garden.
- Review and retain significant trees if possible.
- Refer to the Sir Christopher Ondaatje Avenue, Macquarie Walk, University Common and Jim Rose Earth Sciences Garden landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A12

Architectural Principles

Lot A12 is located in the heart of the campus at the intersection of primary pedestrian routes Wally's Walk and Sir Christopher Ondaatje Avenue. The Jim Rose Earth Sciences Garden is located immediately to the west of the lot. The lot is situated above the rail corridor.

Built Form

- Indicative height 6 storeys.
- Reinforce street wall on the northern frontage to Wally's Walk

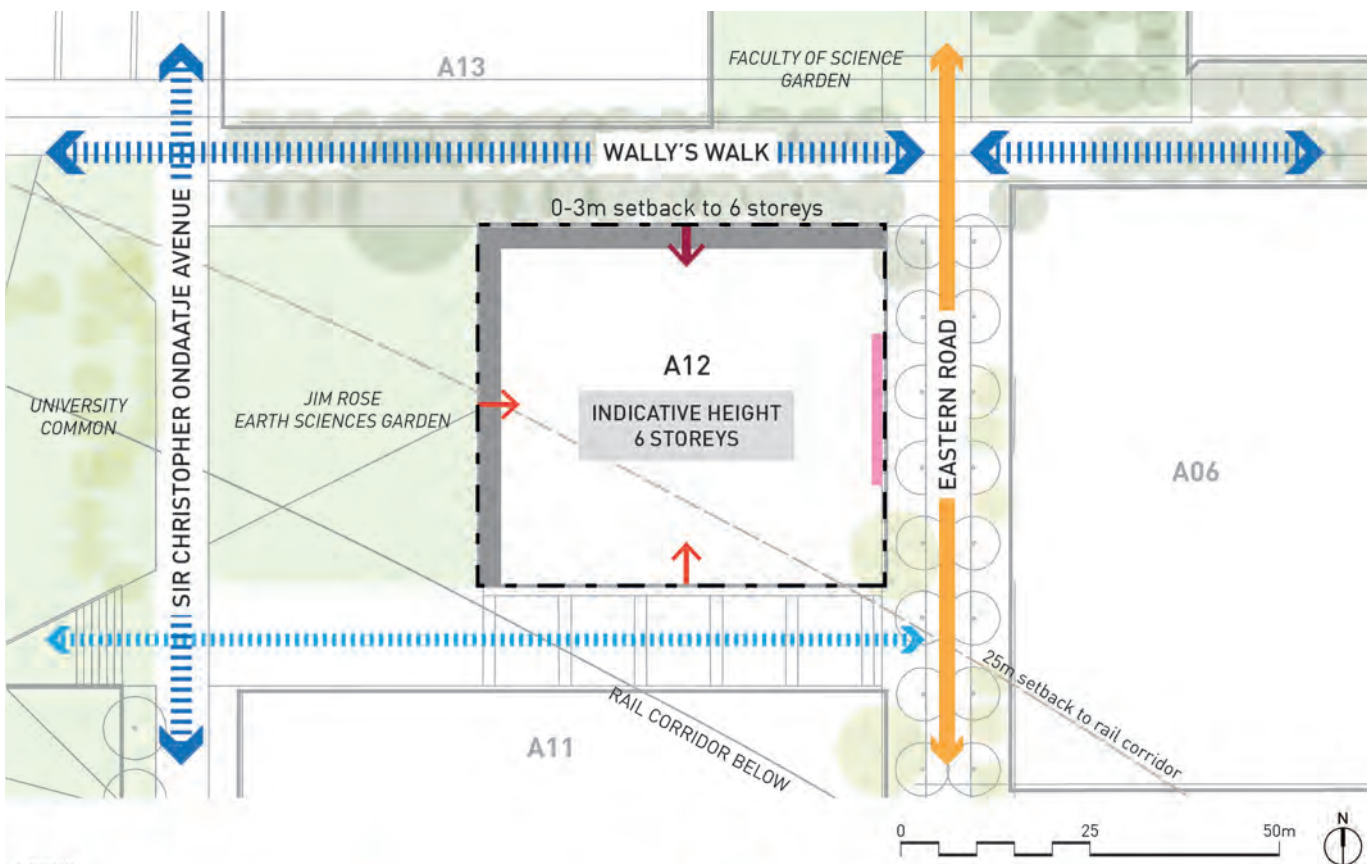
and the western frontage to the Jim Rose Earth Sciences Garden.

Access

- Primary address located indicatively on Wally's Walk along the northern frontage.
- Secondary addresses located indicatively from the Jim Rose Earth Sciences Garden along the western frontage and/or the pedestrian route along the southern frontage.
- Service access from Eastern Road along the eastern frontage.

Landscape

- Create interface with the Jim Rose Earth Sciences Garden.
- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Wally's Walk, Sir Christopher Ondaatje Avenue, Jim Rose Earth Sciences Garden and Faculty of Science Garden landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A14

Architectural Principles

Lot A14 is located on the northern end of the Sir Christopher Ondaatje Avenue. The lot is on the key north-to-south pedestrian route through the Academic Core.

Built Form

- Indicative height 2 storeys.
- Building to address Mars Creek.
- Reinforce street wall on southern frontage facing The Grove (East Common).

- Overshadowing control on the southern frontage. Height to be determined to minimise shadows on northern frontage of The Grove (East Common) between 11am and 2pm in mid-winter.

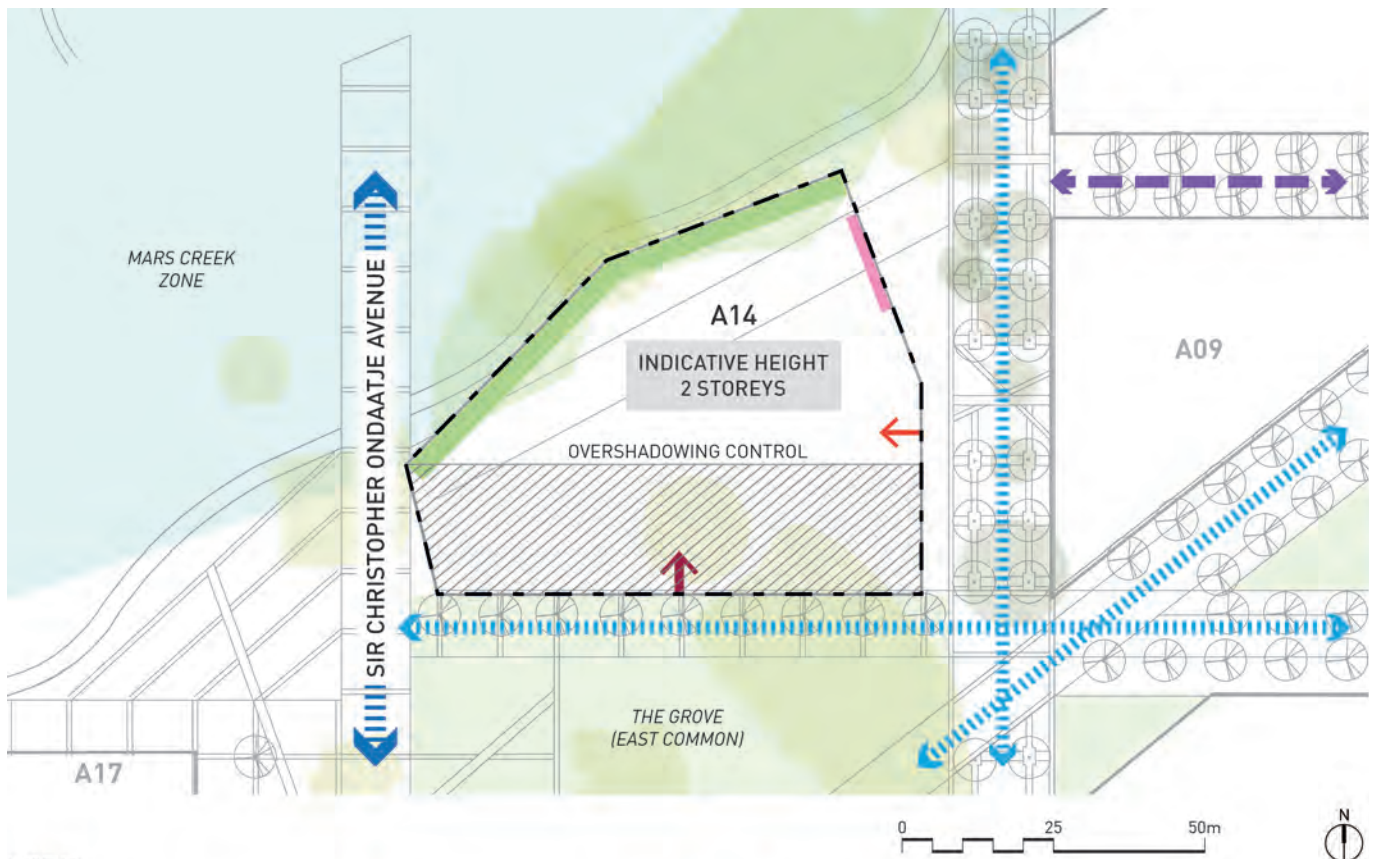
Access

- Primary address located indicatively on The Grove (East Common) along the southern frontage.
- Secondary address located indicatively on pedestrian route along the eastern frontage.

- Service access from the shared way along the north-east frontage.

Landscape

- Interface with Mars Creek.
- Interface with The Grove (East Common).
- Review and retain significant trees if possible.
- Refer to the The Grove (East Common), Sir Christopher Ondaatje Avenue and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A16 AND 17

Architectural Principles

Lots A16 and A17 are located in the far north of the Academic Core. These lots are bounded by Gymnasium Road, Mars Creek and Sir Christopher Ondaatje Avenue. The lot adjacency requires consideration of joint servicing due to limited vehicle access to Lot A17 via Gymnasium Road.

Built Form

- Indicative height 4 (A16) and 10 (A17) storeys.
- Reinforce street walls to

Gymnasium Road Gateway and Sir Christopher Ondaatje Avenue.

- Buildings to address the Mars Creek zone.
- Reinforce built edge to Central Courtyard

Access

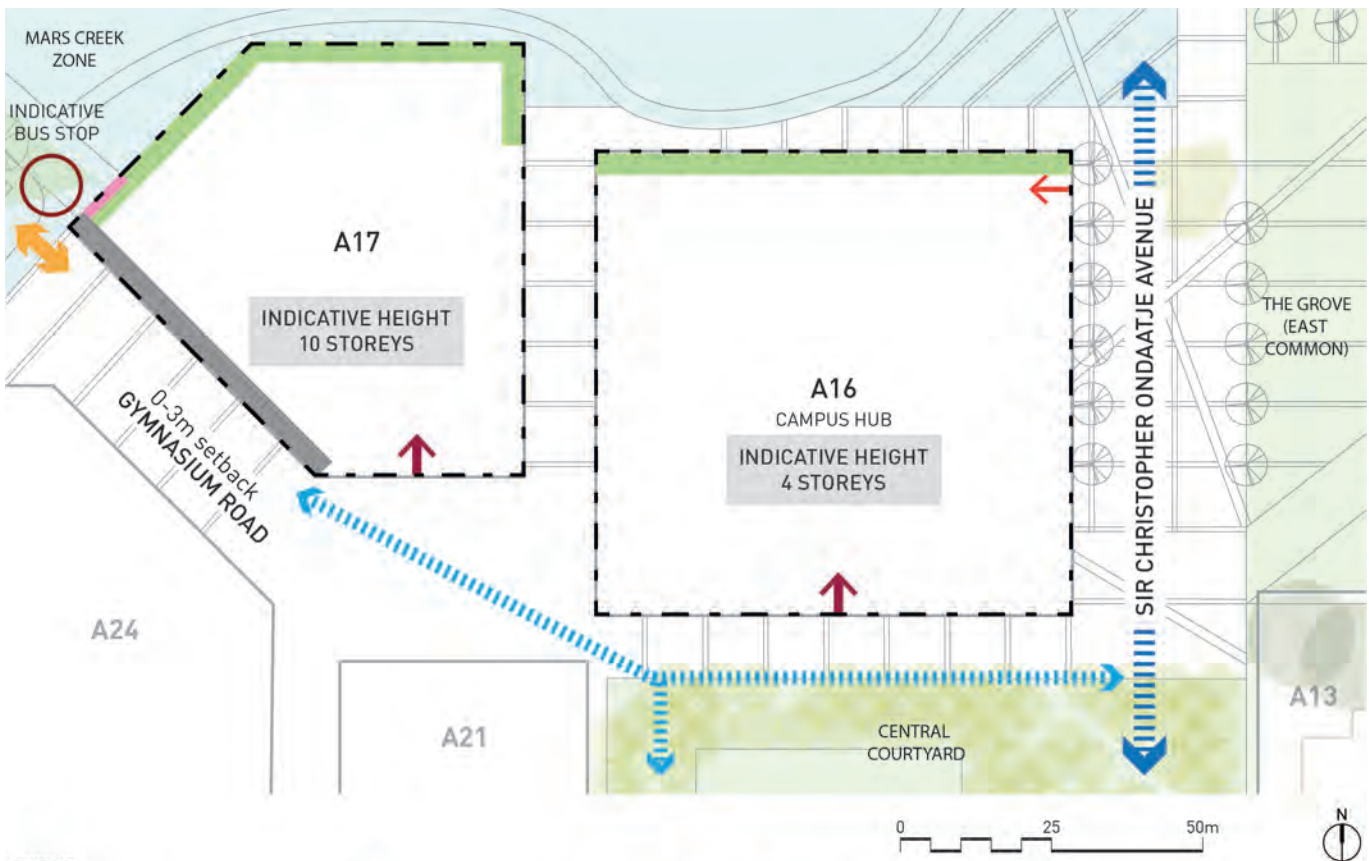
- Primary address located indicatively on Gymnasium Road along the diagonal pedestrian route and south-west frontage from the Central Courtyard.
- Secondary address located indicatively on Sir Christopher

Ondaatje Avenue along the eastern frontage.

- Service access from Gymnasium Road along the western frontage.

Landscape

- Interface with Sir Christopher Ondaatje Avenue.
- Interface with Mars Creek.
- Review and retain significant trees if possible.
- Refer to the Central Courtyard, The Grove (East Common), Sir Christopher Ondaatje Avenue and Mars Creek landscape guidelines.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A19

Architectural Principles

Lot A19 is centrally positioned in the Academic Core, tucked between the new library and the Law School building (C5C), on the western side of University Common and Central Avenue. Building C3A is possibly to be retained. The lot is situated above the rail corridor.

Built Form

- Indicative height 8 storeys.
- Reinforce street wall along southern, eastern and the south-east diagonal frontages.

- Setback above level 6.
- Overshadowing control on the south-east corner. Height to be determined to minimise shadows on south-west corner of University Common between 11am and 2pm in mid-winter.

Access

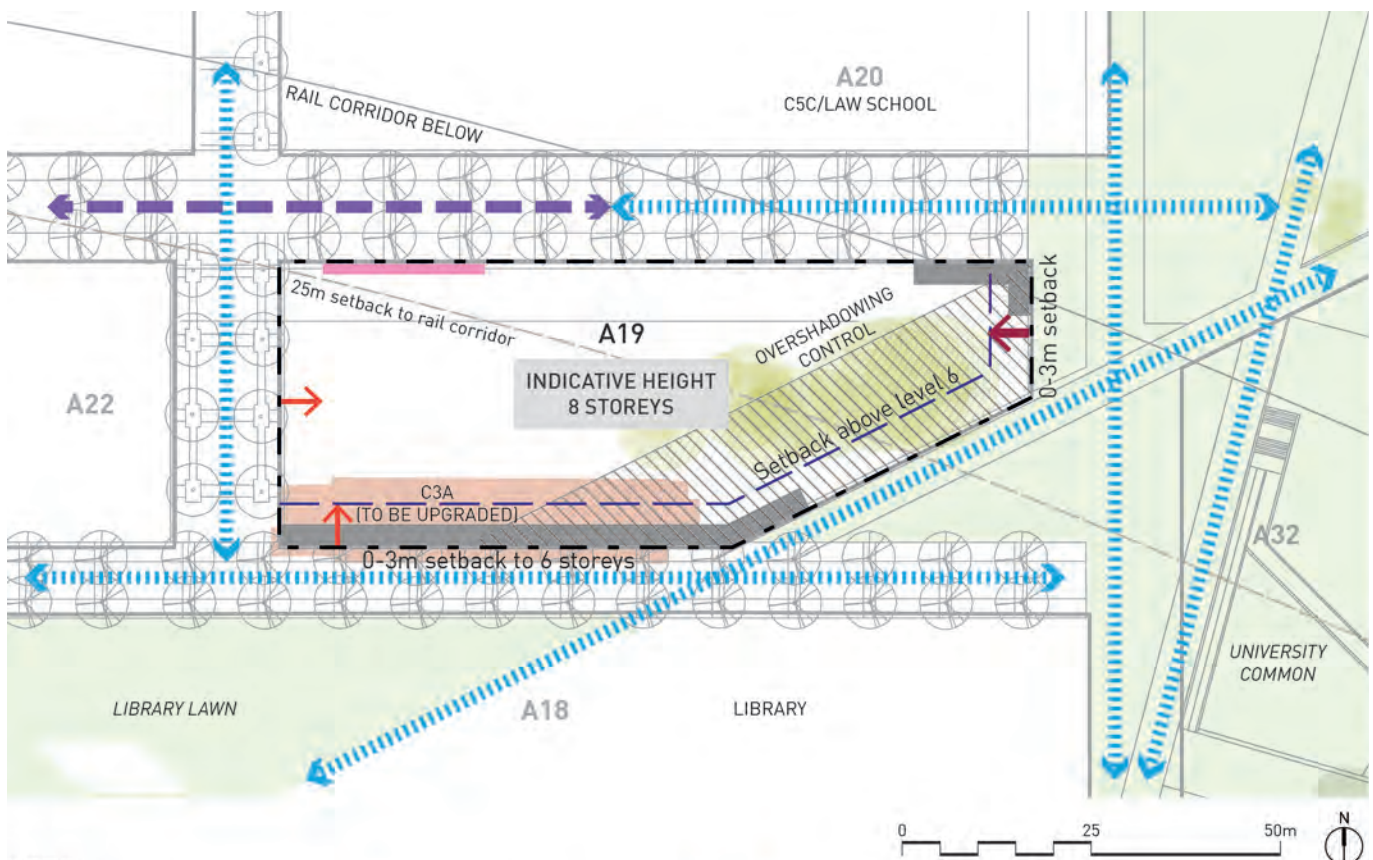
- Primary address located indicatively on pedestrian route along the eastern frontage.
- Possible secondary addresses located indicatively on pedestrian routes on the southern and

western frontages.

- Service access from the shared way along the northern frontage.

Landscape

- Interface with University Common and Library Lawn.
- Review and retain significant trees if possible.
- Refer to the University Common and Library Lawn landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A20

Architectural Principles

Lot A20 is centrally located within the Academic Core. The lot has an existing building to be retained. In the event it is redeveloped, the setback is moved in line with the adjacent lot A19. There is room for a new building on the western side of the lot. The lot is situated above the rail corridor.

Built Form

- Indicative height 8 storeys.
- Reinforce street wall on the north along Wally's Walk.
- Overshadowing control on the

eastern frontage. Height to be determined to minimise shadows on western frontage of University Common between 11am and 2pm in mid-winter.

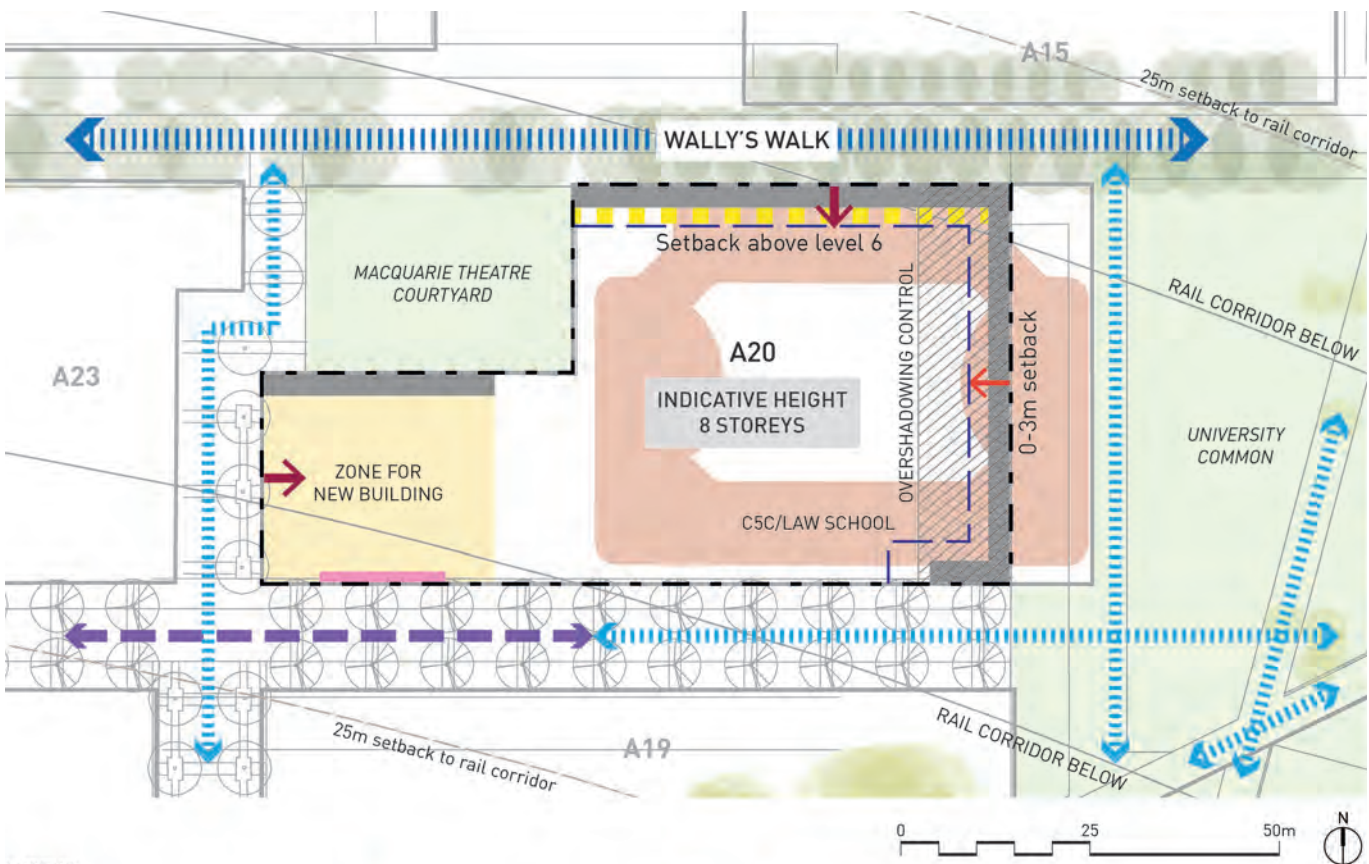
Access

- Primary addresses located indicatively on Wally's Walk and the pedestrian route along the western frontage.
- Secondary address located indicatively on the pedestrian route along the eastern frontage.
- Service access from the shared

way along the southern frontage.

Landscape

- Interface with Macquarie Theatre Courtyard and University Common.
- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Macquarie Theatre Courtyard, Wally's Walk and University Common landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A22

Architectural Principles

Lot A22 is located centrally within the Academic Core adjacent to Western Road and Western Road Park.

Built Form

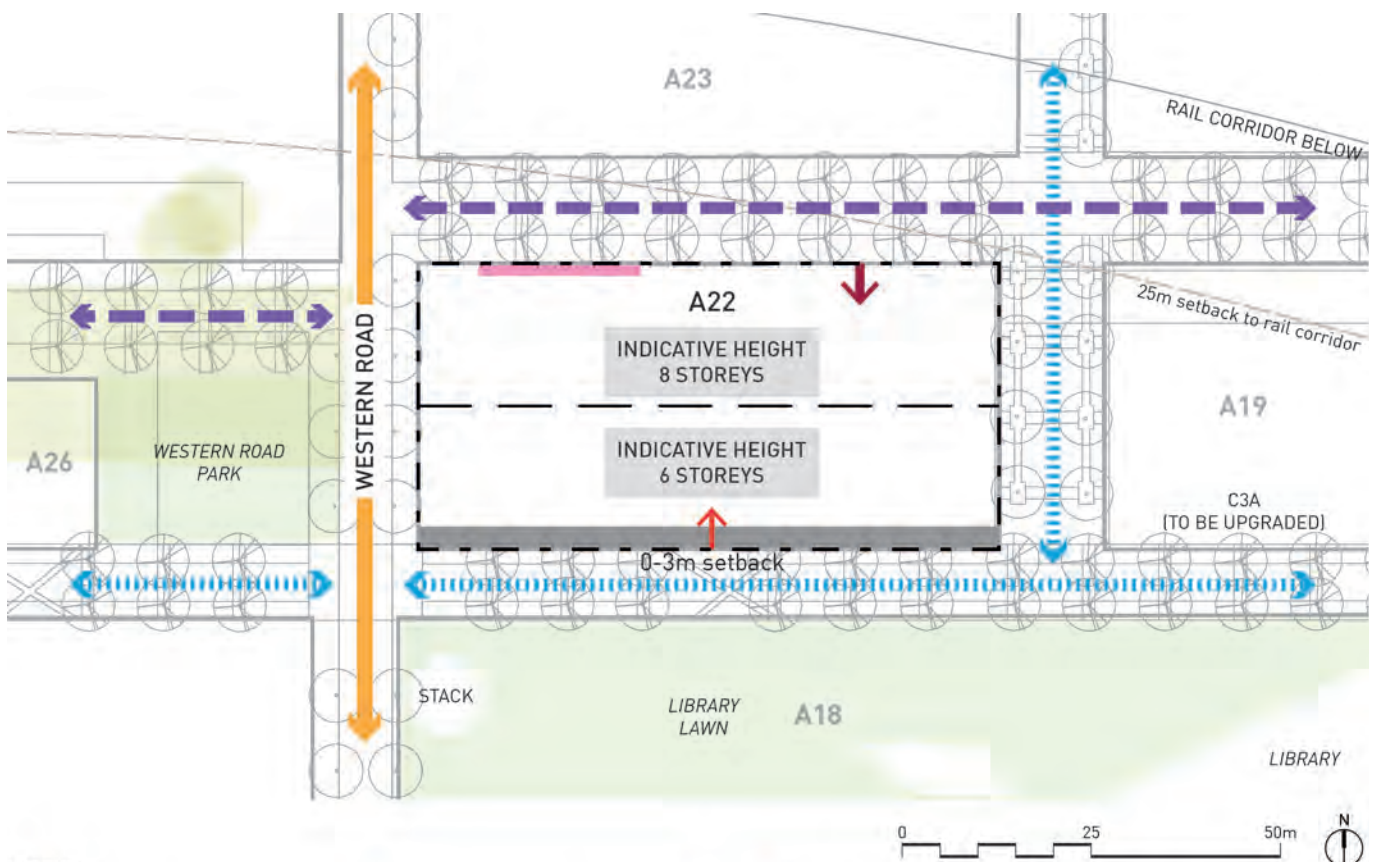
- Indicative height 8 storeys in northern section and 6 storeys in southern section of lot.

Access

- Primary address located indicatively on the shared way along the northern frontage.
- Secondary address located indicatively on the pedestrian route along the southern frontage.
- Service access from the shared way along the northern frontage.

Landscape

- Refer to the Western Road Park and Library Lawn landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A23

Architectural Principles

Lot A23 is located in the western portion of the Academic Core on the corner of Wally's Walk and Western Road. The lot has an existing building that will be retained. However, there is room for a new building on the western part of the lot. The lot is situated above the rail corridor.

Built Form

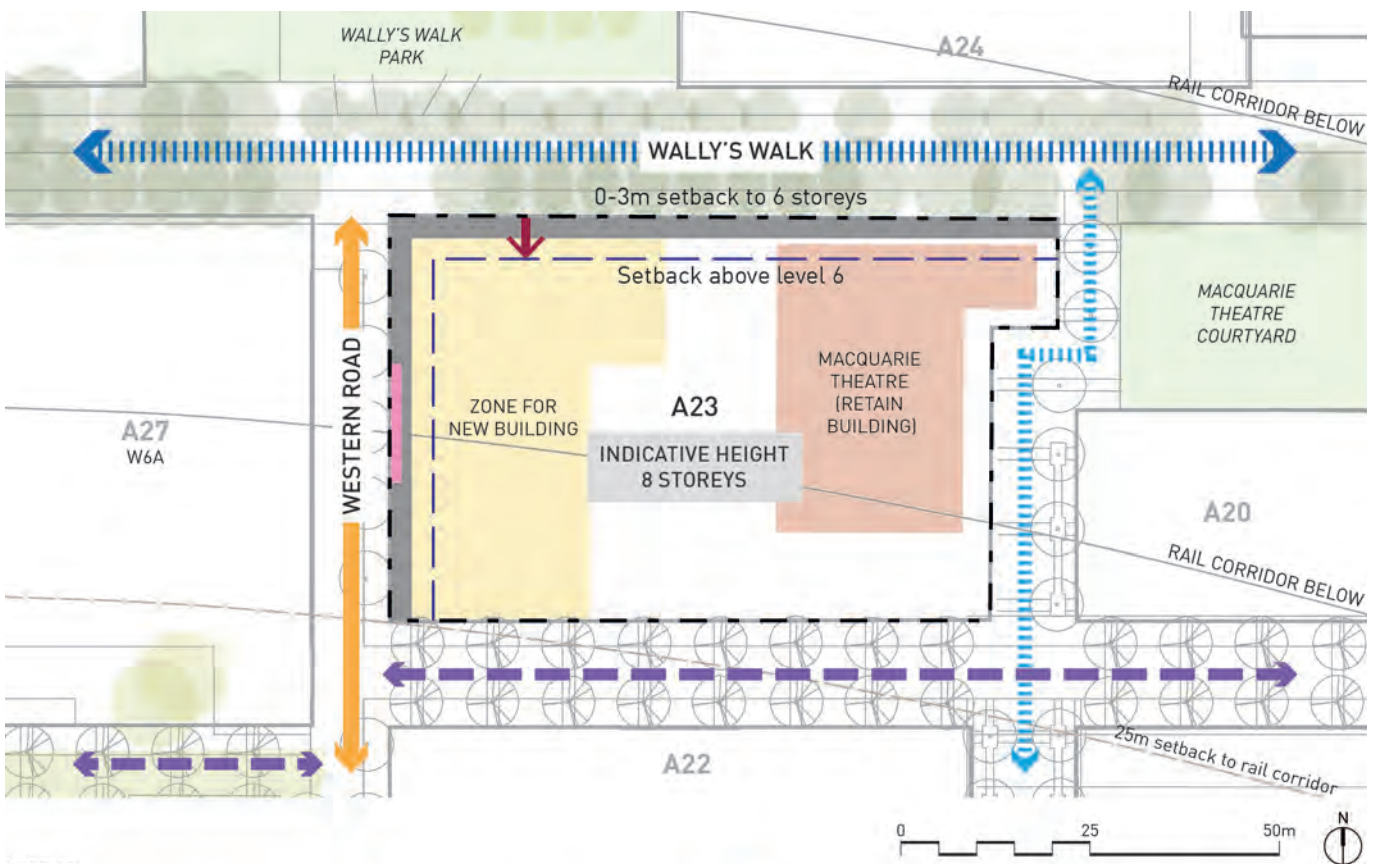
- Indicative height 8 storeys.
- Reinforce street wall along Wally's Walk and Western Road.
- Setback above level 6.

Access

- Primary address located indicatively on Wally's Walk on the northern frontage.
- Secondary address located indicatively on shared way along the southern frontage.
- Service access from Western Road along the western frontage.

Landscape

- Interface with Wally's Walk.
- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Wally's Walk, Wally's Walk Park and Macquarie Theatre Courtyard landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A24

Architectural Principles

Lot A24 is located on Wally's Walk in the north-west sector of the Academic Core. The lot is on top of the rail easement.

Built Form

- Indicative height 6-10 storeys.
- Reinforce street wall along Wally's Walk on the south.
- Softer landscape edges to creek zone.
- Building to address the Mars Creek zone.

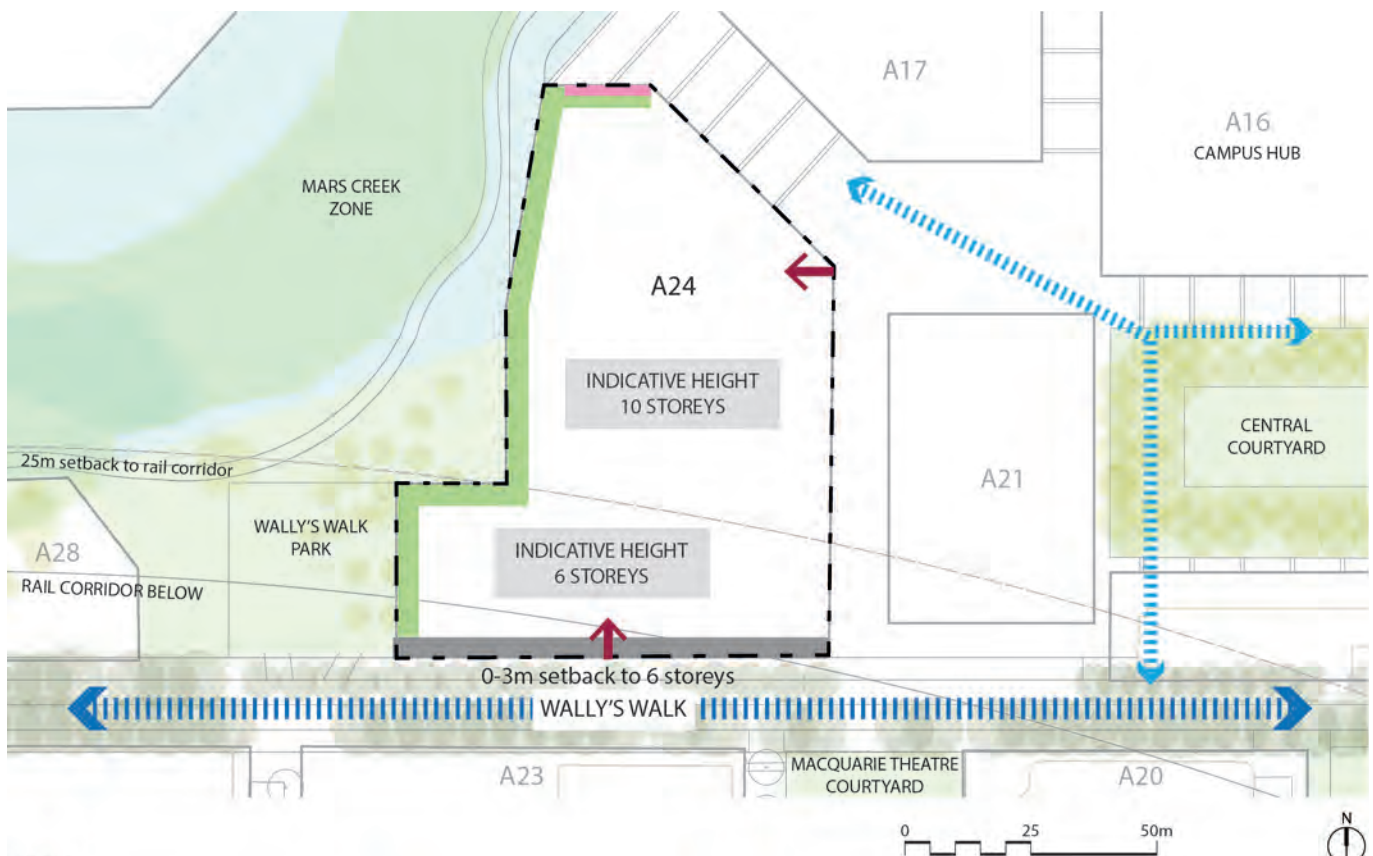
Access

- Primary address located indicatively on Wally's Walk along southern frontage.
- Service access from the shared way on the Gymnasium Road axis along the northern frontage.

Landscape

- Interface with the Mars Creek zone.
- Interface with Wally's Walk Park.
- Significant trees along Wally's Walk to be retained.

- Review and retain significant trees if possible.
- Refer to the Wally's Walk, Wally's Walk Park, Central Courtyard and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

- | | | | | | | | |
|--|-------------------------|--|----------------------|--|---------------------|--|--------------------------|
| | PRIMARY ADDRESS | | PRIMARY PEDESTRIAN | | PRIMARY ROAD | | STREET WALL |
| | SECONDARY ADDRESS | | SECONDARY PEDESTRIAN | | SECONDARY ROAD | | OPEN SPACE EDGE |
| | GROUND FLOOR ACTIVATION | | SHARED WAY | | SERVICE ACCESS ZONE | | RETAIN TREES |
| | | | | | | | RETAIN TREES IF POSSIBLE |

5. LOT CONTROLS

LOT A25

Architectural Principles

Lot A25 is located in the western zone of the Academic Core, adjacent to Library Lawn at the rear of the library on the corner of Macquarie Walk and Western Road.

Built Form

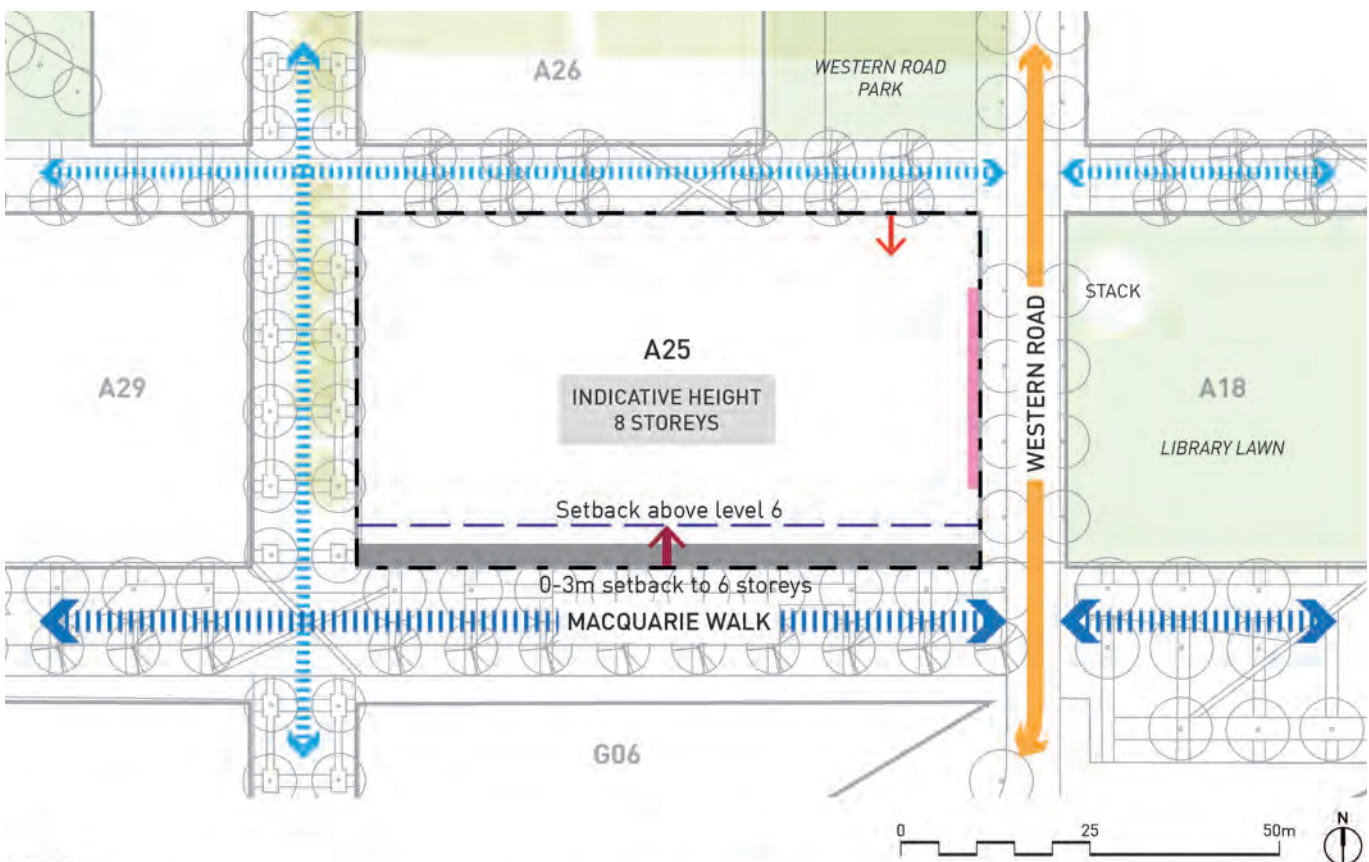
- Indicative height 8 storeys.
- Reinforce street wall along Macquarie Walk.
- Setback above level 6.

Access

- Primary address located indicatively on Macquarie Walk along the southern frontage.
- Secondary address located indicatively on the pedestrian route along the northern frontage from Western Road Park.
- Service access from Western Road along the eastern frontage.

Landscape

- Review and retain significant trees if possible.
- Refer to the Macquarie Walk, Library Lawn and Western Road Park landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A26

Architectural Principles

Lot A26 is located in the western part of the Academic Core. The lot is adjacent to a small open space along Western Road. The lot is discreet as it is not located on primary pedestrian or vehicle routes.

Built Form

- Indicative height 8 storeys.
- Building is to address the pocket park.
- Reinforce street wall along the eastern frontage facing Western Road Park.

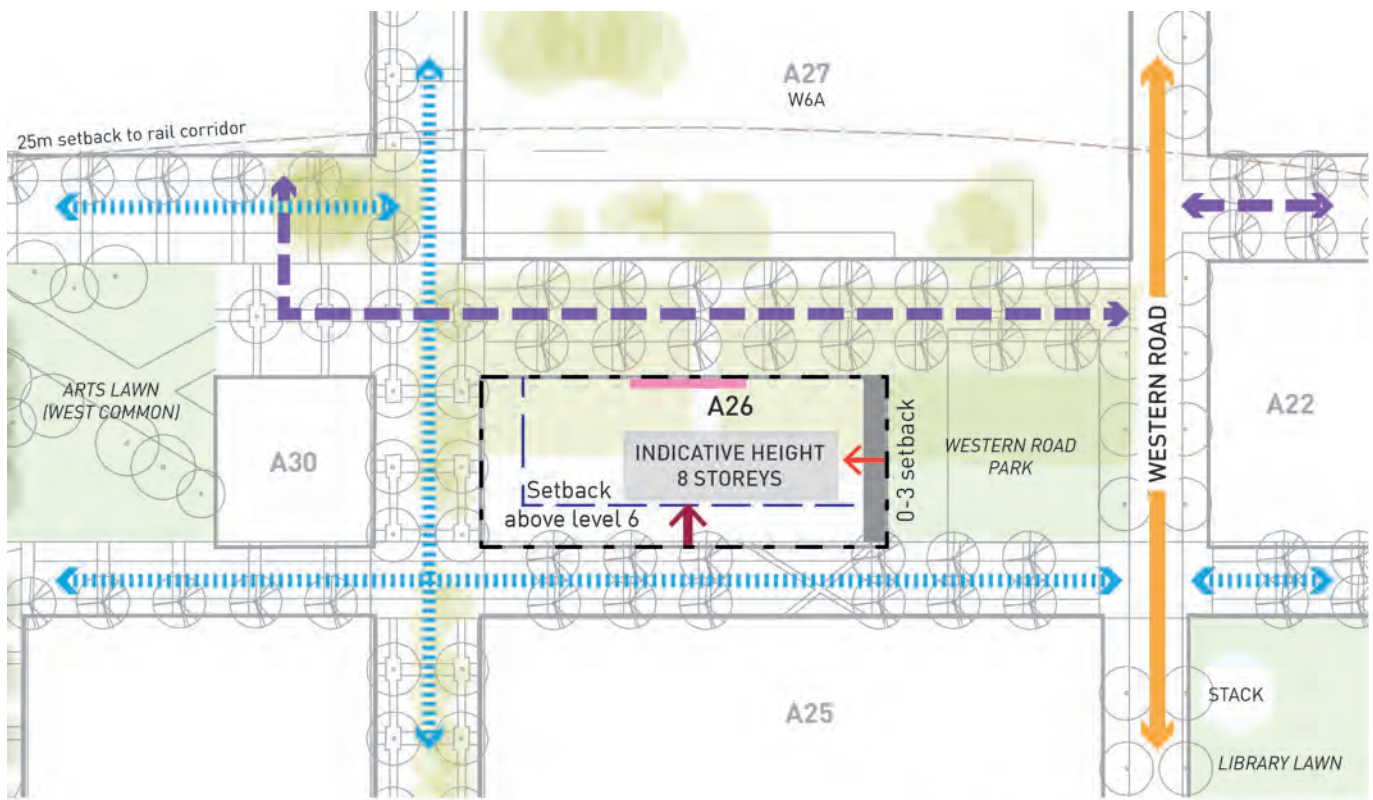
Access

- Primary address located indicatively on pedestrian route along the southern frontage.
- Secondary address located indicatively on eastern frontage from Western Road Park.
- Service access from the shared way along the northern frontage.

- Refer to the Western Road Park landscape guidelines in the Public Domain chapter.

Landscape

- Interface with Western Road Park.
- Review and retain significant trees if possible.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A28

Architectural Principles

Lot A28 is located on the end of Wally's Walk fronting Mars Creek.

Built Form

- Indicative height 4 storeys.
- Building to address Mars Creek.
- Reinforce street wall along Wally's Walk.

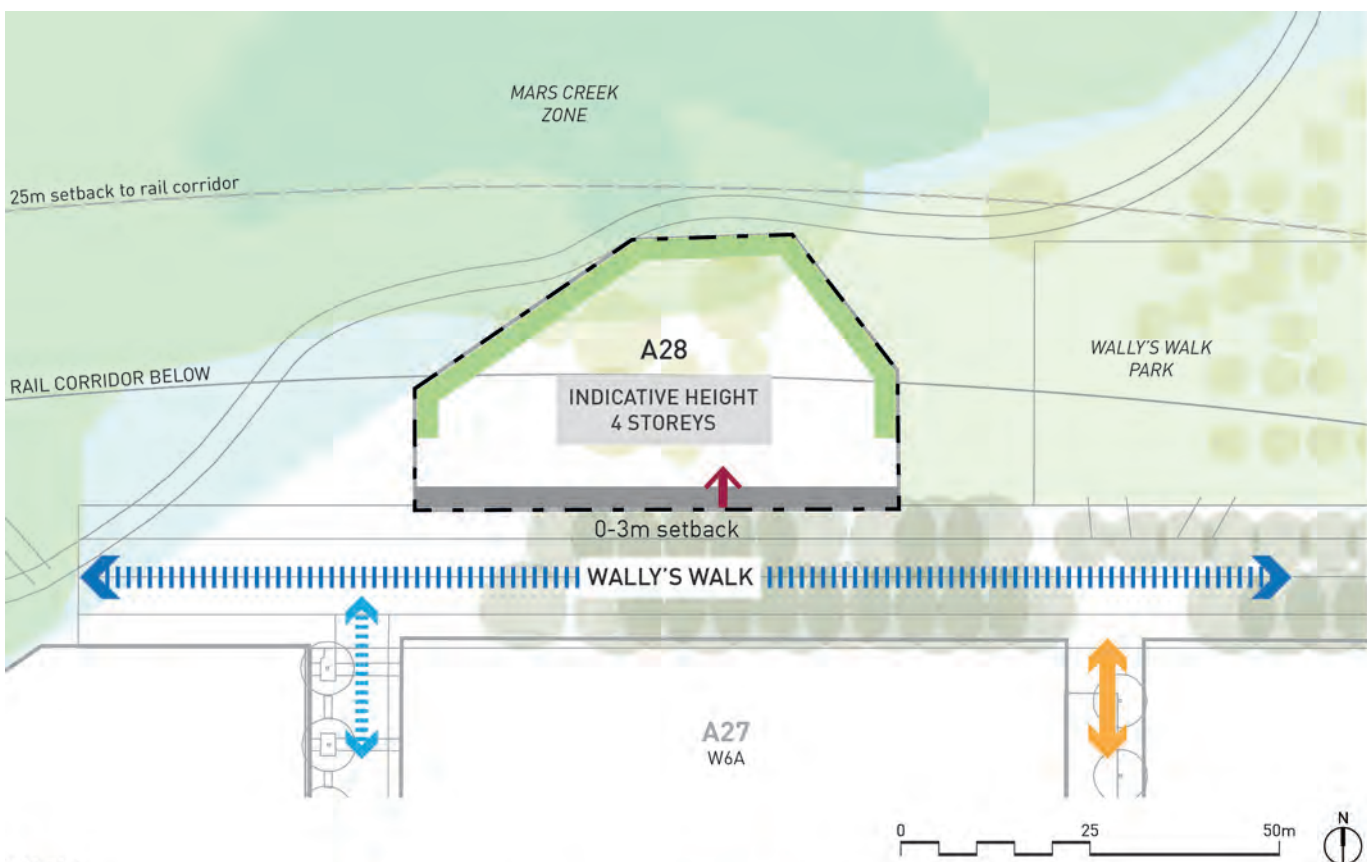
Access

- Primary address located indicatively on Wally's Walk along the southern frontage.
- There is no service access to the lot.

Landscape

- Interface with Mars Creek.
- Interface with Wally's Walk.

- Interface with Wally's Walk Park.
- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees if possible.
- Refer to the Wally's Walk, Wally's Walk Park and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

LOT A29

Architectural Principles

Lot A29 is located in the western part of the Academic Core, towards the western end of Macquarie Walk and on the southern side of the Arts Lawn (West Common).

Built Form

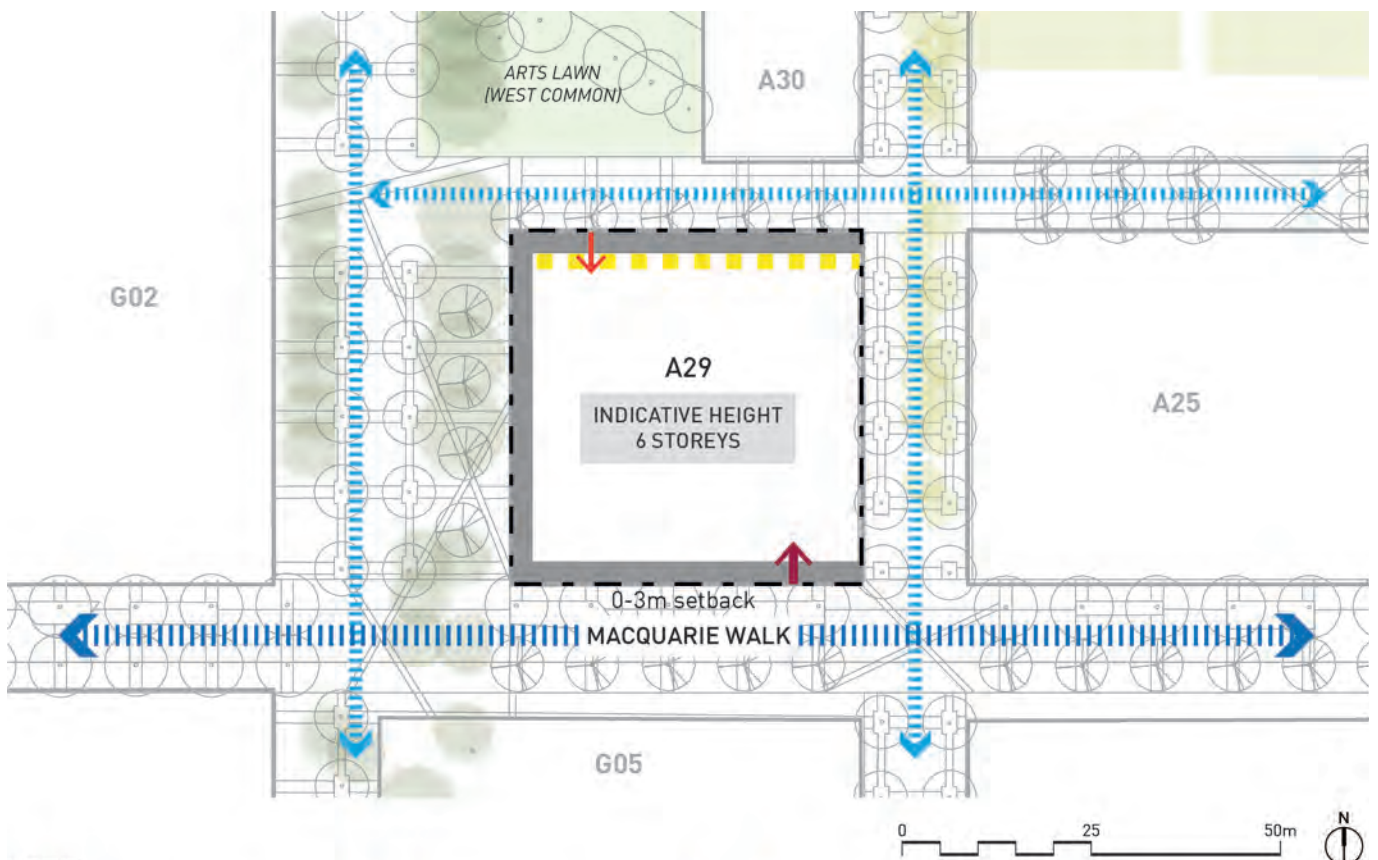
- Indicative height 6 storeys.
- Reinforce street walls on southern, western and northern frontage.
- Active uses are encouraged on northern frontage facing the Arts Lawn (West Common).

Access

- Primary address located indicatively on Macquarie Walk along the southern frontage.
- Secondary address located indicatively along the northern frontage from Arts Lawn (West Common).
- There is no service access to the lot.

Landscape

- Grove of existing eucalypts on western side of lot to remain.
- Review and retain significant trees if possible.
- Refer to the Macquarie Walk and Arts Lawn (West Common) landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A30

Architectural Principles

Lot A30 is located towards the far western side of the Academic Core on the eastern side of the Arts Lawn (West Common). The lot provides a social hub for the western campus.

Built Form

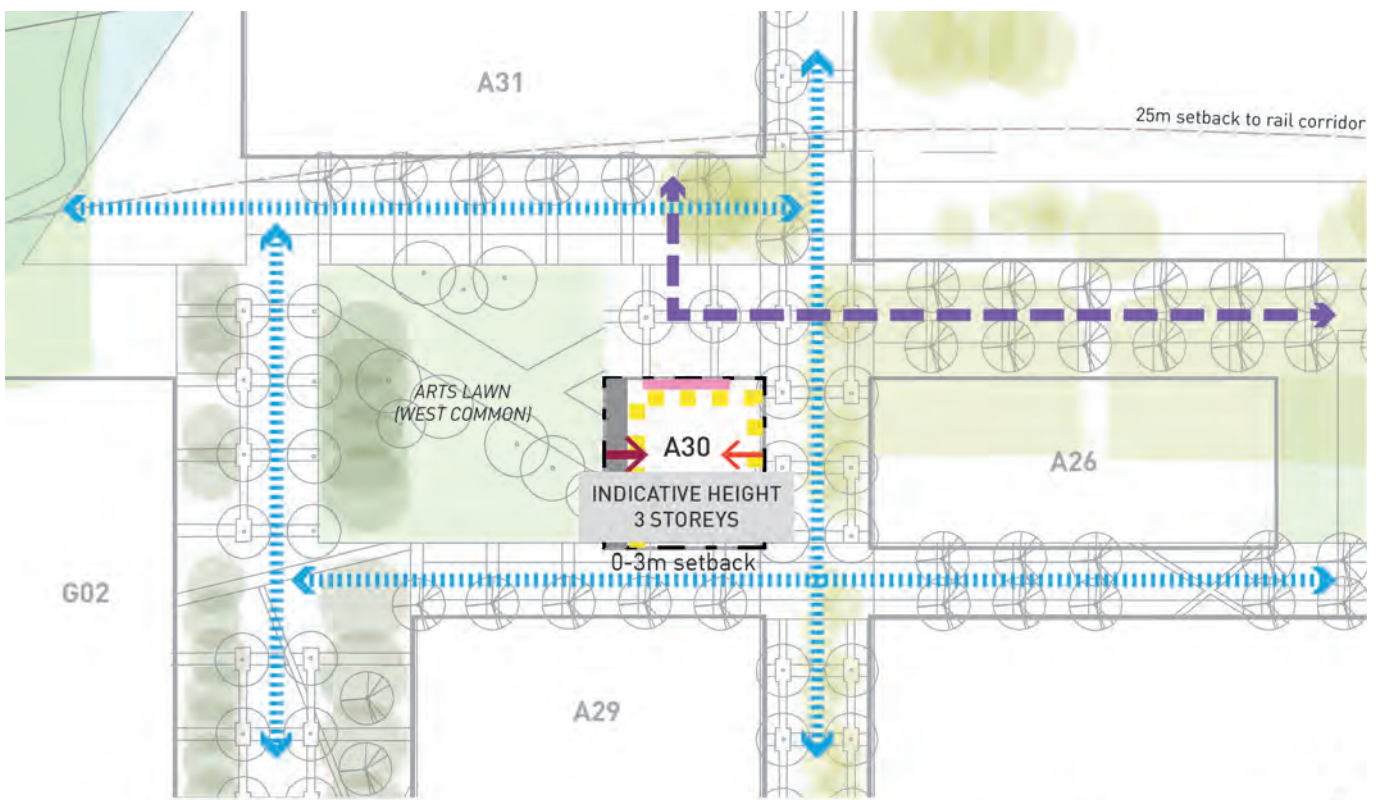
- Indicative height 3 storeys.
- Building is to address the Arts Lawn (West Common).
- Reinforce street wall along Arts Lawn (West Common) frontage.
- Active uses are encouraged for the whole of the ground floor.

Access

- Primary address located indicatively along the western frontage from the Arts Lawn (West Common).
- Secondary address located indicatively on pedestrian route along the eastern frontage.
- Service access from the shared way along the northern frontage.

Landscape

- Interface with Arts Lawn (West Common).
- Review and retain significant trees if possible.
- Refer to the Arts Lawn (West Common) landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT A31

Architectural Principles

Lot A31 is located on the western fringe of the Academic Core, terminating the western end of the primary pedestrian route, Wally's Walk. The Arts Lawn (West Common) is on the south of the lot and the Mars Creek zone is to the east and north.

Built Form

- Indicative height 6 storeys.
- Reinforce street wall along southern frontage facing the Arts Lawn (West Common).

- Building is to address the Mars Creek zone.
- There is an overshadowing control along southern frontage. The height is to be determined with a requirement to maximise solar access to the Arts Lawn (West Common) open space between 11am and 2pm in mid-winter.

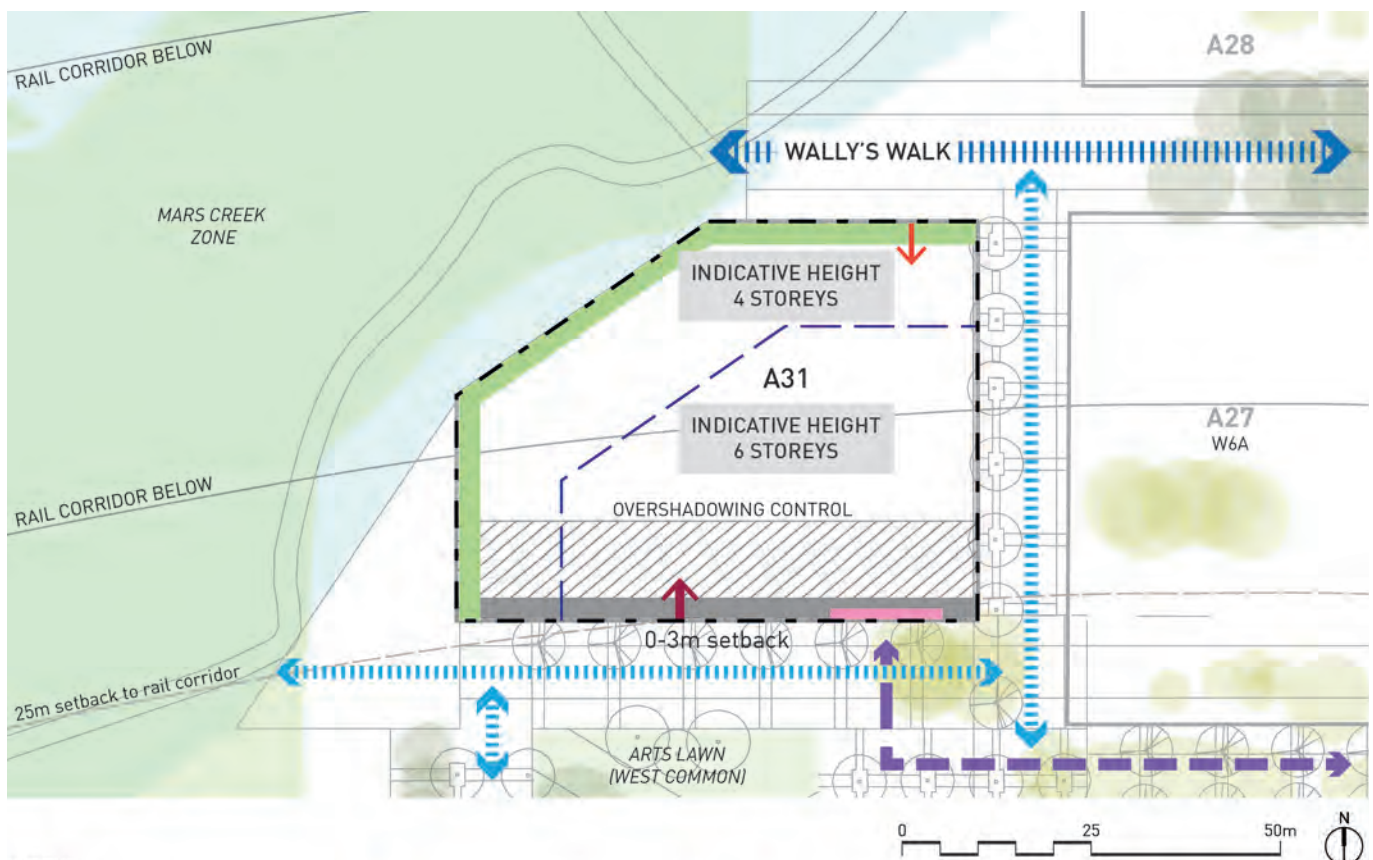
Access

- Primary address located indicatively on pedestrian route along the south frontage from the Arts Lawn (West Common).

- Secondary address located indicatively on Wally's Walk along the northern frontage.
- Service access from the shared way along the southern frontage.

Landscape

- Interface with Mars Creek.
- Review and retain significant trees if possible.
- Refer to the Wally's Walk, Mars Creek and Arts Lawn (West Common) landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT A32

Architectural Principles

Lot A32 is located underground, below the University Common on the corner of the primary pedestrian routes Sir Christopher Ondaatje Avenue and Macquarie Walk. The lot is situated above the rail corridor and there is a change in level across the University Common.

Built Form

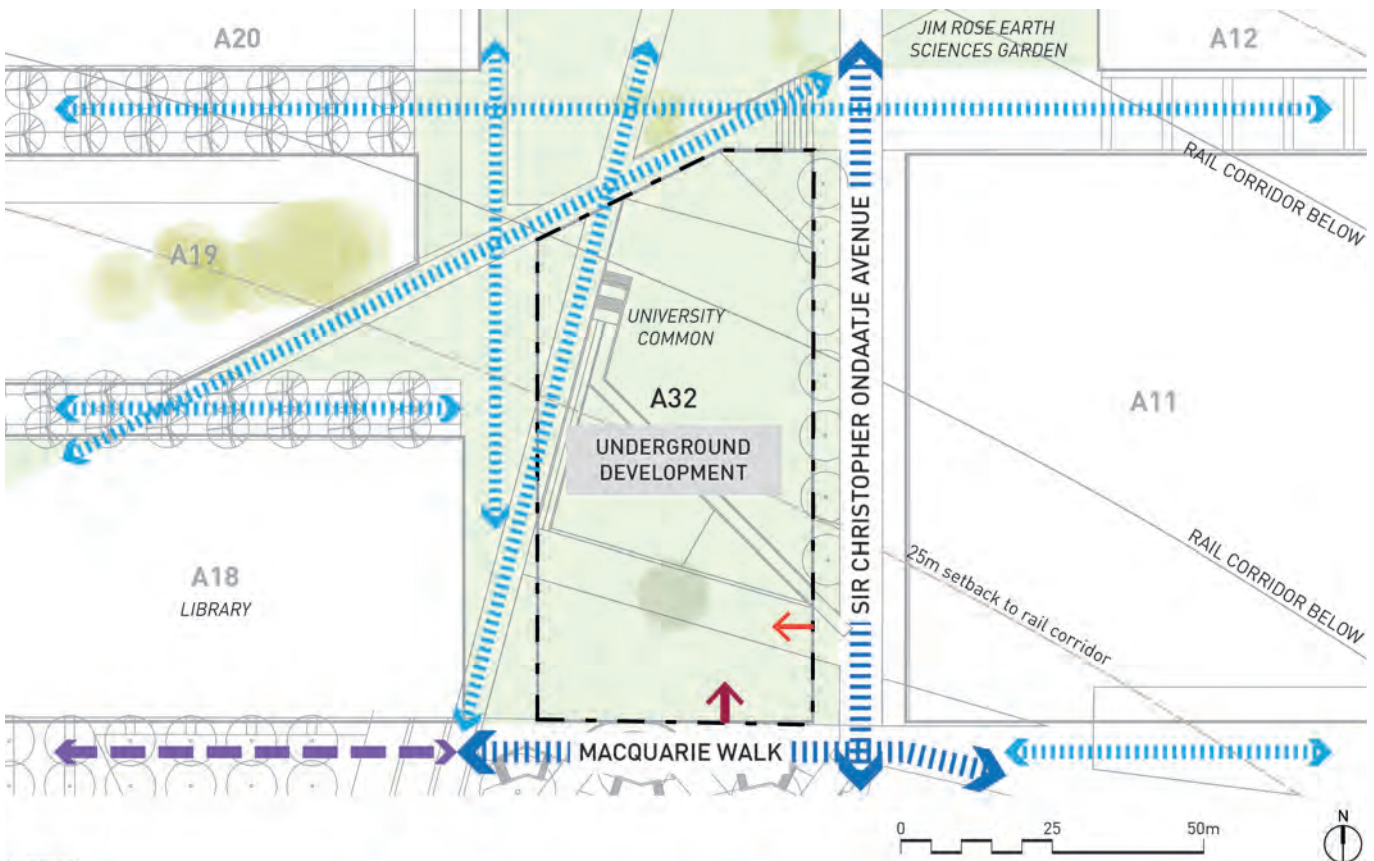
- Underground development.

Access

- Primary address located indicatively on Macquarie Walk along the southern frontage.
- Secondary address located indicatively on Sir Christopher Ondaatje Avenue along the eastern frontage.
- There is no service access to the lot.

Landscape

- Interface with University Common.
- Review and retain significant trees if possible.
- Refer to the University Common, Sir Christopher Ondaatje Avenue and Macquarie Walk landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

5.2.2 Precinct B

Precinct B, the University housing precinct, is located in the north-west of the campus and adjoins Culloden, Waterloo and Vimera Roads.



FIGURE 35: LOTS WITHIN PRECINCT B

LOT B01

Architectural Principles

Lot B01 is located on the intersection of Waterloo and Vimera Roads. It's on University-owned land across Culloden Road from the main campus. It is identified for University housing. The lot is adjacent to residential buildings on Vimiera Road.

Built Form

- Indicative height 4 storeys around boundary and 6 storeys in the centre.

- The lot is suitable to support several buildings.
- Buildings are to address Waterloo Road, Vimiera Road and the network of secondary roads within the lot.

Access

- Primary addresses located indicatively on Waterloo Road along the north-east frontage and Vimiera Road along the north-west frontage.
- Service access from the internal secondary roads.

Landscape

- Possible central open space.
- Landscape buffer along Vimera Road to setback development.
- Interface with Culloden Creek zone on southern boundary.
- Review and retain significant trees if possible.
- Refer to the Culloden Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT B02

Architectural Principles

Lot B02 is located across from the main campus on the corner of Culloden and Waterloo Roads, at the Gymnasium Road Gateway. It is identified for University housing.

Built Form

- Indicative height 4 storeys around boundary and 6 storeys in the centre.
- The lot is suitable to contain several buildings.

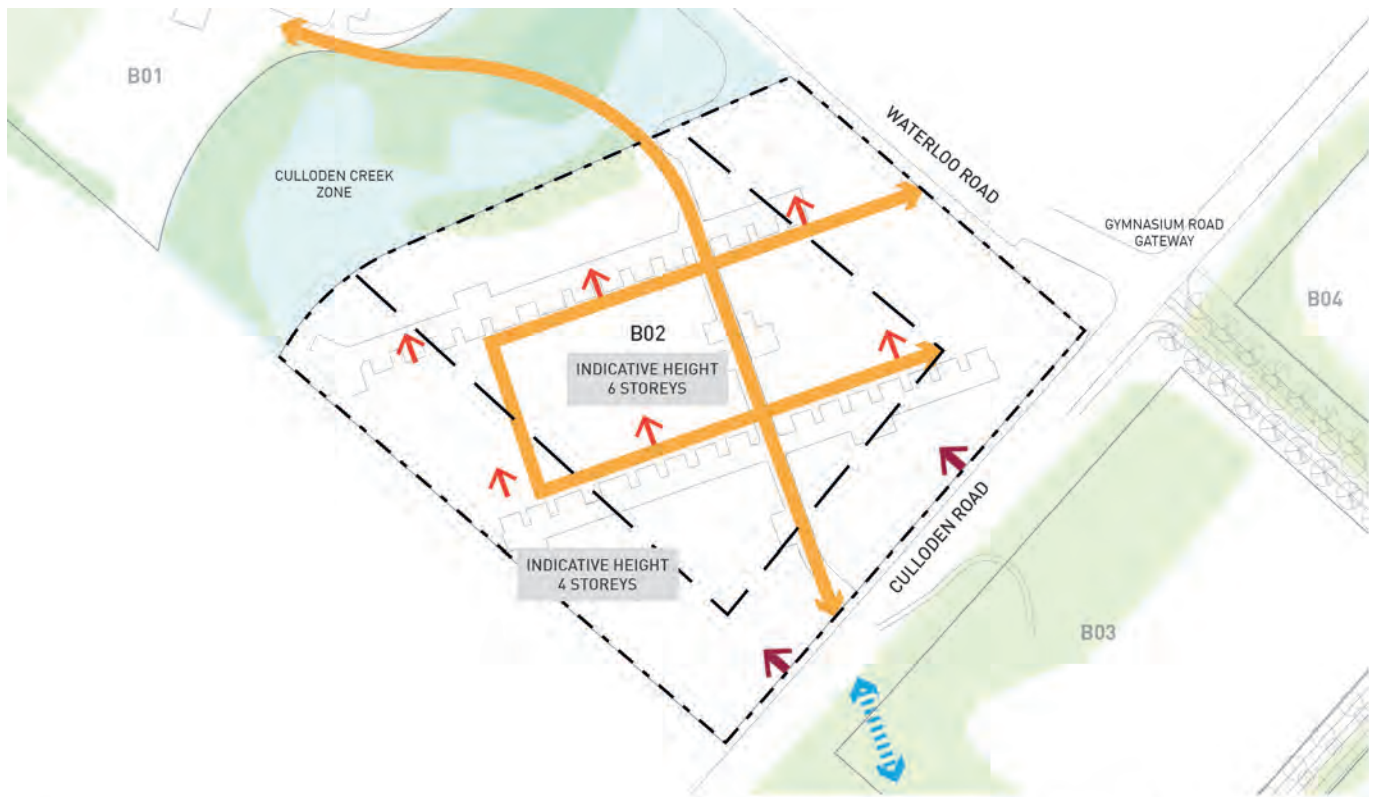
- Buildings are to address Culloden and Waterloo Roads and the network of secondary roads throughout the lot.

Access

- Primary address located indicatively on Culloden Road along the south-east frontage.
- Secondary addresses located indicatively along the internal secondary roads.
- Service access from Culloden Road along the south-east frontage and internal secondary roads.

Landscape

- Interface with Culloden Creek zone on northern boundary.
- Interface with the Gymnasium Road Gateway.
- Review and retain significant trees if possible.
- Refer to the Culloden Creek and Gymnasium Road Gateway landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT B03

Architectural Principles

Lot B03 is bounded by Gymnasium, Culloden and West Precinct Roads within the Gymnasium Road Gateway of the campus.

Built Form

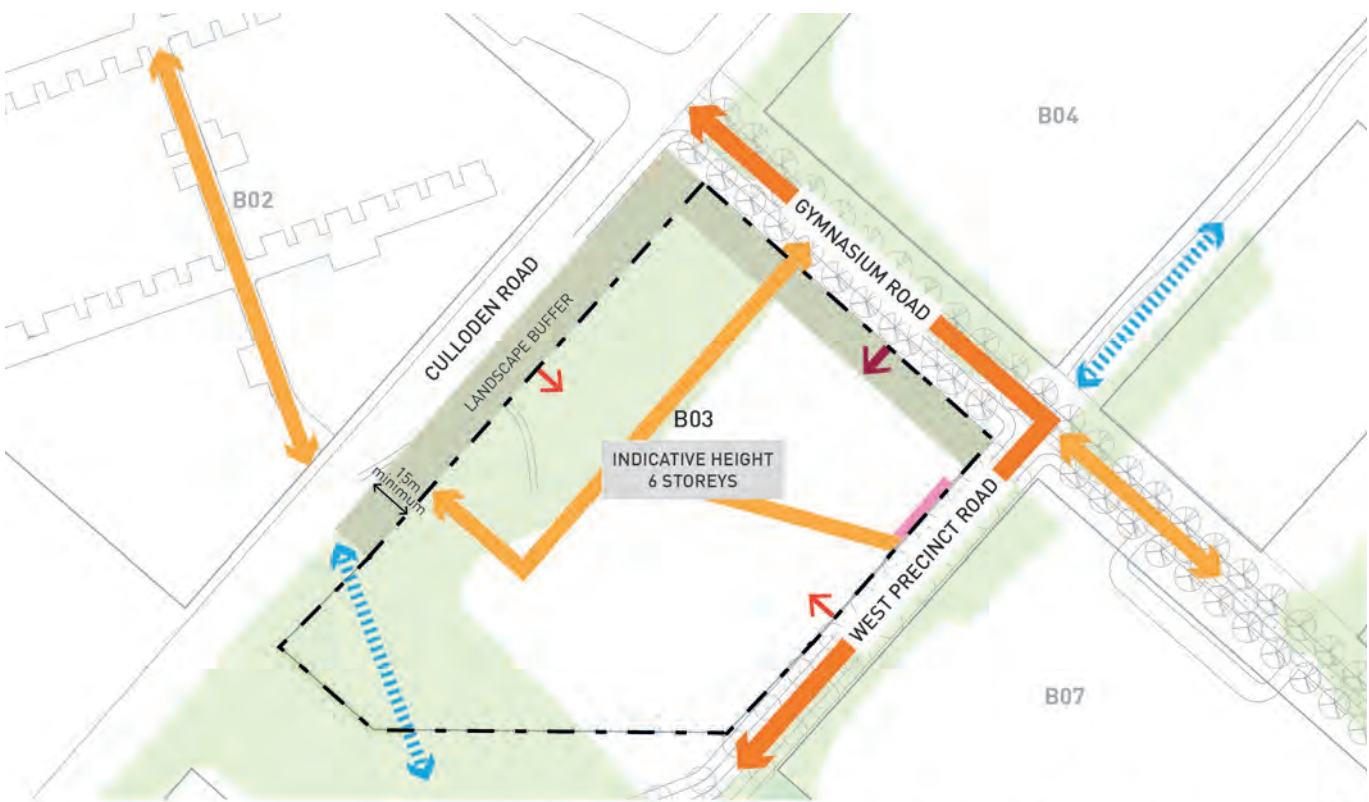
- Indicative height 6 storeys.
- The lot is suitable to support multiple buildings.

Access

- Primary address located indicatively on Gymnasium Road along the north-east frontage.
- Potential secondary address located indicatively on Culloden Road along the north-west frontage.
- Service access from West Precinct Road along the north-east frontage and the internal secondary roads.
- Consider opportunities for at grade car parking as appropriate for future uses.

Landscape

- Interface with the Gymnasium Road Gateway.
- Landscape buffer along Culloden Road.
- Review and retain significant trees if possible.
- Refer to the Gymnasium Road Gateway and West Precinct Road landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT B04

Architectural Principles

Lot B04 is located on the corner of Culloden and Gymnasium Roads within the Gymnasium Road Gateway in the north of the campus. The lot is adjacent to residential buildings on Culloden Road.

Built Form

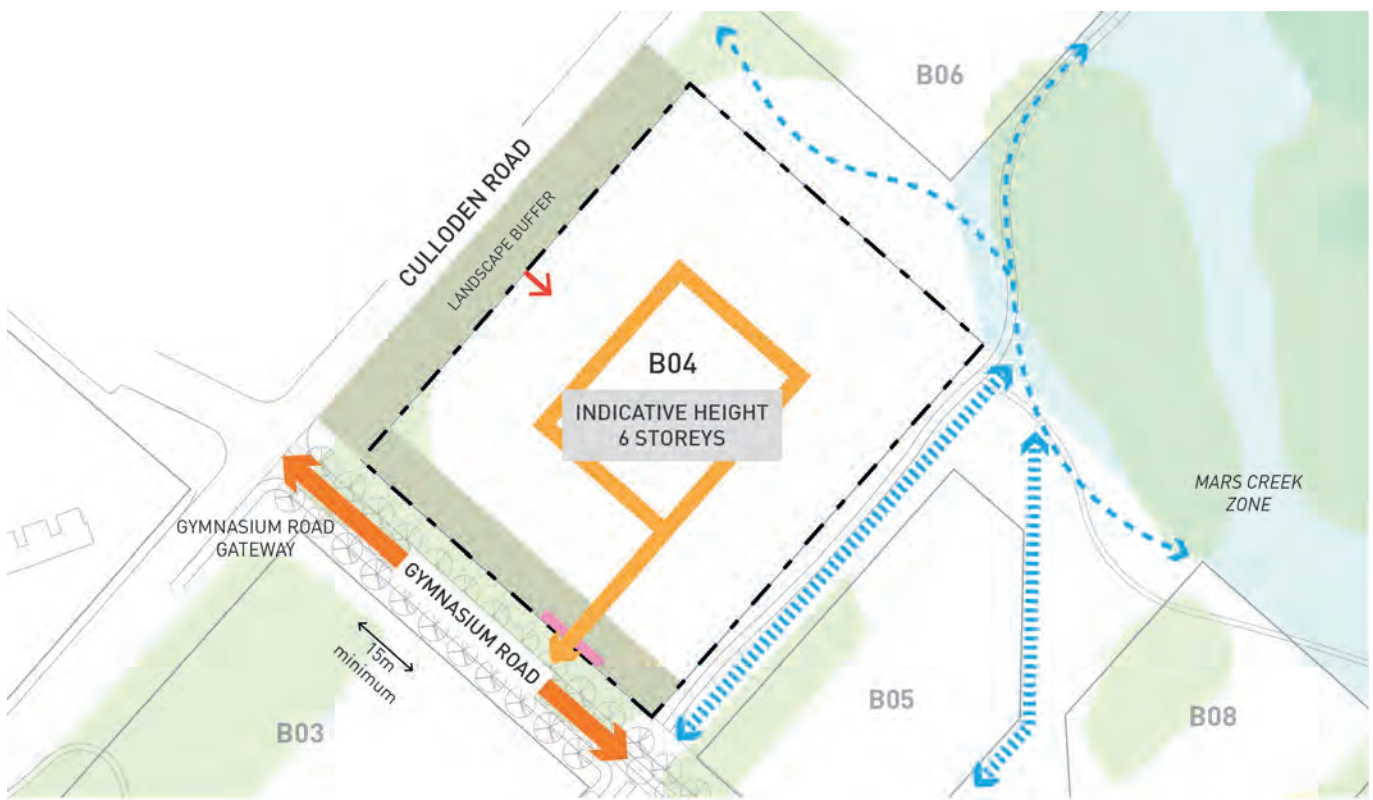
- Indicative height 6 storeys.
- The lot is suitable to contain several buildings.
- Buildings are to address Culloden and Gymnasium Roads.

Access

- Primary address located indicatively on Gymnasium Road along the south-west frontage.
- Potential secondary address located indicatively on Culloden Road along the north-west frontage.
- Service access from Gymnasium Road along the south-west frontage.

Landscape

- Interface with the Gymnasium Road Gateway and Mars Creek zone.
- Landscape buffer along corner of Culloden and Gymnasium Roads
- Review and retain significant trees if possible.
- Refer to the Gymnasium Road Gateway and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT B05

Architectural Principles

Lot B05 is located near the Gymnasium Road Gateway, adjacent to West Precinct and Gymnasium Roads.

Built Form

- Indicative height 6 storeys.
- Building is to address Gymnasium Road.

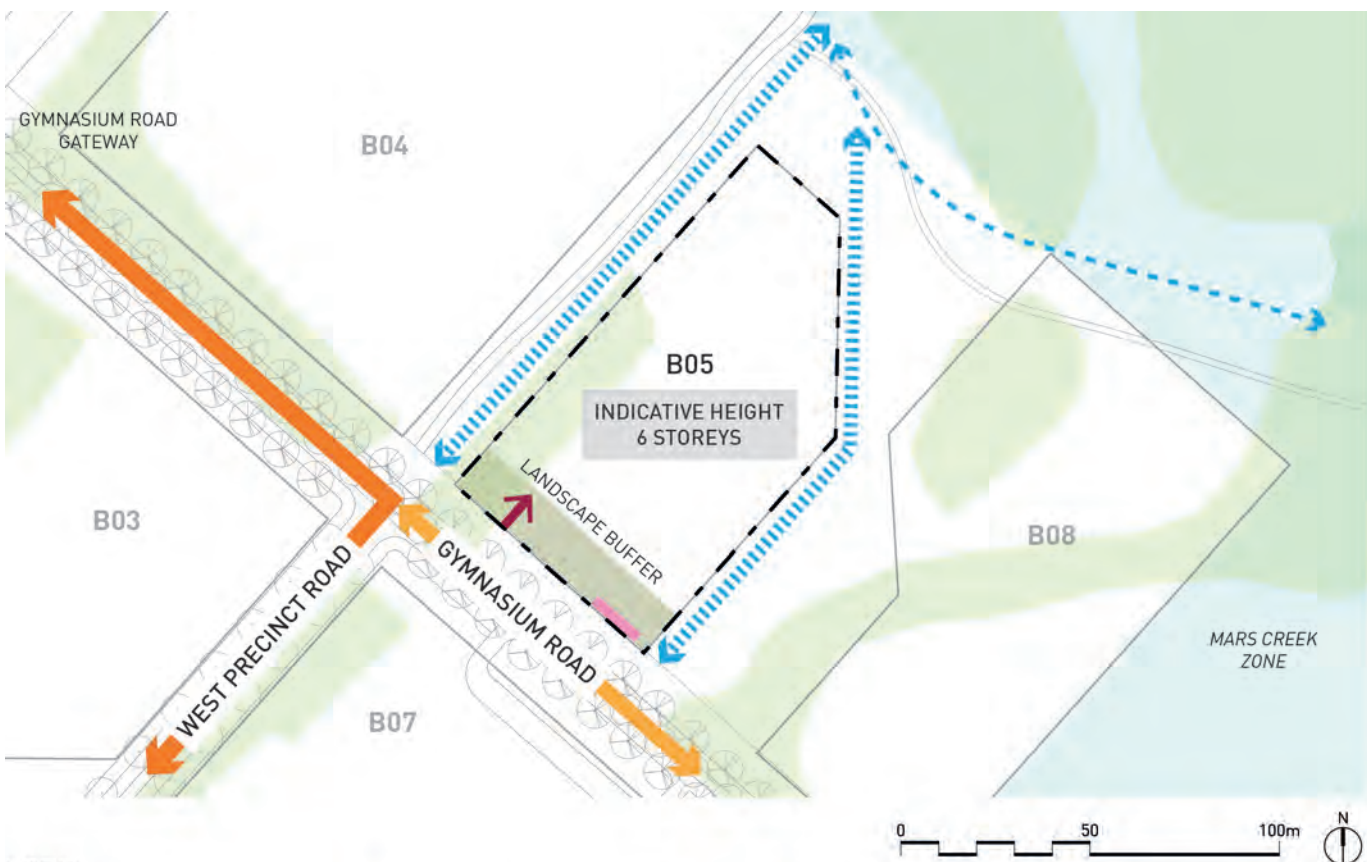
Access

- Primary address located indicatively on Gymnasium Road along the south-west frontage.
- Service access from Gymnasium Road along the south-west frontage.

Landscape

- Interface with the Gymnasium Road Gateway and Mars Creek zone.

- Landscape buffer along Gymnasium Road.
- Review and retain significant trees if possible.
- Refer to the Gymnasium Road Gateway, West Precinct Road and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

LOT B06

Architectural Principles

Lot B06 is located on Culloden Road in the north of the main campus. The lot is adjacent to residential buildings on Culloden Road.

Built Form

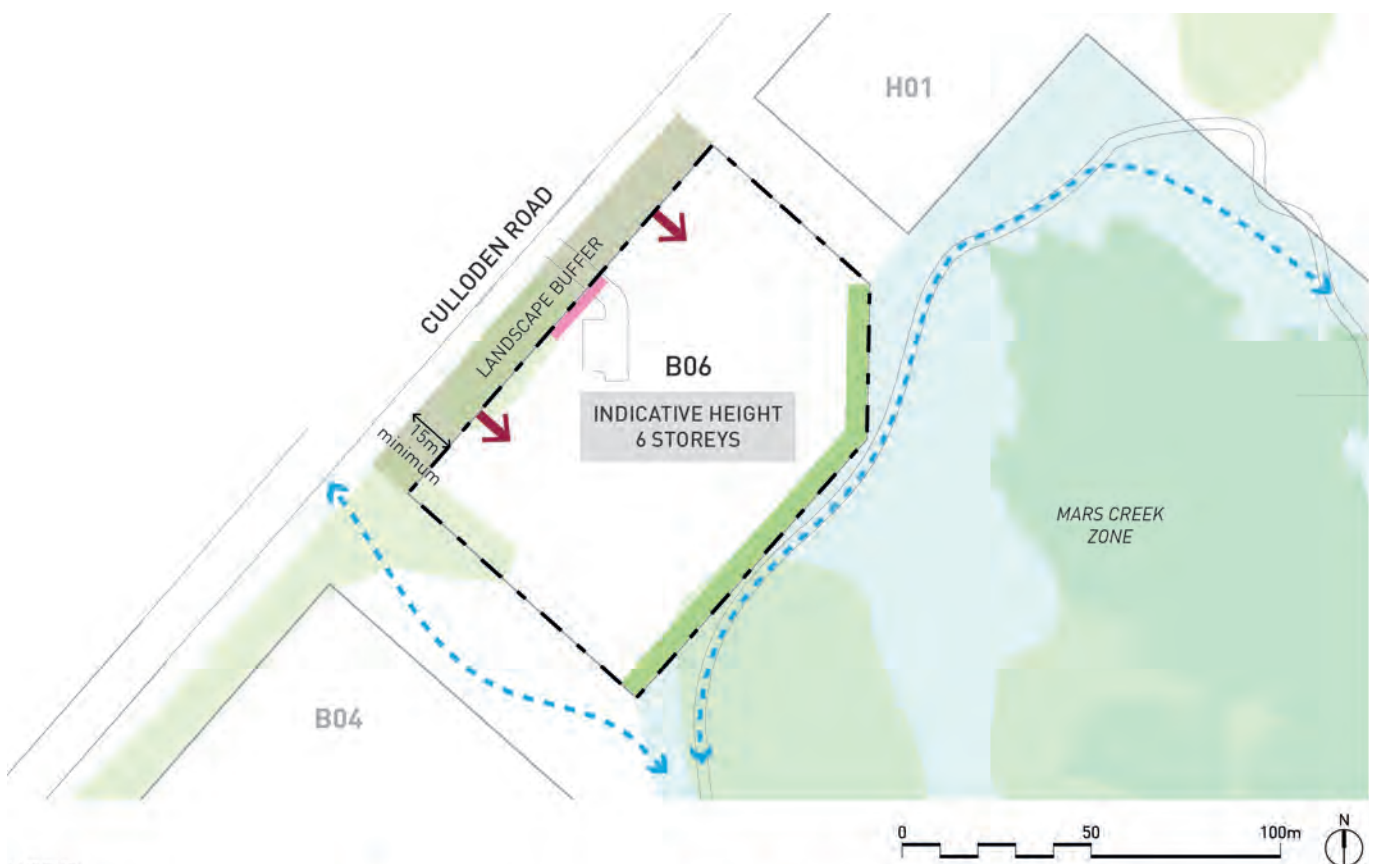
- Indicative height 6 storeys.
- Building is to address Culloden Road and the Mars Creek zone.

Access

- Primary addresses located indicatively on Culloden Road along the north-west frontage.
- Service access from Culloden Road along the north-west frontage.

Landscape

- Interface with the Mars Creek zone.
- Landscape buffer along Culloden Road.
- Review and retain significant trees if possible.
- Refer to the Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT B07

Architectural Principles

Lot B07 is located on the corner of the West Precinct and Gymnasium Roads, fronting the Mars Creek Zone. The lot has an existing building, the Sport and Aquatic Centre, to be retained.

Built Form

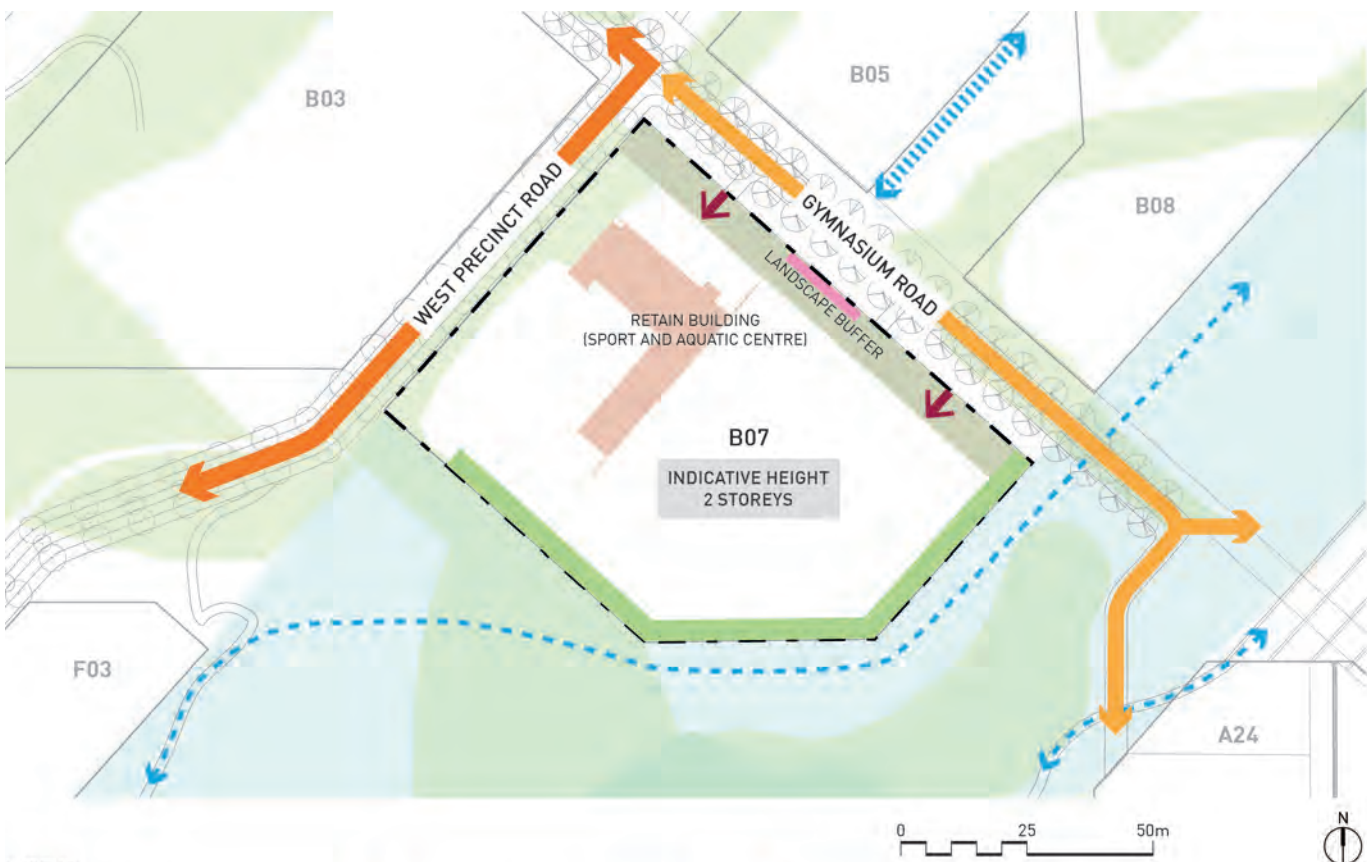
- Indicative height 2 storeys.
- Building is to address Gymnasium Road and Mars Creek zone.

Access

- Primary addresses located indicatively on Gymnasium Road along the north-east frontage.
- Service access from Gymnasium Road along the north-east frontage.

Landscape

- Interface with Mars Creek zone.
- Landscape buffer along Gymnasium Road.
- Review and retain significant trees if possible.
- Refer to the West Precinct Road and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

LOT B08

Architectural Principles

Lot B08 is located at the southern end of Gymnasium Road, fronting the Mars Creek zone. The building is for public use.

Built Form

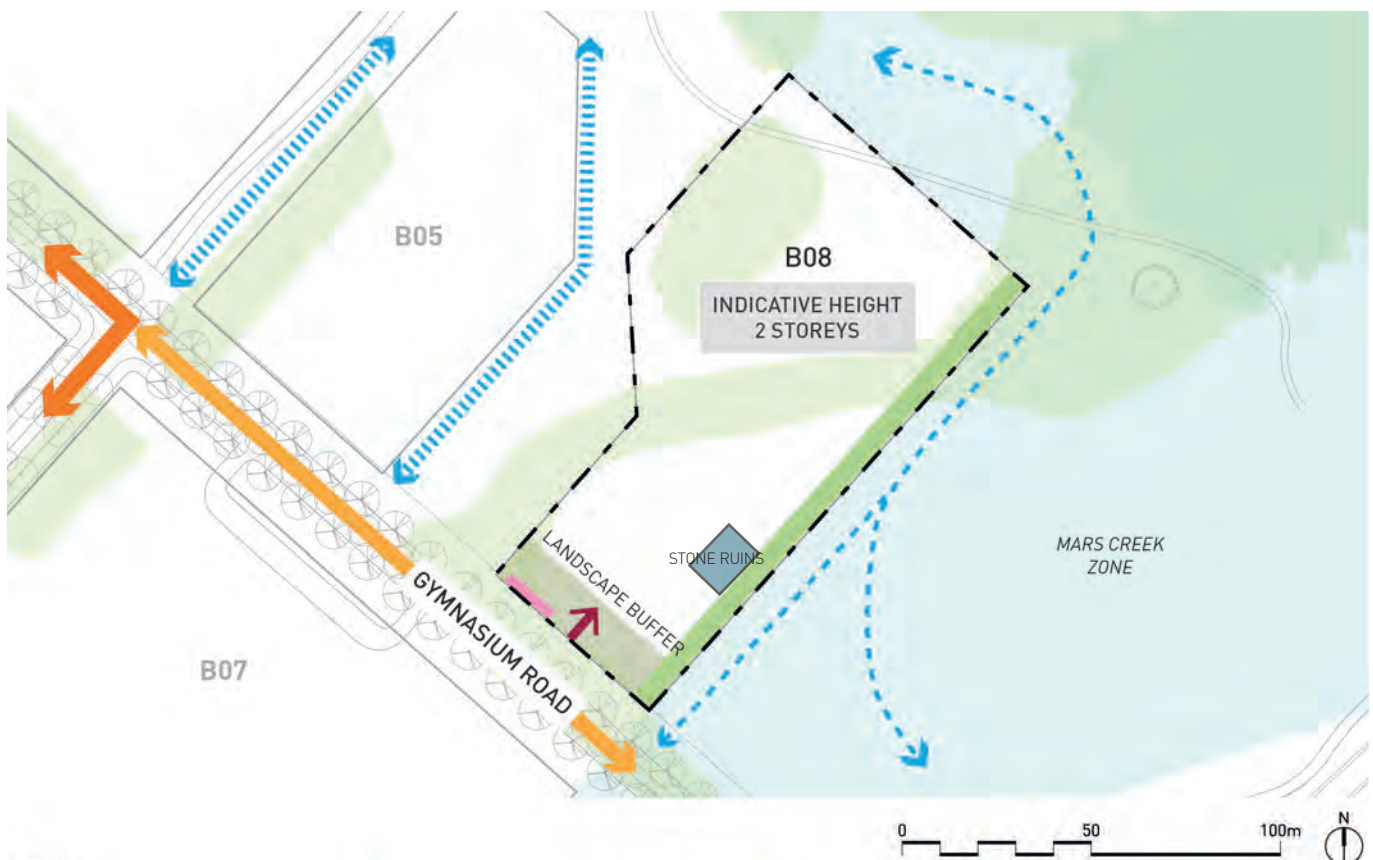
- Indicative height 2 storeys.
- Building is to address Gymnasium Road and Mars Creek zone.
- Future built form in Lot B08 should be considerate of the heritage item (stone ruins) located within the Lot.

Access

- Primary address located indicatively on Gymnasium Road along south-west frontage.
- Service access from Gymnasium Road along south-west frontage.

Landscape

- Interface with the Mars Creek zone.
- Review and retain significant trees if possible.
- Refer to the Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

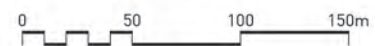
5.2.3 Precinct C

Precinct C, the University open space and playing fields, is located in the far north of the campus and adjoins the M2 Motorway.



FIGURE 36: LOT WITHIN PRECINCT C

LOT C01



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

Architectural Principles

Lot C01 is located on University land across the M2 Motorway, north of the main campus. The lot contains sports fields and ancillary buildings, storage sheds and car parking.

Built Form

- Indicative height 3 storeys.
- Building should be expanded to the same axis north of the Blue Barclay Pavilion, between the pavilion and Jock's Way.
- Building should address Roger Sheeran Oval.

- Indicatively the eastern frontage of the building should align with the Blue Barclay Pavilion.
- New support facilities (ancillary to the sports field and/or university uses) up to 3 storeys may be delivered independently (ie. outside of the Blue Barclay Pavilion expansion zone) within Precinct C.

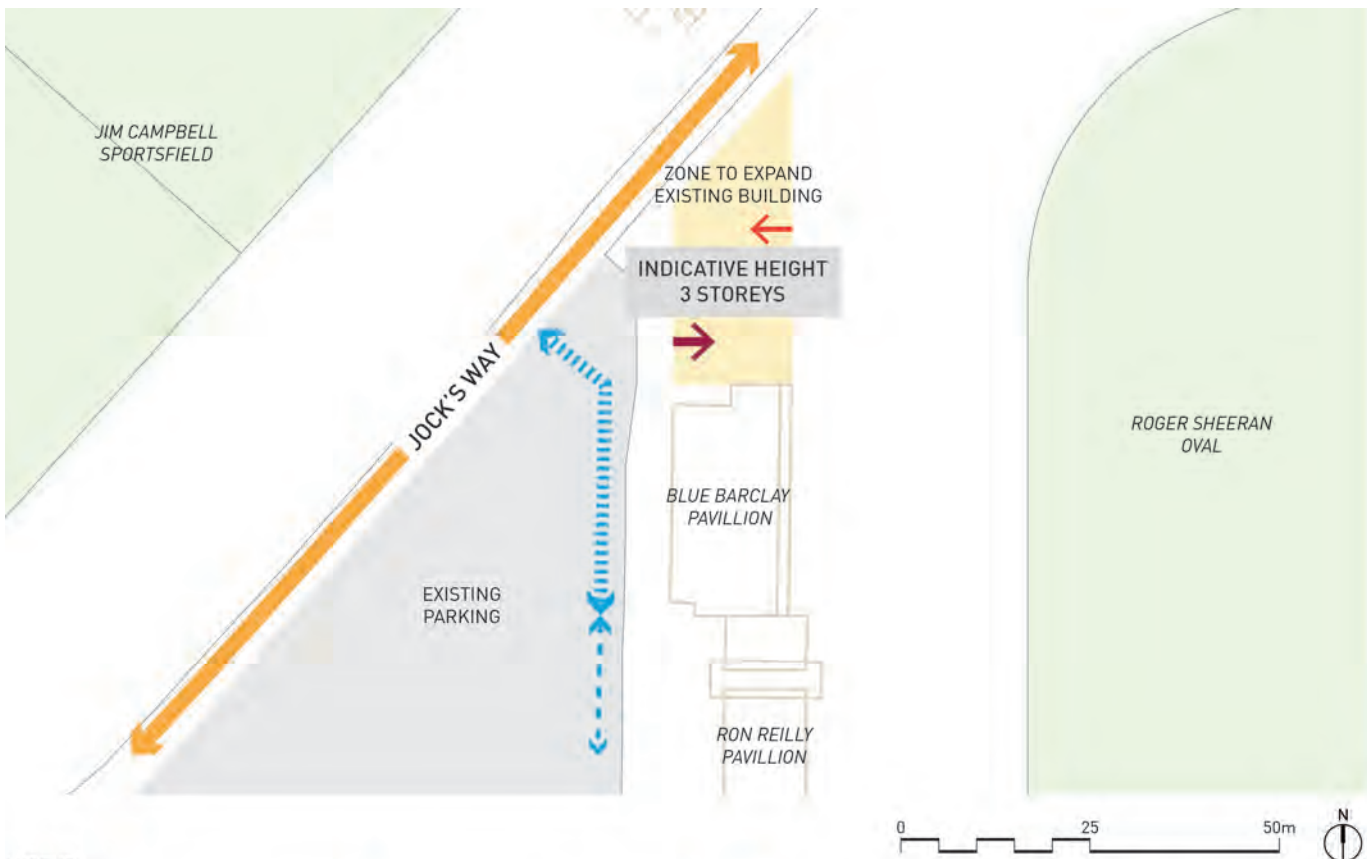
Access

- Primary address located indicatively to the new building from the existing parking.

- Secondary address located indicatively to the new building from Roger Sheeran Oval.
- No service access proposed for the new building.

Landscape

- Interface with Roger Sheeran Oval.
- Review and retain significant trees if possible.
- Refer to the Macquarie University Sports Fields landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5.2.4 Precinct D

Precinct D, the Macquarie University Research Park (MURP) and private hospital, is located in the east of the campus, on the corner of Talavera and Herring Roads. Legacy building lots are shown in grey.

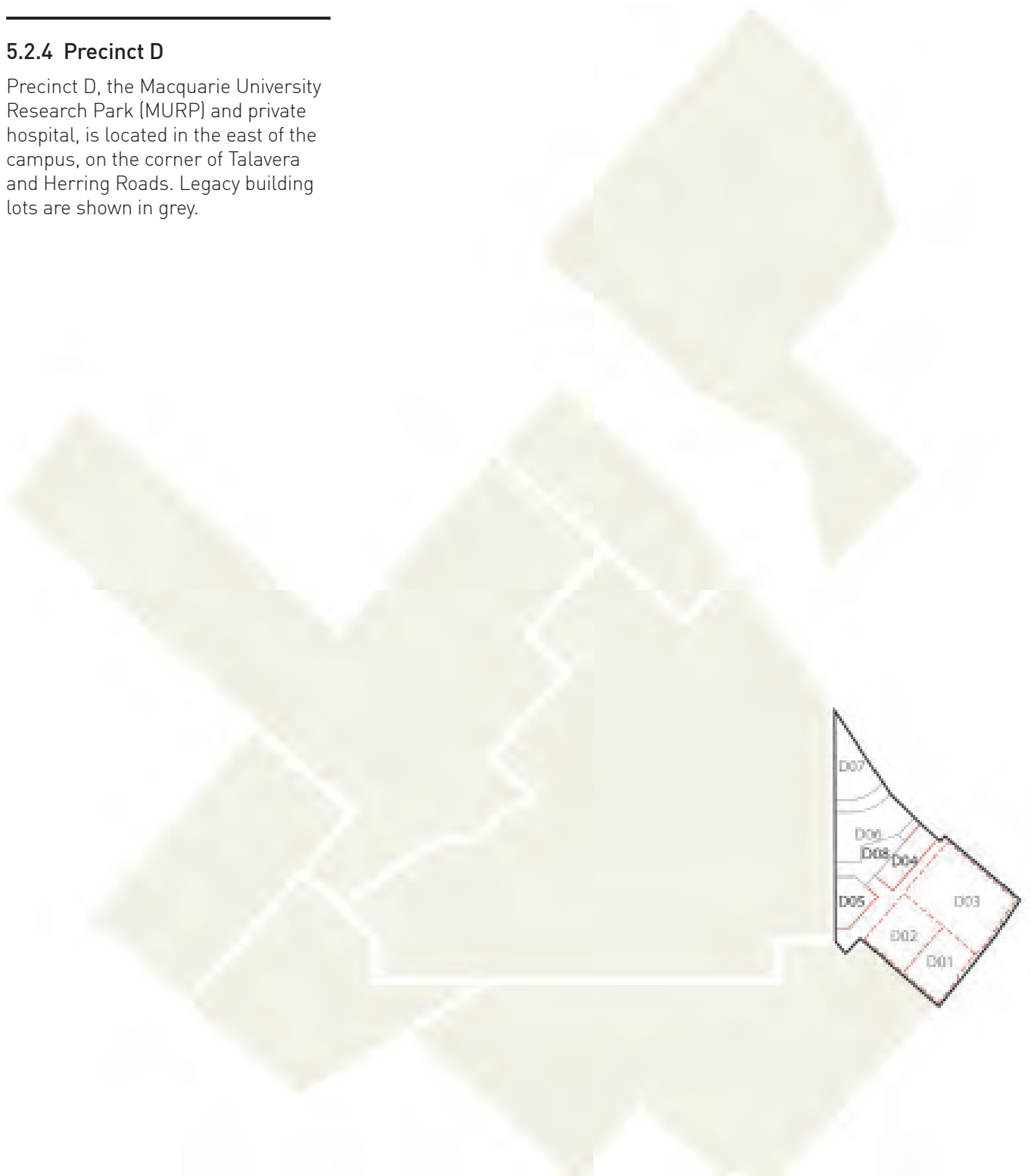


FIGURE 37: LOTS WITHIN PRECINCT D

5. LOT CONTROLS

LOT D01

Architectural Principles

Lot D01 is located on the eastern end of the Macquarie University Research Park Precinct, at the intersection of Herring Road and Innovation Road.

Lot boundaries generally match LEP mapping.

Built Form

- Lot Area 6,098 m².
- Maximum FSR 2.5:1.
- Maximum height 45m.
- Built form should address

Herring Road.

- Preserve maximum GFA of 15,245 m² if Herring Road is widened.

Access

- Primary address located on Herring Road.
- Secondary addresses located on north-east and north-west frontages along Innovation Road and at Lot D02.
- Service access from the shared way along north-west frontage.

- Accommodate widened footpath zone on Innovation Road frontage.

Landscape

- Interface with open space linking with Interchange Plaza.
- Review and retain significant trees where possible.
- Refer to the Innovation Road and Herring Road landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE



LOT D02

Architectural Principles

Lot D02 is located towards the eastern end of both the Macquarie University Research Park and Innovation Road. The lot lies directly on the University Creek zone.

Lot boundaries generally match LEP mapping.

Built Form

- Lot Area 6,098 m².
- Maximum height of 45m.
- Reinforce open space edge along University Creek zone.

- Built form should address University Creek along the western frontage.
- Maximum FSR 3.0:1.

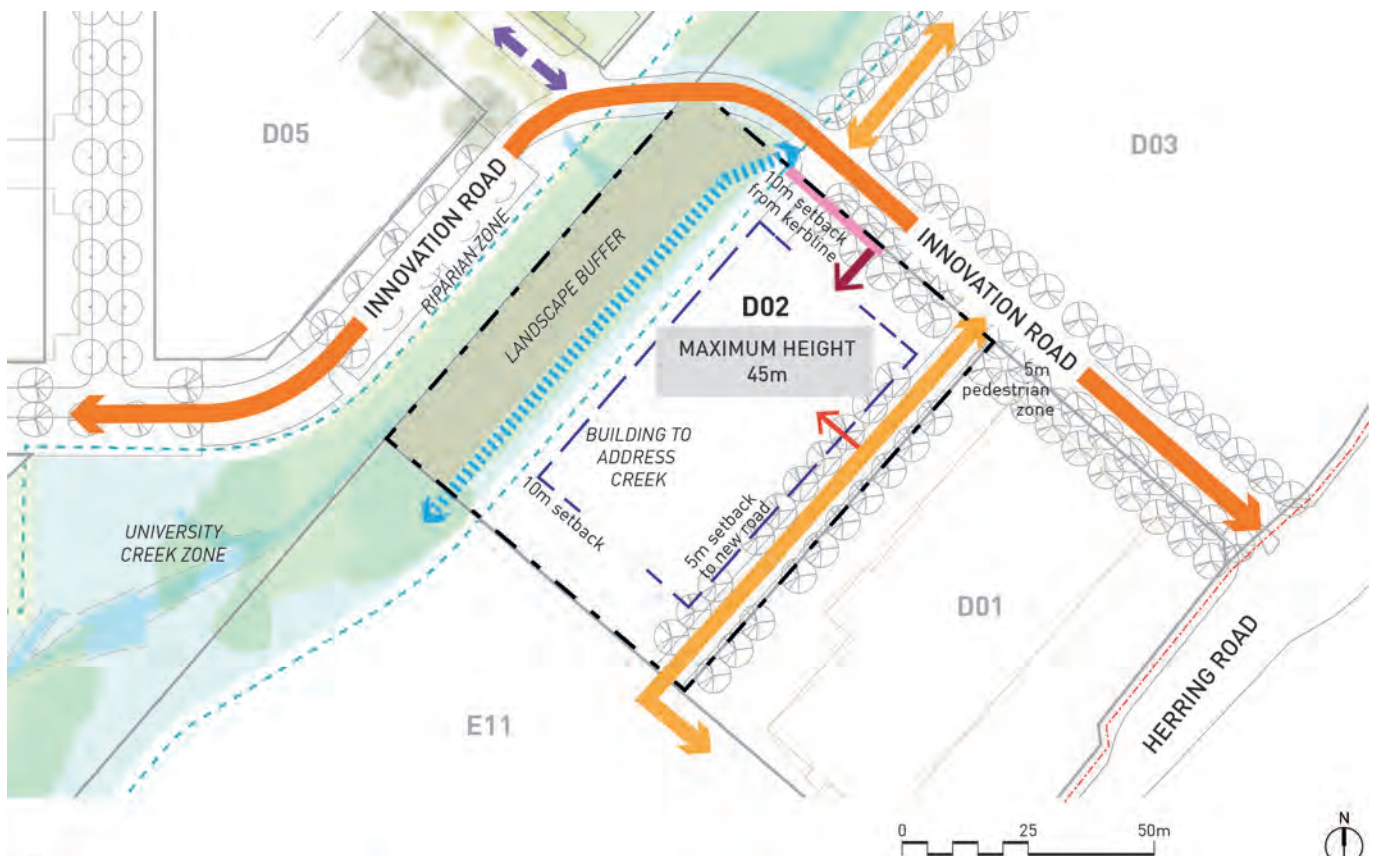
Access

- New secondary road between E11 and Innovation Road.
- Primary address on north-east frontage along Innovation Road.
- Secondary address on the shared way along the south-east frontage
- Service access from Innovation Road on the north-east frontage.
- Accommodate widened footpath

zone on Innovation Road frontage.

Landscape

- Interface with University Creek zone.
- Review and retain significant trees where possible.
- Refer to the University Creek and Innovation Road landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT D03

Architectural Principles

Lot D03 is located towards the eastern end of the Macquarie University Research Park, at the intersection of Herring Road and Innovation Road. The lot lies directly on the University Creek zone.

Lot boundaries generally match LEP mapping .

Built Form

- Lot Area 14,192 m².
- Preserve maximum GFA of 63,864 m² if Herring Road is

widened.

- Maximum height 90m.
- Built form should address University Creek.
- Maximum FSR 4.5:1.

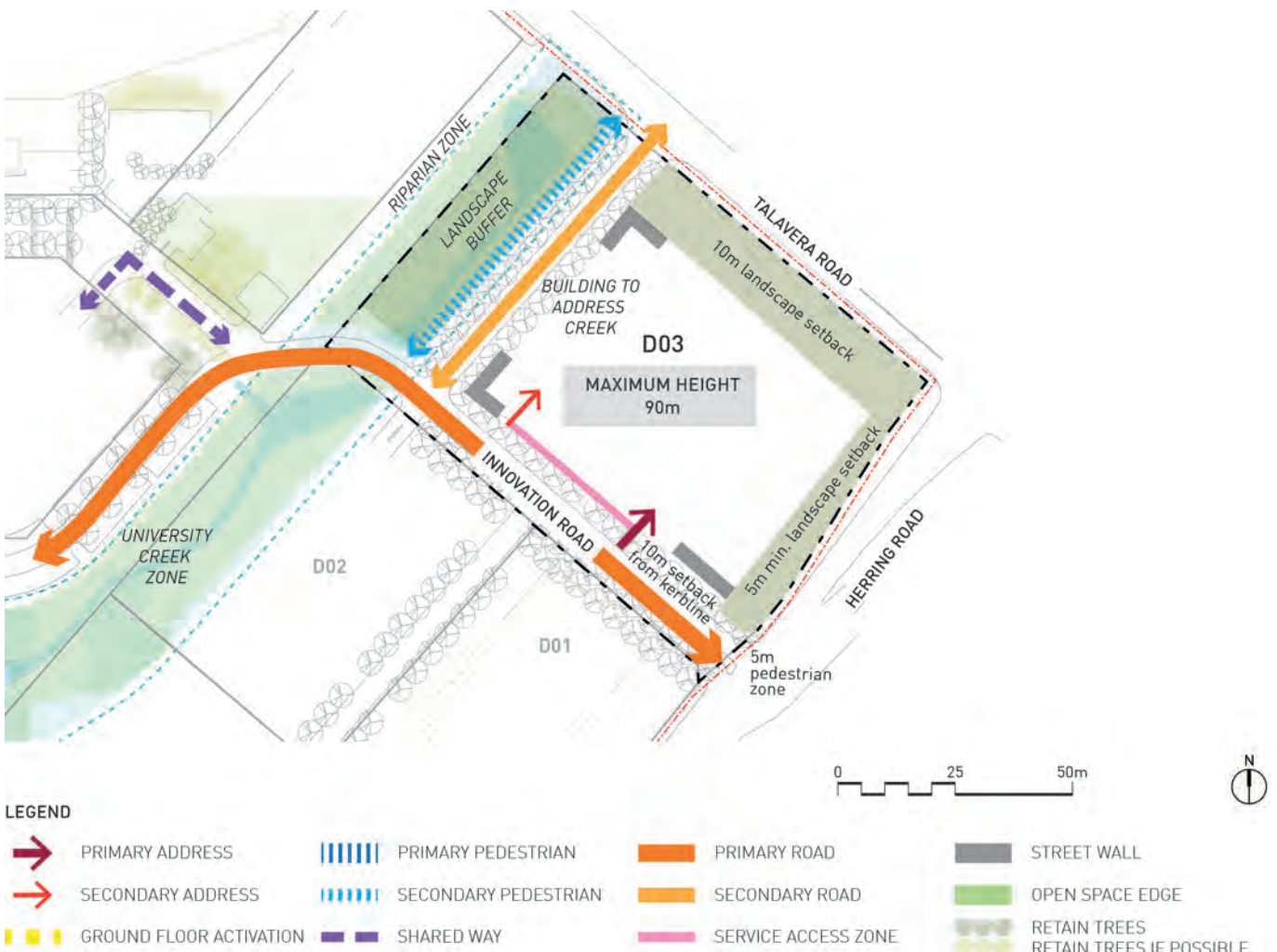
Access

- New secondary road between Innovation Road and Talavera Road.
- Primary address located on Innovation Road on the south-west frontage.
- Secondary address located on the south-west frontage.

- Service access from Innovation Road.
- Accommodate widened footpath zone on Innovation Road.

Landscape

- Interface with University Creek zone.
- Review and retain significant trees where possible.
- Refer to the University Creek and Innovation Road landscape guidelines in the Public Domain chapter.



LOT D04

Architectural Principles

Lot D04 terminates the eastern end of Wally's Walk. The lot is adjacent to the Macquarie University Hospital and lies directly on the University Creek zone.

Built Form

- Lot is suitable for a tall building.
- Indicative height of 12 storeys.
- Building to address University Creek.
- Building setback above RL 53.0 to ensure views to creek.

Access

- Primary address located indicatively on southern frontage from the open space and also from Talavera Road on the northern frontage.
- Service access from Wally's Walk along the southern frontage.

Landscape

- Interface with University Creek zone.
- Open space at end of Wally's Walk.
- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees where possible.
- Refer to the University Creek, Innovation Road and Wally's Walk landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT D05

Architectural Principles

Lot D05 is located on the eastern edge of the Academic Core. The lot lies directly on the University Creek zone.

Built Form

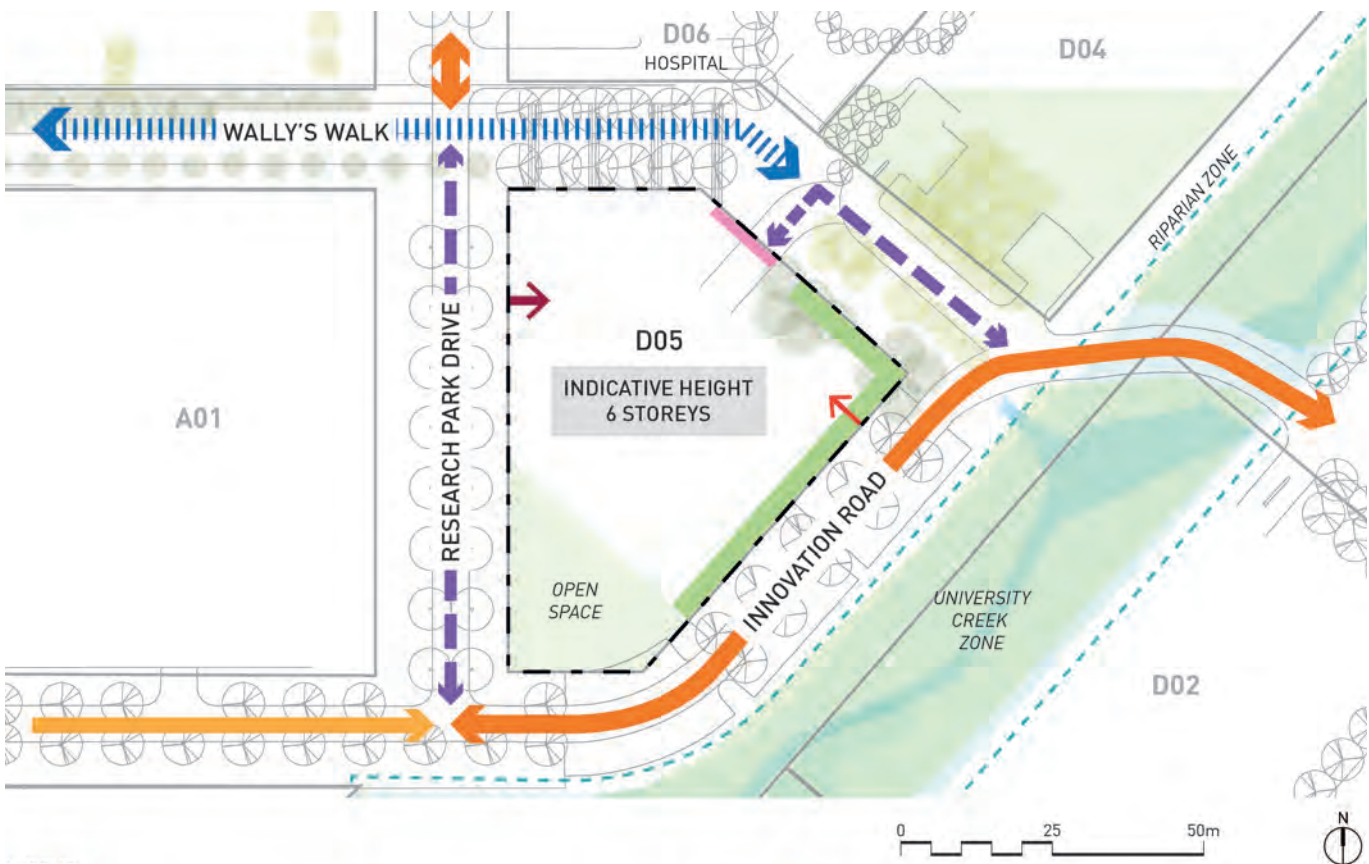
- Indicative height 6 storeys.
- Reinforce street wall to a recommended height of 6 storeys along the creek frontage.
- Built form should address creek.
- Optimise solar access to creek.

Access

- Primary address located indicatively on Research Park Drive along the western frontage.
- Secondary address located indicatively on Innovation Road along south-east frontage from University Creek.
- Service access from Wally's Walk along north-east frontage.

Landscape

- Interface with University Creek zone.
- Provide open space on southern corner of lot.
- Significant trees along Wally's Walk to be retained.
- Review and retain significant trees where possible.
- Refer to the University Creek, Wally's Walk, Research Park Drive and Innovation Road landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT D08

Architectural Principles

Lot D08 terminates the eastern end of Wally's Walk. The lot is adjacent to the Macquarie University Hospital and 75 Talavera Road.

Built Form

- Lot is suitable for an infill building
- Building height should relate to surrounding buildings and not exceed 5 storeys
- Building to act as a visual anchor and address the start / end of Wally's Walk
- Building to be designed to enable visual and physical permeability
- Optimise views and vistas to and from Wally's Walk

- Materials and finishes of the building should be sensitive to the natural landscape
- Building should be sensitively designed on interfaces proximate to surrounding buildings
- Building to respond to the topography and landscaped character of the campus

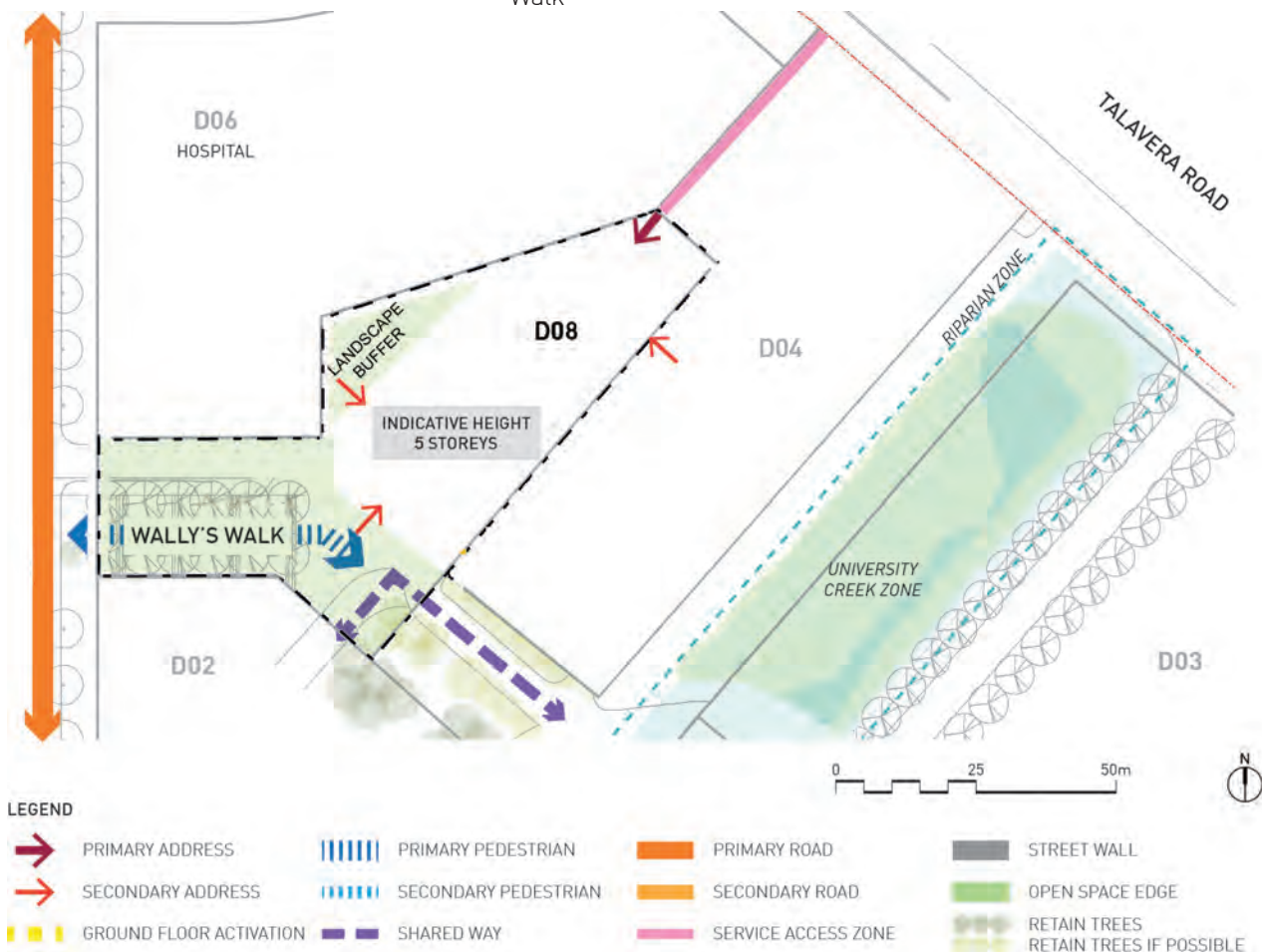
Access

- Building to retain pedestrian access to Innovation Road and University Creek, via the continuation of Wally's Walk
- Building to provide equitable access from Innovation Road
- Building to address Innovation Road and the extension of Wally's Walk

- Provide service vehicle access from Talavera Road

Landscape

- Provide outdoor gathering spaces for a variety of activities
- Provide a landscape buffer at the interface with Macquarie University Hospital
- Building to integrate with the landscaped termination of Wally's Walk
- Review and retain significant trees where possible
- Incorporate riparian planting where possible
- Consider green infrastructure elements to integrate the building into the landscape



5. LOT CONTROLS

5.2.5 Precinct E

Precinct E, which forms part of the Academic Core, is located in the southern end of the campus. It adjoins University Avenue and Herring Road and also consists of two major gateways into the campus at Balaclava Road and Herring Road Gateways.

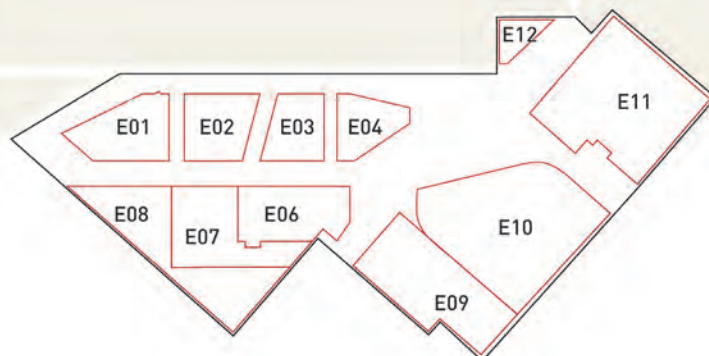


FIGURE 38: LOTS WITHIN PRECINCT E

LOT E02

Architectural Principles

Lot E02 is bounded by Macquarie Walk and the western end of University Avenue. It is located on the southern end of the Academic Core.

Built Form

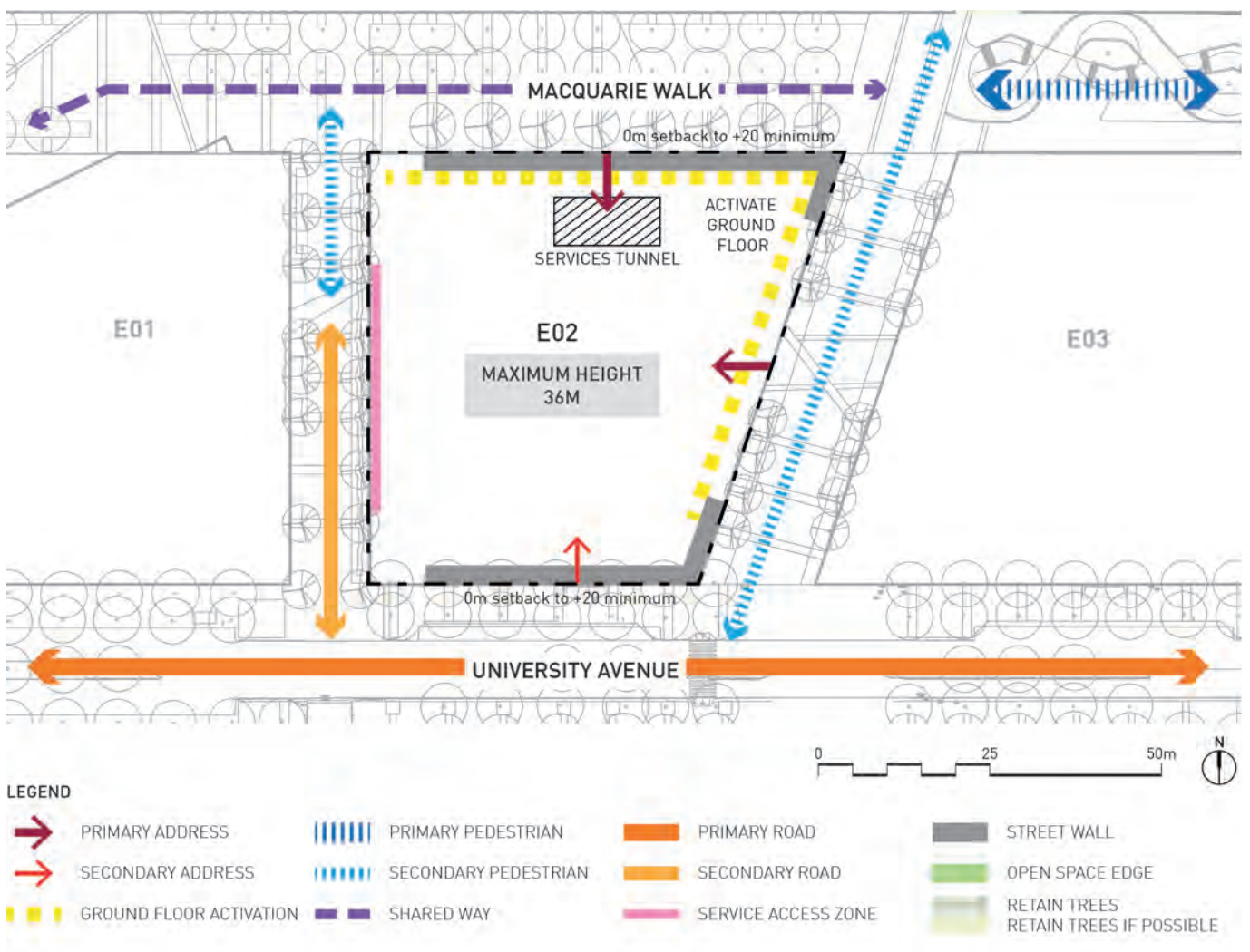
- Indicative height 8 storeys.
- Reinforce street wall to Macquarie Walk and University Avenue.
- Activate Macquarie Walk and pedestrian link frontages.
- High quality facades to Macquarie Walk and University Avenue.

Access

- Primary addresses located on Macquarie Walk and eastern frontage.
- Secondary address located on University Avenue.
- Service access from the secondary road on the western frontage.
- Preserve access to existing service tunnel.

Landscape

- Interface with Macquarie Walk and University Avenue.
- Review and retain significant trees where possible.
- Refer to the Macquarie Walk, and University Avenue landscape guidelines in the Public Domain chapter.



5. LOT CONTROLS

LOT E03

Architectural Principles

Lot E03 is located in the southern end of the Academic Core at the intersection of Macquarie Walk and Sir Christopher Ondaatje Avenue.

Built Form

- Indicative height 8 storeys.
- Reinforce street wall to Macquarie Walk, University Avenue and the secondary pedestrian way on the western frontage.
- Activate Macquarie Walk and pedestrian link frontages.

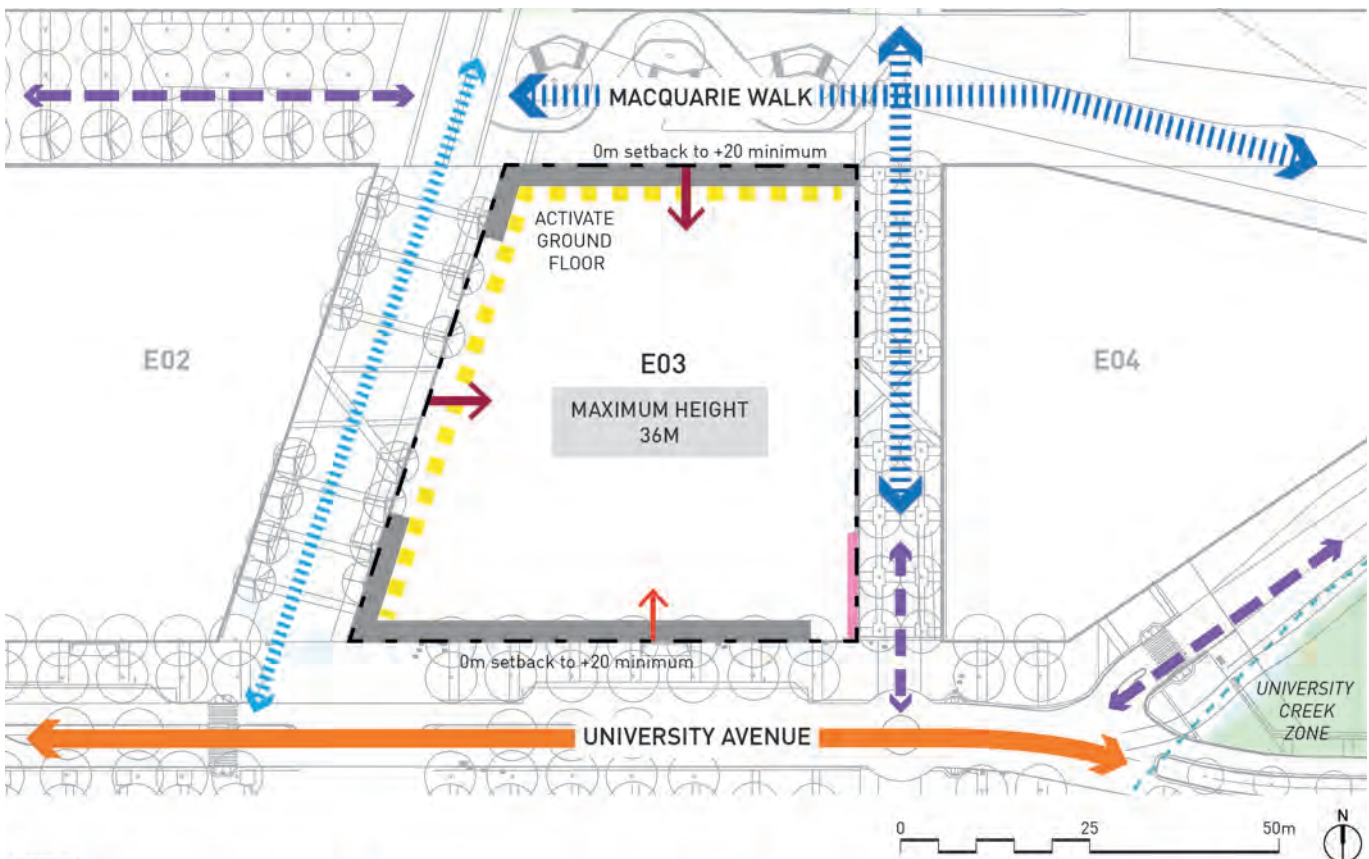
- High quality facades to Macquarie Walk and University Avenue

Access

- Primary addresses located indicatively on Macquarie Walk and along western frontage.
- Secondary address located on University Avenue along the southern frontage.
- Service access from eastern end of University Avenue, along the eastern frontage.

Landscape

- Interface with the Plaza Zone of Macquarie Walk and also University Avenue.
- Review and retain significant trees where possible.
- Refer to the Macquarie Walk, Sir Christopher Ondaatje Avenue and University Avenue landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

LOT E04

Architectural Principles

Lot E04 is located in the southern end of the Academic Core at the intersection of Macquarie Walk and Sir Christopher Ondaatje Avenue.

Built Form

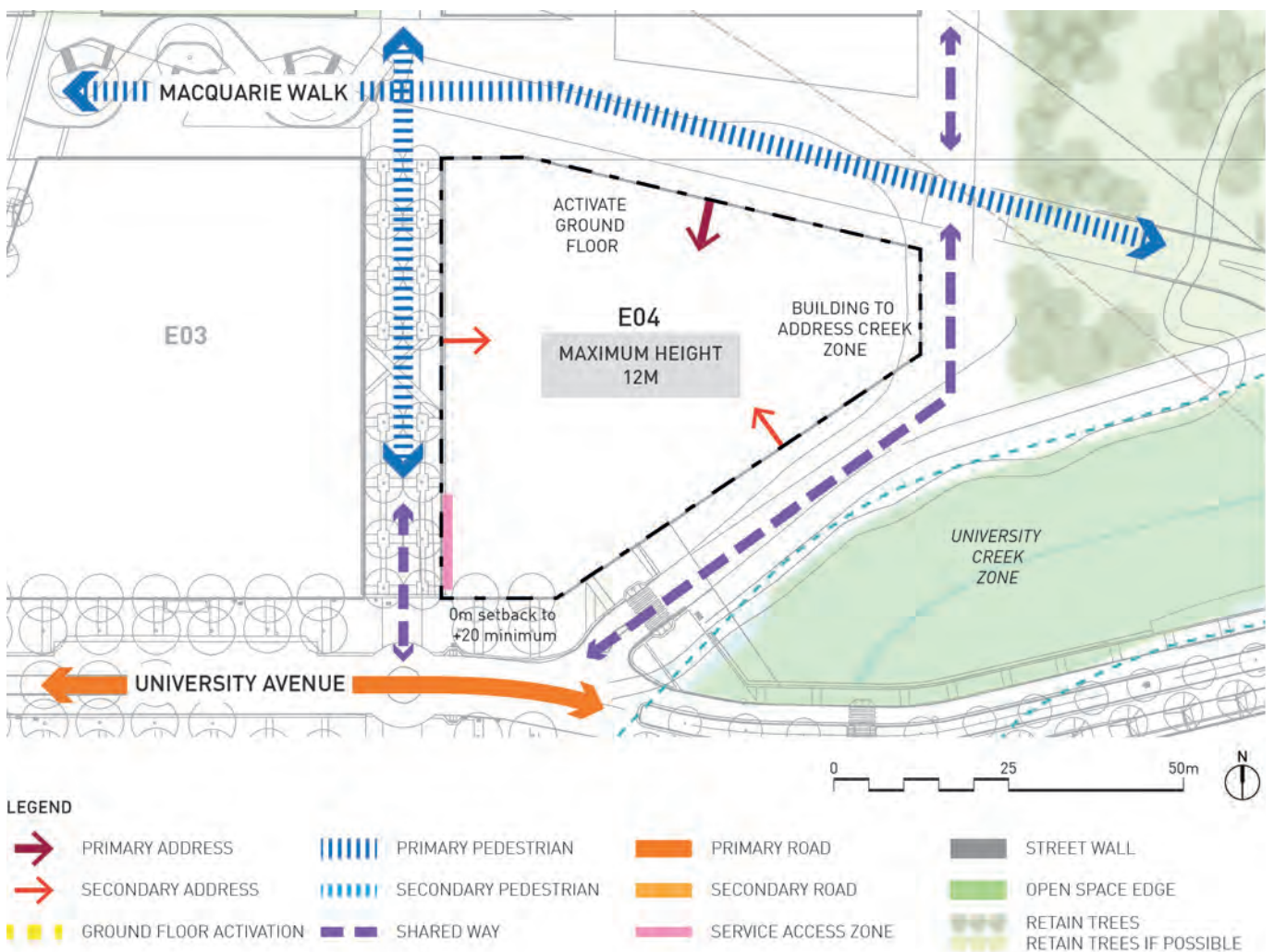
- Indicative height 3 storeys.
- Develop as unique built form at campus entry.

Access

- Primary address located on Macquarie Walk on the northern frontage.
- Secondary access on southern frontage and Sir Christopher Ondaatje along the western frontage.
- Service access from southern frontage.

Landscape

- Interface with the plaza zone of Macquarie Walk, Sir Christopher Ondaatje Avenue and also the University Creek zone.
- Refer to the Macquarie Walk, Sir Christopher Ondaatje Avenue, University Avenue and University Creek landscape guidelines in the Public Domain chapter.



5. LOT CONTROLS

LOT E07

Architectural Principles

Lot E07 completes the precinct south of University Avenue. The site sits behind the Cochlear Building and is seen as a potential expansion of Cochlear. The site should have an address off a future open space on the Cochlear carpark.

Built Form

- The site has a height limit of 36m.
- A high quality facade resolution is needed towards University Avenue.
- Streetwall definition to 20-24m

towards University Avenue (match Cochlear Stage 1).

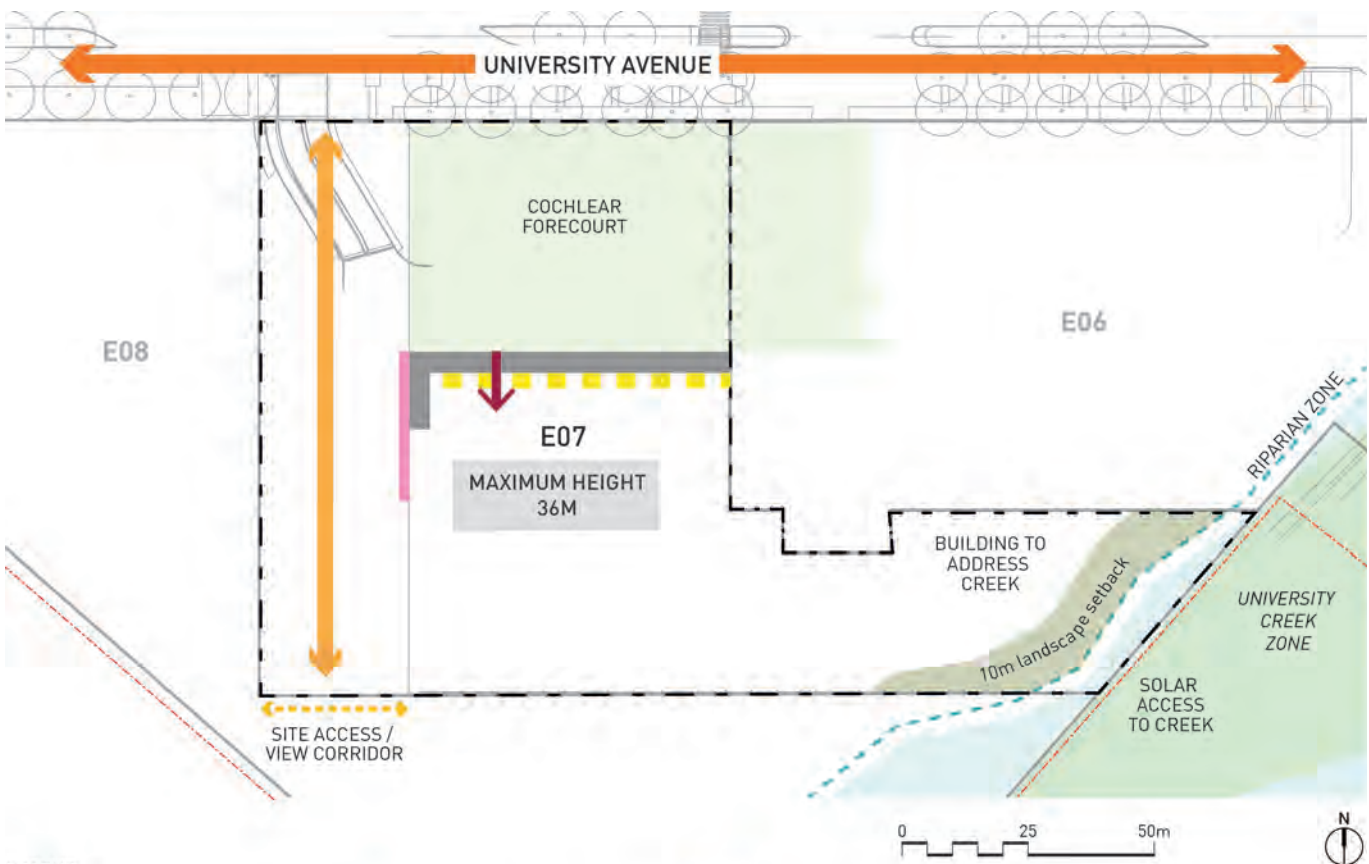
- 3m minimum setback above streetwall line.
- Environmental management elements should be incorporated into the exposed western face of the building.
- Building to address University Creek along eastern frontage.
- High quality facade required.

Access

- Primary pedestrian access from the Cochlear forecourt.
- Vehicular access is off the corridor to the west.

Landscape

- 10m buffer to riparian zone.
- Retain significant trees where possible.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT E08

Architectural Principles

Lot E08 is located in the southern end of the Academic Core along University Avenue.

Built Form

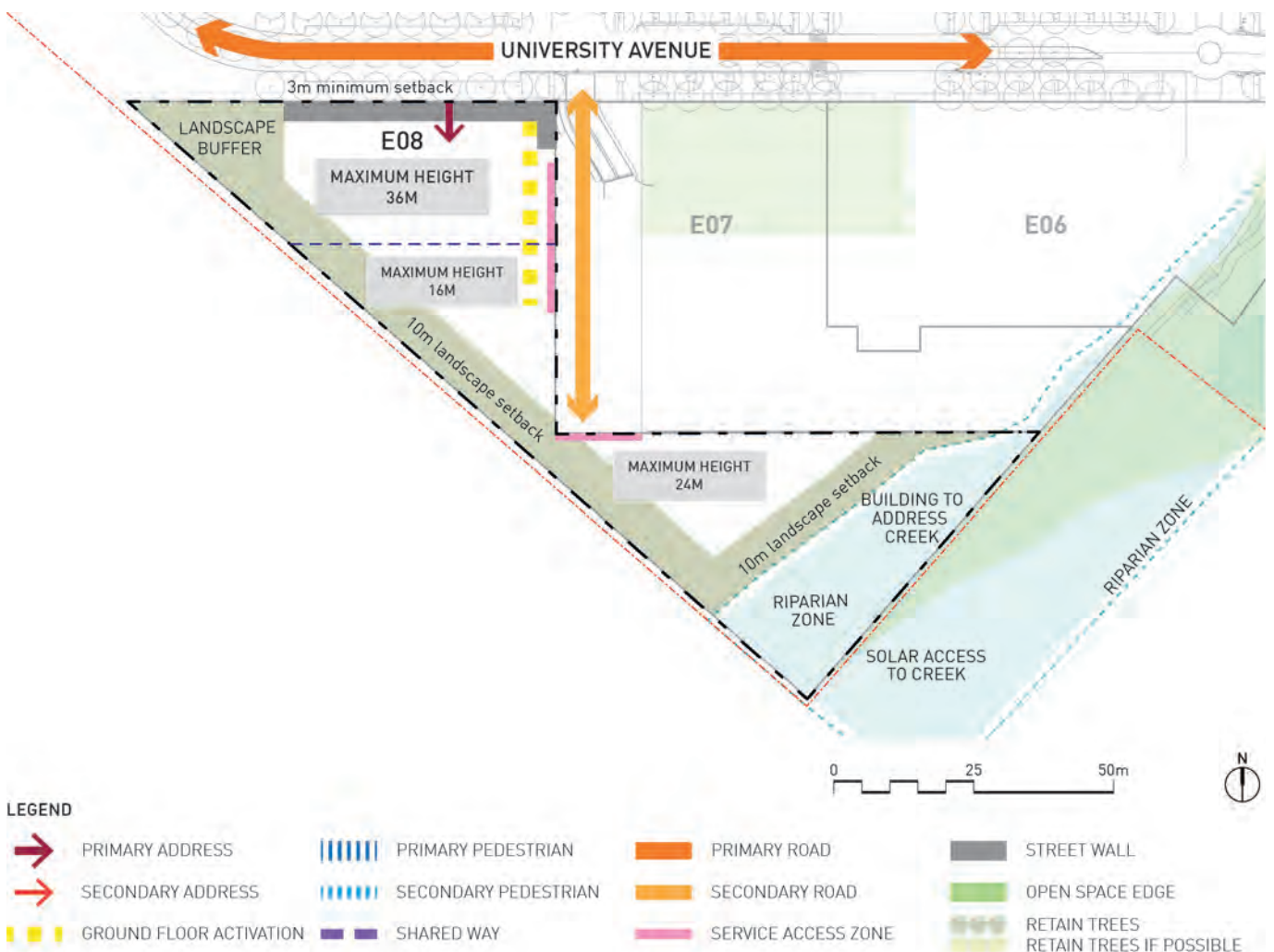
- Indicative height 3-8 storeys.
- Reinforce street wall to University Avenue on the northern frontage and the secondary road on the eastern frontage.
- Street wall definition to 20-24m on University Avenue.
- 3m minimum setback above street wall.

Access

- Primary address located indicatively on University Avenue along the northern frontage.
- Service access from the secondary road along the eastern frontage.

Landscape

- 10m landscape buffer along southern boundary.
- Review and retain significant trees where possible.
- Refer to the University Avenue landscape guidelines in the Public Domain chapter.



5. LOT CONTROLS

LOT E09

Architectural Principles

Located in the south-east corner of Precinct E, Site E09 affects a scale transition to lower buildings to the south of the University. Located on the edge of the campus, the site is adjacent to high density residential development on Herring Road. The site is subject to height and FSR controls in the Ryde LEP.

Lot boundaries generally match LEP mapping.

Built Form

- Maximum FSR 3.5:1.
- A 10m minimum landscape buffer along the southern boundary to ensure adequate building separation.
- A 10m setback is required on Herring Road.
- Streetwall definition is required on the Herring Road frontage.
- 3m minimum setback above streetwall line (8 storeys).
- Environmental management elements should be incorporated into the exposed western face of the building.

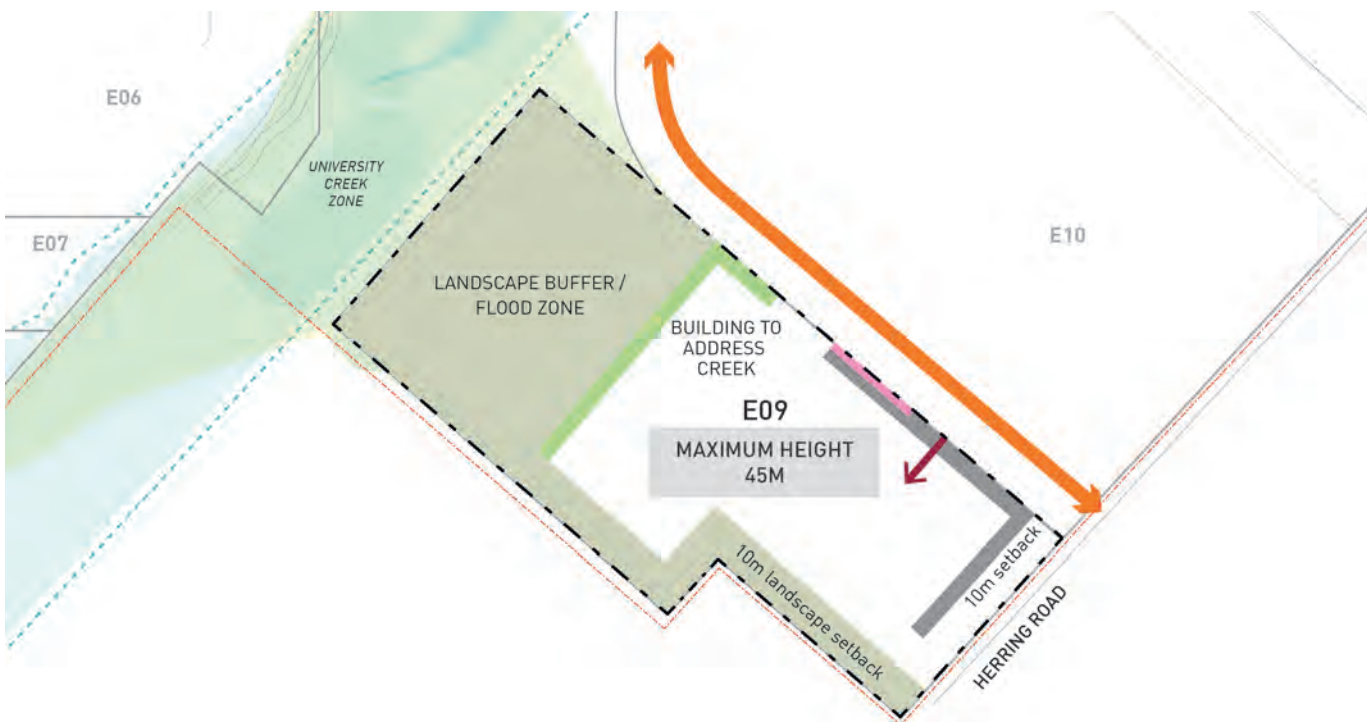
- Building to address University Creek.

Access

- Vehicular access is off the new north south road.
- Car parking is to be set back to allow activation of the open space frontage.

Landscape

- Landscape interface at University Creek.
- Refer to University Creek landscape guidelines in Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT E10

Architectural Principles

Lot E10 forms a gateway to the campus at the Herring Road entry. Like E11, the site is set back from the road to manage the high scale of buildings at the Herring Road Gateway. The site is subject to height and FSR controls in the Ryde LEP. Lot boundaries generally match LEP mapping.

Built Form

- Maximum FSR 3.5:1.
- Maximum height of 120m.
- A high quality architectural resolution is required in this visible site.

- Primary streetwall definition on the Herring Road and Waterloo Road frontages.
- Taller elements to set back the streetwall line (above 8 storeys).
- Environmental management elements should be incorporated in the exposed western face of the building.
- Activate roofs to lower buildings.
- Setback upper levels of low rise building at Gateway above 30m.

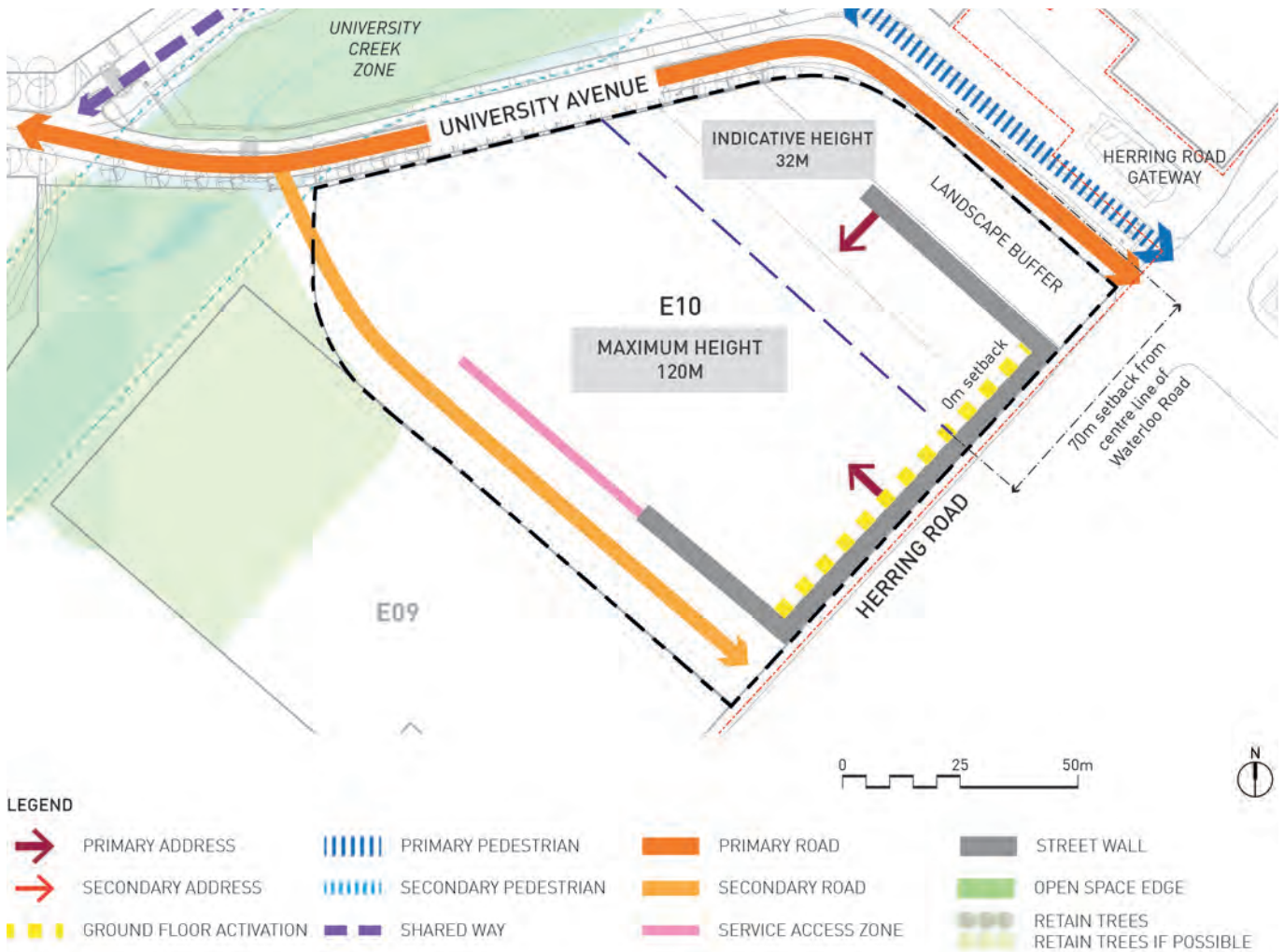
Access

- New secondary road between University Avenue and Herring Road.

- Primary pedestrian access from Herring Road and Herring Road Gateway.
- No vehicular access from University Avenue.
- Service access from new road on southern boundary.

Landscape

- Landscape interface at Herring Road Gateway.
- Reinforce planting along University Avenue.
- Refer to University Avenue landscape guidelines in Public Domain chapter.



5. LOT CONTROLS

LOT E11

Architectural Principles

Lot E11 terminates the eastern end of University Avenue at the with Herring Road. The lot is adjacent the University Creek zone and also Macquarie University Station. Lot boundaries generally match LEP mapping.

Built Form

- Maximum height of 120m.
- Maximum GFA of 128,000 m², excluding air rights.
- Reinforce open space edge along the north-west corner adjacent University Creek.

- Reinforce street wall to Herring Road.
- Building to address University Creek.
- Preserve Herring Road address.
- Possible use of air rights over rail service building.
- Activate roofs to lower buildings.
- Setback upper levels of low rise building at Gateway above 30m.

Access

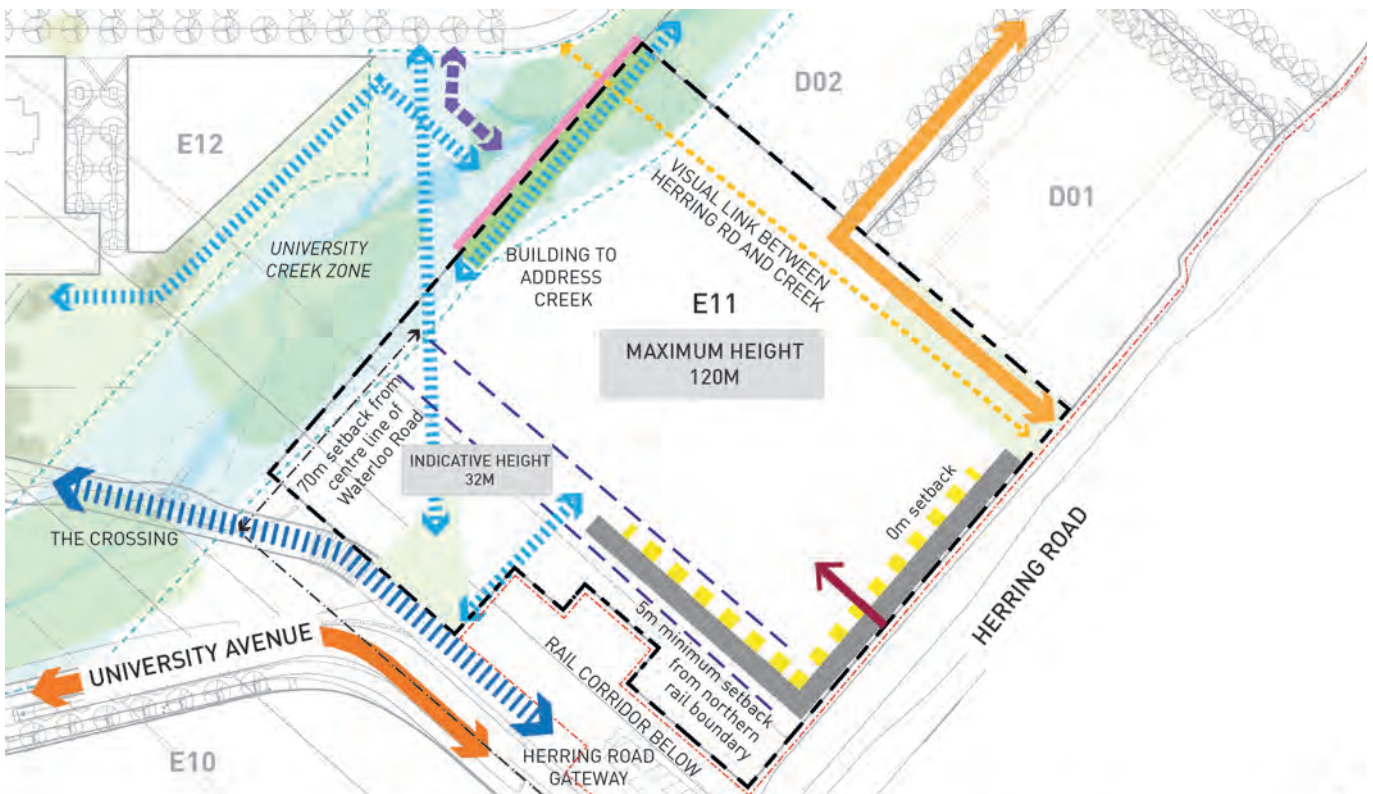
- New secondary road from Herring Road to Innovation Road.
- Primary address located indicatively on Herring Road along

the south-east frontage.

- Service access from the shared way on the north-west frontage.
- Retail to link to Macquarie Centre.

Landscape

- Interface with University Creek zone.
- Preserve riparian corridor.
- Open space at crossing boundary.
- Review and retain significant trees where possible.
- Refer to the University Avenue and University Creek landscape guidelines in the Public Domain.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT E12

Architectural Principles

Lot E12 is located on the eastern end of the Academic Core along Innovation Road. The lot is adjacent the University Creek zone and above the rail corridor which runs below the lot.

Built Form

- Buildings to address University Creek.
- Indicative height of 6 storeys.

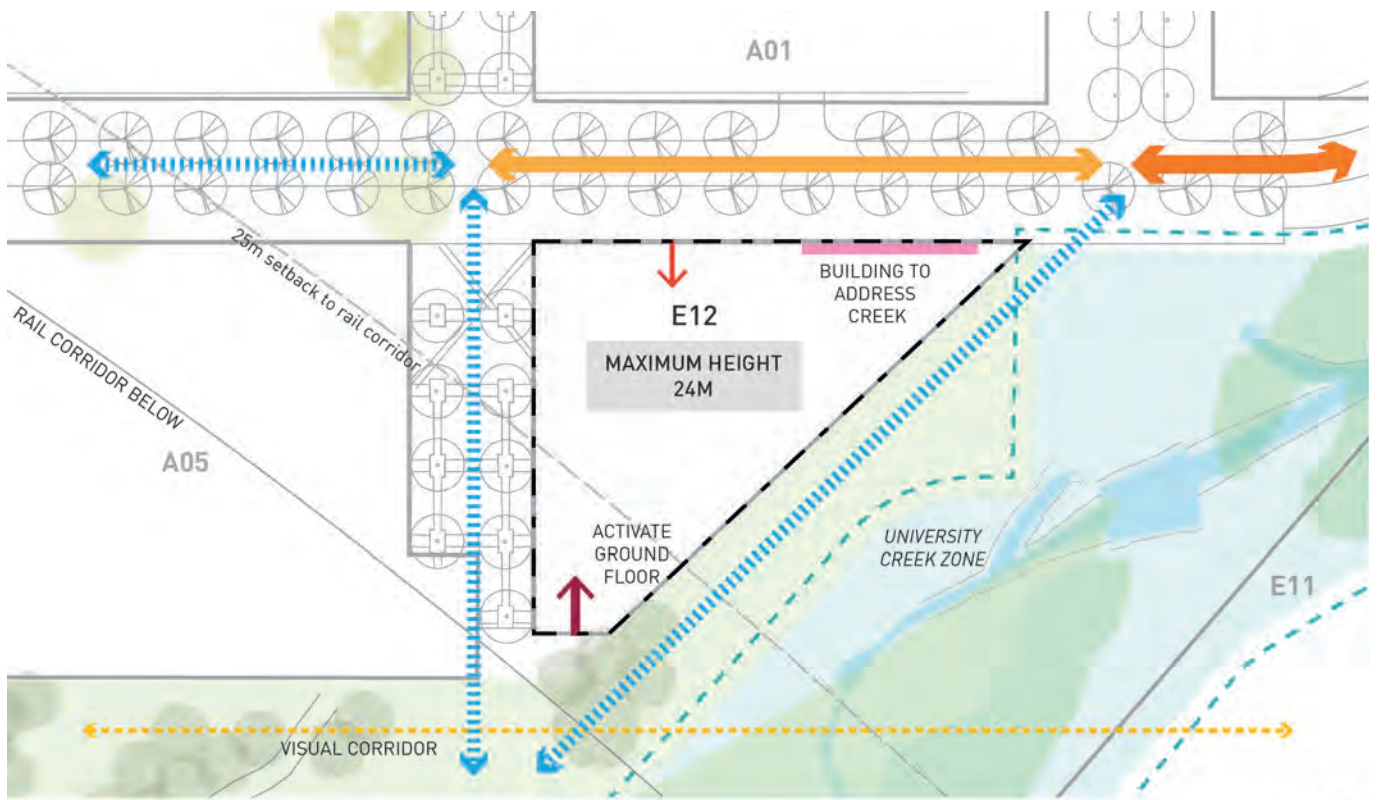
- Optimise solar access to creek.

Access

- Primary address located indicatively on Macquarie Walk along the southern frontage.
- Secondary address located indicatively along the northern frontage.
- Service access from the northern frontage.

Landscape

- Interface with University Creek zone.
- Refer to the Innovation Road, Macquarie Walk and University Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE



5. LOT CONTROLS

5.2.6 Precinct F

Precinct F, Epping Road West, is located in the south-west of the campus, on the corner of Culloden and Epping Roads.

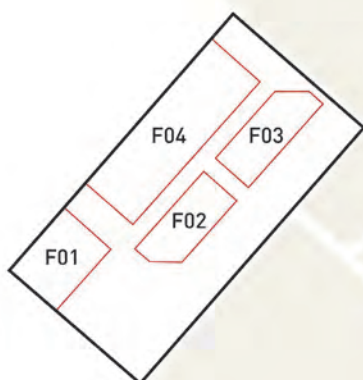


FIGURE 39: LOTS WITHIN PRECINCT F

LOT F01

Architectural Principles

Lot F01 is located in the far western corner of the campus adjacent to the intersection of Culloden and Epping Roads. The lot is adjacent to residential buildings on Culloden Road.

Built Form

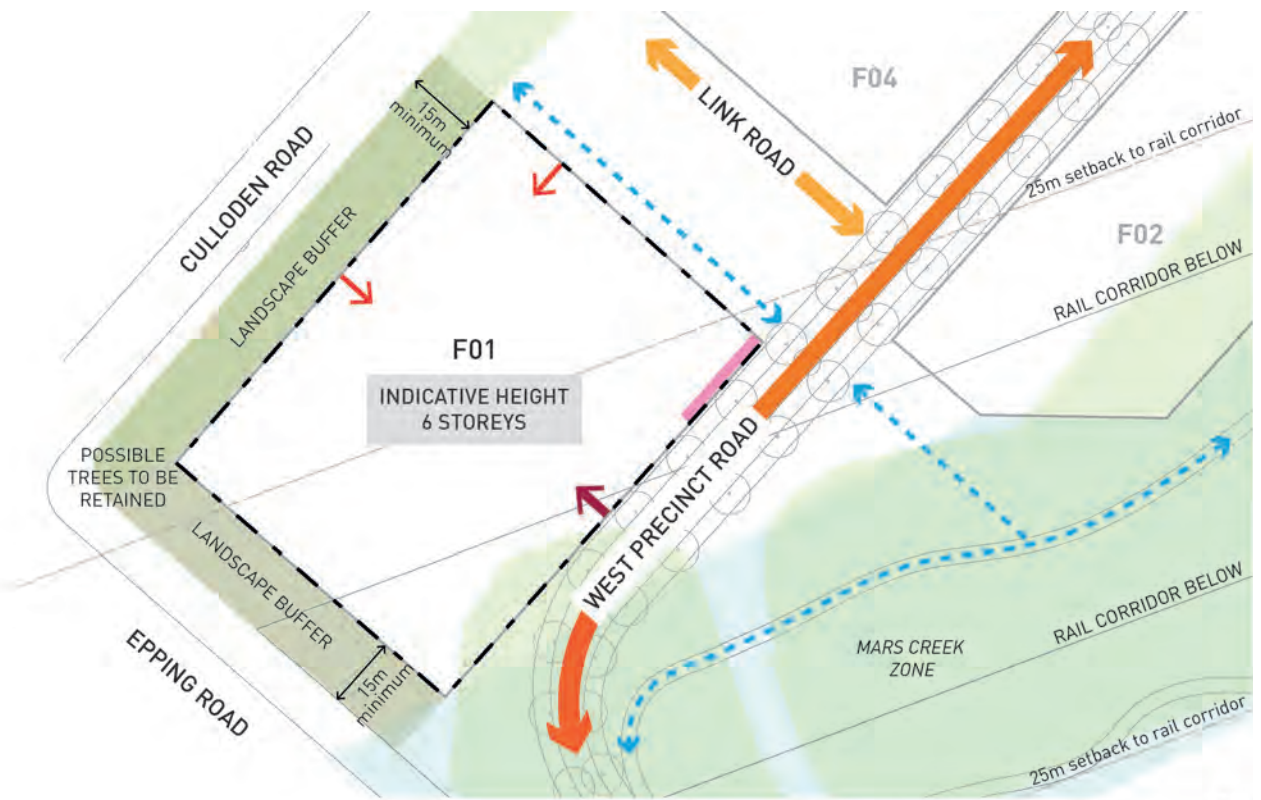
- Indicative height 6 storeys.
- The lot is suitable to contain several buildings.
- Buildings are to address Mars Creek on its south-eastern frontage.

Access

- Primary address located indicatively on West Precinct Road along the south-east frontage.
- Possible secondary addresses located indicatively on Link Road along the north-east frontage and Culloden Road along the north-west frontage.
- Service access from West Precinct Road along the south-east frontage.

Landscape

- Landscape buffer along corner of Culloden and Epping Roads.
- Review and retain significant trees if possible.
- Refer to the West Precinct Road and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

5. LOT CONTROLS

LOT F02

Architectural Principles

Lot F02 is located in the western corner of the campus along West Precinct Road and facing the Mars Creek zone.

Built Form

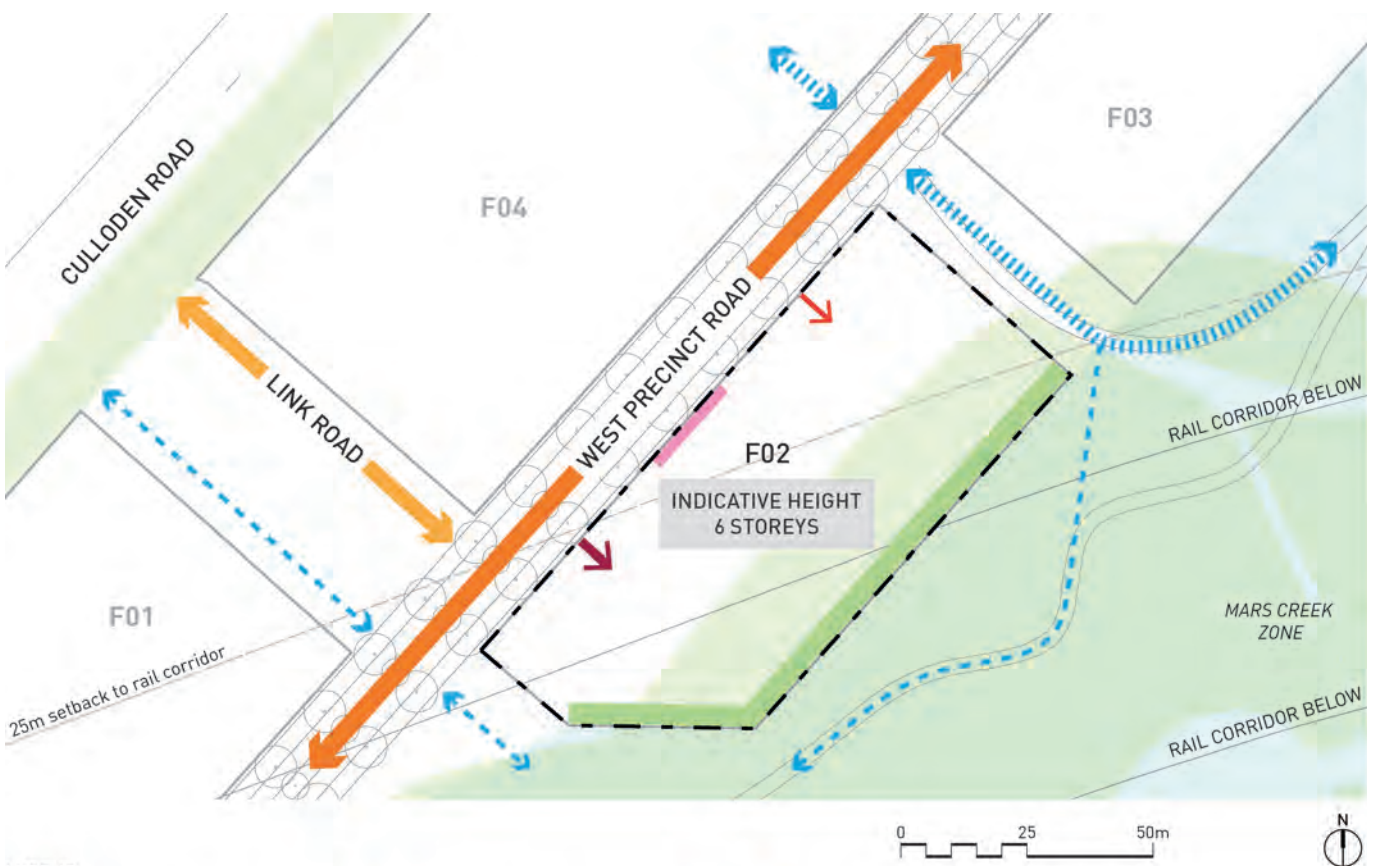
- Indicative height 6 storeys.
- The lot is suitable to contain several buildings.
- Buildings are to address Mars Creek.

Access

- Primary address located indicatively on West Precinct Road along the north-west frontage.
- Possible secondary address also located indicatively on West Precinct Road along the north-west frontage.
- Service access from West Precinct Road along the north-west frontage.

Landscape

- Interface with the Mars Creek zone.
- Review and retain significant trees if possible.
- Refer to the West Precinct Road and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

LOT F03

Architectural Principles

Lot F03 is located in the western part of the campus, sitting in between West Precinct Road and the Mars Creek zone.

Built Form

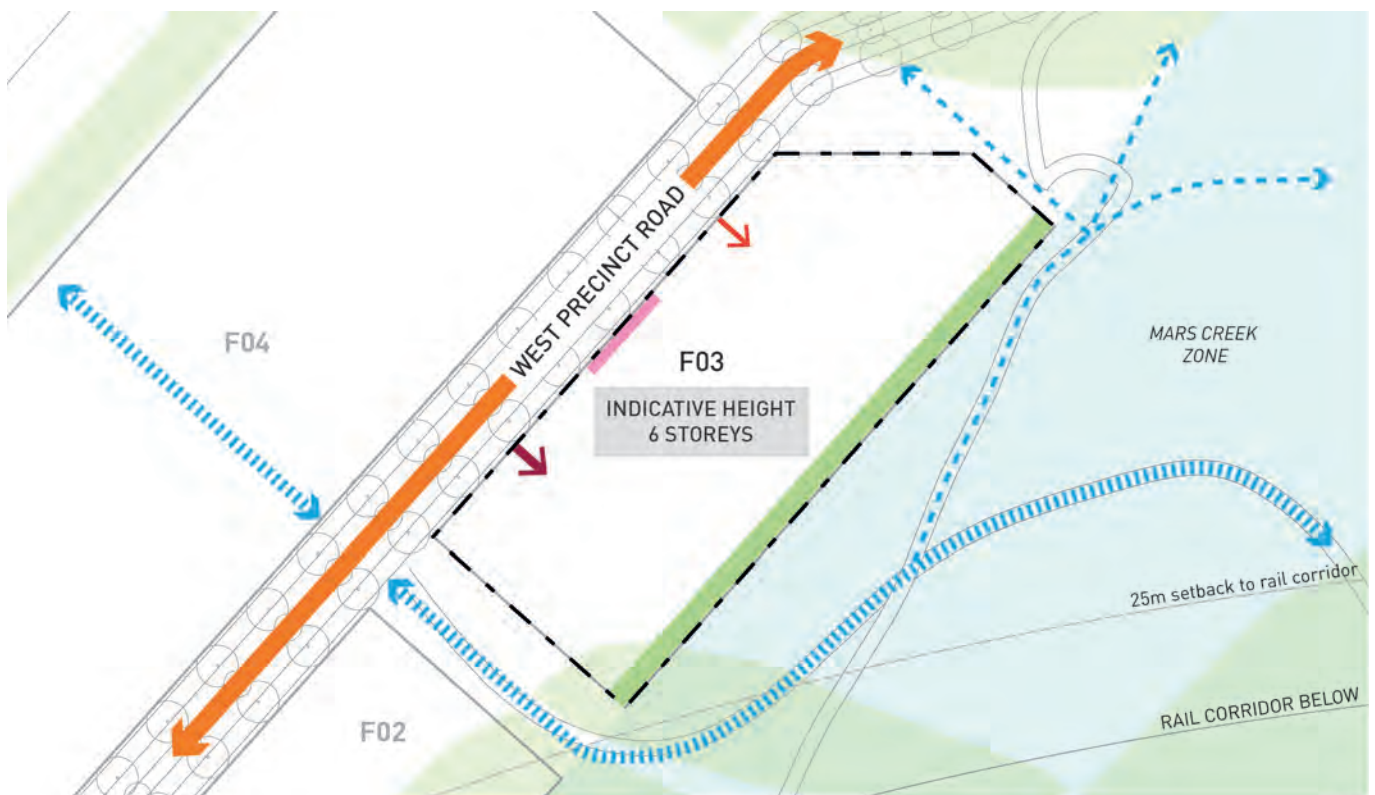
- Indicative height 6 storeys.
- The lot is suitable to contain several buildings.
- Buildings are to address Mars Creek.

Access

- Primary address located indicatively on West Precinct Road along the north-west frontage.
- Possible secondary address also located indicatively on West Precinct Road along the north-west frontage.
- Service access from West Precinct Road along the north-west frontage.

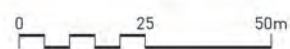
Landscape

- Interface with the Mars Creek zone.
- Review and retain significant trees if possible.
- Refer to the West Precinct Road and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE



5. LOT CONTROLS

LOT F04

Architectural Principles

Lot F04 is located on the western edge of the campus sitting in between West Precinct Road and Culloden Road. The lot is identified for car parking and/or commercial development. The lot is adjacent to residential buildings on Culloden Road.

Built Form

- Indicative height 6 storeys.
- Structured car parking is to be appropriately screened.
- Buildings to address Culloden Road behind a landscape buffer.

Access

- Primary addresses located indicatively on West Precinct Road along the south-east frontage.
- Potential secondary address located indicatively on Culloden Road along the north-west frontage.
- Service access from West Precinct Road along the south-east frontage.

Landscape

- Landscape buffer along Culloden Road.
- Review and retain significant trees if possible.
- Refer to the West Precinct Road landscape guidelines in the Public Domain chapter.



5.2.7 Precinct G

Precinct G, the Epping Road precinct expansion, is located in the south-west of the campus and adjoins Epping Road. The precinct contains a legacy building lot (shown in grey).

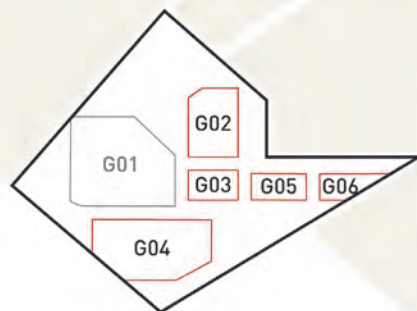


FIGURE 40: LOTS WITHIN PRECINCT G

5. LOT CONTROLS

LOT G02

Architectural Principles

Lot G02 is located on the western side of the Academic Core. The lot is bounded by Wally's Walk, Mars Creek Plaza and Mars Creek.

Built Form

- Indicative height 6 storeys.
- Building is to address Mars Creek zone.
- Reinforce street wall along Macquarie Walk and the eastern frontage.
- There is an overshadowing control along north-east corner. The

height is to be determined with a requirement to maximise solar access to the Arts Lawn (West Common) open space between 11am and 2pm in mid-winter.

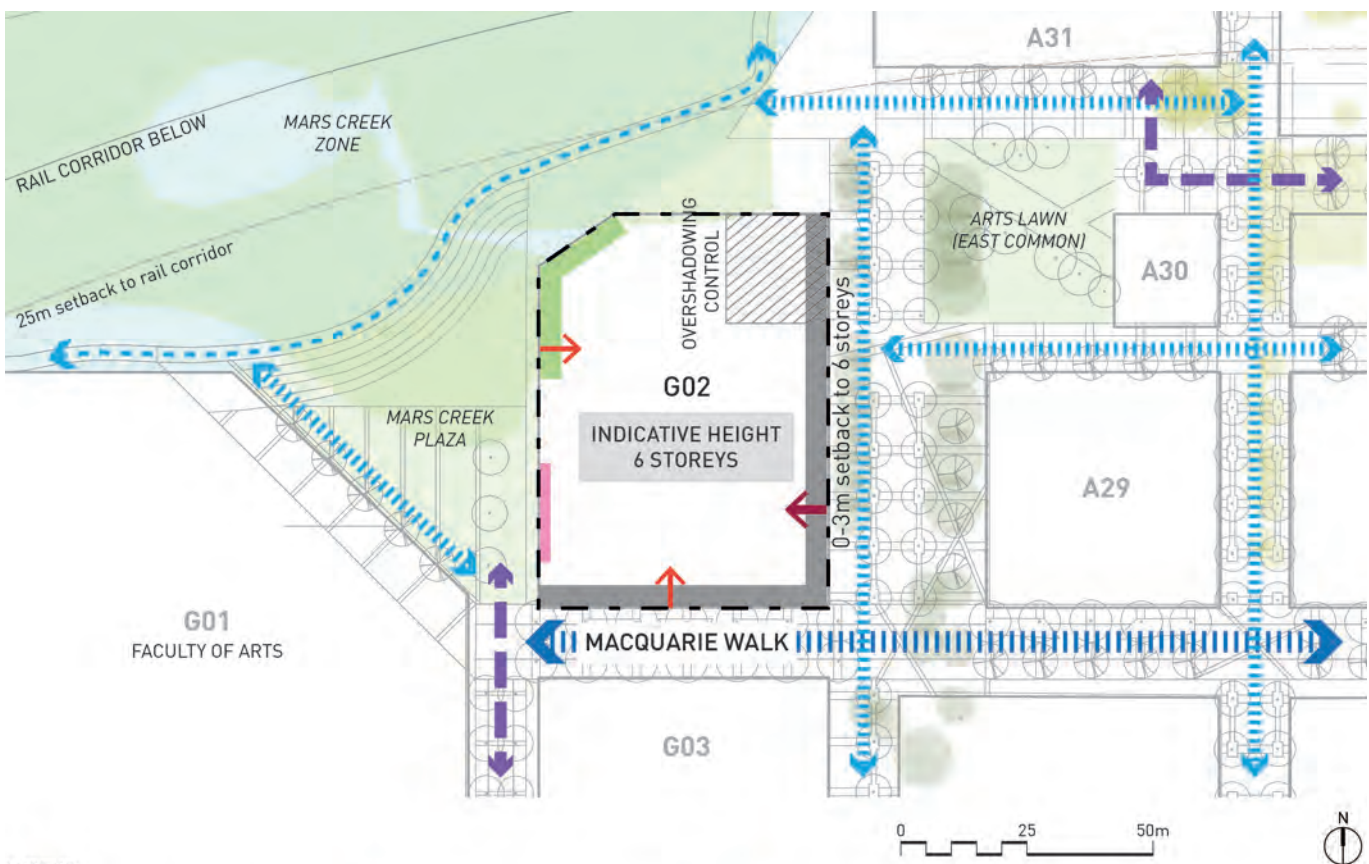
Access

- Primary address located indicatively on pedestrian route along the eastern frontage.
- Possible secondary addresses located indicatively on Macquarie Walk and from Mars Creek Plaza.
- Service access from the shared way on the western frontage from

Mars Creek Plaza.

Landscape

- Interface with the Mars Creek and Mars Creek Plaza.
- Interface with Arts Lawn (West Common) and the retained trees along the eastern frontage.
- Review and retain significant trees if possible.
- Refer to the Macquarie Walk, Arts Lawn (West Common), Mars Creek Plaza and Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

LOT G03

Architectural Principles

Lot G03 is located in the west of the Academic Core. The lot is bounded by Macquarie Walk to the north, the Faculty of Arts building on the west, University Avenue on the south and a pedestrian route on the east.

Built Form

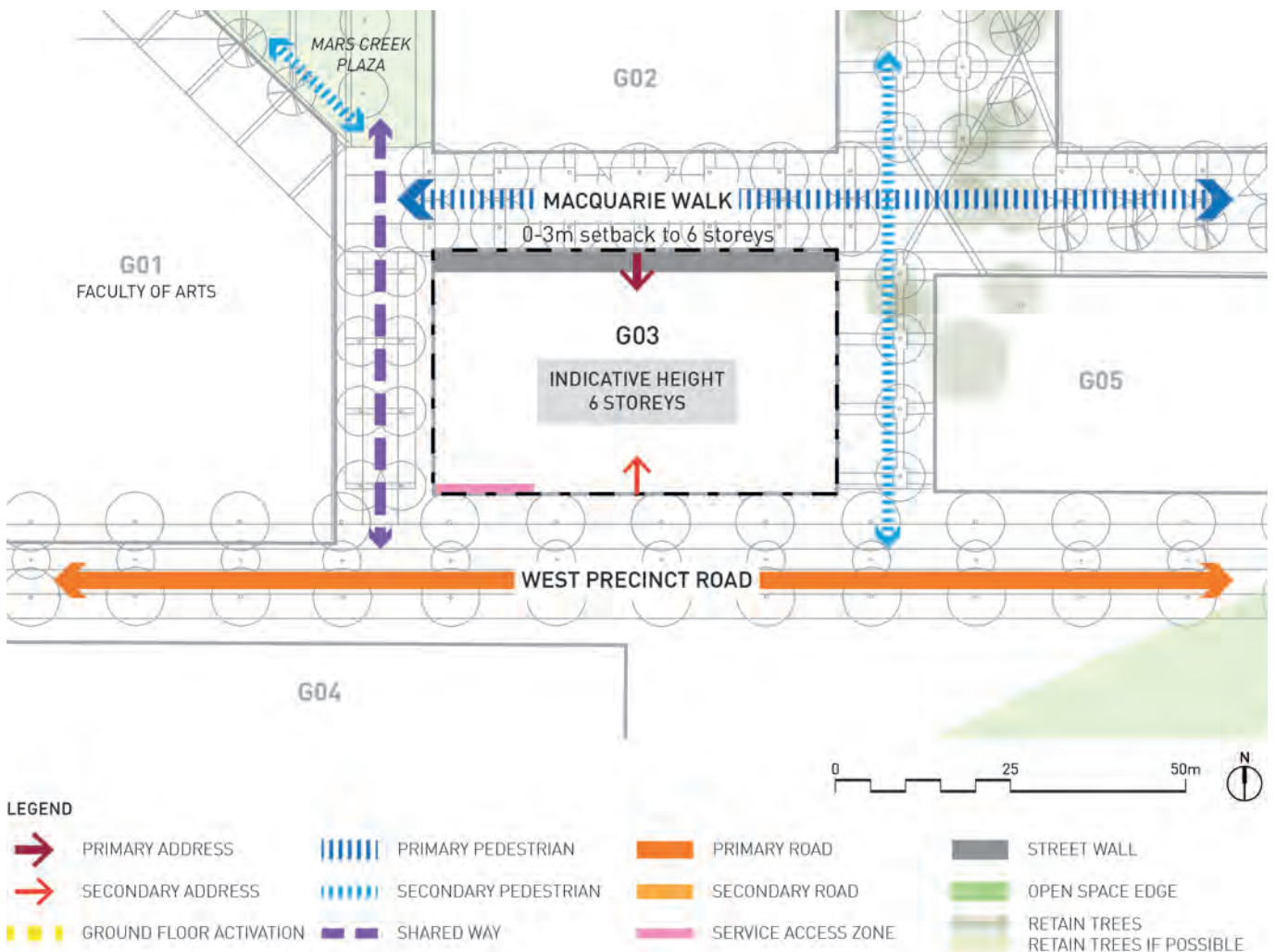
- Indicative height 6 storeys.
- Reinforce street wall along Macquarie Walk.

Access

- Primary address located indicatively on Macquarie Walk along the northern frontage.
- Service access from the shared way along the western frontage.

Landscape

- Review and retain significant trees if possible.
- Refer to the Macquarie Walk, Mars Creek Plaza and University Avenue landscape guidelines in the Public Domain chapter.



5. LOT CONTROLS

LOT G04

Architectural Principles

Lot G04 is located along University Avenue, opposite the Faculty of Arts. The lot is identified for car parking. It is in a prominent location on Balaclava Road Gateway.

Built Form

- Indicative height 6 storeys.
- Reinforce street wall along University Avenue.
- Structured parking should be appropriately screened.

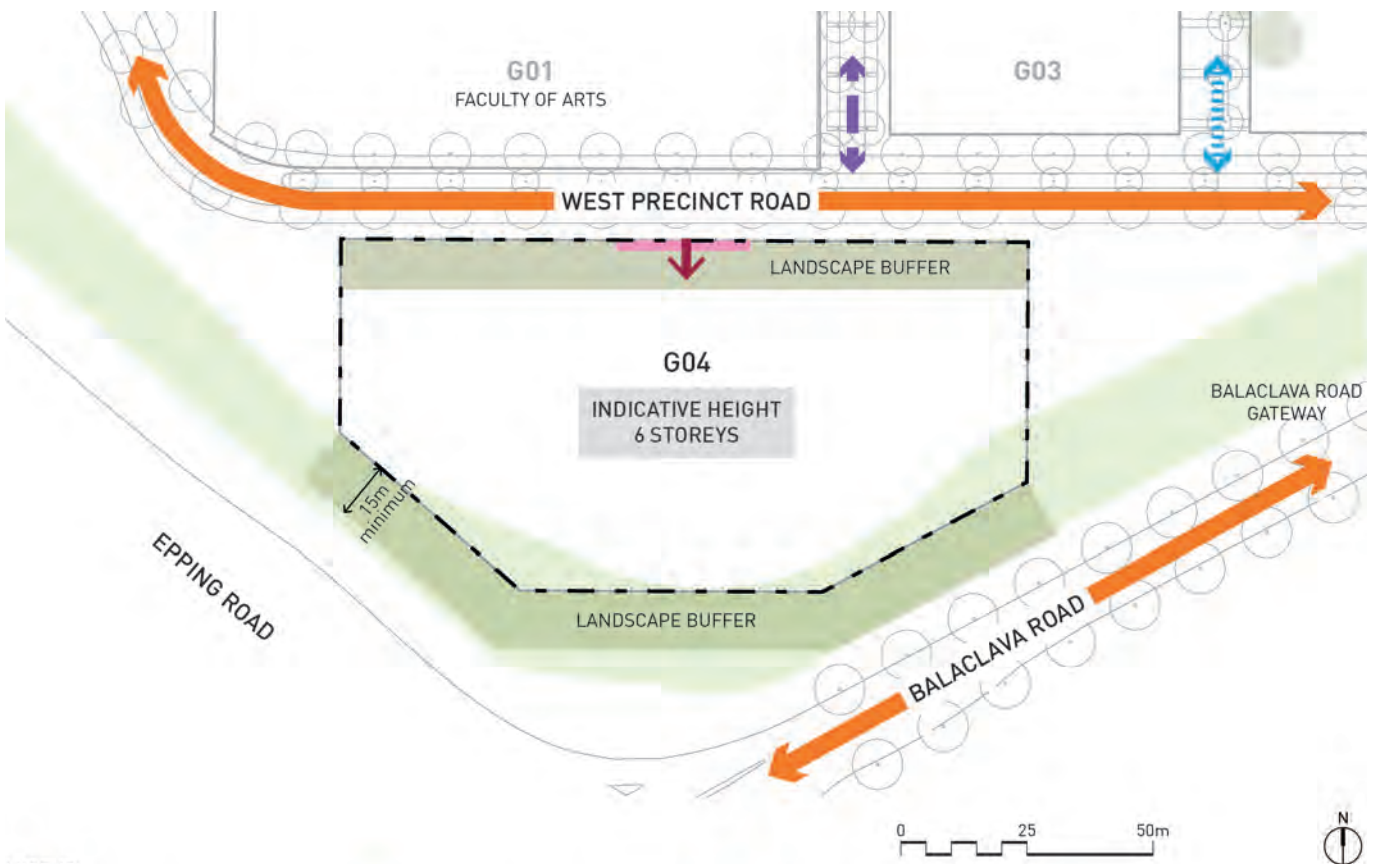
Access

- Primary address located indicatively with the service access on University Avenue along the northern frontage.

- Refer to the University Avenue and Balaclava Road Gateway landscape guidelines in the Public Domain chapter.

Landscape

- Interface with Balaclava Road Gateway.
- Landscape buffer on corner of Epping and Balaclava Roads.
- Review and retain significant trees if possible.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES
							RETAIN TREES IF POSSIBLE

LOT G05

Architectural Principles

Lot G05 is located in the southwest corner of the Academic Core along West Precinct Road. The lot is in a prominent location within the Balaclava Road Gateway.

Built Form

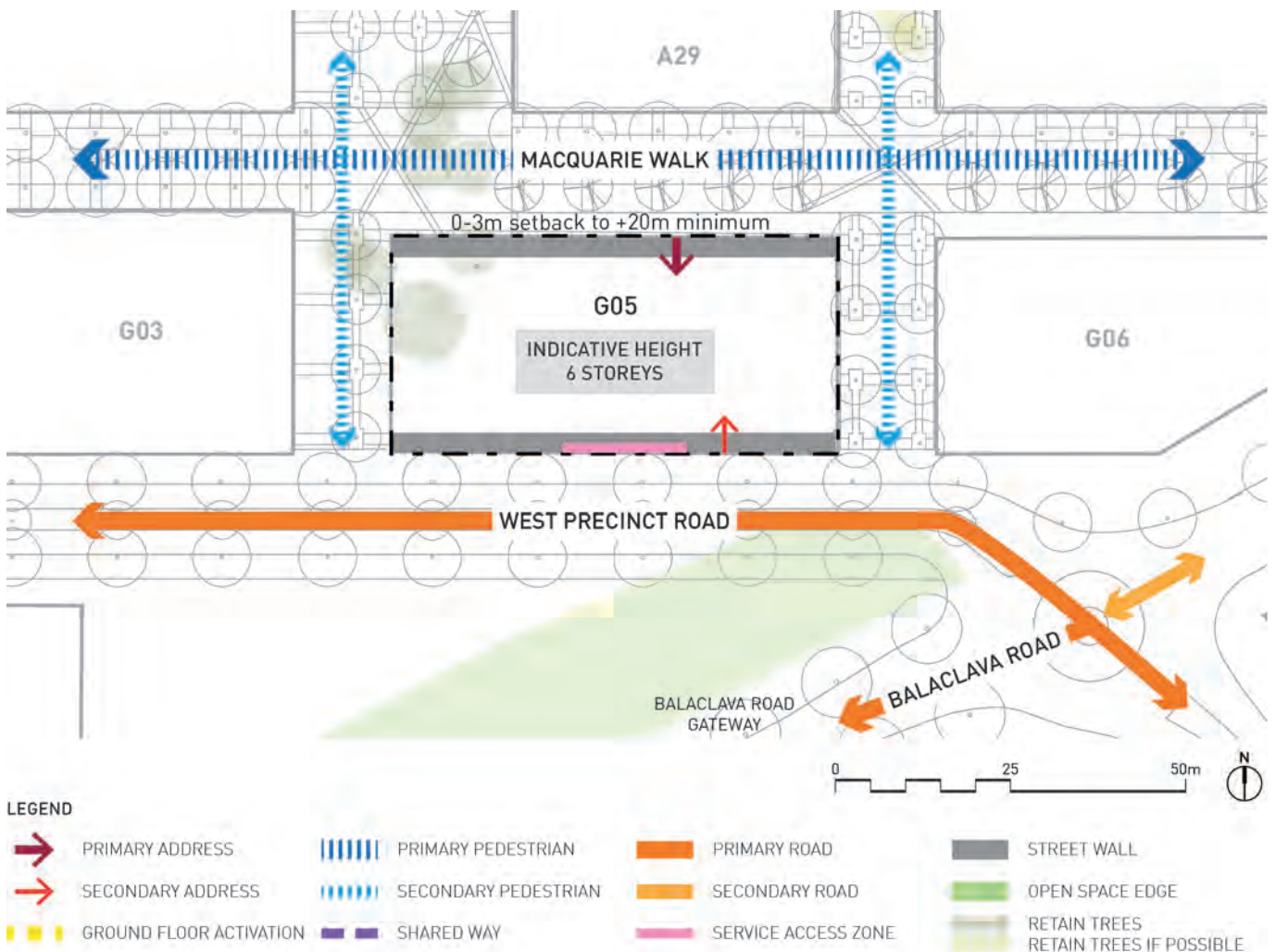
- Indicative height 6 storeys.
- Building is to address West Precinct Road/Balaclava Road Gateway.
- Reinforce street walls along Macquarie Walk and West Precinct Road.

Access

- Primary address located indicatively on Macquarie Walk along the northern frontage.
- Possible secondary address located indicatively on West Precinct Road along the southern frontage.
- Service access from West Precinct Road along the southern frontage.

Landscape

- Interface with Macquarie Walk
- Interface with University Avenue and Balaclava Road Gateway
- Review and retain significant trees if possible.
- Refer to the University Avenue and Balaclava Road Gateway landscape guidelines in the Public Domain chapter.



5. LOT CONTROLS

LOT G06

Architectural Principles

Lot G06 is located in the south-west corner of the Academic Core on the Balaclava Road Gateway.

Built Form

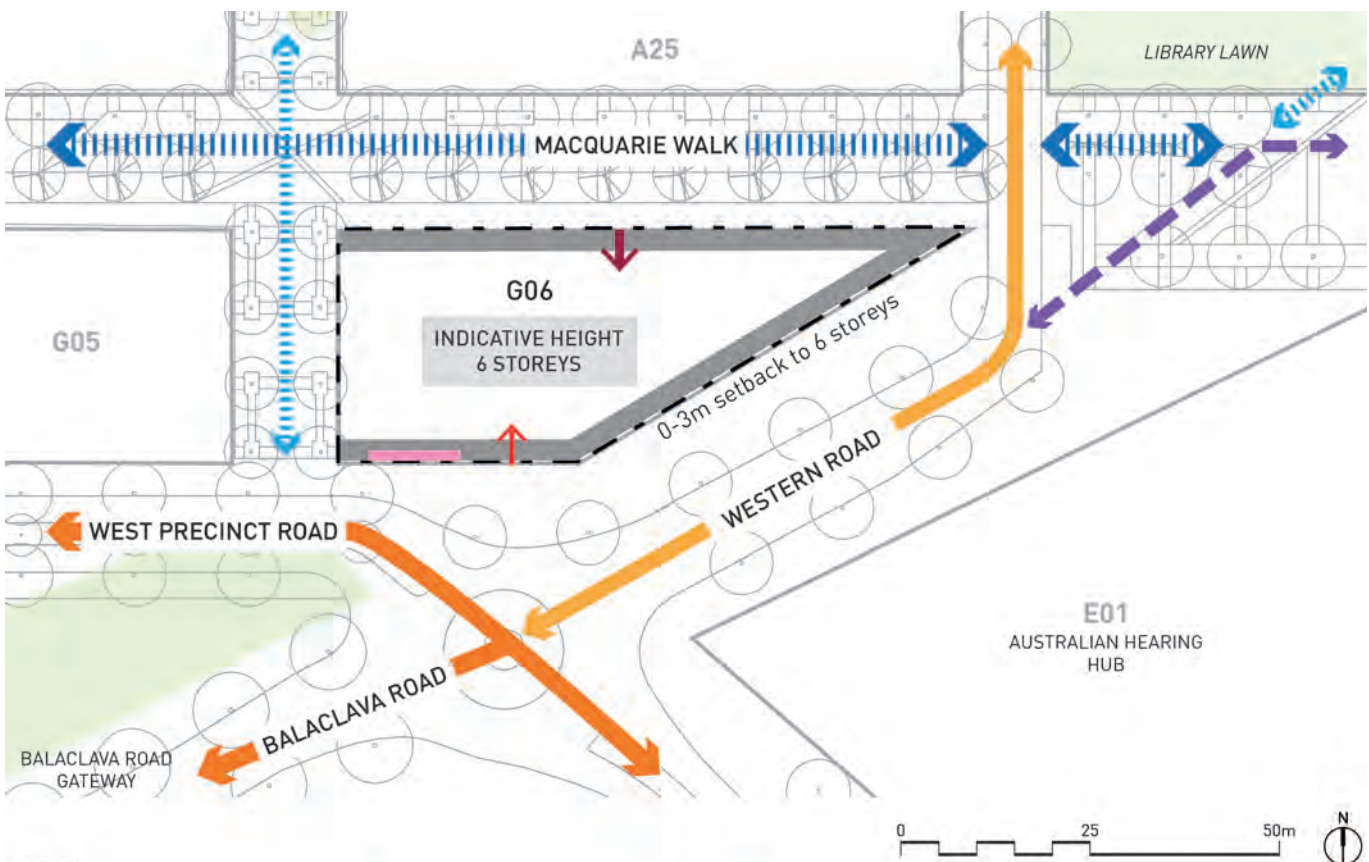
- Indicative height 6 storeys.
- Building is to address Balaclava Road Gateway and Macquarie Walk.
- Reinforce street wall along Macquarie Walk, Western Road and West Precinct Road.

Access

- Primary address located indicatively on Macquarie Walk along the northern frontage.
- Secondary address located indicatively on West Precinct Road along the southern frontage.
- Service access from West Precinct Road along the southern frontage.

Landscape

- Interface with Macquarie Walk and University Avenue.
- Review and retain significant trees if possible.
- Refer to the Macquarie Walk and Balaclava Road Gateway landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE

5.2.8 Precinct H

Precinct H, Talavera Road North, is located in the north of the campus, on the corner of Culloden and Talavera Roads.

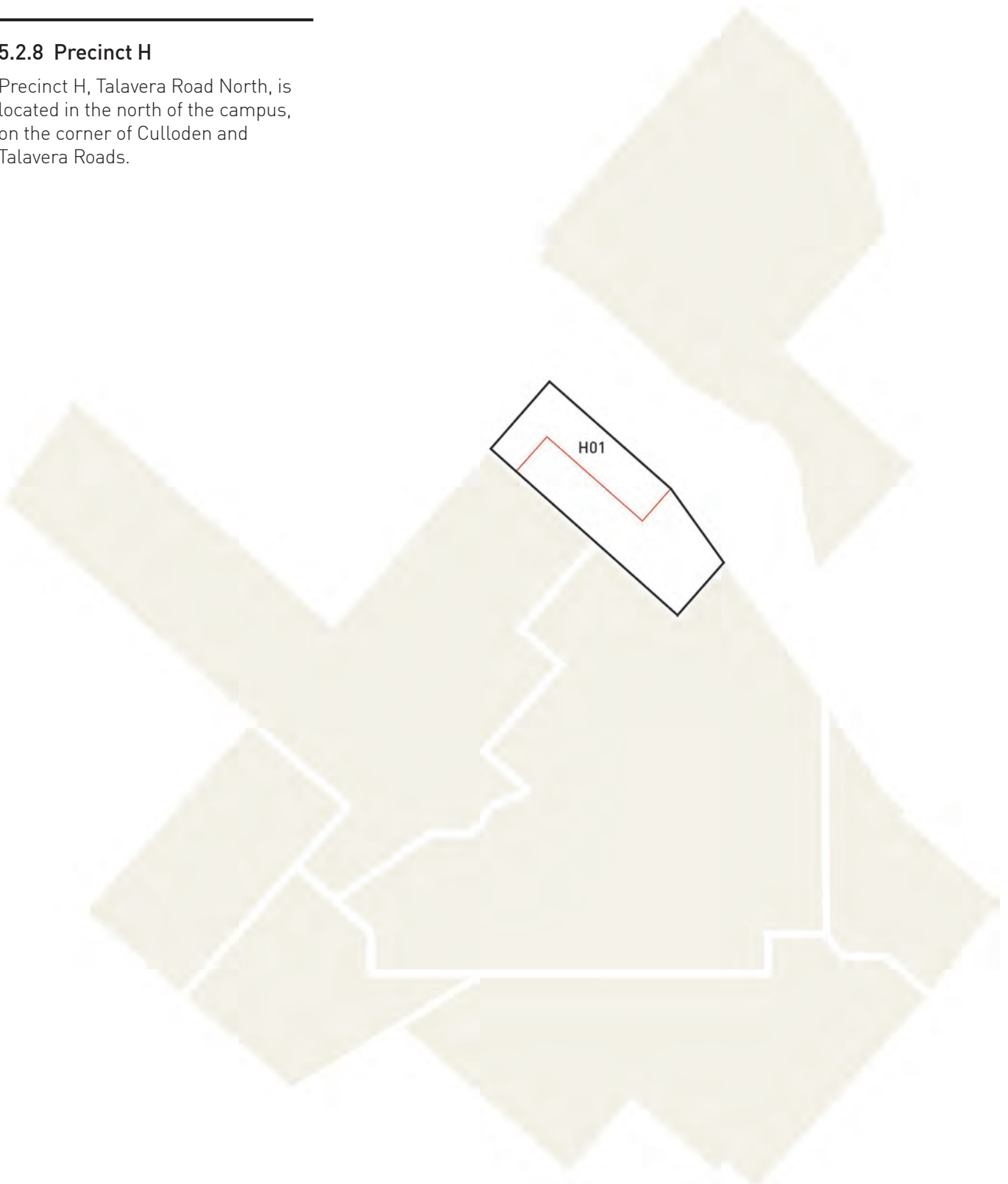


FIGURE 41: LOTS WITHIN PRECINCT H

5. LOT CONTROLS

LOT H01

Architectural Principles

Lot H01 is located in the northern corner of the campus, adjacent to the intersection of Culloden and Talavera Roads. The lot is adjacent to residential buildings on Culloden Road.

Built Form

- Indicative height 6 storeys in north-west section and 3 storeys in north-east section of lot.
- The lot is suitable to contain several buildings.
- Buildings are to address the Mars Creek zone, Culloden and Talavera Roads behind a landscape buffer.

Access

- Primary address located indicatively on Culloden Road along the north-west frontage.
- Possible secondary addresses located indicatively on Culloden Road along the north-west frontage and Talavera Road along the north-east frontage
- Possible service access from both Culloden Road along the north-west frontage and Talavera Road along the north-east frontage.

Landscape

- Landscape buffer along corner of Culloden and Talavera Roads.
- Interface with the Mars Creek zone.
- Review and retain significant trees if possible.
- Refer to the Mars Creek landscape guidelines in the Public Domain chapter.



LEGEND

	PRIMARY ADDRESS		PRIMARY PEDESTRIAN		PRIMARY ROAD		STREET WALL
	SECONDARY ADDRESS		SECONDARY PEDESTRIAN		SECONDARY ROAD		OPEN SPACE EDGE
	GROUND FLOOR ACTIVATION		SHARED WAY		SERVICE ACCESS ZONE		RETAIN TREES RETAIN TREES IF POSSIBLE



MACQUARIE
University