

Architecture
Interior Design
Landscape Architecture
Planning
Urban Design

Australia
PR China
Hong Kong SAR
Singapore
Thailand

AUSTRALIAN CATHOLIC UNIVERSITY STRATHFIELD CONCEPT PLAN_ ENVIRONMENTAL ASSESSMENT

VOLUME 1
MAIN REPORT

Prepared for Australian Catholic University
December 2011

HASSELL



Contact

Silvija Smits Principal
ssmits@hassellstudio.com
Sarah Waterworth Senior Planner
swaterworth@hassellstudio.com

HASELL
Level 2
88 Cumberland Street
Sydney NSW 2000 Australia
T +61 2 9101 2000
F +61 2 9101 2100
©December 2011

Statement of Validity

Submission of Environmental Assessment
Prepared under the former Part 3A and current Schedule 6A of the Environmental Planning and Assessment Act 1979

Environmental Assessment prepared by

Name Silvija Smits

Qualifications B Arch (Hons)
M Urb Plan

Address HASSELL
Level 2
88 Cumberland Street
Sydney NSW 2000

Applicant and Land Details

Applicant Australian Catholic University Limited

Subject site Australian Catholic University Strathfield Campus
167–169 & 179 Albert Road, Strathfield
St Patrick’s College, 2 Edgar Street, Strathfield

Lot and DP Lot 11 DP869042, Lot 12 DP1058289 and Lot 12 DP 1095571

Project Summary

Proposal seeks Concept Plan approval for a conceptual framework for the future development Strathfield Campus, including rationalised built form, parking and access arrangements within an improved and integrated public domain structure.

Environmental Assessment

An Environmental Assessment is attached.

Declaration

I certify that I have prepared the contents of the Environmental Assessment in accordance with the requirements of the Environmental Planning and Assessment Act 1979 and that, to the best of my knowledge, the information contained in this report is not false or misleading.

Signature



Name Silvija Smits
Date: 22 December 2011

Section

00	Executive Summary	3
01	Introduction	
1.1	Overview	7
1.2	Application Background	7
1.3	Proponent and Consultant Team	7
1.4	Director General’s Requirements	7
02	Site Context and Analysis	
2.1	Existing Campus	10
2.2	Metropolitan Context	11
2.3	Regional Context	12
2.4	Local Urban Structure	13
2.5	Local Accessibility	14
2.6	Local Transport	15
2.7	Land Use	16
2.8	Built Form	16
2.9	Topography	17
2.10	Heritage	17
2.11	Vegetation and Open Space	18
2.12	Services and Infrastructure	18
03	The Concept Plan	
3.1	Overview	20
3.2	Urban Design Principles	21
3.3	Development Options	23
3.4	Tree Removal	24
3.5	Traffic and Circulation	25

3.6	Car Parking	25
3.7	Staging	26
3.8	Utilities and Services	27
3.9	Concept Plan	29
3.10	Existing consents applying to the site	30
3.11	Development Precinct Controls	31
04	Environmental Assessment	
4.1	Application of Part 3A	42
4.2	Objects of the EP&A Act	42
4.3	Environmental Planning Instruments	42
4.4	Strategic Planning and Policies	45
4.5	Built Form and Urban Design	46
4.6	Landscaping	46
4.7	Environmental and Residential Amenity	47
4.8	Staging	49
4.9	Transport and Accessibility	49
4.10	Ecologically Sustainable Development	52
4.11	Contributions	52
4.12	Contamination	52
4.13	Geotechnical	52
4.14	Drainage and Stormwater	53
4.15	Flooding	53
4.16	Heritage	53
4.17	Utilities and Infrastructure	53
4.18	Flora and Fauna	54

4.19	Noise and Vibration	54
4.20	Waste	54
4.21	Hazards	55
4.22	Consultation	55
05	Draft Statement of Commitments	
5.1	Draft Statement of Commitments	58
06	Conclusion	
6.1	Summary	63
6.2	Suitability of the site	63
6.2	Justification for the proposal	63

Appendices

Volume 2A	
i	Appendix A Director General’s Requirements
ii	Appendix B Property Description
iii	Appendix C Solar Access Study
iv	Appendix D ACU Neighbourhood Policy
v	Appendix E Transport and Accessibility Study
vi	Appendix F Heritage Impact Assessment & Conservation Management Plan
Volume 2B	
vii	Appendix G Aboriginal Cultural Heritage Assessment
viii	Appendix H Infrastructure Assessment
ix	Appendix I Flora and Fauna Assessment
x	Appendix J Acoustic Assessment
xi	Appendix K Geotechnical Study
xii	Appendix L Phase 1 Environmental Site Assessment
xiii	Appendix M Waste Management Plan

00 _____Executive Summary

This Concept Plan establishes a future development strategy for the Strathfield Campus which incorporates growth opportunities for the campus while improving parking and traffic functions and promoting the heritage significance of existing buildings.

The Australian Catholic University (ACU) operates six campuses across Eastern Australia including two within the Sydney metropolitan region at North Sydney and Strathfield. ACU anticipates continued growth of the two Sydney campuses into the future, which has given rise to the need to prepare a Concept Plan for the Strathfield Campus.

The Concept Plan sets out a future development framework for the ACU Strathfield Campus and represents a substantial redevelopment of the campus.

This Concept Plan establishes a development strategy for the Strathfield Campus which incorporates growth opportunities while improving parking and traffic and promoting the heritage significance of existing buildings.

- The overall aims of the Concept Plan are to:
- _create a world class university incorporating modern teaching and learning facilities;
 - _rationalise teaching functions across the two ACU Sydney campuses focusing specialised activities within each campus;
 - _establish additional floor space to increase availability and efficiency of teaching functions for the Strathfield Campus;
 - _improve site access, car parking and surrounding traffic functions within the campus through increased off-street car parking;
 - _encourage increased use of public transport and alternative transport methods;
 - _upgrade the public domain to create visually interesting transitions through the campus, and promote the existing heritage elements; and
 - _strengthen pedestrian linkages through the campus.

- In summary, the development proposed includes:
- _four new development precincts to provide new library and education buildings;
 - _new underground parking area in the north west of the campus and two basement parking areas with a total minimum of 674 spaces (30 spaces allocated to St Patrick’s College);
 - _consolidation of main site access and egress into four gates along Barker Road, and staff only access off Edgar Street (for St Patrick’s College staff only);
 - _ new access point from Barker Road at the south eastern corner of the campus involving relocation of existing traffic signals to form a new intersection with South Street (opposite);
 - _refined internal circulation within the main campus providing clear separation between service vehicle access, short term parking spaces, internal bus stop and set-down locations, and car parking access;
 - _improved site landscaping and public domain including new pedestrian corridors, open space and landscape improvements; and
 - _new pedestrian links throughout the campus to improve internal site linkages to the north eastern campus and preserve opportunities for further consolidation of the campus in the future.

The additional floor space is to accommodate the increase in student population expected over the next 10 years. This growth will be contained within four new development precincts that have been identified following a comprehensive analysis of the Strathfield Campus including identification of opportunities for new built form.

Additional off-street parking has also been identified in the Concept Plan. A new underground parking area is proposed in the north western corner under the existing playing fields with a total of 282 spaces. New basement parking below the south eastern and western precincts will also provide additional off street parking opportunities.

A key design consideration for the Concept Plan is the creation of a more pedestrian focussed campus and a reduction in potential conflicts between pedestrians and vehicles. The main internal circulation and movement arrangements are therefore rationalised into four gates along Barker Road and separated from primary pedestrian routes through the campus. A staff only, swipe access to the north western car park is proposed off Edgar Street, for St Patrick’s College. Internally, the existing access way along the southern frontage of the site will be retained to serve as the primary movement corridor for campus visitors and the shuttle bus pick up and set down.

Service vehicle deliveries and waste collection will continue to be made from the existing facilities in the centre of the campus. Access to this area will be improved through retention of the central campus gate primarily as a service vehicle access and egress point.

As the proposal is estimated to have a Capital Investment Value in excess of \$30 million and it represented a kind described in Schedule 1, Group 7, Clause 20 of the Major Development SEPP, it was declared as a Part 3A project on 17 February 2011. As a result of recent changes to the EP&A Act the proposal has status as a Transitional Part 3A project.

The proposal is also supported by the principles and objectives of the Sydney Metropolitan Strategy and the Draft Inner West Subregional Strategy.

Each of the issues raised by the Director General’s Requirements dated 17 February 2011 are addressed in this Environmental Assessment (EA) report and are supported where necessary by detailed specialist assessment contained within Volume 2.

It is noted that separate development applications will be made to Strathfield Council for the detailed design of individual buildings and spaces identified under the Concept Plan.

The Concept Plan proposes new development precincts with associated development controls, such as height and gross floor area to ensure new development responds appropriately to the existing built form and character of the locality. The EA demonstrates that the proposed Concept Plan will respond appropriately to its existing context, and ensure the continued use of the land for educational uses without significant impacts on surrounding residential amenity or traffic function.

Off street parking is increased from 346 spaces to a minimum of 674 spaces (with 30 spaces allocated to St Patrick’s College staff), based on the number of future students and staff to be on campus at any one time. Proposed future development also responds to the significant built and landscape heritage character of the campus. All necessary urban infrastructure services are established within the surrounding area and currently provided to the subject site or able to be extended to service new development. These services are also considered to be of an adequate standard to absorb additional future loads generated by new development.

Approval of the Concept Plan is therefore sought consistent with the details in this EA and attached specialist reports and subject to consideration of any issues raised in public exhibition of the application and relevant provisions of Part 3A of the EP&A Act.

01

01_____Introduction

1.1_Overview

The Australian Catholic University (ACU) operates six campuses across Eastern Australia including two within the Sydney metropolitan region at North Sydney and Strathfield. ACU anticipates continued growth of the two Sydney campuses into the future, which has given rise to the need to prepare a master plan for the Strathfield Campus.

This Concept Plan Application sets the development parameters for future growth of the Strathfield Campus over next 10 years through establishing new development precincts and key upgrades to campus infrastructure, access, internal circulation and public domain.

The overall aims of the Concept Plan are to:

- _create a world class university incorporating modern teaching and learning facilities;
- _rationalise teaching functions across the two ACU Sydney campuses focusing specialised activities within each campus;
- _establish additional floor space to increase availability and efficiency of teaching functions for the Strathfield Campus;
- _improve site access, car parking and surrounding traffic functions within the campus through increased off-street car parking;
- _encourage increased use of public transport and alternative transport methods;
- _upgrade the public domain to create visually interesting transitions through the campus, and promote the existing heritage elements; and
- _strengthen pedestrian linkages through the campus.

1.2_Application Background

As the proposal is estimated to have a Capital Investment Value in excess of \$30 million and it represented a kind described in Schedule 1, Group 7, Clause 20 of the *State Environmental Planning Policy (Major Development) 2005* (Major Development SEPP), it was declared as a Part 3A project on 17 February 2011 under clause 6 of the SEPP.

This EA seeks Concept Plan approval for a conceptual framework for the Strathfield Campus.

The then Department of Planning issued Director General's Requirements (DGRs) for this project MP10_0231 on 17 February 2011. The DGRs require that the Environmental Assessment address the following key issues:

- _Environmental Planning Instruments and Policies
- _Built Form and Urban design
- _Landscaping
- _Environmental and Residential Amenity
- _Localised Impact and Integration
- _Staging
- _Transport and Accessibility
- _Ecologically Sustainable Development
- _Contributions
- _Contamination and Geotechnical
- _Heritage
- _Aboriginal Heritage
- _Drainage and Stormwater
- _Flooding
- _Utilities infrastructure
- _Flora and Fauna
- _Noise and Vibration
- _Waste
- _Hazards
- _Consultation

Each of these issues is addressed in this Environmental Assessment (EA) report and supported where necessary by detailed specialist assessment contained in Volume 2. As part of the preparation of the Concept Plan Application, consultation has been held with the following agencies and groups:

- _NSW Department of Planning and Infrastructure
- _Strathfield Council
- _St Patrick's College, Strathfield
- _Metropolitan Local Aboriginal Land Council
- _Surrounding community

1.3_Proponent and Consultant Team

The Australian Catholic University is the proponent for this application. The site is owned by the Sydney Archdiocese who hold the land in trust for the Australian Catholic University Limited.

A range of specialist consultants have contributed to the preparation of this Concept Plan:

- _Spectrum Partners: Project Management
- _HASSELL: Planning, Urban Design, Architecture and Landscape Architecture
- _Weir Phillips: Heritage
- _Arup: Traffic and Transport
- _Coffey: Environmental Services
- _Mott MacDonald/Hughes Trueman: Infrastructure services
- _Biosis: Flora and Fauna
- _Niche Environment and Heritage: Aboriginal Heritage
- _Acoustic Studio: Acoustic
- _JD MacDonald: Waste Management

1.4_Director General's Requirements

The Director General's Requirements are provided at Appendix A to this report.

02

02
 Site Context & Analysis

10

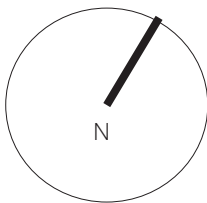
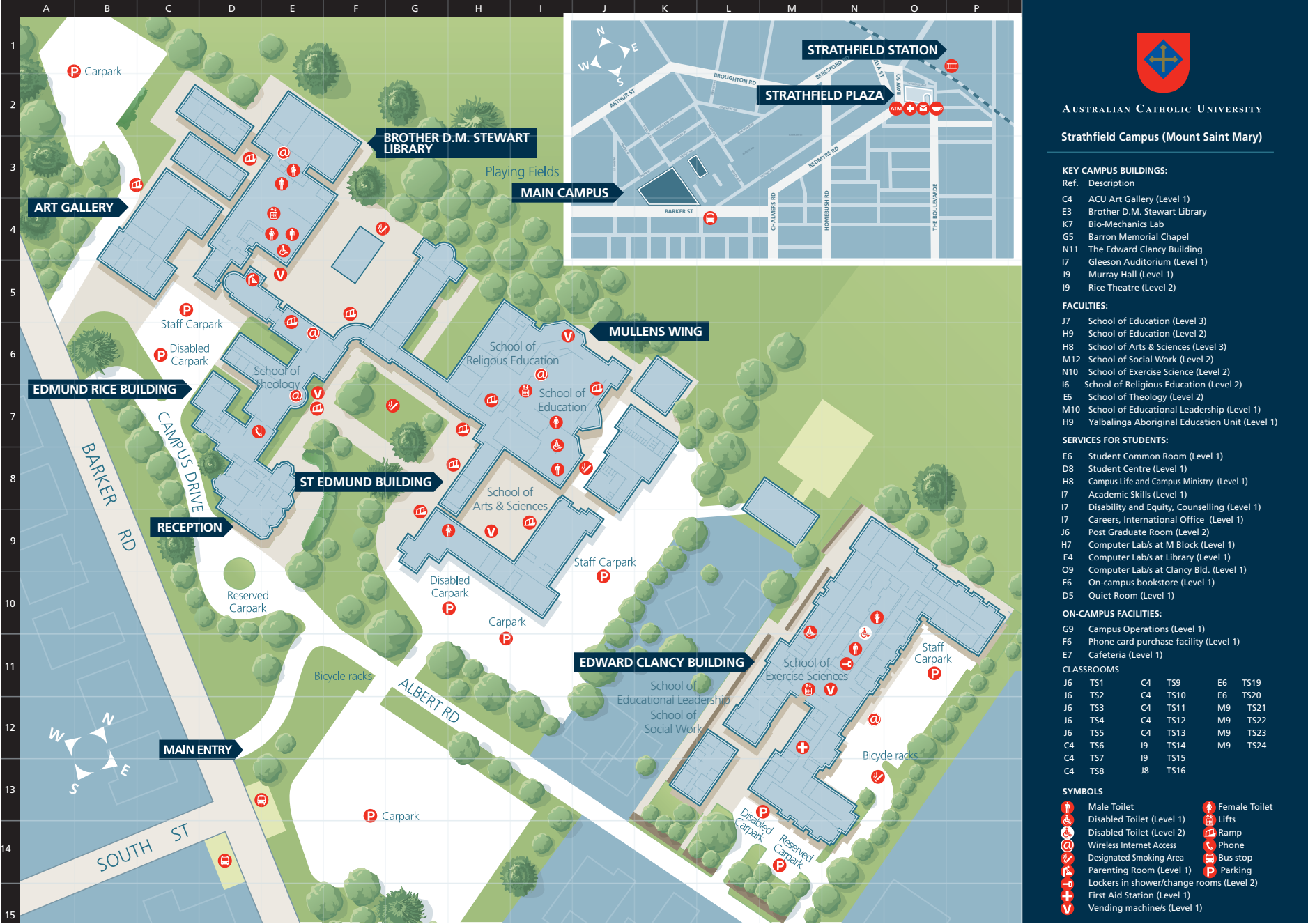
2.1_Existing Campus

The 5 hectare Strathfield Campus has primary frontage on the southern boundary to Barker Road and secondary access on the eastern boundary off Albert Road. The campus is approximately 1.5 kilometres from the Strathfield town centre and located within an established residential area. The real property description of the campus is Lot 11 DP869042 (179 Albert Road) and Lot 12 DP1058289 (167-169 Albert Road).

The campus is spread across two main allotments with several residential properties separating the main/western portion of the campus from a small portion to the north east which is occupied by a large, single building, known as the Edward Clancy Building.

Surface car parking is distributed across the site with the primary parking area at the eastern end of the site adjacent to Albert Road with access and egress to Barker Road and secondary egress to Albert Road. Additional car parking areas are located in the western corner of the main/western campus and within the north eastern portion of the campus predominantly at the rear entrances of buildings.

The site itself is characterised by buildings in a landscaped setting, a number of which are heritage listed, centred at the highest point of the site and focused on a main formal courtyard with frontage to Barker Road. Smaller, north facing courtyards and internal green spaces are scattered between buildings and a large open space area is located in the north western portion of the site between the campus buildings and the adjacent school. This open space is used as three small ovals for organised sports activities.



02
 Site Context & Analysis

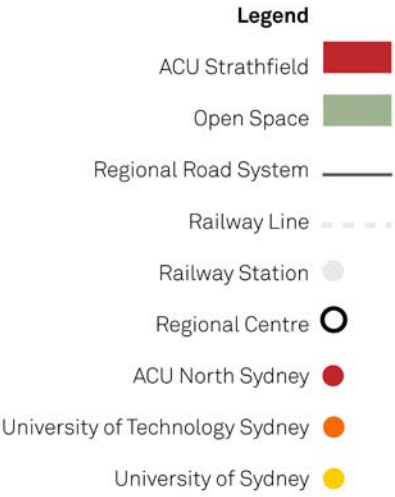
2.2_Metropolitan Context

The ACU Strathfield Campus falls within the Strathfield Local Government Area (LGA) and is located within the inner western subregion of Sydney. The site is approximately 15 kilometres from the Sydney CBD, 11 kilometres from the Parramatta CBD and approximately 1.5 kilometres from Strathfield town centre. The site benefits from a strong urban structure of public transport, infrastructure and roads, making accessibility to the region excellent.

The Strathfield Campus sits to the south of Parramatta River and west of Sydney Harbour. The terrain is generally low lying with a slightly undulating landform. There is a scattering of large urban parks within the metropolitan context, including large open space networks sited within a few minutes from the campus being Olympic Park and Bicentennial Park to the north.

Also lying to the north, the Great Western railway line is part of the major east-west transport corridor within the region providing good accessibility to the city and broader metropolitan area. With Strathfield station representing an important transport interchange in the Inner West subregion, the locality is well serviced by suburban and intercity rail links.

With its close proximity to a system of major urban roads, Strathfield Campus is near Parramatta Road, the M4 Western Motorway, Liverpool Road/Hume Highway and Centenary Drive. This network ensures good accessibility and connectivity to the broader Sydney region.



02____Site Context & Analysis

12

2.3_Regional Context

Strathfield town centre lies within close proximity to Burwood Town Centre, identified as a major centre in the Sydney Metropolitan Strategy. Burwood provides specialised retail and employment to the surrounding subregion. Sydney Olympic Park, a specialised precinct, is also within a few kilometres of the campus providing open space, recreational and sporting facilities to the region. Flemington Markets and Rookwood Cemetery are also significant land uses within the subregion.

The layout and hierarchy of the regional road network surrounding Strathfield Campus reflects a loose grid that responds to the major east-west and north-south structuring systems including Parramatta Road and the railway line to the north, Liverpool Road/ Hume Highway to the south, Centenary Drive to the west and The Boulevard to the east. These major roads run along the ridge lines which characterise the softly undulating terrain of the region and contribute to a range and mix of block sizes and orientations.

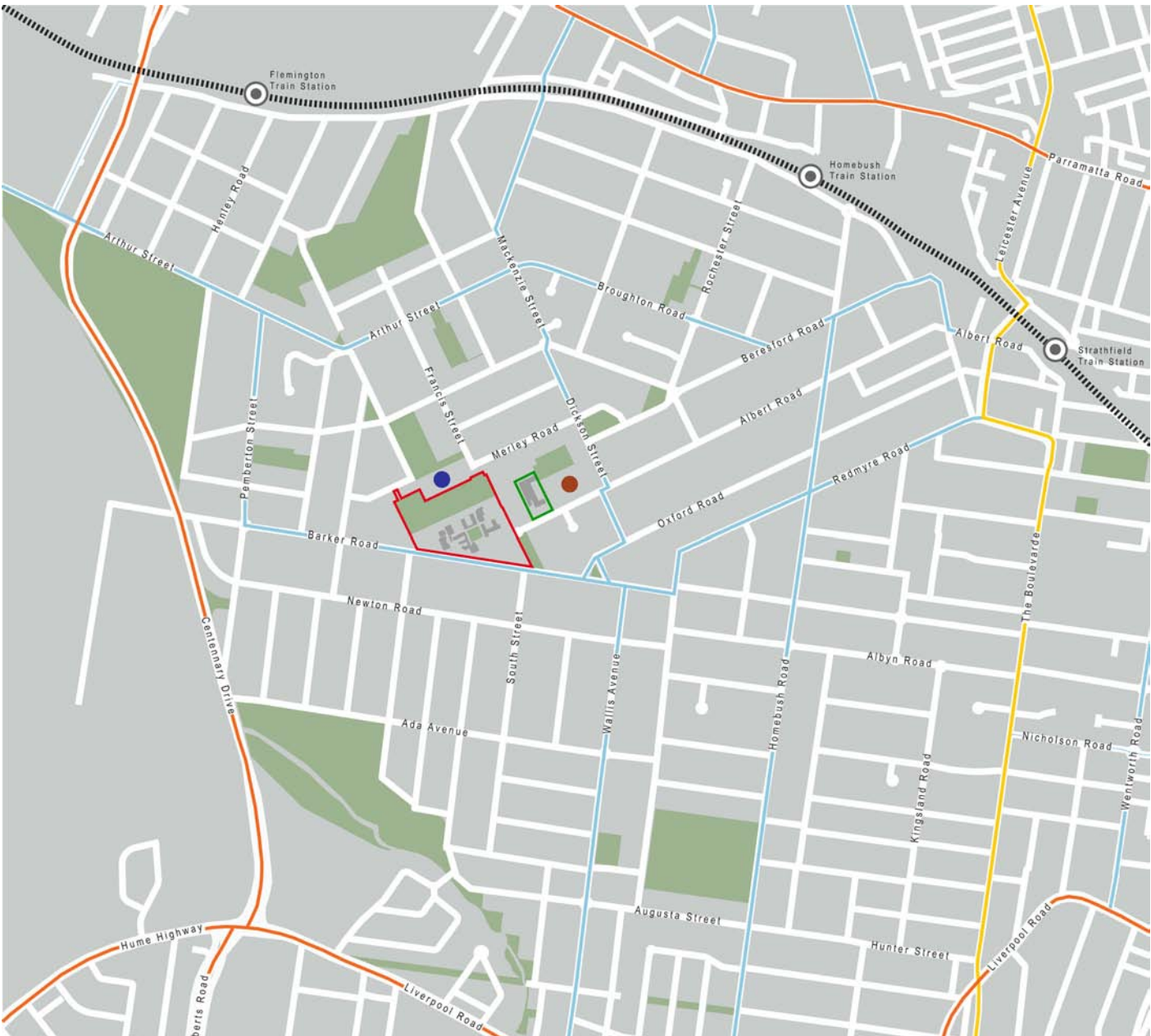
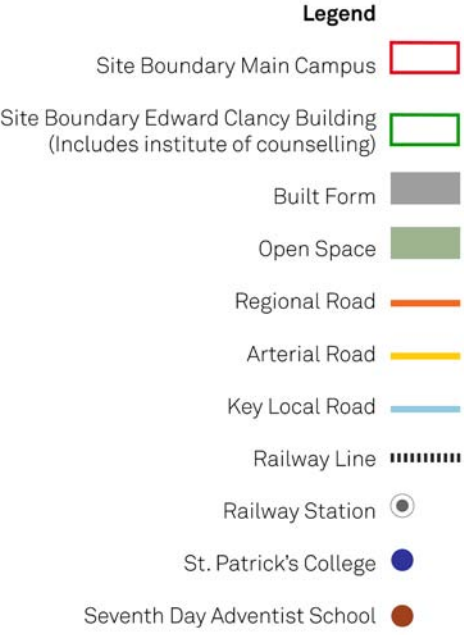
The dominant garden suburb character of the region is characterised by regular block shapes and sizes. However increasing residential and commercial floor space is beginning to change the character of the Strathfield and Burwood town centres. In the last two decades Strathfield’s town centre has particularly altered in character with large, tall residential towers punctuating the landscape and providing strong visual cues visible from outside the suburb.



02 Site Context & Analysis

2.4 Local Urban Structure

The dominant garden suburb of Strathfield is characterised by substantial homes on large allotments with established gardens and frontages. While the campus is predominantly surrounded by low-scale residential uses, there are a number of other institutional and educational uses in the neighbourhood including St Patrick’s College, a high school on the northern boundary and the Seventh Day Adventist School adjoining the Edward Clancy Building to the east.



02 Site Context & Analysis

2.5 Local Accessibility

The campus is located approximately 15-20 minutes walk from both Homebush and Strathfield railway stations, across varying grades and undulating topography. Pedestrian access to the campus is via Barker Road and Albert Road.

Public transport services are available to the site. Bus routes provide good coverage and access to the local area, with services along Barker Road and Oxford Road adjacent to the campus, providing main connections to Strathfield railway station, Burwood railway station, Central, Railway Square and the Sydney CBD.

Barker Road acts as the primary vehicular access point for the main western campus while Albert Road provides primary vehicular access to the Clancy Building and acts as a secondary access to the main campus.

The campus currently has three main parking areas:

- _the western extent of the main campus,
- _the eastern extent of the main campus and
- _surrounding the Clancy Building to the east of the main campus.

These parking areas provide a total of 346 parking spaces. Further short stay parking and reserved administration parking is located throughout the campus, generally surrounding the Edmund Rice Building. There is some short-term (2 hour) parking on Barker Road. Service access is via both Barker Road and Albert Road with set down points located adjacent to the existing central gate from Barker Road.

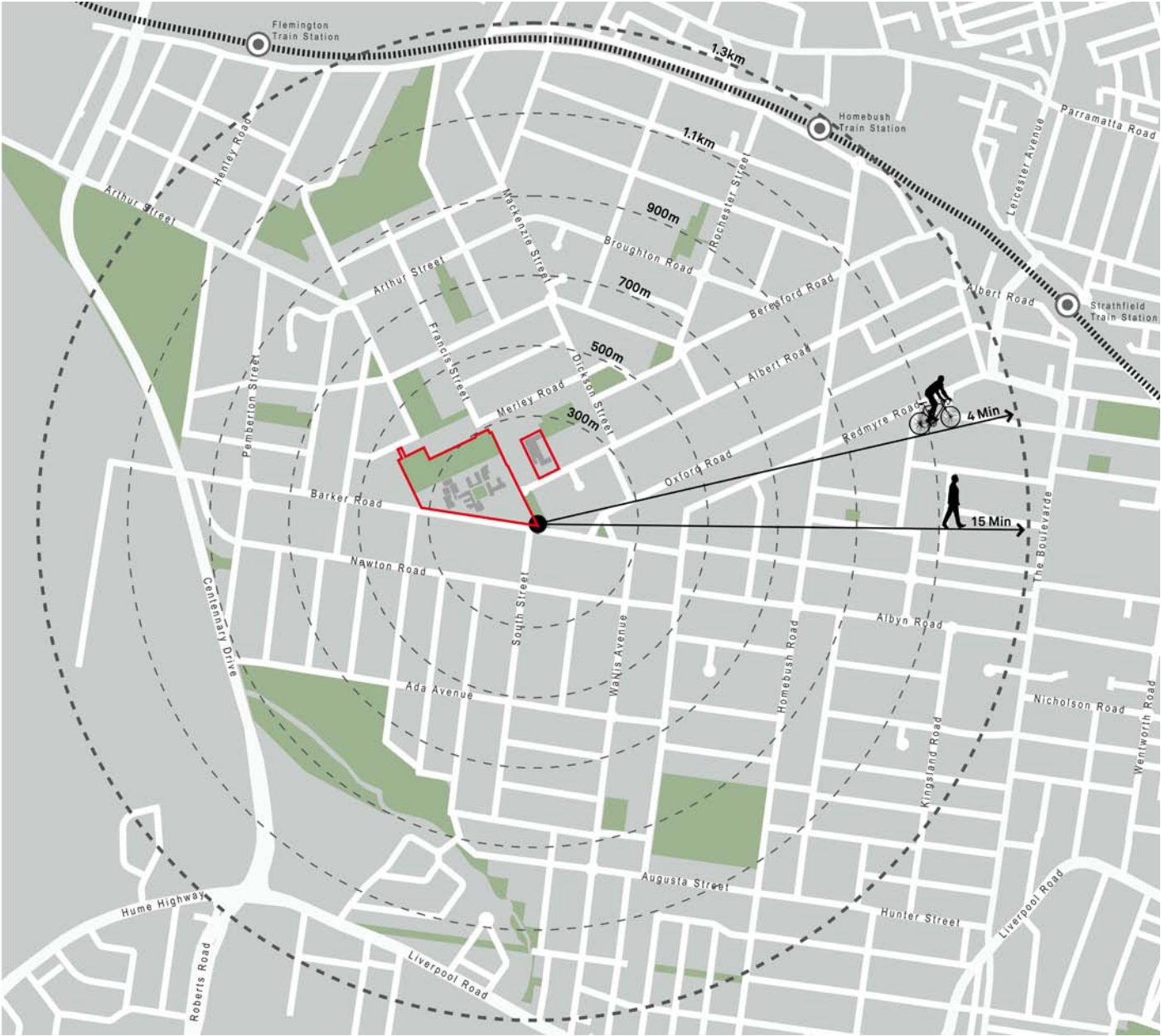
Due to the nature of university timetabling, excellent accessibility to the regional road network, the provision of car parking and distance from the railway line, there is currently a high proportion of vehicle use associated with campus activity.

Legend

Site Boundary

Built Form

Open Space



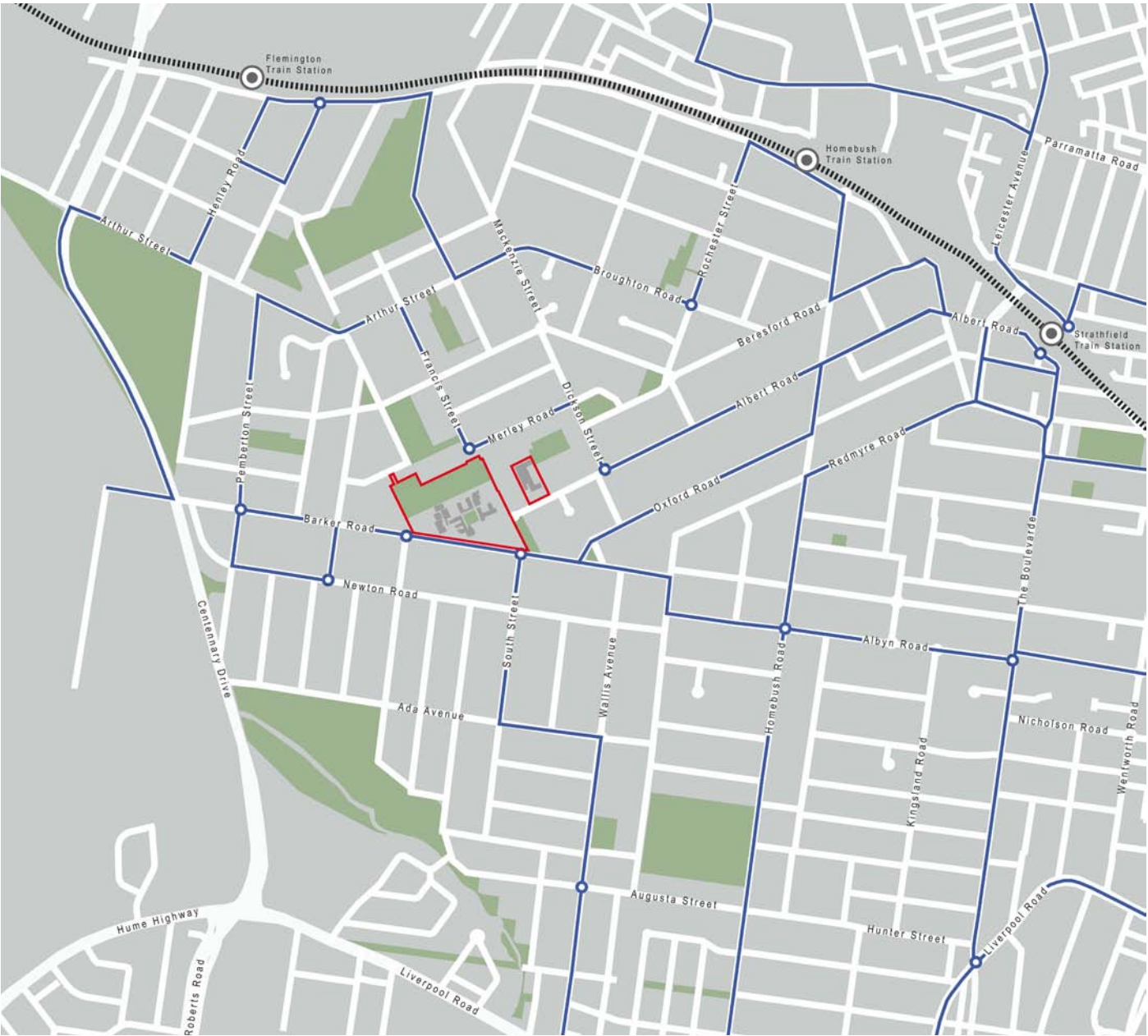
02 Site Context & Analysis

2.6 Local Transport

The Strathfield Campus is well serviced by public transport, particularly buses, due to the distance between the campus and Strathfield railway station. Bus services move between Strathfield and Burwood railway stations and loop through the Strathfield suburb and via the campus along Barker Road.

The frequency of bus services tends to be:
_half hourly between 6.30am - 10.00am
_hourly between 10.00am - 3.00pm
_every 15 mins between 3.00pm - 4.00pm,
_half-hourly between 4.15pm - 8.00pm, and
_no services after 8.00pm.

A private shuttle bus service for students and staff is run by ACU providing regular transport between the campus and Strathfield railway station. The shuttle bus runs every 10 mins during peak periods and provides an alternative transport service for students. The frequency of the shuttle bus service reduces during the non-teaching periods during the year.

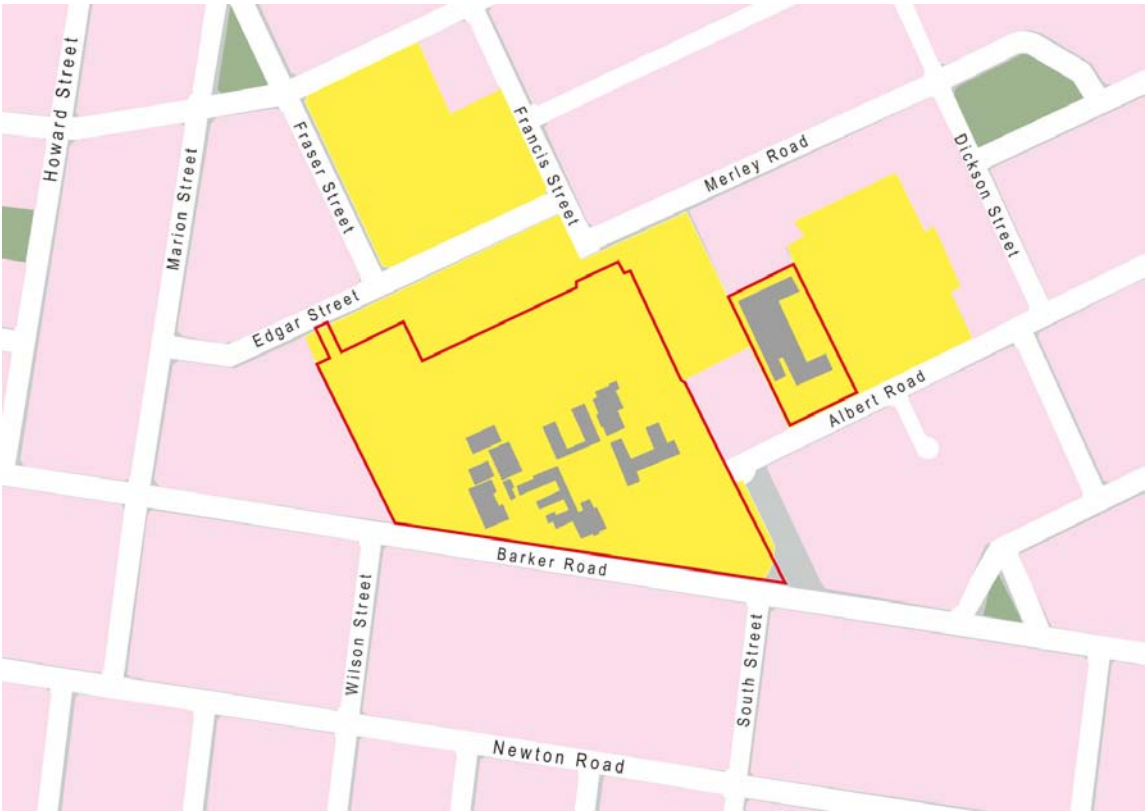


02
 Site Context & Analysis

2.7_Land Use

The Strathfield Campus is located within an established residential context. The surrounding character is that of substantial homes within landscaped gardens on large, single allotments. While some home business and professional offices are also established within the area, the campus is part of a pocket of institutional and educational uses surrounded by residential lands.

The Strathfield Campus is zoned both Special Uses (Ecclesiastical) and Special Uses (School) under the Strathfield Planning Scheme Ordinance 1969. The Special Use zoning covers both the ACU campus, the adjoining St Patrick’s College to the north and north east, and the Institute of Counselling to the east of the eastern campus (Clancy Building).



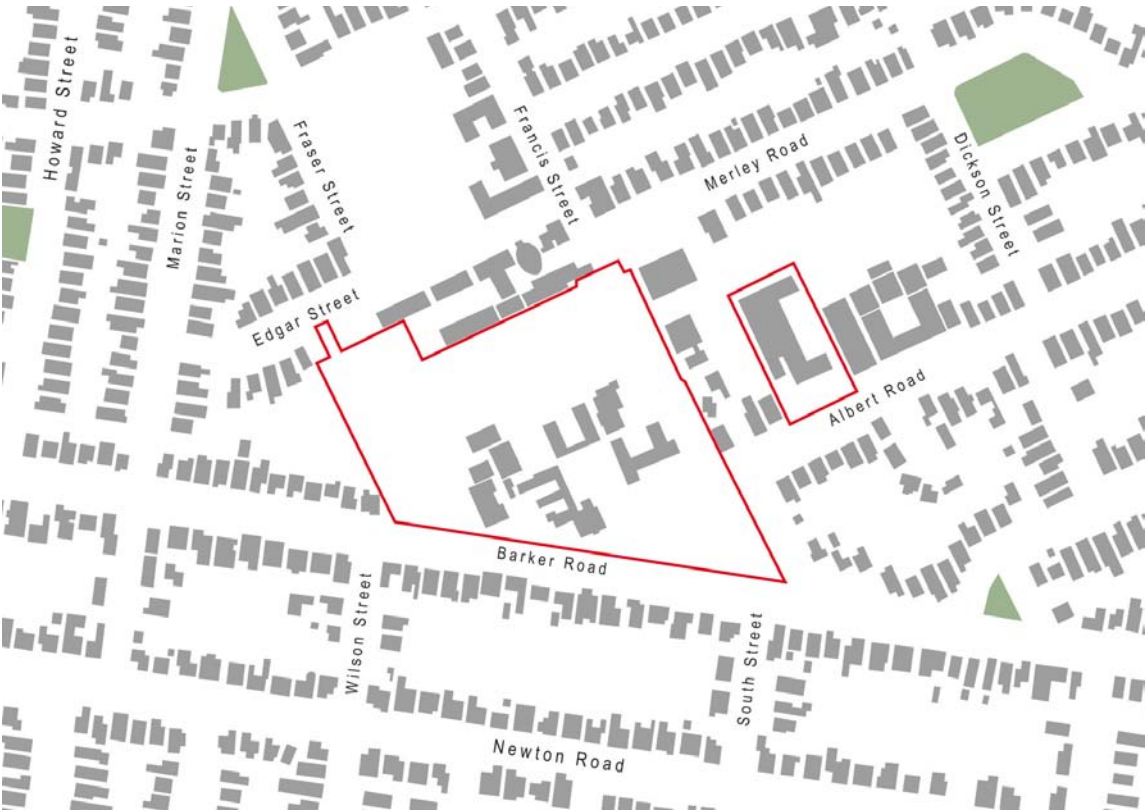
2.8_Built Form

A ground-figure analysis of the Strathfield Campus and its local context shows the extent and pattern of buildings on and around the site and the spaces between them.

The pattern of buildings on the campus is distinct from those in the immediate context. Specifically, larger footprint buildings are wrapped around courtyards and buildings are set back from their boundaries within a landscaped setting. In contrast, smaller residential footprints with regular spaces between buildings and consistent street frontage setbacks, characterise the surrounding local streets.

The orientation and variety of buildings on the campus is generally centred around the Edmund Rice Building and central courtyard. They are predominantly lower scale, typically 2-3 storeys, in a variety of forms and styles, and when accounting for the setbacks and landscape setting, are appropriate in the residential context. The existing buildings have historically and are currently primarily used for teaching and administration purposes.

The surrounding residential buildings are either single detached dwellings or dual occupancy developments. The scale of residential development varies throughout the surrounding streets with several new two and three storey buildings with sub-floor garages.



02____Site Context & Analysis

2.9_Topography

The site has a gentle fall of approximately 2 metres from south to north across the campus.

The high point is located closer to the centre of the site and in proximity to the Barker Road frontage on the southern boundary. The collection of buildings sited around the highest point enjoy an elevated view to the north, across the playing fields and beyond St Patrick’s College.

At the mid-point of the site the land levels out to a flat, grassy playing field which enables prominent views from the main campus buildings across the fields .



2.10_Heritage

The campus includes a number of heritage listed buildings and spaces. The whole site is listed as a heritage item by Schedule 9 (Heritage Items) of the Strathfield Planning Scheme Ordinance 1969 described as ‘Mount St. Mary College,’ No. 179 Albert Road, Strathfield. The site is identified as being of local significance with historic, aesthetic and social qualities.

In particular, the Mount Royal building (now known as the Edmund Rice Building) stands at the centre of the campus and represents one of the best surviving examples of early mansion development within Strathfield. The mansion was designed by architect Harry Chambers Kent and constructed in 1886. In 1907, Mount Royal was sold to the Christian Brothers who renamed it Mount Saint Mary.

The Barron Memorial Chapel which extends from the walkway of the Mount Royal building is also listed as an item of exceptional heritage significance.

In addition to the significant heritage attributes on site, there are several conservation areas and listed heritage items in the local area. Together, these contribute to a strong heritage character.



2.11_Vegetation and Open Space

The campus contains existing scattered vegetation within formal and informal open space areas. The central quadrangle adjacent to the Mount Royal building provides a formal courtyard and curtilage to the historic building. There are groupings of large canopy trees concentrated at the south-eastern corner of the site, adjacent Mount Royal Reserve, which provide a green relief to Barker Road. Tall conifers provide shading along part of the frontage of Barker Road, while some scattered ironbark trees are sited on the western boundary.

A large, green space (playing fields) occupies approximately 35-40 percent of the site to the north serving as shared facilities and overflow for use by the adjacent school, St Patrick's College. The low lying playing fields are located below the higher ground level of the campus and extend to the common boundary with St Patrick's College in the north.

When entering the site from Albert Road, mature street trees contribute to a sense of a green avenue and arrival at the campus. This character combined with the plantings on Mount Royal Reserve to the east, provide a strong green curtilage to the campus.

Based on the Flora and Fauna Assessment undertaken by Biosis, there are no known significant flora or fauna on the site.

2.12_Services and Infrastructure

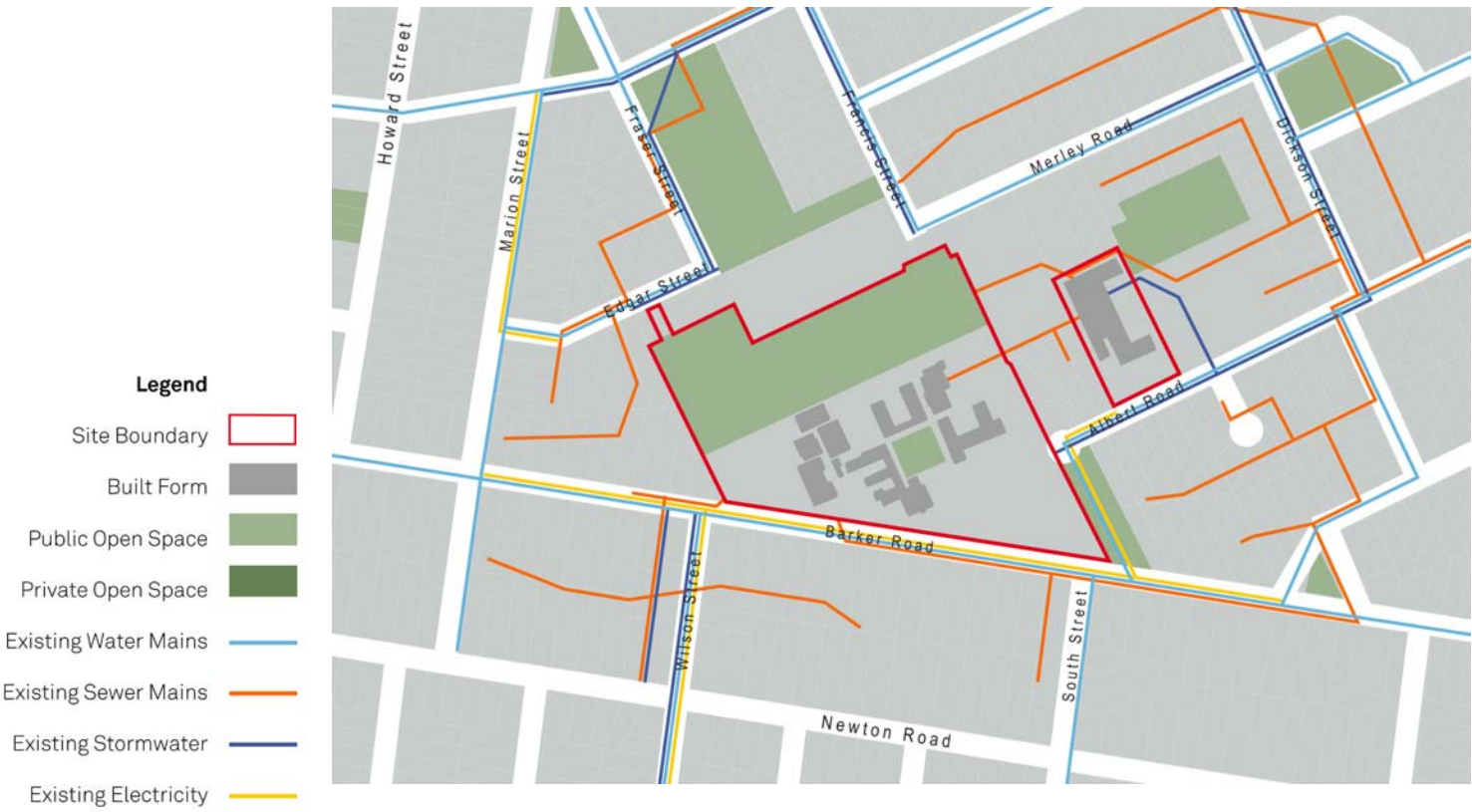
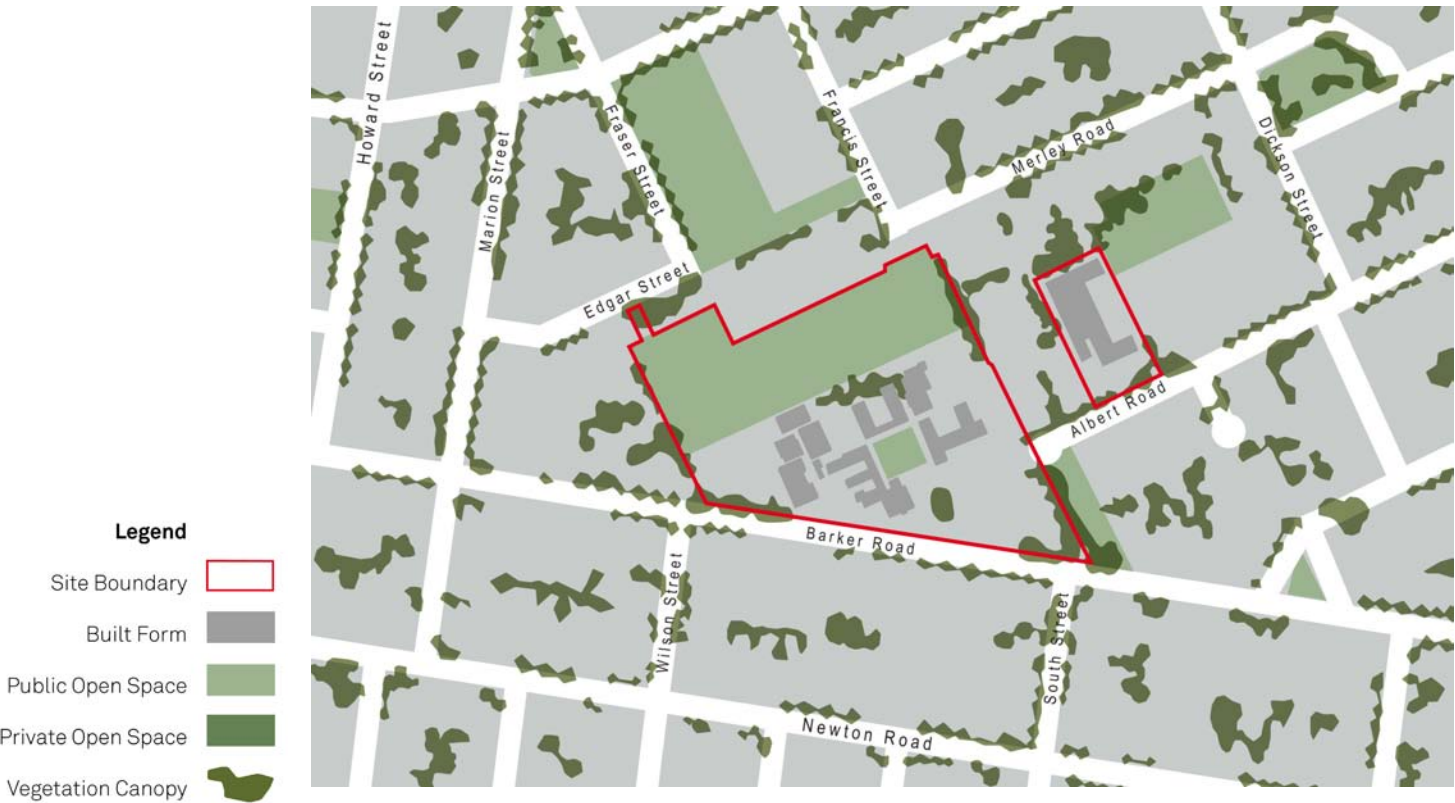
The site is presently serviced by all necessary urban infrastructure.

Water supply to the campus is provided from existing Sydney Water mains which extend along Barker Road, South Street and Albert Road. Existing connection points for the campus are from Barker Road and Albert Road.

There are three existing primary sewer discharge locations from the campus, which correspond to the surrounding catchments. A connection at the southwest corner of the site extends along Barker Road then heading south and joining a main running easterly along Cooks River. The eastern catchment discharges to two points, the first along Barker Road to the south and the second towards the centre of the campus and easterly around the Clancy Building.

The main campus is serviced by two substations at Barker Road midway along the campus frontage and at the Albert Road access point. The Albert Road substation also services the eastern campus (Clancy Buildings) via conduits along Albert Road.

The campus is connected to existing gas services along the southern side of Barker Road, along the western side of South Street and the northern side of Albert Road. Telecommunication services are on the northern side of Barker Road, along South Road and also at Albert Road. The main campus is connected to telecommunication services at Barker Road with the eastern campus connected at Albert Road.



03

03_____Concept Plan Proposal

20

The Concept Plan will guide the future development of the Strathfield campus over the next 10 years through establishing new development precincts and key upgrades to campus infrastructure, access, internal circulation and public domain.

3.1_Overview

This section describes the Concept Plan and the key elements of the proposed design. The Concept Plan has been informed by a number of urban design principles that focus on specific opportunities for the site and respond to the existing structure and character of the Strathfield Campus.

A series of opportunities and constraints for the campus were considered in developing the Concept Plan. From the opportunities and constraints, a number of development options were identified and considered before a preferred option was selected.

The key outcome for the campus was identification of new development precincts within the campus, while ensuring integration with the existing built form and the surrounding location. Vehicle and pedestrian traffic to the campus has also been considered in the Concept Plan in order to improve parking availability within the campus, as well as encourage sustainable alternative traffic options. The prominent heritage character of the campus was also identified as an important consideration for the campus.

In summary, the development proposal includes:

- _four new development precincts to provide new library and education buildings;
- _new underground parking area in the north west of the campus and two basement parking areas with a total minimum of 674 spaces (30 spaces allocated to St Patrick’s College);
- _consolidation of main site access and egress into four gates along Barker Road, and staff only access off Edgar Street (for St Patrick’s College staff only);
- _ new access point from Barker Road at the south eastern corner of the campus involving relocation of existing traffic signals to form a new intersection with South Street (opposite);
- _refined internal circulation within the main campus providing clear separation between service vehicle access, short term parking spaces, internal bus stop and set-down locations and car parking access;
- _improved site landscaping and public domain including new pedestrian corridors, open space and landscape improvements; and
- _new pedestrian links throughout the campus to improve internal site linkages and preserve opportunities for further consolidation of the campus in the future.

The four development precincts are:

- _Precinct 1: South eastern (library and learning commons + basement car parking)
- _Precinct 2: Eastern (educational uses, lecture theatres & research space)
- _Precinct 3: Western (educational uses, laboratories & arts studio + basement car parking)
- _Precinct 4: Central (reuse of existing library, storage, campus facilities and educational uses).

03____Concept Plan Proposal

3.2_Urban Design Principles

In recognition of the existing character of the site, its local context, the anticipated future student capacity and the desired future character, a number of urban design principles have been identified to inform and guide future redevelopment.



Preserve and Retain Existing Campus Buildings

The campus contains a large number of heritage buildings and substantial architecture which contribute to the campus character. The character is unique to the site and is distinct from surrounding development, particularly in the way that the buildings relate to each other and the open space.

Key Concept Plan Considerations

- _Respect and preserve the substantial heritage buildings and their curtilage
- _Reinforce the pattern of buildings in a landscape setting
- _Ensure any new campus buildings relate to and improve the relationship with existing buildings



Strengthen Campus Connections

The pedestrian network provides a framework to organise and restructure the campus into a series of connected and recognisable spaces. The networks will connect the new car parks with old and new buildings through direct and safe pedestrian linkages.

Key Concept Plan Considerations

- _Strengthen the physical and visual connections on campus
- _Develop a hierarchy of legible connections including: a central axis that stitches together built form and open space through the centre of the campus, an edge promenade along the built edge of the playing fields, and an extension of the visual and pedestrian link from Albert Road
- _Utilise existing arcades and cloistered walkways to connect spaces and offer protection from the elements
- _Locate new buildings and learning hubs off the proposed pedestrian links
- _Consider possible future connections to the Clancy Building to the east of the campus



Courtyards and Green Rooms

The existing soft (green) spaces on campus are well used and provide for informal gathering and lunch locations. The existing network of 'green rooms' will be retained and linked with the new courtyard spaces between the proposed new buildings.

Key Concept Plan Considerations

- _Strengthen and reinforce the pattern of green spaces between buildings
- _Encourage 'green rooms' and courtyards as break-out spaces
- _Reinforce the campus structure and activity using a hierarchy of green spaces and anchors across the site
- _Ensure 'green rooms' receive maximum sunlight during the middle of the day.

03____Concept Plan Proposal

22



Future Development Opportunities

The Concept Plan identifies four distinct zones that may be developed in stages to suit the University’s requirements. These development zones respond to the pattern of building on site and retain both the landscape setting and amenity of surrounding development.

The zones provide sufficient opportunity for flexible floor space that will allow for the technological and educational requirements of the university.

Key Concept Plan Considerations

- _Respect and preserve the heritage character and curtilage of existing buildings
- _Locate development zones to limit impact upon adjoining land uses
- _Identify building zones that allow flexible floor space
- _Establish setbacks that respect the surrounds
- _Ensure high standard of design



Campus Interface

The Strathfield Campus presents as a collection of buildings in a landscape setting while the surrounding residential development is characterised by a consistent front setback.

The existing mature trees on site are an asset, helping to define the character of the campus while providing much needed shade during the summer months. Where possible, all existing trees are to be retained and if required relocated and transplanted as part of an overall landscaping strategy.

Key Concept Plan Considerations

- _Retain green relief along the street to provide soft edge to Barker Road
- _Recognise and retail the heritage landscape and character



Access and Circulation

Currently there is a shortfall in parking on the campus and the congestion leads to overspill onto the surrounding streets. This in turn affects the local community in the adjacent streets.

There is also significant conflict between pedestrian and vehicle traffic within the campus as a result of dispersed areas of surface parking throughout the campus.

Key Concept Plan Considerations

- _Increase the number of car parking spaces on campus, either below buildings or below grade
- _Separate pedestrian and vehicle traffic on campus wherever possible
- _Increase the frequency of the ACU shuttle bus service

03
 Concept Plan Proposal

3.3_Development Options

A series of opportunities and constraints for the campus were considered in developing the Concept Plan. The development options were based on the key design principles identified in Section 3.2. The key outcome for the campus was identification of new development precincts within the campus, while ensuring integration with the existing built form and the surrounding location.



3.2.1_Option 1

Option 1 identified three new development zones surrounding the campus buildings, including new buildings along the eastern boundary of the main campus and surface car parking on the western portion of the playing fields.

This option included clustered building forms within the development zones, with varied building alignments, allowing passageways between buildings. However, the greater number of clustered building forms within close proximity creates significant bulk, particularly at the Barker Road frontage.

Key features:

- _Four development precincts
- _Closely clustered building forms
- _Maximum height of three storeys
- _New surface car park



3.2.2_Option 2

Option 2 identified four new development precincts with alternative building envelopes and surface car parking on the eastern part of the playing fields.

Building forms align north south to reflect built form within the existing campus, and allowing north facing internal courtyard spaces.

Key features:

- _Four development precincts
- _North-south building orientation
- _Maximum height of three to four storeys
- _New surface car park



3.2.3_Option 3: Final Design

The preferred option generally maintains the development precincts identified in Option 2, but reconfigures building forms to better respond to their location within the campus. Underground car parking is proposed within the north western part of the main campus to retain the existing playing fields while providing increased parking opportunities.

Building forms align generally north south to reflect built form within the existing campus. In particular, the new library precinct in the south eastern corner of the main campus is proposed to form a new gateway building to the campus along Barker Road.

Key features:

- _Four development precincts
- _Predominantly north-south building orientation
- _North facing internal courtyards
- _Maximum height of three to four storeys
- _New underground car park

03____Concept Plan Proposal

24

3.4_Tree Removal

The Concept Plan will require some tree removal and relocation to facilitate the redevelopment of the campus as proposed. It is intended to retain existing trees wherever possible. Where trees are to be affected by new works, these will be relocated. Refer Figure 3.3.



03
 Concept Plan Proposal

3.5_Traffic and Circulation

The Concept Plan will improve pedestrian circulation throughout the campus by developing new axial connections between key components. The linkages between parking areas and teaching spaces will be improved by embellishing and building upon existing cross campus pedestrian paths.

Vehicular circulation will also be improved through rationalising of the main access and egress points to Barker Road. Staff only, swipe access is proposed via Edgar Street for St Patrick’s College only. A common central access way from Barker Road will provide primary access to campus facilities for campus visitors, shuttle bus set down, service delivery and waste collection services.

A new signalled intersection is proposed at the south eastern corner of the campus (Gate 1) to provide access to the new basement parking area under the library/ learning commons. Existing traffic signals will be relocated to this new intersection, while maintaining pedestrian crossing opportunities.

Bus stops for the ACU shuttle bus service will ensure a centralised campus set down point which will place students at the campus spine and allow clear circulation throughout the campus.

Service deliveries will be made via Gate 3 with a large circulation space to allow adequate turning manoeuvres. Short term courier and delivery spaces adjacent to the waste storage area will serve as a new delivery administration point. The provision of on site short term parking spaces will prevent queuing of vehicles and interference with vehicle movements.

3.6_Car Parking

At present, car parking on the campus is dispersed across several large surface parking areas. These parking areas provide a total of 346 spaces.

The Concept Plan will rationalise existing parking into new underground and basement areas which integrate with new buildings, key pedestrian routes and minimise traffic conflict across the site. The number of off street parking spaces within the campus will be increased to a minimum of 674 spaces (30 spaces allocated to St Patrick’s College).

A new underground parking area with a minimum of 282 spaces is proposed in the north western portion of the main campus, to be accessed from Barker Road (Gate 4) and Edgar Street. The Edgar Street access will be for 30 spaces for St Patrick’s College staff only and require a swipe card. This area will be the primary student parking zone with pedestrian connections direct to the main campus pedestrian network.

Basement car parking is proposed below the western and south eastern precincts (locations B and D in Figure 3.4). Approximately 174 basement parking spaces are proposed below the library and learning commons, accessed via Gate 1 in the south east. A 158 space basement parking area is proposed below the Arts and Sciences building, accessed via Gate 4 at the western end of the Barker Road frontage.

The internal access way (shown orange and as ‘Area C’ on Figure 3.4) will generally retain much of the existing internal movement corridor along the southern boundary. Short term set down parking and administration parking will be provided along the access way with approximately 19 spaces proposed.

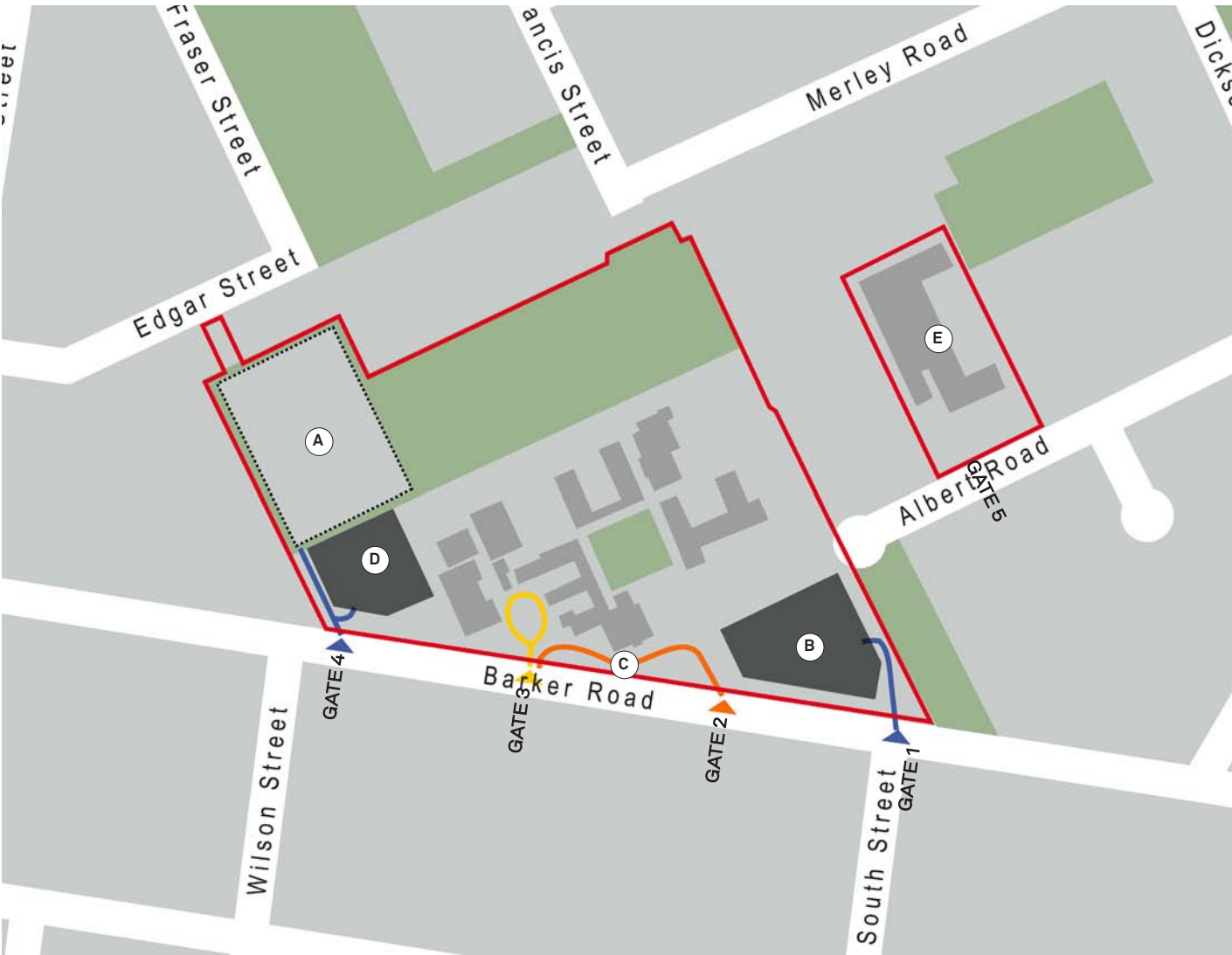


Figure 3.4_Proposed Access and Circulation

Table 3.1_Proposed Car Parking

Location	Surface / BasementParking	Basement	Service
A Main Car Park	282		
B Library/Learning Commons		174	
C Main Accessway			19
D Arts and Sciences		158	
E Clancy Building	32		9
Total	314	332	28