# GREATER CURTIN DELIVERING THE VISION

PART C | CREATING THE CITY OF INNOVATION



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#### Contact

Andy Sharp
Director Properties, Facilities & Development
Curtin University
Kent Street Bentley WA 6102
GPO Box U1987 Perth WA 6845
Tel: +61 8 9266 4428
Email: andy.sharp@curtin.edu.au

#### **Document Control**

The Greater Curtin Delivering the Vision (Part C) has been prepared by the Curtin City Project Group consisting of AECOM, Arup, Block Branding, CBRE, Donaldson and Warn, Pracsys and Syrinx Environmental PL.

Second edition
Approved by: Andy Sharp
Director Properties, Facilities & Development
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# GREATER CURTIN DELIVERING THE VISION

PART C | CREATING THE CITY OF INNOVATION



# CHANCELLOR'S FOREWORD

Curtin University is an institution with an incredibly bright future. It brings together the very best minds in research and teaching and has created a vision for the future that aims to bring prosperity to all Western Australians. Curtin is building upon an area that already possesses the largest concentration of innovative industry and research in the State. We aim to create an important economic and innovation hub with a rich diversity in culture and the arts - a district that celebrates our creative knowledge. Curtin is committed to pursuing this goal with and for the citizens of Perth and Western Australia so that we may become a globally competitive knowledge economy.

Greater Curtin is a visionary plan for our future. It is a bold and exciting plan that sets out the transformational changes required to bring together the world's best minds to solve real world problems. We envisage Greater Curtin to be 'the place' to rub shoulders with some of the most dynamic and exciting businesses and community groups in Australasia. It will be a place where large and small businesses and entrepreneurs can exchange knowledge - a place where creative relationships are forged between colleagues. Greater Curtin will give the community, students and companies a unique opportunity to conceive and develop ideas and technologies – a place where innovation and opportunity coexist ready for the taking.

The University has prepared this master plan as the first step in showcasing the very best in urban planning and design. We are forging strong relationships with business and government to ensure our goals and aspirations meet the demands and changing face of university education and delivery. We have every desire to create an urban centre that will become a hub of innovation and research. Greater Curtin is set to develop into one of the most dynamic districts conceived for the benefit of Perth and Western Australia. We invite you to join with us in making this a truly globally competitive knowledge centre - a Greater Curtin.

#### **COLIN BECKETT**

CHANCELLOR CURTIN UNIVERSITY



# VICE-CHANCELLOR'S FOREWORD

If the role of the university is to look ever forward, to challenge and to create opportunities for its citizens by finding new and better ways of understanding our world, then Curtin University exceeds these aspirations by bringing to life the Greater Curtin initiative.

Our vision for a knowledge hub defined by the synergies of research, business and entrepreneurial enterprise forms the basis of the Greater Curtin proposal. Our plans for an urban centre will deliver significant opportunity for a wide range of knowledge industries, business and research groups and will extend to help position Western Australia as a key knowledge economy in Australia and Asia.

Greater Curtin is underpinned by a broad spectrum of innovation and delivers on four key network strengths;

Education and Innovation Network – Meeting the demands of future generations will require Curtin University to provide contemporary courses and research capabilities that closely align with community and business expectations. Greater Curtin will become the centre of research and innovation in Western Australia, blending new practices for entrepreneurship with business and industry partners.

Social and Cultural Network – With one of the largest humanities faculties in Western Australia, Greater Curtin will be the place where arts and culture meet technology and innovation. We seek to become the creative hub for Perth and an attractive vibrant destination for the community.

**Urbanisation Network** – Greater Curtin will support an urbanisation economy based around public transport, dense residential and high participation rates of knowledge workforce and visitor populations. In the spirit of great urban places, Greater Curtin will serve its community as a living laboratory where technology and research are visible and accessible to everyone.

Business and Research Network — A collection of visionary companies and researchers already exists in Bentley, and Greater Curtin seeks to leverage this critical mass to form new business and research opportunities — multiplying the number of innovative companies within Western Australia. The Greater Curtin project will demonstrate the network benefits offered to entrepreneurial business and researchers by the promotion of fresh ideas and collaboration between new and existing innovators. Greater Curtin is planned to contribute an estimated \$4.5B in annual output to the State economy when fully developed, comprising knowledge exports, value-added industry and significant wages income.

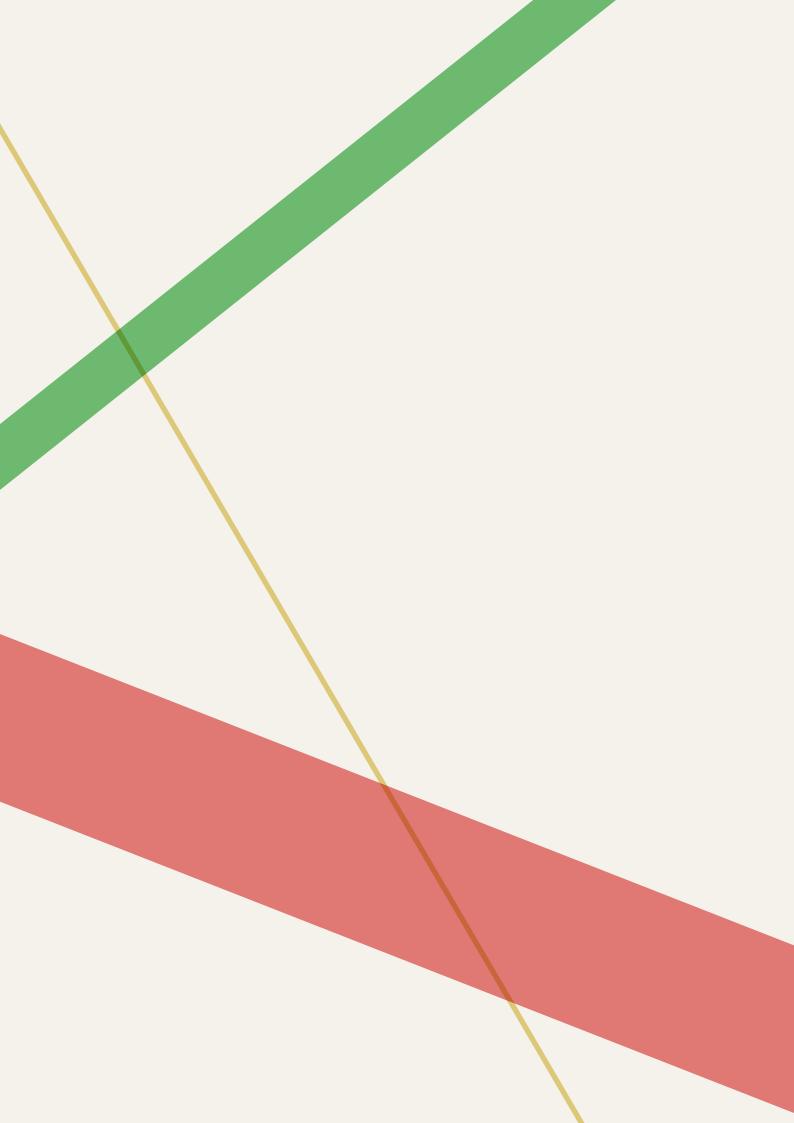
These exciting networks provide solid foundations for Curtin University and form the cornerstone from which Greater Curtin is implemented.

We invite all Western Australians to be part of Greater Curtin and to participate in making Curtin University a leading light in research and innovation for this and future generations.

#### **DEBORAH TERRY**

VICE-CHANCELLOR CURTIN UNIVERSITY





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2.2 **DESIGN DIRECTIONS** 

3.1 **INTRODUCTION** 

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3.3 TYPOLOGIES

Greater Curtin will be a city supporting innovation, collaboration and creativity. It will be home to a diverse and integrated community. Greater Curtin will provide a boundless and adaptable urban context that supports constant exchange

supports constant exchange between industries, businesses, governments and researchers, forging partnerships in a place where new thoughts can be conceived and where knowledge and innovation extend beyond buildings.

Its communities will be seamlessly connected with the ability to meet, share and learn together. Whether in a lab, a cafeteria or underneath a tree, it will be a place that encourages thinking, thriving on togetherness, a prosperous city of diverse cultures whose goals are one and the same.

To make tomorrow better.

# 1.0 INTROINCTION

"The Great University...
should look ever forward:
for it the past should
be but a preparation of
greater days to be."



# 1.1 PURPOSE OF THE DOCUMENT

The Greater Curtin Delivering the Vision is document C in a suite of three documents:

- Document A Greater Curtin Drivers for Change
- Document B Greater Curtin Master Plan
- Document C Greater Curtin Delivering the Vision (this document).

The role of these documents is outlined in the diagram below. A Vision document supports these documents, establishing a high level introduction to Greater Curtin. A series of technical documents also exist to provide further detail behind the analysis, strategies and initiatives developed during the master plan process.

The built form guidelines and design controls contained within this document have been developed to assist designers, developers and decision makers in contributing to the progressive realisation of Greater Curtin's aspirations for its built environment.

In the development of the master plan a great deal of consultation and consideration has informed the proposed land use mix, its distribution, the proposed urban structure, built form and public realm typologies and character, as well as the supporting infrastructure strategies to ensure the delivery of an urban outcome that is:

- Distinctive
- Memorable
- Valuable
- Functional
- Fulfilling.

The physical layers of the master plan are interconnected, and their success in delivering Greater Curtin's vision is dependent on their comprehensive and holistic appreciation, interpretation and delivery. Through the realisation of its vision, Greater Curtin will be a great place to visit, study, live and work, and the contribution made by each building, development lot, street and space is critical to achieving this.

# DELIVERY + OUTPUTS

GREATER CURTIN MASTER PLAN

#### **THE GOAL**

#### GREATER CURTIN VISION

- Establishes the Vision for Greater Curtin
- Provides a high level introduction to the master plan
- Sets out the intent for the future city.

#### **THE WHY**

#### GREATER CURTIN DRIVERS FOR CHANGE

- Establishes the starting point for the project
- Sets out the drivers for the evolution of the university into a city
- Provides a clear understanding of the key decisions taken – the rationale and outcome.

#### THE WHAT

#### GREATER CURTIN MASTER PLAN

- Illustrates and defines the framework for the future city
- Defines the key structuring elements of the future city
- Establishes the key strategies and initiatives proposed to deliver the vision for Greater Curtin.

#### **THE HOW**

# GREATER CURTIN DELIVERING THE VISION

- Provides an instruction manual for the detailed delivery of the master plan
- Provides detailed design guidance.

# 1.2 HOW TO USE THIS DOCUMENT

This document has been written and shaped to: Interpretations of the guidelines will therefore

#### PROVIDE A PRACTICAL HANDBOOK

The guidelines contained within this document are intended to provide a practical handbook, or design manual, for the comprehensive translation of the Greater Curtin Master Plan intent.

#### DEFINE PARAMETERS TO GUIDE THE EVOLUTION OF OPPORTUNITIES

The guidelines set in place parameters within which development can be explored and designs developed.

All of the guidelines must be responded to in the development of proposals for Greater Curtin.

The guidelines set out instruction for:

- · Site-wide design requirements
- Development lot opportunities and design intent
- The physical parameters for development lots
- · The desired primary land uses per lot
- Desired design outcomes for development lots and suggested typologies of built form
- · Requirements for public realm
- Requirements and opportunities for sustainability and design innovation.

#### **ENCOURAGE INTERPRETATION**

The master plan for Greater Curtin illustrates and defines an opportunity for Curtin University's land at Bentley. It is fully appreciated that the development opportunity and potential urban evolution defined by the master plan will emerge over an extended time frame. The master plan has been shaped and staged with an assumption that the area will evolve over a minimum 20-year timeframe. In defining the design guidance the need for interpretation in response to current trends in the market, planning and design has been a key consideration.

Interpretations of the guidelines will therefore be favourably considered where modifications achieve or surpass the design requirements provided, and where proposed outcomes maintain and enhance the architectural and environmental quality, public realm and accessibility, and sustainability determined by the master plan, its vision and the six guiding principles for Greater Curtin:

- Greater Systems
- · Living Laboratory
- · Collection of Cultures
- Platform for Partnerships
- Networked Communities
- Distinctly Curtin.

#### **DOCUMENT STRUCTURE**

#### **DESIGN DIRECTIONS (DD)**

The 'Design Directions' (DD) provide overarching objectives, or site-wide strategies and design instruction applicable across all built form typologies, super lots and lots.

### DESIGN AND DEVELOPMENT GUIDANCE Superlots

In order to assist in the determination of development opportunities, and clearly define distinct land parcels, the master plan has been subdivided into development bands or 'Superlots'.

The Superlots are illustrated to define the location and extent of distinct development parcels and provide additional design direction and advice for their successful development within the context of the wider master plan.

#### **Typologies**

The master plan anticipates a range of activities at Greater Curtin. This land use diversification will result in the need for a range of individual building typologies. The design guidelines present massing and design advice relative to each building type, and offer good practice precedent imagery to illustrate the types of outcome desired at Greater Curtin.

## DESIGN DEVELOPMENT PROCESS AND POLICY CONTEXT

Directions 2031 and Beyond (D2031) provides the overarching spatial planning framework for the Perth and Peel Regions. Within its Activity Centres Network, Bentley/Curtin is recognised as a Strategic Specialised Activity Centre. Five Specialised Centres are noted in State Planning Policy 4.2 Activity Centres for Perth and Peel (SPP 4.2) including Curtin/Bentley, which sit outside the hierarchy of population, retail and business, based centres.

This document provides designers and developers with a handbook that should be read in conjunction with:

- The suite of documents which make up the Greater Curtin Master Plan
- The Building Code of Australia (BCA)
- Disability Discrimination Act
- Aboriginal Heritage Act 1972
- Any other relevant Australian and WA, Perth Regional Standards, legislation and regulations.

# 2.0 DESIGN DIRECTIONS -SITE WIDE INSTRUCTION



GREATER CURTIN MASTER PLAN 2.0

#### 2.1 INTRODUCTION

The Design Directions are provided to establish overarching objectives, or site-wide strategies and design instruction applicable across all typologies, superlots and lots.

The Design Directions provide instruction to drive design development to deliver outcomes that are innovative, sustainable and holistic, and deliver the direction set by the Greater Curtin Master Plan Vision and six guiding design principles.



## **GREATER SYSTEMS**

The master plan for Greater Curtin embeds a progressive strategy to achieve sustainable development outcomes. Feeding and supporting the future city is a network of integrated infrastructure systems designed to anticipate the growth of the future city, supported by strategies that enable adaptation to accommodate innovation in services provision.



#### LIVING LABORATORY

The evolution of the city, its design, construction and life will provide a focus for education and life-long learning, leveraging off academic and research opportunities, and providing platforms for collaboration, innovation and the exchange of knowledge. The evolution and delivery of the master plan will provide opportunities for and be inclusive and draw on the knowledge and experience of its resident communities.



## COLLECTION OF CULTURES

Greater Curtin will be home to a diverse and integrated community. It will be a vibrant place characterised by intimate, local, human scale neighbourhoods with easy access to everyday needs. It will be an environment that enables its residents to live, work and play in Greater Curtin.



## PLATFORMS FOR PARTNERSHIPS

The approach to architecture and urban planning is embedded in this concept, promoting the delivery of spaces that facilitate knowledge networks, establishing an attitude to architecture of open plans and the provision of spaces for interaction and community, enabling the evolution of a city that thrives on collaboration, diversity and innovation.



# NETWORKED COMMUNITIES

Embedded within the Greater Curtin structure is an integrated urban movement network that provides access to convenient and attractive public transport with transit enabled streets that are safe, walkable and cycleable. This network will extend strong links beyond the city, effectively connecting the Greater Curtin community to its neighbourhood, to Perth and into the region.



# DISTINCTLY CURTIN

Greater Curtin will grow from established foundations. The distinctive characteristics of its land and cultures provide the building blocks for the future city, establishing the framework for the evolution of a place that is responsive and respectful of its heritage, looking forever forward from its past.





# 2.2 **DESIGN DIRECTIONS**

The focus for each Design Direction (DD) is summarised in the opposite diagram. Instructions for each DD are outlined in the following pages.



#### URBAN MORPHOLOGY

#### **FOCUS**

Provides instructions for the approach to be taken to the location, arrangement and massing of built form.

#### **INSTRUCTIONS**

DD 1.1 Massing
DD 1.2 Wayfinding



#### CHARACTER AND IDENTITY

#### **FOCUS**

Explores and provides direction for:

- The definition of neighbourhoods and their character
- The development of an architectural language; its geometry, tectonics and materiality
- The development and delivery of a distinctive design language for Greater Curtin's landscape and public realm.

- DD 2.1 Neighbourhood Character
- DD 2.2 Built Form Geometry and
- DD 2.3 Use of Materials
- DD 2.4 Detailing and Finishes
- DD 2.5 Existing Vegetation
- DD 2.6 Vegetation Character Zone
- DD 2.7 Micro-climates
- DD 2.8 Public Art







#### **RELATIONSHIPS**

#### **FOCUS**

Establishes guidance to deliver a and legible with good amenity.

#### **INSTRUCTIONS**

DD 3.1 Safety

DD 3.2 Activation

DD 3.3 Legibility

DD 3.4 Amenity and Comfort

DD 3.6 Living Stream

DD 3.8 Pedestrian Links,



#### **RESPONSIVENESS**

#### **FOCUS**

and achieve sustainable and innovative development outcomes.

#### **INSTRUCTIONS**

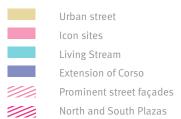
**Environmentally Sustainable** 

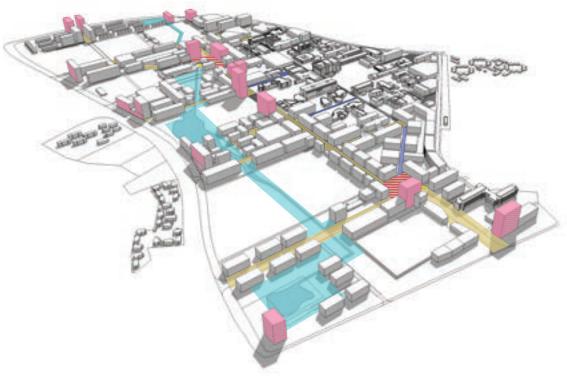
Design (ESD)

DD 4.3 Flexible Design

DD 4.4







#### DD 1.1 MASSING

#### INTENT

The term massing, in the context of these guidelines, relates to the general shape of individual buildings, or shaping of a collection of buildings, with a view to ensuring good urban outcomes are achieved and the delivery of a built form that is cohesive and legible.

- Buildings are to be predominantly organised with the maximum length on a north-south orientation to optimise opportunities for sustainable design outcomes.
- Groups of buildings have been organised in development bands to strongly define complementary public spaces, enhancing the opportunity for attractive. building settings and optimal solar access.
- Built forms are to be used to define and frame streets, junctions and public spaces.
- Building heights are to be used to create rhythm and variety.



#### DD 1.2 WAYFINDING

#### INTENT

The opportunity to deliver intuitive wayfinding, where elements of the built environment are used and organised to assist with legibility and navigation, has been a deliberate approach to the proposed location and juxtaposition of building heights.

- Buildings with significant additional height have been identified for key sites to:
  - Create legible gateways, signifying key arrival points into Greater Curtin
  - Reinforce the role and significance of key nodes of activity along Main Street
  - Give Greater Curtin an address within the Perth skyline.
- Development should respond to the proposed east-west aligned massing bands, which deliver both opportunities for development efficiencies as well as defining strong view corridors and neighbourhood legibility.
- Development adjacent to and along the Living Stream should promote and reinforce the opportunity to create view lines which enhance both physical and visual connectivity between key public spaces.
- Key views from the existing campus should be preserved and enhanced. These views include opportunities to capture views north over Collier Park and to Perth CBD and south towards the Canning River from within buildings and rooftop terraces.







#### DD2 CHARACTER AND IDENTITY

#### **OVERVIEW**

The realisation of the Greater Curtin
Master Plan will see a traditional university
campus evolve and grow into a vibrant,
mixed, urban centre, introducing a
greater variety of activities and land uses.
Through the delivery of the master plan
the accommodation for these new uses
and activities will complement Curtin's
established identity and elevate its character
to create a new, enhanced Greater Curtin.

DD2 Character and Identity explores and provides direction for:

- The definition of neighbourhoods and their character
- Architectural language; its geometry, tectonics and materiality
- The language of the landscape and public realm.

#### **INSTRUCTIONS**

DD 2.1 Neighbourhood Character

DD 2.2 Built Form Geometry

DD 2.3 Use of Materials

DD 2.4 Detailing and Finishes

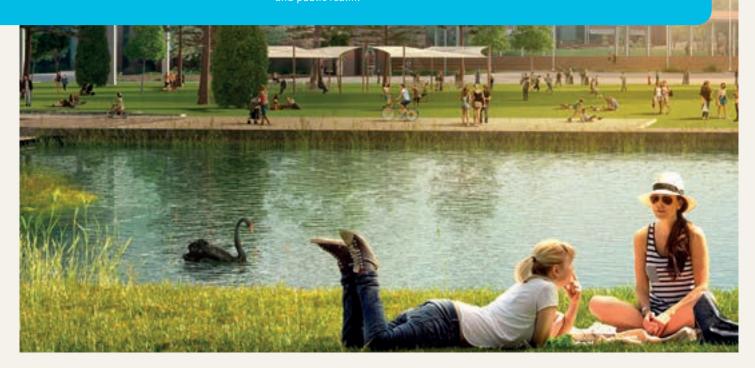
DD 2.5 Existing Vegetation

DD 2.6 Vegetation Character Zones

DD 2.7 Micro-climates

DD 2.8 Public Art

DD2 Character and Identity should be read in conjunction with Appendix A: Curtin's Existing Character. This appendix provides insight and a starting point for the appreciation of the valued design language from the campus core.



#### DD 2.1 NEIGHBOURHOOD CHARACTER

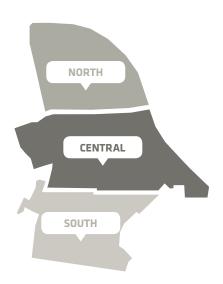
#### **INTENT**

Greater Curtin consists of three distinct neighbourhoods. Geographically defining these neighbourhoods and using them to provide legibility and definition of character for the Greater Curtin community is a key objective. To achieve this, the distinctive character and identity of each neighbourhood should be reinforced in the physical outcomes for each area.

#### **INSTRUCTIONS**

#### **Greater Curtin Central**

- Greater Curtin Central will be the ceremonial and civic heart of Greater Curtin and a focus of community activity.
   New development should respond to the design principles, materials, form and character of the best examples of the University's existing urban vernacular. Well executed, contemporary interpretation and design innovation within this framework is encouraged. The intent is to consolidate the original character of the campus so that it ultimately extends the width of the site, from Hayman Road to Kent Street.
- All development adjacent to Central Park must seek to deliver a positive visual and physical relationship with the park landscape.



#### **Greater Curtin North and Greater Curtin South**

- Greater Curtin North and South are the day-to-day engine rooms of the city. They are both key points of arrival and focus of diverse business and retail activities. New development activity within these neighbourhoods will be more varied than the existing campus and therefore a greater range of building typology is anticipated. However, all new buildings should seek to reflect and adapt the basic qualities of Curtin's urban vernacular.
- The Resources and Chemistry Building (Building 500)
   provides a good example of interpretive architecture. This
   building has a contemporary aesthetic but utilises a material
   and colour palette, and linear form that is derived from this.
- Sites identified as key urban markers, where taller buildings are encouraged, provide opportunities to deliver distinct architectural statements.
- New development adjacent to the iconic Curtin
  Dome in the Greater Curtin North neighbourhood
  must complement and enhance the setting of
  this distinctive and important structure.

#### DD 2.2 BUILT FORM GEOMETRY AND ARTICULATION

#### **INTENT**

Some of the most significant opportunities to deliver sustainable built form outcomes are influenced at the simplest level by the positioning and articulation of development. In the development of the Greater Curtin Master Plan the overall design direction has been to deliver a development framework that optimises opportunities for more sustainable outcomes starting at this fundamental point of decision making, through to the contribution of development detailing.

DD 2.2 focuses on opportunities for building geometry and articulation to contribute to the delivery of more sustainable development outcomes as well as the delivery of a strong sense of identity and contribution to the legibility of the city.

#### **INSTRUCTIONS**

- Buildings are to be predominantly organised with the maximum length on a north-south orientation to optimise opportunities for sustainable design outcomes.
- To contribute to the development of an architectural language that is 'Distinctly Curtin' (refer Appendix A) the articulation of facades should explore the use of:
  - Horizontal bands that emphasise the linear form of buildings (e.g. Architecture Building 201)
  - A dominant surface material emphasising the scale and volume of the building (e.g. Robinson Library Building 105, Engineering Building 204)
  - The expression of a buildings structural frame within either the plane of the exterior walls, or as an exoskeleton.
  - Deep set windows providing shade from excessive exposure to direct sun.

#### DD 2.3 USE OF MATERIALS

#### INTENT

The clear use of materials to articulate building façades and the public realm is a successful part of Curtin's established vernacular (refer Appendix A) that should be continued to deliver a built form language that aids legibility at a city-wide and individual building scale, and minimises the need for more formal signage.

- Apply a limited and well-considered materials palette.
- Materials should be used to define architectural elements, contributing to the legibility of each building and enhancing the individual character and identity of each development
- In the detailing of the public realm material choices should respect and respond to the University's heritage, associated with the original campus core, where simple use of quality and resilient materials forms a strong foundation to the public domain.
- Material selection should consider:
  - Low embodied energy solutions
  - Effective whole-of-life costs
  - Low ongoing maintenance
  - Sustainable production.
- Feature walling to landscape and public realm works is to typically feature three finishes:
  - Concrete (insitu off-form or precast)
  - Brick red brick as base and coloured brick as feature
  - Solid Western Australian sourced stone or stone cladding – to areas of embellishment. Limestone and reconstituted limestone walling is to be avoided.
- The resolution of levels across playing fields and development lots may require the use of earth battering or retaining walls.
   Where space does not provide adequate room for earth battering, retaining walls will be acceptable but are not preferred. Limestone and reconstituted limestone retaining walls are to be avoided.

#### DD 2.4 DETAILING AND FINISHES

#### INTENT

Good construction detailing is essential. A well-detailed and well-constructed building reduces the recurrent costs of maintenance and disruption to academic programming.

#### **INSTRUCTIONS**

- Low maintenance materials, which do not require painting
  or similar treatment, are preferred, such as brick, concrete,
  glass, anodised aluminium, copper, stainless steel. These
  are all already used on many of the campus buildings. These
  materials are long-lasting and gain character with age.
- If materials requiring maintenance are preferred, the ability to easily be replaced or maintained must be considered.
- Careful consideration should be given to the design and appearance of the roofscape, treating these areas as a fifth elevation of a building, exploring the opportunity for them to be useable or productive spaces, such as a roof garden, for water catchment or supporting renewable energy technologies.
- Additional to the importance of effective stormwater collection and drainage and the prevention of moisture ingress into the structure, roofs, gutters, cappings, flashings, etc. must be well resolved in detail and neatly executed in robust non-corrodible materials.
- It is preferred that shade devices (canopies, hoods, fins, etc.)
  are fully integrated into the building fabric and constructed
  of material that will not deteriorate. Shade devices and
  screens attached to the surface of buildings should generally
  be avoided as they tend to require ongoing maintenance.
- Exterior colour should be inherent to the materials used for buildings and not applied, generating a natural, earthy character to the Campus's architecture, and providing a practical solution with respect to maintenance minimisation.
- The consistency of pitch angle, colour and profile of proposed tiled roofs should contribute to the desired effect of unifying groups of buildings across the campus.

#### DD 2.5 EXISTING VEGETATION

#### INTENT

Greater Curtin will continue to celebrate the dual botanic heritage of the former Swan Coastal Plain and Pine plantation species, whilst looking to showcase Western Australian botanic species within an innovative and new green infrastructure and public domain network (refer Appendix A).

- All trees at Curtin (Pine or otherwise) have value and should be retained where possible unless deemed dangerous, unhealthy, a weed species or other reason identified for removal by an arborist.
- Any retention and replacement strategy for pines on site should involve retaining and planting a network of 'Pine stands' in association with key points in the Greater Curtin Master Plan. This includes places of cultural exchange, plazas, gateways, meeting points and the like.

#### DD 2.6 VEGETATION CHARACTER ZONES

#### **INTENT**

New planting within Greater Curtin will respond to four character zones, three of which are informed by the underlying paleochannel and soil structures of the area.

For more information regarding appropriate planting species, refer to Appendix B: Planting List.

#### **INSTRUCTIONS**

- Proposed key species are based on endemic vegetation of the Swan Coastal Plain. The Curtin Plant Schedule and accompanying plan illustrate the desired species list and distribution.
- To increase biodiversity the opportunity to source locally provenanced seeds should be explored, germinated and grown for use in all future street and park planting.
- Buffer species should be utilised to form an important biodiversity corridor along Kent Street.
- Wet species, as listed, should be used to develop the Living Stream aquatic aesthetic.
- Dry species, as listed, should be used to inhabit the lower slopes of the Curtin rise which extends up to the established core campus area.



Character	Zone	Speci	ies List

**Buffer** • Agonis flexuosa

• Banksia attenuata

Banksia menziesiiEucalyptus rudis

• Macrozamia riedlei

Nuytsia floribunda

Banksia littoralis

• Banksia occidentalis

Eucalyptus rudisMelaleuca preissiana

Melaleuca rhaphiophylla

Wetland sedges

Allocasuarina fraseriana

Banksia grandis

Corymbia calophylla

Eucalyptus erythrocorys

Eucalyptus marginata

Eucalyptus todtiana

Xanthorrhoea preissii

#### Existing Campus Core

Wet

Dry

#### DD 2.7 MICRO-CLIMATES

#### INTENT

An important overlay to this plan occurs at the individual building scale where distinct microclimates occur to the north and south of east-west orientated buildings. These conditions define opportunities for dry and full sun tolerant species versus wetter shade tolerant species, generating a landscape typology for adoption throughout Greater Curtin.

#### **INSTRUCTIONS**

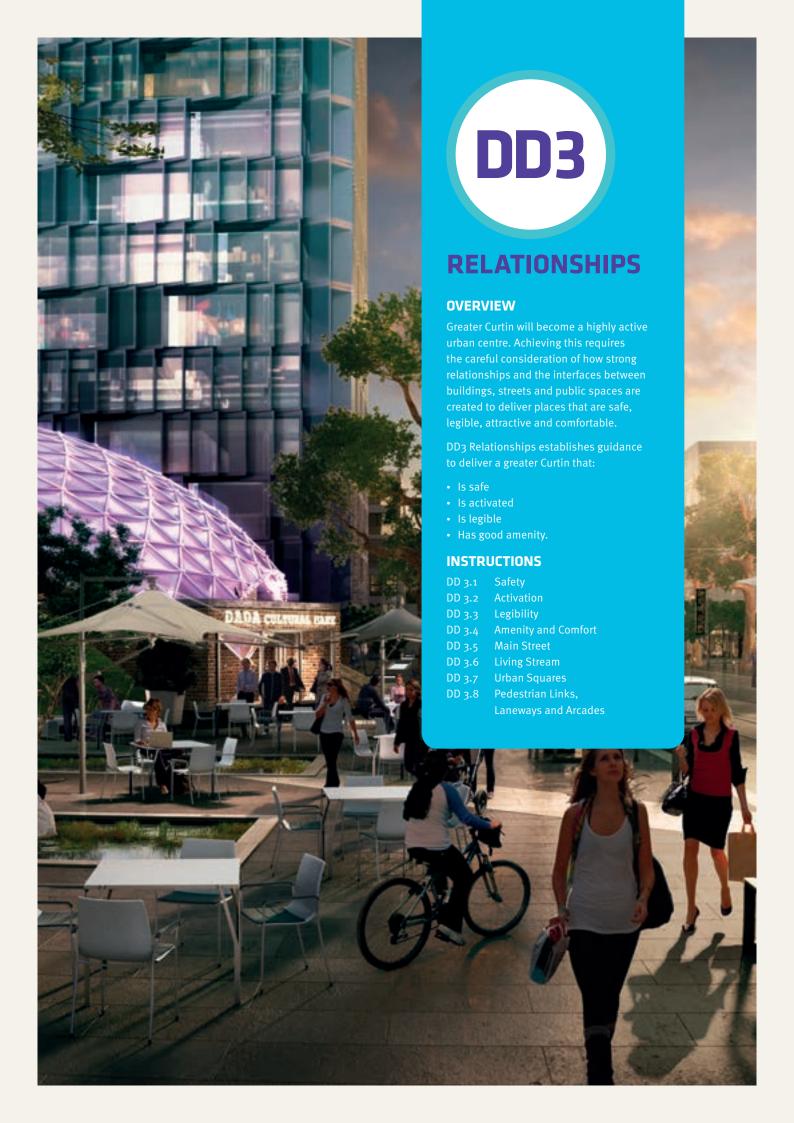
 Plant species indicated in the Greater Curtin Plant Schedule and identified as north and south aspect species should be selected as appropriate.

#### DD 2.8 PUBLIC ART

#### INTENT

Public art is an integral part of great urban places. It has the capability to enrich our day-to-day experiences as well as stimulate and educate. The inclusion of public art can enhance the practical function of spaces, enhance architecture and contribute to a sense of place.

- Develop a stimulating and creative urban environment through the integration of public art with artworks to be used as opportunities for provocation and education, in particular providing a platform to profile heritage, Indigenous culture and technological infrastructure innovations.
- 0.5% of total construction budget for all buildings up to a maximum sum of \$250,000 is to be allocated to public art. This can be coordinated as part of the building works or contributed to a Curtin University Public Art Fund for allocation within the Greater Curtin public realm.
- Each key urban 'gateway' should showcase a significant and innovative artistic, landscape or architectural feature to deliver a memorable impression.
   Opportunities should explore the development of:
  - Significant sculptural art work commissions
  - Iconic stands of pine trees
  - Signature architectural form, scale and height
  - Lighting installations and other potential more ephemeral works.



#### DD 3.1 SAFETY

#### INTENT

All new development in Greater Curtin must contribute to the delivery of a safe environment that employs appropriate design techniques to minimise reliance on CCTV and other security measures, and optimises opportunities for the natural surveillance of streets, pathways and public spaces.

#### **INSTRUCTIONS**

- Include active uses in the ground level of buildings where possible e.g. retail
- Integrate visually permeable façades at ground level where physical activation is not possible e.g. the use of windows and building entries
- Include balconies, terraces and windows on podium and upper levels of buildings to enable overlooking and the natural surveillance of adjacent spaces
- Development should provide adequate and attractive lighting solutions
- Where appropriate include on-street parking to slow traffic speeds and provide a buffer between pedestrians and other moving vehicles
- Deliver a built form that tightly holds the street and street corners to reduce vehicular visibility and encourage slower traffic movement
- Streets and public spaces must be designed with 'clutter reduction' in mind to minimise risk or hazards such as falling into water, tripping on vegetation and slipping on ground surfaces.

#### DD 3.2 ACTIVATION

#### INTENT

New development must contribute to the creation of an active environment, employing appropriate design elements to create regular footfall, encourage interaction and lingering, and provide people with a sense of ownership of spaces.

#### **INSTRUCTIONS**

- Explore the delivery of an appropriate land use mix to create active edges where required e.g. shops, cafes, bars and restaurants
- Include mixed building typologies
  with activated ground floors to deliver
  efficient use of space and create a vibrant,
  comfortable and safe environment for people
- Integrate appropriate design elements and infrastructure to accommodate flexible use of spaces, in particular supporting learning and leisure, e.g. seating, shade, power and Wi-Fi accessibility
- Consider place management activities as part of delivering successful and vibrant public spaces.

#### DD 3.3 LEGIBILITY

#### INTENT

All new development in Greater Curtin must contribute to the delivery of a legible environment that is easy to navigate and minimises the need for formal signage.

- Key building entries should be clearly articulated by design
- Use height (i.e. tower elements) where appropriate to create 'urban markers' in key places including at transport nodes, urban squares, and ceremonial parks
- Ensure appropriate context and setting is given to iconic buildings and features e.g. the Curtin Dome
- Integrate clear and simple signage and wayfinding elements into built form and public spaces to aid navigation
- Reduce visual and physical clutter in buildings and the public realm.

#### DD 3.4 AMENITY AND COMFORT

#### **INTENT**

All new development in Greater Curtin must contribute to an urban environment that is attractive, memorable and comfortable.

#### **INSTRUCTIONS**

- Provide appropriate shelter such as shade trees, awnings, colonnades and arcades to create an attractive and climate comfort walking and cycling environment.
- Use well-designed 'building sleeves' to integrate more effectively inactive elements such as car parking and service access.
- Use development to frame key streets and public spaces.
- Provide appropriate volumes and types of 'street furniture' to promote the active use of space e.g. seating, tables.

#### DD 3.5 MAIN STREET

#### INTENT

Urban form must frame and contribute to the primacy, activation and amenity of Main Street.

- Development must contribute to a formal, coherent and continuous streetscape, except at sites identified for landmark/iconic buildings.
- Buildings must have zero setback to their development boundary
- Arcades and or awnings must be an integral part of building façades onto Main Street
- Street level floor to ceiling heights must be a minimum of 3m
- Where appropriate retail frontages integrate shopfront diversity within key nodes.
- Shopfront glazing must activate the street with no single large-scale commercial premises occupying more than twice the width of neighbouring shopfronts.

#### DD 3.6 LIVING STREAM

#### INTENT

Urban form must make a positive contribution to the setting and activation of the Living Stream.

#### **INSTRUCTIONS**

- Development adjacent to the Living Stream should generate strong sightlines enabling views to/from the Living Stream
- Development should provide visual and physical permeability at ground level avoiding continuous façades
- Development lighting should be subtle and contribute to the atmosphere of a quiet natural space
- The landscape associated with adjacent development lots should complement and provide a seamless integration with the Living Stream
- Buildings should contribute to an informal character, complementing the natural recreational nature of the Living Stream.

#### DD 3.7 URBAN SQUARES

#### **INTENT**

Urban form must contribute positively to the definition and activation of urban squares.

#### **INSTRUCTIONS**

- Buildings should help define the edges of proposed squares with zero setbacks and continuous colonnades to activate the street edge
- Land use mixes should be explored to deliver opportunities to activate edges and present opportunities to support alfresco dining
- Buildings should include balconies and terraces at upper levels to encourage overlooking and sense of activity around the square.

# DD 3.8 PEDESTRIAN LINKS, LANEWAYS AND ARCADES

#### INTENT

Urban form should help to define and positively contribute to the safety and comfort of mid-block links.

- Development should deliver a consistent setbackto help define a visually and physically clear and unobstructed pathway.
- At ground floor development should incorporate, as an integral piece of the building design, awnings, canopies and screens to provide climate comfort for pedestrians and cyclists.





**RESPONSIVENESS** 

#### **OVERVIEW**

The Greater Curtin Master Plan establishes a flexible framework to guide growth at Curtin over an extended timeframe; at least the next 20 years.

Flexibility in the interpretation of certain aspects of the plan is critical to respond to the changing dynamics of environmental, social, political and economic factors, as well as attitudes to land use activity, built form, infrastructure and community needs.

The master plan sets in place core elements to guide development in a way that is responsive to change and provides guidelines that enable opportunities

for innovation to be realised as part of a university environment, supporting platforms for learning through the projects delivery.

The following section outlines 'Design Directions' to encourage innovation and the pursuit of more sustainable design outcomes:

#### **INSTRUCTIONS**

DD 4.1 Environmentally
Sustainable Design (ESD)

DD 4.2 Social Sustainability

DD 4.3 Flexible Design

DD 4.4 Innovation



#### **DD 4.1 ENVIRONMENTALLY** SUSTAINABLE DESIGN (ESD)

#### INTENT

Curtin is committed to the pursuit of progressive environmental sustainability in the delivery of its master plan. Carefully considered design can significantly reduce materials and water demand as well as the dependence on energy use for air conditioning systems to cool and heat buildings, generating outcomes that are more efficient and that contribute positively to the environment.

#### **INSTRUCTIONS**

#### **GENERAL**

- · All new buildings are to be welldesigned and seek to deliver exemplary functional performance.
- Buildings must be fit for purpose.
- All new buildings must define, in consultation with the university, project specific ESD targets at the outset that seek to meet or surpass current best practice standards.
- · As a minimum, new buildings must comply with a minimum 4 star NABERS rating for energy and water.
- · While not mandatory, new buildings are encouraged to achieve an appropriate Greenstar rating of at least 5 stars.
- Certain development sites, due to their location or use, have been nominated as key contributors to Greater Curtin's sitewide sustainability strategies for energy and water management (Refer to Section 4.4: Future Systems of Document B Greater Curtin Master Plan). At these locations development should explore initiatives such as:
  - The inclusion of well-designed roof gardens, as an extension of public spaces, helping to establish Greater Curtin as a model for modern urban density and open space

- Extending the stormwater management capacity of Greater Curtin through the integration of 'Green Roofs' which will contribute to water catchment for the Living Stream
- The exploration of decentralised and renewable energy initiatives
- The opportunity to utilise the natural landscape on and around buildings to positively modifying the microclimate should be explored in the design of the public realm.

#### RENEWABLE AND CLEAN ENERGY

· New development should seek to optimise the use of clean and renewable energy. Solar collectors, photo-voltaic panels, geothermal energy and wind power are some of the technologies that are currently available. These technologies should be carefully integrated into the design of new buildings so that they also contribute positively to the visual character and identity of Greater Curtin as a place that embraces innovation and responsible energy management.

#### **CLIMATE PROTECTION**

- · Climate modifying devices should be fully integrated into the fabric and design of buildings.
- Development opportunities should produce sun studies to demonstrate how façade designs effectively mediate the impact of sun penetration through the use of
  - Canopies
  - Louvers
  - Screens
  - Arcades
  - Glazing systems.
- It is expected that new buildings will achieve a higher standard of climate control and user comfort than merely achieving BCA compliance.

#### **VENTILATION AND NATURAL LIGHT**

- · Development should seek to optimise access to natural light and fresh air. Habitable rooms and spaces within buildings should ensure people enjoy the benefits of fresh air, natural light and attractive views to outside streets, courts, gardens, etc.
- · Development should seek to optimise opportunities to utilise cross ventilation, allowing for the continuous flow of air between opposite façades and reduction in the use of mechanical cooling.

#### **WATER USE**

- · All water (including recycled and harvested water) is to be used wisely, that is, water is to be considered a valuable resource and not to be wasted. For more information on requirements for water infrastructure, refer to Section 4.4: Future Systems of Document B Greater Curtin Master Plan, and the Greater Curtin Integrated Urban Water Management Strategy).
- · Rainwater harvesting and re-use within buildings is required. Certain buildings are required to harvest rainwater for the purpose of communal reuse.
- Excess rainwater not able to be re-used within buildings or communally must be distributed into the Living Stream.
- · Reuse of communal treated wastewater is required.
- · The controlled use of water within the design of shaded courtyards, or similar, should be considered to improve the general level of physiological and psychological comfort.

#### **ORIENTATION**

· Not all development will be able to achieve the optimum orientation to benefit from climate comfort. Well-considered architecture will address orientation as a basic requirement for good design.

#### DD 4.2 SOCIAL SUSTAINABILITY

#### INTENT

At Curtin social sustainability is as important as economic and environmental sustainability. The three domains are to be considered as inter-linked and inter-dependent, accepting that the physical environment has a powerful formative effect on our individual and collective being.

#### **INSTRUCTIONS**

- Developments should seek to deliver
  the same level of diversity and land
  use mix as defined in the master plan
  document matching the academic needs
  with social and cultural facilities, and
  providing a range of housing and retail
  and commercial activities to support the
  people visiting or living in Greater Curtin.
- Buildings and their uses will be required to relate positively to the adjacent public realm and streetscape and contribute to a safe and comfortable urban fabric that will provide the framework for communities to develop and for people to enjoy a vital and diverse social and cultural lifestyle within Greater Curtin.
- Development should respond to and support a variety of potential modes of transport including provision for cyclists. Besides compliance with BCA requirements, new developments must include a comfortable end-of-trip facility to encourage the use of bicycle transport and provide useful and wellmaintained provision for people that use bicycles for transport, deliveries, etc.

- Bicycle paths (or mixed pedestrian/ cycle paths) must be extended to the primary entrances of each building.
   Secure bike racks are to be provided close to building entrances.
- Greater Curtin will be an example of wellintegrated universal access. The design of individual buildings and the public realm must cater to universal access standards and provisions should generally surpass the Standards and BCA requirements.
- New developments will need to actively and positively integrate with and provide public realm as defined by the master plan and development guidance, making a genuine contribution to enhancing the value of public space.
- Private open space, associated with specific developments, must be well-designed, equal or better in quality and amenity to the public realm infrastructure delivered by the University. It must also be well-maintained.
- All non-residential car parking within Greater Curtin forms part of a total allocation determined by the State Government. Curtin University is required to manage all parking as part of its commitment to a collective parking strategy across all sites.

#### DD 4.3 FLEXIBLE DESIGN

#### INTENT

The design of buildings and public spaces should be adaptive and capable of accommodating different uses over time. This is both a sensible economic strategy in terms of investment as well a supporting social variety and diversity.

#### **INSTRUCTIONS**

· For residential developments in commercial or educational settings the ground floor accommodation must be of sufficient height to ensure the available space can be converted into a retail or commercial use. The minimum floor to ceiling height is to be 3.om, excluding air conditioning and other services. The intention is for the lower levels of apartment developments to be 'future proofed' so that they can, if desired, be used for small business activities and that apartments can be adapted for commercial activity. Particularly with street level residences, designers should ensure the space, building structure and fabric support changes of use.

### DD 4.4 INNOVATION

#### INTENT

Curtin University's roots are in the development and application of technologies. Innovation is implicit in all aspects of Greater Curtin. New development must take full advantage of this opportunity to reinterpret the original campus aesthetic and bring contemporary, forward-looking forms, materials and systems into the mix. Additional to new construction systems and materials, innovations are common to building services and systems devised to reduce the consumption of energy. Architectural innovations also occur in the accommodation of new modes of living, working and learning, delivering hybrid buildings, adaptable structures, technologically augmented spaces, and green initiatives, all of which are appropriate to Greater Curtin.

#### **INSTRUCTIONS**

#### **CULTURAL INNOVATION**

 Development should explore ways to optimise bringing life to the streets of Greater Curtin as an innovation in the intensely suburban city of Perth.
 Development should consciously contribute to the activation of the public realm to support all forms of formal, informal and spontaneous events and stimulate people to participate.

#### **COMMITMENT TO HISTORY**

• Development touched by the Dreaming Trail and Living Stream (as defined in the master plan) should positively seek to understand and interpret the design intention of the Indigenous heritage and natural systems of the land to become part of the future visual language of the city. The Dreaming Trail and the Living Stream add a unique quality to the environment that is genuinely local. The master plan's landscape strategy develops these themes into a valuable attribute. Public artworks as well as architecture can contribute to these themes.

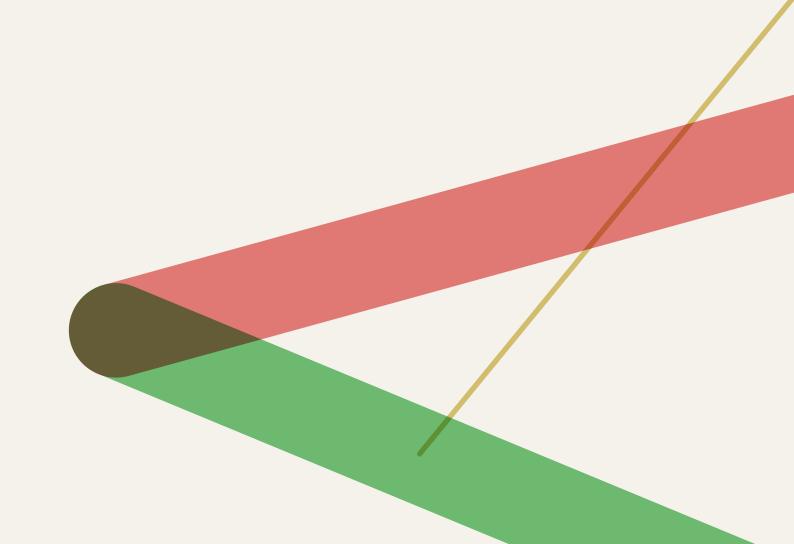
#### **CONSTRUCTION TECHNOLOGY**

 New development at Greater Curtin should, where feasible, embrace new design and construction technologies such as modular, prefabricated components and building elements that minimise waste.

#### CONNECTIVITY

 New development should explore opportunities to utilise new generation mobile devices to create interactive and augmented environments.

# 3.0 DEVELOPMENT GUIDANCE



#### 3.1 **SUPERLOTS**

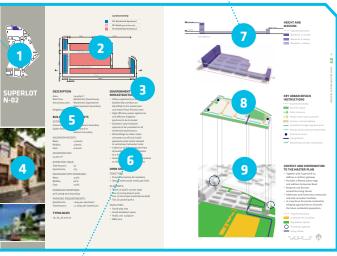
For ease of development discussions and to leverage opportunities for development efficiency, the master plan has been divided into a number of superlots, as identified in the adjacent diagram. Development guidelines for each superlot are described in the following section. The diagram below explains how to navigate the superlot development guidelines.

## HOW TO USE THE SUPERLOT DEVELOPMENT GUIDELINES

- Identifies the location of the superlot within the master plan
- 2. Identifies the configuration, key dimensions and proposed land use activities of the superlot
- 3. Establishes appropriate building typologies, as identified in Section 3.2
- 4. Provides precedent examples of appropriate built form character outcomes
- Establishes key design parameters for built form, including maximum heights, setbacks, minimum site coverage and parking requirements
- 6. Identifies key environmental, infrastructure and open space requirements
- 7. Establishes maximum height allowances identifies green roof opportunities
- 8. Outlines key urban design instructions, including edge conditions, access points and key focuses for building articulation
- Establishes the superlot's contribution in the context of the master plan





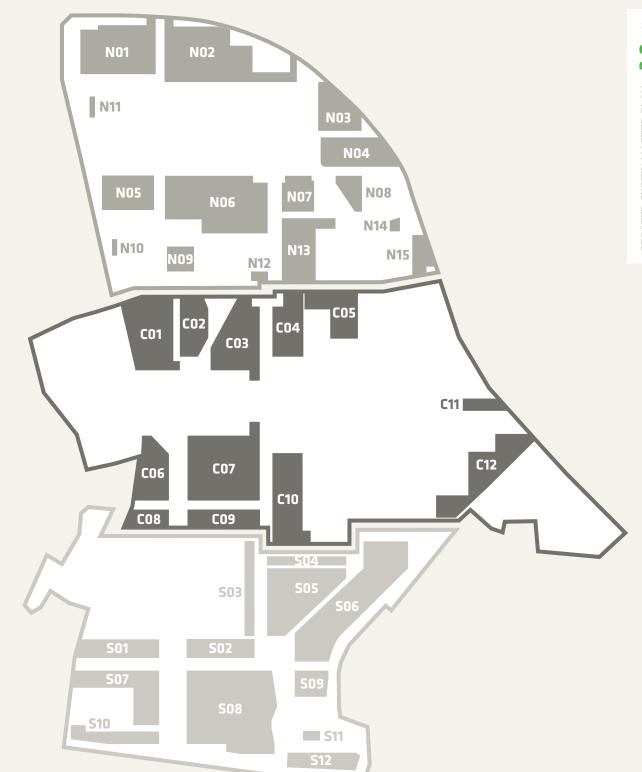


# 6 OPEN SPACE FUNCTION: - Passive recreation for residents - Strong north-south landscape links - Respect and enhance - biodiversity corridors ELEMENTS: - One (1) public access way - One (2) public access way - One (3) local park (centrally located) - One (4) pocket park FACILITIES: - Small play area - Small kickabout space - Public art/ sculpture

**GREATER** 

CURTIN NORTH



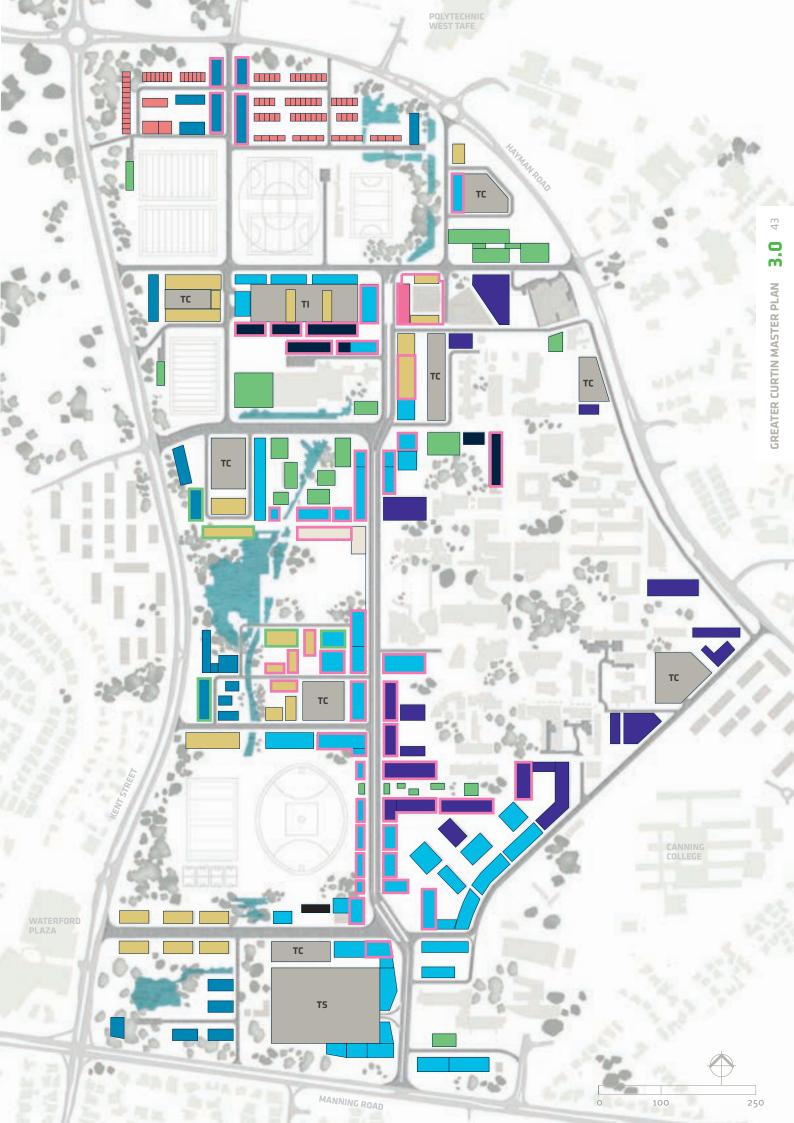


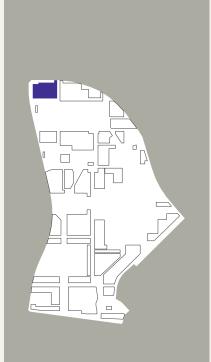
#### **LAND USE ACTIVITIES**

The identification of land for different development markets and the careful consideration of land use mix and adjacencies in each superlot is a key strategy of the master plan to guide outcomes that will increase diversity and opportunities to forge partnerships and realise urbanisation economies. The proposed land uses and corresponding gross floor area are identified in the adjacent plan and table. These land uses are applicable to each superlot within this section.

	Land Use Activity	GFA (m²)
	AC. Academic	142,032
*GF	CO. Community Space	52,173
	RA. Residential Apartment	147,884
	RC. Residential Academic	143,687
	RE. Retail (ground floor only)	58,065
	RH. Residential Hotel	19,890
	RO. Residential Short Stay	4,131
	RS. Residential Students	29,201
	RT. Residential Townhouse	19,730
	OF. Office/Commercial	329,544
	TC. Transport Car Park	125,308
	TI. Transit Interchange	10,223
	TS. Transit Stabling	20,700
	TOTAL	1,102,568

<sup>\*</sup> Denotes Ground Floor land use for certain community use buildings







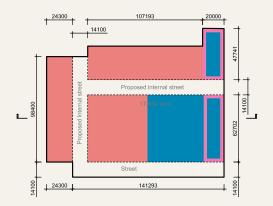


#### **Land Use Activity**

RA. Residential Apartment

RE. Retail (ground floor only)

RT. Residential Townhouse



#### **DESCRIPTION**

Area: 17,864 m<sup>2</sup>

Main Use: Residential (townhouse)
Secondary uses: Residential (apartment)

Retail (eastern boundary)

#### **BUILDING REQUIREMENTS**

**SETBACKS:** 

Ground floor: 3m to eastern boundary

Upper floors: No setback to

eastern boundary

#### **MAXIMUM HEIGHT:**

West: 3 levels
Middle: 8 levels
East: 13 levels

#### **MAXIMUM GFA:**

40,976 m<sup>2</sup>

#### **EXPECTED YIELD:**

Townhouses: 45 Apartments: 330

#### **MAXIMUM SITE COVERAGE:**

West: 60% Middle: 70% East: 100%

#### **MINIMUM FRONTAGE:**

80% along eastern boundary

#### **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment
Townhouses: 1.2 bays per townhouse

#### **TYPOLOGIES**

1A, 1B, 3 and 6

### ENVIRONMENT AND INFRASTRUCTURE

- Utilise opportunity to enhance biodiversity corridors and retain Pinus pinasta trees as identified in the master plan
- High efficiency water appliances and efficient irrigation practices to be included
- Domestic solar hotwater systems to be provided on all residential townhouses, with large scale solar hotwater for showers on selected apartment buildings
- All buildings to collect clean rainwater run-off
- Precinct underground centralised rainwater tanks and system to be positioned under the street/pedestrian network
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

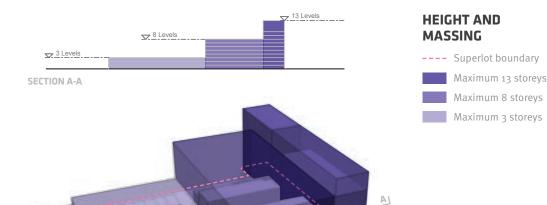
- · Passive recreation for residents
- · Strong north-south landscape links
- Respect and enhance biodiversity corridors

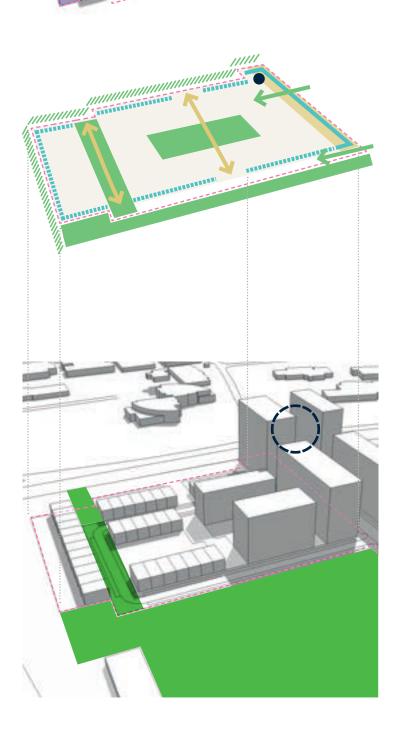
#### **ELEMENTS:**

- One (1) public access way
- One (1) local park (centrally located)
- One (1) pocket park

#### **FACILITIES:**

- Small play area
- Small kickabout space
- Public art/sculpture
- BBQ area





### KEY URBAN DESIGN INSTRUCTIONS

--- Superlot boundary

Key link/space

Key access

Public access way uncovered

Arcade/covered walkway

Activated frontage at ground level

Strong visual/physical relationship

Prominent corner

//// Biodiversity corridor contribution

### CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

- Together with Superlot N-02, defines a northern gateway
- Provides a filtered urban edge and address to Hayman Road
- Respects the established biodiversity corridors to the west and north
- Is a key focus for private residential, bringing opportunities to diversify the future residential population
- Addresses and frames key formal community recreation facilities.

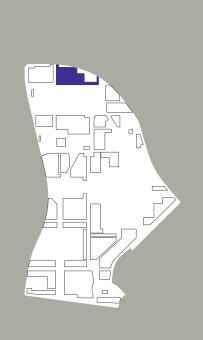
--- Superlot boundary

Key streets/spaces

Threshold/gateway









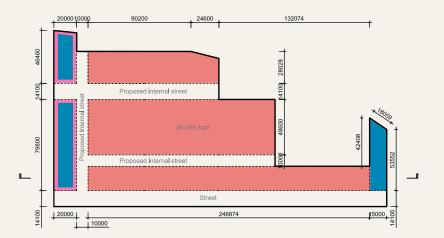


#### **Land Use Activity**

RA. Residential Apartment

RE. Retail (ground floor only)

RT. Residential Townhouse



#### **DESCRIPTION**

Area: 24,489 m<sup>2</sup>

Main Use: Residential (townhouse)
Secondary uses: Residential (apartment)

Retail (western boundary)

Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

Ground floor: 3m to western boundary

Upper floors: No setback to

western boundary

#### **MAXIMUM HEIGHT:**

West: 13 levels
Middle: 3 levels
East: 6 levels

#### **MAXIMUM GFA:**

37,300 m<sup>2</sup>

#### **EXPECTED YIELD:**

Townhouses: 70 Apartments: 235

#### **MAXIMUM SITE COVERAGE:**

West: 100% Middle: 60% East: 100%

#### **MINIMUM FRONTAGE:**

90% along west boundary

#### **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment
Townhouses: 1.2 bays per townhouse

#### **TYPOLOGIES**

1A, 1B, 4A and 06

### ENVIRONMENT AND INFRASTRUCTURE

- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees
- High efficiency water appliances and efficient irrigation practices to be included
- Domestic solar hotwater systems to be provided on all residential townhouses
- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

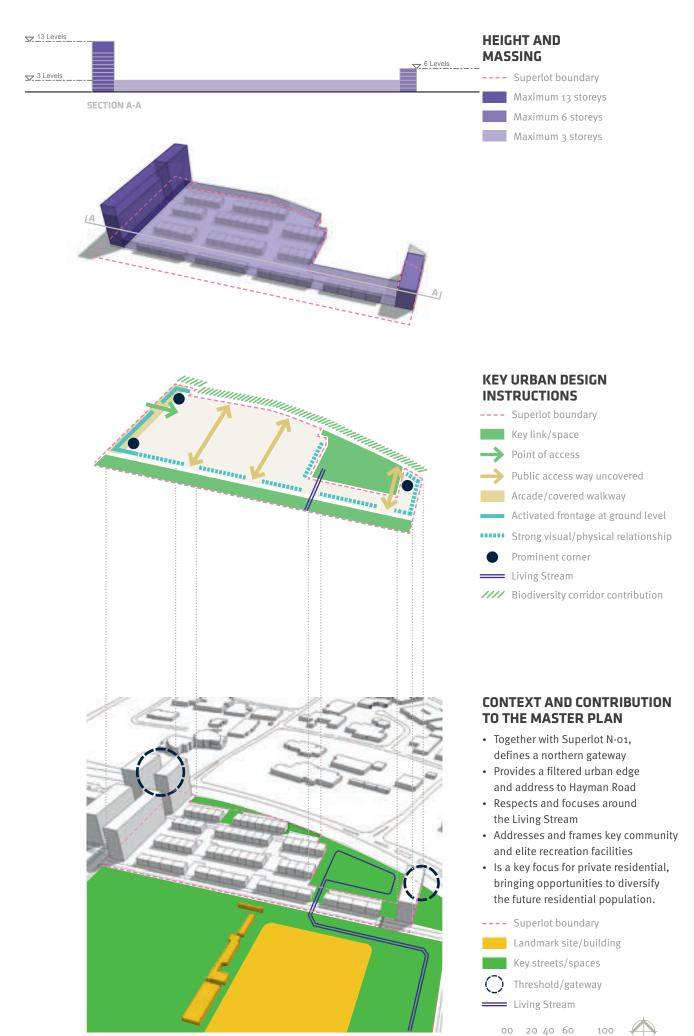
- Passive recreation for residents
- · Strong north-south landscape links

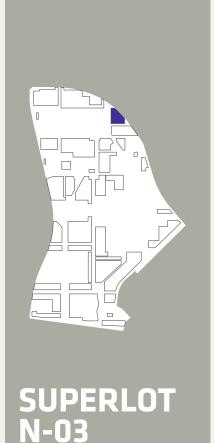
#### **ELEMENTS:**

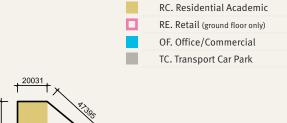
- Three (3) public access ways
- One (1) Living Stream park
- One (1) local park (centrally located)
- Two (2) pocket parks

#### **FACILITIES:**

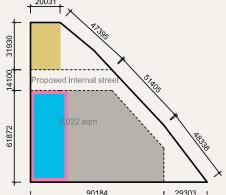
- · Small play area
- Small kickabout space
- Public art/sculpture
- BBQ area







**Land Use Activity** 



#### **DESCRIPTION**

Area: 8,022 m² Main Uses: Car Parking

Secondary uses: Commercial (office)

Residential (academic) Retail (western boundary)

Location: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

no setbacks required

#### **MAXIMUM HEIGHT:**

North: 8 levels Upper floors: 6 levels

#### **MAXIMUM GFA:**

27,800 m²

#### **EXPECTED YIELD:**

Academic Apts: 110

#### **MAXIMUM SITE COVERAGE:**

70%

#### MINIMUM FRONTAGE:

n/a

#### **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

Commercial and/

or General use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant

planning policy.

#### **TYPOLOGIES**

4A and 6

### ENVIRONMENT AND INFRASTRUCTURE

- Provision of end-of-trip facilities for cyclists
- Opportunity to deliver a green roof as identified in the master plan
- Propose Pinus pinasta stands to entry as identified in the master plan
- Selected buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- High efficiency water appliances and efficient irrigation practices to be included
- Provision of large PV systems on transport car parks and solar hotwater systems for showers on apartment buildings
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

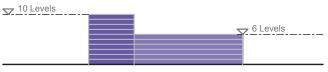
• Passive recreation for residents

#### **ELEMENTS:**

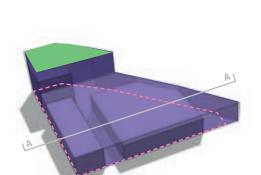
- One (1) pocket park
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

#### **FACILITIES:**

· Roof garden



SECTION A-A



### HEIGHT AND MASSING

---- Superlot boundary

Maximum 10 storeys

Maximum 6 storeys

Green roof opportunity

### KEY URBAN DESIGN INSTRUCTIONS

--- Superlot boundary

Point of access

Strong visual/physical relationship

Prominent corner

### CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

- Defines a northern gateway
- Provides an address to Hayman Road
- Addresses the Living Stream and formal recreation facilities
- Is a focus for commercial activities supporting the health-related activities within the neighbourhood
- Is a strategic location for commercial and academic parking and cycle end-of-trip facilities.

---- Superlot boundary

Landmark site/building

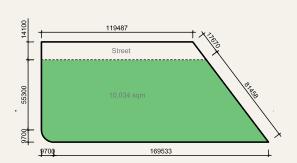
Key streets/spaces

Threshold/gateway

Living Stream







#### **DESCRIPTION**

Area: 10,034 m<sup>2</sup>

Main Use: Community (health)

Secondary uses: Retail Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

No setback to southern boundary

#### **MAXIMUM HEIGHT:**

5 levels

#### **MAXIMUM GFA:**

11,000 m<sup>2</sup>

#### **EXPECTED YIELD:**

n/a

#### **MAXIMUM SITE COVERAGE:**

70%

#### **MINIMUM FRONTAGE:**

50% minimum frontage along southern boundary

#### **PARKING REQUIREMENTS:**

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

#### **TYPOLOGIES**

n/a

### ENVIRONMENT AND INFRASTRUCTURE

- Utilise opportunity to enhance biodiversity corridor and propose Pinus pinasta stands as identified in the master plan
- High efficiency water appliances and efficient irrigation practices to be included
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

• Passive recreation and arrival space

#### **ELEMENTS:**

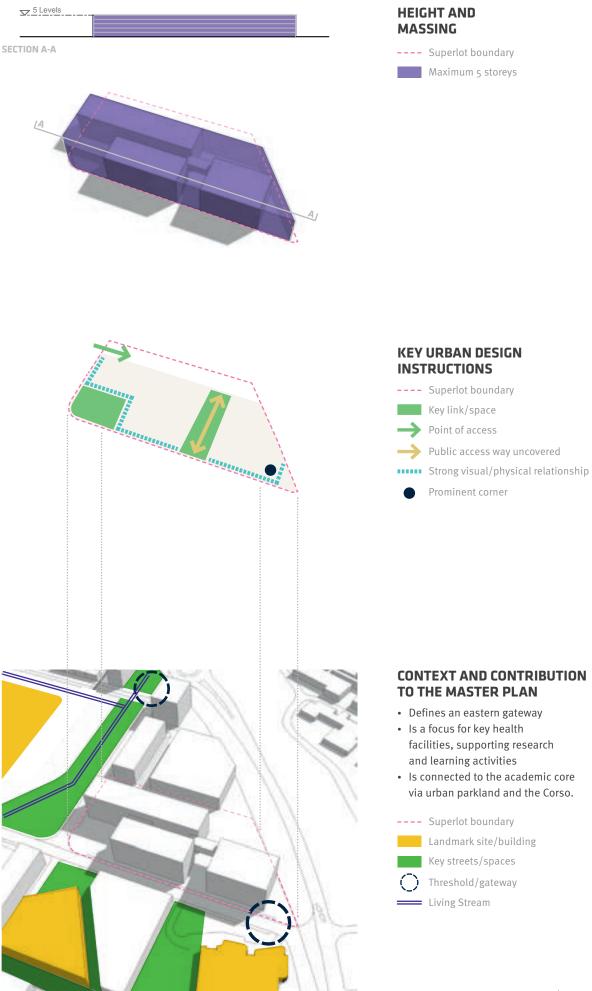
- One (1) pocket park
- One (1) public access way

#### **FACILITIES:**

• Public art/sculpture

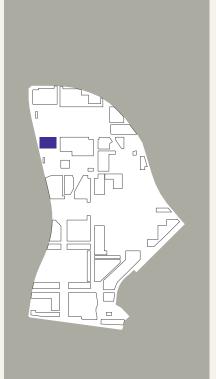








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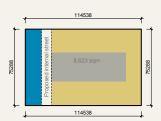


#### **Land Use Activity**

RA. Residential Apartment

RC. Residential Academic

TC. Transport Car Park



### SUPERLOT N-05

#### **DESCRIPTION**

Area: 8,623 m<sup>2</sup>

Main Use: Residential (academic)
Secondary uses: Residential (apartment)

Car parking

Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

Ground floor: No setback to northern

boundary

Upper floors: 5m setback to

western boundary (3rd level and above)

#### **MAXIMUM HEIGHT:**

West: 12 levels Remainder: 5 levels

#### **MAXIMUM GFA:**

41,300 m<sup>2</sup>

#### **EXPECTED YIELD:**

Apartments: 145 Academic Apts: 340

#### **MAXIMUM SITE COVERAGE:**

Basement: 100% Otherwise: 60%

#### **MINIMUM FRONTAGE:**

90% along northern boundary

#### **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

Commercial and/

or General use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant

planning policy.

#### **TYPOLOGIES**

2 and 5

### ENVIRONMENT AND INFRASTRUCTURE

- Roof top garden on podium opportunity as identified on the master plan
- Utilise opportunity to enhance biodiversity corridor as identified in the master plan and retain existing trees to Kent street where possible
- High efficiency water appliances and efficient irrigation practices to be included
- Provision of large solar hotwater systems for showers on apartment buildings
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

- Passive recreation for residents
- · Strong north-south landscape links
- Respect and enhance biodiversity corridors

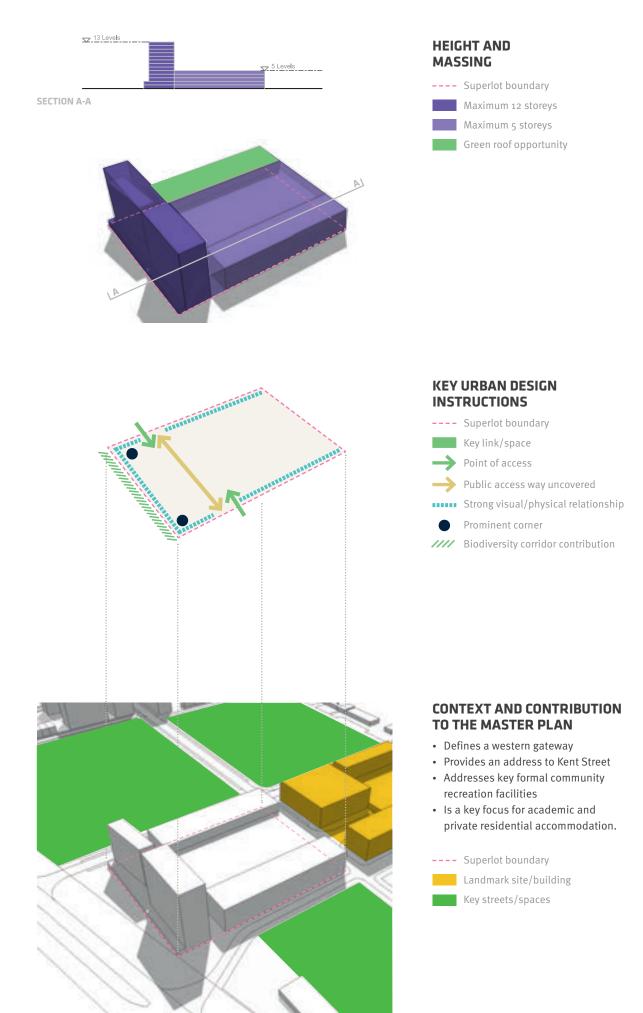
#### **ELEMENTS:**

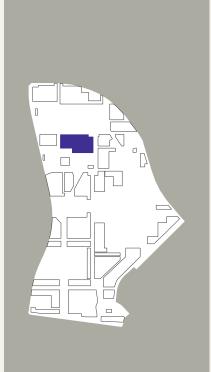
- One (1) public access way
- One (1) pocket park
- Semi-private roof gardens, building allocation for green roof, as shown in master plan to have 50% roof area allocated to green roofs

#### **FACILITIES:**

- Small play area
- BBQ area
- Roof gardens







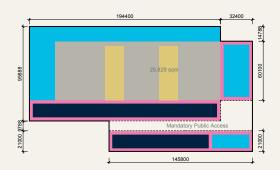






#### **Land Use Activity**





#### DESCRIPTION

Area: 25,829 m<sup>2</sup>

Main Use: Transit interchange Commercial (office) Secondary uses:

Retail

Residential (students)

Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

Ground, 1st floor: No setback to western

and southern boundaries;

3m to northern

and eastern boundaries

Upper floors: No setback to

northern and eastern

boundaries; 3m setback to public access way

**HEIGHTS:** 

Tower. 16 levels Remainder: 5 levels

#### **MAXIMUM GFA:**

86,000 m<sup>2</sup>

#### **EXPECTED YIELD:**

Student units: 925 Apartments: 98

#### **MAXIMUM SITE COVERAGE:**

Ground Floor: 90% Upper Floors: 60%

#### MINIMUM FRONTAGE:

90% along northern, eastern boundaries and public access way

#### **PARKING REQUIREMENTS:**

Student units: Apartments:

Commercial and/

or General use:

1 bay per 5 students 1 bay per apartment

Bentley-Curtin parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant planning policy.

#### **TYPOLOGIES**

2, 4A and 6

#### **ENVIRONMENT AND INFRASTRUCTURE**

- · Provision of end-of-trip facilities for cyclists
- · Opportunity to deliver a green roof as identified in the master plan
- · Select buildings to collect clean rainwater run-off
- High efficiency water appliances and efficient irrigation practices to be included
- · Precinct underground centralised rainwater tank and pipework to be positioned under the street/pedestrian network
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- Infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

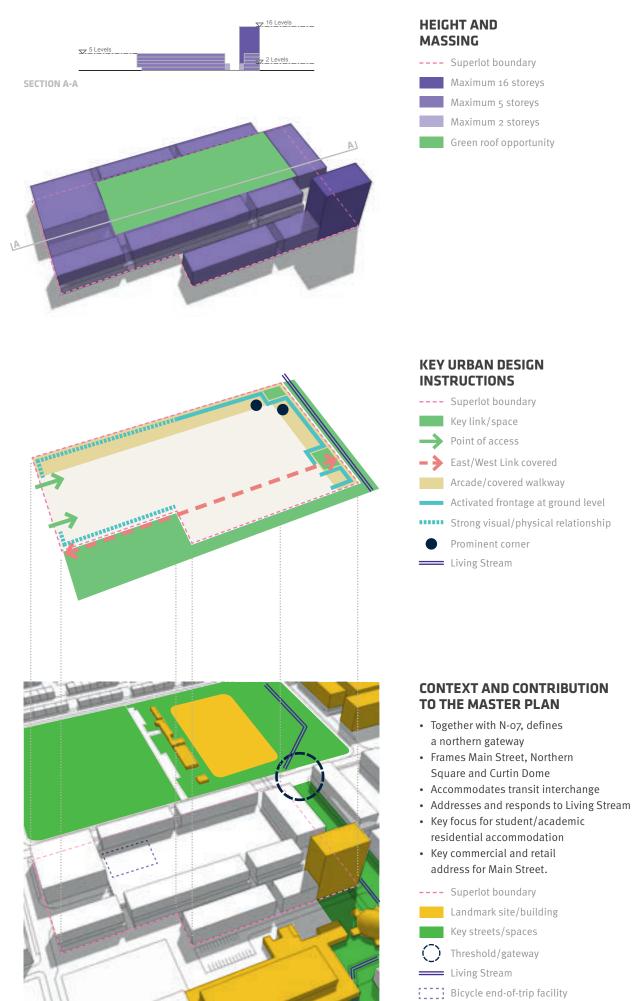
- · Active and passive recreation
- · Arrival space for users

#### **ELEMENTS:**

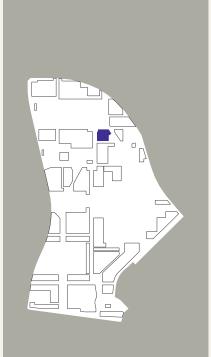
- One (1) small urban entry plaza
- 50% of podium roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan
- One (1) public access way (covered)
- Four (4) multi-purpose, roof-top hard courts for community sports

#### **FACILITIES:**

- Public art/sculpture
- Multi-purpose hard courts suitable for tennis, netball and basketball
- · Roof gardens



00 20 40 60

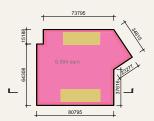


#### **Land Use Activity**

RC. Residential Academic

RE. Retail (ground floor only)

RO. Residential Short Stay



### SUPERLOT N-07

#### **DESCRIPTION**

Area: 5,348 m<sup>2</sup>

Main Use: Residential (short stay)
Secondary uses: Retail (ground floor)

Residential (academic)

Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

Ground Floor: No setback to northern

and southern boundaries;

3m to main street

Upper floors: No setback to western

and southern boundaries

#### **MAXIMUM HEIGHTS:**

Ground Floor: 1 levels
Upper Floors: 4 levels

#### **MAXIMUM GFA:**

23,000 m<sup>2</sup>

#### **EXPECTED YIELD:**

Short Stay Apts 165 Academic Apts 235

#### **MAXIMUM SITE COVERAGE:**

Ground Floor: 100% Upper Floors: 50%

#### **MINIMUM FRONTAGE:**

90% on north, west and south boundaries

#### **PARK REQUIREMENTS:**

Apartment: 1 bay per apartment General use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant

planning policy.

#### **TYPOLOGIES**

2

### ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof on podium as identified in the master plan
- Propose new Pinus pinasta stands to entry and utilise opportunity to enhance biodiversity corridors as identified in the master plan
- High efficiency water appliances and efficient irrigation practices to be included
- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

· Passive recreation for residents

#### **ELEMENTS:**

- One (1) public access way along eastern boundary
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

#### **FACILITIES:**

• Roof gardens



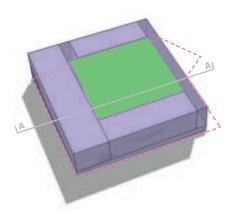


### HEIGHT AND MASSING

--- Superlot boundary

Maximum 4 storeys

Green roof opportunity



### KEY URBAN DESIGN INSTRUCTIONS

---- Superlot boundary

Key link/space

Point of access

Public access way

East/West Link Covered

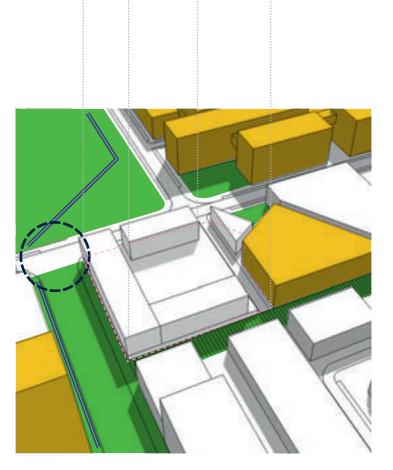
Arcade/covered walkway

Activated frontage at ground level

Strong visual/physical relationship

Prominent corner

Living Stream



### CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

- Together with N-o6, acts as a northern gateway
- Frames Main Street and the Northern Square
- Key focus for academic residential accommodation
- · Key retail destination
- Key retail frontage to Main Street
- Respects and addresses future teaching and learning building 410

---- Superlot boundary

Landmark site/building

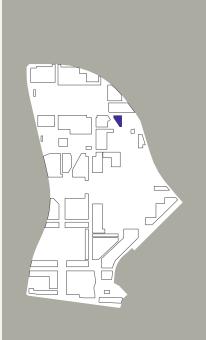
Key streets/spaces

Threshold/gateway

Living Stream











### DESCRIPTION

Area: 3,268 m²
Main Use: Academic
Secondary uses: Retail
Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

No setback to southern and western boundary

#### **HEIGHTS:**

4 levels

#### **MAXIMUM GFA:**

13,100 m²

#### **EXPECTED YIELD:**

n/a

#### **MAXIMUM SITE COVERAGE:**

100%

#### **MINIMUM FRONTAGE:**

90% on northern, southern and western boundary

#### **CAR PARK:**

General use:

Bentley-Curtin
parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant
planning policy.

#### **TYPOLOGIES**

n/a

### ENVIRONMENT AND INFRASTRUCTURE

- · Green roof opportunity
- High efficiency water appliances and efficient irrigation practices to be included
- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

· Passive recreation

#### **ELEMENTS:**

- One (1) public access way along western boundary
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

#### **FACILITIES:**

• Roof gardens

✓ 4 Levels **HEIGHT AND MASSING SECTION A-A** --- Superlot boundary Maximum 4 storeys A Green roof opportunity **KEY URBAN DESIGN** A STATE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN **INSTRUCTIONS** --- Superlot boundary Key link/space Point of access Public access way covered Strong visual/physical relationship East/West Link covered **CONTEXT AND CONTRIBUTION TO THE MASTER PLAN** • Key focus for academic uses, complementing the academic and health related activities in the neighbourhood • Respects and addresses future teaching and learning building 410, adjacent park and future health related activities to the north ---- Superlot boundary Landmark site/building Key streets/spaces

00 20 40 60



CO. Community Space



### 61201 3,390 sqm 9959 61201

### SUPERLOT N-09

#### **DESCRIPTION**

Area: 3,390 m<sup>2</sup>
Main Use: Community

(sport/recreation)

Secondary uses: Central Energy Plant

Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

To match existing stadium

#### **MAXIMUM HEIGHT:**

Height and scale to match existing stadium

#### MAXIMUM GFA:

3,400 m<sup>2</sup>

#### **EXPECTED YIELD:**

-

#### **MAXIMUM SITE COVERAGE:**

100%

#### **MINIMUM FRONTAGE:**

-

#### **PARKING REQUIREMENTS:**

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

#### **TYPOLOGIES**

n/a

### ENVIRONMENT AND INFRASTRUCTURE

- High efficiency water appliances and efficient irrigation practices to be included
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- Inclusion of a Central Energy Plant (CEP)
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

· Active recreation for community use

#### **ELEMENTS:**

• Two (2) multi-purpose, roof-top hard courts for community sports

#### **FACILITIES:**

 Multi-purpose indoor and roof-top hard courts suitable for tennis or netball

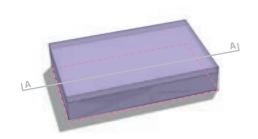




### HEIGHT AND MASSING

---- Superlot boundary





THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE OW

### KEY URBAN DESIGN INSTRUCTIONS

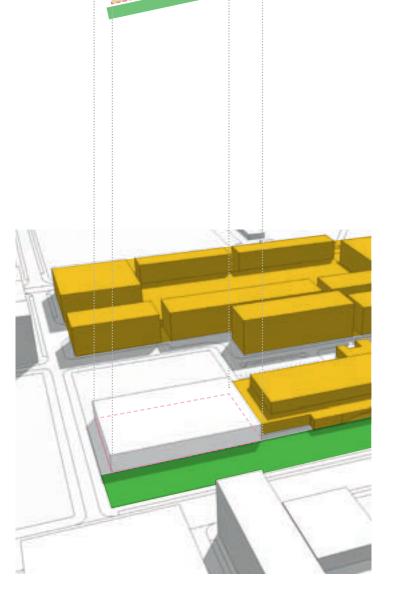
---- Superlot boundary

Key link/space

Arcade/awning

Strong visual/physical relationship

Prominent corner



### CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

- Accommodates the future expansion of Curtin Stadium's indoor sport facilities
- Respects and addresses key green space and outdoor recreation facilities
- Accommodates a future Central Energy Plant

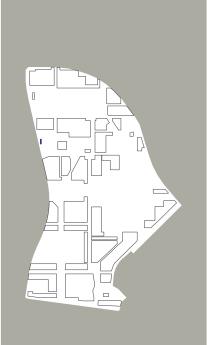
---- Superlot boundary

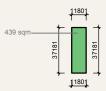
Landmark site/building

Key streets/spaces









#### **DESCRIPTION**

Area: 439 m<sup>2</sup>
Main Use: Community

(sport/recreation)

Secondary uses: -Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

 Building must address adjacent sporting field

#### **MAXIMUM HEIGHT:**

1 level

**MAXIMUM GFA:** 

440 m<sup>2</sup>

**EXPECTED YIELD:** 

\_

**MAXIMUM SITE COVERAGE:** 

100%

MINIMUM FRONTAGE:

\_

#### **PARKING REQUIREMENTS:**

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

#### **TYPOLOGIES**

9

### ENVIRONMENT AND INFRASTRUCTURE

- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees
- High efficiency water appliances and efficient irrigation practices to be included
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

**FUNCTION:** 

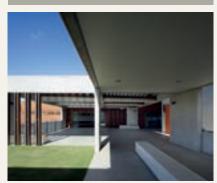
• n/a

**ELEMENTS:** 

• n/a

FACILITIES:

• n/a





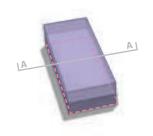


63

### HEIGHT AND MASSING

--- Superlot boundary





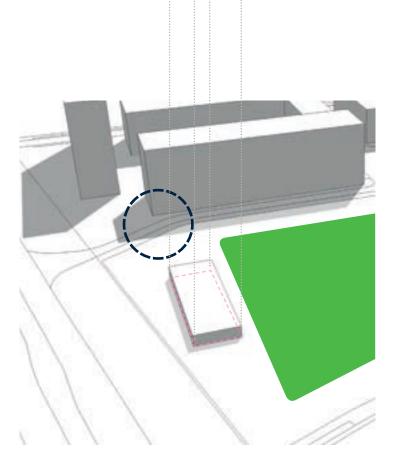
### KEY URBAN DESIGN INSTRUCTIONS

---- Superlot boundary

Key link/space

Arcade/awning

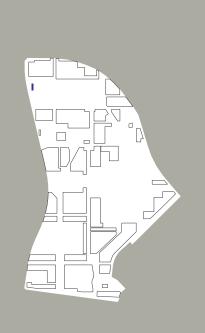
Strong visual/physical relationship



### CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

- Accommodates facilities for formal recreation and community sporting clubs
- ---- Superlot boundary
- Key streets/spaces
  - Threshold/gateway





# 

### SUPERLOT N-11

#### **DESCRIPTION**

Area: 530 m<sup>2</sup>
Main Use: Community

(sport/recreation)

Secondary uses: -Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

 Building must address adjacent sporting fields

#### **MAXIMUM HEIGHT:**

1 level

**MAXIMUM GFA:** 

440 m<sup>2</sup>

**EXPECTED YIELD:** 

\_

**MAXIMUM SITE COVERAGE:** 

100%

MINIMUM FRONTAGE:

-

#### **PARKING REQUIREMENTS:**

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

#### **TYPOLOGIES**

9

### ENVIRONMENT AND INFRASTRUCTURE

- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees to Kent street where possible
- High efficiency water appliances and efficient irrigation practices to be included
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

**FUNCTION:** 

• n/a

**ELEMENTS:** 

• n/a

**FACILITIES:** 

• n/a







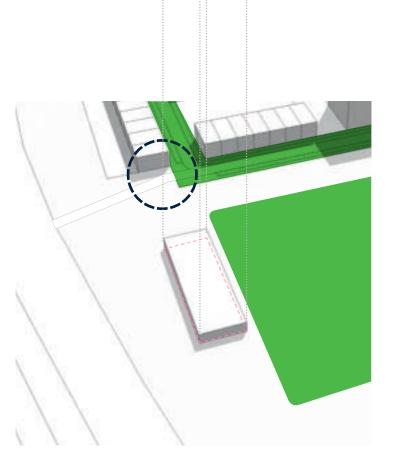
### KEY URBAN DESIGN INSTRUCTIONS

---- Superlot boundary

Key link/space

Arcade/awning

Strong visual/physical relationship



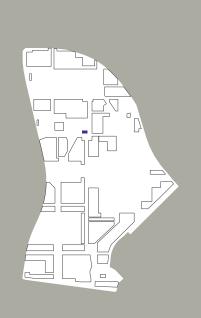
#### **CONTEXT AND CONTRIBUTION**

 Accommodates facilities for formal recreation and community sporting clubs

---- Superlot boundary

Key streets/spaces

Threshold/gateway



#### 37890 0000 558 0000 37890

### SUPERLOT N-12

### DESCRIPTION

Area: 752 m²
Main Use: Community
Secondary uses: Retail
Neighbourhood: North

#### **BUILDING REQUIREMENTS**

**SETBACKS:** 

n/a

**MAXIMUM HEIGHT:** 

4 levels

**MAXIMUM GFA:** 

3,000 m<sup>2</sup>

**EXPECTED YIELD:** 

n/a

**MAXIMUM SITE COVERAGE:** 

100%

**MINIMUM FRONTAGE:** 

n/a

**CAR PARK:** 

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

#### **TYPOLOGIES**

9

#### **ENVIRONMENTAL**

• n/a

#### **INFRASTRUCTURE**

- Building to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- High efficiency water appliances to be included
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

**FUNCTION:** 

• n/a

**ELEMENTS:** 

• n/a

**FACILITIES:** 

• n/a







4 Levels

SECTION A-A

#### **HEIGHT AND MASSING**

---- Superlot boundary





#### **KEY URBAN DESIGN INSTRUCTIONS**

--- Superlot boundary

Key link/space

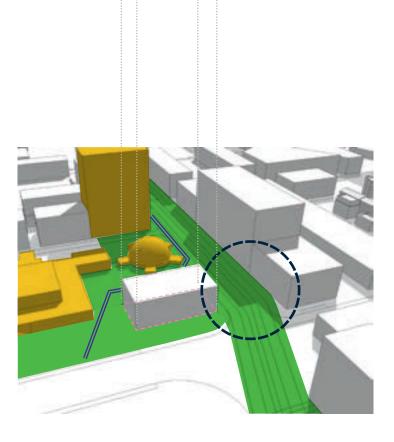
Point of access

Public access way

Arcade/covered walkway

Activated frontage at ground level Strong visual/physical relationship

Prominent corner



#### **CONTEXT AND CONTRIBUTION TO THE MASTER PLAN**

- Together with N-13, acts as a southern gateway to Northern Square and transit interchange
- Frames Main Street, Northern Square and Curtin Dome
- Focus for community facilities
- · Provides retail frontage to Main Street

--- Superlot boundary

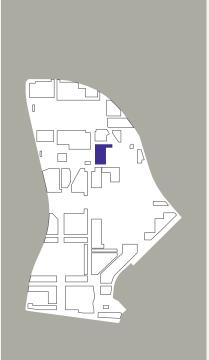
Landmark site/building

Key streets/spaces

Threshold/gateway

Living Stream





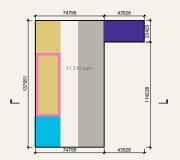






#### **Land Use Activity**

AC. Academic
RC. Residential Academic
RE. Retail (ground floor only)
OF. Office/Commercial
TC. Transport Car Park



#### **DESCRIPTION**

Area: 11,315 m<sup>2</sup>

Main Use: Residential (academic)
Secondary uses: Commercial (office)

Car Parking

Neighbourhood: North

#### **BUILDING REQUIREMENTS**

#### **SETBACKS:**

Ground floor: 3m

Upper floors: No Setback

#### **MAXIMUM HEIGHT:**

Central: 10 Levels Remainder: 4 Levels

#### **MAXIMUM GFA:**

43,000 m<sup>2</sup>

#### **EXPECTED YIELD:**

Apartments: 350

#### **MAXIMUM SITE COVERAGE:**

Levels 1-4: 80% Upper levels: 50%

#### MINIMUM FRONTAGE:

90% along main street

#### **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

Commercial and/

or General use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant

planning policy.

#### **TYPOLOGIES**

4A and 4B

### ENVIRONMENT AND INFRASTRUCTURE

- Provision of end-of-trip facilities for cyclists
- Green roof and biodiversity corridor opportunity as identified in the master plan
- Provision of large PV system on transport car parks and solar hotwater systems for showers on apartment buildings
- Selected buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- High efficiency water appliances and efficient irrigation practices to be included
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

#### **FUNCTION:**

· Strong north-south landscape link

#### **ELEMENTS:**

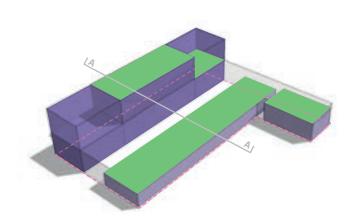
- One (1) public access way
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

#### **FACILITIES:**

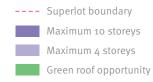
• n/a



**SECTION A-A** 



#### **HEIGHT AND MASSING**



#### **KEY URBAN DESIGN INSTRUCTIONS**



Strong visual/physical relationship

Prominent corner

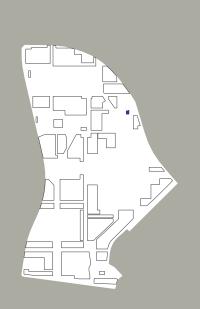
#### **CONTEXT AND CONTRIBUTION TO THE MASTER PLAN**

- Together with Superlot N-12, defines a southern gateway
- Frames Main Street, Northern Square and Curtin Dome
- Key focus for academic residential accommodation
- Key commercial and retail address to Main Street
- --- Superlot boundary Landmark site/building Key streets/spaces
- Threshold/gateway Living Stream

Bicycle end-of-trip facility



CO. Community Space



## 22319 L

### SUPERLOT N-14



#### **DESCRIPTION**

Area: 620 m<sup>2</sup>
Main Use: Community

(bicycle end-of-trip facilities)

Secondary uses: -Neighbourhood: North

#### **BUILDING REQUIREMENTS**

**SETBACKS:** 

Northern boundary: No setback Eastern boundary: 5m

**MAXIMUM HEIGHT:** 

1 Level

**MAXIMUM GFA:** 

620 m²

**EXPECTED YIELD:** 

n/a

**MAXIMUM SITE COVERAGE:** 

100%

MINIMUM FRONTAGE:

n/a

#### **PARKING REQUIREMENTS:**

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

#### **TYPOLOGIES**

n/a

### ENVIRONMENT AND INFRASTRUCTURE

- Provision of end-of-trip facilities for cyclists
- High efficiency water appliances to be included
- general infrastructure to be provided as identified in the master plan

#### **OPEN SPACE**

**FUNCTION:** 

N/S landscape link

**ELEMENTS:** 

• n/a

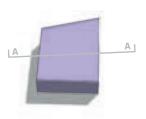
**FACILITIES:** 

• n/a

# HEIGHT AND MASSING

---- Superlot boundary





rininini)

# KEY URBAN DESIGN INSTRUCTIONS

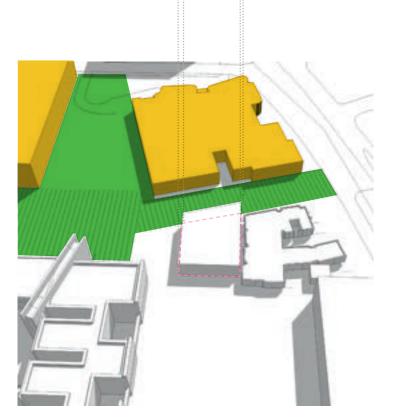
---- Superlot boundary

Key link/space

Point of access

■ East/West Link uncovered

Strong visual/physical relationship



# CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

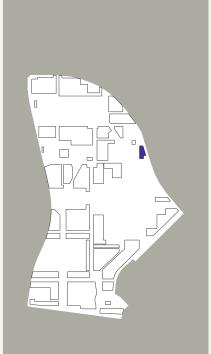
- Focus for community facilities
- Respects and addresses the adjacent Central Energy Plant

--- Superlot boundary

Landmark site/building

Key streets/spaces





# SUPERLOT N-15 DESCRIPTION Area: Main Use:

Area: 3,266 m²
Main Use: Car parking
Secondary uses: Academic
Neighbourhood: North

# **BUILDING REQUIREMENTS**

**SETBACKS:** 

No setback to south boundary

**MAXIMUM HEIGHT:** 

South: 5 levels North: 4 levels

**MAXIMUM GFA:** 

12,700 m<sup>2</sup>

**EXPECTED YIELD:** 

n/a

**MAXIMUM SITE COVERAGE:** 

100%

MINIMUM FRONTAGE: 100% along south boundary

**PARKING REQUIREMENTS:** 

Commercial and/

or General use: Bentley-Curtin

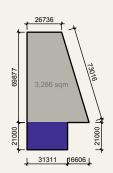
parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **Land Use Activity**

AC. Academic

TC. Transport Car Park



# **TYPOLOGIES**

4A

# ENVIRONMENT AND INFRASTRUCTURE

- High efficiency water
- appliances to be includedProvision of large PV system on transport car park
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- Infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

**FUNCTION:** 

• n/a

**ELEMENTS:** 

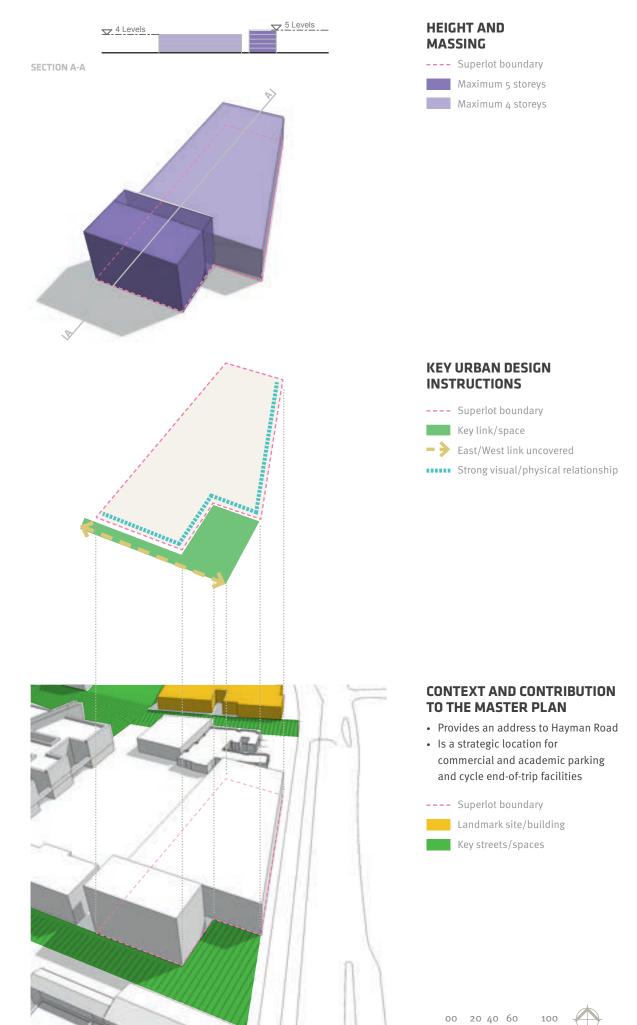
• n/a

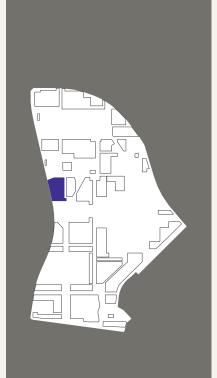
**FACILITIES:** 

• n/a









**SUPERLOT** 

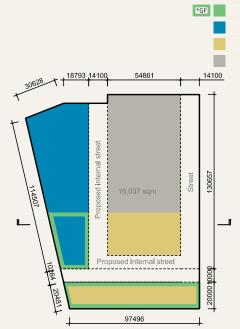
**C-01** 





### **Land Use Activity**

CO. Community Space RA. Residential Apartment RC. Residential Academic TC. Transport Car Park



# **DESCRIPTION**

Area: 16,037 m<sup>2</sup>

Main Use: Residential (apartment)
Secondary uses: Residential (academic)

Car parking Community

Neighbourhood: Central

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

Upper floors:

Ground, 1st floor: No setback to northern

and western boundary and public access way 5m to western boundary

(3rd level and above)

# **MAXIMUM HEIGHTS:**

West: 12 levels East: 6 levels

# **MAXIMUM GFA:**

60,400 m<sup>2</sup>

# **EXPECTED YIELD:**

Apartments: 190
Academic apts: 140

# **MAXIMUM SITE COVERAGE:**

Ground Floor: 80%

Upper Floors: 50% (western side)

85% (remainder)

# **MINIMUM FRONTAGE:**

\_

# **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

Commercial and/

or General use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant planning policy.

# **TYPOLOGIES**

4A and 5

# ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof as identified in the master plan
- Propose Pinus pinasta stands to entry as directed in the master plan
- High efficiency water appliances to be included
- Select buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Provision of large PV system on transport car parks and solar hotwater systems for showers on apartment buildings
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

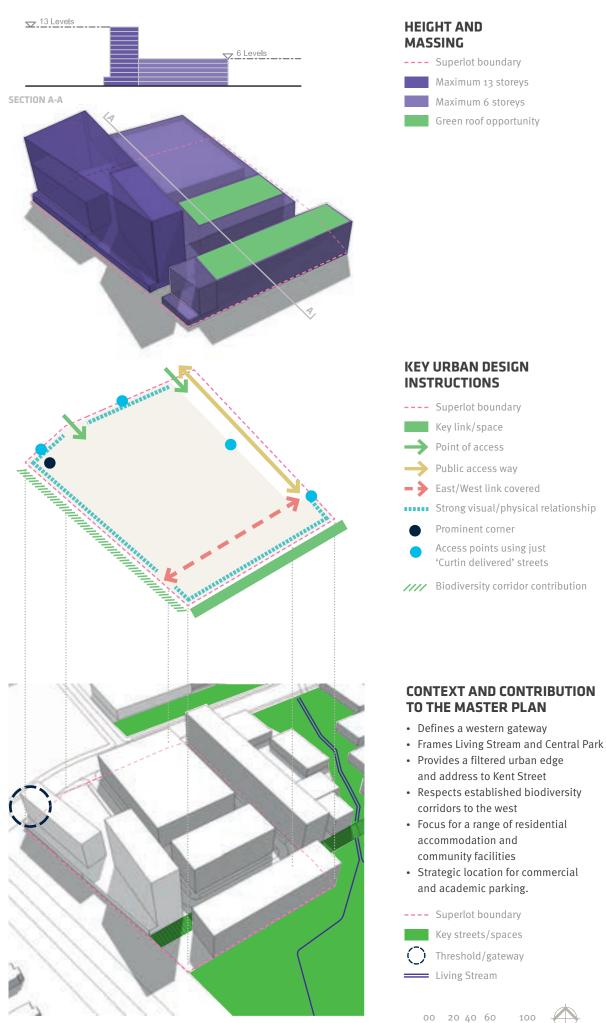
# **FUNCTION:**

- · Passive recreation for residents
- strong east-west landscape links

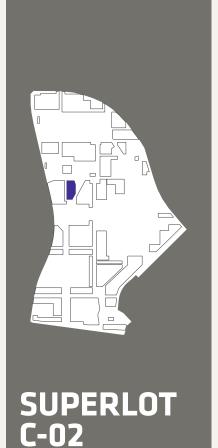
# **ELEMENTS:**

- One (1) pocket park
- One (1) public access way (paved)
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

- Bench-table set
- Small play area
- BBQ area
- Roof gardens
- · Public art







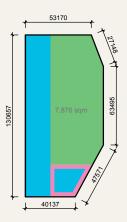




CO. Community Space

RE. Retail (ground floor only)

OF. Office/Commercial



### **DESCRIPTION**

Area: 7,876 m²
Main Use: Community
Secondary uses: Retail

Commercial (office)

Neighbourhood: Central

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

Ground, 1st floor: No setback to

western and

southern boundary

Upper floors: 3m to southern

boundary

# **MAXIMUM HEIGHT:**

West: 6 levels
South: 4 levels
Remainder: 2 levels

# **MAXIMUM GFA:**

17,000 m<sup>2</sup>

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

60%

# MINIMUM FRONTAGE:

90% along western and southern boundary

# PARKING REQUIREMENTS:

Commercial and/

or general use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant
planning policy.

### **TYPOLOGIES**

3

# ENVIRONMENT AND INFRASTRUCTURE

- High efficiency water appliances to be included
- All buildings to collect clean rainwater run-off
- Precinct underground centralised rainwater tank and pipework to be positioned under the street/pedestrian network
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

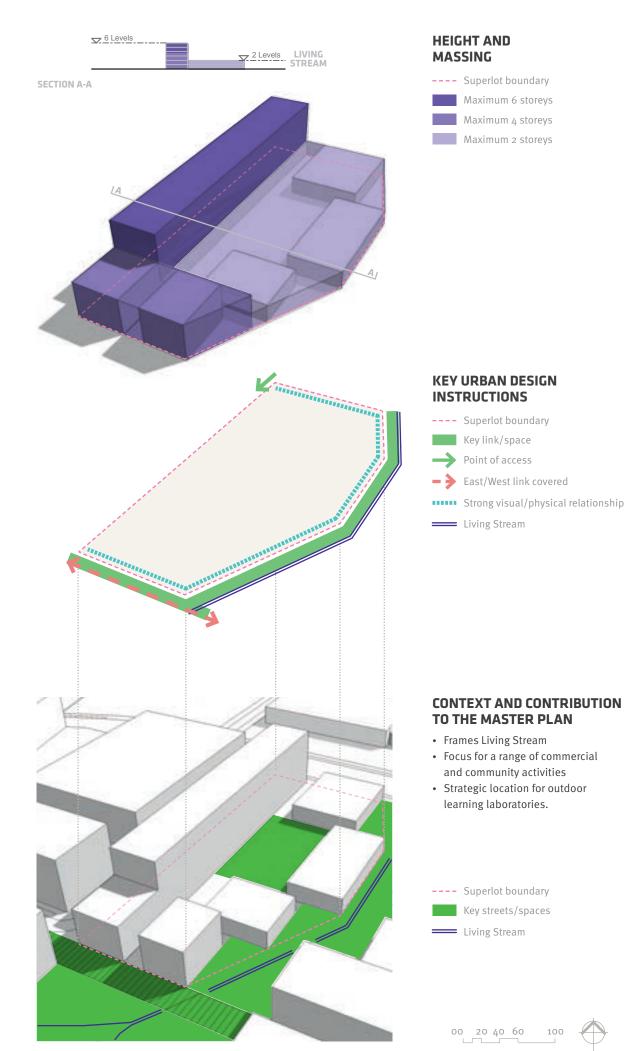
### **FUNCTION:**

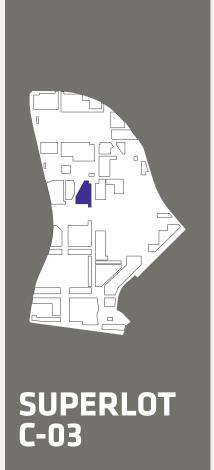
- Outdoor learning spaces
- Strong north-south and eastwest landscape links

# **ELEMENTS:**

- One (1) urban plaza/ outdoor learning space
- Two (2) pocket parks
- Four (4) public access ways

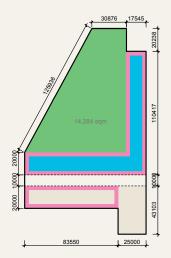
- Bench-table set
- · Wi-fi connectivity











# **DESCRIPTION**

Area: 14,284 m²
Main Use: Community
Secondary uses: Retail

Commercial (office) Residential (hotel)

Neighbourhood: Central

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

Ground, 1st floor: No setback to

eastern boundary and public access way 3m to public access way

Upper floors: 3m to public access

# **MAXIMUM HEIGHT:**

East: 6 levels
public access way: 4 levels
Northwest: 2 levels
Southeast: 15 levels

# MAXIMUM GFA:

44,100 m<sup>2</sup>

# **EXPECTED YIELD:**

Hotel rooms: 285

# **MAXIMUM SITE COVERAGE:**

60%

# **MINIMUM FRONTAGE:**

90% along east boundary and public access way

# **PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant

planning policy.

# **Land Use Activity**

CO. Community Space

RE. Retail (ground floor only)

RH. Residential Hotel
OF. Office/Commercial

TYPOLOGIES

3 and 4B

# ENVIRONMENT AND INFRASTRUCTURE

- High efficiency water appliances to be included
- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- inclusion of a Central Energy Plant (CEP) as indicated on master plan
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

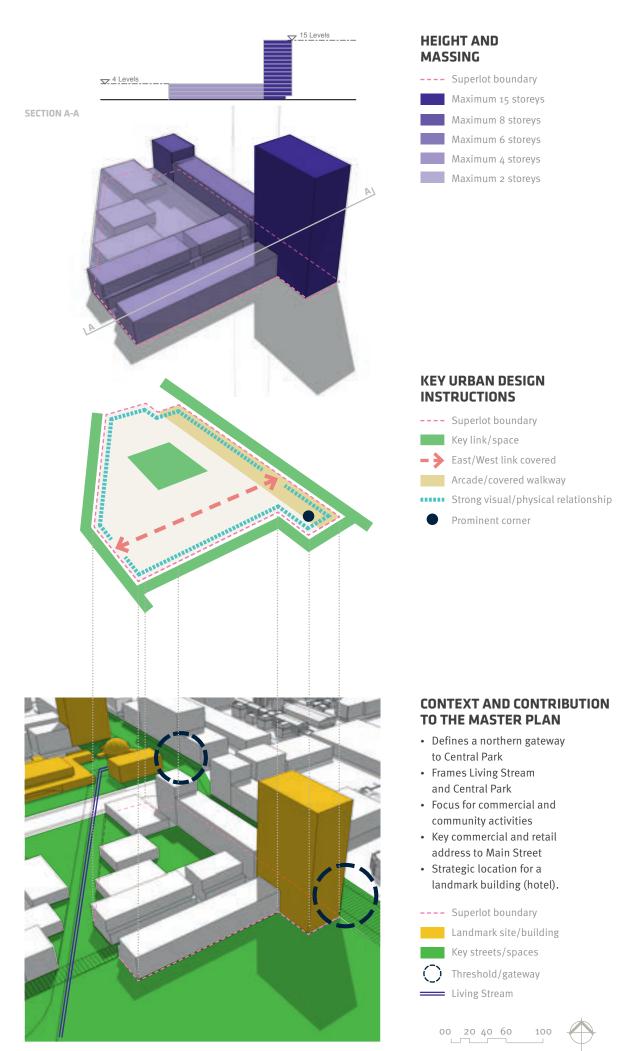
### **FUNCTION:**

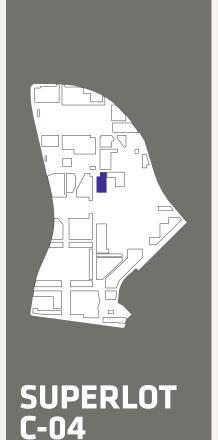
- · Passive recreation/social gathering
- Strong north-south and east-west landscape links

# **ELEMENTS:**

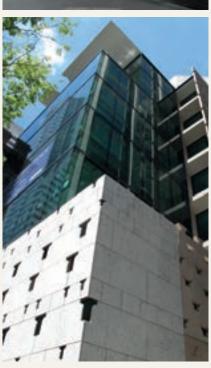
- One (1) urban plaza
- One (1) public access way (landscaped)

- Bench-table set
- Public art
- BBQ area







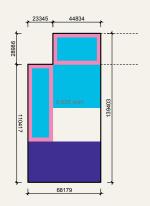


AC. Academic

ш

RE. Retail (ground floor only)

OF. Office/Commercial



### **DESCRIPTION**

Area: 8,828 m²
Main Use: Academic

Commercial (office)

Secondary uses: Retail Neighbourhood: Central

# **BUILDING REQUIREMENTS**

**SETBACKS:** 

Ground floor: 3m to Main Street
Upper floors: No setback to

northern boundary

# **MAXIMUM HEIGHT:**

Tower: 8 levels Main Street: 6 levels Remainder: 4 levels

Rooftop of building on northeastern boundary must allow for a pedestrian

connection to Superlot C-05

# **MAXIMUM GFA:**

30,400 m<sup>2</sup>

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

65%

# **MINIMUM FRONTAGE:**

90% along Main Street

# **CAR PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **TYPOLOGIES**

4A and 4B

# ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof as identified in the master plan
- High efficiency water appliances to be included
- Select buildings to collect clean rainwater run-off
- Precinct underground centralised rainwater tank and pipework to be positioned under the street/pedestrian network
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

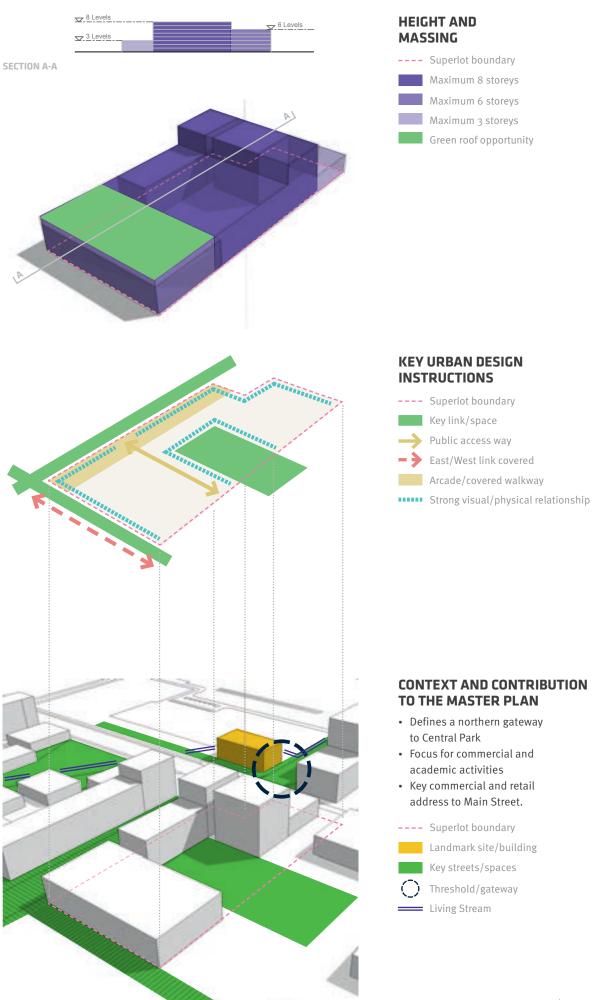
# **FUNCTION:**

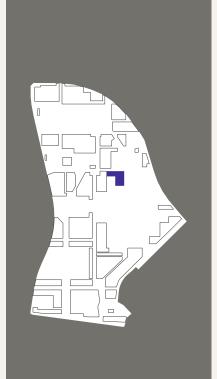
- Passive recreation
- Strong north-south and eastwest landscaped links

# **ELEMENTS:**

- Two (2) public access ways
- One (1) urban plaza/ outdoor learning space
- One (1) 'grand balcony' (publicly accessible roof garden – at same level as existing Corso)
- One (1) aerial walkway connecting Corso to roof garden

- Roof gardens
- Kiosk(s) (bars, cafes, etc.)
- · Wi-fi connectivity







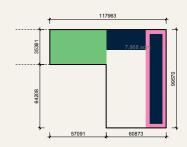


### **Land Use Activity**

CO. C

CO. Community Space

RE. Retail (ground floor only)
RS. Residential Students



# **DESCRIPTION**

Area: 7,868 m<sup>2</sup>

Main Use: Residential (student)

Secondary uses: Retail

Community

(bicycle end-of-trip facility)

Neighbourhood: Central

# **BUILDING REQUIREMENTS**

**SETBACKS:** 

Ground floor: No setbackto

northern boundary

Upper floors: No setback to northern and

eastern boundaries

# **MAXIMUM HEIGHT:**

3 levels

Rooftop of building on northwestern boundary must allow for a pedestrian connection with Superlot C-o4

# MAXIMUM GFA:

13,000 m<sup>2</sup>

# **EXPECTED YIELD:**

Student units: 245

# **MAXIMUM SITE COVERAGE:**

60%

# MINIMUM FRONTAGE:

90% along northern and eastern boundary (excluding ground floor)

# **CAR PARKING REQUIREMENTS:**

Student Housing 1 bay per

5 students

# **TYPOLOGIES**

3 and 4A

# ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof as identified in the master plan
- High efficiency water appliances to be included
- Select buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

### **FUNCTION:**

- A functional and flexible space for small to medium scale events
- Passive recreation

# **ELEMENTS:**

- Two (2) public access ways
- One (1) 'grand balcony' (publicly accessible roof garden – at same level as existing Corso)
- One (1) aerial walkway connecting Corso to roof garden

# **FACILITIES:**

· Wi-fi connectivity

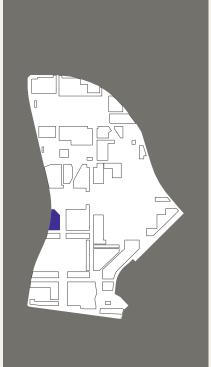






CO. Community Space

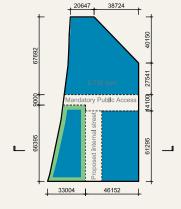
RA. Residential Apartment



# SUPERLOT C-06







# **DESCRIPTION**

Area: 8,738 m<sup>2</sup>

Main Use: Residential (academic)

Secondary uses: Community Neighbourhood: Central

# **BUILDING REQUIREMENTS**

### **SETBACKS:**

Ground, 1st floor: No setback to southern

boundary and to public access way

Upper floors: 5m to western boundary

(3rd level and above)

# **MAXIMUM HEIGHT:**

West: 13 levels
Northeast: 8 levels
Southeast: 4 levels

# **MAXIMUM GFA:**

36,900 m<sup>2</sup>

# **EXPECTED YIELD:**

Apartments: 355

# **MAXIMUM SITE COVERAGE:**

Ground Floor: 100% (west)

60% (remainder)

Upper Floors: 60%

# **MINIMUM FRONTAGE:**

90% along public access way

# **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

# **TYPOLOGIES**

3 and 5

# ENVIRONMENT AND INFRASTRUCTURE

- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees
- Large scale solar hotwater system for showers to be provided on residential buildings
- High efficiency water appliances to be included
- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- Infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

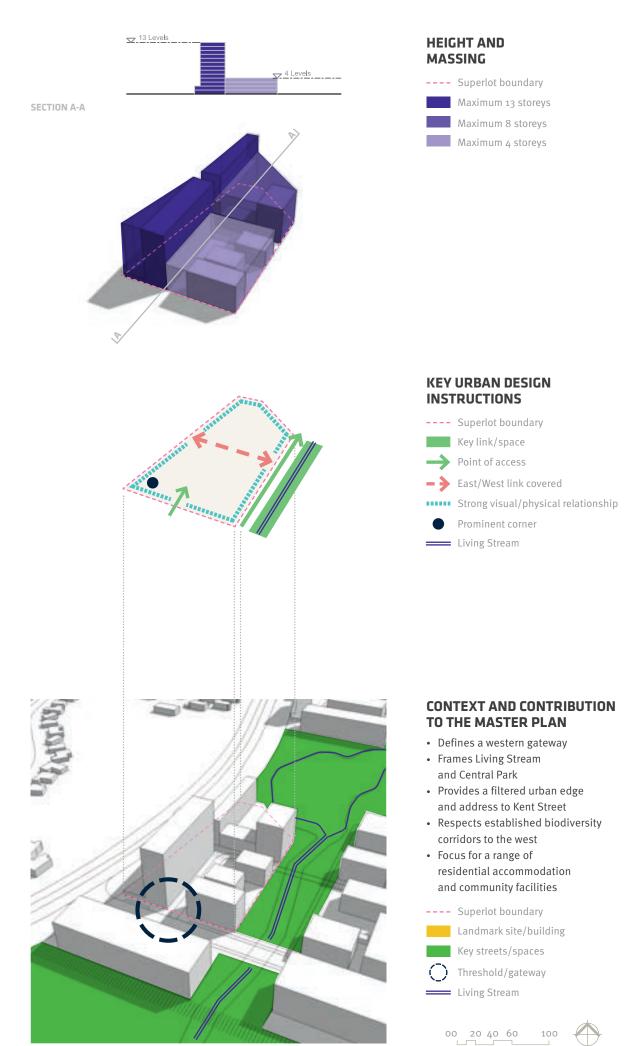
### **FUNCTION:**

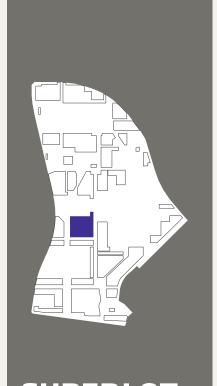
- · Passive recreation for residents
- Strong east-west pedestrian and cycle links

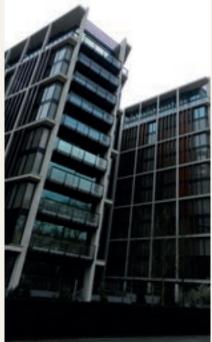
# **ELEMENTS:**

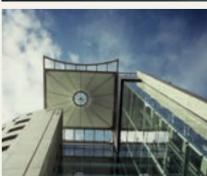
- Two (2) public access ways
- Two (2) courtyards
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

- Bench-table set
- BBQ area
- Small play area
- · Roof gardens









### 134090 25000 2890 23,530 sqm 23,530 sqm 24,200 25,000 25

# **DESCRIPTION**

Area: 23,530 m<sup>2</sup>

Main Use: Residential (academic)
Secondary uses: Commercial (office)

Community Retail

Neighbourhood: Central

# **BUILDING REQUIREMENTS**

### **SETBACKS:**

No setbackto Main Street and public access way

# **MAXIMUM HEIGHT:**

Northeast: 13 levels
Southeast: 6 Levels
Northwest: 5 Levels
Southwest: 4 levels

# **MAXIMUM GFA:**

84,600 m<sup>2</sup>

# **EXPECTED YIELD:**

Apartments: 310

# **MAXIMUM SITE COVERAGE:**

80%

# **MINIMUM FRONTAGE:**

90% along Main Street and public access way

# **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **TYPOLOGIES**

3 and 4A

### **Land Use Activity**

RC. Residential Academic
RE. Retail (ground floor only)
OF. Office/Commercial
TC. Transport Car Park

# ENVIRONMENT AND INFRASTRUCTURE

- Provision of end-of-trip facilities for cyclists
- Opportunity to deliver a green roof as identified in the master plan
- Select buildings to collect clean rainwater run-off
- Precinct underground centralised rainwater tank and pipework to be positioned under the street/pedestrian network
- High efficiency water appliances to be included
- inclusion of a Central Energy Plant (CEP) as indicated on master plan
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- Infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

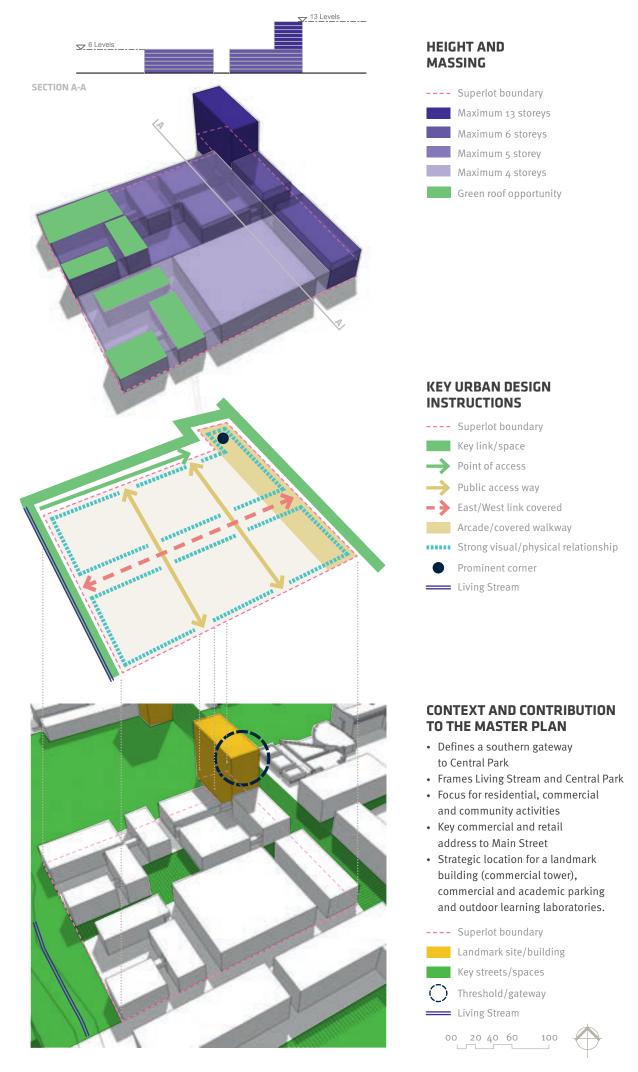
# **FUNCTION:**

- Passive recreation
- A functional and flexible space for small to medium scale events
- · Strong north-south and east-west links

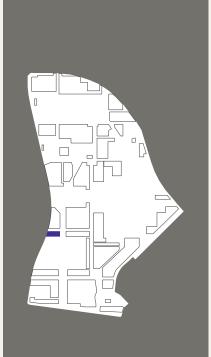
# **ELEMENTS:**

- Three (3) public access ways
- One (1) urban plaza
- Two (2) courtyards
- Two (2) East/West Links
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

- Roof gardens
- · Wi-fi connectivity



RC. Residential Academic



# 3,338 sqm 96933

# SUPERLOT C-08

# **DESCRIPTION**

Area: 3,338 m<sup>2</sup>

Main Use: Residential (academic)

Secondary uses: Community Neighbourhood: Central

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

No setbackto northern boundary

# **MAXIMUM HEIGHT:**

6 levels

# **MAXIMUM GFA:**

12,750 m<sup>2</sup>

# **RESIDENTIAL YIELD:**

Apartments: 213

### **MAXIMUM SITE COVERAGE:**

70%

# MINIMUM FRONTAGE:

n/a

# **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

# **TYPOLOGIES**

4A

# ENVIRONMENT AND INFRASTRUCTURE

- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees
- Opportunity to deliver a green roof as identified in the master plan
- Provision of large scale solar hot water system for showers on apartment building
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

# **FUNCTION:**

• Passive recreation for residents

# **ELEMENTS:**

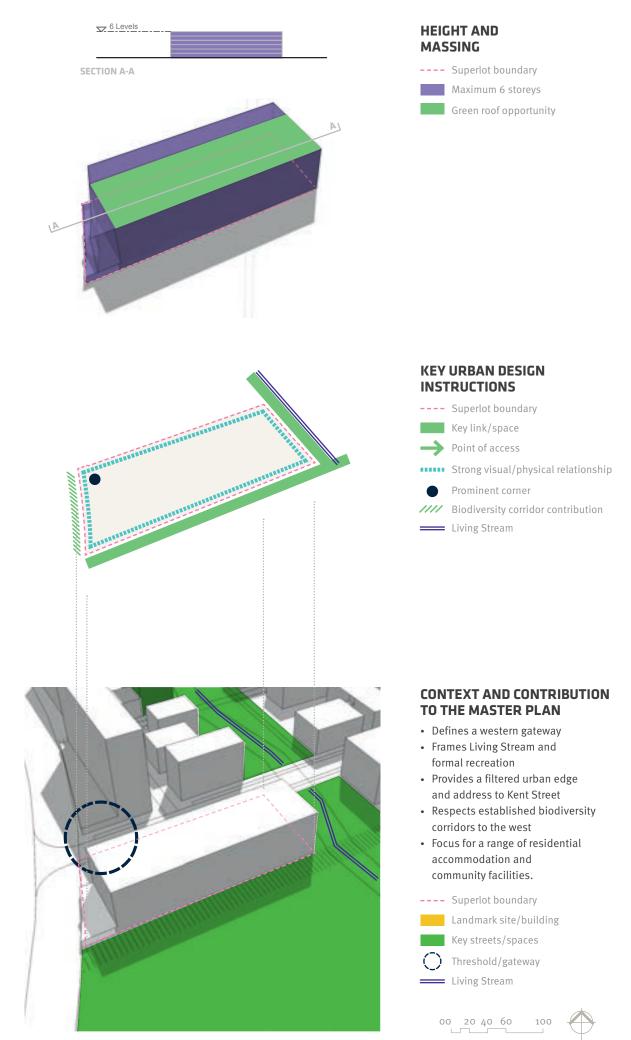
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan
- One (1) public access way

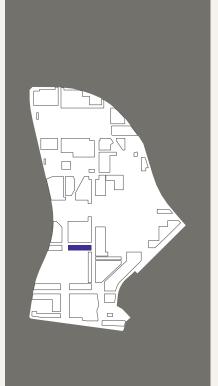
# **FACILITIES:**

• Roof garden



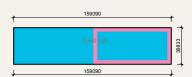






RE. Retail (ground floor only)

OF. Office/Commercial



# SUPERLOT C-09

# **DESCRIPTION**

Area: 5,860 m<sup>2</sup>

Main Use: Commercial (office)

Secondary uses: Retail Neighbourhood: Central

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

No setbackto northern and eastern boundary

# **MAXIMUM HEIGHT:**

6 levels

# **MAXIMUM GFA:**

24,700 m<sup>2</sup>

# **EXPECTED YIELD:**

# **MAXIMUM SITE COVERAGE:**

80%

# **MINIMUM FRONTAGE:**

90% along northern and eastern boundary

# **PARKING REQUIREMENTS:**

Commercial and/

Bentley-Curtin or general use:

> parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **TYPOLOGIES**

4A and 4B

# **ENVIRONMENT AND INFRASTRUCTURE**

- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- · Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- · General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

# **FUNCTION:**

- · Passive recreation for residents
- · Strong north-south landscape links

# **ELEMENTS:**

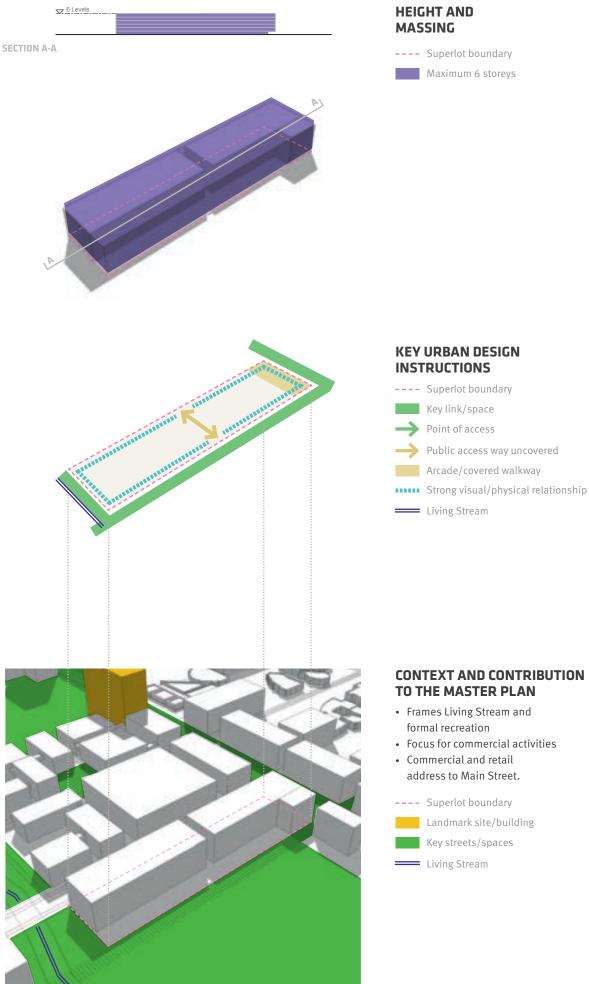
- One (1) pocket park
- One (1) public access way
- One (1) north-south landscape link

# **FACILITIES:**

• n/a

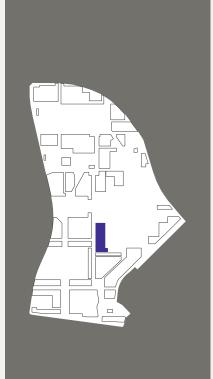








00 20 40 60







### 8282 11415 82828

# **DESCRIPTION**

Neighbourhood:

Area: 13,643 m² Main Use: Academic

Secondary uses: Commercial (office)

Retail Central

# **BUILDING REQUIREMENTS**

### **SETBACKS:**

Ground floor: 3m

Upper floors: No setback to Main Street,

western and southern

boundary

# **MAXIMUM HEIGHT:**

6 levels

# **MAXIMUM GFA:**

47,200 m²

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

North and south: 100% Central: 50%

# **MINIMUM FRONTAGE:**

90% along western and southern boundary

# **PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **Land Use Activity**

AC. Academic

RE. Retail (grou

RE. Retail (ground floor only)

OF. Office/Commercial

# **TYPOLOGIES**

3 and 4A

# ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof as identified in the master plan
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

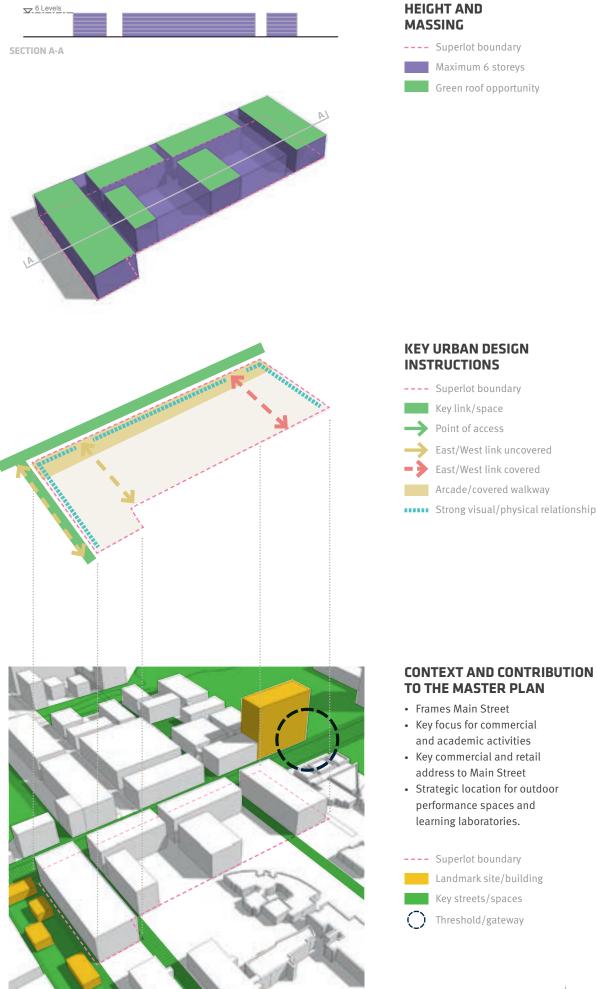
### **FUNCTION:**

- · Performance space
- Outdoor learning spaces
- Strong north-south and eastwest landscape links

# **ELEMENTS:**

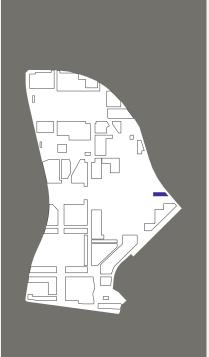
- Two (2) public access ways
- One (1) courtyard
- One (1) urban plaza/outdoor learning space
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

- Ampitheatre
- Bench-table set
- BBQ area
- · Wi-fi connectivity





00 20 40 60





# **DESCRIPTION**

Area: 2,506 m² Academic Academic

Secondary uses:

Neighbourhood: Central

# **BUILDING REQUIREMENTS**

**SETBACKS:** 

No setback to south boundary

**MAXIMUM HEIGHT:** 

6 levels

**MAXIMUM GFA:** 

13,200 m<sup>2</sup>

**EXPECTED YIELD:** 

n/a

**MAXIMUM SITE COVERAGE:** 

100%

MINIMUM FRONTAGE:

90% along south boundary

**PARKING REQUIREMENTS:** 

Commercial and/

or general use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant

planning policy.

**TYPOLOGIES** 

4A

# ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof as identified in the master plan
- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

**FUNCTION:** 

• Passive recreation

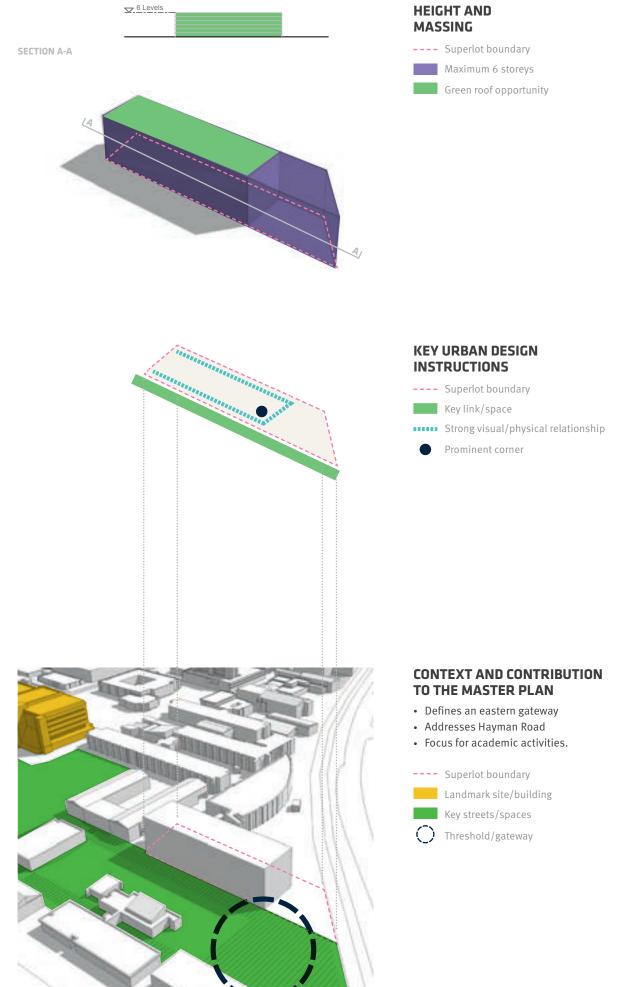
# **ELEMENTS:**

 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

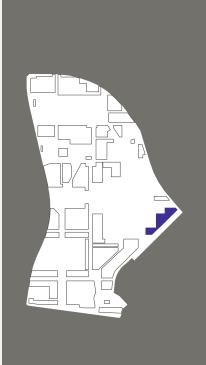
# **FACILITIES:**

• Roof gardens





00 20 40 60



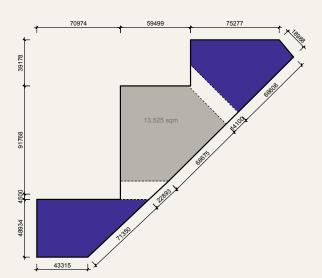




### **Land Use Activity**

AC. Academic

TC. Transport Car Park



# **DESCRIPTION**

Area: 13,525 m²
Main Use: Academic
Secondary uses: Car parking
Neighbourhood: Central

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

No setback to north boundary

# **MAXIMUM HEIGHT:**

6 levels

# **MAXIMUM GFA:**

44,300 m<sup>2</sup>

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

90%

# MINIMUM FRONTAGE:

90% along north boundary

# **PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **TYPOLOGIES**

3 and 4A

# ENVIRONMENTAL AND INFRASTRUCTURE

- Provision of end-of-trip facilities for cyclists
- Opportunity to deliver a green roof as identified in the master plan
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

# **FUNCTION:**

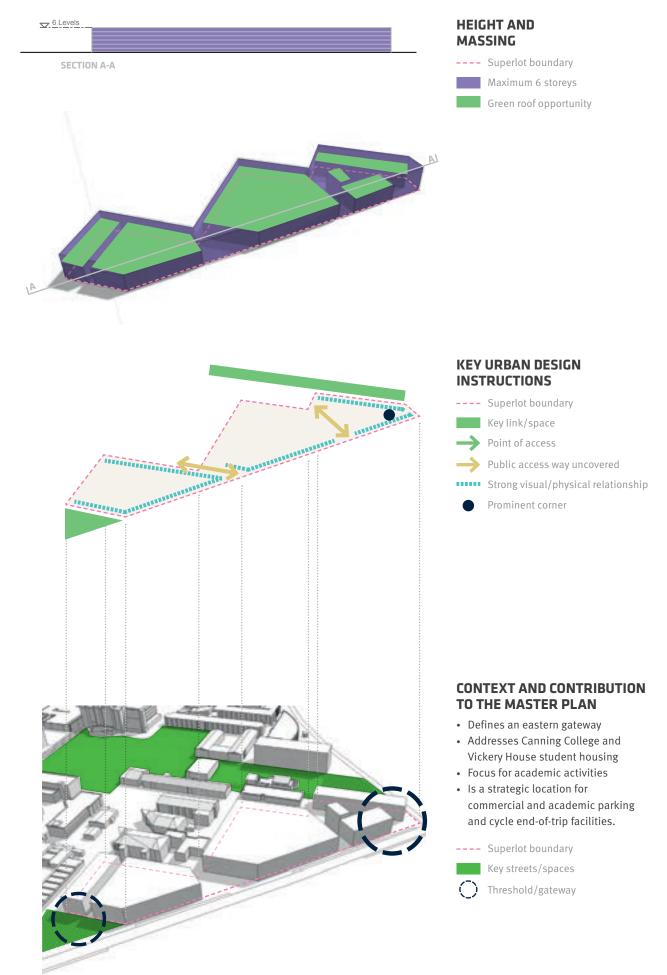
- · Passive recreation for residents
- Strong north-south and eastwest landscape links

# **ELEMENTS:**

- Two (2) public access ways
- One (1) pocket park
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

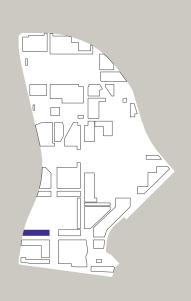
# **FACILITIES:**

• Roof gardens





RC. Residential Academic



# 183887

7,342 sqn

# SUPERLOT S-01



# **DESCRIPTION**

Area: 7,342 m<sup>2</sup>

Main Use: Residential (academic)

Secondary uses: -Neighbourhood: South

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

No setback to south boundary

# **MAXIMUM HEIGHT:**

5 levels

# **MAXIMUM GFA:**

14,000 m<sup>2</sup>

# **EXPECTED YIELD:**

Apartments: 233

### **MAXIMUM SITE COVERAGE:**

50%

# MINIMUM FRONTAGE:

n/a

# **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

# **TYPOLOGIES**

4A

# ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof as identified in the master plan
- Provision of large solar hotwater systems for showers on apartment buildings
- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

# **FUNCTION:**

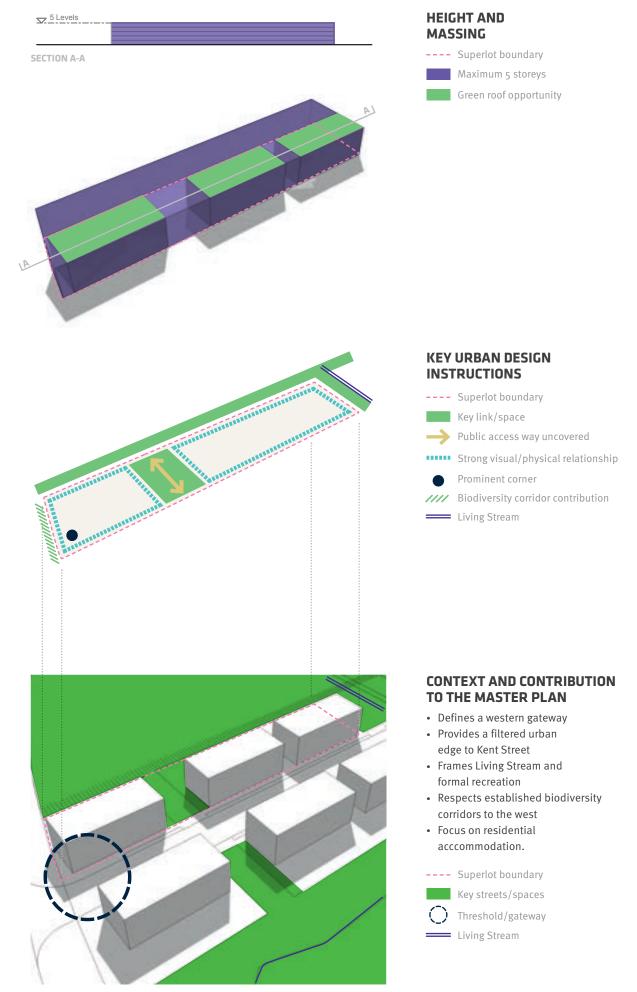
• Passive recreation

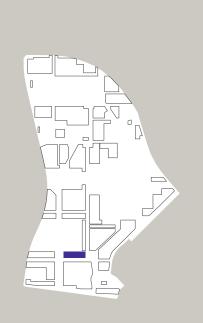
# **ELEMENTS:**

- One (1) public access way
- Three (3) semi-private gardens
- One (1) pocket park
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

# **FACILITIES:**

Roof gardens

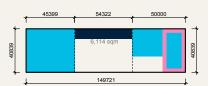




RE. Retail (ground floor only)

RS. Residential Students

OF. Office/Commercial



# SUPERLOT S-02

# **DESCRIPTION**

Area: 6,114 m<sup>2</sup>

Main Use: Commercial (office)

Secondary uses: Retail Neighbourhood: South

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

No setback to southern and eastern boundary

# **MAXIMUM HEIGHT:**

6 levels

# **MAXIMUM GFA:**

12,600 m<sup>2</sup>

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

80%

# **MINIMUM FRONTAGE:**

90% along eastern boundary

# **PARKING REQUIREMENTS:**

Student Housing 1 bay per 5 students

Commercial and/

or general use: Bentley-Curtin

parking cap applies.
Refer master plan.
Subject to negotiation
on pursuit of project
opportunity and relevant

planning policy.

# **TYPOLOGIES**

4A and 4B

# ENVIRONMENT AND INFRASTRUCTURE

- Extension of existing Central Energy Plant (CEP)
- Selected buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

# **FUNCTION:**

- Passive recreation for residents
- · Strong north-south landscape links

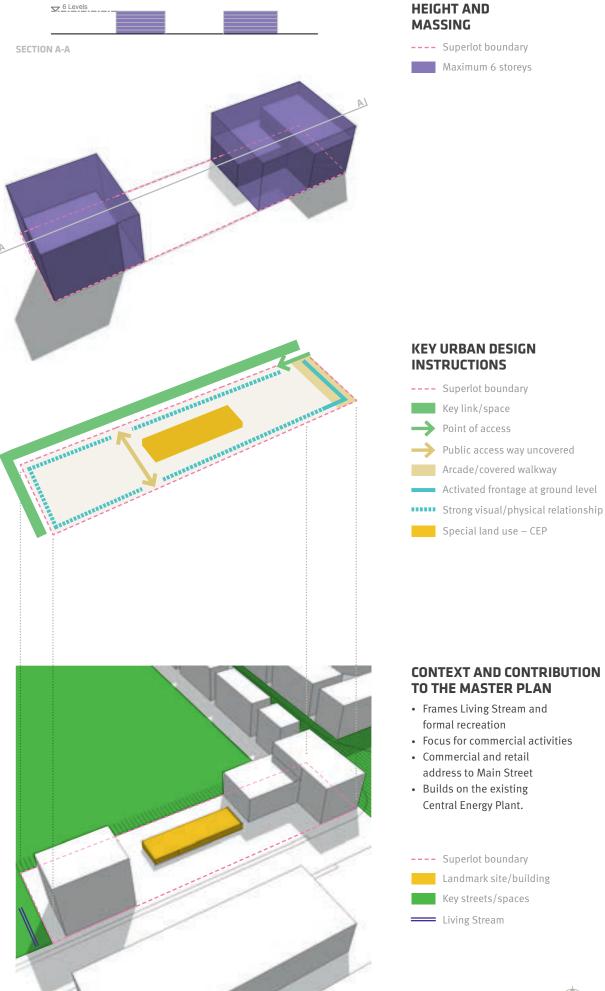
# **ELEMENTS:**

- One (1) public access way
- Two (2) courtyards

# **FACILITIES:**

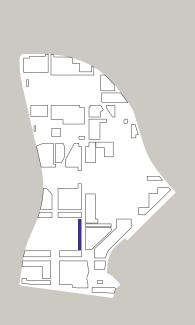
Roof gardens







00 20 40 60



# SUPERLOT S-03





# 4,576 sqm

**DESCRIPTION** 

Area: 4,576 m<sup>2</sup>

Main Use: Commercial (office)

Secondary uses: Retail

Community

Neighbourhood: South

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

n/a

# **MAXIMUM HEIGHT:**

Feature building: 2 Levels Remainder: 6 Levels

# **MAXIMUM GFA:**

11,700 m<sup>2</sup>

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

Ground Floor: 50% Upper Floors: 100%

# **MINIMUM FRONTAGE:**

n/a

# **PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **Land Use Activity**

CO. Community Space

RE. Retail (ground floor only)

OF. Office/Commercial

# **TYPOLOGIES**

8

# ENVIRONMENT AND INFRASTRUCTURE

- Selected buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

# **FUNCTION:**

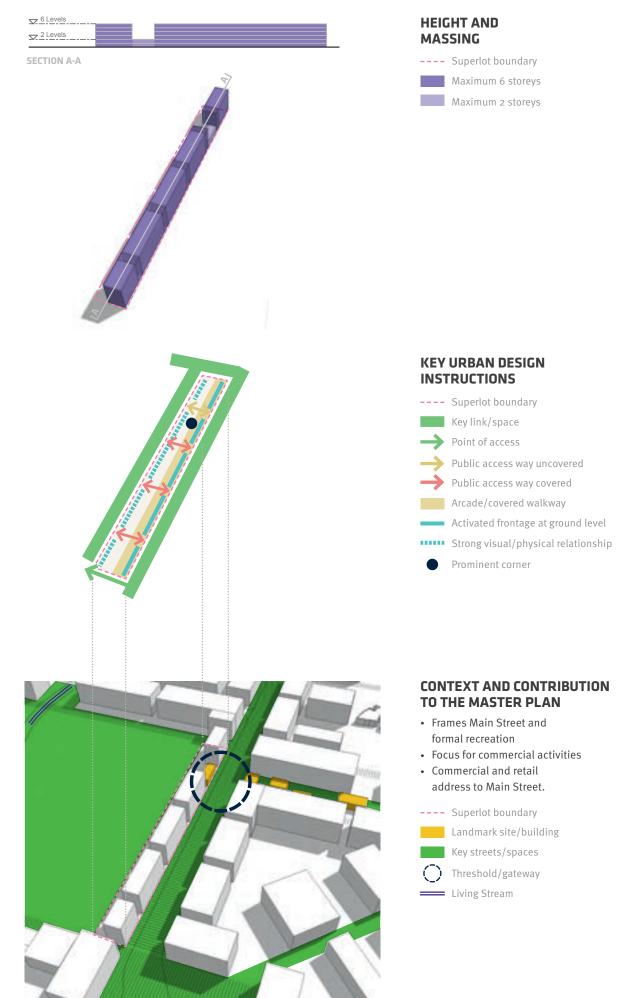
· Passive recreation for residents

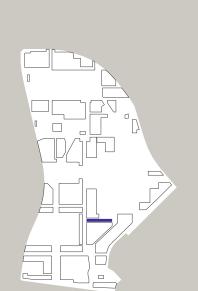
# **ELEMENTS:**

- Five (5) semi-private gardens/ water management zone
- Four (4) public access ways

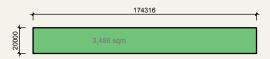
# **FACILITIES:**

• n/a





CO. Community Space



# SUPERLOT S-04

# ONE ON INVAX





# **DESCRIPTION**

Area: 3486 m<sup>2</sup>
Main Use: Community

Secondary uses: -Neighbourhood: South

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

 Buildings must address all surroundings

# **MAXIMUM HEIGHT:**

2 levels

# **MAXIMUM GFA:**

2,400 m<sup>2</sup>

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

40%

# **MINIMUM FRONTAGE:**

n/a

# **PARKING REQUIREMENTS:**

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

# **TYPOLOGIES**

9

# ENVIRONMENT AND INFRASTRUCTURE

- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General Infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

# **FUNCTION:**

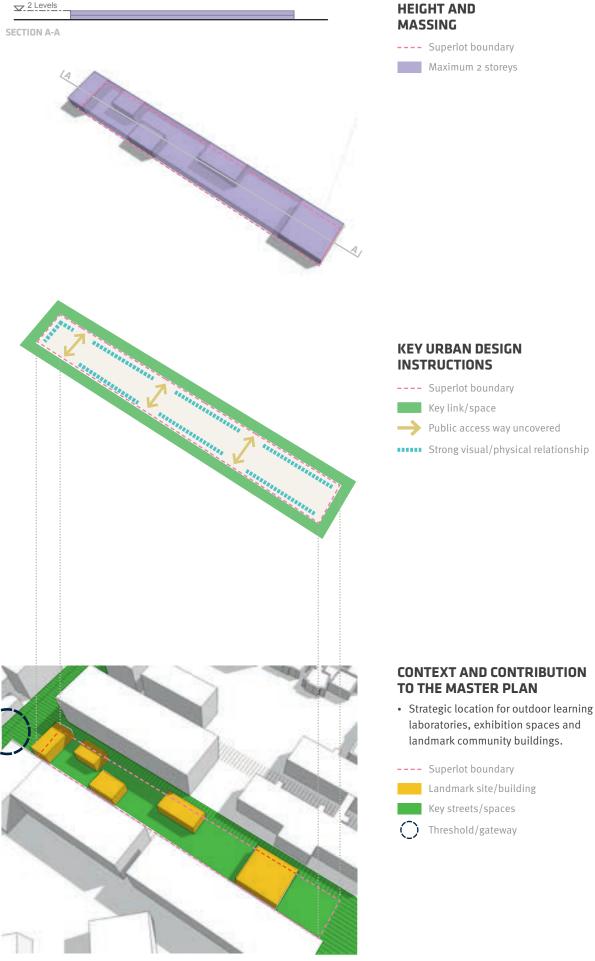
- Outdoor exhibition/learning space
- · Urban orchard

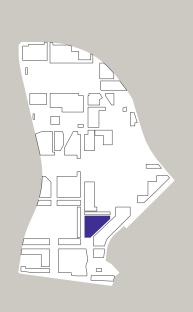
# **ELEMENTS:**

- One (1) linear park. outdoor learning space/water management zone
- Three (3) public access ways

# **FACILITIES:**

· Wi-fi connectivity





# SUPERLOT S-05

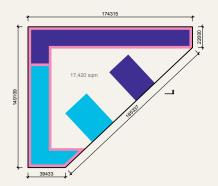




# **Land Use Activity**

AC. Academic

RE. Retail (ground floor only) OF. Office/Commercial



### **DESCRIPTION**

Area: 17,420 m<sup>2</sup> Main Use: Academic

Commercial (office)

Secondary uses: Retail Neighbourhood: South

# **BUILDING REQUIREMENTS**

# **SETBACKS:**

3m to Main Street Ground floor: No setback to Upper floors:

Main Street and public access way

# **MAXIMUM HEIGHT:**

6 levels

# **MAXIMUM GFA:**

51,000 m<sup>2</sup>

# **EXPECTED YIELD:**

n/a

# **MAXIMUM SITE COVERAGE:**

50%

# **MINIMUM FRONTAGE:**

90% along main street, western and northern boundary

# **PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

> parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

# **TYPOLOGIES**

3

# **ENVIRONMENT AND INFRASTRUCTURE**

- · Opportunity to deliver a green roof as identified in the master plan
- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- · Storm water management and treatment facilities (e.g. rainwater gardens)
- · Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- · General infrastructure to be provided as identified in the master plan

# **OPEN SPACE**

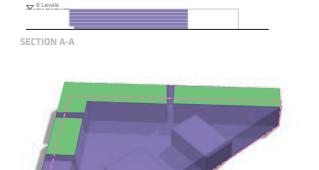
# **FUNCTION:**

- · Passive recreation
- Outdoor exhibition/learning space
- · Occasional stormwater management

# **ELEMENTS:**

- Three (3) public access ways
- Three (3) courtyards/water management zones
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

- Bench-table set
- · Wi-fi connectivity
- Roof gardens
- · Large lawn area

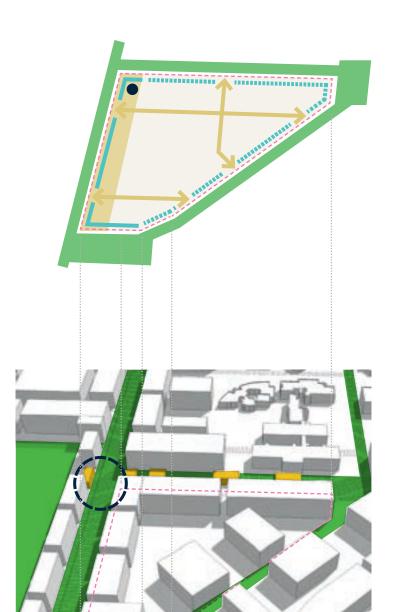


### **HEIGHT AND MASSING**

--- Superlot boundary

Maximum 6 storeys

Green roof opportunity



### **KEY URBAN DESIGN INSTRUCTIONS**

--- Superlot boundary

Key link/space

Public access way uncovered

Arcade/covered walkway

Activated frontage at ground level Strong visual/physical relationship

Prominent corner

### **CONTEXT AND CONTRIBUTION** TO THE MASTER PLAN

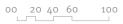
- · Frames Main Street and Southern Square
- Facilitates convenient pedestrian links between Main Street and Corso
- Key focus for academic and commercial activities
- Key commercial and retail address to Main Street and Southern Square
- · Strategic location for outdoor exhibition spaces and learning laboratories.

Superlot boundary

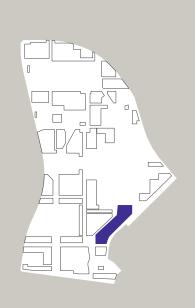
Landmark site/building

Key streets/spaces

Threshold/gateway



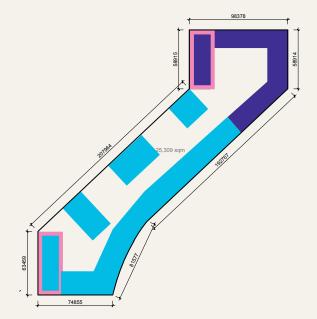




# SUPERLOT S-06







### Land Use Activity

AC. Academic

RE. Retail (ground floor only)

OF. Office/Commercial

### DESCRIPTION

Area: 25,309 m<sup>2</sup>

Main Use: Commercial (office)

Academic

Secondary uses: Retail Neighbourhood: South

### **BUILDING REQUIREMENTS**

### **SETBACKS:**

No setback to Main Street and southeastern boundary

### **MAXIMUM HEIGHT:**

6 levels

### **MAXIMUM GFA:**

75,900 m<sup>2</sup>

### **EXPECTED YIELD:**

n/a

### **MAXIMUM SITE COVERAGE:**

60%

### **MINIMUM FRONTAGE:**

Main Street: 90% Southeast 80%

### **PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

### **TYPOLOGIES**

3

# ENVIRONMENT AND INFRASTRUCTURE

- Provision of end-of-trip facilities
- Opportunity to deliver a green roof as identified in the master plan
- Storm water management and treatment facilities (e.g. rainwater gardens)
- Selected buildings to collect clean rainwater run-off as identified in the master plan
- Precinct underground centralised rainwater tank (CRT) and pipework to be positioned under the street/pedestrian network
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

### **OPEN SPACE**

### **FUNCTION:**

- Passive recreation
- Outdoor exhibition/learning space
- · Occasional stormwater management

### **ELEMENTS:**

- Three (3) public access ways
- Three (3) courtyards/water management zones
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

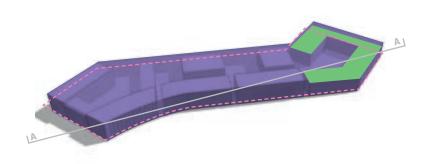
### **FACILITIES:**

- · Wi-fi connectivity
- · Large lawn area
- Roof gardens

# HEIGHT AND MASSING

SECTION A-A





# KEY URBAN DESIGN INSTRUCTIONS

---- Superlot boundary

Key link/space

Public access way uncovered

Arcade/covered walkway

Activated frontage at ground level

Strong visual/physical relationship

# CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

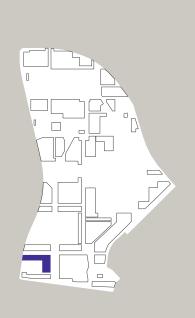
- Addresses Canning College and Southern Square
- Facilitates convenient pedestrian links between Main Street and Corso
- Focus for commercial and academic activities
- Is a strategic location for commercial and academic parking and cycle end-of-trip facilities.

--- Superlot boundary

Landmark site/building

Key streets/spaces

Living Stream



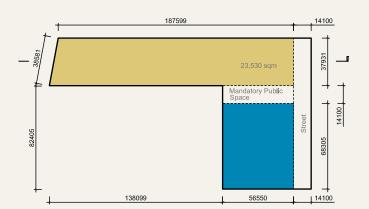
# SUPERLOT S-07





### **Land Use Activity**

RA. Residential Apartment
RC. Residential Academic



### **DESCRIPTION**

Area: 23,530 m<sup>2</sup>

Main Use: Residential (academic)
Secondary uses: Residential (apartment)

Neighbourhood: South

### **BUILDING REQUIREMENTS**

### **SETBACKS:**

No setback to northern boundary

### **MAXIMUM HEIGHT:**

5 levels

### **MAXIMUM GFA:**

21,300 m²

### **EXPECTED YIELD:**

Academic units: 233
Apartments: 74

### **MAXIMUM SITE COVERAGE:**

50%

### **MINIMUM FRONTAGE:**

n/a

### **PARKING REQUIREMENTS:**

Private Apartments: 1 bay per apartment

Student Housing: 1 bay per

5 students/dwellings

### **TYPOLOGIES**

4A

# ENVIRONMENT AND INFRASTRUCTURE

- Opportunity to deliver a green roof as identified in the master plan
- Select buildings collect clean rainwater run-off and the installation of a third pipe reuse network as identified in the master plan
- Provision of large solar hotwater systems for showers on apartment buildings
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

### **OPEN SPACE**

### **FUNCTION:**

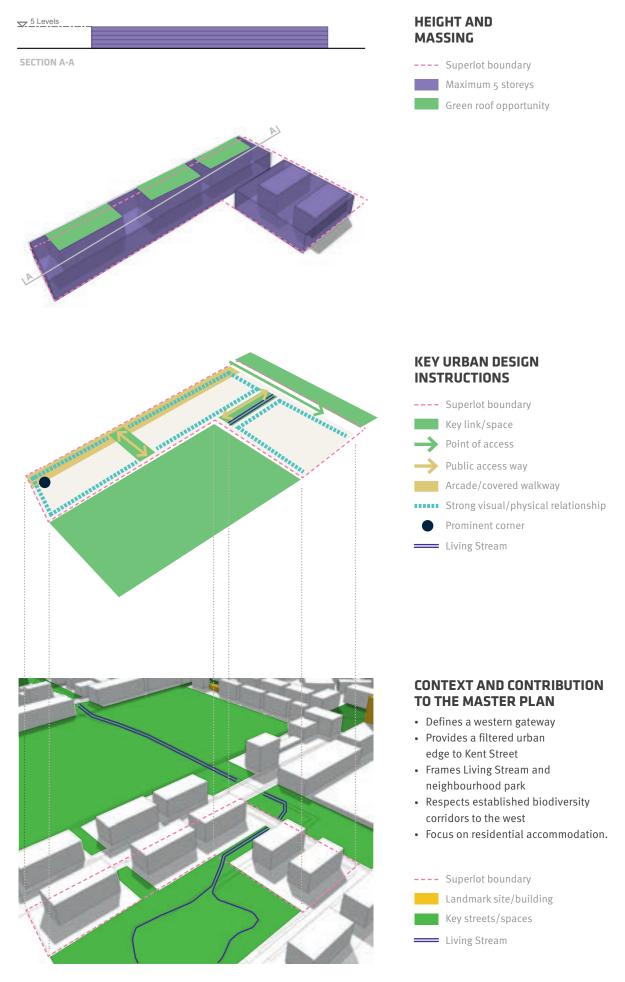
- · Passive recreation for residents
- Strong north-south and eastwest landscape links

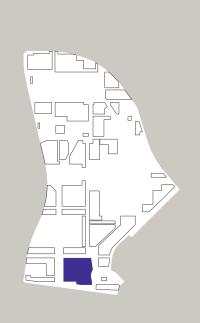
### **ELEMENTS:**

- Two (2) public access ways
- Two (2) pocket park
- Five (5) semi-private gardens
- 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

### **FACILITIES:**

- Roof gardens
- Small play area
- · Small kickabout area
- BBQ area

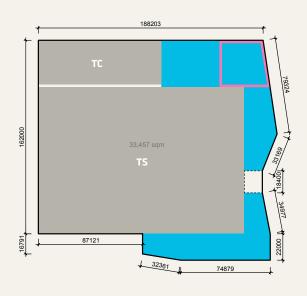




# SUPERLOT S-08







### **TYPOLOGIES**

4A, 4B and 7

### **ENVIRONMENT AND INFRASTRUCTURE**

· Provision of end-of-trip facilities

**Land Use Activity** 

OF. Office/Commercial RE. Retail (ground floor only) TC. Transport Car Park

TS. Transit Stabling

- Utilise opportunity to enhance biodiversity corridors as identified in the master plan and retain Pinus pinasta trees
- · Opportunity to deliver a green roof as identified in the master plan
- · Select buildings to collect clean rainwater run-off
- · Precinct underground centralised rainwater tank and pipework to be positioned under the street/pedestrian network
- Provision of large PV system on transport car parks
- · Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- · Infrastructure to be provided as identified in the master plan

### **OPEN SPACE**

### **FUNCTION:**

- · Passive recreation for residents
- · Strong north-south landscape links
- · Respect and enhance biodiversity corridors

### **ELEMENTS:**

• 50% of roof area to be allocated to green roofs for environmental and amenity purposes, as identified in the master plan

### **FACILITIES:**

• n/a

### **DESCRIPTION**

Area: 33,457 m<sup>2</sup>

Main Use: Commercial (office) LRT stabling yard Secondary uses:

> Car parking Retail

Neighbourhood: South

### **BUILDING REQUIREMENTS**

### **SETBACKS:**

No setback to northern and eastern boundary

### **MAXIMUM HEIGHTS:**

Northeast: 12 levels Northwest: 6 levels Middle: 1 level Remainder: 4 levels

### **MAXIMUM GFA:**

74,400 m<sup>2</sup>

### **EXPECTED YIELD:**

### **MAXIMUM SITE COVERAGE:**

100%

### **MINIMUM FRONTAGE:**

Northeast corner: 90% North and East: 80%

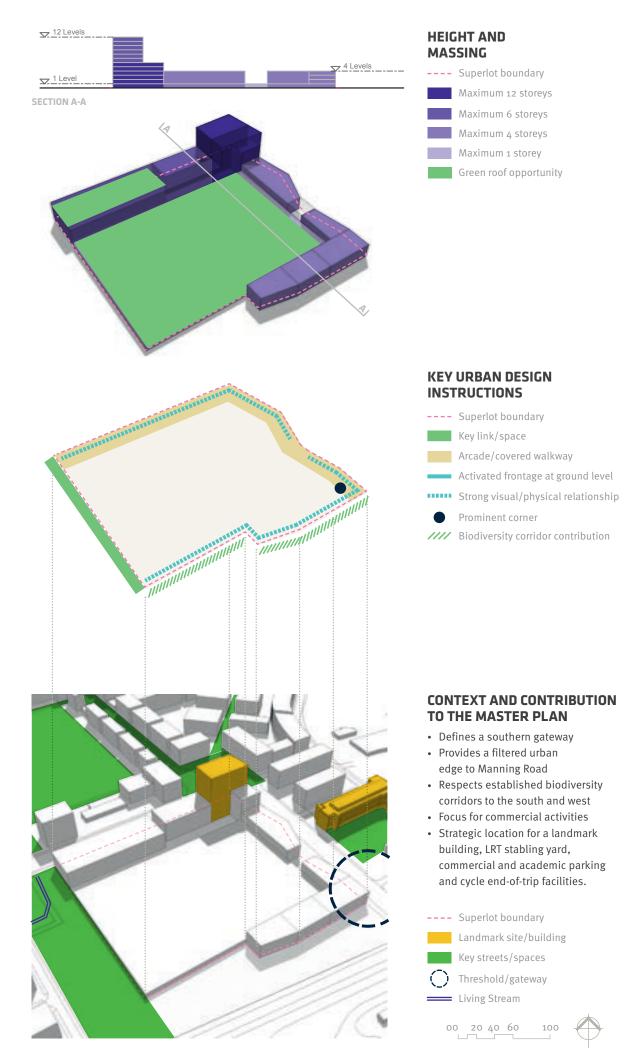
### **PARKING REQUIREMENTS:**

Commercial and/

or general use: Bentley-Curtin

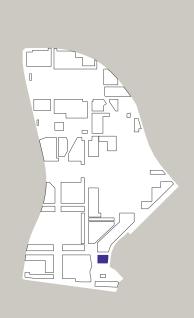
parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

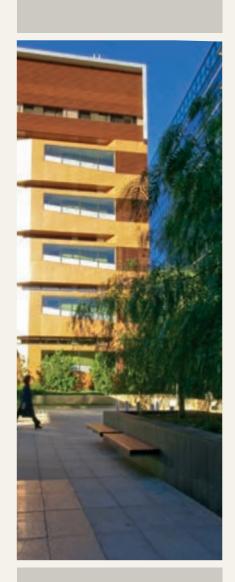


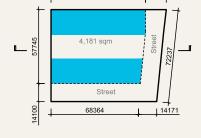


OF. Office/Commercial



# SUPERLOT S-09





73815

### **DESCRIPTION**

Area: 4,181 m<sup>2</sup>

Main Use: Commercial (office)

Secondary uses: -Neighbourhood: South

### **BUILDING REQUIREMENTS**

**SETBACKS:** 

No setback to Main Street

**MAXIMUM HEIGHT:** 

6 Levels

**MAXIMUM GFA:** 

13,200 m<sup>2</sup>

**EXPECTED YIELD:** 

n/a

**MAXIMUM SITE COVERAGE:** 

60%

**MINIMUM FRONTAGE:** 

n/a

**PARKING REQUIREMENTS:** 

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

### **TYPOLOGIES**

4A

# ENVIRONMENT AND INFRASTRUCTURE

- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

### **OPEN SPACE**

**FUNCTION:** 

Passive recreation

**ELEMENTS:** 

- One (1) pocket park
- One (1) public access way

**FACILITIES:** 

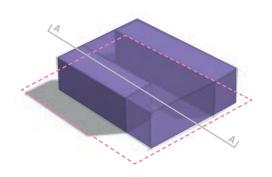
• n/a

SECTION A-A

# HEIGHT AND MASSING

---- Superlot boundary





# KEY URBAN DESIGN INSTRUCTIONS

---- Superlot boundary

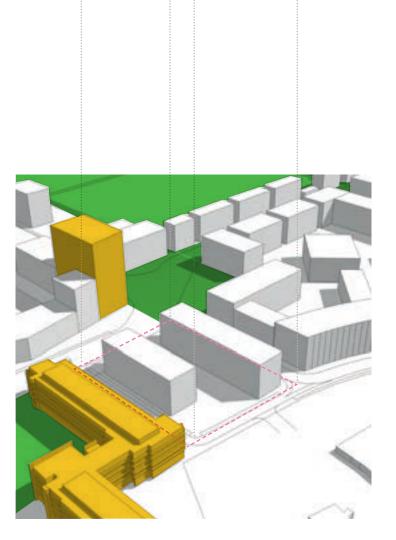
Key link/space

Point of access

Public access way uncovered

Activated frontage at ground level

Strong visual/physical relationship



# CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

- Focus for commercial activities
- Addresses Building 500.

---- Superlot boundary

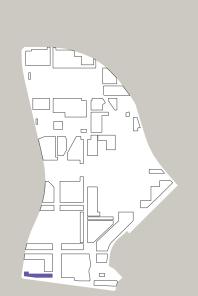
Landmark site/building

Key streets/spaces

Threshold/gateway

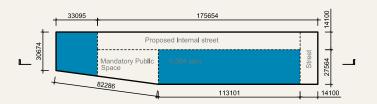
Living Stream





### Land Use Activity

RA. Residential Apartment



# SUPERLOT S-10





### **DESCRIPTION**

Area: 5384 m<sup>2</sup>

Main Use: Residential (apartment)

Secondary uses: -Neighbourhood: South

### **BUILDING REQUIREMENTS**

### **SETBACKS:**

-

### **MAXIMUM HEIGHT:**

West: 12 Levels East: 5 Levels

### **MAXIMUM GFA:**

15,800 m<sup>2</sup>

### **EXPECTED YIELD:**

Academic units: 158

### **MAXIMUM SITE COVERAGE:**

West: 80% East: 70%

### MINIMUM FRONTAGE:

n/a

### **PARKING REQUIREMENTS:**

Apartments: 1 bay per apartment

### **TYPOLOGIES**

5 and 7

# ENVIRONMENT AND INFRASTRUCTURE

- Provision of large solar hot water system for showers on apartment building
- All buildings to collect clean rainwater run-off
- Precinct underground centralised rainwater tank and pipework to be positioned under the street/pedestrian network
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

### **OPEN SPACE**

### **FUNCTION:**

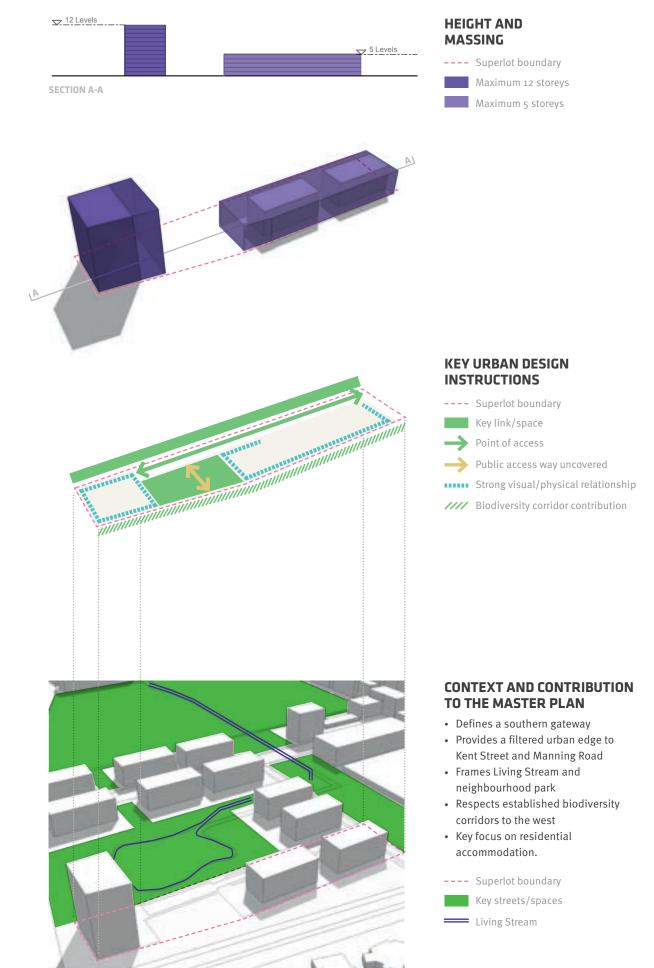
• Passive recreation for residents

### **ELEMENTS:**

- One (1) local park (centrally located)
- Three (3) semi-private gardens

### **FACILITIES:**

- Small play area
- Bench-table set
- BBQ areas





CO. Community Space



# SUPERLOT S-11

### **DESCRIPTION**

Area: 752 m<sup>2</sup>
Main Use: Community

Secondary uses: -Neighbourhood: South

### **BUILDING REQUIREMENTS**

### **SETBACKS:**

• Building must address urban square to North

### **MAXIMUM HEIGHT:**

2 levels

### **MAXIMUM GFA:**

1,500 m<sup>2</sup>

### **EXPECTED YIELD:**

n/a

### **MAXIMUM SITE COVERAGE:**

100%

### MINIMUM FRONTAGE:

n/a

### **PARKING REQUIREMENTS:**

Car parking allocation and arrangements subject to negotiation on pursuit of project opportunity.

### **TYPOLOGIES**

9

# ENVIRONMENT AND INFRASTRUCTURE

- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network
- General infrastructure to be provided as identified in the master plan

### **OPEN SPACE**

### **FUNCTION:**

• n/a

### **ELEMENTS:**

• n/a

### **FACILITIES:**

• n/a

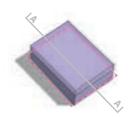




# HEIGHT AND MASSING

--- Superlot boundary





# KEY URBAN DESIGN INSTRUCTIONS

---- Superlot boundary

Key link/space

Point of access

Strong visual/physical relationship

# CONTEXT AND CONTRIBUTION TO THE MASTER PLAN

- Key focus for community activities
- Addresses urban plaza to the north.

---- Superlot boundary

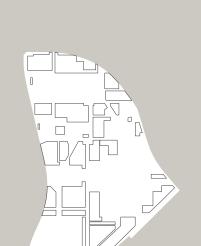
Landmark site/building

Key streets/spaces

Threshold/gateway

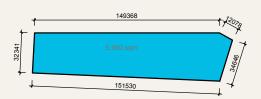
Living Stream





### Land Use Activity

OF. Office/Commercial



# SUPERLOT S-12

### **DESCRIPTION**

Area: 5,560 m<sup>2</sup>

Main Use: Commercial (office)

Secondary uses: -Neighbourhood: South

### **BUILDING REQUIREMENTS**

**SETBACKS:** 

3m to all boundaries

**MAXIMUM HEIGHT:** 

East: 6 levels West: 15 levels

**MAXIMUM GFA:** 

23,300 m²

**EXPECTED YIELD:** 

n/a

**MAXIMUM SITE COVERAGE:** 

50%

**MINIMUM FRONTAGE:** 

n/a

**PARKING REQUIREMENTS:** 

Commercial and/

or general use: Bentley-Curtin

parking cap applies. Refer master plan. Subject to negotiation on pursuit of project opportunity and relevant

planning policy.

### **TYPOLOGIES**

4B

# ENVIRONMENT AND INFRASTRUCTURE

- All buildings to collect clean rainwater run-off and install pipework under street network to centralised rainwater tanks
- Waste water treatment plant (WWTP)
- Collection of full wastewater from all buildings and the installation of a third pipe reuse network as identified in the master plan
- General infrastructure to be provided as identified in the master plan

### **OPEN SPACE**

### **FUNCTION:**

- Passive recreation
- Buffer to WWTP

### **ELEMENTS:**

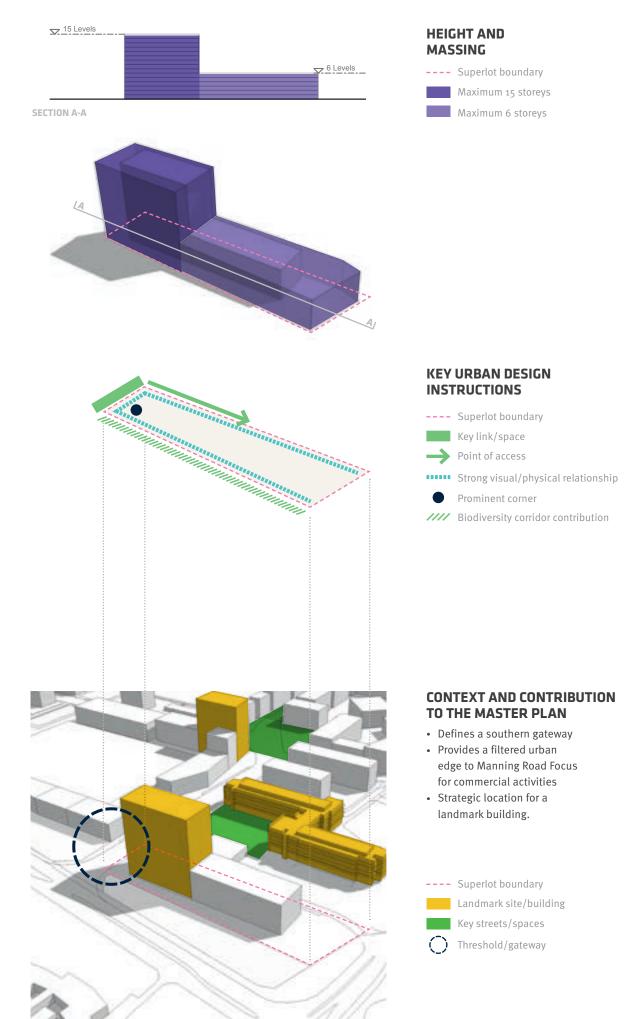
• One (1) pocket park

### **FACILITIES:**

• n/a









### 3.2 TYPOLOGIES

# DIFFERENTIATED CHARACTER IN DEVELOPMENT BANDS

While the master plan addresses the overarching principles and drivers for delivering Greater Curtin, the typologies address individual buildings and groups of buildings.

The grouping of typologies will create different scales, spatial relationships and settings that will accommodate a variety of activities.

The intent of the master plan is to develop precincts within Greater Curtin that have vitality and a distinctly local character and identity.

### **RESPONSE TO SURROUNDING CONDITIONS**

It is important to consider typologies within their context.

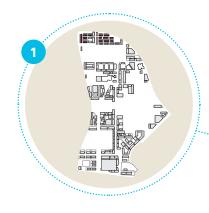
A well-designed development will find a synergy between a building, its neighbouring buildings and the public/private space in which it sits.

### **TYPOLOGIES**

The plan opposite shows the distribution of typologies across Greater Curtin, and the following pages outline the key objectives and design requirements for each typology.

# HOW TO USE THE TYPOLOGY GUIDELINES

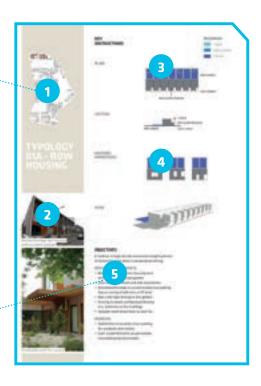
- Identifies where the typology is permitted within the master plan
- Provides precedent examples of appropriate built form character outcomes
- Establishes key instructions including layout, maximum heights and edge conditions
- **4.** Identifies possible massing configurations
- 5. Establishes key design requirements to achieve the objective of the typology



OBJECTIVES

DESIGN REQUIREMENTS
PARKING

5





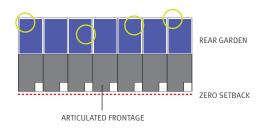
# TYPOLOGY 01A - ROW HOUSING





# KEY INSTRUCTIONS

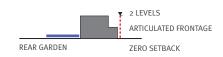
PLAN



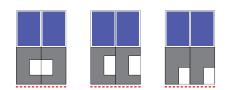
Key External

Public Semi-private Private

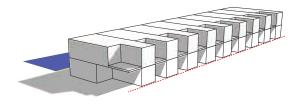
**SECTION** 



MASSING VARIATIONS



**VIEW** 



### **OBJECTIVES**

A medium to high density residential neighbourhood of terrace housing within a landscaped setting.

### **DESIGN REQUIREMENTS**

- Narrow frontage terrace housing each with an external private garden
- Zero setback to street and side boundaries
- Articulated frontage to accommodate one parking bay or courtyard with deck at FF level
- Max 1.8m high fencing to rear garden
- Fencing to match architectural finishes (i.e. extension of the building)
- Suitably sized street trees to each lot.

### PARKING

- Subdivision to provide street parking for residents and visitors
- Each residential lot to accommodate one parking bay (minimum).





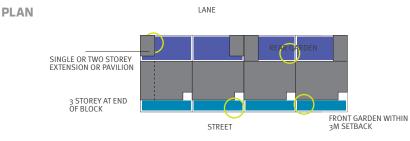


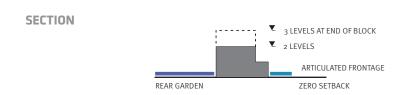


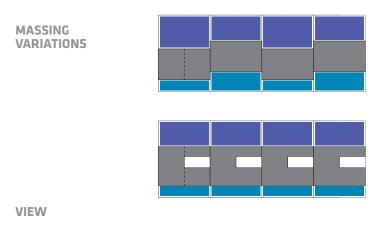
# **KEY**

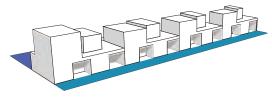
# **INSTRUCTIONS**











### **OBJECTIVES**

A medium to high density residential neighbourhood of terrace housing within a landscaped setting.

### **DESIGN REQUIREMENTS**

- Broad frontage terrace housing each with an external private garden to rear and a small street front garden
- · Two storey residences required, with third storey (full or part lot) allowed on end of blocks
- 3m street setback for residence. Zero setbacks to side boundaries
- Street tree required to every second lot
- · Street fence visually permeable and to a maximum height of 1,100mm. Rear fence maximum height 1,800mm
- Deciduous tree to every rear garden
- Bin enclosures to be incorporated within building envelope at rear.

### **PARKING**

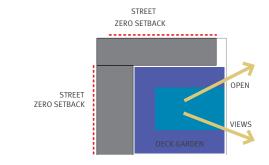
- Subdivision to provide street parking for residents and visitors
- Each residence to accommodate one private parking bay (minimum)
- Private parking bays to be accessed from a rear lane or parking within basement or within a shared parking station (by developer).



# TYPOLOGY 02 -PERIMETER BLOCK



# KEY INSTRUCTIONS

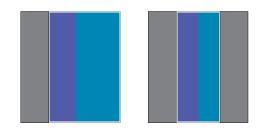


### **SECTION**

**PLAN** 



# MASSING VARIATIONS

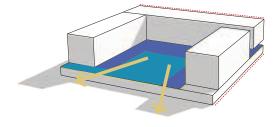




Key External

Public Semi-private Private

### **VIEW**



### **OBJECTIVES**

An urban street clearly defined with a variety of apartments above retail premises.

### **DESIGN REQUIREMENTS**

- Zero street setback for podium and upper levels
- Podium may occupy entire site with zero setbacks to all boundaries
- · Uniform height for apartment blocks
- 3.0m minimum internal height for podium
- Approximately 50% of deck garden to be private (ground floor users access) and 50% semi-private (upper level resident access)
- Arcade or awning to streetscape
- · Retail/commercial to address street front
- · Avoid blank walls to street front
- · Avoid continuous glazed strip façade to street front
- Apartment balconies at upper level may extend over streetscape boundary to a maximum projection of 1m.

### **PARKING**

· Basement parking.



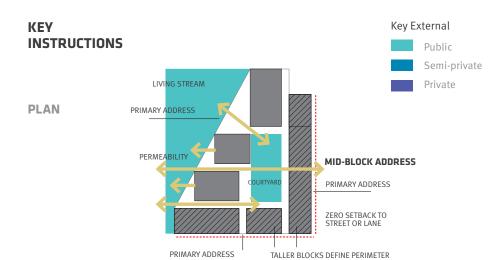
# TYPOLOGY 03 -CLUSTERED BLOCKS



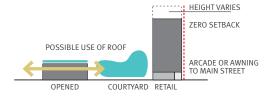
Physical and visual permeability between building and landscape



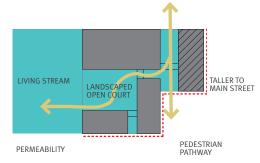
pedestrian path between urban street and internal courtyard



### **SECTION**

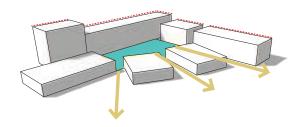


# MASSING VARIATIONS



ZERO BOUNDARY SETBACK

### **VIEW**



### **OBJECTIVES**

A grouping of independent blocks of mixed uses aligned with the street and arranged around a central courtyard within a landscape setting.

### **DESIGN REQUIREMENTS**

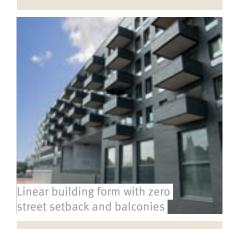
- Retail required along main street
- Buildings facing streets and laneways are to reinforce urban structure
- Colonnade or awning required along footpath
- Zero setback to street/laneway boundary
- · Varied heights of different building blocks
- Physical and visual permeability required for blocks adjoining Living Stream and Corso
- · Landscaped roof decks encouraged
- Mid-block arcade permitted.

### **PARKING**

Basement or parking station within development lot.



# TYPOLOGY 04A -LINEAR BLOCK



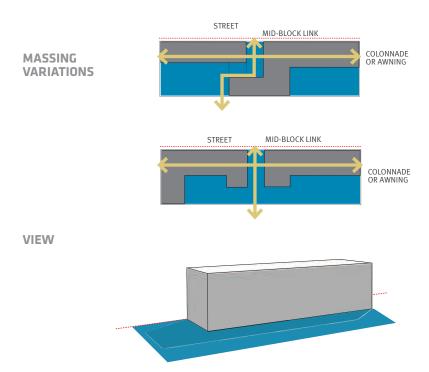
### **KEY INSTRUCTIONS**

**PLAN** 

### Key External Public Semi-private Private

STREET/LANE ZERO SETBACK COLONNADE OR AWNING FREE SHAPE AND ARRANGEMENT





### **OBJECTIVES**

A compact and generic urban form suitable for a variety of single or mixed uses.

### **DESIGN REQUIREMENTS**

- Clear, linear form with consistent height across neighbouring buildings
- · All façades of equivalent quality
- Retail allowed along streets and lanes
- Avoid continuous glass façade at street level
- · East-west long access to gain solar benefits of north-south orientation
- · Blocks suitable for single use or subdivided for mixed uses
- · Colonnade or awning to street boundary
- Mid-block link(s) for long runs
- Consistent north-south built edge.



Public Semi-private Private

# KEY INSTRUCTIONS





# SECTION



MID-BLOCK LINK

STREET

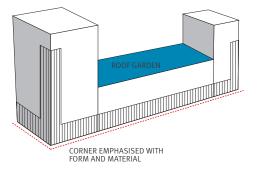
# TYPOLOGY 04B-LINEAR BLOCK CORNER











### **OBJECTIVES**

A compact urban form suitable for a variety of single or mixed uses. Type 4B addresses the importance of the corner location.

### **DESIGN REQUIREMENTS**

- Clear, linear form with consistent height across neighbouring buildings
- · All façades of equivalent quality
- Retail allowed along streets and lanes
- · Avoid continuous glass façade at street level
- East-west public access to gain solar benefits of north-south orientation
- Blocks suitable for single use or sub-divided for mixed uses
- · Colonnade or awning to street boundary
- Mid-block link(s) for long runs
- · Semi-private open space.



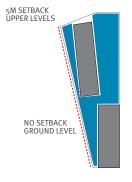
# TYPOLOGY 05 - PODIUM AND TOWER





# KEY INSTRUCTIONS

**PLAN** 

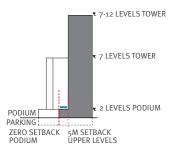


Key External

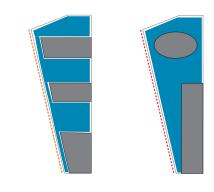
Public Semi-private

Private

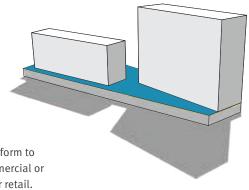
**SECTION** 



MASSING VARIATIONS



**VIEW** 



### **OBJECTIVES**

A podium-tower or podium-slab form to accommodate high quality commercial or residential (including hotel) over retail.

### **DESIGN REQUIREMENTS**

- High quality design
- Podium to provide activated streetscape of retail and commercial mix
- Avoid long stretches of continuous, uninterrupted glazing
- Solar screen of double glazing for exposed façades
- Roof garden
- No commercial address to Kent Street.

### **PARKING**

- Basement
- Undercroft or on-grade only if car park is sleeved with commercial tenancies.

Key External

Public Semi-private

Private





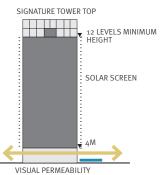
### **KEY INSTRUCTIONS**

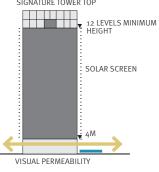
**PLAN** 

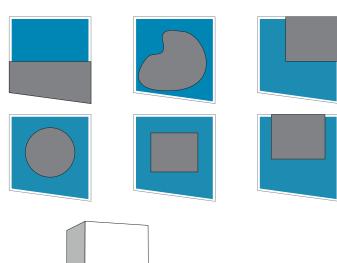
**SECTION** 

**MASSING VARIATIONS** 











### **OBJECTIVES**

- Tall towers in open space to form iconic landmarks at specific locations
- Tower architecture to be distinctive and high quality.

### **DESIGN REQUIREMENTS**

- · High quality design
- Tall, free standing tower in landscaped plaza
- · Siting and building form to respond to specific context and use
- · Visual permeability at street level
- GF/Lobby height to be minimum height of 4.om
- Solar screen or double-glazing for exposed façades
- Orientated to maximise light access to public open space.

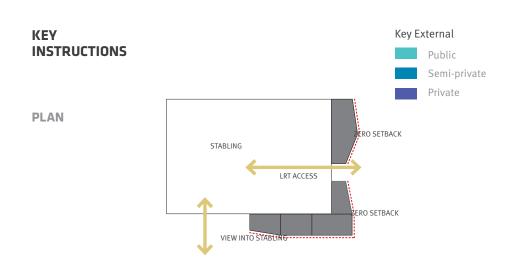
### **PARKING**

· Basement parking.

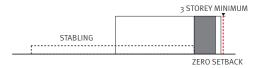


# TYPOLOGY 07 -SLEEVED STRUCTURE

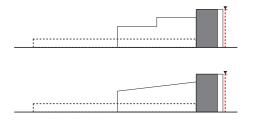




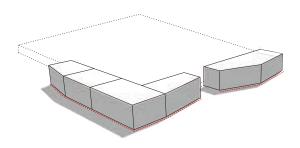
**SECTION** 



MASSING VARIATIONS



**VIEW** 



### **OBJECTIVES**

A clean, attractive and efficient tram stable workshop carefully integrated into the urban setting.

### **DESIGN REQUIREMENTS**

- Retail or commercial at street level
- Zero setback to all boundaries
- · Two storey minimum height
- Avoid continuous shopfront glazing at street level
- Ample glazing to stabling structure to provide views into stabling workshops
- No ground floor open space.

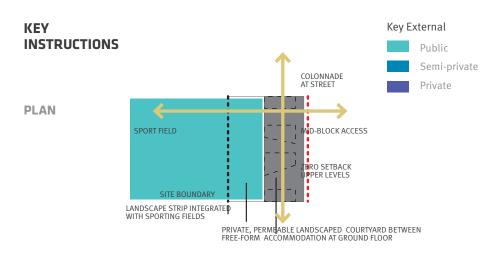


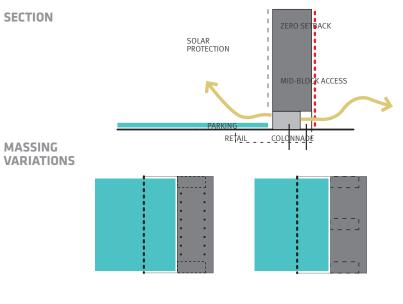
# TYPOLOGY 08 -ELEVATED BLOCK

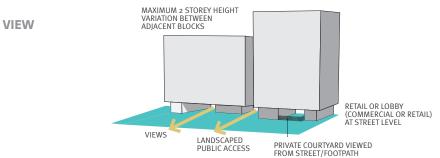


Transparency through the ground floor









### **OBJECTIVES**

Linear free-standing urban blocks elevated above street to provide visual and physical permeability.

### **DESIGN REQUIREMENTS**

- Possible partially open ground floor lobby and/or retail separated by private landscaped courtyards
- Solar screen to west facing façade
- Minimum 30% of main street frontage to built form to be permeable to active open space
- Zero setback to street boundary; side boundary setbacks as per BCA requirements
- Commercial, educational, residential uses permitted
- · Colonnade along street boundary
- Upper-level balconies not to extend over street boundary.

### **PARKING**

· Basement parking.



# TYPOLOGY 11 -PAVILION



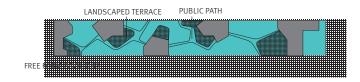




# KEY INSTRUCTIONS

**PLAN** 

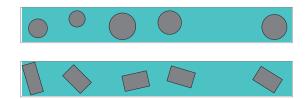




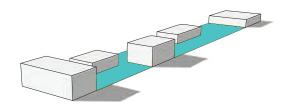
**SECTION** 



MASSING VARIATIONS



**VIEW** 



### **OBJECTIVES**

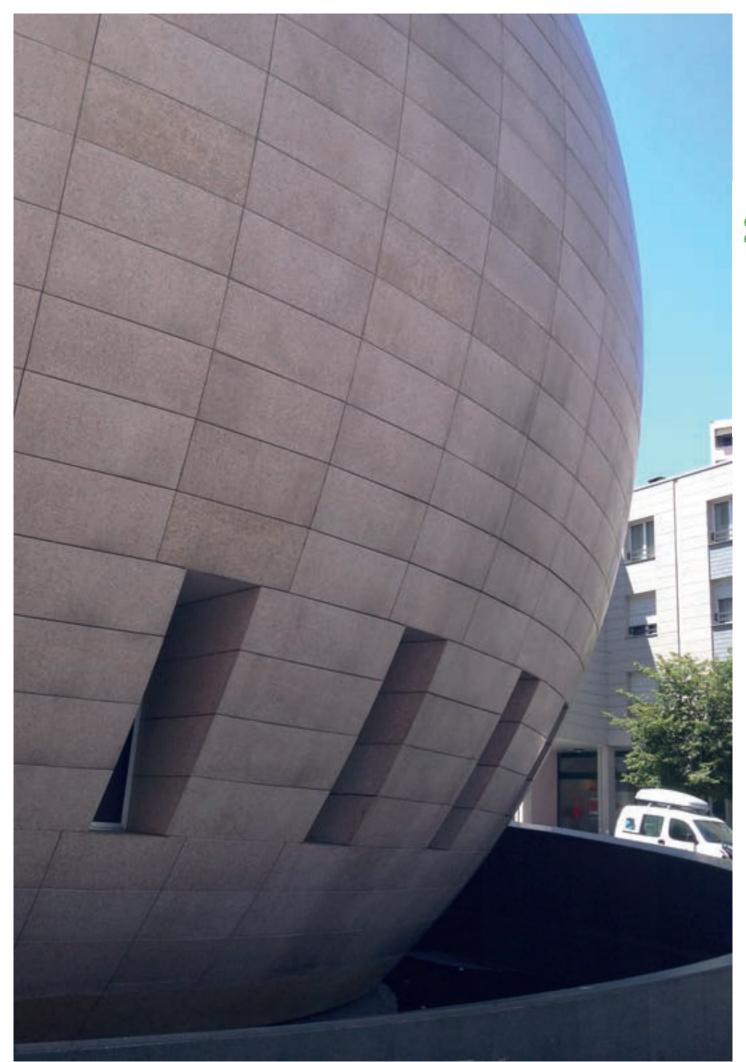
Free-form pavilions in a landscaped setting. Pavilions can vary in height, shape and use or materials.

### **DESIGN REQUIREMENTS**

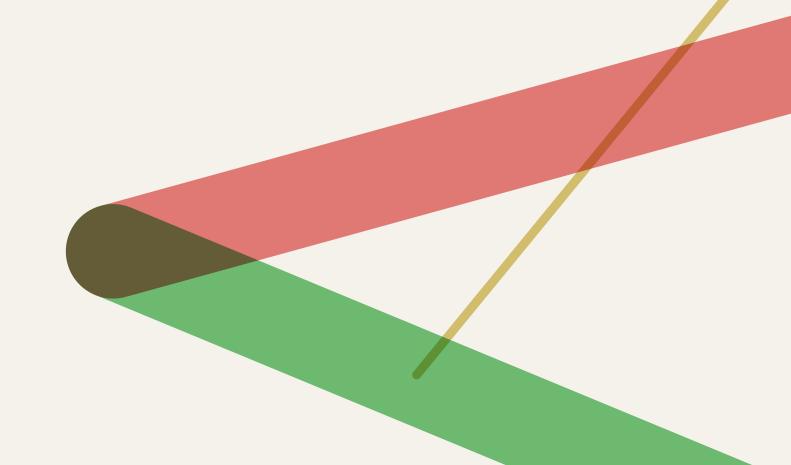
- Building form and materials unrestricted
- Innovations in form, materials and construction methods encouraged
- Single or two storey
- Each pavilion integrated with landscaped (hard or soft) terrace
- Built form to be considered 'in the round'
- Pavilions linked with public pathways
- Roof gardens and terraces encouraged

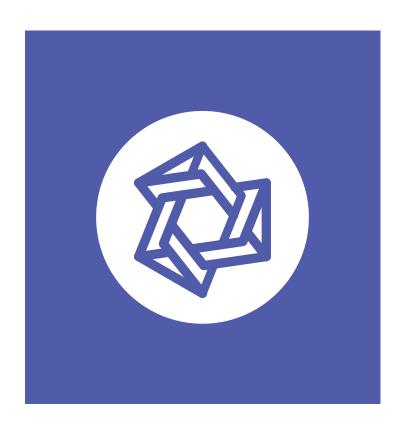
### **PARKING**

• No parking permitted at pavilions.



# APPENDIX A: CURTIN'S EXISTING CHARACTER





# DISTINCTLY CURTIN

Greater Curtin will grow from established foundations. The distinctive characteristics of its land and cultures providing the building blocks for the future city, establishing the framework for the evolution of a place that is responsive and respectful of its heritage, looking forever forward from its past.





One of the six guiding principles of the master plan sets the requirement for future development to be respectful and responsive to the established vernacular and character of the university. The following information is provided to provide insight and a starting point for appreciation of the valued design language from the campus core. This language has been a reference point for and informed the design guidance provided.



# BUILT FORM GEOMETRY AND ARTICULATION

The original buildings that establish Curtin University's vernacular were designed with scale, form and materials that responded to local climatic conditions and created a distinctive character.

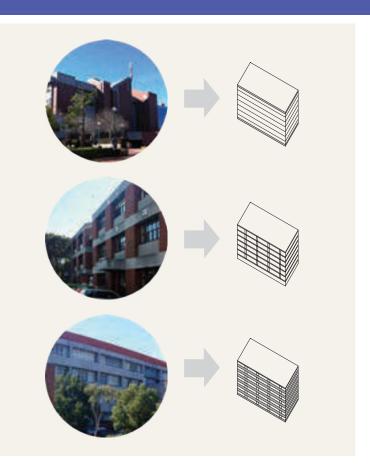
North and east facing façades are frequently distinguished by concrete blades and fins angled to mediate light and ventilation. These are sound passive design principles. These filtering devices have a strong sculptural form, as do external stairs and ramps. Such devices also cast deep shadows that add boldly defined shapes and patterns onto the external surfaces. There is the opportunity for new architecture to adopt these devices or reinterpret them.

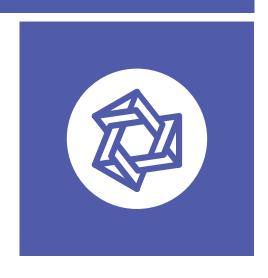
The John Curtin Centre/Chancellery (B100) and the Robinson Library (B105) have large expanses of brickwork and glazing with a few structural elements expressed in concrete. The Hayman Theatre (B102) has clearly defined forms cast in concrete. The Theatre features its escape stairs as a sculptural form and the covered colonnade on the exterior of the building sets a clear rhythm that unifies neighbouring buildings and provides a deep covered walkway. The Engineering Building (B204) employs a similar design approach although the two buildings have a quite different appearance.

Buildings within the campus have also expressed the structural frame through a change in material (usually concrete) that contrasts in colour and texture to the infill panels, the visual language of the elevations giving strong expression to the frame and infill pattern. These infill panels are generally red brick, concrete or glazing.

Key reference buildings for design exploration:

- Hayman Theatre (102)
- Main Cafeteria (104)
- Administration (101)
- Architecture (201)
- Physical Sciences (301)
- Davis Lecture Theatre (302)
- Health Sciences (305)
- Pharmacy (306)
- Watson Lecture Theatre (307)
- Biomedical Sciences (308)
- Robertson Library (105).





### **COLOURS & TEXTURES**

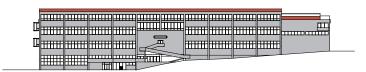
Generally the range of textures, materials and colours on a single building is limited. Exterior colour is usually inherent to the material used and not applied resulting in a natural, earthy character to the Campus's architecture, and a practical solution with respect to maintenance minimisation.

The vernacular architecture of the university can therefore be characterised by the use of four dominant materials:

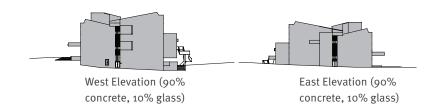
- Concrete
- Brick
- Glass
- Tiled roofs.



North Elevation (30% brick, 20% glass, 20% concrete)



South Elevation (10% brick, 45% concrete, 45% glass)



Architecture – Newer buildings within the university campus have a specific brick colour. This brick was used for the John Curtin Centre complex of buildings. It is a smooth 'engineering brick' with a random colour shift. Some of the older buildings use bricks of a slightly darker colour and with a more textured surface.

Mortar is mostly cream coloured to visually emphasise the stretcher-bond coursing pattern, although mortar colour matching the red bricks has been used to good effect.

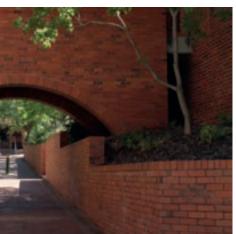
Concrete structure and walls are usually textured, mostly displaying a wood board pattern although other textures such as hammered, ribbed, sand-blasted and smooth (off-form) finishes have been used.

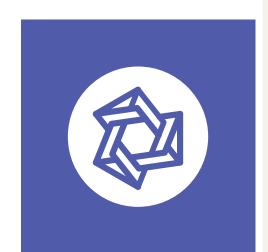
Pitch roofs are clad with terracotta coloured tiles. Roof tile profiles are limited in range and colour. The consistency of pitch angle, colour and profile of the tiled roofs contribute to the desired effect of unifying groups of buildings across the campus.

**Public realm** – Across the campus streets and walkways appear to be detailed within the following rules:

- North-south aligned streets are detailed using in-situ materials (e.g. asphalt and concrete)
- East-west aligned streets utilise unit pavers (e.g. brick paving).







### **ELEMENT**

CONCRETE SHADE ELEMENTS

### **APPLICATION**

Shade element and climate modifiers integrated into the building fabric add visual character and are low in maintenance.

CONCRETE ENTRANCES

Some early buildings are designed with prominent entry statements. The Architecture building (B201) is an obvious example. The John Curtin Gallery (B200A) also has a clearly identifiable entry. Centralised space allocation results in students moving to various buildings and clearly identifiable buildings with a clear main entry are a practical benefit.





### **ELEMENT**

CONCRETE STRUCTURAL ELEMENTS

### CONCRETE EXPRESSIVE VOLUMES

### **APPLICATION**

The clear expression of a building's structure is a common feature to Curtin's architecture.

Other structural elements such as lintels, beams, spandrels, etc. are also expressed in concrete to add visual detail and a semiotic logic to the architecture.

The Campus architecture has some interesting spatial experiences and the form of some buildings boldly express functions. Curtin Theatre has a large concrete volume poised over the brick base (on the eastern side) and a concrete colonnade on the western side. There are some lecture theatres defined by its profile and the Robinson Library features vertical shafts for stairs and lifts.

There are several examples of textured finishes to concrete that adds foreground character to walls and elements. There is ample opportunity for varied surface finishes in this material.





## **ELEMENT APPLICATION**

**CONCRETE ARTWORK** 

The plastic nature of concrete is well-suited to the integration of artworks into the building fabric. There are many contemporary techniques and innovations applicable to the imaginative casting or treatment of concrete.

CONCRETE ARCADES A very characteristic element of the original campus is the use of covered walkways and arcades constructed in concrete.

These structures are very practical in protecting pedestrians and shading the building, while adding a visual rhythm to the façade composition and a human scale to the buildings.

BRICK INFILL PANELS

Brick panels are commonly used as infill panels between structural elements, structural frames, and between windows.

BRICK EXPRESSIVE VOLUMES

Some buildings such as the Library, the John Curtin Centre, and the New Technologies Building utilise brick as the dominant material to express the form and volume of the building. The New Technologies Building (B<sub>314</sub>) uses two tones of red brick the bands to add a graphic character to the form. Individual windows are set into the brick walls to emphasis the solidity and singular nature of the form.

BRICK LANDSCAPE Brickwork and concrete are used in long stretches either as screen walls, retaining walls and garden walls. Bricks and concrete are also used for paving and other landscape elements such as steps and ramps, and various enclosures for plant and equipment.

Using similar materials for buildings and hard landscape has the benefit of uniting buildings to their surrounds.



















- Existing Pinus pinasta to be retained and replanted as required
- Existing trees to be retained
- Existing trees to be assessed for removal



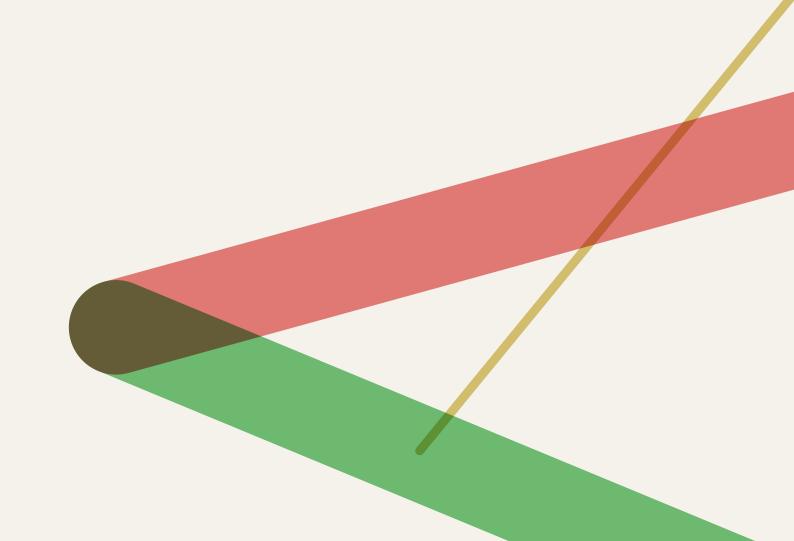
## THE PINES (PINUS PINASTA)

- For the following reasons and qualities existing pines are proposed to be retained and where required a replacement strategy delivered:
  - They are a reminder of the sites evolution –
    how it was through fire that a clearing in the
    plantation became selected for siting of Curtin
    University (known as WAIT at the time)
  - They form a connection beyond the immediate Curtin site to define a broader precinct inclusive of Collier Park Golf Course and Technology Park
  - They provide context to an architectural design dialogue between vertical Pine trunks of the Pines and fenestration of the early buildings
  - They play a role in biodiversity of the site by providing 'temporary' foraging opportunities for the Carnaby's Black Cockatoo and other bird species until a reestablishment/recovery of naturally supportive vegetation complexes are incorporated more prominently across the site
  - They have positive cultural associations developed over the life of Curtin – for example sitting under the cool and shady Pines on a hot summer's day or the iconography of the pines in early and current photographs of the campus.
  - In landscape aesthetic terms they offer a grand scale, verticality, hardiness, deep colouring and general amenity, and finally
  - Because they have proven themselves to work well (in more urban spaces) and their replacement value is not to be underestimated.





## APPENDIX B: PLANTING LIST



Botanic Name	Common Name	Height (m)	Spread (m)	Street Tree	Buffer (B)	Wet (W)	Dry (D)
Native Trees							
Acacia saligna	Orange Wattle	5	4		В	W	D
Agonis flexuosa	WA Peppermint	12	7	*	В		D
Acmena smithii	Lilly Pilly	8	5	*			
Allocasuarina fraseriana	Common Sheoak	15	8	*	В		D
Allocasuarina equestifolia	Beach Sheoak	4-6		*	В		
Allocasuarina torulosa	Rose sheoak	15		*			D
Angophora costata	Smooth Apple Gum	15	7				D
Banksia ashbyi	Ashby's banksia	2-4	2				D
Banksia attenuata	Candle Banksia	4-12	3-8		В		D
Banksia coccinea	Scarlet banksia	2	2			W	
Banksia fraseri	Dryandra	0.5-1	1		В		D
Banksia gardneri	Prostrate banksia	0.35	1.5				D
Banksia grandis	Bull banksia	8	5	*	В	W	D
Banksia hookerisana	Hooker's Banksia	2-3	2 <del>-</del> 3		В		D
Banksia ilicifolia	Holly-Leaf Banksia	10	8			W	
Banksia littorailis	Swamp banksia	10	8			W	
Banksia menziesii	Firewood Banksia	10	8		В		D
Banksia mucronualata	Swordfish dryandra	2	0.5				D
Banksia nivea	Honeypot dryandra	0.5-1	1				D
Banksia nobilis	Golden dryandra	0.6-4	2				D
Banksia prionotes	Saw-toothed Banksia	5-10	3-5				D
Banksia quercifolia	Oak-leaved banksia	1-2	2		В		D
Banksia sessilis	Parrot bush	4			В		D
Callistemon 'kps'	King's Park Special	3-5	3-4	*	В	W	
Callistemon viminalis 'captain cook'	Weeping Bottlebrush	3-5	3-4	*	В	W	
Casuarina cunninghamiana	River Sheoak	20	12	*	В	W	
Casuarina equisetifolia ssp.equisetifolia	Horse Tail Sheoak	12-18	8	*		W	
Corymbia calophylla	Marri				В		D
Corymbia ficifolia	Red flowing gum	4-8	4-8		_	W	D
Corymbia maculata	Spotted gum	20	10			W	D
Eucaluptus caesia	Gungurru, Silver Princess	3.5-6	3			W	D
Eucalyptus forrestiana	Fuchsia Gum	0.0	•			W	_
Eucalyptus gomphocephala	Tuart	12-40	5-15		В	W	D
Eucalyptus macrandra	Long-flowered marlock	5	0 10		5	w	В
Eucalyptus marginata	Jarrah	30	20			**	D
Eucalyptus nicolli	Willow Leaf Peppermint	15	12	*		W	D
Eucalyptus salmonophloia	Salmon Gum	12-30	12			**	D
Eucalyptus rudis	Flooded Gum	10-25	10-15		В	W	Ь
Eucalyptus sideroxylon	Red Iron Bark	15-20	10-15	*	Ь	W	D
Eucalyptus sideroxylori Eucalyptus spathulata	Swamp Mallee	6-10	8		В	W	Ь
Eucalyptus spaintilata Eucalyptus tetragona	Tallerack	2-5	O		Ь	VV	D
Eucalyptus tetragoria Eucalyptus torquata	Coral Gum	5-10	4-8	*			D
Hymensoporum flavum	Native Frangipani	8	4 <b>-</b> 0 5			W	D
Macrozamia riedlei	Zamia	3	5		В	VV	D
Melaleuca armillaris	Bracelet honey myrtle	3 4 <b>-</b> 5			D		D
		4 <b>-</b> 5	5	*		147	U
Melaleuca lineriifolia	Rottnest Island Tea Tree			*		W	
Melaleuca linariifolia	Flax Leafed Paperbark	7-14	6-Aug	-	Б	W	
Melaleuca preissiana	Modong	4-10	3-5		В	W	
Melaleuca quinquinervia	Broaf Leaf Paperbark	10-15	8	-		W	
Melaleuca rhaphiophylla	Moonah Swamp Paperbark	7-10	4-6	*	_	W	_
Nuytsia floribunda	WA Christmas Tree	10	6		В		D
Xanthorrhoea preissii	Grass tree	4	2		В	W	D









Botanic Name	Common Name	Height (m)	Spread (m)	Street Tree	Buffer (B)	Wet (W)	Dry (D)
Exotic Trees							
Brachychitonacerifolius	Illawarra Flame Tree						
Carya illinoinensis	Pecan	20	15				D
Cercis siliquastrum	Judas			*			
Ceretonia siliqua	Carob	10	7			W	D
Erythrina sykesii	Coral Tree	15	12				D
Delonix regia	Poinciana	12	8				D
Lagerstroemia indica	Crepe Myrtle	7	5				D
Liquidambar styraciflua	Liquidambar	25	12	*			D
Metrodsideros excelsa	NZ Christmas Tree	10	6	*	В		
Olea europaea	Olive	8	5	*			D
Pinus pinaster	Pinaster Pine	30	12			W	D
Platanus orientalis digitata	Cutleaf Plane	25	25	*			D
Pyrus ussuriensis	Manchurian Pear	8-15	8 <b>-</b> 12	*		W	
Sapium sebiferum	Chinese Tallow	10	8			W	
Schinus molle	Peppercorn Tree	10	7				D
Ulmus parvifolia	Chinese Elm	15	9	*		W	
Palm Trees							
Archontophernix cunninghamiana	Bangalow Palm	20				W	
Howea forsteriana	Kentia Palm	10	6			W	











Howea forsteriana

Botanic Name	Common Name	Height (m)	Spread (m)	Street Tree	Buffer (B)	Wet (W)	Dry (D)
Shrubs							
Acacia pentadenia	Karri wattle				В		
Acacia truncata	Spreading	1.2m			В		
Acacia vestita	Hairy wattle	3m			В		
Agapanthus sp.	African Lily					W	
Agonis flexuosa nana		1m				W	
Anigozanthos	Kangaroo Paws						
Astartea scoparia						W	
Beaufortia aestiva	Summer Flame	1.5m					D
Billardiera heterophylla	Australian Bluebell					W	
Callistemon phoeniceus	Fiery bottlebrush	2m			В		
Calothamnus quadrifidus	•	2m			В		D
Clivia sp.	Fire Lily					W	
Correa reflexa	Native Fuchsia	1m					D
Cyathea cooperii						W	
Darwinia citriodora	Lemon-scented darwinia					W	
Daviesia triflora		0.6m			В		D
Diospyros sp.	Sweet persimmon					W	
Eremophila glabra	Tar Bush	3m				W	
Ficinia nodosa	Knotted club rush	0.6m				w	
Grevillea ella bella	, , , , , , , , , , , , , , , , , , , ,	0.6-1m			В	••	D
Grevillea lemon supreme		1.2m			_	N	_
Grevillea nudiflora		0.7m					D
Hakea varia	Variable-leaved Hakea	4m	3m			W	
Hypocalymma angustifolium	White Myrtle	4111	0111			w	
Kunzea glabrescens	Spearwood					w	
Lepidosperma gladiatum	Coastal sword sedge	0.6m				w	
Lepidosperma squamatum	obasiai sword scage	0.0111			В	**	
Leucophyta brownii	Cushion bush	0.6m			5		D
Leucophyta canal rocks	Cushion busin	0.8m			В		D
Lomandra tanika	Spiny-heahed mat-rush	0.0111					
Maireana oppositifolia	Bluebush	0.8m					D
Melaleuca cardiophylla	Tangling Melaleca	2m			В		Ь
Melaleuca little nessie	ranging Melaleca	2m			В		D
Melaleuca megacephela		2m			В		
Melaleuca mesophila		3m			В		
Melaleuca systena		JIII			ь		D
Nitraria billardierei	Nitre bush	2m	4m				D
Patersonia occidentalis	Nitte busii	2111	4111			W	
Pittosporum 'Miss Muffet'	Dwarf Pittosporum					W	
Phlebocarya ciliata	Dwan Fillosporum					W	
Phormium tenax	New Zealand Flax					W	
Phyllanthus calycinus	False Boronia	1.2m				W	
Rosmarinus calycinus Rosmarinus officinalis	Rosemary	1.2111				vv	D
Scaevola nitida	Shining fanflower	2m					D
Scaevoia nitida Scholtzia involucrata	spiked Scholtzia	2111				W	U
	Native bluebell					W	
Sollya heterophylla	Bird of Paradise					W	
Strelitzia reginae	Bird of Paradise	0.5			Б	vv	D
Westringia morning light		0.5m			В		
Westringia smokey		1m			В		D









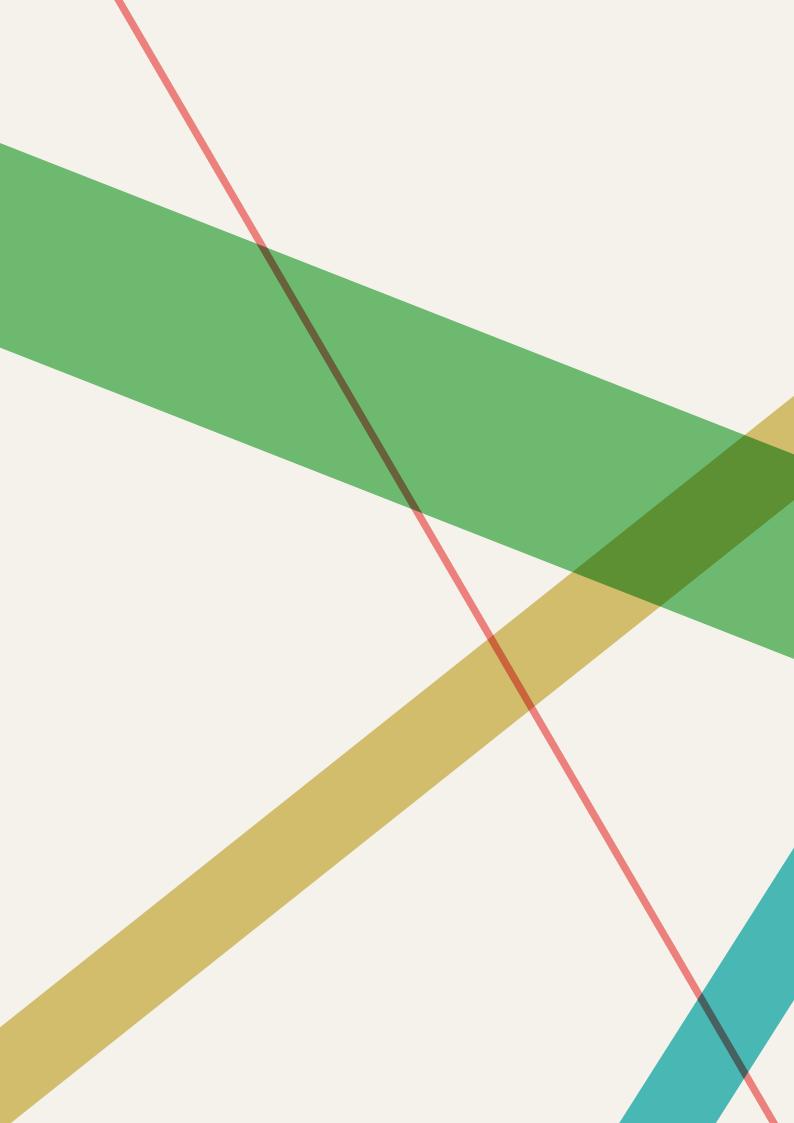
Botanic Name	Common Name	Height (m)	Spread (m)	Street Tree	Buffer (B)	Wet (W)	Dry (D)
Ground Cover							
Adenathos cueatusc"Coral Carpet"	Woolly Bush						
Baumea articulata	Jointed Rush					W	
Bolboschoenus caldwellii	March Club-rush					W	
Brassica campestris	Canola , Rape					W	
Carex inversa	Knob Sedge					W	
Chaetanthus aristatus	ű					W	
Conostylis aculeata	Prickly Conostylis	0,4m			В	W	
Conostylis juncea				*		W	
Conostylis setigera	Bristly Cottonstylis			*		W	
Dampiera linearis	Common Dampiera			*		W	
Dianella caerulea	Flax Lily					W	
Dianella revoluta var. Divaricata	· · · · · · · · · · · · · · · · · · ·	0.6m			В		D
Eleocharis acuta	Common Spikerush				_	W	_
Eremophila kalbarri carpet	озими ориногази	0.4m				W	
Gahnia trifida	Coast Saw-sedge					W	
Gastrolobium capitatum		0.8m				W	
Grevillea crithmifolia		0.5m				•••	D
Haemodorum spicatum	Mardja	010111				W	
Hemiandra pungens	aja	0.1m					D
Hypolaena exsulca		0.1111				W	
Juncus kraussii						w	
Juniperus conderta	Shore Juniper					w	
Lepidosperma longitudinale	Silere Gamper					w	
Leptocarpus laxus						w	
Macarthuria australis						w	
Meeboldina cana						w	
Meeboldina scariosa						w	
Schoenoplectus validus	Lake Club-rush					w	
Schoenus subfascicularis	Lake olds rush					w	
Thysanotus patersonii						w	
Climber							
Hardenbergia comptoniana	Native Wisteria						D
Hibbertia scandens	Snake Vine					W	
Trachelospermum jasminoide	Star Jasmine					W	















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