

# Integrated Mental Health Complex Landscape SSDA Report SSD-44034342 January 2025\_Issue L









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002

SEARs Reporting

# **SEARs Reporting**

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Appendix A - Landscape SD Drawing Set

Item	SEARS Requirement	Relevant Section of Report
8	Trees and Landscaping	
8.1	Assess the number, location, condition and significance	See page 030 Tree Retention Plan and 031 Canopy
	of trees to be removed and retained and note any	Cover (to be read in conjunction with arborist report)
	existing canopy coverage to be retained on-site.	
8.2	Provide a detailed site-wide landscape plan, that:	
8.2.1	details the proposed site planting, including location,	See page 027 & 028 Planting Strategy
	number and species of plantings, heights of trees at	
	maturity and proposed canopy coverage.	
8.2.2	provides evidence that opportunities to retain	See page 030 Tree Retention Plan
	significant trees have been explored and/or informs the	
	plan.	
8.2.3	demonstrates how the proposed development would:	
•	contribute to long term landscape setting in respect of	See page 008 Landscape Site Plan
	the site and streetscape	
•	mitigate the urban heat island effect and ensure	See page 031 Canopy Cover
	appropriate comfort levels on-site.	
•	contribute to the objective of increased urban tree	See page 031 Canopy Cover
	canopy cover	
•	maximise opportunities for green infrastructure,	Refer page 032 Draft Greener Places Design Response
	consistent with Greener Places	
Relevant Gu	idelines, Plans and Legislation to be addressed:	
	Draft Greener Places Design Guide (GANSW)	Refer 032 Draft Greener Places Design Response
	Technical Guidelines for Urban Green Cover in NSW	Refer 013 Eastern Entry and 014 Non Accessible
	(Office of Environment and Heritage (OEH), 2015).	Loading Dock Green Roof Green Connection to
		Northern Courtyard
	Australian Standard 4970 Protection of trees on	Refer arborist report
	development sites.	
	Objective 30 of The Greater Sydney Region Plan - A	See page 031 Canopy Cover
	Metropolis of Three Cities.	





# SDRP Feedback

	Comment Number	Comment	Response		Comment Number	Comment	Response
DRP 7 #1 ugust 2021		The access strategy, hierarchy of spaces and landscape connectivity is reliant on the realisation of different elements of the Westmead Health Core Masterplan which may take considerable time to eventuate. Provide detail of the landscape, access and circulation strategy for both the interim and the	The landscape concept has considered the Westmead Health Core Masterplan, in particular the 'Green Wedges' and their integration with the Open Space Landscape to the North.  The proposed design of the Northern Courtyard enables the seamless integration and coordination with the future Green Wedge. Site Plans showing access and landscaping both before and after the realisation of the Westmead Health Core		11	While the challenges of flooding, the high voltage underground connection bisecting the site, and providing access in the site's dense setting are acknowledged, concern is raised that the architectural strategy will preclude the creation of a connection with the landscape at	Access to the 'Open Landscape' to the North, has been provided, non-obstructed and where possible adjacent to landscape. Providing direct, legible, and level access to this landscape area.  To further enhance this connection paving materials and artwork representing the 'Three Rivers' and Eels journey are being considered to be incorporated along this important link.
		longterm conditions, including future expansion strategies.	Masterplan, have been included.  Longer-term evolution of the masterplan is under development between Health and GSC.			grade. Reconsider the location of the loading dock and elevated architectural strategy in order to provide a direct and generous landscape connection at grade.	Reconfiguration of the street entry has also increased connectivity to the public realm.
_	8	Demonstrate that the interim and longterm	The current landscape/ external design aims to be ingrain legibility by way of			ianuscape connection at grade.	Additional landscaping has been introduced to Redbank Road to increase the connection with landscape at grade.
		access and circulation strategies are simple and intuitive, noting the critical importance of legible navigation and wayfinding for mental health facilities.	creating landmarks,through planting, art, and other landscape/ external features. Way finding signage will complement the external landscape legibility. A more intuitive design of pathways, materials and objects shall create usability and legibility.	-	12	Provide a detailed study of the ground plane and access strategy that identifies secure lines, street interface and finishes.	The ground plane design has been greatly enhanced and clarified. Better connections to the built form have been created and stronger legibility has been created.
			Public access to the building				It has been established in consultation with the LHD that the Open Landscape shall not be secured, and shall act essentially as a public space, eliminating the need for
			Main access through CASB and link bridge on Level 2				most secure fence lines.
			Secondary access locally to the building via the eastern entry				Access to the building is via CASB L2 link bridge, secondary access via eastern entry (with direct access to the northern landscaped area), and urgent
			Urgent access to Mental Health Assessment				MHAU access via drop off on Redbank Road.
			Unit (MHAU) via drop off on Redbank Road  Palical and Indicated a second desiration of a first of a second point.				Police/ambulance and logistics have dedicated access points.
9	9	The site strategy does not demonstrate a response to the special quality of the place or a landscape strategy. Provide a landscape strategy that responds to the richness of the site, the river setting, allows for a direct and generous connection at grade, ongoing stewardship of the landscape and optimal health outcomes. It is recommended that the landscape consultant present at the next SDRP session.  Consider how a hierarchy and diversity of spaces might support and optimise health outcomes by offering variation in scale, layout, connection to landscape, views, light, noise, sensory and physical stimuli.	Police/ ambulance and logistics via dedicated access points.  The landscape design aims to initially respond to the needs of the users and to Connect with Country and with that take cues from the natural features of the locality. A large on grade 'Open Landscape' offering has been provided to the north of the site with shall host a substantial variety of spaces and amenity. Partnership with Traditional Owners is underway, creating a better understanding of country.	SDRP #2 Sept 2021	2	Where possible, seek to apply the CwC approach beyond surface treatments and landscape, to include the spatial planning, for example how circulation might relate to internal and external spaces or views, gathering space, etc.	While we believe external spatial arrangement in the northern space has been drive by cwc principals such as organic forms and a varying array of gathering spaces nestled within planting we can further investigate deeper connections though spatial design.  Refer to P008
			Two workshop sessions have occurred and concepts such as the Three Rivers, Eel lifecycle/ journey have been considerations of stories weaved into the design of the external spaces. Yarning circle, medicinal planting and ceremonial areas are also inclusions to the landscape design from these codesign sessions. Further presentation and feedback shall occur to refine and inform  We recognise that the site is constrained owing to the masterplan layout. We have endeavoured to provide a more direct relationship between the IMHC and northern	_	3	Explore applying surface treatments to the floors as well as the ceilings (often useful for orientation for consumers).	Feature paving inlays are proposed at entry points we believe it would be advantageous to 'flow' seamlessly internally/externally Refer to P10 & P13
					4	Seek further understanding of the community's preferences for the design and purpose of their indigenous spaces and present how this is being incorporated at the next SDRP session.	Refer to P008 Further consultation with users is ongoing
_	10		landscaped area at grade by relocating entry point to the east. Additionally there has been further provisions of landscaping introduced along Redbank Road to endeavour to improve the building's response at grade.		6	The project is currently not responding to the landscape wedges adjacent, that are derived from the Draft Westmead Place Strategy Structure Plan	At this stage green wedge information available has been limited We have in opportunity for strong access and considered existing levels to future proof compatibility.
10	10		The Project has focussed on optimising health outcomes by integrating mental health and general hospital services to increase attendance and support for reach in of services. Furthermore the design has responded through the following:  Creating close proximity to de-stigmatise mental health services;  Creating generous Australian Health Facility  Guideline courtyard, communal and therapeutic spaces to provide healing to consumers;	-	7	Provide further resolution of the circulation experience for consumers, visitors and staff to access the public park. Demonstrate that the journey for everyone is equitable, pleasant, easy to navigate, direct, of a reasonable distance and with generous paths	Refer to P009 Circulation
			<ul> <li>Creating views and northerly aspect over Toongabbie Creek,</li> <li>Changing the design from traditional MH 'race track' units to optimise daylight and amenity;</li> <li>Inclusion of sensory rooms to create a calming and nurturing environment.</li> <li>The landscape and external design incorporate the needs of a variety of sized groups, and individuals.</li> <li>The range of clinic services and consumers intended for this facility shall by nature drive the design of these spaces and inclusions. The outcome is overlay Connection with Country, Clinical and Environmental initiatives to create a cohesive design – with the health outcomes as desired.</li> </ul>		10	Shield the emergency entry and provide visual amenity through screening and landscaping similar to the introduced roof over the loading dock. Apply similar strategies to other areas creating negative visual impact for consumers within the building.	The team has reviewed the views towards the ramp from the building. Ambulances move along the eastern ramp promptly resulting in only fleeting moments where they may be viewed. Therefore no further screening has been provided. Screening is maintained to the eastern section of loading dock where vehicle and operational movement may be more frequent and extended.
					11	Provide strategies where undercroft planting is proposed to ensure vegetation can thrive in shaded conditions.	Refer indicative planting schedules P027, P28





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# City of Parramatta Feedback

Comment Number	Comment	Response
8	It is recommended that greater consideration is given to incorporate some of the existing significant trees, in particular trees 10, 40, 49,	Trees 10, 40, and 50 are not part of this approval.  Trees 49, 52 and 53 are required for removal due to necessary civil works in the
	50, 52 and 53 are large trees, all are in good condition and are a major feature within the site and locality and are located within or near the Masterplan Green Wedge.	carpark.
	Tree 10 is an excellent specimen and is the largest on the site and should be retained.  These trees should all be considered for retention and the design modified to accommodate them as an integral part of the Connection to Country aspect of the design.	
9	The proposed replacement tree numbers are to be equal to or greater than the number of trees being shown to be removed (minimum 100	The tree removal identifies 34 trees (excluding 15 palms) for removal, 33 trees for retention and 84 trees to be planted. As a result, the replacement of trees to be removed is in excess of 2:1
	replacement trees).	Refer P30 tree removal plan.
		Tree canopy details including the SSD and separate approval (REF) are as follows:
		<ul> <li>Separate application tree removal - 1407sqm (this refers to the REF application)</li> </ul>
		• SSD tree removal - 812m2
		• Existing canopy retained – 715m2
		Proposed new tree canopy – 2126m2
		<ul> <li>Separate application proposed tree canopy - 459m2 (this refers to the REF application)</li> </ul>
		Accordingly, the project will result in an overall tree canopy of 3300m2, or an increase of 287.38m2 tree canopy.
10	Some of the proposed trees are located too close to the building infrastructure and footpaths. Ensure the location of the new trees are positioned a minimum 3.5m away from any building, 2m away from any drainage line and are at least 1m from the edge of a planter wall or path to avoid the rootball or canopy clashing with the infrastructure.	Tree locations have been adjusted where possible. Root barriers to be adopted to minimise risk of damage to walls and services.
11	Increase the proposed tree container size increase from 75L to a minimum 100L – 400L advanced tree stock.	Smaller root balls work better with limited depth due to remediation works.  200L are proposed as street trees to Redbank Rd
12	The Tree Protection Zones (TPZ) be added to all plans for all existing trees to be retained and protected to ensure adequate protection measures and non-destructive construction method for the installation of paths and walls, for example, are considered and identified in	Refer updated drawings  IMHC_LS_DG_0110  IMHC_LS_DG_0100  IMHC_LS_DG_0002  IMHC_LS_DG_0001

Comment Number	Comment	Response
13	The TPZ and tree numbers are to be shown on all plans (landscape, architectural, civil) for coordination.	Refer updated drawings  IMHC_LS_DG_0110  IMHC_LS_DG_0100  IMHC_LS_DG_0002  IMHC_LS_DG_0001
14	A Tree Retention and Removal plan be provided showing all of the existing trees to be either retained or removed.	Refer P30
59	The planting of large / deep rooted trees to near electricity infrastructure is opposed by Endeavour Energy. Existing trees which are of low ecological significance in proximity of electricity infrastructure should be removed and if necessary replaced by an alternative smaller planting. The landscape designer will need to ensure any planting near electricity infrastructure achieves Endeavour Energy's vegetation management requirements.	Noted- no existing trees in proximity to HV line



### **Design Vision and Principles**

In May 2022, the NSW Government announced the investment of \$460 million into the development of a new Integrated Mental Health Complex (IMHC) at Westmead, that will transform the delivery of mental health services across Western Sydney and deliver improved care for patients in line with state and national mental health reforms. The Integrated Mental Health Complex will replace the existing mental health facilities at Cumberland Hospital.

The Integrated Mental Health Complex at Westmead is located within the Westmead Health Precinct, approximately 1.5km north-west of the Parramatta Central Business District (CBD), the primary metropolitan centre of Western Sydney. The site is legally described as Lot 1 DP1194390 and Lot 4 DP 1077852, with works proposed in the central part of the precinct.

The Westmead Health Precinct is one of the largest health, education, research and training precincts in Australia. Spanning approximately 75 hectares, the precinct comprises over 400,000sqm of health-related developments including four major hospitals, four world-leading medical research institutes, two university campuses and the largest research-intensive pathology service in NSW. Westmead Health Precinct sits within the broader Westmead Health and Innovation District, a cornerstone for investment, economic growth and job creation in Western Sydney, servicing one of the fastest growing populations in Australia.

Approval is being sought for the construction and operation of a new multi-storey Integrated Mental Health Complex at the Westmead Health Precinct comprising of:

- New multi-level hospital facility to a height of approximately 10 storeys
- New link bridge connecting to the existing central acute services building
- Minor alterations to the existing road network within the hospital campus
- Site preparation including bulk earth works, tree removal, cut and fill
- Inground building services works and utility adjustments, including service diversions
- Building foundation works
- Wayfinding and signage
- Landscape works.

For a detailed project description refer to the Environmental Impact Statement (EIS) prepared by Ethos Urban.

The landscape vision for the IHMC project is to provide external spaces and a landscape setting which complement the facilities of the IMHC for the use of staff, consumers and their visitors. The landscape serves a variety of functions; an outlook for the building, clinical spaces for the use of consumers and staff which play a function healing and treatment and peripheral areas that open to the broader community and health precinct.

At the forefront of the landscape design are the following principles

- Connection to Country incorporating indigenous knowledge, stories and practices in the design and function of landscape spaces
- Respite create calming spaces for a variety of users to connect with nature on the healing journey
- Activity cater to a range of users and clinical spaces though the provision of focused active and passive activities
- Safety provide a secure, safe welcoming environment for users and staff













#### Site Analysis

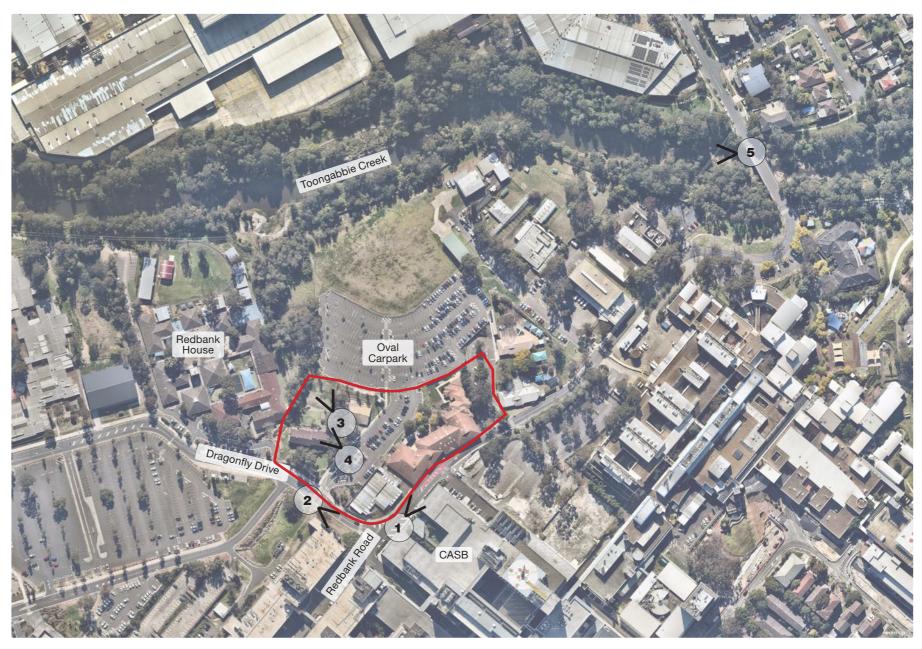
The IMHC site sits within the greater Westmead Hospital Precinct. The IMHC site is bound is by Dragonfly Drive to the south, Redbank Rd and the Clinical Acute Services Building (CASB) to the east, the existing Oval Carpark to the north and Redbank House to the east.

Toongabbie Creek runs in an east west direction to the north of the site. The naturally occurring ecological community around the site is Swamp Oak Floodplain forest. Predominant existing trees include *Casuarina cunninghamiana*, *Eucalyptus punctata* and *Angophora costata*. These trees are further detailed in the Tree retention plan within this document and the Arboricultural Impact Assessment.

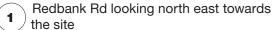
The site is known to have soil contamination which is outlined in the Remediation Action plan (RAP) developed by JBS&G landscape treatments will follow recommendations outlined in the RAP.

A high voltage easement runs though the site south west to north east, landscape in this area will be limited to softscape featuring species with non invasive root systems i.e. grasses and groundcovers. Hardscape will be limited in this zone to critical pathways.

The site is subject to the Draft Westmead Place Strategy which looks to promote employment, active and public transport and people focused amenity.









Dragonfly Dr looking across the site towards the CASB



North west corner of site



Existing buildings and trees on site



Toongabbie Creek





## Landscape Site Plan

The ground floor open landscape gives







#### Connecting with Country

The landscape design of the IMHC aims to respond to the needs of the First Nations users and Connect with Country of the Dharug people.

Connecting with Country is explored in the design as a way to further share and educate the broader community.

Workshop sessions facilitated by Cox Inall Ridgeway have taken place with Dharug Traditional Custodians. Key concepts of the Three Rivers and the open hand architectural form have led the design of the external spaces.

A Yarning circle, medicinal planting and ceremonial areas have been incorporated into the landscape design as a result of feedback from these co-design sessions. Planting will be designed to invoke the senses though touch and smell and display seasonal changes with locally significant species incorporated from input of co-design.

The theme of the Three Rivers is explored though the forms and patters in the open space pathway and front drop of area.

Importantly the courtyards provide a setting in which users in are able to go outside, feel the sun, wind, rain and look up at the sky and stars.

ESD concepts such as the treatment of stormwater runoff in the carpark and the use of native vegetation contributing to the local biodiversity support the idea of Caring for Country.

Ongoing co design is to occur to refine and inform the design as it evolves though

development.





Retention, protection and revegetation of existing planting with nature trail



Incorporation of medicinal and bush tucker planting



Ceremony Space & yarning circle refer page 008



Three Rivers Walk



Carpark WSUD





### Circulation

The open space and circulation around and though the IMHC site has been designed to be legible and inclusive.

A pathway networks connects the level 1 entry, the eastern entry though the open space towards the future green wedge. Along the length of pathways external seating nodes are provided for rest and respite.

- Green wedge connection to hospital
- Circulation from hospital to open space
- External seating nodes
- Pedestrian visitor / vehicle visitors entry
- Maintenance access







16.01.2025

### Redbank Road

The street front drop off at level 1 Redbank Rd frontage, includes streetscape elements such as seating, bollards, feature paving and softscape

The dropoff zone services urgent drop off allowing users to enter the level 1 foyer adjacent with direct access to the Mental Health Assessment Unit.

The softscape and greening will feature a series of trees to contribute to the Redbank Road streetscape and provide shade to the surrounding hardstand understory planting will be low as to maintain sight-lines between pedestrian and vehicles and in line with CPTED principles.

Bollards will be located to signal shareway users to the Redbank Rd path to dismount.



Embankment planting to ambulance bay



Street tree planting with clear trunk and low understory

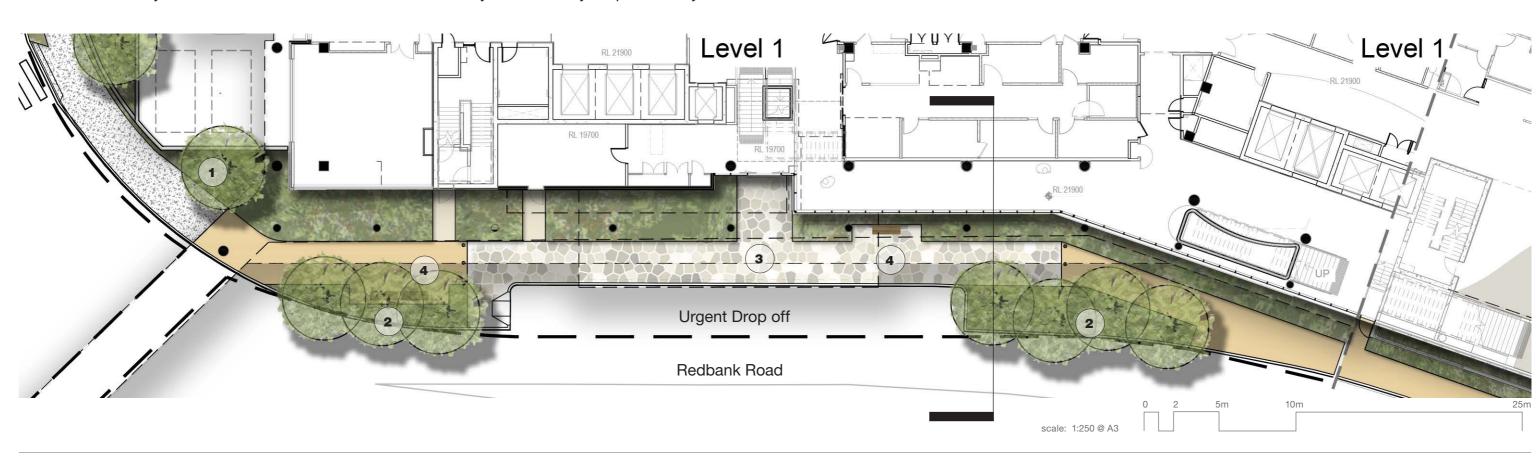


Feature paving with bollards to key dropoff & entry interface

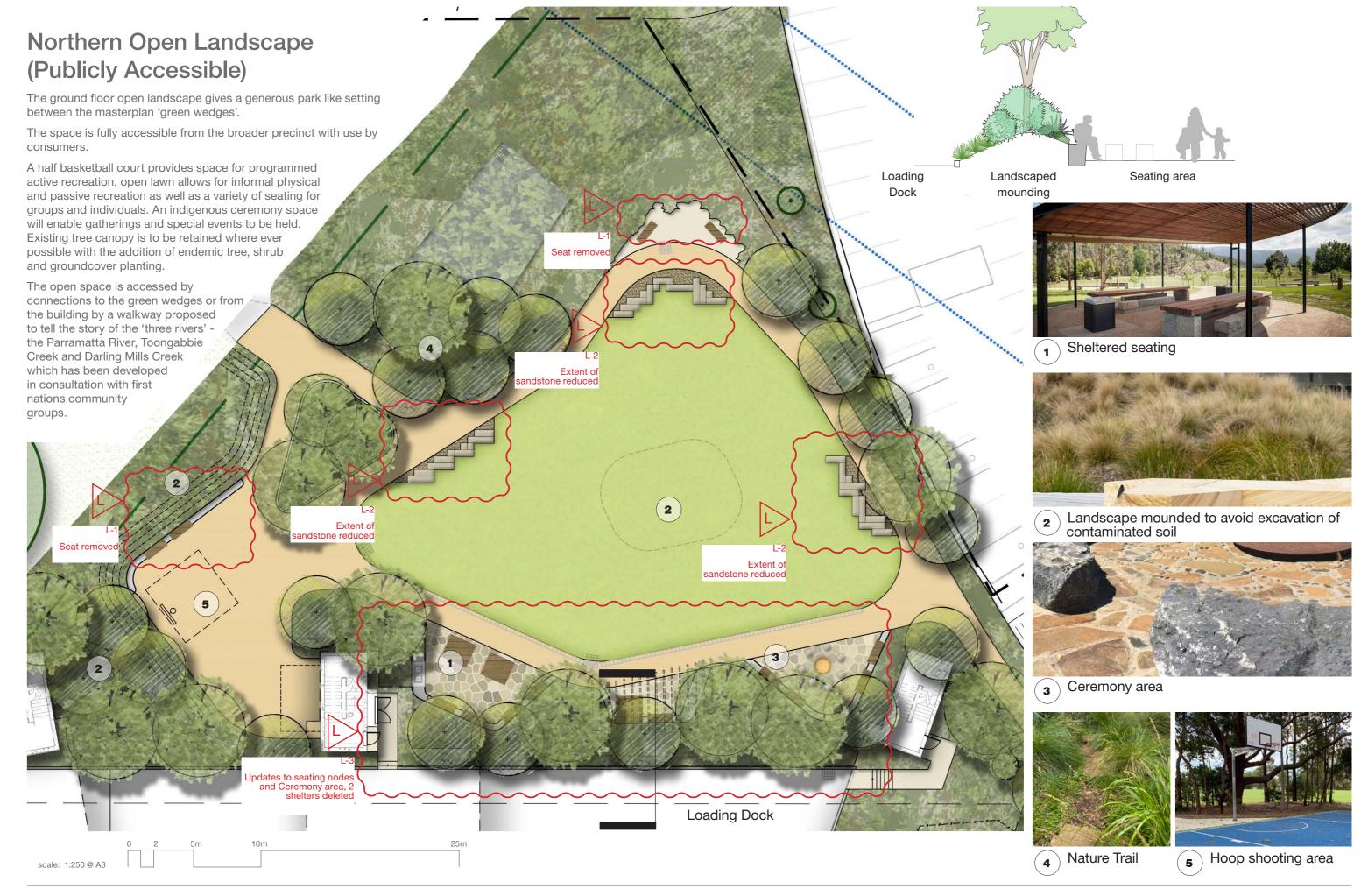


Pedestrian seating







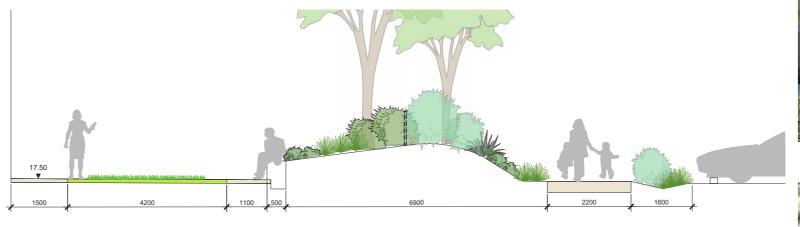






## **Staff Courtyard**

A staff terrace is located adjacent the corporate administration spaces. This area provides space for retreat for staff from clinical spaces with a range of areas for social events, group meetings and individual respite. Generous planting and screening provide separation between the publicly accessible open space and the loading dock to the west.







Screening with vegetation, mounding and architectural screens



2 Sheltered seating



Seating with provision for outdoor meetings & collaboration



BBQ for events



River walk to open space



Wire fence and screen to courtyard



scale: 1:250 @ A3

#### **Eastern Entry**

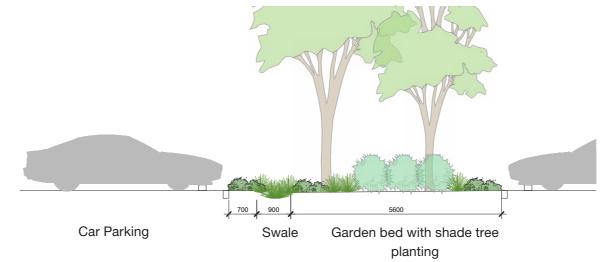
The eastern entry serves as a key community facing entry point to the IMHC.

Visitors and users arriving by car and on foot will access the building from the drop off and carpark,

Feature paving reinforcing the 'Three Rivers Concept' will guide visitors to the eastern entry. Pockets of planting soften and provide a human scale to the built form

Within the carpark, tree canopy cover is proposed to shade hardstand areas with the capture and filtration of water off hardstand though biofiltration in garden beds.

The provision of bioswales within the carpark will align with the Technical guidelines for urban green cover in NSW document.





Feature paving in the 'Three Rivers' theme



Presentation garden areas with locally significant species



Seating for drop off/pick up



Carpark shade tree planting



Bio filtration/raingardens to carpark





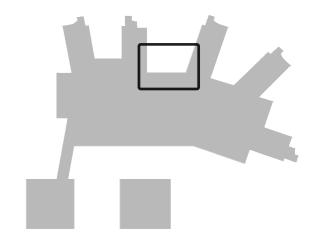
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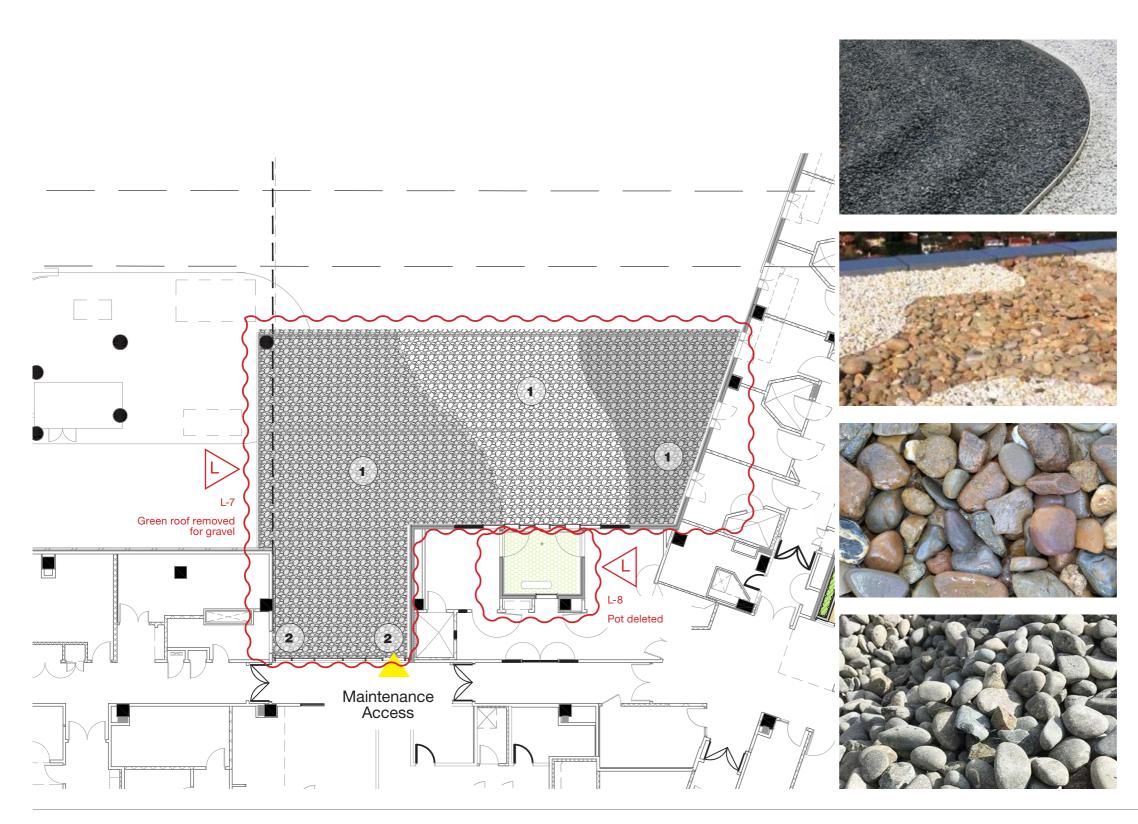


## Non Accessible Loading Dock Roof

A gravel treatment is proposed to the loading dock roof. The use of contrasting gravel types separated by edging will provide an attractive outlook tying into Connecting with Country themes on the site.

Maintenance access to the roof shall be provided through a secure door, with a continuous safety line ensuring safe and appropriate access for maintenance personnel.







(2) Maintenance Access





### Courtyards

Across 9 levels a range of corresponding clinical courtyards have been proposed. These courtyards are generally located near the common indoor spaces to the respective units.

While consultation with hospital staff, local health district are on going; the following general principles for the varying mental health treatment and acuity are being employed to the design of these spaces

- Opportunities for small groups to converse
- Areas for individuals
- Appropriate sensory planting i.e Older Persons Mental Health (OPMH)
- Continuation of Connection with Country informed design
- Considered safety hazards i.e sharp edges, ligature risks, trip hazards
- Good sightlines/ reduced concealment areas
- Overall create welcoming spaces, avoiding a 'clinical' or 'institutional' feel
- Provides spaces for users to connect with fresh air, sunlight, and vegetation



Northern Facade



Eastern Facade



Western Facade



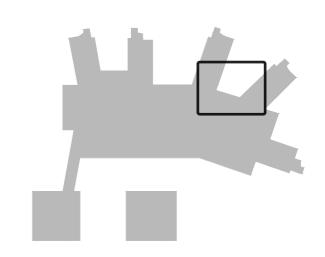




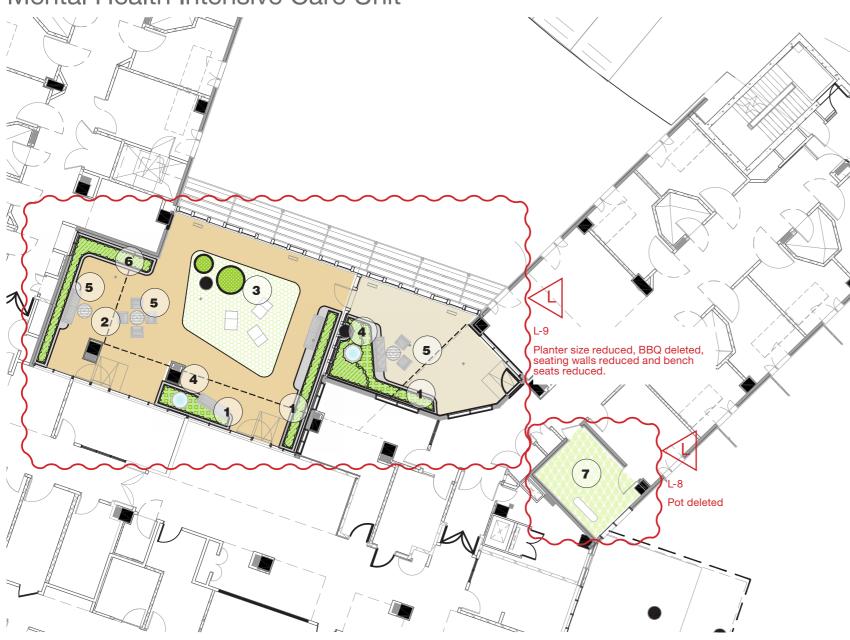








### Mental Health Intensive Care Unit



- 1 Raised garden beds
- (2) Group seating area
- (3) Artificial turf lawn with lounging seating
- (4) Raised garden bed with water feature
- 5 Fixed dining furniture
- 6 Sensory planting beds
- 7 De-escalation courtyard

The Mental Health Intensive Care Unit (MH ICU) provides a variety of amenity for individuals and groups.

Raised garden beds with sensory planting soften the space and provide therapeutic benefits.

Barbeque and dining facilities allow for social occasions within the unit and outdoor dining.

scale: 1:200 @ A3

Page 001

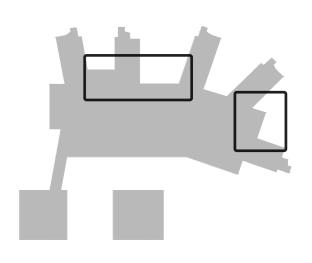
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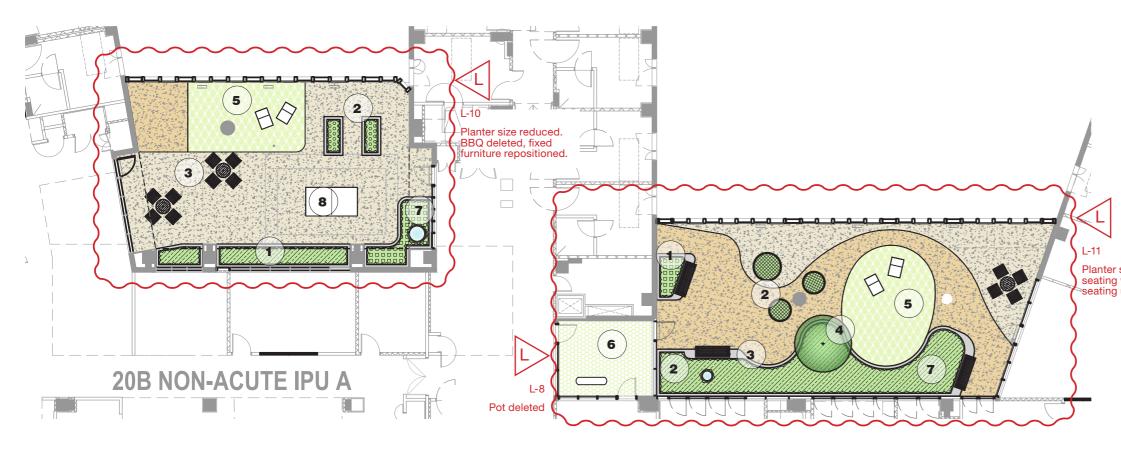






Non Acute In patient A

Non Acute IPU B



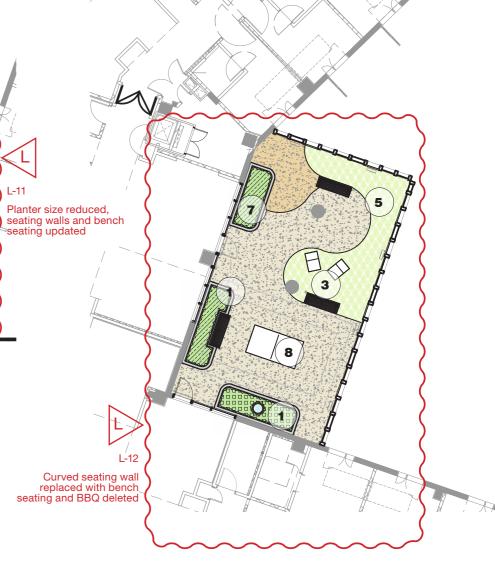
The level 2 Non Acute courtyards provides a range of seating and amenity for users.

Passive and active elements include table tennis, seating, raised beds for sensory planting and a barbeque.

De-escalation courtyards include planting and secure bench seating.

- 1 Peripheral planting
- 2 Raised garden beds
- **3** Group seating area
- (4) Trees in raised beds
- **5** Artificial turf lawn

- 6 De-escalation courtyard
- **7** Sensory planting
- 8 Table Tennis



0 1 2 3 4 5 10m 20m scale: 1:200 @ A3





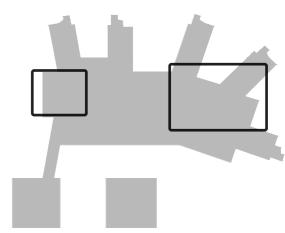








scale: 1:200 @ A3



Acute IPU Sub Acute IPU BBQ and planter deleted, seating 20B SUB-ACUTE IPU (1) Raised garden beds Planter size modified, BBQ deleted, 5 seats and 2 tables deleted. 2 Bench seating 3 De-escalation courtyard - softfall surface with durable bench seating The level 3 courtyards cater to the acute IPU and Sub-Acute **4** Table Tennis IPU's. The main amenity courtyards feature a raised planter with seating surrounds. Further individual seats cater for both (5) Sensory Planting groups and individuals using this space as part of a formal program or informally in recreation time. 6 Flexible artificial turf area A smaller sub acute IPU courtyard allows for more intimate groups and individual reflection with fall attenuation surfacing Courtyards relocated from, and safe, tamper free furniture. northern facade, Pots deleted



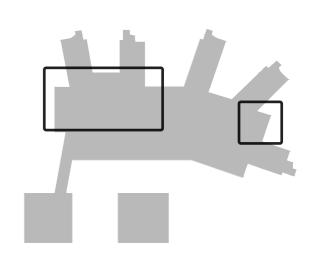












Acute High Dependency Unit IPU



The level 4 courtyards cater to the acute HDU IPU and Acute IPU units. The main amenity courtyards feature a raised planter with seating surrounds. Further individual seats cater for both groups and individuals using this space as part of a formal program or informally in recreation time.

Planter size modified, 2 bench seats deleted

A series of smaller courtyards allow for more intimate groups and individual reflection with fall attenuation surfacing and safe, tamper free furniture.

L L

Raised garden beds

(3) De-escalation courtyard - softfall

Courtyard - softfall surface with

surface with durable bench

durable bench seating

2 Bench seating

seating

BBQ deleted, planter reduced and 3 cafe tables deleted.

Acute IPU

- tables deleted.
- 5 Sensory planting
- **6** Flexible artificial turf area

X6 FF

- 7 Table Tennis
- 8 Water Feature
- **9** Exercise Bike

0 1 2 3 4 5 10m 2 scale: 1:200 @ A3

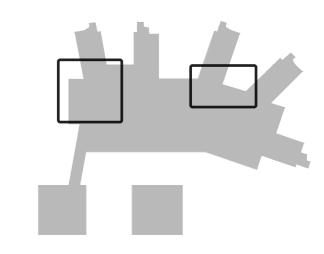












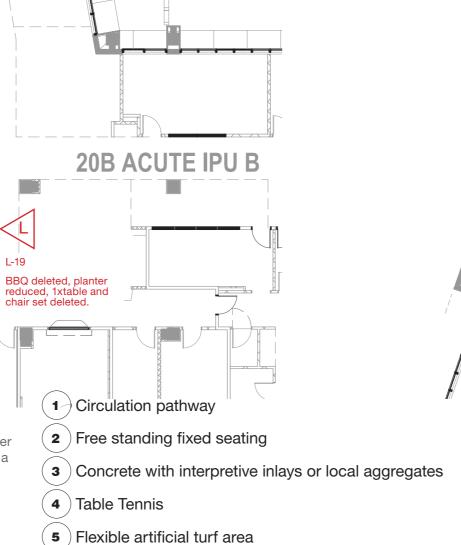
Acute IPU

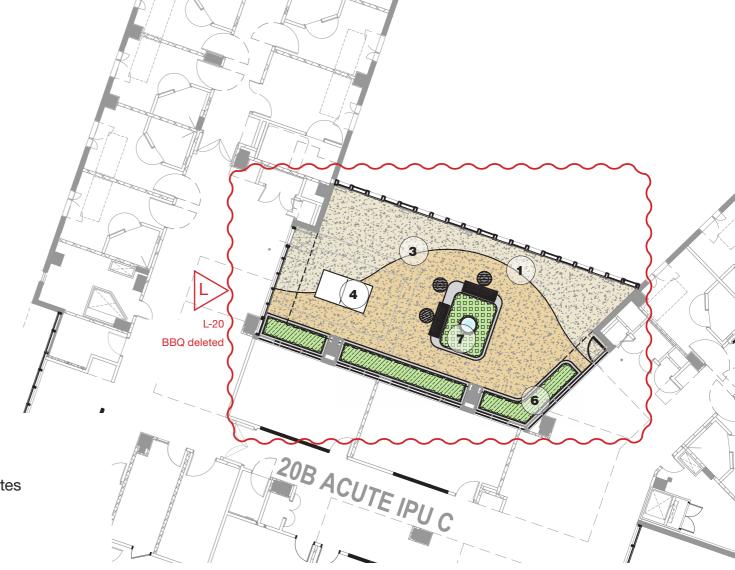
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BE FEE CH

The acute and sub acute IPU courtyards feature a raised planter with seating surrounds. Further individual seats cater for both groups and individuals using this space as part of a formal program or informally in recreation time.

Sub-Acute IPU





scale: 1:200 @ A3

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**6** Sensory planting

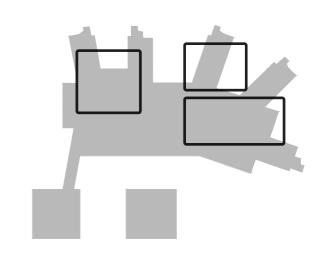
**7** Water Feature



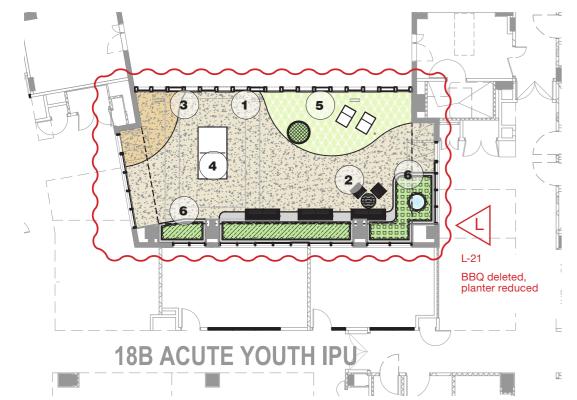






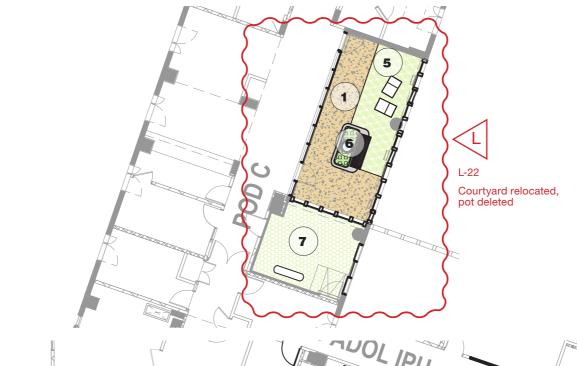


#### Acute IPU



The acute and adolescent IPU courtyard features a raised planter with seating surrounds. Further individual seats cater for both groups and individuals using this space as part of a formal program or informally in recreation time.

#### Adolescent IPU



1 Circulation pathway

(2) Free standing fixed seating

(3) Concrete with interpretive inlays or local aggregates

(4) Table Tennis

(5) Flexible artificial turf area

6 Sensory planting

(7) De-Escalation Courtyard



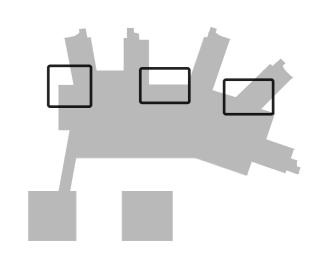








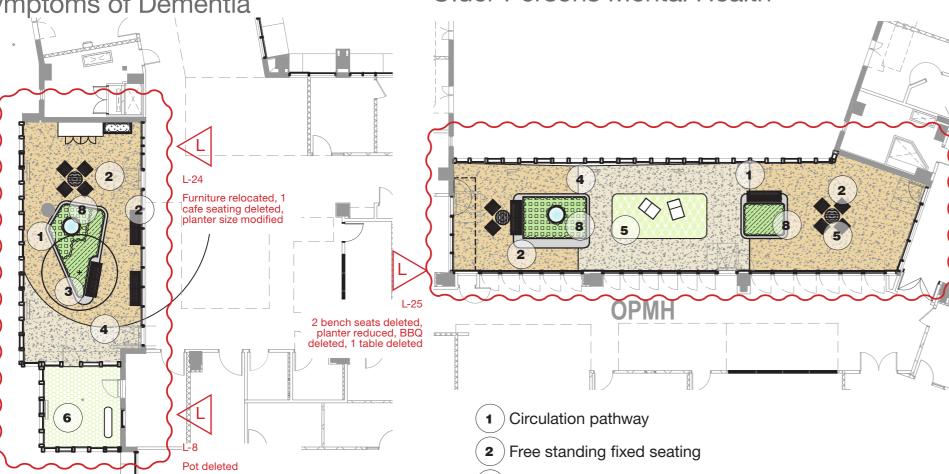


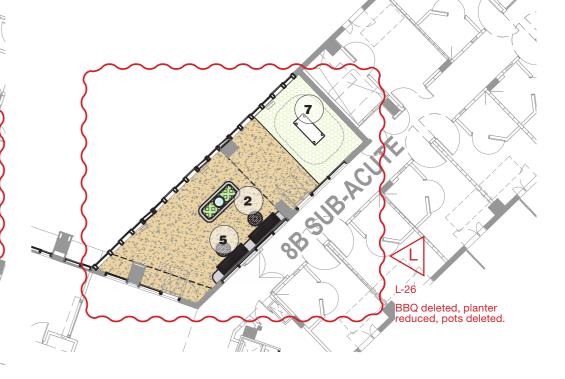


Behavioural and Psychological Symptoms of Dementia

Older Persons Mental Health

Sub-Acute IPU





The Behavioural and Psychological Symptoms of dementia courtyard provides a walking circuit around a rased planted bed. Areas of lawn and benches allow for activities within the space.

The older persons mental health courtyard allows users to walk though with raised planter beds and seating to the perimeter.

A subacute courtyard features a frangible grafted tree with raised planter and seating surrounds. Further individual seats cater for both groups and individuals using this space as part of a formal program or informally in recreation time.

- (3) Raised garden beds with frangible / grafted trees
- 4 ) Concrete with interpretive inlays or local aggregates
- **5** Flexible artificial turf area
- De-Escalation courtyard
- **7** Exercise bench
- Sensory planting

scale: 1:200 @ A3

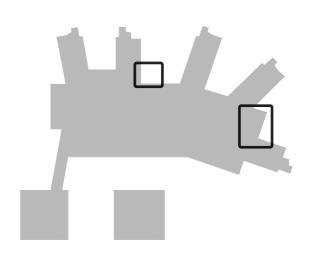
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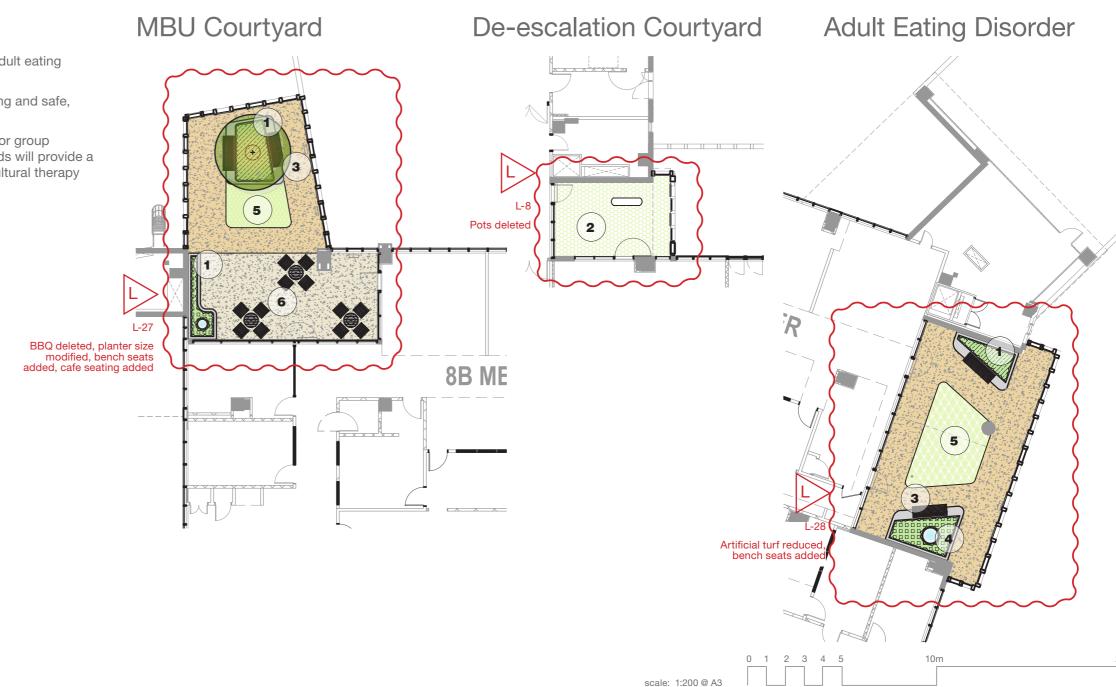


The level 8 courtyards provide facilities for de-escalation and adult eating disorder.

The de-escalation courtyard will feature fall attenuation surfacing and safe, tamper free furniture.

The adult eating disorder courtyard will provide flexible space for group meetings, and individual rest and relaxation. Raised garden beds will provide a green backdrop of internal space and could be used for horticultural therapy

- 1 Raised planter bed
- 2 De-escalation courtyard
- 3 Bench seating
- (4) Sensory planting
- 5 Flexible artificial turf area
- 6 Free standing fixed seating





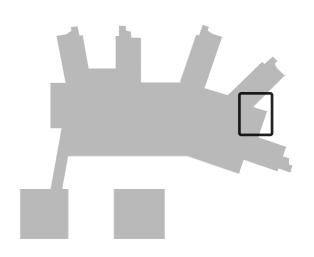












The Brain Injury Rehabilitation Service (BIRS) courtyard will include features to assist in mobility therapy. These may include ramps, stairs and sensory pathways. Raised garden beds will provide softening to the space with seating for rest and respite.

- 1 Raised planter
- (2) Raised garden beds with frangible / grafted trees
- (3) Fixed Furniture

# Brain Injury Rehabilitation Service





# **Materiality Strategy**

Materiality and planting will be selected to be durable with minimal maintenance requirements. Where practical natural locally materials eg stone will be incorporated to the landscape providing a connection to the wider landscape and familiarity in a hospital environment. Native locally endemic species will have relatively low water demands, Irrigation is to be provided with the system and lines designed to be hidden and tamper proof. A safety audit shall be undertaken to assess the system is appropriate.



# **Materiality Schedule**

Ground Floor Dropoff / Building frontages				
Image	Description	Location	Colour / Finish	
Paving				
	Aggregate concrete	Ground floor circulation	Local river aggregate	
	Unit Paving	Ground Floor drop off / building entry	Natural Stone	
	Feature Unit Paving	Ground Floor drop off / building entry		
Structures / furniture	-			
	Bench seating with back and armrests	Ground Drop off	Composite and with metal fixtures some integrated with planter walls with hidden / tamper proof fixings and anti ligature	
	Planter walls	Ground Floor plaza	Concrete walls/edging to planter beds and lawn	
Lighting	Bins	Ground floor dropoff	Composite and steel 240L bin enclosure	
Lighting	Amenity lighting	Ground Floor dropoff	Variety of post top, wall, strip and uplighting to features	

# **Materiality Schedule**

Courtyards					
Image	Description	Location	Colour / Finish		
Paving		•	•		
	Concrete with oxide aggregate	Ground Floor & Courtyards	2-3 colours - metal strip between		
	Artificial Turf	Courtyards	40mm Prestige turf		
	Softfall	Courtyards	TPV Softfall		
Structures / furniture	<u> </u>	•	•		
	Bench seating with back and armrests	Ground Floor & Courtyards	Composite and with metal fixtures some integrated with planter walls		
	Fixed dining furniture	Ground Floor & Courtyards	Composite and with metal fixtures some integrated with planter walls Selected with hidden / tamper proof fixings and anti ligature		
	Fixed Single freestanding seats	Ground Floor & Courtyards	Composite and with metal fixtures Selected with hidden / tamper proof fixings and anti ligature		

Courtyards					
Image	Description	Location	Colour / Finish		
	BBQ	Ground Floor & Courtyards	Timer controlled electric BBQ in custom glazed brick enclosure. Anti vandal with safety shutoff by staff.		
	Planter walls	Ground Floor & Courtyards	190mm Insitu concrete 500mm - 1000mm height with accent glazed brick		
	1/2 basketball court with Basketball hoop	Ground floor Open space	Coloured concrete playing surface, Pole mounted hoop.		
Lighting	Table Tennis	Courtyards	Metal Table		
Lighting	Amenity lighting	Courtyards	Uplighting to features, wall lighting		

# **Planting Strategy**

Existing trees are proposed to be retained and protected wherever possible providing shading and a green setting. Additional tree planting across the ground plane and frontages will further contribute. Proposed planting will be predominately native species with an emphasis on locally endemic Swamp Oak forest Cumberland Plain community. Species which have food, medicinal, and cultural significance are to be included with a desire though Connecting with Country consultation to provide species with fragrance to enable a sensory connection to nature and sense of familiarity. Planting within the courtyards shall be non toxic, low allergenic species without sharp foliage or forms. Trees within courtyards are to be grafted species to avoid ligature risk.

Detailed planting design is to consider CPTED principles – avoiding placing tall planting adjacent circulation pathways that may be a used as hiding places, blocking surveillance across landscaped areas.

Native locally endemic species will have relatively low water demands

An irrigation is to be provided with tamper proof fittings and lines. A safety audit shall be undertaken to assess the system is appropriate.



Species nominated in Cox Inall Ridgeway Consultation Report

### **Planting Schedule Ground Floor**

Botanic Name	Common Name	Pot Size	Mature Size (h x w) (m)	Botanic Name	Common Name	Pot Size	Mature Size (h x w) (m)
REDBANK RD STREET TREES				GRASSES AND GROUNDCOVERS			
Corymbia maculata	Spotted Gum	200L	30 x 8	Austrodanthonia tenuior	Wallaby grass	150mm	1 x 0.5
	•			Actinotus helianthi	Flannel Flower	150mm	.5 x .5
TREES				Carex appressa	Tall sedge	150mm	0.8 x 0.7
Acacia melanoxylon	Bloodwood	75L	12 x 5	Carex fascicularis	Tassel sedge	150mm	1 x 0.7
Backhousia myrtifolia	Cinnamon Myrtle	75L	3 x 4	Cymbopogon refractus	Barbed wire grass	150mm	1 x 1
Brachychiton populneus	Kurrajong	75L	8 x 10	Carpobrotus glaucescens	Pig Face	150mm	.2 x 1
Corymbia maculata	Spotted Gum	75L	30 x 8	Cissus antarctica	Kangaroo Vine	150mm	.15 x 1
Eucalyptus crebra	Narrow Leaved Ironbark	75L	15 x 6	Carpobrotus glaucescens	Pigface	150mm	.15 x 1
Eucalyptus eugenioides	Thin-leaved Stringybark	75L	30 x 8	Gazania tomentosa	Silver Gazania	150mm	.15 x 1
Eucalyptus moluccana	Grey Box	75L	20 x 8	Dianella caerulea	Blueberry lily	150mm	1.2 x 0.7
Eucalyptus tereticornis	Forest Red Gum	75L	30 x 8	Dietes grandiflora	Wild Iris	150mm	.4 x .6
Leptospermum petersonii	Lemon Scented Tea Tree	75L	5 x 3	Hibbertia scandens	Snake Vine	150mm	.1 x 1
Melaleuca decora	White Feathered Honeymyrtle	75L	5 x 4	Hardenbergia violacea	False Sasparilla	150mm	.5 x 2
Melaleuca leucadendra	Weeping Paperbark	75L	10 x 6	Ficina nodosa	Knobby club rush	150mm	0.4 x 0.5
Melaleuca linariifolia	Flax Leafed Paperbark	75L	10 x 6	Juncus kraussii	Sea rush	150mm	1 x 1
Melaleuca quinquenervia	Broad Leafed Paperbark	75L	15 x 8	Juncus pallidus	Pale rush	150mm	1 x 0.6
Melaleuca styphelioides	Prickly Leaved Paperbark	75L	10 x 6	Juncus usitatus	Common rush	150mm	0.4 x 0.5
o.aioaoa oi, poo.aoo	y _carea r aperba		.07.0	Lomandra 'Tanika'	Matt Rush	150mm	.4 x .4
SHRUBS & ACCENTS				Lomandra longifolia	Matt Rush	150mm	1 x 1
Acmena smithii var. minor	Lilly Pilly	200mm	2 x 2	Myoporum parvifolium	Creeping Boobialla	150mm	.3 x 2
Alternanthera dentata 'Little Ruby'	,,	200mm	.15 x .6	Poa 'Kingsdale'	Tussock Grass	150mm	.3 x .6
Alpinia zerumbet	Shell Ginger	200mm	1 x 1	Pennisetum 'Nafray'	Swamp Foxtail Grass	150mm	.6 x .6
Alpinia nutans	Dwarf Cardomom	200mm	1 x 1	Trachelospermum jasminoides	Star Jasmine	150mm	0.3 x 0.3
Austromyrtus dulcis 'Copper Tops'	Midgem	200mm	1 x 1.5	Poa labillardieri	Eskdale, tussock grass	150mm	0.4 x 0.25
Anigozanthos Big Red	Kangaroo Paw	200mm	1 x 1.0	Schoenoplectus mucronatus	N/A	150mm	1 x 0.5
Banksia 'Birthday Candles'	Banksia	200mm	.3 x 1	Themeda trianda	Kangaroo grass	150mm	1 x 0.3
Bursaria spinosa	Blackthorn	200mm	30 x 3	Lomandra longifolia	Tanika, spiny mat-rush	150mm	0.75 x 1
Callistemon 'Endeavour'	Bottlebrush	200mm	2x3	Microlaena stipoides	Weeping grass	150mm	0.7 x 0.2
Callistemon 'Little John'	Dwarf Bottle Brush	200mm	1 x 1	Mentha australis	Native Mint	150mm	.3 x .3
Dodonaea viscosa	Hop Bush	200mm	2 x 1	Tetragonia tetragonioides	Warrigal Greens	150mm	.5 x .5
Ozothamnus diosmifolius	Everlasting	200mm	1.5 x 1	Viola hederacea	Native Violet	150mm	.1 x 1
Eremophila glabra	Emu Bush	200mm	.8 x .5	CLIMBERS	Native violet	10011111	.1 X 1
Grevillea 'Bronze Rambler'	Grevillea	200mm	.0 x .3	Wisteria sinensis	Chinese wisteria	300mm	3-12m
Darwinia biflora	Grevillea	200mm	0.8 x 0.8	Wisteria Sirierisis	Offiliese wisteria	30011111	3-12111
Dodonaea viscosa	Sticky hop bush	200mm	0.0 x 0.0	BIORETENTION PLANTING			
Kunzea ambigua	Tick Bush	200mm	1 x 2	Poa labillardieri	Tussock Grass	75mm Tube	.3 x .6
Lasiopetalum parviflorum	FICK DUSII	200mm	0.5 x 0.3	Carex appressa	lussock Glass	75mm Tube	.6 x .6
Persoonia linearis	Narrow Leaved Geebung	200mm	4 x 3	Ficinia nodosa	Knobbly Club Rush	75mm Tube	.6 x .6
Pimelia linifolia	Rice Flower	200mm	1.5 x 1	Juncus usitatus	Tussock Rush	75mm Tube	.3 x 1
Melaleuca linariifolia 'Claret Tops'	Honey Myrtle	200mm	1.3 X 1	Dodonea viscosa 'Purpurea'	Hop Bush	75mm Tube	1 x 1
Phormium tenax 'Purpureum'	Bronze Flax	200mm	1.5 x 1	·		75mm Tube	1.5 x 1
Philodendron 'Xanadu'	Xanadu Philodendron	200mm	1.5 X 1	Melaleuca thymufolia	Rosy Paperbark	75mm rube	7 1.5 X 1
	Adriadu Fillodelidioli				L-3	$^{\circ}$	
Rhaphiolepis 'Oriental Pearl'	Dagga Like	200mm	1 X 1	CASB REPLACEMENT PLANTING	Amendment		
Spathiphyllum 'Sensation'	Peace Lily	200mm	.4 x .4	Rhaphiolepis indica	Indian Hawthorne to plant size and specie	S	1.5 x 2
Telopea speciosissima	Warratah	200mm	2 x 3	Alpinia nutans	Dwarf Cardamom	200mm	1 x 1
Tasmannia insipida	Pepper Bush	200mm	2 x 1.5	Doryanthes excelsa	Gymea Lily	200mm	1.5 x 1.5
Westringia fruticosa	Crass Tree	200mm	2 x 2				
Xanthorrhoea Sp	Grass Tree	45L	2 x 1.5				

### **Planting Schedule Courtyards**

Planting within the courtyards shall be non toxic, low allergenic species without sharp foliage or forms. Trees within courtyards are to be grafted species to avoid ligature risk.

Courtyards are generally North, east and west facing with access to indirect light as a minimum. Where planting is in an undercoft location species shall be shade tolerant.



L-30 Amendments to plant sizes and species

**Botanic Name** Pot Size Mature Size Common Name (h x w) (m) COURTYARD PLANTING Grafted Grevillea Sp 100L Alpinia nutans **Dwarf Cardomom** 200mm 1 x 1 Lilly Pilly 2 x 2 Acmena smithii var. minor 200mm Banksia 'Birthday Candles' Banksia 150mm 0.3 x 1 Callistemon 'Little John' **Dwarf Bottle Brush** 1 x 1 200mm 0.8 x 0.7 Carex appressa Tall sedge 150mm Grevillea Mt Tamboritha Wooly Grevillea 200mm 0.4 x 1 Pigface 150mm .15 x 1 Carpobrotus glaucescens Dianella caerulea Blueberry lily 150mm 1.2 x 0.7 Snake Vine .1 x 1 Hibbertia scandens 150mm Melaleuca linariifolia 'Claret Tops' Honey Myrtle 200mm 1 x 1 0.15 x 1 Myoporum parvifolium Creeping Boobialla 150mm Westringia fruticosa Coastal Rosemary 200mm 2 x 2 Cissus antarctica 150mm .15 x 1 Kangaroo Vine Dichondra repens Kidney Weed 150mm .1 x .5 Dianella 'Little Jess' Native Flax 150mm .2 x 1 Dietes grandiflora Wild Iris 150mm .4 x .6

Botanic Name	Common Name	Pot Size	Mature Siz
			(h x w) (n
Hardenbergia violacea	False Sasparilla	150mm	.5 x 2
Poa 'Kingsdale'	Tussock Grass	150mm	.3 x .6
Lomandra longifolia	Matt Rush	150mm	1 x 1
Lomandra 'Tanika'	Matt Rush	150mm	1 x 1
Lasiopetalum parviflorum		200mm	0.5 x 0.3
Ozothamnus diosmifolius	Everlasting	200mm	1.5 x 1
Pimelia linifolia	Rice Flower	200mm	1.5 x 1
SENSORY SPECIES and VEGETABLE PLANTER	BED		
Leptospermum petersonii 'Little Lemon Scents'	Tea Tree	200mm	1.5 x 1.5
Prostanthera rotundifolia	Native Oregano	200mm	2 x 1
Rosemarinus officinalis	Rosemary	200mm	0.5 x 0.5
Mentha australis	Native Mint	150mm	.3 x .3
Stachys byzantina	Lambs Ear	150mm	0.4 x 0.4
Tetragonia tetragonioides	Warrigal Greens	150mm	.1 x .2

Common Thyme

Native Violet

Species nominated in Cox Inall Ridgeway Consultation Report

Thymus vulgaris

Viola hederacea





Myoporum parvifolium Creeping Boobialla



Dianella 'Little Jess'



Grafted Grevillea Sp



Cissus antarctica



Pimelia linifolia

Leptospermum petersonii 'Little Lemon Scents'



150mm

150mm

 $0.3 \times 0.3$ 

0.1 x 1

Mentha australis



Tetragonia tetragonioides





# **Proposed Trees**

Proposed tree species have been selected from locally indigenous plant communities with species to provide amenity such as shade and screening.







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# **Existing Trees**

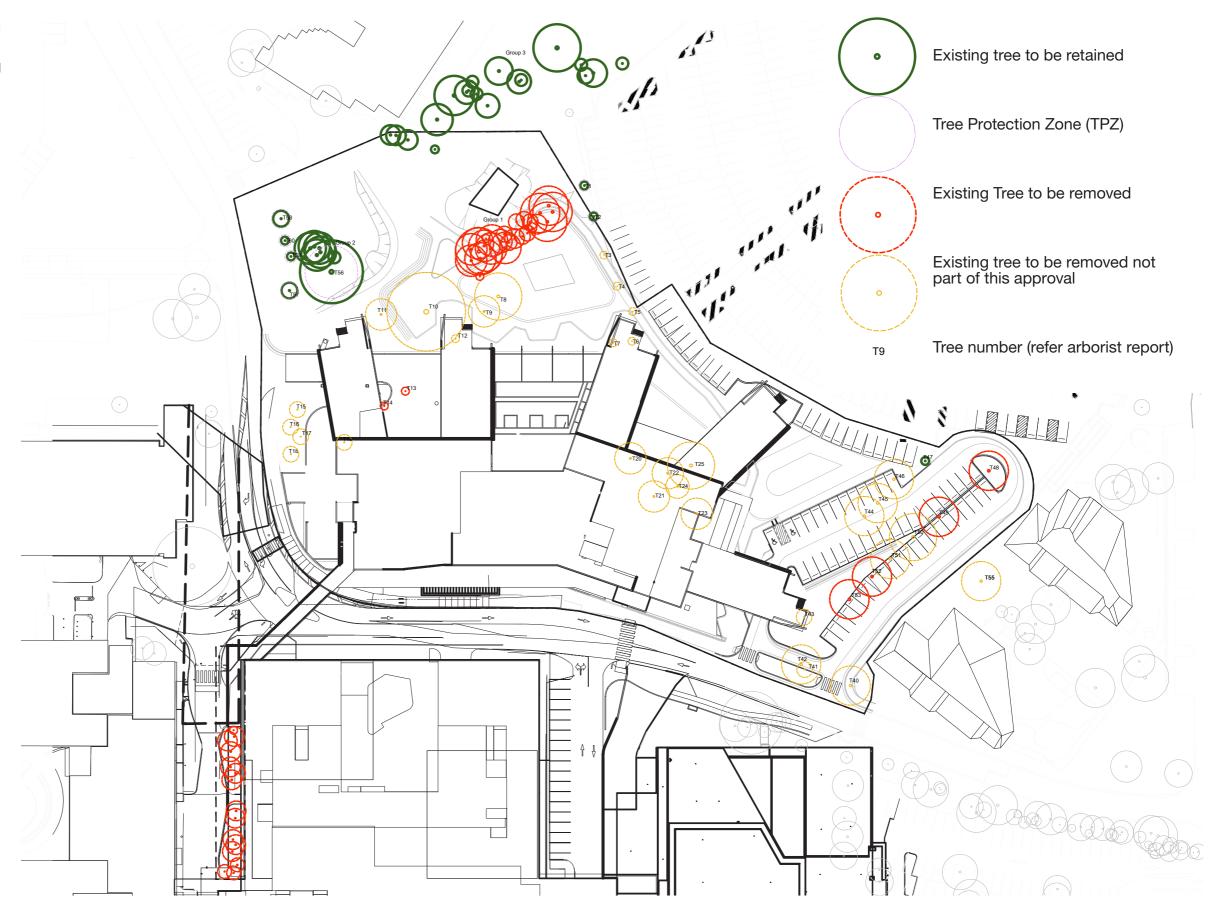
Existing trees are proposed to be retained and protected wherever possible providing shading and a green setting.

Due to RAP requirements, site constraints, and construction staging many trees are required to be removed. This removal of existing trees shall be offset by a significant replanting proposal. It should be noted that all trees have been assessed as fair/ poor with retention value as low or medium.

Refer to Tree Management Strategies Arboricultural impact Assessment 16th November 2022 for further information

1	Eucalyptus punctata	Grey Gum
2	Eucalyptus punctata	Grey Gum
13	Angophora costata	Sydney Red Gum
14	Angophora costata	Sydney Red Gum
28	Melaleuca linarifolia**	Paper Bark
29	Eucalyptus eximia**	Yellow Blood Wood
34	Casuarina cunninghamiana**	River She-Oak
35	Casuarina cunninghamiana**	River She-Oak
36	Casuarina cunninghamiana**	River She-Oak
37	Casuarina cunninghamiana**	River She-Oak
40	Eucalyptus species	Eucalyptus
47	Casuarina cunninghamiana	River She-Oak
48	Casuarina cunninghamiana	River She-Oak
49	Casuarina cunninghamiana	River She-Oak
52	Corymbia citriodora	Lemon Scented Gui
53	Casuarina cunninghamiana	River She-Oak
55	Casuarina cunninghamiana	River She-Oak
56	Corymbia maculata	Spotted Gum
57	Angophora costata	Sydney Red Gum
58	Eucalyptus punctata	Grey Gum
59	Corymbia maculata	Spotted Gum
60	Casuarina cunninghamiana	River Oak
Group 1	Eucalyptus maculata	Spotted Gum
	Eucalyptus punctata	Grey Gum
	Casuarina cunninghamiana	River Oak
Group 2	Casuarina cunninghamiana	River Oak
Group 3	Casuarina cunninghamiana	River Oak

<sup>\*\*</sup>Trees not shown on this pla







16.01.2025

### **Canopy Cover**

In accordance with Objective 30 of The Greater Sydney Region Plan - A Metropolis of Three Cities Urban tree canopy cover is increased.

Additional canopy cover will ensure landscape spaces are comfortable year round shading hardstand as well as providing visual amenity viewed from the building surrounding and above ground floor landscaping.

The close proximity of the site to Toongabbie Creek vegetation corridors complements existing habitat

Existing trees are to be maintained in the existing north east carpark with additional tree canopy throughout open spaces and to street frontages.

The proposal represents an increase in canopy cover from existing of 1116sqm to 2841sqm.







#### Draft Greener Places Design Response

Designing to the Greener Places and Better Placed Design Framework for Green Infrastructure:

Following the ethos of the 'Greener Places' design framework, this project focuses on providing a development harmonious with the existing setting.

Incorporating the Greener Places and Better Places principles through the landscape design philosophy

#### Integration & Better for community

Combine green infrastructure with urban development and grey infrastructure

Tree planting and site planning enables a large green space to the northern portion of the site. This is in close proximity to Toongabbie Creek Vegetation corridors allowing for greater canopy connection. Tree planting around the proposed building and streetscapes will further reinforce these connections. The Open space provides pedestrian connections to future adjacent masterplan 'Green Wedges' connecting to the broader Westmead Campus.

Exploration of Water Sensitive Urban Design (WSUD) initiatives have been employed with swales for water capture, bioretention basins in the open space and filtration in the carpark.

#### Connectivity

Create an interconnected network of open space

A legible path network surrounds the IMHC building with the Open space providing a key link for east-west pedestrian movement. Redbank Road and Dragonfly Drive frontages contribute to campus streetscapes with accessible pathways and street tree planting. The Redbank Road frontage considers the masterplan inclusion of a cycle connection. Hardscape finishes and feature planting will assist formal wayfinding in integrating IMHC connections into legible links in the Westmead Campus broader urban fabric.

#### Multi functionality & Better Fit

Deliver multiple ecosystem services simultaneously

The landscape performs a variety of ecosystem services including the treatment and management of water on site, and climate regulating though minimising hardstand and increasing tree canopy cover.

Greater biodiversity in planting will allow for pollination and habitat creation. Cultural spaces have been provided to support the gatherings, the passing of knowledge and wisdom in the support of mental health care.

#### Participation & Better Value

Involve stakeholders in development and implementation

Participation as a principle seeks to involve the knowledge and needs of diverse parties in relation to planning. Ongoing engagement across indigenous groups and user groups has informed key design drivers and principles explained in this document. The look and feel of the landscape is to represent the community and include opportunities for ongoing participation and evolution through time.

Clinical courtyards have been developed with user groups. The wealth of knowledge offered within this setting ensure the design and features are relevant for the community and supported by the day to day end users.

These principles are supported by three key strategies of

#### Open space for recreation

The open space provides for recreation including the Ceremony Spaces, basketball, passive and active amenity alongside the mental health facility. These spaces allow for formal and informal gatherings of a variety of sizes, day and year round use of the space. Secure outdoor spaces enable users the chance to connect with nature, relax and reflect while undertaking treatment.

#### Urban tree canopy

The landscape design proposes canopy cover across the extent of the ground plane resulting in a net increase in canopy cover this is to be supported by an understory of locally native species complementing local ecologies of the

#### Connecting bushland and waterways

The addition of tree planning across the site will complement existing surrounding tree canopy. New plantings will ensure diversity in the maturity of trees ensuring secession in stock- protecting and increasing canopy cover in the future.

Within the site, a Water Sensitive Urban Design (WSUD) approach will ensure that water coming though the site will be appropriately captured treated and reused.

The key benefits of adopting the Greener Places and Better Places framework as a basis for this design include:

- Locally harmonious landscape character
- Consideration of micro climates within the site
- Sharing of the cultural and environmental stories of the area



