



WENTWORTH HEALTH SERVICE REDEVELOPMENT

LANDSCAPE DESIGN

MAY 2023 | REVISION 05

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TO BE READ IN CONJUNCTION WITH:

- A. ARCHITECTURAL REF PLANS
- B. LANDSCAPE REF PLANS
- C. CONNECTING WITH COUNTRY REPORT

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Date	Issue	Issued By
20.12.22	DRAFT	FC
10.02.22	FOR ISSUE	FC
04.04.2023	DRAFT	FC
11.04.2023	FOR ISSUE	FC
01.05.2023	FINAL	FC
24.05.2023	FINAL	BM

1.1 BACKGROUND

The Wentworth Health Service Redevelopment is a \$30m project located in the Far West region of NSW, close to the Victorian border. The project will include full asset replacement of the existing health service's ageing buildings and infrastructure, along with additional health services in line with contemporary models of care and the ongoing needs of the local area.

The current Wentworth Health Service is in the town of Wentworth within the Far West Local Health District (FWLHD). It has historically been a 20-bed inpatient health service with 2-bays dedicated to urgent requirements. 15 beds are currently operational and there is currently no Urgent Care or Emergency facility. The hospital is a short drive from the town with no immediate neighbours. It serves approx. 3700 people from Wentworth and surrounding towns and is supported by a small service in Dareton and a new HealthOne in Buronga. The nearest hospital within the Local Health District is Balranald (approximately 2hrs away) and Broken Hill (3hrs away). The service is also supported by Mildura Base Hospital, operated by Victoria Health (30 minutes away).

Three sites were shortlisted and explored during the master plan phase, of which the existing hospital site is the preferred site and was endorsed by the governance during the master plan phase.

1.2 DESIGN CONSIDERATIONS

The intention for the design is provide an ecologically robust and naturalistic setting for staff and patients to work and recover in. The landscape design ties together the landscape character external to the site beyond the levee and compliments the functional layout of the hospitals internal design. Where appropriate the design intent is informed by the GA NSW Greener Places Design Guide (2020).

Considerations:

- Retain existing levee bank,
- Minimise impact on existing riparian zone along the river,
- Minimise impact on existing vegetation, and
- Allow for future growth opportunities
- Consider bushfire asset protection zone recommendations
- Improve habitat opportunities and ecosystem health

- Retain and increase existing tree canopy cover
- Promote Connection with Country (refer to Connecting with Country Report)

The design explored the location and access of key spaces and the movement between areas for all users. Each area was discussed within the framework with project user groups over the course of Concept and Schematic Design phases. Their feedback has guided the design response.

1.3 DESIGN INTENT

The focus of the landscape design is to reflect and compliment the local characteristics of the Wentworth Hospital Redevelopment, whilst providing amenity and familiarity to the users of the health facility.

The planting and material selection seeks to provide a naturalistic landscape setting. Planting selection has been culturally informed by our engagement with the local Indigenous community. The planting palette is to be low maintenance, drought resistant and native to the Wentworth region, providing species that can withstand local climate conditions.

The entry forecourt is designed to clearly define the main entrance and work in cohesion with the carpark so that it is easily accessible for all users. Low local endemic planting is intended for this area with the opportunity for some informal gathering spaces for public.

To address the level difference between the entrance & the lower car park areas will be battered and boulders will aid in providing passive retaining opportunities minimising the use of retaining walls. A formal ramp allows pedestrian access from the lower carpark. Feature shrub planting is used along the batter between the fleet carpark and eastern façade to screen the carpark.

The use of evergreen, native trees to the entry carpark provide a soft screen to the hospital that will help with privacy for the internal occupants and generate shade for pedestrians. Existing trees are a priority to retain with a minimum replacement rate of 1:4 for any trees removed.

Existing Rose bushes are intended to be re-located and re-planted on site to form a memorial garden located near the

accommodation zone and shaded by existing trees

Areas directly adjacent the levee are intended to be mass planted and tie back into the naturalistic landscape of Wentworth. The planting consists of local endemic species that can re-establish the existing site and areas that have been disturbed during demolition.

Lawn area will be limited to the future accommodation zone with the preference of native grasses and shrubs being used. Local species can be seeded via hydroseeding/hydromulching in strategic dense clusters revegetating the site.

The landscape directly adjacent the hospital is to have semi-mature plantings, strategically chosen and positioned to provide views from the hospital rooms. The ground plain is to be made up of varied typologies of gravel with plants emerging from the ground plane in clustered zones. Endemic plant species (grasses/ground covers/shrubs) to a max height of 1m and featuring boulders/logs and a range of gravel in varied sizes, colours & textures are shaped around paths.

The landscape design, provides spaces that offer an opportunity for direct visual and cultural connection to the river, endemic planting species for cultural whilst accommodating for future climatic events.

1.4 GANSW – Urban Design for Regional NSW

The Wentworth Health Service Redevelopment design incorporate the GANSW Urban Design for Regional NSW 2020 guidelines by providing naturalistic and ecologically robust landscape design features that tie in with the local landscape character and Indigenous culture. The design also takes into consideration recommendations for bushfire asset protection zones, habitat opportunities and ecosystem health, and promoting Connection with Country.

The design retains existing vegetation and tree canopy cover, minimizes impact on existing riparian zones, and incorporates mass plantings of local endemic species to help re-establish the existing site and areas that have been disturbed during demolition. Additionally, the design provides spaces that offer direct visual and cultural connection to the river, and the planting palette is low maintenance, drought-resistant, and native to the Wentworth region, which helps to withstand local climate conditions and showcase Wentworths regional character.

GANSW Design Principle	Description	How Wentworth Hospital Meets the Design Principle (Landscape)
Context	Designing for the unique context of each regional town or city, including its history, culture, landscape, and built form.	The landscape design for Wentworth Hospital uses native plant species and features outdoor spaces that reflect the local landscape and environment.
Connectivity	Providing a well-connected network of streets, pedestrian paths, and cycleways to encourage active transport and enhance accessibility.	The landscape design incorporates a network of pedestrian paths and outdoor spaces that enhance connectivity and accessibility throughout the hospital grounds. These can in the future be linked into public transport infrastructure.
Identity	Creating distinctive and memorable places that reflect the unique character and identity of each regional town or city.	The landscape design intends to incorporate public art and outdoor spaces that reflect the local landscape and culture, creating a distinct and memorable sense of place.
Integration	Integrating new development with existing infrastructure, services, and communities to ensure a cohesive and sustainable urban fabric.	The landscape design incorporates sustainable features such as water-efficient irrigation and the use of locally sourced planting materials, and is designed to integrate with the surrounding ecology.
Resilience	Designing for resilience to natural hazards and climate change, including measures to mitigate flood risk and manage water resources.	The landscape design incorporates measures to manage stormwater runoff and reduce the urban heat island effect, and uses drought-tolerant plant species to increase resilience to climate.
Sustainability	Incorporating sustainable design principles, such as reducing energy consumption, promoting renewable energy, and minimizing waste generation.	The landscape design incorporates sustainable features such as water-efficient irrigation and is designed to reduce its environmental impact and promote biodiversity.
Adaptability	Designing for adaptability to future changes, such as demographic shifts and use cases.	The landscape design incorporates flexible spaces and multi-use outdoor areas that can adapt to changing community needs and future developments.

The Draft Greener Places Design guideline is a document developed by the NSW Government's Department of Planning, Industry and Environment, which provides guidance for the design of sustainable and resilient public spaces. The guideline aims to support the creation of high-quality public spaces that enhance the health and wellbeing of local communities, support biodiversity, and mitigate the impacts of climate change.

The guideline is relevant to the Wentworth Hospital redevelopment project as it provides guidance on creating sustainable and resilient public spaces that support health and wellbeing. The Wentworth Hospital redevelopment project aims to create a new healthcare facility that not only meets the needs of patients but also contributes to the wellbeing of wider community. By incorporating the principles of the Draft Greener Places Design guideline into the design of the hospital and its surrounding spaces, the project can create a more sustainable and liveable environment for patients, staff, and visitors alike.

GANSW Guidelines	Guideline Description	Design Response
Open Space and Recreation	Open space refers to "open" (or not built upon) land that accommodates recreation or provides relief from the built environment.	<ul style="list-style-type: none"> Design provides spaces that offer direct visual and cultural connection to the river Pavement types vary from smooth to rough providing a range of safe walking challenges Palliative Courtyard is designed to be enclosed by a slatted fence, providing privacy whilst allowing visual connection to adjacent planting areas Yarning Circle is an outdoor space designed for social gatherings and cultural ceremonies, constructed using natural cut stone, concrete, and ground plane patterns
Tree canopy	Urban trees have a critical role in creating healthy cities. They provide shade and shelter, improve air quality, absorb carbon and rainfall, cool local environments, and support wildlife	<ul style="list-style-type: none"> Tree replacement rate is greater than 4:1 for Stage 1B. This is to promote greater shade and canopy cover on site. Native species have been selected on site to support habitat values. Retention of existing vegetation and tree canopy cover maintained with only 9 trees removed on site.
Bushland and Waterways	Incorporation of Green infrastructure seeks to contribute to biodiversity conservation by providing habitats or establishing connections between habitats and populations.	<ul style="list-style-type: none"> Surface materials selected to maintain permeability Native vegetation prioritized for cultural usage and Planting palette is low maintenance, drought-resistant, and native to the Wentworth region Landscape incorporates mass plantings of local endemic species on areas that a disturbed during construction Several bioswales are located on the site. These are vegetated channels that are designed to slow down and treat runoff, removing pollutants and recharging groundwater supplies. This also minimises impact on existing riparian zones

2.1 SITE LOCATION

The site is a crown land title DP 1136392 and the address is listed as 24 Hospital Road, Wentworth, NSW, 2648

The hospital site is accessed via the Hospital Road off the Silver City Highway. It is approx. 1km from the town center across the two bridges. The Lifespan Bridge, which can be lifted to allow vessels through, could cause up to 20-mins delays for patients from the opposite side of the Darling River for each side.

The entry connects to a driveway and the parking along the side. The precinct plan considers this driveway to be re-aligned to direct the traffic to the new building entrance.

The levee bank is considered a route to any emergency flood egress.

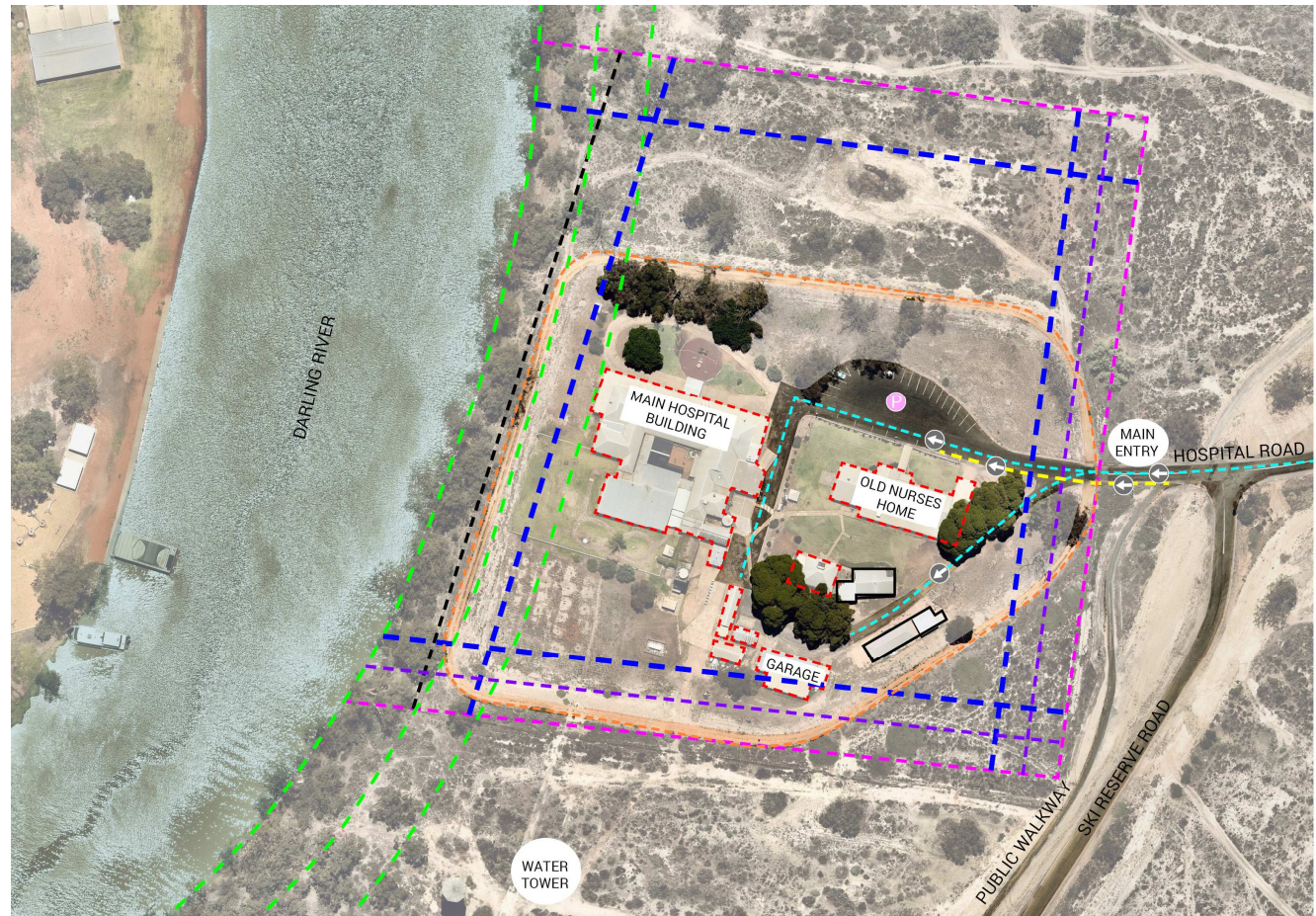
There is also a pedestrian walkway outside the eastern boundary. The new master plan has identified a connection to the walkway for easy pedestrian access.

The Wentworth Health Service is located on the eastern side of the township across the Darling River. The figure below shows the location in context with other health services within Wentworth region.

1. Broken Hill Hospital (Approx. 267km from Wentworth Town).
2. Mildura Base Public Hospital (Approx. 27km from Wentworth Town).
3. Mildura Health Private Hospital (Approx. 27km from Wentworth Town).
4. Buronga HealthOne (Approx. 30km from Wentworth Town).
5. Dareton Primary Health Service (Approx. 13km from Wentworth Town).

2.2 SITE SUMMARY

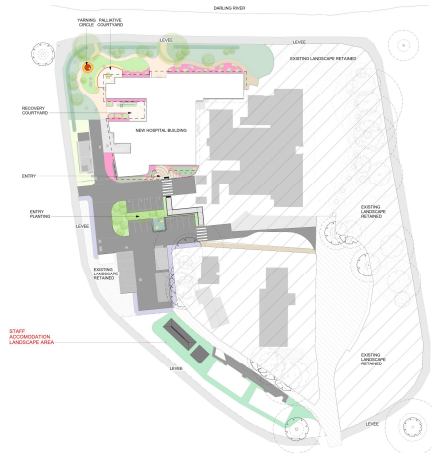
The site is an existing hospital site and is zoned RU5 Village in the Wentworth Local Environmental Plan 2011. Health services facility is permitted with consent under Wentworth LEP 2011 as well as via clauses 56 and 57(1) of the Infrastructure SEPP and its successor (the Transport and Infrastructure SEPP from 1 March 2022)



Plan – Aerial – Vehicular and Pedestrian Access

- EXISTING BUILDING TO DEMOLISH
- EXISTING BUILDING TO REMAIN
- - - VEHICULAR ACCESS
- - - PEDESTRIAN ACCESS
- - - LEVEE BANK
- - - APZ FOR HEALTH SERVICE BUILDING
- - - APZ FOR STAFF ACCOMMODATION AND AMBULANCE STATION
- - - SITE BOUNDARIES
- - - FENCES
- - - RIPARIAN ZONE

3.1 SITE STAGING



Base Scope – STAGE 1A

This stage focuses on utilising the existing road network and landscaping key areas immediately adjacent to the hospital. The design provides a naturalistic landscape setting that marries into the surrounding areas. On entering the site, the parking areas provide a formal landscape setting to aid in orienting and accessing the hospital. To the rear and the heart of the building, naturalistic planting choices, paved courtyards and curvilinear hardscapes seek to provide a calming and familiar environment. Encircling the site, there is a potential for a linear river walk that provides a connection to views of the river.

No landscaping works are proposed to be undertaken outside the existing levee bank. These areas will remain off-limits to both staff and patients.

New Staff Accommodation infrastructure and associated civil and landscape works currently sit outside of the 'Base Scope' allowance. This will be included as a tender option and are intended to be included in the project works, budget permitting.



Base Scope – STAGE 1B

The future scope of this project builds on the previous stage by providing :

- An entry garden sequence to provide wayfinding opportunities.
- Additional tree planting and bioswales located in carpark.
- Additional path connecting into staff area
- Existing Roses re-located to form a small informal garden area
- Hydro mulch with native seed mix planted over demolition locations and cap and contain areas.



Future Scope – STAGE 2

The future scope of this project builds on the previous stage by providing :

- An entry garden sequence to provides wayfinding opportunity.
- Formal and informal pathway connections. One formalised path to the south joining into the existing council footpath and one informal walking trail to the north leading you though site.
- Staff accommodation areas to the south are intended to be a flexible and private space nestled amongst the existing trees.

New Staff Accommodation infrastructure and associated civil and landscape works currently sit outside of the 'Base Scope' allowance. This will be included as a tender option and is intended to be included in the project works, budget permitting.

3.2 LANDSCAPE DESIGN - LOOK AND FEEL



ZONE 1 – MINIMALIST COURTYARD

Area directly adjacent building to have minimal planting, strategically chosen and positioned to provide a minimalist view from the rooms. The ground plain to be made up of varied typologies of gravel with plants emerging from the gravel.

Zone to include – Endemic plant species (grasses/ground covers/shrubs) to a max height of 1m and featuring boulders/logs and a range of gravel in varied sizes, colours & textures.



ZONE 2 – FEATURE PLANTING ZONE

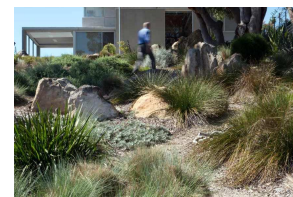
Gravel pathway network links the entries & nodes in this area, featured planting areas showcase local endemic species that celebrate medicinal plants and practices of the First Nations Community.

Zone to include – Local endemic plant species (nominated by consultation with First Nations community) that showcase medicinal, food or industry plant species, range of gravel in varied sizes, colours & textures and logs/boulders for habitat and refuge for fauna species.



ZONE 3 – TRANSITION LANDSCAPE

Area directly adjacent the levee are intended to be mass planted and tie back into the naturalistic landscape of Wentworth. The planting consists of local endemic species (red box woodland) that can re-establish the existing site.



ZONE 4 – ENTRY PLANTING

Low local endemic planting to this area with the opportunity for some informal gathering spaces for public. To address the level difference between the entrance & the lower car park this area will be battered and boulders will help provide passive retaining opportunities. A formal ramp allows pedestrian access from the lower carpark.

Zone to include logs/boulders for habitat and refuge for fauna species.



ZONE 5 – RE-SEEDING AREA

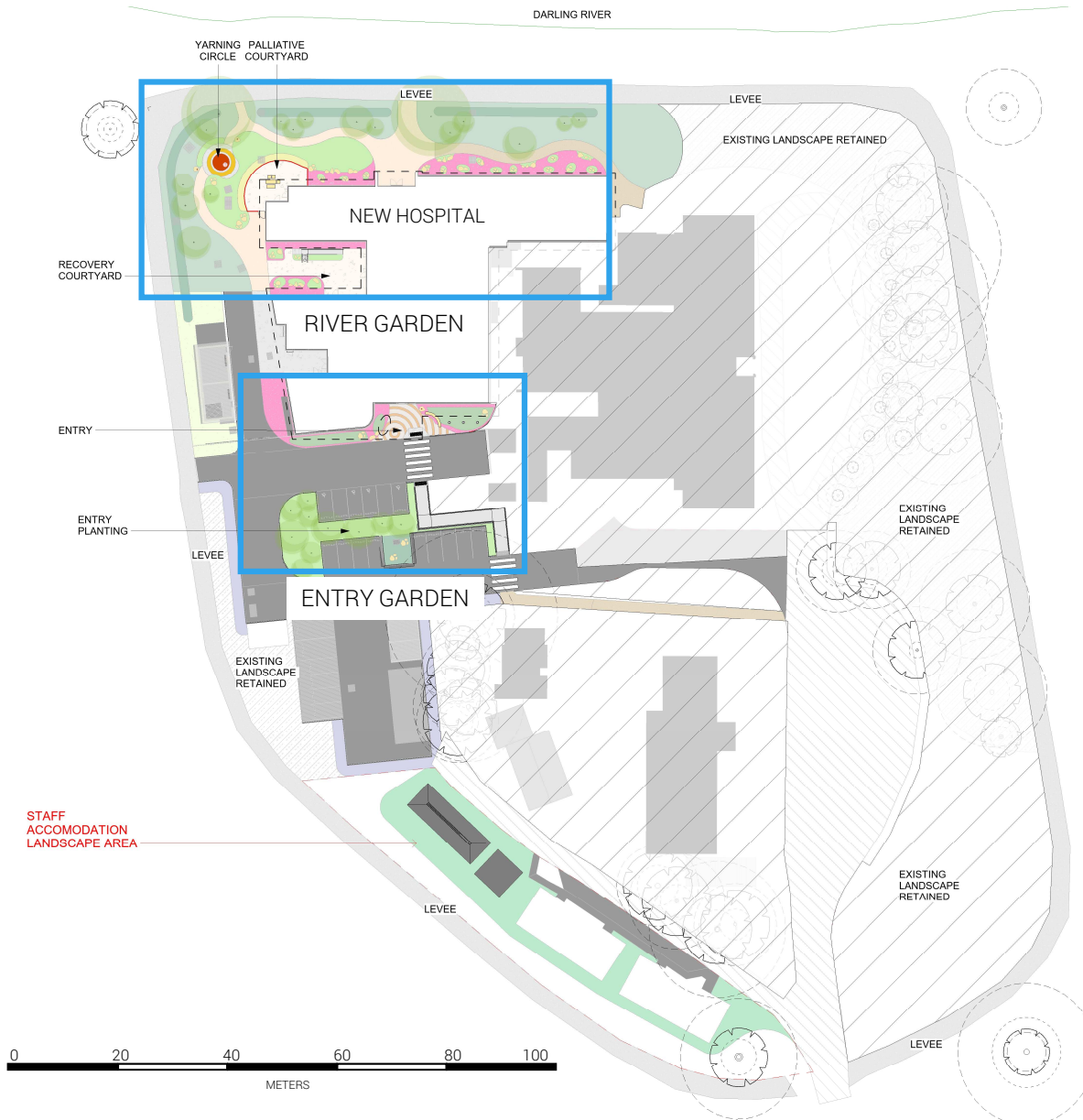
This areas to the north and east (see next page) are intended to tie back into the naturalistic landscape of the region, The planting consist of local endemic species that can re-establish the existing sites disturbed areas. Lawn are will be limited with a preference of native grasses and shrubs being used in this area. Local species can be seeded via hydromulch in strategic dense clusters and allowed to grow out revegetating the site.






























ZONE 6 – STAFF AREA

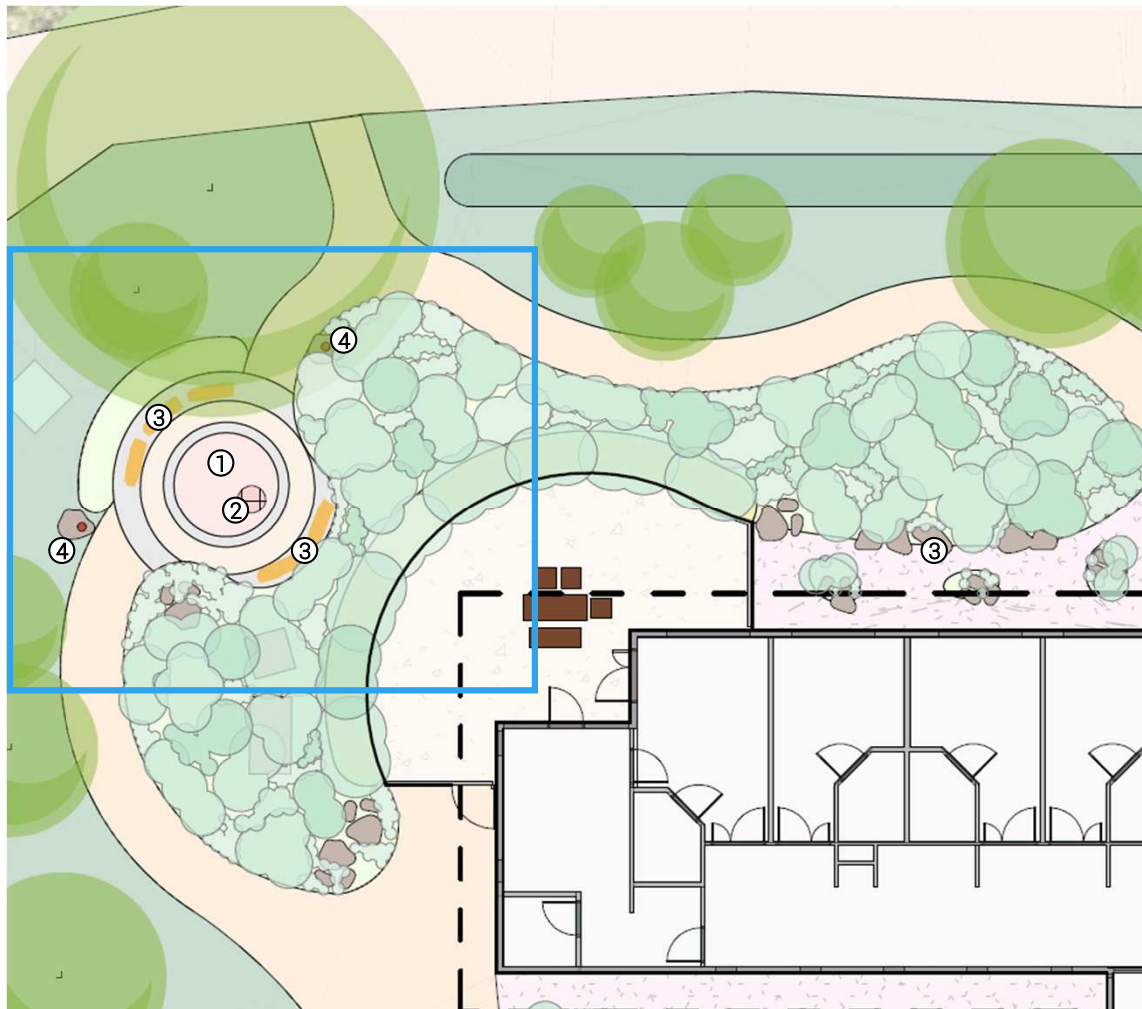
Area to be predominately lawn area to allow flexibility of the space, screening planting to be included to the perimeter of this space to provide privacy to the staff area.

Zone will include endemic screening species, lawn to the staff area.



SYMBOL	ITEM CODE	MATERIAL DESCRIPTION
SURFACE TREATMENT		
	PAV01a	CONCRETE
	PAV01b	CONCRETE
	PV02a	SEMCO STAIN
	PV02b	SEMCO STAIN
	PAV03	NO-FINES CONCRETE
	PAV04	DECOMPOSED GRAVEL PATH WITH BINDING AGENT
	PAV05	LOOSE GRAVEL TYPE 01
	PAV06	LOOSE GRAVEL TYPE 02
	PAV07	AUSTRAL BRICK PAVERS SCULPTURED SANDS
	PAV08	ORGANIC MULCH
FURNITURE AND FIXTURES		
	FX01	BOULDERS
	FX02	SEATING BOULDERS
	FX03	STEEL INTERP SIGNS
	FX04	FLAG POLES
	FX 05	SFA LINEA CURVED SEAT
	FX06	SFA FORUM SET (TABLE, CHAIRS AND BENCH)
	FX08	FIRE PIT
HR03 STEP HANDRAIL		
PLANTING		
	PL01	Cultural Use Planting Mix
	PL02	Feature Planting
	PL03	Endemic Buffer Planting
	PL04	Bio Swale Planting Mix
	PL05	Make Good Planting Mix
	PL06	Hydromulch (Seed)
	PL07	Large Shrubs Mix
	PL08	Entry Planting Mix
	PL09	Rose Garden Relocated
	PL10	Staff Lawn Area

3.4 YARNING CIRCLE – STAGE 1A



YARNING CIRCLE

The Yarning Circle is an outdoor space designed social gatherings and cultural ceremonies. This space is constructed using a combination of natural cut stone, concrete, and ground plane patterns. One of the key features of the Yarning Circle is the addition of a small fire pit for smoking ceremonies and interpretation signage.



1. GRAPHIC TO YARNING CIRCLE GROUND PLANE



2. PROVISIONS FOR REMOVABLE SMOLDERING/SMOKING PIT

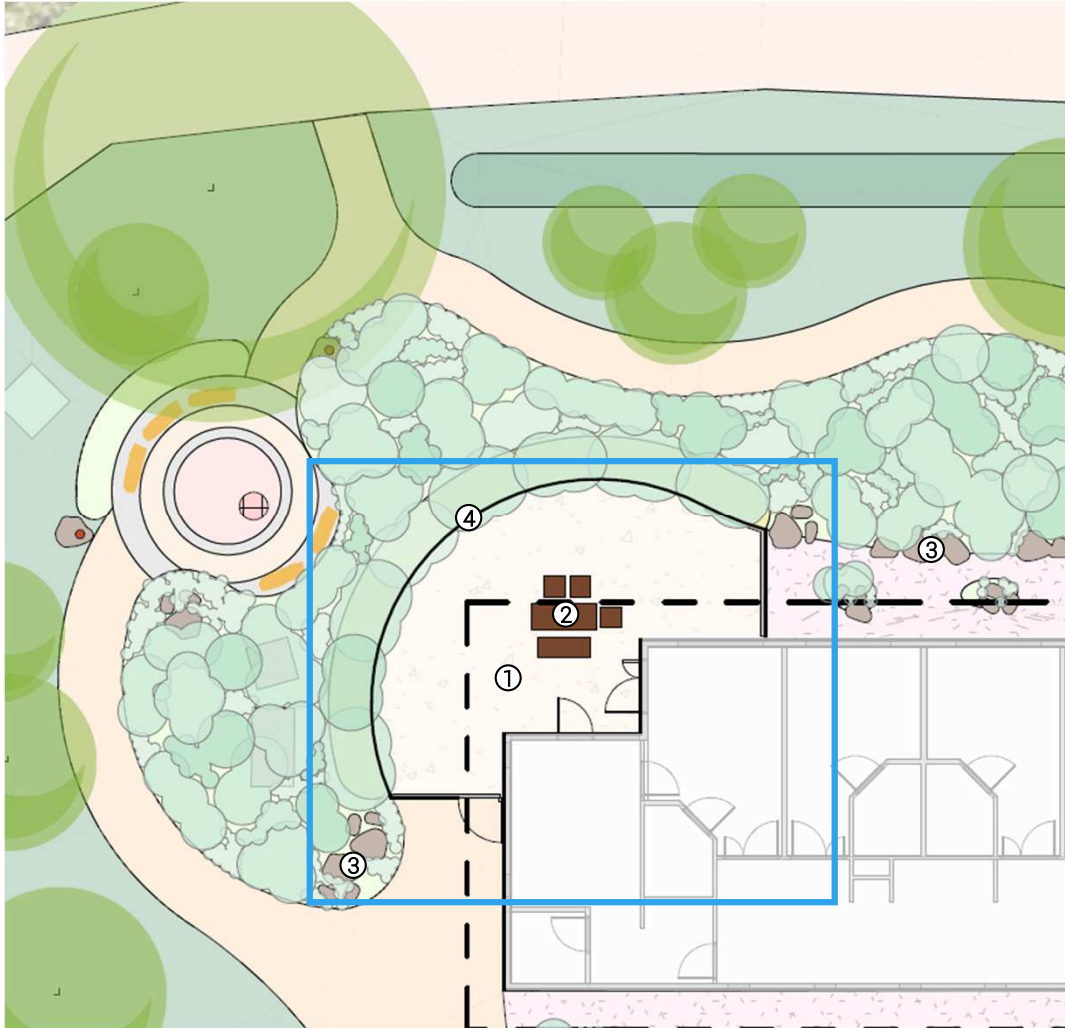


3. CUT STONE SEATING (GRANITE, BLUE STONE OR MUD ROCK)



4. CULTURAL INTERPRETATION SIGNAGE

3.4 PALLIATIVE COURTYARD – STAGE 1A



1. BROOM FINISHED CONCRETE



2. STREET FURNITURE FORUMN SET



3. VEGETATION AND BOULDERS



3. VEGETATION AND BOULDERS

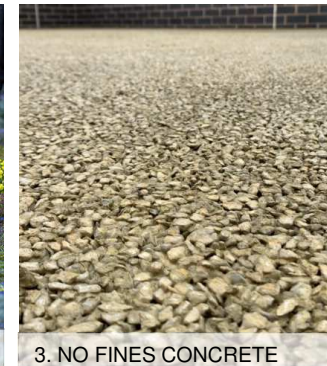
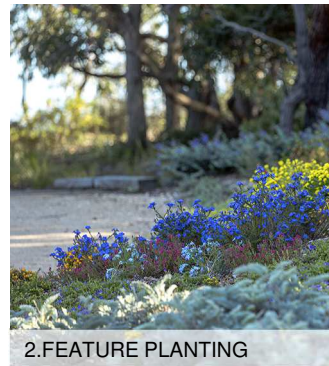
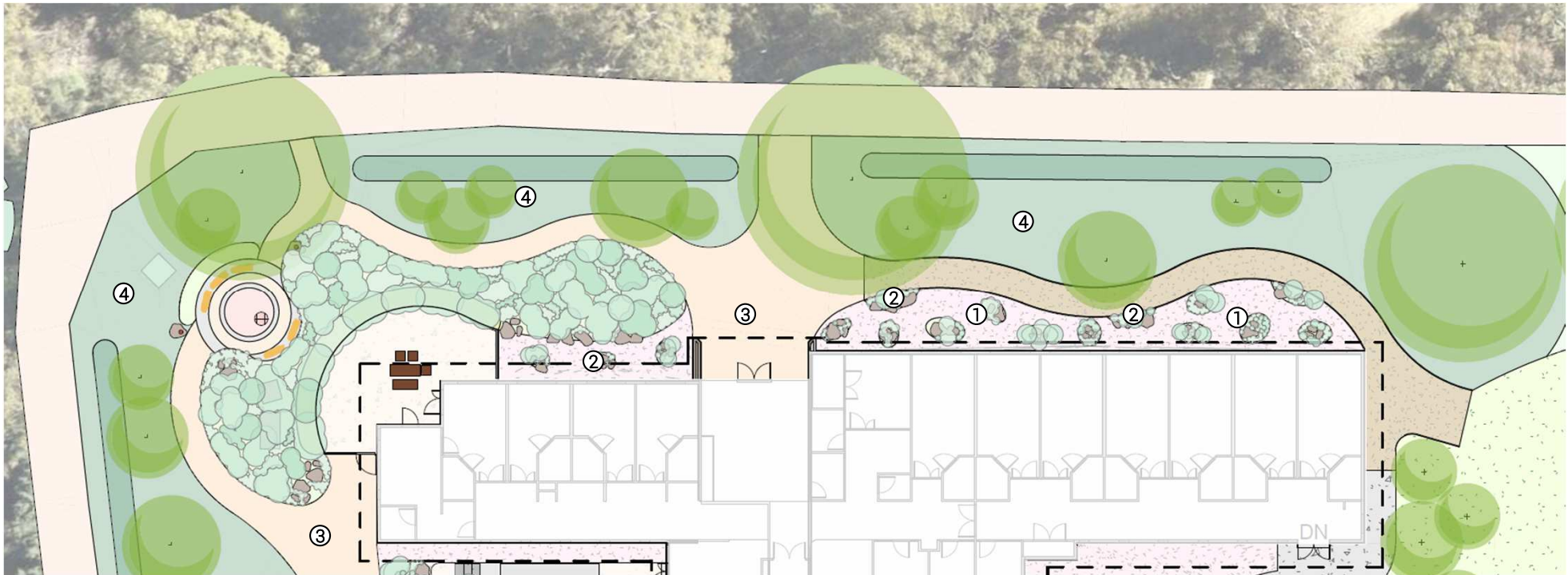


4. SLATTED FENCE WITHIN LANDSCAPE

PALLIATIVE COURTYARD

The courtyard is designed to be enclosed by a slatted fence. Broom finished concrete ground plane is at the same grade as the hospital providing good access. The open spacing in the fence provide a level of privacy whilst allowing visual connection to the adjacent planting areas. There is gate access to the path network allowing for visitors and patients staying in the palliative care unit secondary access to the room without the need of walking through the whole hospital.

3.4 RIVER GARDEN – STAGE 1A



3.5 REHABILITATION COURTYARD- STAGE 1A



1. STAIR AND RAMP AND DIFFERENT SURFACE TREATMENTS

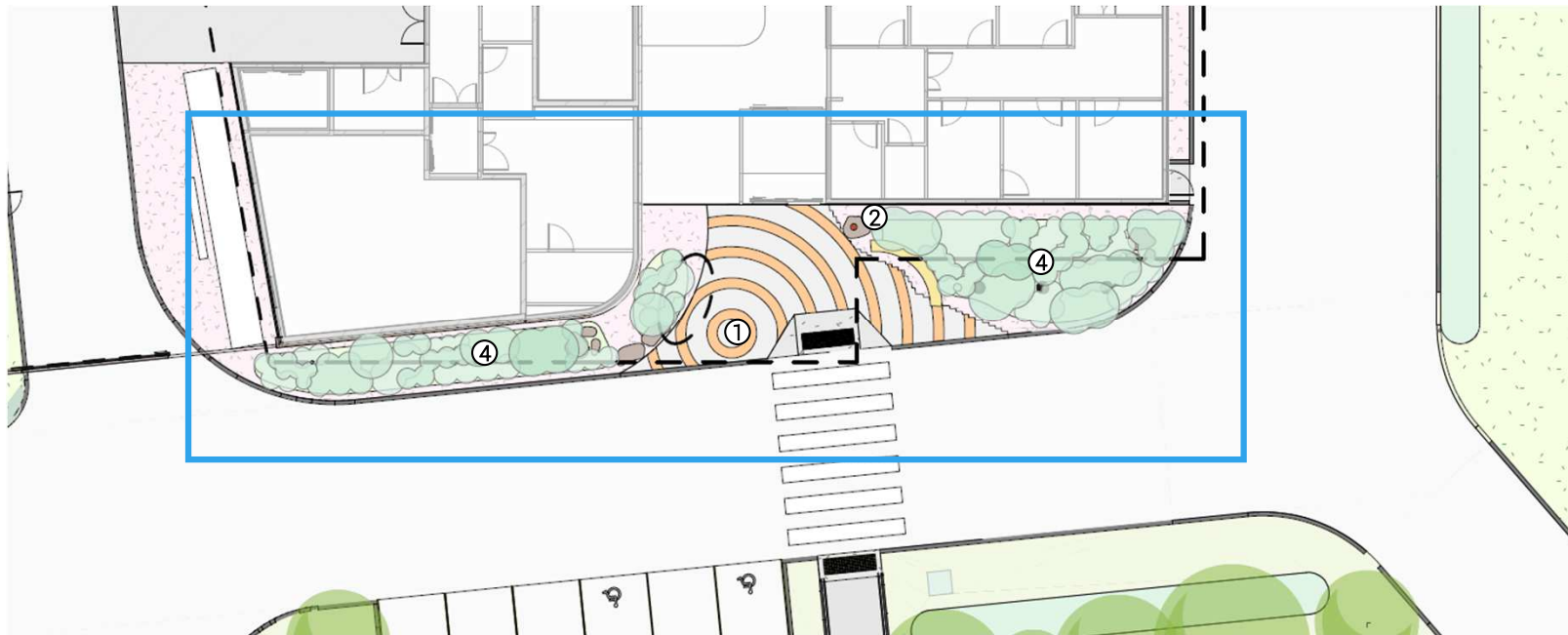


2. BROOM FINISHED CONCRETE

REHABILITATION COURTYARD

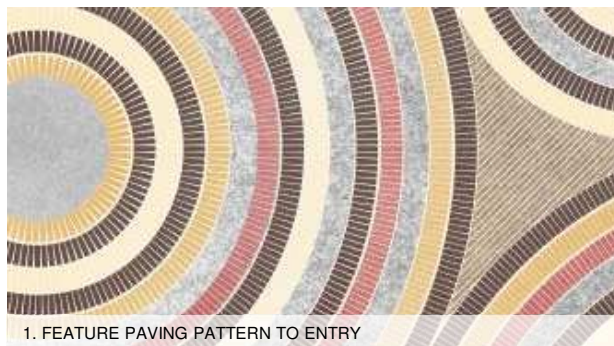
The outdoor rehabilitation ramp is designed to provide a safe and accessible space for individuals to recover and rehabilitate. The Ramp and step arrangement has been designed to provide a varied level of access and challenge to assist in the rehabilitation process. The ramp is equipped with handrails to ensure the safety of those using it. The surrounding area has gravel garden beds, which contain a variety of native plants and boulders, creating a natural and peaceful environment. The loose gravels adjacent to the IPU can be used as a secondary surface for recovery exercises.

3.6 ENTRY – STAGE 1A

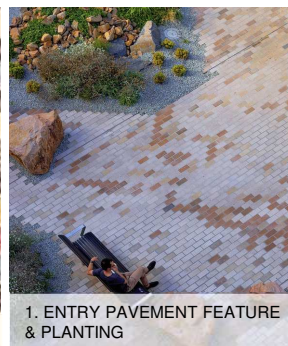


ENTRY COURTYARD

The entry forecourt to the Wentworth Hospital is a well-designed space that incorporates a pattern in the paving, endemic planting, flag poles, and seating for visitors. The ground plane makes use of the roofs feature oculus and provides planting beneath it to mirror the design intent., The forecourt aims to provide an inviting entry point to the hospital, making patients and visitors feel at ease.



1. FEATURE PAVING PATTERN TO ENTRY



1. ENTRY PAVEMENT FEATURE & PLANTING



3. WELCOME TO COUNTRY STONE



4. ENTRY PLANTING

3.7 LANDSCAPE DESIGN - MILSETONE 1B





SYMBOL	ITEM CODE	MATERIAL DESCRIPTION
SURFACE TREATMENT		
	PAV01a	CONCRETE
	PAV01b	CONCRETE
	PAV02a	SEMCO STAIN
	PAV02b	SEMCO STAIN
	PAV03	NO-FINES CONCRETE
	PAV04	DECOMPOSED GRAVEL PATH WITH BINDING AGENT
	PAV05	LOOSE GRAVEL TYPE 01
	PAV06	LOOSE GRAVEL TYPE 02
	PAV07	AUSTRAL BRICK PAVERS SCULPTURED SANDS
PLANTING		
	PL01	Cultural Use Planting Mix
	PL02	Feature Planting
	PL03	Endemic Buffer Planting
	PL04	Bio Swale Planting Mix
	PL05	Make Good Planting Mix
	PL06	Hydromulch (Seed)
	PL07	Large Shrubs Mix
	PL08	Entry Planting Mix
	PL09	Rose Garden Relocated
	PL10	Staff Lawn Area

STAGE 1B ITEMS

1. Additional tree planting
2. Targeted Hydro-mulch (75% Coverage)
3. Bioswale
4. Entry Planting
5. Relocated Rose Garden
6. Large Shrubs
7. Staff lawn area
8. Gravel Pathway – Re-using existing road as base

3.8 LANDSCAPE DESIGN - POTENTIAL FUTURE LANDSCAPE – STAGE 2



SYMBOL	ITEM CODE	MATERIAL DESCRIPTION
	SURFACE TREATMENT	
	PAV01a	CONCRETE
	PAV04	DECOMPOSED GRAVEL PATH WITH BINDING AGENT

STAGE 2 ITEMS

1. Additional tree planting
2. Formalized concrete path
3. Additional gravel pathway walking trail

4.0 PLANTING DESIGN

4.1 STAGE 1A

PLANTING SCHEDULE [TREES]						
ID	Latin Name	Common Name	Mature Height	Mature Spread	Pot Size	Quantity
STAGE 1A TREES						
ACAste	Acacia stenophylla	River Cooba, Maapu	1-2m	2-4m	45L	2
ACAste(b)	Acacia stenophylla(b)	River Cooba, Maapu	1-2m	2-4m	25L	1
BRApop	Brachychiton populneus	Kurrajong	6-20m	3-6m	45L	1
BRApop(b)	Brachychiton populneus(b)	Kurrajong	6-20m	3-6m	25L	1
CAPmit(b)	Capparis mitchellii(b)	Orange Bumbil, Wild Pomegranate	6-20m	3-6m	25L	2
CORsce	Corymbia citriodora scintuosus	Dwarf Lemon Scented Gum	3-7m	3m	45L	6
EUCcam	Eucalyptus camaldulensis	River Red Gum	up to 30m	15m	45L	2
GEIpar	Geijera parviflora	Wilga	6-9m	4-6m	45L	1
MELbra	Melaleuca bracteata	Black Tea Tree	4-7m	3-5m	45L	1
MELlha(b)	Melaleuca halmaturorum(b)	Salt Paperbark	2-6m	2-6m	25L	2
PITang	Pittosporum angustifolium	Weeping Pittosporum, Native Apricot	6-10m	3-5m	45L	1
PITang(b)	Pittosporum angustifolium	Weeping Pittosporum, Native Apricot	6-10m	3-5m	25L	1
SANacu	Santalum acuminatum	Sweet Quandong	4-6m	2-4m	45L	3
SANacu(b)	Santalum acuminatum(b)	Sweet Quandong	4-6m	2-4m	25L	3
						TOTAL
						GRAND TOTAL
						27

PLANTING SCHEDULE						
ID	Latin Name	Common Name	Mature Height	Mature Spread	Pot Size	Quantity
CULTURAL USE PLANTING						
ATRnum	Atriplex nummularia	Old Man Saltbush	2-3m		Tubestock	8
CALpur	Calostemma purpureum	Wilcannia Lily	0.6m	0.3m	Tubestock	258
CHRapi	Chrysocephalum apiculatum	Common Everlasting	0.1-0.4m	0.4-2m	Tubestock	155
DAMros	Dampiera rosmarinifolia	Rosemary Dampiera	0.5-0.6m	1-1.5m	Tubestock	38
DIAre	Dianella revoluta	Blueberry Lily	0.75 - 0.9m	0.3 - 0.6m	Tubestock	104
DIScra	Disphyma crassifolium	Round Lead Pigface	0.2-0.3m	1-2m	Tubestock	37
DODang	Dodonaea viscosa subsp. angustissima	Narrow Leaf Hop Bush	2-4m	2-4m	Tubestock	13
EREmac	Eremophila maculata	Emu Bush	1-3m	1.5-2m	Tubestock	8
PORole	Portulaca oleracea	Common Pigweed	0.1-0.4m	0.4m	Tubestock	179
SARpra	Sarcocolla praecox	Pigface	0.1-0.5m	1m	Tubestock	20
TRIsca	Triodia scariosa	Porcupine Grass	0.6-1m	0.5-3m	Tubestock	24
						TOTAL
						844
FEATURE PLANTING						
BEYopa	Beyeria opaca	Dark Turpentine Bush	1m	1-2m	Tubestock	4
ERECra	Eremophila crassifolia	Thick Leaf Emu Bush	0.2-1m	1m	Tubestock	16
EREgla	Eremophila glabra	Tar Bush	0.1-0.3m	1-2m	Tubestock	11
KUNpom	Kunzea pomifera	Muntries	0.3-0.5m	2-5m	Tubestock	9
LEPlep	Lepidium leptopetalum	Shrubby Peppergrass	0.6m	0.6m	Tubestock	28
MYOpar	Myoporum parvifolium	Creeping Myoporum	0.3m	2-3m	Tubestock	6
SARpra	Sarcocolla praecox	Pigface	0.1-0.5m	1m	Tubestock	18
SWAfor	Swainsona formosa	Sturt's Desert Pea	0.5-1m	0.5-1m	Tubestock	22
						TOTAL
						114
						TOTAL
						958

PLANTING MIXES:

COLOUR	CODE	DESCRIPTION	TOTAL SQM	PLANT / SQM	POT SIZE	TOTAL NO.
PLANTING						
	PL03	Endemic Buffer planting	754	4per m ²	Tubestock	3015
	PL04	Bio swale planting mix	27	4per m ²	Tubestock	107
	PL06	Hydromulch	416	SEED MIX	Hydromulch	416
	PL08	Entry planting mix	183	4per m ²	Tubestock	734
						GRANDTOTAL
						4272



Planting – Stage 1A

The Wentworth Hospital utilizes native plants in its landscaping to create a sustainable and ecologically responsible environment. The selection of native plants is based on their ability to thrive in the local climate and soil conditions, reducing the need for excessive watering and fertilization. Additionally, the use of native plants supports the preservation of the local ecosystem and provides a habitat for native wildlife. The native plants are also chosen for their aesthetic qualities, creating a natural and visually appealing landscape that is well-suited to the hospital's surroundings.

- Feature planting is prioritized directly adjacent to the hospital
- Bioswales capture runoff
- Endemic planting chosen to transition into surrounding landscape
- Native trees specified across whole of site
- Cultural use planting is situated around the yarning circle and courtyards

4.2 STAGE 1B

PLANTING SCHEDULE [TREES]						
ID	Latin Name	Common Name	Mature Height	Mature Spread	Pot Size	Quantity
STAGE 1B TREES						
ACAste	Acacia stenophylla	River Cooba, Maapu	1-2m	2-4m	45L	2
ACAste(b)	Acacia stenophylla(b)	River Cooba, Maapu	1-2m	2-4m	25L	2
EUCcam	Eucalyptus camaldulensis	River Red Gum	up to 30m	15m	45L	2
GEIpar(b)	Geijera parviflora(b)	Wilga	6-9m	4-6m	25L	2
MELbra(b)	Melaleuca bracteata(b)	Black Tea Tree	4-7m	3-5m	25L	1
PITang	Pittosporum angustifolium	Weeping Pittosporum, Native Apricot	6-10m	3-5m	45L	1
PITang(b)	Pittosporum angustifolium	Weeping Pittosporum, Native Apricot	6-10m	3-5m	25L	1
SANacu	Santalum acuminatum	Sweet Quandong	4-6m	2-4m	45L	1
SANmur(b)	Santalum murrayanum(b)	Bitter Quandong	1-4m	2-3m	25L	1
TOTAL						13

PLANTING MIXES:

COLOUR	CODE	DESCRIPTION	TOTAL SQM	PLANT / SQM	POT SIZE	TOTAL NO.
PLANTING						
	PL06	Hydromulch	6575	SEED MIX	Hydromulch	6575
	PL07	Large Shrubs mix	60	4per m ²	Tubestock	237
	PL08	Entry planting mix	171	4per m ²	Tubestock	682
	PL09	Rose Garden Relocated	12	4per m ²	Tubestock	45
	PL10	Staff lawn area	463	Turf	Rolled Turf	463
GRANDTOTAL						8002

Planting – Stage 1B

Stage 1B:

1. Relocation of existing rose garden
2. Hydromulch applied to disturbed areas
3. Bioswales
4. Large Shrubs



4.3 LANDSCAPE DESIGN - POTENTIAL FUTURE LANDSCAPE STAGE 2

PLANTING SCHEDULE [TREES]						
ID	Latin Name	Common Name	Mature Height	Mature Spread	Pot Size	Quantity
STAGE 2 TREES						
CAPmit(b)	Capparis mitohollii(b)	Orange Bumbil, Wild Pomegranate	6-20m	3-6m	25L	2
GEIpar(b)	Geijera parviflora(b)	Wilga	6-9m	4-6m	25L	2
MELbra(b)	Melaleuca bracteata(b)	Black Tea Tree	4-7m	3-5m	25L	2
MELha(b)	Melaleuca halmaturorum(b)	Salt Paperbark	2-6m	2-6m	25L	2
SANmur(b)	Santalum murrayanum(b)	Bitter Quandong	1-4m	2-3m	25L	4
EUCstckl	Eucalyptus stricklandii	Stricklands Gum	10-15m	7-9m	25L	16
TOTAL						28

Planting – Stage 2

1. Additional entry tree planting to shade carpark areas



4.4 LANDSCAPE PLANTING – LOOK AND FEEL

TREES



Maapu | River Cooba
Acacia Stenophylla



River Red Gum
Eucalyptus camaldulensis



Matya Manu | Bitter Quandong
Santalum murrayanum



Mukirli | Orange Bumbil
Capparis mitchellii



Kurrajong
Brachydon populneus



Black Tea Tree
Melaleuca bracteata



Weeping Pittosporum
Pittosporum angustifolium



Salt Paperbark
Melaleuca halmaturorum



Nhiitaka, Katha | Wilga
Geijera parviflora

SHRUBS



Thara | Narrow Leaf-hopbush
Dodonaea viscosa subsp. angustissima



Kalthika | Emu Bush
Eremophila bignoniiflora



KuyipaRa | Emu Bush
Eremophila maculata



Mallee Rice Flower
Pimelea microcephala



Rosemary Dampiera
Dampiera rosmarinifolia



Pearl bluebush
Maireana sedifolia



Pink Velvet-Bush
Lasiopetalum behrii



Old-man Saltbush
Atriplex nummularia

REEDS AND GRASSES



Marsh Club-rush
Bolboschoenus medianus



Spiny Flat-Sedge
Cyperus gymnocaulis



Pula | Porcupine Grass
Triodia scariosa



Button Grass
Dactyloctenium radulans



Common Reed
Phragmites australis



Spreading Flax-lily
Dianella revoluta



Wilcannia Lily
Calostemma purpureum

IN-FILL AND CASCADING



Nhakalu | Round-leaf Pigface
Disphyma crassifolium



Kaangli | Pigface
Sarcocolla praecox



Parnamula, Piria, Thungara | Common Pigweed
Portulaca oleraceus



Creeping boobialla
Myoporum parvifolium



Kalbarri Carpet
Eremophila biserrata



Prostrate eremophila
Eremophila glabra



Common Everlasting
Chryscephalum apiculata

Planting Selection

Planting selection has been informed by species that are listed in the Ecological Cultural Knowledge Handbook - Paakantyi (Barkindji) (2011, NSW Government) . Planting selection has also been verified by site visits to the Wentworth Botanical Gardens, where there are examples of existing mature, climate adapted species present. Majority of plants selected have Indigenous cultural significance and uses.

4.5 LANDSCAPE PLANTING RESEARCH DETAILS

ENDEMIC SPECIES LIST

REFER TO EXCEL DOCUMENT FOR DETAILS

●	Acacia brachybotrya	●	Einadia nutans subsp. nutans	●	Leptospermum coriaceum
●	Acacia calamifolia	●	Enchylaena tomentosa	●	Lomandra effusa
●	Acacia colletoides	●	Eremophila biserrata	●	Maireana pyramidata
●	Acacia glandulicarpa	●	Eremophila crassifolia	●	Maireana sedifolia
●	Acacia lineata	●	Eremophila deserti	●	Melaleuca halmaturorum
●	Acacia montana	●	Eremophila divaricata	●	Melaleuca lanceolata
●	Acacia notabilis	●	Eremophila glabra	●	Melaleuca uncinata
●	Acacia nyssophylla	●	Eremophila maculata	●	Melia azedarach
●	Acacia rigens	●	Eremophila oppositifolia	●	Microcybe multiflora
●	Acacia sclerophylla	●	Eremophila scoparia	●	Micromyrtus ciliata
●	Acacia stenophylla	●	Eucalyptus camaldulensis	●	Muehlenbeckia florulenta
●	Acacia trineura	●	Eucalyptus cladocalyx	●	Myoporum montanum
●	Acacia wihelmiana	●	Eucalyptus dumosa	●	Myoporum parvifolium
●	Atriplex nummularia	●	Eucalyptus famelica	●	Olearia muelleri
●	Atriplex vesicaria	●	Eucalyptus intertexta	●	Olearia pimeleoides
●	Billardiera cymosa	●	Eucalyptus largiflorens	●	Olearia rudis
●	Brachychiton populneus	●	Eucalyptus leucoxylon subsp. leucoxylon	●	Phragmites australis
●	Bursaria spinosa	●	Eucalyptus oleosa	●	Pimelea microcephala
●	Callistemon brachyandrus	●	Eucalyptus peninsularis	●	Pittosporum angustifolium
●	Calostemma purpureum	●	Eucalyptus sideroxylon	●	Prostanthera aspalathoides
●	Calytrix tetragona	●	Eucalyptus gracilis	●	Rhagodia spinescens
●	Casuarina pauper	●	Goodenia varia	●	Roepera similis
●	Chenopodium nitriaceum	●	Grevillea huegelii	●	Santalum acuminatum
●	Chrysocephalum apiculatum	●	Grevillea oleoides shiressii	●	Scaevola spinescens
●	Clematis microphylla	●	Splendour	●	Sclerolaena tricuspidis
●	Corymbia sp.	●	Grevillea pterosperma	●	"Senna Artemisioides ssp. Artemisioides "
●	Cyperus gymnocaulos	●	Hakea leucoptera	●	Senna artemisioides ssp coriacea
●	Dampiera rosmarinifolia	●	Hakea muelleriana	●	Senna nemophila
●	Dianella revoluta	●	Halgania cyanea	●	Solanum esuriale
●	Disphyma crassifolium subsp. clavellatum	●	Jasminum didymum	●	Syagrus romanzoffiana
●	Dodonaea bursarifolia	●	Kennedia prostrata	●	Tecticornia triandra
●	Dodonaea stenozyga	●	Lagunaria patersonia	●	Templetonia Egena
●	Dodonaea viscosa subsp. angustissima	●	Lasiopetalum baueri	●	Typha orientale
●	Duma florulenta	●	Lasiopetalum behrii		
		●	Lepidium Leptopetalum		

KEY

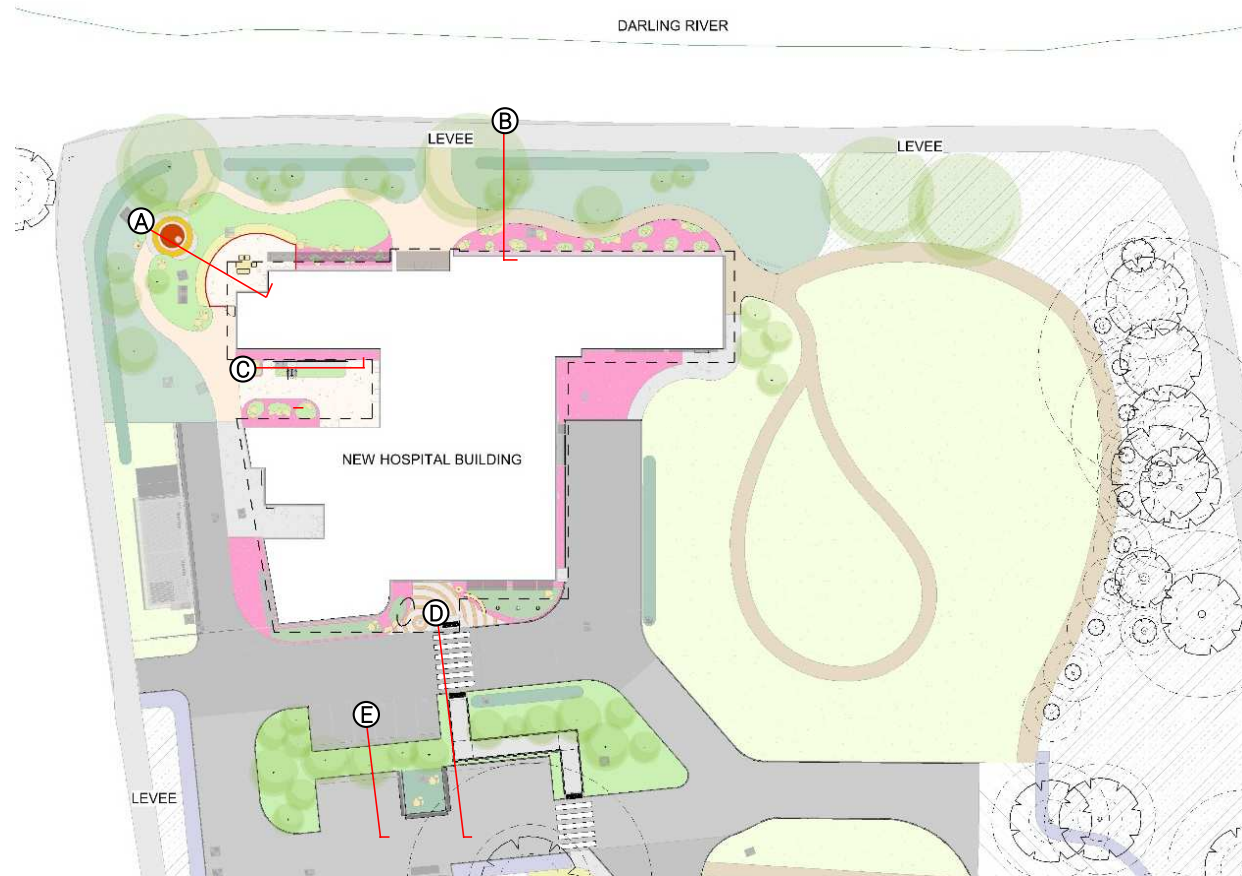
● ENDEMIC NEARBY (NSW / VIC / SA) ● ENDEMIC TO SITE ● EDIBLE ● HABITAT (BIRD / BEES)

5.1 LANDSCAPE SECTIONS KEY PLAN

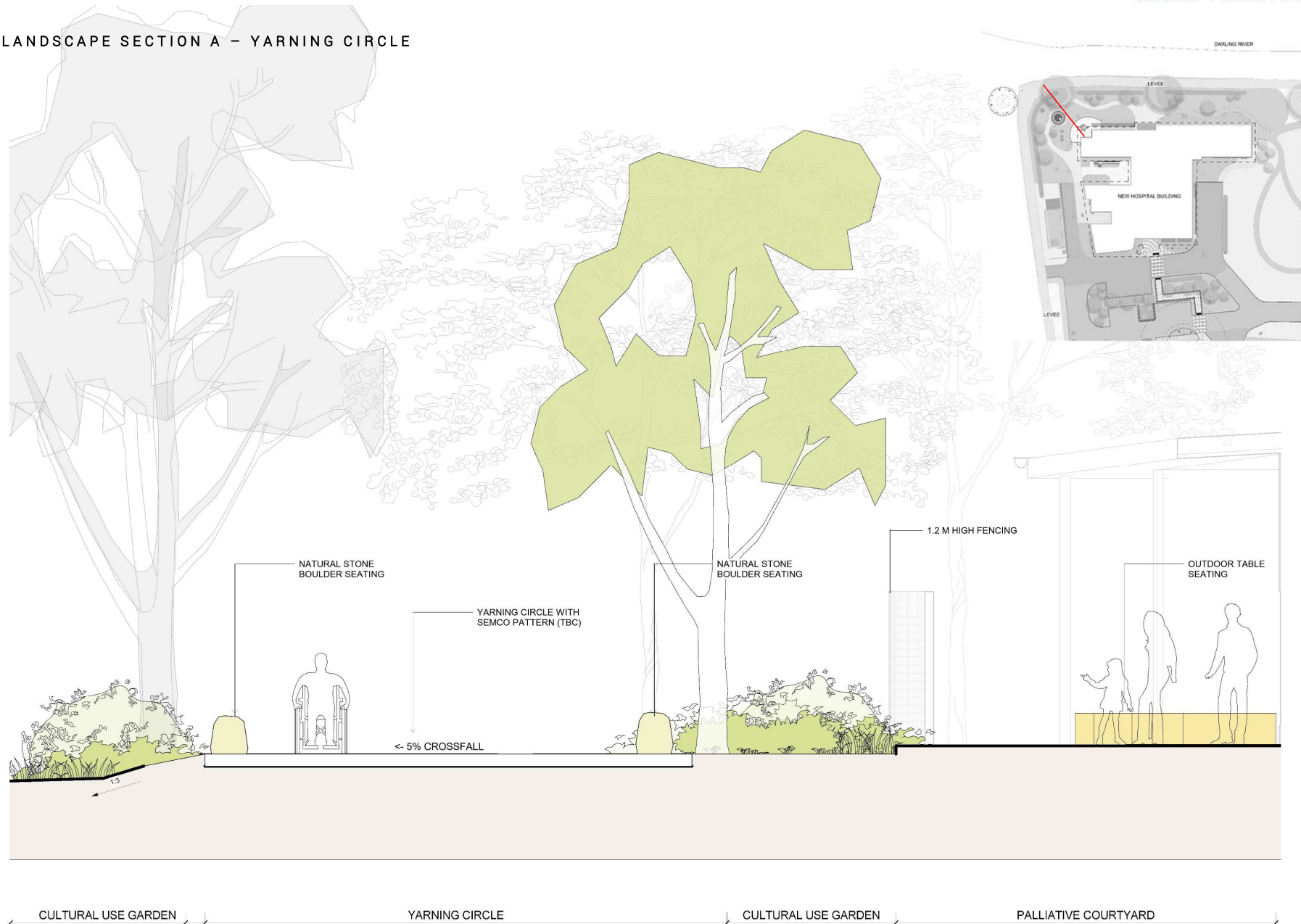
Navigating Terrain

The landscape interfaces with the grade changes between the levee bank, new hospital pad and landscape platforms. The following pages provide a high-level overview of the grade changes and landscape treatments that will interface with the hospital, levee.

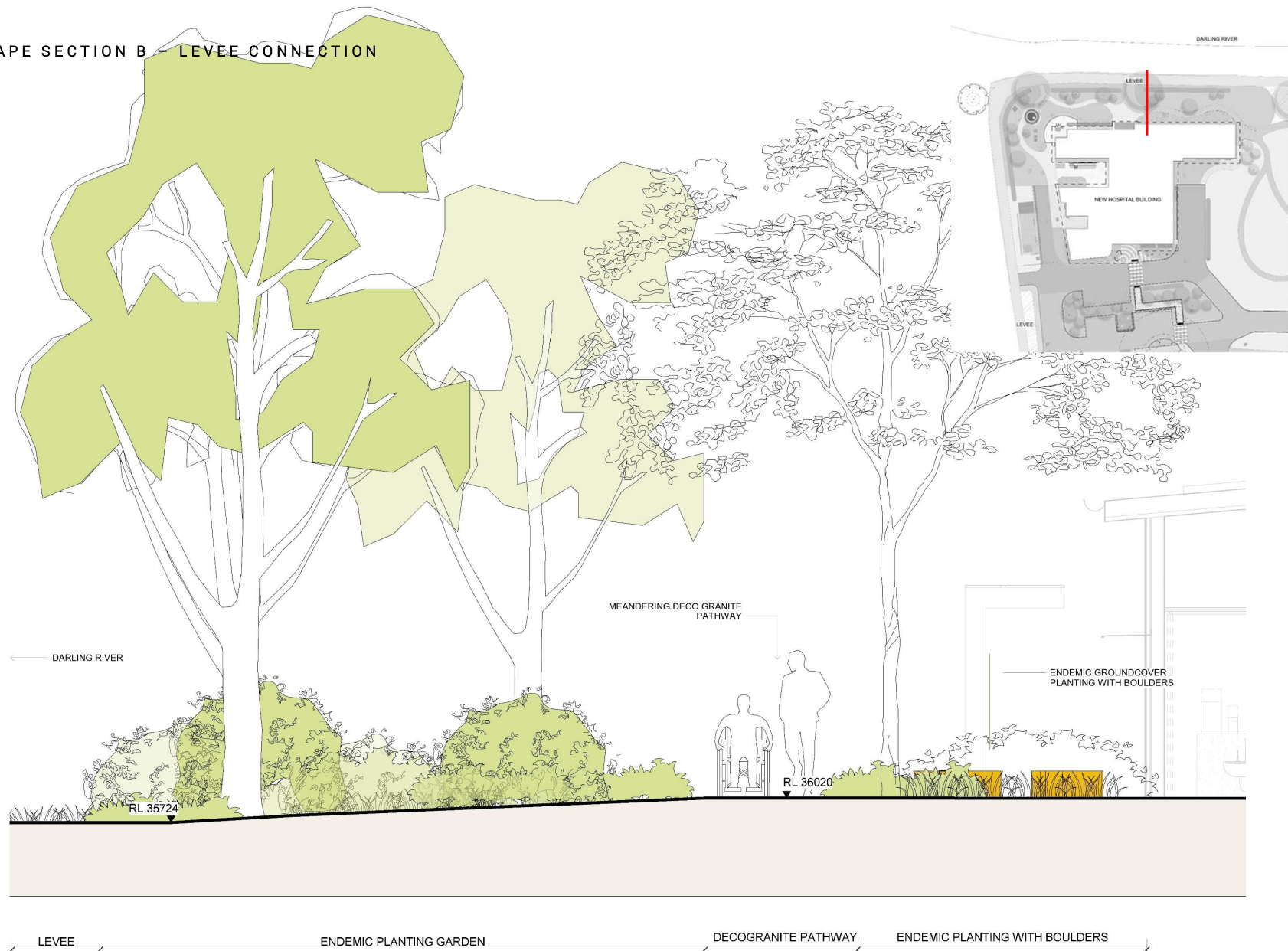
The intended design for WHSR is to ensure a naturalistic aesthetic and use natural materials where appropriate. Landscape works look to take advantage of surface runoff in the form of bio swales. Where achievable batters are to use large stones and boulders minimizing these use of formal retaining walls.



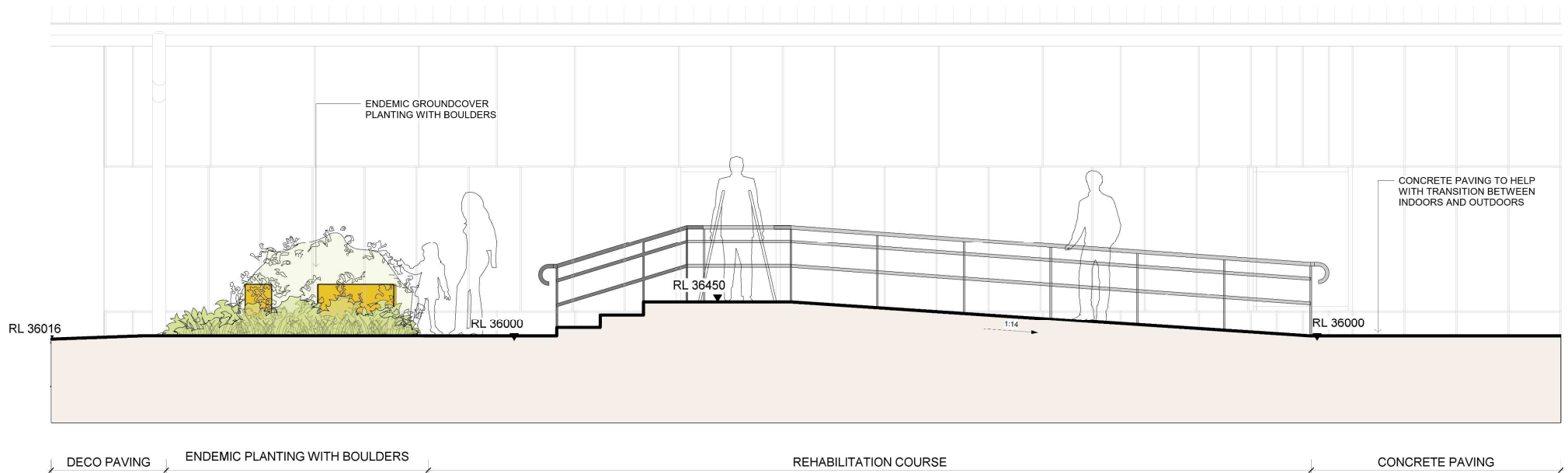
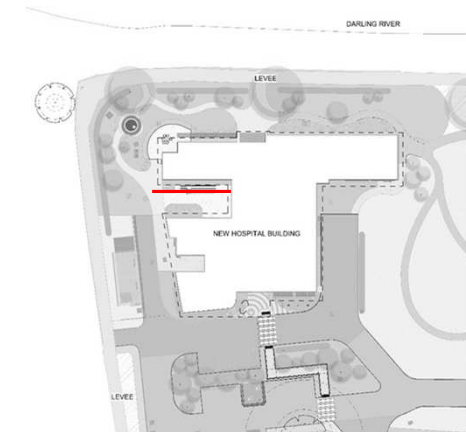
5.2 LANDSCAPE SECTION A – YARNING CIRCLE



5.3 LANDSCAPE SECTION B – LEVEE CONNECTION



5.4 LANDSCAPE SECTION C- REHABILITATION COURTYARD



5.5 LANDSCAPE SECTION D – ENTRY CARPARK AND RAMP ACCESS



5.6 LANDSCAPE SECTION E - ENTRY CARPARK

