

University of Waikato
Hillcrest Campus

Strategic Masterplan: Campus Design Principles Overview



Jasmax



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Proposed Hillcrest Campus Masterplan - 2037 and Beyond



The maps included in this document outline the potential location of campus buildings and infrastructure in 2037



Foreword

The University of Waikato was established in 1964 on what was previously 68 hectares of farmland and orchards on the fringes of Hamilton. At that time, New Zealand's universities were undergoing rapid expansion.

The University's development followed a popular pattern around the world with teaching, research, administration, food outlets, social spaces and student accommodation on campus. During the University's inception, all public sector development in New Zealand was undertaken by the then Ministry of Works using Brutalist architecture principles; much of the University's layout and facilities reflect this architectural influence.

A concentrated building programme ran through until the early 1980s as the University experienced rapid growth. The result was a series of buildings that emphasised the separate identity of the faculties of the day but provided limited support for a University-wide collegial and social learning experience.

Today there is a growing emphasis on providing an engaging environment for learning and research that is fit for purpose now and in the future, and also reflects the aspirations of the University. With student numbers growing and an increasing reputation nationally and internationally, it is imperative that we place the student experience at the heart of everything we do.

This Masterplan proposes ways in which the University can create the physical environment necessary to attract and inspire future staff and students, and engage with the wider community.

Professor Neil Quigley

Vice-Chancellor

The Vision in 2037

In 2037, the University of Waikato will support a rewarding study-work-life balance, responsive to a diverse range of student needs. Staff and students will have greater choice over where, when and how they learn, research, socialise, play and work on campus.

In 2037, the campus design will exemplify the University of Waikato as a centre for learning, research and innovation. The Hillcrest campus will provide high-quality, resilient environments for the delivery of learning and research. The campus will be centred around a vibrant social heart (encompassing new facilities supporting wellness, recreation and entertainment) that is well connected to precincts dedicated to teaching and research, accommodation, sports and leisure.

Campus life will blend civic, social, cultural, community and academic experiences, supporting staff and students to achieve their full potential and contribute to the success of future generations, breathing life into the University mission – 'Ko Te Tangata'.

Key Recommendations

The primary recommendation of the strategic campus Masterplan is to create a modern, vibrant and attractive 'Academic Campus Heart' on the Hillcrest Road ridgeline, designed to attract academic and student talent, local business, industry, and community. This will be complemented by a 'Campus Social Heart' overlooking the lakes.

The second recommendation is to provide greater connectivity between key campus activities. Introducing a defined campus pathway, terraces and connectors will improve pedestrian connections

This document outlines the guiding design principles for the University's 20-year strategic campus Masterplan, developed with Jasmx architects, and in consultation with staff, students and community stakeholders.

between existing buildings and different levels of the campus. These projects will transform the staff, student and visitor experience, providing increased social opportunities, weather protection and enhanced accessibility.

Thirdly, the strategic campus Masterplan proposes new landscaped entries in key gateway locations. The most significant proposal to address this is The Pā development – a dynamic and multi-functional space that will serve our students, staff, the broader community and visitors.

Drawing on the Māori concepts of community and location, The Pā will create a welcoming and vibrant core facility for the Hillcrest campus, incorporating food outlets, social and formal learning spaces, a shared space for community and leadership, and a new University marae.

Completing the campus plan will be distinctive 'Character Precincts' which enhance and expand the West, North and East areas of the campus:

- The West Precinct includes undergraduate accommodation, facilities, an extended Performing Arts Academy, a new Health and Wellness Centre combined with Student Union, and a refurbished retail and hospitality hub, described in this document as the 'Campus Social Heart'.
- The North Precinct includes large-format, high-performance sports facilities co-located with the sports fields and College Hall residential accommodation.
- The East Precinct provides staff and postgraduate accommodation and meets the needs of research and education partners.

CAMPUS DESIGN PRINCIPLES SUMMARY

Purpose of Design Principles:

The Strategic Masterplan Design Principles provide a guide for future campus development opportunities. Relevant design principles are applied to ensure future projects are aligned to campus aspirations.



CAMPUS PRESENCE

Campus development will express University of Waikato values and culture and will showcase University activity.



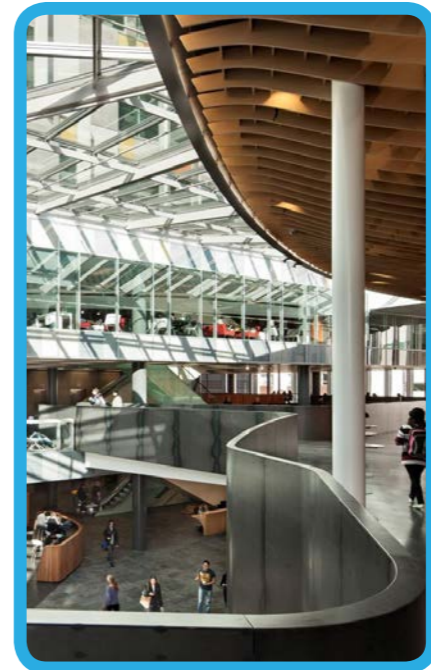
CAMPUS HEART

Campus development will provide well-connected Academic and Social Hearts addressing Hillcrest Road and overlooking the campus lakes.



CHARACTER PRECINCTS

Campus development will establish distinctive precincts that reflect character and identity, while enabling sharing of resources.



CONNECTED CAMPUS

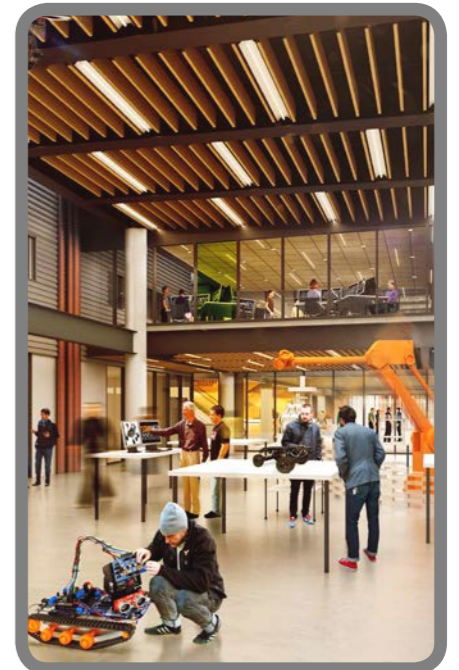
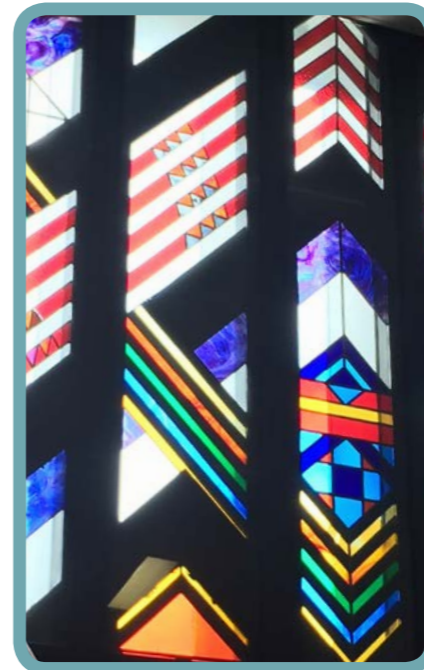
Campus development will be organised by legible, accessible connections that enable intuitive wayfinding and good sightlines.



WHENUA TAURIKURA

Campus development will celebrate and enhance the natural landscape as a foundation of University of Waikato identity.

CAMPUS DESIGN PRINCIPLES SUMMARY



LIVING CAMPUS

CULTURAL IDENTITIES

INNOVATIVE LEARNING ENVIRONMENTS

COLLABORATIVE CAMPUS

BUILT HERITAGE

CAMPUS INFRASTRUCTURE

Campus development will provide a rich mixed-use environment for accommodation, social, health, sports and recreational uses designed to welcome the community.

Campus development will reflect the concepts of mana and manaakitanga to create an inclusive, welcoming environment.

Campus development will provide flexible learning spaces and a variety of social learning environments to support different learning styles.

Campus development will support collaboration between individuals, departments, faculties, business and the wider community.

Campus development will celebrate beauty, existing heritage and be designed for adaptability.

Campus infrastructure will be developed for future resilience.

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Presence & Arrival

CAMPUS PRESENCE

Campus development will express University of Waikato values and culture and will showcase University activity:

- Development will establish visible campus presence at key boundaries and thresholds
- Campus entries will support different arrival functionality (drop off, pedestrian, cycle, parking)
- Innovative research and learning spaces will be showcased on primary campus thoroughfares
- Campus will contain spaces to engage with iwi, community, business and industry
- The defining attributes of the campus will be retained and strengthened, preserving aspect and outlook; mature and native vegetation and architectural legacy.



New campus gateways
| WEST CAMPUS / KNIGHTON ROAD ARRIVAL AERIAL PERSPECTIVE



View along east-west axis
| THE UNIVERSITY OF WAIKATO PĀ PROJECT (ARCHITECTUS / JASMAX)





View south along Taupiri axis
| THE UNIVERSITY OF WAIKATO PĀ PROJECT (ARCHITECTUS / JASMAX)

CAMPUS ARRIVAL ZONES



KEY :

-  KEY ARRIVAL ZONES / CAMPUS GATEWAY
-  OPEN SPACE PLAZAS TO SUPPORT ARRIVAL & WELCOME

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Campus Heart

CAMPUS HEART

Campus development will provide well-connected Academic and Social Hearts addressing Hillcrest Road and overlooking the campus lakes:

- Development will support a diverse community of campus users
- Social and learning activities will be consolidated toward the centre of campus
- Spaces will be provided to enable civic engagement and events
- Facilities which require extended hours of occupation will be co-located
- Public engagement venues generating increased economic, cultural, and knowledge-sharing activities will be co-located
- High-use spaces will be placed in the heart of the campus.

CAMPUS PRECEDENT IMAGERY



Open social space and student hub adjacent to the campus centre
| MONASH UNIVERSITY CLAYTON, NORTHERN PLAZA

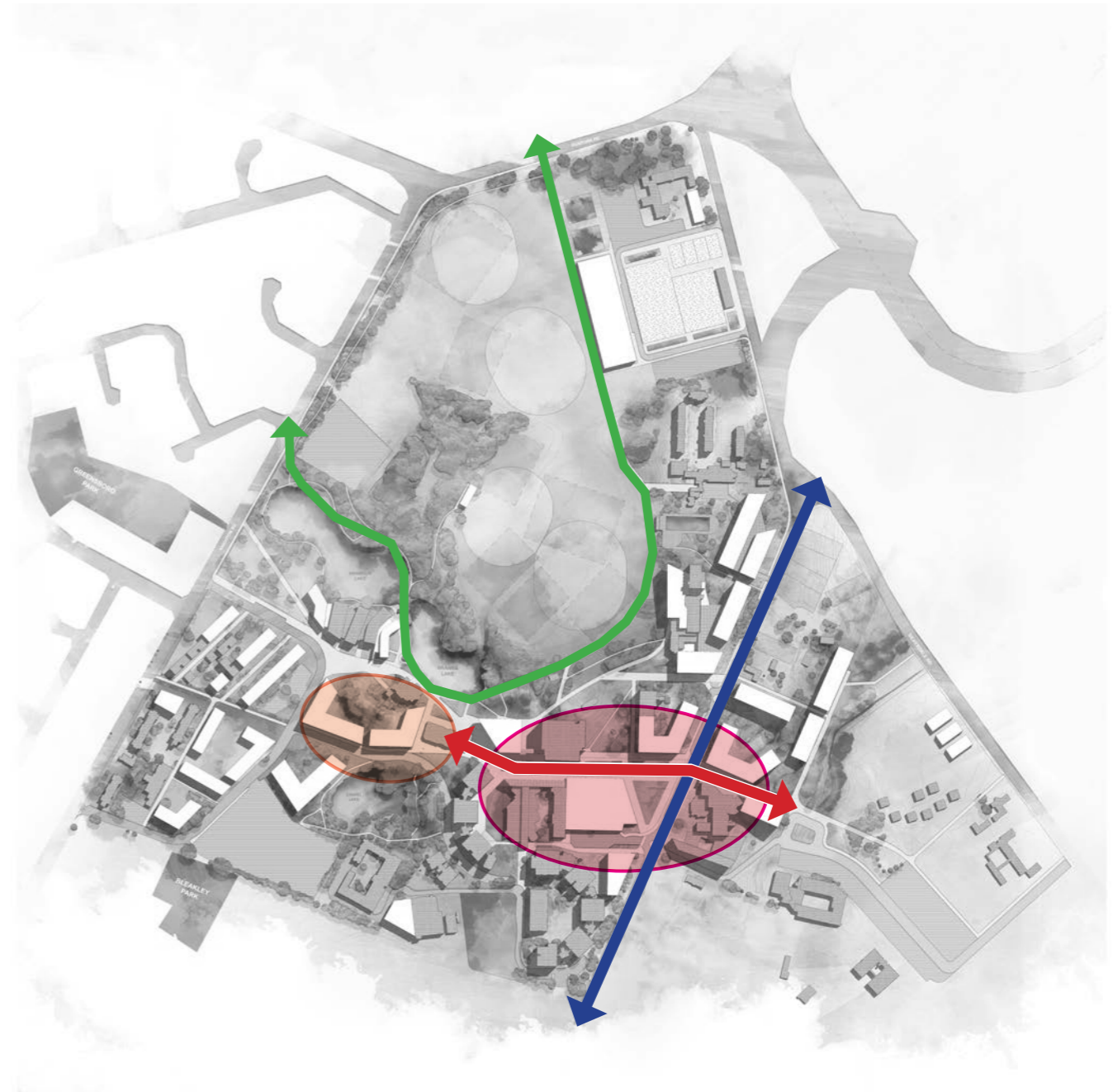


View south along Taupiri axis
| THE UNIVERSITY OF WAIKATO PĀ PROJECT (ARCHITECTUS / JASMAX)



View along pathway
| THE UNIVERSITY OF WAIKATO PĀ PROJECT (ARCHITECTUS / JASMAX)

CAMPUS HEART



KEY :

- ACADEMIC HEART
- SOCIAL HEART
- ↔ KEY PUBLIC SPINE (MAINLY ACTIVATED BY VEHICLES)
- ↔ KEY CAMPUS SPINE (MAINLY ACTIVATED BY PEDESTRIANS)
- ↔ SECONDARY GREEN SPINE

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Character Precincts

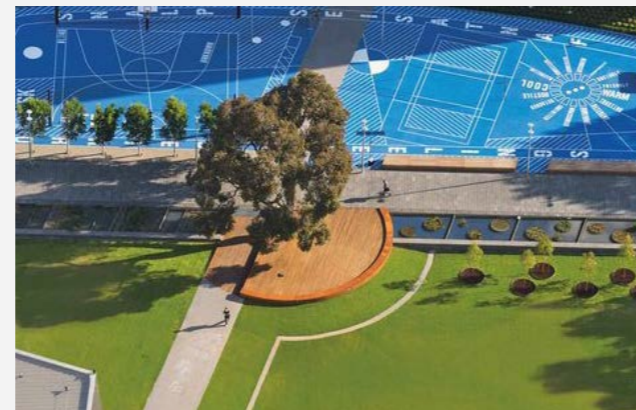
CHARACTER PRECINCTS

Campus development will establish distinctive precincts that reflect character and identity of uses, while enabling sharing of resources:

- The campus will support cross-disciplinary interaction and allow for the sharing of resources
- Strong linkages will be maintained between precincts and the campus heart areas
- Precincts will offer satellite amenities to compliment campus heart offerings
- Academic precincts will provide a core of generic learning and workspace environments
- Specialist technology, equipment, spaces and knowledge will consolidate in academic precincts
- Non-academic precincts will cluster complementary activities
- Use of specialist space will be University wide rather than owned by faculties to encourage shared access to resources.

CAMPUS PRECEDENT IMAGERY

NORTH PRECINCT: RECREATION



Dynamic system of social and recreational activities
| MONASH UNIVERSITY CAULFIELD CAMPUS

EAST PRECINCT: ACADEMIC / RESEARCH



Specialist learning and research spaces
| AUT ETD BUILDING (JASMAX)

Inter-faculty events
| AALTO UNIVERSITY DESIGN FACULTY

WEST PRECINCT: ACCOMMODATION



Sustainable student village establishes a distinct character
| BASTYR UNIVERSITY STUDENT VILLAGE

Open and activated spaces on campus accommodation precincts
| TIETGEN DORMITORY, COPENHAGEN UNIVERSITY

CHARACTER PRECINCTS



KEY :

- CHARACTER PRECINCTS
- ACADEMIC HEART
- ↔ KEY CAMPUS SPINE (MAINLY ACTIVATED BY PEDESTRIANS)

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Connected Campus - Pedestrian

CONNECTED CAMPUS

Campus development will be organised by legible, accessible connections that enable intuitive wayfinding and good sightlines:

- Campus development provides clarity and hierarchy of circulation
- Safe, well-lit thoroughfares will be designed to maximise universal access
- Wayfinding will be intuitive and memorable
- Safe primary circulation routes with 24/7 access linking carparking and key campus spaces
- Improve pedestrian and vehicular travel experience in the wider Hillcrest area
- Multi-modal transportation options to be supported with campus amenity and planning. Low-carbon transport services (electrical and solar array) to be developed on campus.

CAMPUS PRECEDENT IMAGERY



View of promenade and adjacent open spaces | DISCOVERY GREEN, HOUSTON TX (HARGREAVES ASSOCIATES)

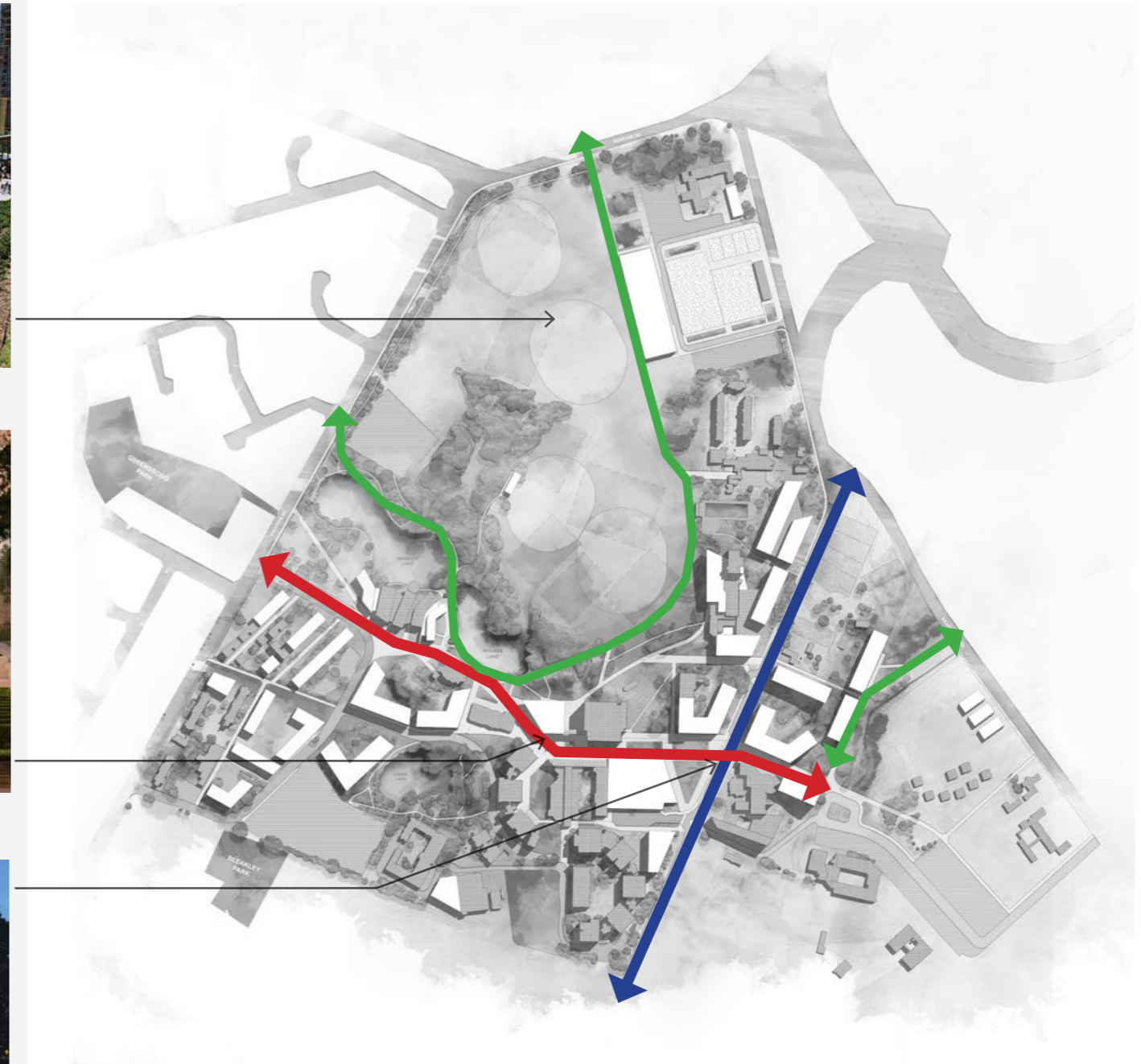


Public interface and front door | AUT SIR PAUL REEVES BUILDING (JASMAX) | UNSW KENSINGTON CAMPUS



Hillcrest Road: Public interface of the University of Waikato | THE UNIVERSITY OF WAIKATO

PRIMARY CONNECTIONS



KEY :

- ↔ KEY CAMPUS CONNECTION (ACTIVATED BY VEHICLES, PEDESTRIANS & CYCLISTS)
- ↔ KEY CAMPUS CONNECTION (ACTIVATED BY PEDESTRIANS)
- ↔ KEY GREEN CONNECTIONS (ACTIVATED BY PEDESTRIANS & CYCLISTS)

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Connected Campus - Cycling, Driving, Public Transport

CONNECTED CAMPUS

Campus development will be organised by legible, accessible connections that enable intuitive wayfinding and good sightlines:

- Promote cycling as a healthy, sustainable means of transportation
- Provide access to enhanced cycle hub facilities for cyclists in key arrival locations
- Promote a dedicated cycle path between the campus and the city centre and better connect the campus to cycling infrastructure
- Limit vehicular entry to the campus to create a safer pedestrian network
- Provide a public transport hub accessed from the new Knighton Road loop
- Create well-lit, safe pedestrian links from consolidated carparking zones located in character precincts.

CAMPUS PRECEDENT IMAGERY



Secure bicycle storage, lockers, showers & bike repair areas provided to promote commuter bicycle transit into downtown Chicago
| MCDONALD'S CYCLE CENTRE CHICAGO (MULLER&MULLER)



Bus transit shelters for the trolley-bus loops inserted to address the gaps in UBC's public realm fabric
| UNIVERSITY BOULEVARD TRANSIT SHELTERS (PUBLIC ARCHITECTURE+ COMMUNICATION)



Pedestrian and bicycle links through the Arizona State University campus
| CYCLE AND WALKWAY ARIZONA STATE UNIVERSITY

CYCLE NETWORK ENHANCEMENT OPPORTUNITIES



KEY :

- ➔ PROPOSED DEDICATED CYCLE WAY
- ||||| SHARED CYCLE / PEDESTRIAN PATHWAY
- CYCLE HUB (SHOWERS, E-BIKE CHARGE, LOCKERS, SECURE BIKE STORAGE)
- ↔ KEY CAMPUS CONNECTION (ACTIVATED BY PEDESTRIANS)

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

PUBLIC TRANSPORT ACCESS : BUS & COACH FACILITIES, ACCESSIBLE CAMPUS ROUTES



- KEY :**
- BUS STOP / COACH
 - PRIVATE CAR DROP-OFF
 - ↔ HILLCREST ROAD
 - VEHICLE ACCESS ROUTES
 - ↔ ACCESSIBLE ROUTE THROUGH CAMPUS:
 - ↔ ACCESSIBLE ROUTE
 - VERTICAL TRANSPORTAION LIFTS

PEDESTRIAN ACCESS ROUTES : FROM CARPARKING TO CAMPUS HEART



- KEY :**
- ↔ CAMPUS PATHWAY
 - ⋯→ ROUTE TOWARDS CAMPUS HEART FROM CARPARKING
 - CARPARKING
 - 1 KNIGHTON RD (GATE 2B)
 - 2 KNIGHTON RD LOOP (NEW GATE)
 - 3 SILVERDALE RD (GATE 3A)
 - 4 SILVERDALE RD (GATE 11 / GATE 10)
 - 5 KNIGHTON RD LOOP (NEW GATE)

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Campus Landscaping & Surrounds

WHENUA TAURIKURA

Campus development will celebrate and enhance the natural landscape as a foundation of University of Waikato identity:

- Celebrate outlook and prominence from the Hillcrest ridgeline
- Balance planting with passive observation opportunities to promote a safe campus
- Ecological enhancement of waterways, lakes and wetlands
- Connect buildings to campus open space
- Prioritise ecological stormwater catchment systems, including reducing the amount of hard paved areas
- Provide an ecological node for Hamilton's native regeneration project
- Provide opportunities for rongoa and mahinga kai/productive landscapes on campus
- Seek to increase biodiversity through predominance of native species on site.

The Hillcrest campus redevelopment represents an opportunity to contribute to an urban ecological restoration project sponsored by Hamilton City Council and the University of Waikato. This sets a target of 10% of the urban area of Hamilton to be restored to vegetation planted in native species.

Together with the proposed Ruakura Greenways, Hillcrest campus has the potential to provide an important ecological stepping stone for birds and wildlife. The Hillcrest campus can provide a minor ecological node, becoming a native seed repository and living laboratory for research.

The Strategic Masterplan identifies several opportunities to enhance the existing catchment, waterways, lakes and increase native planting. These include protecting the last remaining remnant of the ancient Karipūkau forest on campus. The principles associated with Whenua Taurikura promote a return to a more natural and functional ecology.

CAMPUS PRECEDENT IMAGERY

SOCIAL HEART



Activation of campus hub spaces
| MONASH UNIVERSITY CAULFIELD CAMPUS GREEN



Existing campus lakes are a highly valued green open space
| THE UNIVERSITY OF WAIKATO

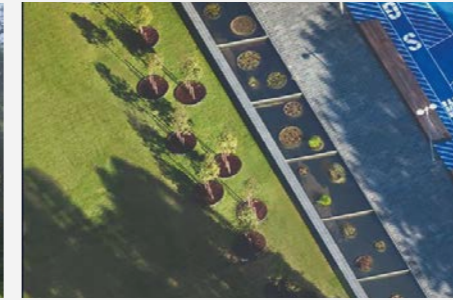


View of The Pā looking south
| THE UNIVERSITY OF WAIKATO PĀ PROJECT
(ARCHITECTUS / JASMAX)

RIDGE



Natural landscape surrounding Chapel Lake
| THE UNIVERSITY OF WAIKATO



New event lawn is the centrepiece to the campus
| MONASH UNIVERSITY CAULFIELD CAMPUS



Views overlooking Hamilton from Hillcrest Ridge
| THE UNIVERSITY OF WAIKATO

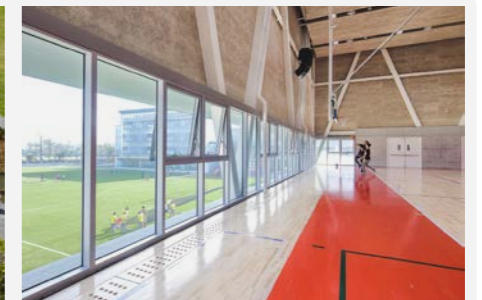
OPEN FIELDS & LARGE FORMAT COMPETITIVE SPORTS VENUE



Overlooking the campus fields in the north precinct
| THE UNIVERSITY OF WAIKATO



Campus is activated through a dynamic landscape, encouraging users to study, socialise and linger on campus
| MONASH UNIVERSITY CAULFIELD CAMPUS



Gymnasium adjacent to open outdoor fields
| KAOSHIUNG AMERICAN SCHOOL ATHLETIC COMPLEX
(MAYU ARCHITECTS)

RESIDENTIAL



Sustainable student village
| BASTYR UNIVERSITY STUDENT VILLAGE



Green space provides a non-working environment also acting as a stormwater infiltration system
| FONTERRA CENTRE (JASMAX)



This urban park serves as a living fabric within the surrounding urban district
| DISCOVERY GREEN (HARGREAVES ASSOCIATES)

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

KEY OPEN SPACE CHARACTER ZONES



KEY :

- ACADEMIC & SOCIAL HEARTS
- ⋯ RIDGE
- OPEN FIELDS & LARGE FORMAT COMPETITIVE SPORTS VENUE
- RESIDENTIAL ZONES

KEY ECOLOGICAL NETWORKS



KEY :

- ⋯ WATER ECOLOGY
- ⋯ ECOLOGICAL NODES
- ↔ PRIMARY PEDESTRIAN SPINE
- ↔ HILLCREST ROAD

A series of landscape networks work in parallel to the open space character zones and campus precincts. These networks respond to flows of water, people and ecological flora and fauna. The key landscape networks are demonstrated in this diagram.

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Living Campus

LIVING CAMPUS

Campus development will provide a rich mixed-use environment for accommodation, social, health, sports and recreational uses designed to welcome the community:

- Residential accommodation will support the diverse needs of students, staff and visitors
- Students will have spaces that provide a sense of comfort, ownership, influence and belonging
- A range of health, wellbeing and recreation and retail and entertainment facilities will be co-located, and easily accessible
- Campus facilities and landscape will be designed for community and University use
- The University will be a community destination for sports and recreation, enjoyment of cultural experiences and acquisition of knowledge.

CAMPUS PRECEDENT IMAGERY



Timber-clad student dorms and educational centre set within a landscaped park for a boarding school in Paris
| MAISON D'EDUCATION DE LA REGION D'HONNEUR (BELUS & HENOCQ ARCHITECTES)



Food and beverage facilities provide students with a sense of ownership and comfort
| AUT ETD BUILDING (JASMAX)



Free-standing cottages make up this sustainable student village
| BASTYR UNIVERSITY STUDENT VILLAGE

RESIDENTIAL, RECREATIONAL, FOOD AND BEVERAGE & RETAIL



KEY :

- | | | | | | |
|--|--|--|-------------------------------|--|--|
| | LIVING CAMPUS AMENITY | | EXISTING RETAIL / HOSPITALITY | | RESIDENTIAL |
| | COMPETITIVE SPORTS VENUE & TRAINING FACILITIES | | ORANGA: STAFF COMMONS / BAR | | EXISTING & FUTURE CAMPUS RESIDENTIAL EXPANSION |
| | STUDENT RECREATION / GYM FACILITY | | ACADEMY EXPANSION | | EXISTING COLLEGE HALLS & POSSIBLE FUTURE EXPANSION |
| | FUTURE RETAIL / FOOD AND BEVERAGE OPPORTUNITY | | 'NO. 5 DAIRY' OPEN SPACE | | EXISTING & FUTURE STAFF AND POSTGRADUATE RESIDENTIAL EXPANSION |
| | | | | | FUTURE OPPORTUNITY FOR ADAPTIVE REUSE |

PROPOSED STRATEGIC MASTERPLAN

CAMPUS DESIGN PRINCIPLES

Campus & Public Engagement Opportunities

CULTURAL IDENTITIES

Campus development will reflect the concepts of mana and manaakitanga to create an inclusive, welcoming environment:

- The campus will contain dynamic cultural and social spaces and places for people to be welcomed and new relationships to be forged
- The campus will retain physical markers and acknowledgements of the University's achievements, people, history and heritage
- Amenities will support different cultural and religious practices and areas for cultural exchange.

CAMPUS PRECEDENT IMAGERY



'BALLOONS OVER WAIKATO' ANNUAL FESTIVAL



Ceremonial opening of Tūhoe
| TŪHOE TE URU TAUMATAUA (JASMAX)



Interior view towards the stage
| THE UNIVERSITY OF WAIKATO PĀ PROJECT (ARCHITECTUS / JASMAX)

EVENTS, CONFERENCES & CULTURAL PERFORMANCE



KEY :

- | | | | | | |
|----------|--|----------|--------------------------------------|----------|---|
| | OUTDOOR PUBLIC EVENTS - COMMUNITY | | CONFERENCE / INDOOR PUBLIC EVENTS | | INDOOR ARTS / CULTURAL PERFORMANCE VENUES |
| A | SPORTS FIELDS | D | THE PĀ | G | STUDENT UNION |
| B | TEMPORARY PUBLIC EVENTS - HARD SURFACE | E | S BLOCK | | |
| C | STUDENT-LED FESTIVALS | F | GALLAGHER ACADEMY OF PERFORMING ARTS | | |

CAMPUS DESIGN PRINCIPLES

INNOVATIVE LEARNING ENVIRONMENTS

Campus development will provide flexible learning spaces and a variety of social learning environments to support different learning styles.

- The campus will provide a diverse range of settings with space and technology to explore pedagogical innovations and deliver proven teaching methodologies
- Campus design will leverage the learning potential of circulation and social space, supporting activities that encourage innovation and creativity
- The campus will include a range of learning and study spaces to support individual (quiet to social) and group work (white board to tech-enabled)
- Future development will ensure that learning and research environments are flexible and responsive to change.

COLLABORATIVE CAMPUS

Campus development will support collaboration between individuals, departments, faculties, business and the wider community.

- Facilities for shared use and collaboration will be concentrated at the campus centre, with nodes for collaboration located in character precincts
- Showcase spaces for research and engagement will activate public frontages in high visibility areas
- University partners will be co-located in research and education precincts
- Spaces and facilities will foster mutually beneficial stakeholder partnerships
- The campus will perform as a Living Laboratory to enable research, reduce energy use where possible, implement ecological regeneration, enable social engagement and practice tikanga Māori.

BUILT HERITAGE

Campus development will celebrate beauty, existing heritage and be designed for adaptability.

- New assets will be responsive to architectural heritage, with a cohesive language and material palette
- Campus developments will feel balanced, beautiful, and in harmony with the natural environment
- Cultural identity will be physically expressed
- Amenities support different cultural and religious practices and provide areas for cultural exchange
- Opportunities for enriching the cultural identity of the campus through naming and marking places and spaces will be considered in consultation with iwi
- Design will promote health and wellbeing through use of natural light and ventilation
- Existing assets will be reused and adapted to support pedagogical and technological requirements for future learning and research
- Existing buildings will be modified where required to provide attractive and 'sticky' campus environments.

CAMPUS INFRASTRUCTURE

Campus infrastructure will be developed for future resilience.

- Best-practice regenerative frameworks will be integrated into all building projects with respect to energy use, water use and waste
- The campus will model leadership in regenerative thought, through initiatives to raise community awareness
- Wherever practicable, assets will be adapted or repurposed, ensuring optimisation of space, consolidation of functions, density and people
- A replacement strategy will be developed to reduce reliance on non-renewable energy sources.