Schematic Design Report
Eurobodalla Regional Hospital– Capital Consultants

April, 2022
For: NSW Health Infrastructure

Health
Southern NSW
Local Health District

Health
Infrastructure

ROOT PARTNERSHIPS
Advisory+
Project Management

Conrad Gargett

Documentation Control

Revision	Description	Issue date	Prepared by	Reviewed by
A	DRAFT	14 April 2022	[redacted]	[redacted]
B	Final DRAFT	29 April 2022	[redacted]	[redacted]
C	FINAL	31 May 2022	[redacted]	[redacted]
D	FINAL	15 June 2022	[redacted]	[redacted]

We acknowledge the Walbunga people of the Yuin Nation, Traditional Custodians of the land on which the Eurobodalla Regional Hospital will be sited, and pay respects to their Elders past and present.

Abbreviations/Acronyms

Term	Description
ABW	Activity Based Working
AusHFG	Australasian Health Facility Guidelines
BAL	Bushfire Attack Level
BoH	Back-of-house
CPTED	Crime Prevention through Environmental Design
CSP	Clinical Services Plan
DGN	Design Guidance Notes
ED	Emergency Department
ERH	Eurobodalla Regional Hospital
ERG	Expert Reference Group
ESD	Environmentally Sustainable Design
EUG	Executive User Group
FDB	Functional Design Brief
FFDI	Forest Fire Danger Index
FoH	Front-of-house
HINSW	Health Infrastructure New South Wales
THITH	Hospital at in The Home
HLS	Helicopter Landing Site
HPU	Health Planning Unit
HS	Health Service
ICT	Information and Communication Technology
IPU	Inpatient Unit
LGA	Local Government Area
MoC	Model of Care
MoH	Ministry of Health
MPS	Multipurpose Services
NSW	New South Wales
NZE	Net Zero Emissions
PAS	Project Advisory Service
PDC	Project Development Committee
PMF	Probable Maximum Flood
PPT	Project Planning Team
PUG	Project User Group
PV	Photovoltaic
PWD	Persons with a Disability
SDRP	State Design Review Panel
SNSWLHD/LHD	Southern New South Wales Local Health District / Local Health District
SOA	Schedule of Accommodation
WSUD	Water Sensitive Urban Design
ZMP	Zonal Masterplan

Table of Contents

List of Tables

List of Figures

1.0 Executive Summary

1.1 Project Scope

Southern NSW Local Health District (SNSWLHD) currently provides health services across three campuses within the Eurobodalla Shire, including hospitals at Batemans Bay and Moruya. The Eurobodalla Regional Hospital Clinical Services Plan (CSP), endorsed in March 2020, identified a need to consolidate existing services, reduce duplication, and increase the provision of care to meet the needs of the Eurobodalla population.

The Eurobodalla Regional Hospital project aims to create a sustainable, patient and community focused service which is digitally enabled. Planning has maintained a focus on sustainability, both environmentally and operationally, as well as being community focused. This is evident in the use of the preferred site at Moruya in providing natural light and views for a majority of the facility, considering the topography to allow the Indigenous community to maintain a connection with Country through significant life events, as well as meeting clinical needs through access, co-location and key adjacencies.

As a pilot project for the NSW Government Architect's "Connecting with Country" framework, consultation has been undertaken with members of the Indigenous community in both identification of a preferred site and the development of the design through Masterplan, Concept Design and now into Schematic Design. This consultation is planned to continue through the life of the project to ensure the facility, its staff, and visitors are able to connect with and respond to Country.

Early planning identified a preferred Eurobodalla Regional Hospital site, adjacent to the Princes Highway in Moruya. This site can accommodate the health service as well as provision for appropriate future proofing. The site has immediate access from the highway, as well as alternate vehicular access from the north, if required. The site planning responses are based on the natural topography, environmental orientation, environmental constraints and outlook to local and distant views.

Following the funding announcement, SNSWLHD identified a preference for the inclusion of a 4 bed Psychiatric Emergency Care Centre (PECC). This has been supported by the Ministry of Health with 4 beds being re-allocated from the Sub-Acute Inpatient Unit. Planning for the PECC is underway, noting its inclusion is to be achieved within the approved capital envelope of $260m.

The development of this Schematic Design Report has consisted of continual development of the Masterplan, consultation with a range of stakeholders within SNSWLHD, Community members and the Health Infrastructure Delivery team, Project Advisory Services and Expert Review Group.

1.2 Purpose of the Schematic Design

The delivery of the Schematic Design (SD) builds on decisions which have developed since the masterplan and concept design was undertaken.

The report builds on the work of the Masterplan Report, the Functional Design Brief (FDB) and supporting documentation including the Schedule of Accommodation (SoA) and the Concept Design. The SD responds to the design principles established in these documents.

The Schematic Design contained in this report further develops and addresses four primary weighted considerations in a hospital solution: optimum clinical delivery, efficiency, satisfaction, and the ability to address the future.

The methodology of this Schematic Design report attempts to present the steps and rigor undertaken to develop the approved concept design through schematic design, to ensure scope is captured accurately and foreseeable issues are discussed and strategies to resolve are developed.

The outcome of this design rigor was a Schematic Design that has been developed collaboratively from project team, HINSW, Root Partnerships (RP) and the end users.

The report aims to provide a comprehensive overview of the project context, outcomes of the Masterplan and concept design. The report is intended to demonstrate to the reader that a robust level of analysis of design and engineering systems has been undertaken in this phase, and to communicate how the intent of the functional design brief and project objectives are being met.

The report is structured to provide an overview of the project framework and to communicate the design development undertaken by the design team including:

- Project background, aims, and objectives;
- Overview of the site considerations impacting on the Schematic Design;
- Consolidation of the design team's understanding of the key design drivers;
- Development of the proposed building footprints and department planning to reflect the outcomes of the Functional Design Brief;
- Architectural Design Response;
- Exploration of engineering considerations including site wide infrastructure requirements, as well as building specific requirements; and
- Analysis of certification and access considerations impacting on the concept design.

1.3 Development of Schematic Design

During the SDR process, the decisions and principles established during the CDR stage were elevated through a consultative process with the ERH key stakeholders, user groups, and the design consultants. The following are key issues considered in developing schematic design and determining the recommended functional outcome:

- Planning principles for each functional department;
- Relationships and travel distance between key functional departments;
- Generic room layouts and their relationship to other departments;
- Incorporation of expanded building services plant requirements;
- AusHFG, operational models and security protocols;
- Value for money, whole of life (WOL), safety in design and capital cost; and
- Material selection, finishes, fittings and equipment.

This report builds upon the preceding master plan report and concept design report, and includes the following components:

- A summary of the project background, objectives and the Schematic Design process;
- An overview of the design principles which have informed SD development including site and regulatory context;
- Detailed descriptions of the architectural schematic design response; and
- Detailed description of the engineering and site infrastructure schematic design response and investigations.

1.4 Schematic Design

The Schematic Design will provide the basis for completion of the Detailed Business Case in conjunction with the Functional Design Brief, which will establish the budget for the project.

1.4.1 Program

The Schematic Design phase commenced in September 2021 following the endorsement of the Concept Design, and finalised as a draft Schematic Design in April 2022.

1.4.2 Additional Funding

On the 27 November 2021, the NSW Government announced a further $60 million investment for the Eurobodalla Regional Hospital redevelopment, taking the total estimated cost (ETC) for the project to $260 million.

The additional funding will enable the enhanced clinical priorities to be addressed in the redevelopment of the new greenfield hospital, including:

- Increase in Emergency Department capacity (17 spaces) including specialist consultation rooms;
- Additional inpatient maternity beds (five beds in total);
- Expansion of medical imaging including a second x-ray machine;
- Close Observation Unit to be built to an Intensive Care Unit standard to allow for future proofing;
- Four flexible short stay mental health beds within the inpatient area;
- Staff education and training facilities; and
- Establishment of an MRI service.

Following the funding announcement, SNSWLHD identified a preference for the inclusion of a 4 bed Psychiatric Emergency Care Centre (PECC) as opposed to the announced flexible short stay mental health beds. This has been supported by the Ministry of Health with 4 beds being re-allocated from the Sub-Acute Inpatient Unit. Planning for the PECC is underway, noting its inclusion is to be achieved within the approved capital envelope of $260m.

2.0 Role and Methodology

2.1 Project Team

Table 1: Project Team

Organisation	Project Team Member	Contact Name
Conrad Gargett	Executive Lead	[redacted]
Conrad Gargett	Project Lead	
Conrad Gargett	Project Architect	
Conrad Gargett	Director Design Strategy	
Conrad Gargett	Project Support	
Conrad Gargett	Project Support	
Conrad Gargett	Associate, Architect	
Conrad Gargett	Principal, Design Solutions	
Conrad Gargett	Associate, Wayfinding	
Conrad Gargett	Interior Designer	
Conrad Gargett	Project Support	
Conrad Gargett	Project Support	
Conrad Gargett	Landscape Architect	
Conrad Gargett (WSP)	Associate – Sustainability	
Conrad Gargett (Site Image)	Landscape Architect	
Conrad Gargett (Site Image)	Landscape Architect	
Root Partnerships	Project Lead	
Conrad Gargett (Site Image)	Landscape Architect	
Root Partnerships	Project Lead	
Root Partnerships	Project Director	
Root Partnerships	Senior Project Manager	
Root Partnerships	Project Manager	
Root Partnerships	Facility Planner	
HI NSW	Chief Executive	
HI NSW	Senior Project Director	
HI NSW	Director Rural & Regional	
HI NSW	Executive Director Rural & Regional	
HI NSW	Project Director	
HI NSW	Senior Procurement Advisor	
HI BIM	BIM & Digital Engineering Lead	
HI BIM	BIM Project Advisor	
SNSW Local Health District	General Manager, Coastal Network	
SNSW Local Health District	Manager, Finance and Business	
SNSW Local Health District	District Director Finance & Performance	
SNSW Local Health District	Chief Executive	
SNSW Local Health District	Executive Director, Clinical Governance	
SNSW Local Health District	ERH Site Manager & DONM	
SNSW Local Health District	Director, Medical Services	
SNSW Local Health District	Development Change Manager	
SNSW Local Health District	Development Project Lead	
Eurobodalla Council	Director, Infrastructure Services	
Eurobodalla Council	Planning and Sustainability Services	
Eurobodalla Council	General Manager	
Eurobodalla Council	Community, Arts and Recreation	
Ministry of Health	A/Executive Director Strategic Reform	
Ministry of Health	Principal Planning and Policy Officer	
TfNSW	Program Director, Princes Hwy Upgrade	
TfNSW	Project Manager, Moruya Bypass	
Community Consultative	Community Representative	
Genus Advisory – Cost Manager	Director	
Genus Advisory – Cost Manager	Associate	
Genus Advisory – Cost Manager	Associate Director	
Bonacci – Structural/Civil	Structural Lead	
Bonacci – Structural/Civil	Civil Lead	
Bonacci – Structural/Civil	Civil Designer	
Bonacci – Structural/Civil	Director	
Steensen Varming – Electrical and Communications	Electrical and Communications Lead	
Steensen Varming – Electrical and Communications	Electrical Engineer and Document Control	
Steensen Varming – Electrical and Communications	Project Director	
Steensen Varming – Electrical and Communications	Electrical Engineer	
Steensen Varming – Electrical and Communications	Electrical Engineer	
Steensen Varming – Electrical and Communications	Electrical/BIM Engineer	
Stantec	Mechanical and Med Gases Lead	
Stantec	VT	
Arup – Hydraulic and Fire Systems	Hydraulic and Fire Systems Lead	
Arup – ESD	Sustainability	
Arup – ESD	Sustainability	
Arup Acoustic	Senior Consultant	
Arup Acoustic	Acoustician	
Bitzios Consulting	Manager (Major Projects)	
Bitzios Consulting	Senior Traffic Engineer	
Solanum Services & Consulting	Hazardous Good consultant	
Cini Little	Food Services Consultant, Principal	
AviPro	Aviation Consultant	
Arup Acoustic	Acoustic Engineer	
Cini Little	Kitchen Consultants	

2.2 Methodology

The Schematic Design will provide the basis for completion of the Business Case in conjunction with the Functional Design Brief.

During schematic design we have undertaken the following tasks:

- Build on Master planning strategies from the May 2021 report
- Collaborative approach between design team, SNSWLHD and HINSW
- Optimise the Clinical Adjacencies, travel distances and co-location of departments
- Reflect on further opportunities through workshopping and review
- Rationalise area schedules collaboratively with SNSWLHD and HINSW
- Acknowledge patient pathways in the design
- Agree standard components for further investigation
- Adopt the Australasian Health Facility Guidelines for the specific agreed scope items
- Prepare schematic plans for user consultation and cost planning development
- Undertake site specific analysis
- Develop statutory approval requirements for the scope of works
- Test fit area layout strategies and footprints for circulation patterns
- Detail and develop plant strategies and layout
- Develop details for construction options
- Develop Floor Plans for review, comment and action with LHD
- Develop User Group Packs to allow the LHD easy access to all relevant information involving planning and building envelope strategy
- Value manage/design to budget; and
- Development of site constraint detail relative to efficient use of services and site limitations.

2.3 User Engagement

Schematic Design (SD) studies and options for planning have been presented to a representative group of the SNSWLHD via the Executive User Group (EUG).

Continuing Stakeholder input within the SD was vital to ensure Governance was best executed and the end users were informed through the client team. The project engagement occurs through a number of select committees / groups that ensure that all aspects of the project are met.

Initiating this within the SD, meetings, teleconferences and workshops with key NSW HI and SNSWLHD members were critical in developing the planning of the project within this phase. These have been additional to the captured meetings within the schedule, as well as the multiple rounds of user group consultation.

Reviews by the Expert Reference Group (ERG), Project Advisory Strategy (PAS) at Health Infrastructure, and Government Architect NSW State Design Review Panel (SDRP) were also carried out concurrently, and relevant feedback incorporated into the planning strategy.

The project strategic direction and ongoing monitoring of progress occurs through the Planning and Development Committee (PDC). They ensure all timelines and phases of the project are met. The Executive User Group (EUG) are responsible for the endorsement of the design leading to and after the local stakeholder's review of the planning. The Planning and Development Committee (PDC) are the project team delivering the briefed objectives within project budget and time frames while informing at set points the Project Users Group (PUGs). It is the PUG input at the Local Health District (LHD) level that provides stakeholder ownership of the development.

2.3.1 Stakeholders

During the Schematic Design phase, the design team facilitated a number of Hospital Design User Group (PUGs) sessions and Executive User Groups (EUGs).

The PUG sessions were predominantly divided into groups based on Health Planning Unit (HPU).

In addition to the Project User Groups, the Executive User Group and Project Development Committee (PDC) have reviewed and provided input as the Schematic Design has developed.

In addition to the ERH stakeholders, consultation with a variety of groups was undertaken to assist in identifying the opportunities and constraints for the project. This has included consultation with:

- Government Architect NSW (GANSW);
- NSW Ambulance Service;
- Eurobodalla Shire Council;
- Transport for NSW; and

The broad extent of consultation revealed a wide range of perspectives to inform the development of the Schematic Design. Consultation is important to ensure that the project is inclusive of the diverse range of users which will be affected by the new Eurobodalla Regional Hospital and it is anticipated that further consultation will be required within the Developed Design Phase.

Workshop

ERH Schematic Design PUG's

ERH Design Sessions (Internal CG Review)

EUG ICU/ Pathology Review

ERH Revised Blocking & Stacking

ERH Schematic Design Workshop 2

HI Project Advisory Strategy (PAS)

State Design Review Panel (SDRP)

Blue Sky Workshop (ESD)

Indigenous Consultation

Design Jam Conversations

HI Expert Review Group Arch

HI Expert Review Group Services

2.4 Documentation Review

Clinical Services Plan

The Clinical Services Plan was developed by Southern NSW Local Health District (SNSWLHD) over many years, with endorsement from the Ministry of Health (MoH) in May 2020. The Clinical Service Plan (CSP) provides a comprehensive overview of current and future health service delivery across all care settings, and make recommendation for capital works enhancements and clinical services delivery.

Planning and Prioritisation Report

This project was one of the first NSW Health planning projects to use the Facility Planning Process that specifically includes a Part 0 initiation stage. This Part 0 is envisioned to be managed by the LHD prior to a project being funded or announced however as this framework had been launched HI led some of the Part 0 initiatives for the ERH project

During Part 0 "Project Initiation", a process of initial scope optimisation was undertaken to ensure a sustainable and appropriately sized service could be provided within the allocated budget. As a result, a Planning and Prioritisation Report was developed.

This report summarises the clinical service prioritisation process undertaken with Eurobodalla Regional Hospital to date. The Planning and Prioritisation report sought to identify a preliminary service configuration for the ERH at day 0 to help inform and guide the detailed planning process. This was done through "transform and optimise" initiatives and a service prioritisation process for the Eurobodalla Regional Hospital (ERH) Redevelopment.

Informing Documents:

- Eurobodalla Masterplan Report – Capital Consultants May 2021
- Eurobodalla Regional Hospital Clinical Service Plan, March 2020
- Australasian Health Facilities Guidelines, February 2021
- NSW Health Guidelines for Facility Planning Process - July 2020
- Eurobodalla Regional Hospital Site Selection Report
- Eurobodalla HS Site Selection Flood Assessment Report Rev 0
- Moruya (Eurobodalla) Hospital HLS Aviation Feasibility Assessment AviPro V1.1 Final
- Preliminary Town Planning Assessment 30062020 – Site Selection
- Building Code of Australia (BCA)
- Site Selection Working Group Brief Final
- ERH Redevelopment - Recommendation Report V1.2
- Review of South East Regional Hospital & Site Visit
- POE Report Operating Theatres and IIOR 2017; and
- 190312 POE IPU Major Findings and Recommendations Presentation.
- NSW Health 20 Year Health Infrastructure Strategy booklet
- The State Infrastructure strategy 2012-2032
- The NSW State Health Plan – Towards 2021
- The NSW Rural Health Plan – Towards 2021
- Oral Health 2020: A Strategic Framework for Dental Health in NSW
- Australian Government Health Mouths, Health Lives: Australia's National Oral Health Plan 2015-2024
- NSW Aboriginal Health Plan 2013-2023
- NSW Integrated Care Strategy
- Healthy, Safe and Well: A Strategic Plan for Children, Young People and Families 2014-2024
- NSW Ageing Strategy 2012
- GL2014_018 Wayfinding for Health Facilities
- eHealth Strategy for NSW Health 2016-2020
- The National Framework for Universal Child and Family Health Services
- NSW Ministry of Health Office of Kids and Families initiative – Health safe and well
- Protecting People and Property, NSW Health Policy and Standards for Security Risk Management in NSW Health Agencies, February 2022
- NSW Health, PD 2019 060 Workspace Accommodation Policy
- GA NSW, Connecting with Country Framework

The below consultants' reports have informed the Schematic Design report:

- Electrical Engineers Report
- Engineers inspection reports (structural & civil)
- Geotechnical Report
- Town Planning
- Arborist Report
- Mechanical Engineers Report
- Surveyor plans.
- Electrical Engineers Report
- Engineers inspection reports (structural & civil)
- Geotechnical Report
- Town Planning Report
- Arborist Report
- State Design Review Panel Review. Refer Appendix.
- Mechanical Engineers Report
- Surveyor plans
- Bushfire Assessment Report
- Preferred Site Due Diligence Flood Assessment
- Aboriginal Archaeological Assessment
- Historical Archaeological Assessment
- Statement of Heritage Impact
- Aboriginal Cultural Heritage Assessment Report
- Food Service Consultants (This is only a drawing should this be included?)
- Hazard Analysis Report

2.5 Staging

The Schematic Design is based on a single stage development which will relocate the existing Batemans Bay and Moruya hospital to a new site. The design team understands reviews of potential staging options (Early / Enabling Works) are ongoing.

2.6 Health Facility Guidelines

The Australasian Health Facility Guidelines (AusHFG) informed the development of the Functional Design Brief and therefore, the Schematic Design. The Guidelines have been used in the manner for which they are intended.

The AusHFG are not intended to restrict innovation that might improve performance or outcomes, or to be prescriptive where clinical service circumstances can validate an alternate configuration.

The aims of the AusHFG are to:

- assist with the design of safe health facilities that provide privacy and dignity for patients,
- support contemporary models of care and the needs of carers, visitors and staff;
- maintain public confidence in the standard of health facilities;
- achieve affordable solutions for the planning and design of health facilities; and
- promote built solutions that minimise recurrent costs and encourage operational efficiencies.

The guidelines provide a basis for discussion of requirements with users assisting in the establishment of a dialogue that allows for the model of care to inform consideration of the AusHFG to tailor the design solution to the project-specific functional brief and developed user requirements.

2.7 Design Excellence

The New South Wales Government is committed to design excellence, recognising that well-designed buildings, spaces and places contribute to the quality of life and economic success of our state.

Continued engagement with the Office of the Government Architect, Design Champion Wade Sutton, and engagement with the State Design Review Panel has formed part of the development process of this design report.

The hospital's and HI NSW vision includes embedding sustainability (ESD) as a core principle of the design and operation of the facility. This will create a facility which:

- Creates a healthy campus community;
- Protects occupant health, promotes occupant wellness and prevents environmental harm;
- Provides secure, safe potable water;
- Enhances the civic, urban experience;
- Is resilient and ready for the future;
- Improves natural systems and landscape areas; and
- Delivers on the Connecting with Country Framework.

The precinct will be healthier and underpin good mental health and as a result:

- Buildings will be healthier and welcoming – assisting navigation and reducing barriers to access;
- Facilities will be healthier and helpful - facilitating ease of access, safety and satisfaction; and
- Technologies and resources promote a healthier and holistic service – including implementing best practice approaches.

3.0 Site Review

3.1 Site Location

The proposed health service campus is approximately 2km South East of the Moruya town centre (refer Figure 1), predominantly on a clear sloping site which forms a parkland setting. Links into the town centre rely mainly on motorised road transport but the local authority does encourage bicycle routes and public transport, currently servicing the neighbouring TAFE campus and residential neighbourhood.

3.2 Indigenous People and Eurobodalla

3.2.1 First Nations Diversity

The Eurobodalla Regional Hospital recognises Aboriginal people as the original inhabitants and custodians of all land and water in Eurobodalla and respects their enduring cultural and spiritual connections. The ERH Project collectively acknowledges the Traditional Owners of the land on which we live, work, and meet

The people of the Yuin Nation are the traditional custodians of the land we now know as Eurobodalla Shire. Yuin people have lived in the area for thousands of years and have an enduring custodianship and connection over the land and waterways of Eurobodalla.

The dispossession of Aboriginal people from their lands across Narooma, Batemans Bay and in other towns on the Far South Coast (FSC) began in the nineteenth century. The combination of introduced diseases, violence and forced removals significantly affected the Aboriginal population across the wider region.

Today, the Indigenous population generally is disadvantaged across a range of measures including health, education and income. The Eurobodalla Shire has the largest Aboriginal population in SNSWLHD, with an estimated 6.8% of the Shire's population identifying as Aboriginal or Torres Strait Islanders, double the state average of 3.4%. This population is young, with 46% aged 0-19 years. Cultural recognition and identity are important to the health and wellbeing of the growing number of Indigenous people who use or work in health services. This information has been extracted from the Clinical Services Plan (CSP). Additional information is provided in section 6.17 of this report.

3.3 Site Plan

The site is mostly safe from the town's known flood area, with the western portion of the site within the flood plan (refer flooding Eurobodalla HS Site Selection Flood Assessment Report Rev0); the town itself sits alongside the Moruya River. The river and the Princes Highway should be considered in access planning and stocking, during disasters.

The site has a large expansion area but is limited by the topography. Any form of development will need to be closely positioned to the existing plateau in order to prevent extensive elevation above the hillside

3.4 Helicopter Landing Site (HLS)

The new Eurobodalla Regional Hospital is to have a helipad located on the site however the number of retrievals is expected to decrease in response to a higher Role Delineation of. After consideration of multiple options during the new hospital preliminary design stage the layout (within the site) and design (orientation, shape, size and profile) for the HLS has been determined by the Aviation Consultant. The current HLS location is deemed the most feasible due to the following considerations;

— Topography of existing site;
— Existing vegetation and heritage trees;
— Avoiding overflight of the main hospital building for approach and Departure; and
— Minimising patient transfer distance between the landing site and the Emergency Department (less than 100m is preferred).

The aviation report considers the essential requirements for the establishment of a successful on-grade HLS and further considers these requirements in extensive detail. The essential primary features of a successful HLS are summarised below;

— Alignment with direction of prevailing winds;
— required to be removed traffic control (ATC) which has been acknowledged by Eurobodalla Shire Council, as owner of the Moruya Airport Availability of emergency landing areas;
— Avoidance of vertical structures and obstacles/hazards;
— Avoidance of airspace restrictions and limitations;
— Avoidance of areas sensitive to noise and vibration; and
— Avoidance of ecologically and environmentally sensitive areas.

Important criteria for approach/departure paths is that there be a minimum of two that are at least 135° apart. In addition, the Guidelines state that the HLS should be no more than 100m from the ED, ICU which therefore makes proximity to the hospital a very important consideration. Generating two obstacle-free approach and departure paths, together with positioning the HLS close to the hospital; at the same time avoiding a clash between helicopter main rotor downwash and people, vehicles and fixtures/furnishings has been the major challenge in siting the ERH HLS. Following much analysis and planning one workable option; a design originally known as HLS Option 1, now with slight modifications. This location provides adequate proximity between the HLS and the hospital entrance while keeping it somewhat remote from pedestrian and vehicular activity within the campus

Assessment of the surrounding obstructions, prevailing wind directions and potential 'no-fly' areas (e.g. mental health facility, sensitive residential areas) will help determine the approach and departure paths to and from the HLS. The contracted helicopter operator will develop specific procedures for the HLS that will take into consideration noise and vibration minimisation. Whilst all attempts are made to minimise overflight and noise impact, the safety of the helicopter (and occupants) is the prime responsibility of the pilot and therefore in certain weather conditions, overflights of noise sensitive areas may not be avoided.

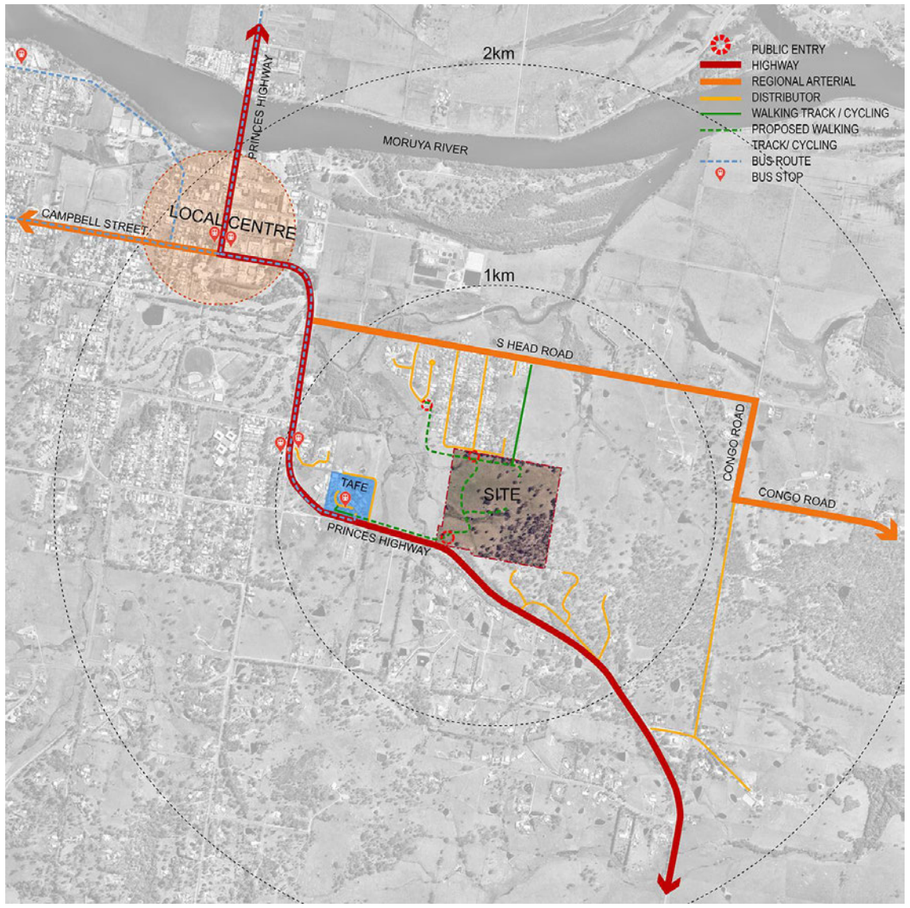

Figure 1: Site Hierarchy

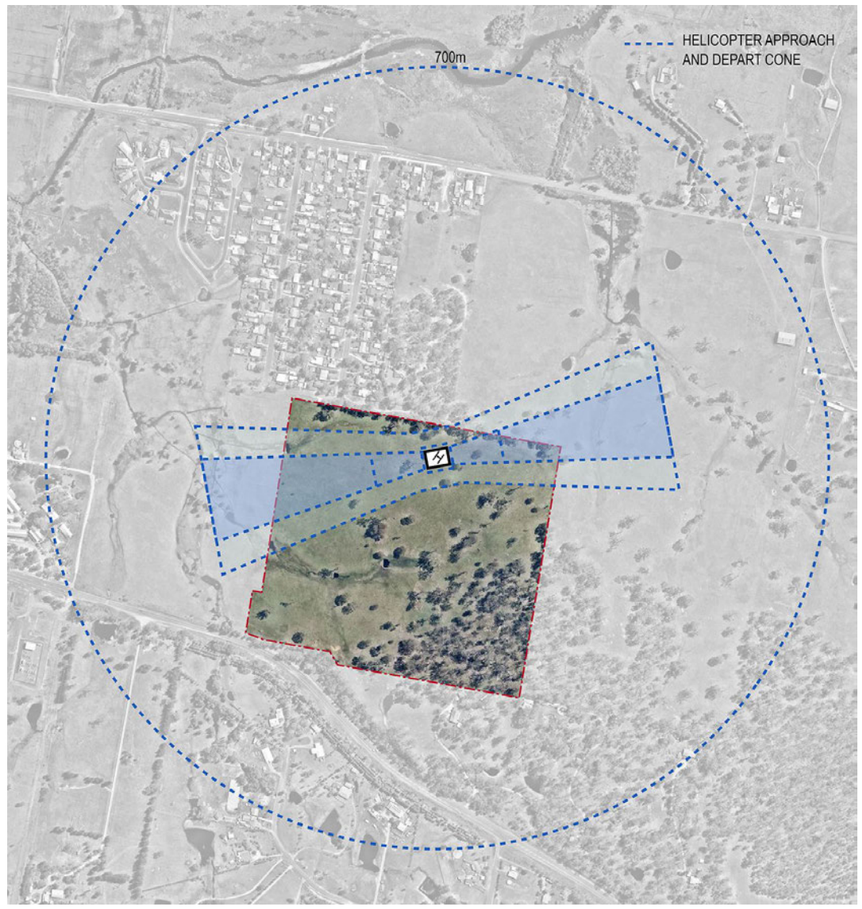

Figure 2: Zones – shows the detailed Helipad on the Eurobodalla site

3.5 Solar Analysis

The sun path diagram confirms optimised orientation of proposed buildings, noting they should be sited with long axis orientated East-West.

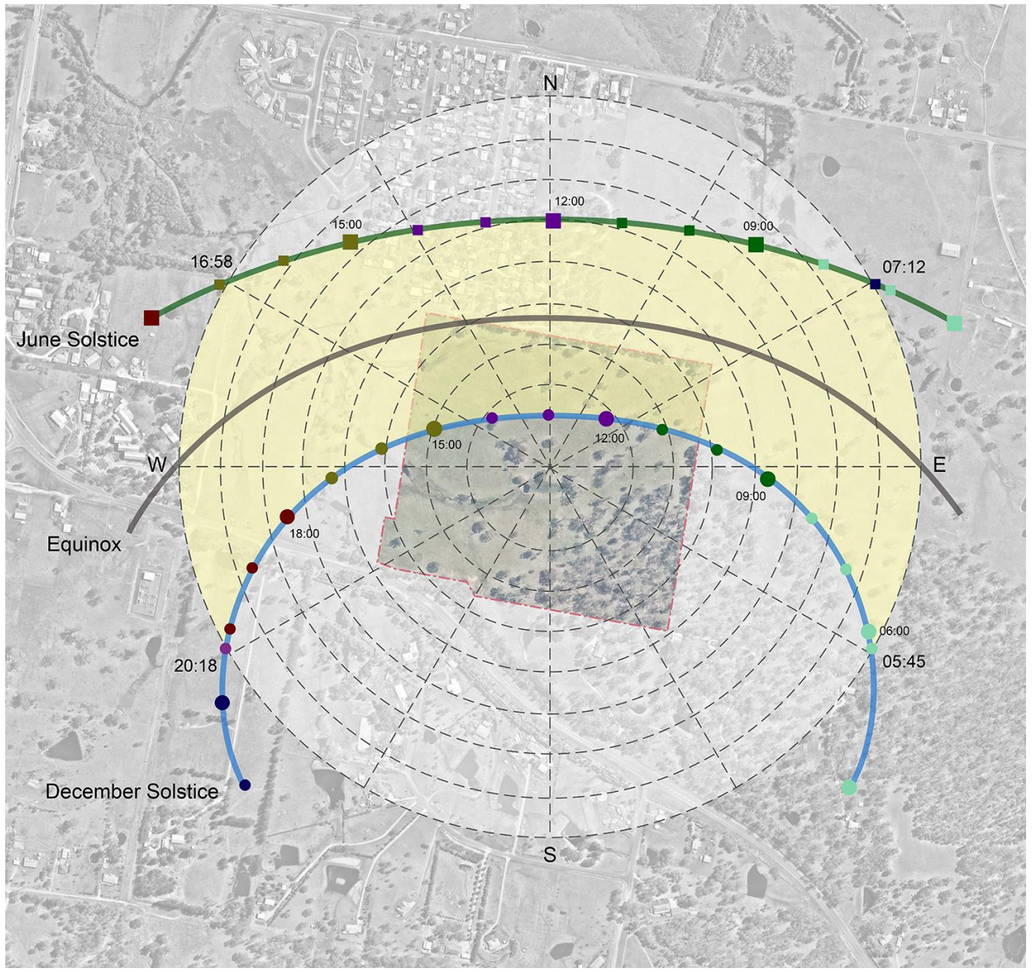

Figure 3: Sun Path Diagram

3.6 Wind Analysis

Figure 4: Wind Analysis – Wind Impact on site, demonstrates how the prevailing winds impact on the Eurobodalla site.

The raised topography to the North-East & South-East will assist in buffering the wind for the central zone of the site. As the Southerly winds are less desirable, the preferred zone for the hospital is positioned to the North of the large sloping hill to the South East.

Wind Rose

The wind rose provides a basis for designing for comfort conditions. It also informs consideration for the location of a helipad, determining the most likely approach and departure flightpaths.

Data for the four seasons of the year indicates that:

— Summer breezes are primarily from North East
— Winter winds are from West, South East and East.

Therefore, it is recommended that:

— Sheltering from West and South East is required
— Flexible sheltering from West and South East side is required to protect from winter winds but allow for summer breezes.

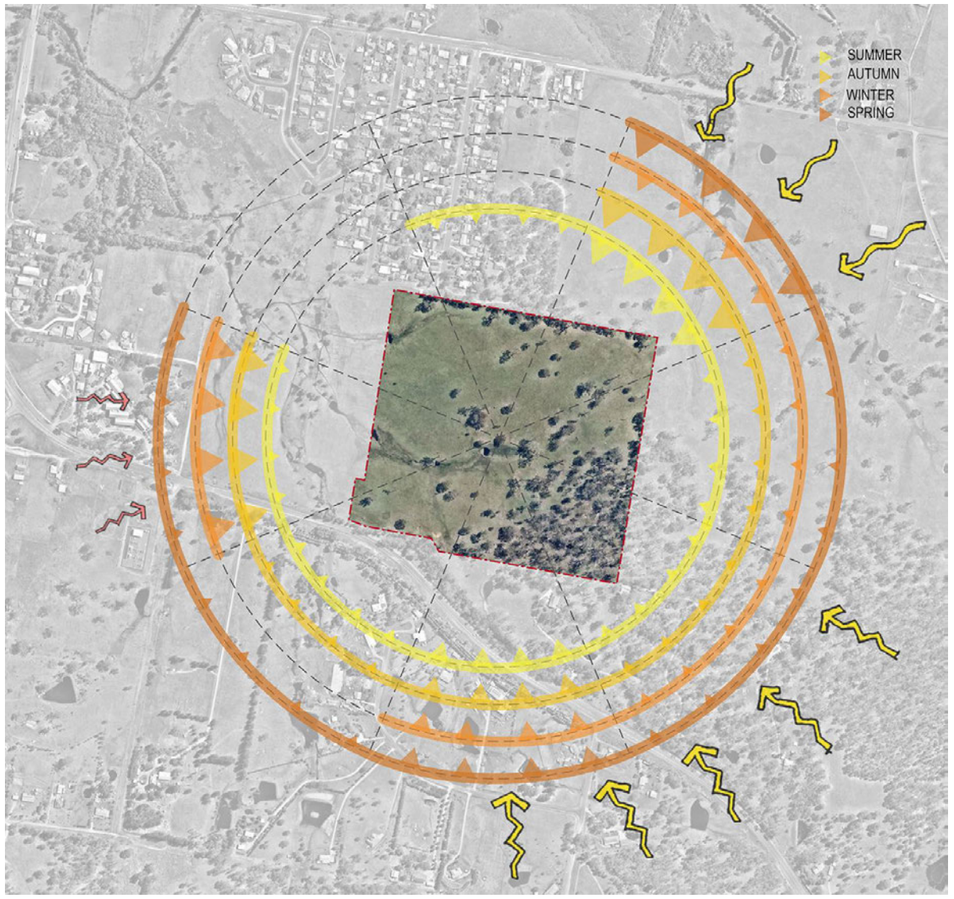

Figure 4: Wind Analysis – Wind Impact on site

3.7 Flooding

The site is mostly safe from the town's known flood area, with the western edge of the site within Probable Maximum Flood (PMF) plan (refer flooding Eurobodalla HS Preferred Site due diligence flood assessment). Considerations have been made when looking at preferable zones for the building to be well above the Probable Maximum Flood line, and for the main access road to also be well above the PMF.

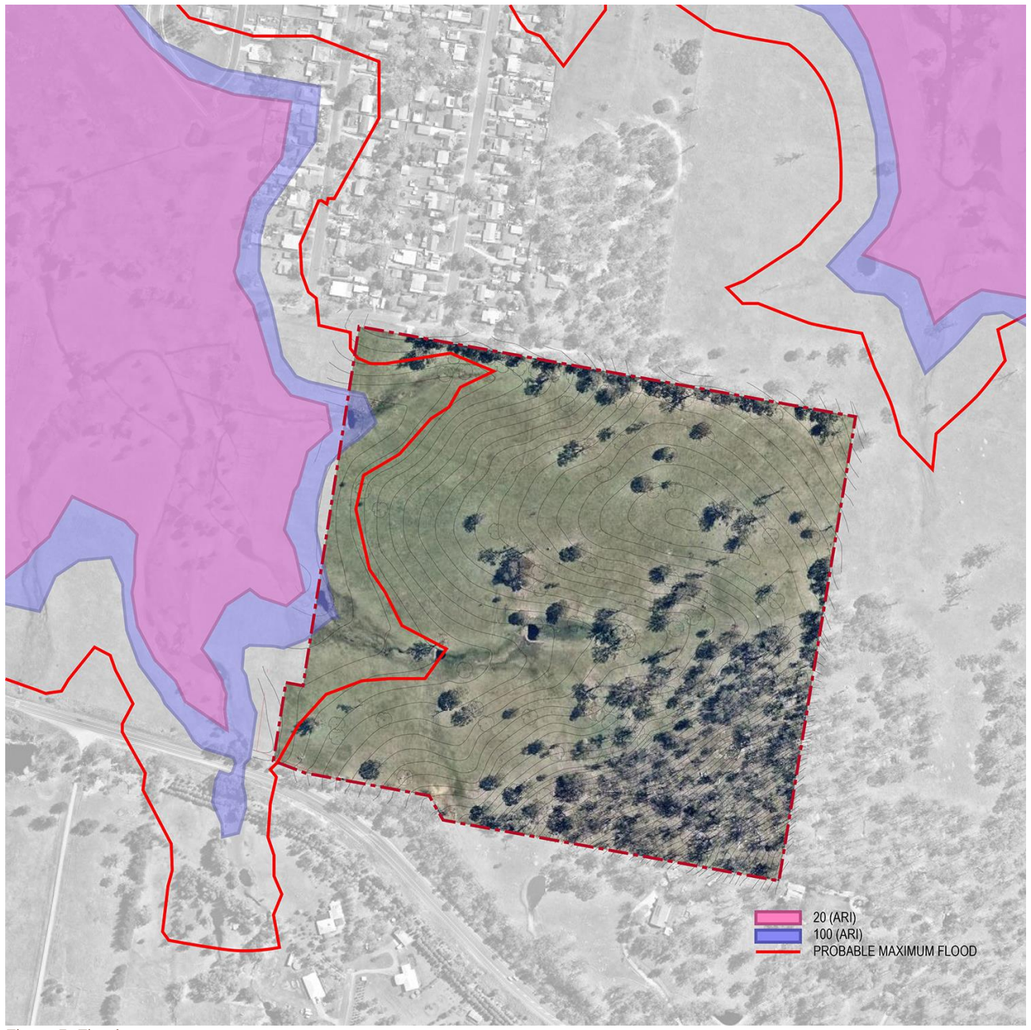

Figure 5: Flood

3.8 Topography/ Vegetation

The proposed Eurobodalla site is a large allotment comprising of primarily vacant land. A large portion of the site is cleared with some existing natural vegetation on the sloping portion to the south east of the site. The site is located circa 2.2km south of Moruya town centre.

Figure 6 shows the topography of the Eurobodalla site.

The topography of the site extends from a lowest point of approximately RL-1.5 at the north-west up to approximately RL-55 at the south-east ridge. This constitutes a total change in level of more than 50m. The area identified as usable and appropriate for development is to the north-east corner of the site. This zone contains a ridge point at around RL 22 which is intended to be used as a prominent green space and entry zone for the hospital building. The building is to be located to the west of this ridge over a zone which falls at a gradient of 3-5% towards to west.

A significant gully feature extends from east to west on the site and acts as a natural watercourse through the site. The high point is at the base of the south-east ridge at RL 19 and the gully extends to west into the flood zone. The low point of the gully on the western boundary is approximately RL 2.0.

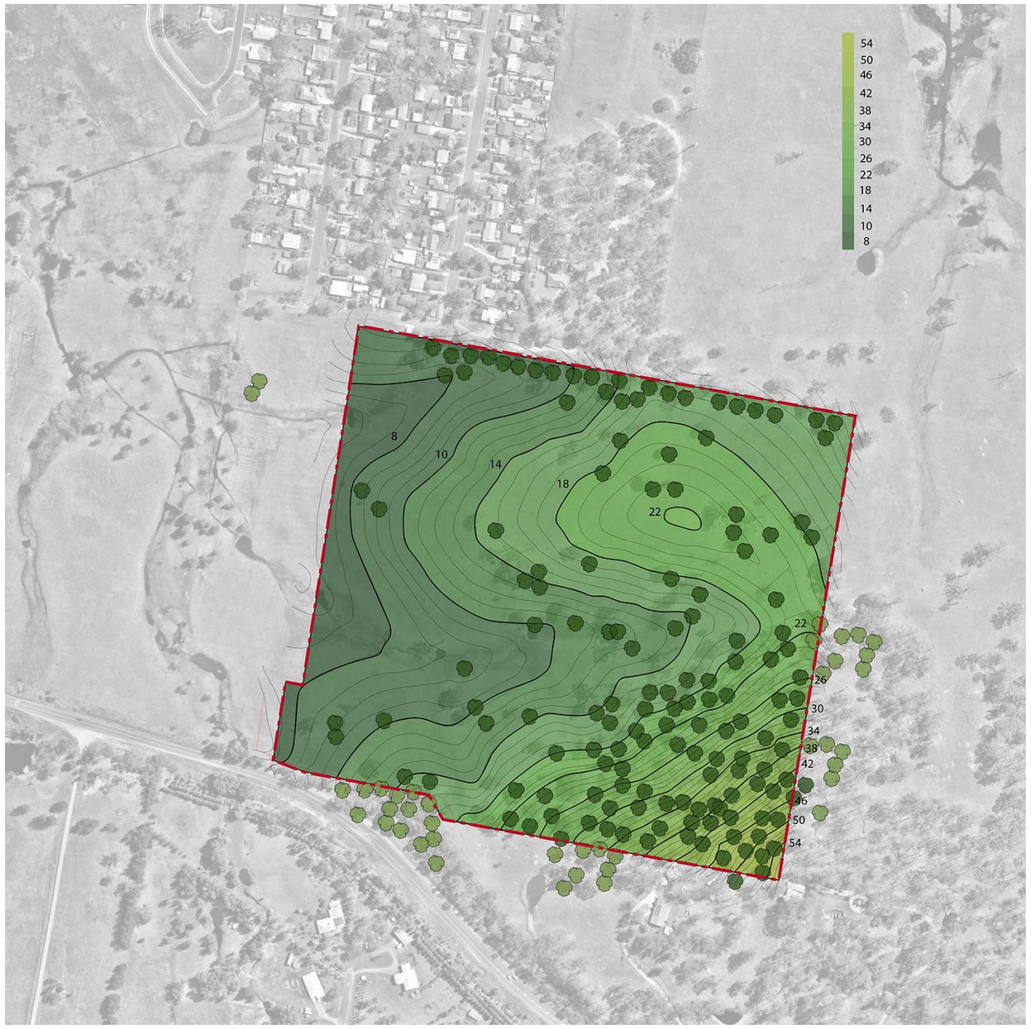

Figure 6: Topography / Vegetation

3.9 Roads, Access and Parking

The following figure demonstrates the existing roadways and access routes to the Eurobodalla site.

3.9.1 Primary Vehicular Circulation and External Entries

Opportunities to establish multiple entries into the ERH site has been examined to ensure that the precinct does not operate as an island, with one northern entry and one southern entry. This is to ensure future provision for relieving emergency and/or peak conditions by more than two primary sources if preferred.

The future Princes Highway bypass for Moruya is mooted to occur in the near future, with a preferred strategic corridor to the east of the site announced in May however it is noted further community consultation on proposed routes is underway2021further . Any potential effects on existing surrounding site services infrastructure are noted within the consultants' reports and will be further developed in the next stages of the project. The project is being designed based on current known information only.

Figure 7: Site Road Hierarchy

3.10 Bushfire

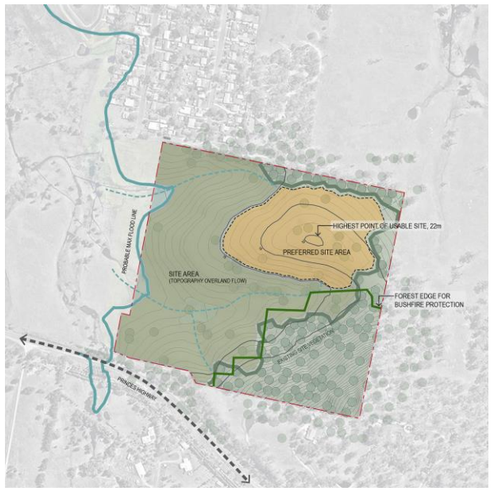

Figure 8: Asset Protection Zone and Offsets

The site is mapped as bush fire prone land and a bushfire assessment of the proposed development site was undertaken on 25 – 29 October 2021 by Able Ecology. Reporting concluded that the development can be constructed provided appropriate precautions are taken and that compliance with the Planning for Bushfire Protection 2019 can be achieved.

The proposal to construct the new hospital will occupy a minimum building footprint area of 43,489 m2 (approx.), not including an aircraft flight path area, landscaping, and bushfire asset protection zone. The associated infrastructure includes additional vegetation clearing for an aircraft flight path (helicopter), car parking, areas of building expansion, access road north to Albert / Caswell Street, and access road south to Princes HWY with Round-about addition, landscaping, and bushfire asset protection zone.

The dominant hazard on site is identified as unmanaged grassland on all aspects to the main hospital footprint. Further a large path of dry forest is noted to the southeast corner of the site however it is noted that this is in the order of 140m away from the main hospital building footprint. Space has been identified on the allotment to clear existing vegetation and permit a deemed-to-satisfy separation distance for BAL - 12.5 and 29 construction of proposed buildings. The APZ is located on lands with a slope not exceeding 18°, and is wholly within the boundaries of the development site. The APZ is to be maintained to an inner protection area condition for the specified distances in the Bushfire report. For the Main Hospital Building, an APZ will need to be maintained as Inner Protection Area condition for a distance of 45 metres on the north aspect, and 40 metres on the west, east, and south aspects.

The assessment report concludes that the required building construction is BAL – 12.5 on all aspects of the main hospital buildings. All building construction is to in accordance with the NCC and must comply with Section 3 and 5 (BAL -12.5) of Australian Standard 3959 (2018) Construction of buildings in bushfire-prone areas and Table 6.8a of PBP 2019 and as modified by Section 7.5, 7.5.1, 7.5.2, 7.5.3, and 7.5.4 (where applicable) of PBP 2019. Refer to AS 3959 (2018) for a detailed description.

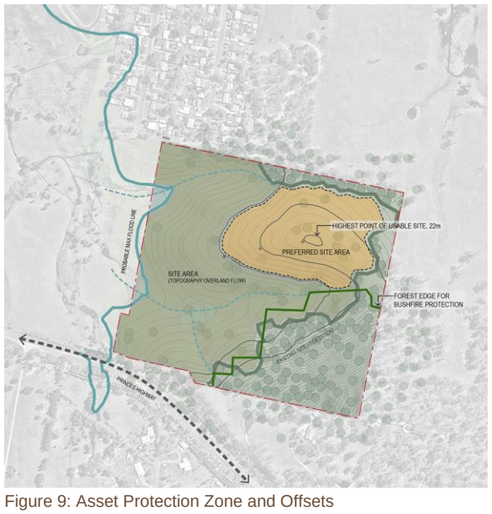

Figure 9: Asset Protection Zone and Offsets

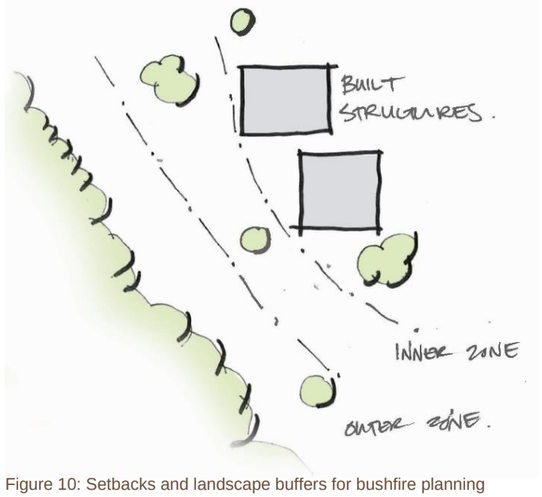

Figure 10: Setbacks and landscape buffers for bushfire planning

3.11 Town Planning Parameters

3.11.1 Zoning

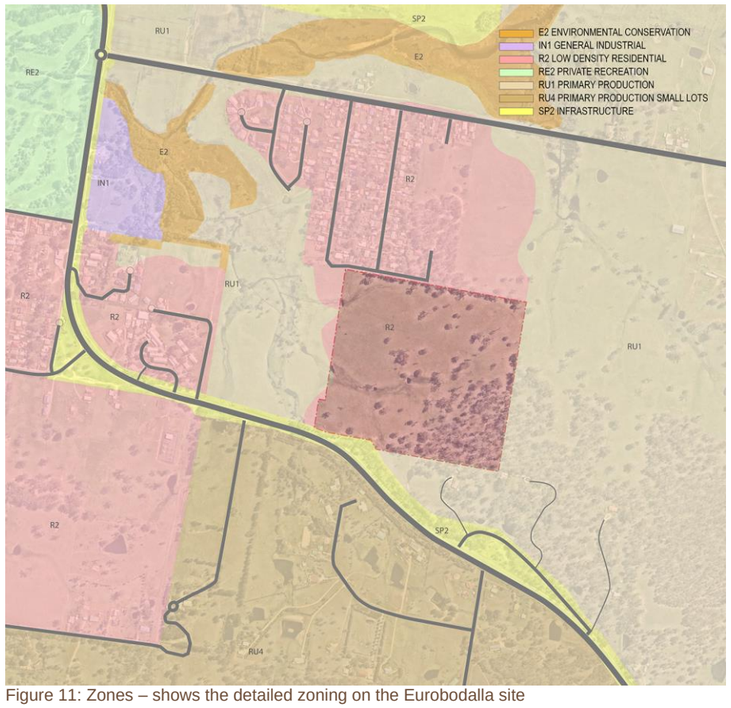

Figure 11: Zones – shows the detailed zoning on the Eurobodalla site

Zoning categories include:

- Local Centre;
- Environmental Conservation;
- General Industrial;
- Low density residential;
- Private recreation;
- Primary Production;
- Primary Production Small Lots; and
- Infrastructure.

3.11.2 Title / Ownership / Site lots

The site is located 2 kilometres to the south east of Moruya town centre on the Princes Highway in the Eurobodalla Local Government Area. The property is approximately 21.79 hectares and is zoned variously R2 Low Density Residential (90%), and RU1 Primary Production (10%)[JR1]. The development is proposed for the area of the site zoned R2 Low Density Residential. Under State Environmental Planning Policy (Transport and Infrastructure) 2021 the R2 zone is identified as a prescribed zone meaning health services facilities are permissible with consent. The northern half of the site is also within the Coastal Zone as determined by State Environmental Planning Policy (Resilience and Hazards) 2021.

Lot 2, DP1281574, Princes Highway, Moruya (Southeast of the township).

3.11.3 Neighbouring Service Providers on the Site

- Essential Energy have no assets affected on the Site
- Optus does not have any fibre optic cables on the Site, although a major fibre optic cable is present along the Princes Highway, in proximity to the Sites south west border
- A trench containing in-service/constructed NBN (Copper/ RF/Fibre) cables runs by the Princes Highway
- Telstra has a conduit along the Princes Highway

3.12 Environment

While the hospital is located near generous areas of green-space and planting along the Princes Highway, most landscape within the hospital site itself function as buffers and promote health and wellbeing.

The large open space with strands of mature trees at the southern and northern edges. The landscaping is generally degraded with little maintenance being undertaken.

3.13 Adjoining Properties

Surrounding development includes a residential subdivision immediately adjacent to the north (known as Mynora) and a TAFE college immediately adjacent to the south west. The Princes Highway arcs around to the west and south of the site and South Head Road runs along some of its northern boundary. Other than the adjacent residential land at Mynora and the TAFE College, the surrounding lands are rural, principally used for grazing.

3.14 Local Health Services

The Southern NSW Local Health District (SNSWLHD) occupies the south-eastern corner of NSW; in the 2016 Census there were 200,176 people in SNSWLHD. The LHD is made up of seven Local Government Areas (LGAs), covering an area of 44,534 square kilometres. The most populated LGA is Queanbeyan Palerang with about 61,000 people, with Upper Lachlan LGA having the least number of people (about 8,000).

Eurobodalla Shire has a population of approximately 38,000 people, 6.8% of which identify as Aboriginal or Torres Strait Islander. Much of the local industry is related to agriculture, government administration, hospitality and tourism. SNSWLHD contributes to communities, employing around 2,000 full time equivalent staff. Southern NSW LHD adjoins the Western NSW LHD to the north-west, Victoria to the south, South Western Sydney to the north, Illawarra/Shoalhaven LHDs to the north-east, the South Pacific Ocean to the east and Murrumbidgee LHD to the west.

SNSWLHD almost completely surrounds the Australian Capital Territory (ACT). The proximity to the ACT has a major impact on the planning of health care services for LHD residents.

There are eleven public hospitals and three Multipurpose Services (MPS) in SNSWLHD. Community health services are provided across the District. The District Hospitals, MPSs and community health services provide a range of services including emergency, intensive care, coronary care, maternity, acute medical and surgical services, sub-acute and primary and community services.

Mental health services include acute, non-acute, child and adolescent and specialist mental health services for older people. Multipurpose Services provide integrated acute and sub-acute inpatient services, and residential aged care, along with a range of community health services.

3.15 Site Investigations

A number of reports were undertaken as preliminary site investigations to inform the design process, including contamination investigations, bushfire and ecology investigations, geotechnical, groundwater and surface water and survey reports. The site investigations were undertaken between January 2021 and June 2021 and assessed the masterplan options for the Eurobodalla Regional Hospital. Further critical site investigations such as extra detailed feature survey, geotechnical testing and environmental consultancies and Heritage were undertaken between July 2021 and November 2021 to inform the Schematic Design stages of the project.

3.16 Eurobodalla Significant Sites

3.16.1 Yuin People

The Yuin people are the traditional owners of the Eurobodalla region. This Country spans between Ulladulla to Eden north-south, and from the coast to Cooma in the west. The Yuin traditional territory is larger than that of Eurobodalla, covering parts of neighbouring shires. The Yuin hold a strong connection to the land, as well as to the coastline and ocean that borders their Country, which holds their significant sites both through Dreaming stories and important sacred sites.

The Yuin lived in balance with their environment, treating the land with respect and helping to cultivate and maintain their abundance of natural resources and food. The social structure of the Yuin people embraced prescribed rules of behaviours to help maintain social order. These rules were told and passed down through stories and Dreaming's. The original Dreaming story depicts Daramulun and his mother Ngalalbal living on earth;

"Originally the earth was bare and like the sky, as hard as stone, and the land extended far out where the sea is now. There were no men or women, but only animals, birds, and reptiles. He placed trees on the earth. After Koboka, the thrush, had caused a great flood on the earth, which covered all the coast country, there were no people left, excepting some who crawled out of the water on to Mount Dromedary (Gulaga).

'Then Daramulun went up to the sky, where he lives and watches the actions of men… He told the Yuin what to do, and he gave them the laws which the old people have handed down from father to son to this time. When a man dies and his Tulugal (spirit) goes away it is Daramulun who meets it and takes care of it.'

- Recounted by A W Howitt, 1904

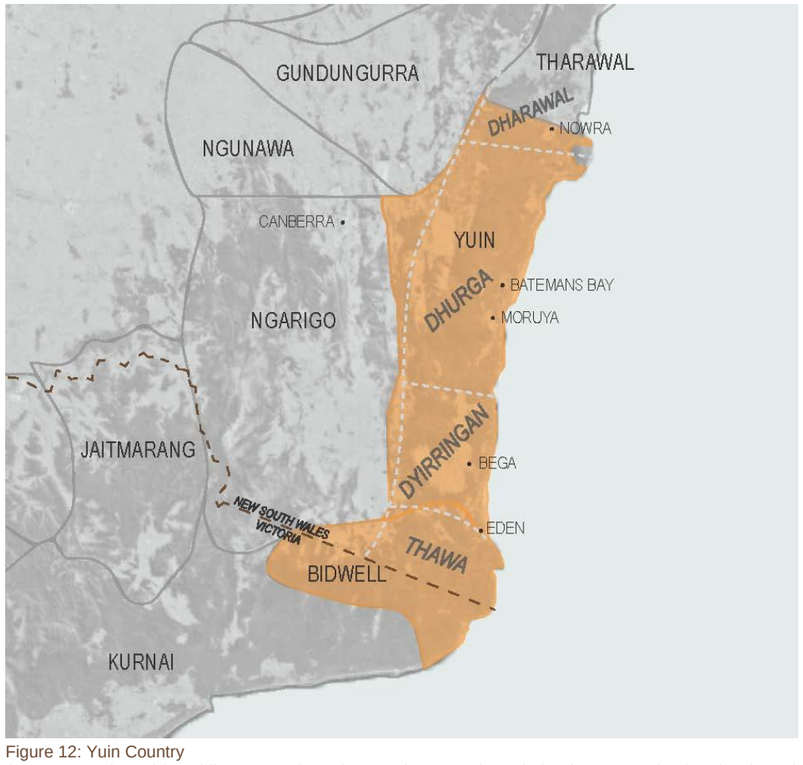

Figure 12: Yuin Country
(Resource: Adapted from '*Illawarra and South Coast language boundaries (Map: Brenda Thornley, based on Eades, 1976)')*

The Yuin people encapsulates many smaller groups within the region, including the Wandiwandian, Dhurga, Bidewal, Walbanja and the Djiringanj. All these groups are connected through the Dreaming of Gulaga, the mother mountain.

3.16.2 Gulaga (Mt Dromedary)

Gulaga is considered the place of ancestral origin for all Yuin people. The mountain is also retold as the Mother Mountain during the Dreaming, who had two sons and seven daughters. Gulaga represents the lesson of "always doing as you are told". This story depicts Gulaga's two sons, Najanuka and Baranguba, who live with their mother. Baranguba decided to move away from his mother and live alone, but not after long, he was separated from his mother by water and could not return home. Baranguba remains separated from Gulaga, and is what is now known as Montague Island. After Baranguba was unable to return home, Gulaga kept her second son, Najanuka, close, embodied by Little Dromedary.

Aside from the spiritual significance of Gulaga, the mountain is part of numerous songlines and significant sites for the local Yuin people. The mountain hosts both women's and men's places, characterised by the form of the mountain. The mountain also historically provided the main route for the Ngarigo people to the west (Cooma) to travel towards the coast for the winter, in order to avoid the colder inland temperatures. The local people also used Gulaga as a "weather clock", able to determine changes in the weather and seasonal patterns through the fauna and flora of the mountain. Resources for making tools and weapons were also harvested from the mountain, including "Garrara" tree stems and "Mingo" grass (Kangaroo Grass) for use in fashioning spears.

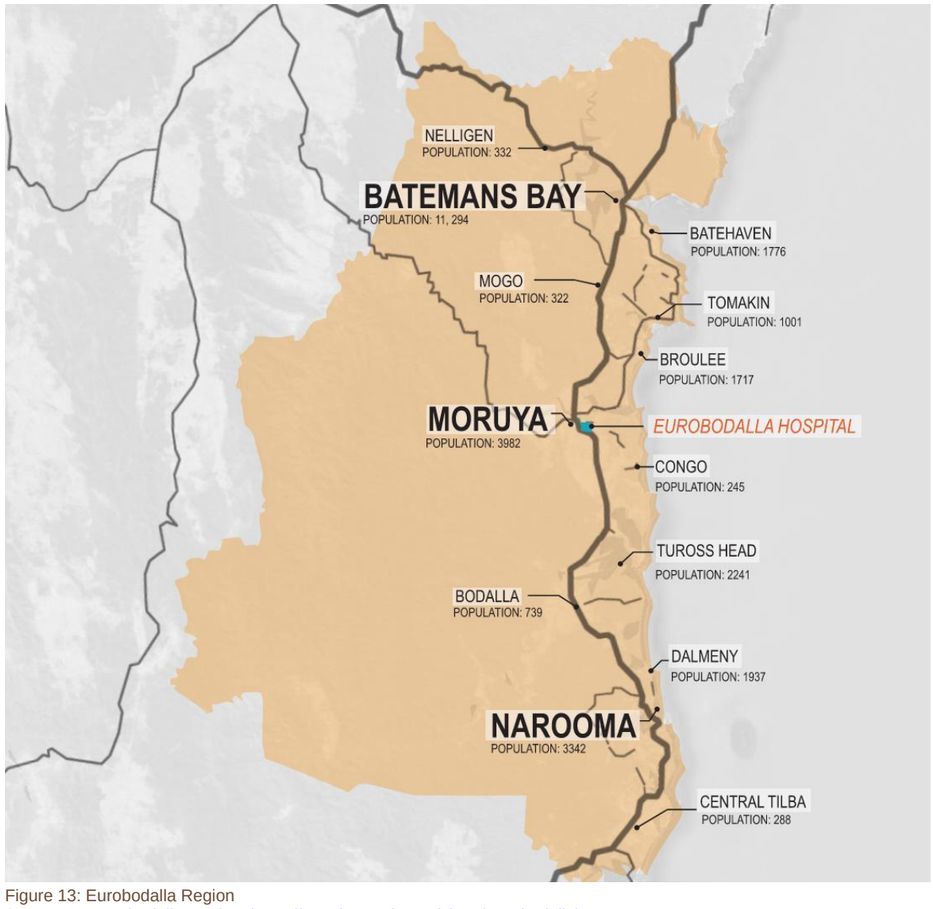

Figure 13: Eurobodalla Region
(Resource: Eurobodolla Region, https://google.com/maps/place/Eurobodalla)

3.16.3 Moruya and Deua River

Alongside Gulaga's two sons, the Mother Mountain also had seven daughters. Before Baranguba left his mother, the sisters headed north together, towards what is now known as Batemans Bay. As they travelled north they looked back to see their mother and brothers, and continued to travel onwards. At one point (near Hanging Mountain) when they turned back, they could no longer see their mother. They continued to the north, crying as they walked, creating the seven rock pools along the Deua River. These rock pools are considered highly significant places, and are believed to host both healing and fertility powers.

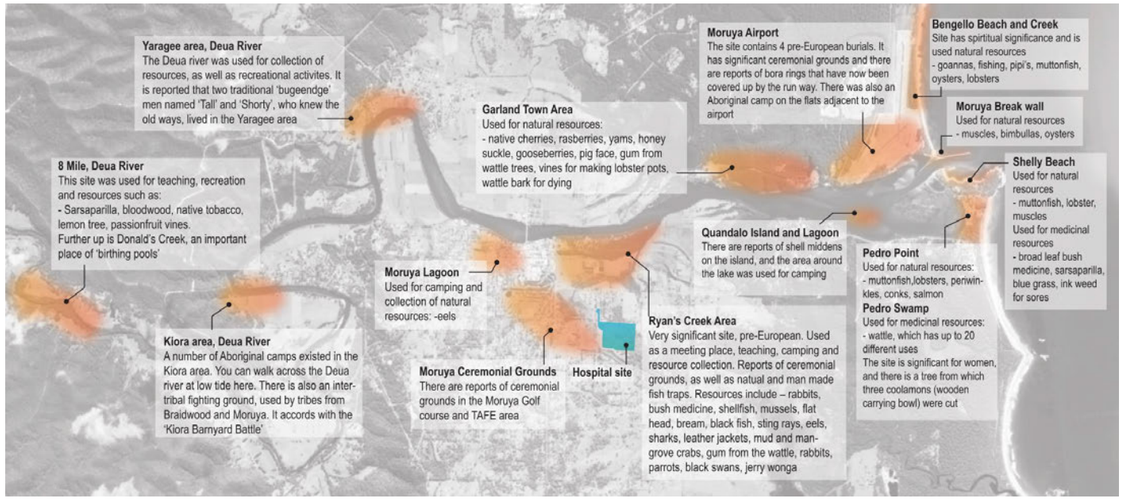

Figure 14: Moruya & Deua River
(Resource: Moruya & Deua River, https://www.google.com/maps/place/Deua+River)

The physical history of both the Deua and Moruya Rivers show these locations as educational landscapes; places to pass down knowledge through generations. There are numerous oral recollections within the local community of these rivers being utilised as training grounds for gathering and hunting, as well as reading and protecting the land. The Moruya River also holds significance as a black swan gathering ground. Black swans are generally regarded as the totem animal of the Yuin people (separate from the individual totems given to each person), and as such holds importance as an area to be protected. Part of the Indigenous connection to land is protection and conservation, both to the fauna and flora. With totemic animals, each community or group would be responsible for protecting both their totem and its habitat.

3.16.4 Catalina (Hanging Rock Creek)

Located within the Batemans Bay area, Hanging Rock Creek, specifically the site of the original ironstone pillar, was a significant meeting place for local groups and travellers. There was a rich social life surrounding this site, and fishing and fresh water were abundant. In 1997-98, the local Council removed the rock due to seeing the monolith as dangerous due to its proximity to the road. The removal had a lasting impact on the local Indigenous community, having destroyed the physical marker of a significant place within their social history.

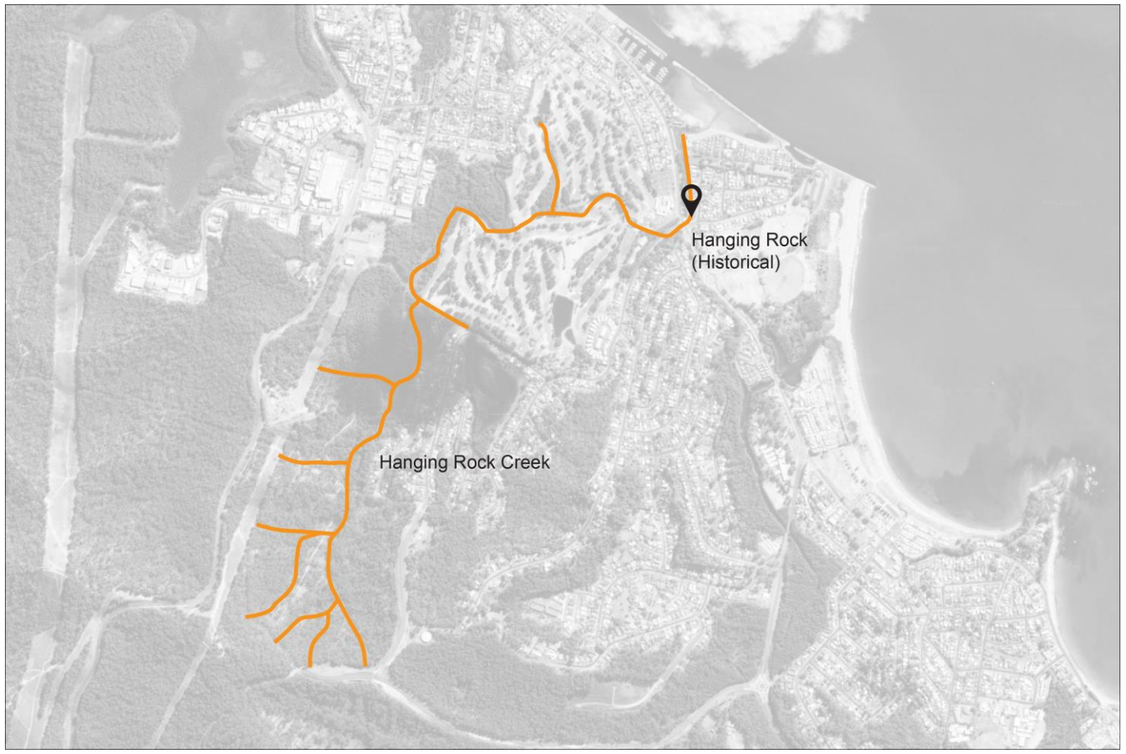

Figure 15: Hanging Rock Creek
(Resource: Hanging Rock Creek, https://www.google.com/maps/place/Hanging+Rock+Creek)

3.16.5 Songlines and connections

Many of the significant places within the Eurobodalla region are connected by pathways or "songlines". Songlines have proved difficult to interpret from an outside perspective, but are described as the way in which the landscape of the Country was formed. Songlines describe the movements of the creator gods as they made their way through the Country, and have strong ties to Dreaming stories and sacred sites. These passages are present both physically, as well as metaphysically, meaning they are unable to be physically seen, but are equally important to landscape and Indigenous Culture.

Within the Eurobodalla region there are songlines present surrounding Gulaga and her children, but the more identifiable connections through the land have been worn by historic movement between sacred sites, ceremonial grounds, and seasonal movement. Links described, to a surface level to preserve significant sites and pathways for the local community, by local Yuin people include travelling from Wallaga Lake to Ulladulla, Wallaga Lake to Pebbly Beach, and Potato Point to Brou Lake. These connections were frequently travelled, and followed the landscape to provide abundant food, water, and shelter during travel,

Another link is the Corn Trail; the shortest route down the Clyde Mountain. This route followed traditional walkways used for generations, as well as Dreaming paths and natural resources, allowing the landscape to guide and provide. This track also provided a social link between the coastal groups and the inland groups within Yuin Country, providing an important social link.

3.17 Connecting with Country

Connecting with Country is an initiative by the NSW Government's Architect Office, and is a draft framework intended to help form, design, and deliver government infrastructure that will undergo 12 months of testing and piloting alongside Aboriginal Communities to find the best method for implementing a finalised framework, looking at all projects state-wide.

The framework is to be utilised by community, local government, government agencies, industry, and developers. The intention is to have all groups involved in delivering government projects adopt the following long-term commitment:

Through our projects, we commit to helping support the health and wellbeing of Country by valuing, respecting, and being guided by Aboriginal people, who know that if we care for Country – it will care for us.

This commitment expects the attempts to realise three (3) strategic goals:

— Reduce the impacts of natural events such as fire, drought, and flooding through sustainable land and water use practices;
— Value and respect Aboriginal cultural knowledge with Aboriginal people co-leading design and development of all NSW infrastructure projects; and
— Ensure Country is cared for appropriately and sensitive sites are protected by Aboriginal people having access to their homelands to continue their cultural practices.

Connecting with Country will support the design and planning industry in engagement with Aboriginal culture and heritage to help produce projects that:

— Protect the health and wellbeing of Country and therefore of Aboriginal communities, and by extension all communities; and
— Embed Aboriginal knowledge into the design and planning of our built environment to make NSW a better place for all its citizens.

The people's connection to Country has produced a large database of Aboriginal wisdom and knowledge that future projects are looking to embrace and embed within planning and design. A project is enhanced by incorporating this knowledge, not only benefitting the community, as well as Country, but, in addition, these cultural lessons are preserved in a tactile and immediate form.

The human centred design method has limitations and if people are the first priority then the land and nature become secondary. When this happens, people are affected negatively as they are immediately influenced by nature. Taking a traditional Aboriginal world view, designing with nature at the centre and considering people as a part of nature, we can create a more holistic and sustainable future.

3.17.1 Our Approach

— Identifying the Aboriginal knowledge holders and Contributors early in the project to have a comprehensive Aboriginal influence throughout the project;
— Drawing upon available research to gain understanding of local history and culture, which reveals traditional ways of recording knowledge and builds relationships within the Aboriginal community;
— Including appropriate space or facilities for cultural proceedings that the community requires. Projects may require the inclusion of culturally specific facilities, or the project site may have significant cultural history that requires an appropriate design alteration;
— Creating an opportunity for outside interaction. Many people (Indigenous and non-Indigenous) do not have access to the world of Aboriginal culture and knowledge, and often have a thirst for learning more about the First Peoples;
— Building a database to identify people in the project that influence and guide the project and determine who benefits from the project success and how;
— Creating an ongoing line of communication for the project user group and design consultants to provide feedback on successful practice that can be carried into future projects;
— Incorporating traditional local land and water management techniques into design – ESD;
— Considering the original use of the site and community needs, the project will dedicate space for traditional Custodians to continue their cultural practice on Country;
— Including cultural practices in the process of a project and including all participants to connect the people of the Country's past with the people in control of its future use; and
— Seeking local Aboriginal-owned businesses to partner with throughout the project and after. Design Consultancy, Construction, Material Provision, and Tenancy are possibilities – Wayfinding, Placemaking and Graphic Design.

Figure 16: Country Centred Design

3.18 Connecting with Country

3.18.1 Indigenous Design Thinking

Conrad Gargett and Yerrabingin have worked in collaboration with Aboriginal community members and organisations and the project team, to create a Human-centred design approach, focussed on the development of Indigenous design narratives and design principles. Rather than traditional consultation or engagement, in Human-centred design, the community are active co-designers of the project and a shared collective voice is presented, instead of individual representations.

Ideation and design were explored through the lens of design thinking, using collaborative events such as Design Jams. The key first step was identifying needs, desires and apprehensions, whilst discussing the opportunities for meaningful engagement for the precinct programs. While not all discussions could occur on site, they were held on Country and the cultural landscape context of the site was maintained at front of mind during the Design Jams.

The Human-centred design approach commenced at the beginning of the design process, ensuring that Yuin culture is at the core and foundation of the project. The collaboration with the local Aboriginal community and a multi-disciplinary design team brought a diversity of knowledge and perception to the design thinking process. Our approach incorporates Aboriginal Cultural Heritage as a living memory in the landscape and architectural response and how it will be represented through the design. Including endemic ecology, cultural resources, land management practices, local language, site features and way-finding.

3.18.2 Community Consultation

The project integrates outcomes of community co-design activities, research and local Aboriginal design narratives into the final design. Developing relationships the design team share with the land and local Indigenous people increase the design team's knowledge of the Yuin Country. Community collaboration is a continual and ongoing process through each stage of the project. Through discussion with members of the Yuin nation and through research we have furthered our understanding of the significance of granite for the region. The importance of the mother mountain Gulaga is further understood with particular reference to the rocks or tors which tell the story of the creation of the Yuin nation.

3.18.3 Archaeological significance

A series of studies, investigations and consultations have been undertaken to assess the Archaeological and Aboriginal Archaeological significance of the site. The archaeologists, Comber Consultants, have generated four documents of primary reference for this report – these are as follows;

- Historical Archaeological Assessment
- Aboriginal Archaeological Assessment
- Aboriginal Cultural Heritage Assessment
- Statement of Heritage Impact

Historical Archaeological Assessment

To ensure that the historical archaeological significance of the project area is not adversely impacted upon by this proposal and to inform an Environmental Impact Statement (EIS), Comber Consultants have been commissioned to undertake a historical archaeological assessment in accordance with the NSW Heritage Manual, Assessing Heritage Significance (Heritage Office 2001) and the Historical Archaeology Code of Practice (Heritage Office 2006). This report determined that the study area, which has previously been used for grazing and agricultural purposes, does not contain archaeological potential and it is not expected that relics will be located within the property. It was concluded therefore that there are no constraints to the proposed development in respect of historical archaeology.

Aboriginal Archaeological Assessment

It is understood and respected that encroaching into the ground has a direct impact on Country and it is acknowledged that removal of Aboriginal artefacts is a sensitive issue. Following extensive consultation with the Aboriginal Community and in accordance with the Aboriginal Cultural Heritage Consultation Guidelines for Proponents 2010 a series of recommendations have been prepared by the Archaeologist. These recommendations area based on the following;

- Legal requirements under the terms of the National Parks & Wildlife Act 1974 (as amended), which states that it is an offence to harm or desecrate an Aboriginal object without first gaining a permit under Part 6 of the National Parks & Wildlife Act 1974.
- Research into the archaeological record for the region, and the study area.
- Results of the assessment as outlined in this report.

Recommendation 1: Consultation

Aboriginal consultation should be undertaken in accordance with Heritage NSW's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 and an Aboriginal cultural heritage assessment report (ACHAR) prepared for this proposal. This ACHAR will inform the EIS required for the SSDA and support an application for an AHIP for any early works to be assessed under Part 5 of the EPA Act.

Recommendation 2: Salvage

Archaeological salvage must be undertaken in consultation with the Cobowra Local Aboriginal Land Council and other Registered Aboriginal Parties. The archaeological salvage can be undertaken without an AHIP once the SSDA has been issued.

Recommendation 3: Early works

If project early works, such as installation of services, the driveway, a parking lot etc., which may be assessed under Part 5 or as a complying development under the EPA Act, are to be undertaken, an Aboriginal Heritage Impact Permit will be required. Aboriginal consultation must be undertaken first as detailed in recommendation 1 above and An AHIP application for harm, with salvage, submitted to Heritage NSW accompanied by the ACHAR and a Research Design outlining the salvage methodology.

Recommendation 4: Scarred Trees

The three scarred trees should be avoided and protected from harm or damage through early works or development of the new hospital. They should be actively managed and protected to ensure their health and longevity.

Recommendation 5: Interpretation Strategy and Plan

An interpretation strategy and plan should be developed and implemented to showcase the Aboriginal history of Moruya and the site.

Recommendation 6: Report review

Once the final plans have been developed they should be reviewed and the archaeological report be updated.

Aboriginal Cultural Heritage Assessment

Comber Consultants were engaged to undertake an Aboriginal archaeological assessment. This assessment recommended that Aboriginal consultation should be undertaken and an Aboriginal Cultural Heritage Assessment Report (ACHAR) prepared detailing that consultation. It was further recommended that once the consultation had been completed it would be necessary to undertake archaeological salvage excavation in consultation with the Cobowra Local Aboriginal Land Council (CLALC) and other Registered Aboriginal Parties (RAPs).

As a result of the consultation, the following are the Registered Aboriginal Parties:

- Cobowra Local Aboriginal Land Council
- The South Coast People
- Thoorga Thoorga
- Didge Ngunawal Clan
- Barraby Cultural Services
- South Coast Elders Group
- Goobah
- Corroboree Aboriginal Corporation
- 35 organisations requested that their names be withheld and remain confidential

The site contains known Aboriginal objects and is registered on the Aboriginal Heritage Information Management System

(AHIMS). The site contains potential for Aboriginal subsurface archaeological deposits. The ACHAR recommends the following:

1. Aboriginal community consultation should continue for the life of the project.
2. Archaeological salvage must be undertaken in consultation with the Cobowra Local Aboriginal Land Council and the other Registered Aboriginal Parties. The archaeological salvage can be undertaken without an AHIP as the SEARS have been issued.
3. The three scarred trees located within the study area should be avoided and protected from harm or damage through early works or development of the new hospital. They should be actively managed and protected to ensure their health and longevity.
4. An interpretation strategy and plan should be developed and implemented to showcase the Aboriginal history of Moruya and the site.

Statement of Heritage Impact

This report has assessed the impact of the proposal on the heritage significance of the site and surrounding area and concludes that there will be no adverse impact on the site in respect of the built environment, historical archaeology, views and vistas. However, the site does contain registered Aboriginal sites and a program of archaeological salvage has been recommended as a mitigation measure. The information gained from archaeological excavation contributes to our knowledge and understanding of Aboriginal occupation. This knowledge can then be passed down to future generations through educational programs and interpretation. Such strategies will contribute to building and maintaining social cohesion within the Aboriginal and broader community and protecting cultural values for future generations.

The Statement of Heritage Impact makes the following recommendations:

Recommendation 1: Aboriginal salvage excavation

As subsurface Aboriginal objects are predicted to exist within the study area, and it is an offence to harm such objects, salvage excavations should be undertaken in accordance with the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales and in association with the Registered Aboriginal Parties. As the project is a State Significant Development it will not be necessary to apply for an Aboriginal Heritage Impact Permit.

Recommendation 2: Scarred Trees

Three Aboriginal Scarred Trees have been recorded within the study area. They should be avoided and protected from harm or damage during development of the new hospital. They should be actively managed and protected to ensure their health and longevity.

Recommendation 3: Interpretation

An interpretation plan and strategy should be prepared and implemented which details the Aboriginal and non-Aboriginal history of Moruya and the site.

Recommendation 4: Induction

An Aboriginal heritage induction should be provided to all employees, contractors and subcontractors engaged on the project, on the significance of the Aboriginal heritage, that it an offence to harm Aboriginal objects and be advised of their responsibilities under the National Parks and Wildlife Act 1974 in respect of Aboriginal heritage.

Recommendation 5: Unexpected Finds and Human Remains Procedure

Aboriginal Objects: If any Aboriginal objects are unexpectedly uncovered during the redevelopment of the site, all work must cease in the vicinity of the object and an area of at least one metre around the Aboriginal objected secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted for further advice. The consultant will assess the object and provide further advice. In addition, the consultant will liaise with the Registered Aboriginal Parties. No-one should enter the secured area and work can only recommence when advised by the consultant.

Human Remains: If any skeletal remains are uncovered during the redevelopment of the site, all work must cease in the vicinity of the human skeletal remains and an area of at least one metre around the skeletal remains secured and cordoned off using fencing and/or appropriate barriers. The archaeological consultant must be immediately contacted and must attend immediately. The consultant will inspect the skeletal remains to confirm that they are human. If the remains are human, the consultant will contact and liaise with the Police, Heritage NSW and the Registered Aboriginal Parties, all of whom will most likely attend the site. Work will not be able to recommence within the secured area until suitable management procedures are in place. It could take several months to determine an appropriate course.

3.18.4 Connecting with Country Working Group

Consultation activities have included the Eurobodalla Regional Hospital Connecting with Country Project Working Group, which consists of members of the Indigenous community, the Local Health District and the Design Team. This working group has been meeting monthly and has endorsed the use of the local Indigenous language ‘Dhurga’. The PWG has also endorsed the following principles:

- Caring for Country;
- Welcome, enhanced setting for Indigenous Persons;
- Support knowledge sharing and local cultural practices;
- Support and enhance wellness through facility design; and
- Commit to Country.

3.18.5 Design Jam

The design jam formed a key community consultation session whereby m update and then regular community collaboration with the Indigenous working group. The process produced a design approach/intent that incorporates Aboriginal cultural heritage as a living memory in the landscape and architectural response and how it will be made evident throughout the design.

Figure 17: Connecting with Country – Our Approach

The key outcomes identified to be incorporated into design are as follows:

Connection to Country:

‘Wallawaani’ welcome sign at entry

Totem poles along road

‘Rainbow Serpent Drive’ name of the road

Aboriginal and Torres Strait Islander flags flying 24/7 outside hospital entrance. When someone has passed on lowering these to half mask as a sign of respect

Local Aboriginal artists to create artworks / murals

Landscape:

Central meeting place south of carpark: educational area
Medicinal plants providing spiritual energy onto hospital: don’t block energy.
Endemic vegetation within landscape
Bush Tucker planting
Healing garden
Accessible to the wider public
Exercise track connecting the site to the broader community
Calming trail and walkways
Identify active and calm zones

Building elements:

Shelter over carpark for people walking to hospital

View to the west for end of life

Connecting babies to Country earlier on: having a room on ground floor with direct access to the outside gardens. Aboriginal birthing place

Names of buildings spaces: Walawaani, Meeting Place and Healing Place.

The Connection to Country collaboration has produced a large database of Aboriginal knowledge holders that are available to the project team and to the LHD as they take ownership of the land the building stands on.

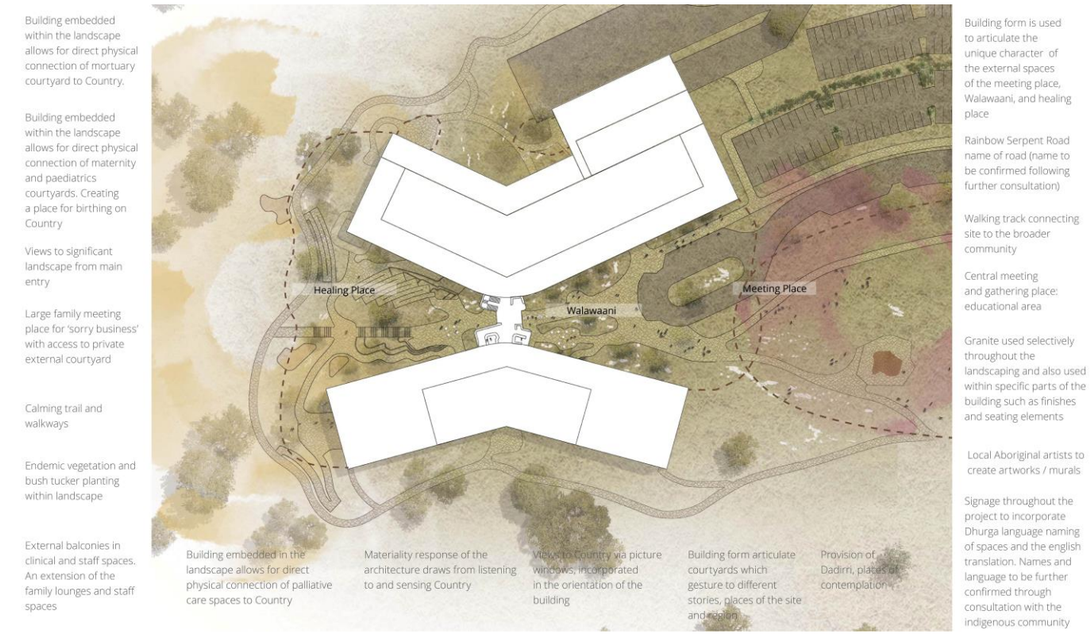

Figure 18: Design Jam and Design Session outcomes

3.18.6 Design Conversations

Conrad Gargett has had highly positive meetings with local community and returned to present the Design Jam outcomes/ response in Design Conversation to the first nations people, having found difficulty in connecting online during COVID restrictions. We have held Connecting with Country drop-in sessions, hospital drop-in sessions and a Connecting with Country Design conversation, all on Country. Connecting with Country drop-in sessions were held in both Batemans Bay and Moruya and in both hospital and community settings. All sessions were publicly advertised and open to all members of the community.

This culminated in a design conversation in the Moruya RSL Hall in February 2022. This was attended by approximately twenty members of the Indigenous community, the design team and the hospital team - including the SNSWLHD Coastal Network General Manager and Eurobodalla Site Manager. This session consisted of brief presentations of the outcomes from the Design Jam both from Yerrabingin and Conrad Gargett. Yerrabingin outlined the key outcomes and commentary from the design jam as previously presented to the SDRP. Conrad Garrett presented slides outlining the interior design, wayfinding response and architectural and site response as per images previously presented to the SDRP. The presentations were well received but the poignancy of the session was the discussion and conversation that occurred which.

Figure 19: Connecting with Country – Our Approach

3.18.7 Ongoing outcomes

Consultation has resulted in multi-varied outcomes and feedback. These range from commentary on proposals and idea generation to endorsement of proposals and specific requests for spaces and built elements. Privacy and discretion are important elements of how the Indigenous community engage with health services. Discreet entries and appropriate levels of privacy are incorporated into the architectural planning and interior design.

The outcomes of the consultation and design conversation sessions with the First Nations community in Moruya promote an approach that is Aboriginal-led, involves community and uses appropriate design processes to promote Aboriginal input and leadership while ensuring the designed outcomes are culturally respectful and authentic.

The design conversations were guided and influenced by a broad range of community voices, and in particular Indigenous voices. These stories and narratives have been applied to the planning frameworks and deeply embedded the essences of Country in meaningful, realistic outcomes in the built form and operations.

In particular, Gadhu Family Health staff focused on the deliverables of the community around culturally safe environments for women and families. Birthing on Country is an important element which has been explored in the future focused design, through direct courtyards and pathways around the landscape to offer the spiritual connection to Country for Mothers and their new born.

The architecture is capturing the identity of the First Nations community ensuring the success of this approach is a place of belonging and community empowerment.

Outcomes:

— Culturally safe environment;
— Empowered by choice – birthing on Country;
— Place of belonging;
— Guidance and cultural support for Birthing on Country;
— Birthing Room – open to elements;
— Room for families to Chant;
— Community grown child; and
— Women's business.

4.0 Development Proposal

4.1 Clinical Service Plan Statement

Southern NSW Local Health District (SNSWLHD) mission states ‘all people across our diverse communities are able to have timely access to the right health care in the right setting to maximise their health, wellbeing and independence’. The Eurobodalla Regional Hospital Clinical Services Plan (CSP) provides the framework to deliver on the District’s mission statement with a 10 to 15 year outlook for the development and delivery of health care to the residents of the Eurobodalla Shire. The Eurobodalla Shire population is projected to increase from 37,968 people in 2016 to 40,517 by 2031 (a 0.4% increase per annum compared to the 1.3% increase expected for NSW). With a median age of 53.2 years, the Shire has one of the highest proportions of older residents in NSW, 29% aged 65 and over, compared to 20% across the LHD and 16% in NSW. The Eurobodalla population aged 70 years and over is projected to further increase by 72% between 2015 and 2031.

The Shire also has the largest Aboriginal population in SNSWLHD with an estimated 6.8% of the Shire’s population identifying as Aboriginal or Torres Strait Islanders. This population is young, with 46% aged 0-19 years. Development of the CSP for Eurobodalla presented an opportunity to plan services to meet the needs of the growing and ageing population with a strong emphasis on networking, the integration of services and partnering with patients and external service providers.

The CSP outlines the current and future health service needs of the Eurobodalla population and describes future strategies for the delivery of clinical services to best meet those needs. The CSP identifies the key challenges facing Eurobodalla Regional Hospital in delivering safe, quality and efficient services, including the physical infrastructure deficits. Innovative and sustainable models of care and related workforce requirements have been explored. Results of consultation and engagement have been outlined.

The future Eurobodalla Regional Hospital will consolidate existing services and reduce current duplication and inefficiencies. It will increase the provision of care in the region to provide care as close to home as possible, in a phased and coordinated way that is prioritised according to service need and aligned with local capability. The overarching principles of the new service will ensure that it:

- Is culturally appropriate and inclusive;
- Is integrated across all disciplines;
- Includes a range of emergency, inpatient and ambulatory models;
- Reduces duplication; and
- Is underpinned by the unique population needs of the Eurobodalla.

The CSP clearly articulates what clinical services will be required in the future and provides an indicative recommendation of future infrastructure requirements to enable changes to service provision and provide for the population into the future. This plan outlines a way forward but the service evolution is expected to be an iterative process that continues and refines over time.

4.2 Service and Facility Planning Context

The overarching principles that underpin the Clinical Services Plan objectives were set out in the Functional Design Brief where, in particular, the following were identified as specific requirements. These have informed the Schematic Design and the architectural planning principles:

- Efficient patient, team and services flows - easy and efficient navigation point to point;
- Privacy and dignity for all patients and visitors;
- Avoidance of healthcare associated infection;
- Accurate identification of patients, team, equipment, and medications;
- Avoidance of medication errors;
- Collaborative, efficient, and effective clinical handover;
- Timely access of services;
- Prevention of falls and adverse events;
- Minimised travel time for team;
- Pragmatic and efficient;
- Overall spatial planning that supports standardisation of the configuration and fit-out of clinical areas;
- Integration of ergonomic principles into design;
- Clear visual connection between patients and team;
- Connectivity to external environment;
- Control over natural and artificial light by team and patients;
- Design features that facilitate safe and effective care for people with disabilities and behavioural issues;
- Design that is salutogenic, that is, is a cause of good health, and maximises use of positive elements related to natural light, colour, images of nature, access to fresh air, visual arts and music, and ‘spiritual’ spaces; and
- Design which facilitates an integrated approach to care.

The planning acknowledges these principles and is informed by the Functional Design Brief developed through initial consultation with user groups. This work will form the basis of further consultation in the next phases of the development of the design.

To assist in the assessment of departmental relationships, the design team has collaborated with a software developer to produce tools assisting in department placement and assessing the proximity of department adjacencies. In addition, the team have programmed an assessment tool to assess and illustrate travel time between departments and across multiple levels.

4.2.1 Planning Approaches

The Schematic Design Phase has included extensive consultation with user groups in a “design-led” approach to brief development and planning, in parallel with the ongoing development of the Functional Design Brief. This process has encompassed both clinical and non-clinical spaces and has resulted in planning which reflects the unique needs of the Eurobodalla Regional Hospital. Overall strategies employed within the design are described within this report.

4.2.2 Clinical Areas

These are spaces in which patients may be assessed or receive treatment.

Throughout Schematic Design, planning of clinical areas has been based on the following key strategies:

- Departments are located to enable efficient movement of patients and clinicians between areas where functional adjacencies are required.
- Main routes throughout the planning has separated major public flows from other activities.
- Planning within clinical areas has adopted an approach of maximising clinical spaces within the department footprint and locating workspaces in centralised spaces. This aims to avoid the ‘land-locking’ of specialties within inflexible planning. Clinical areas are subsequently able to easily flex using the available infrastructure as demands for specialties change over time or in line with changes in operational policies.
- Sharing or ‘flexing’ of spaces has been emphasised, particularly within the ambulatory setting, Activity Based Work (ABW), by avoiding the specific allocation of clinical rooms to only one speciality wherever possible and maximising bookable spaces. This approach is required to be used in conjunction with efficient scheduling systems.
- The design aims to accommodate “overflows”. Spatial infrastructure, in conjunction with operational procedures, is able to accommodate irregular fluctuations in service demand from one area within adjacent or other areas. This is achieved through strategies such as co-located waiting areas or efficient access to similar spaces in other units.
- Larger spaces such as meeting rooms or education spaces are located on unit peripheries when possible or outside of units to enable sharing between units.
- Waiting areas within clinical areas have been optimised, based on a recognition of the increasing shift to electronic waiting, queueing and check-in systems, which reduce the need for patients and visitors to wait directly within the departments.

4.2.3 Patient Care Inpatient Spaces

Planning has prioritised the location of inpatient departments (including overnight stay and recovery) to optimise amenity through access to daylight and distant views. Lighting design and acoustic treatment in these areas is of major importance to ensure calm, comfortable conditions.

For patients who spend extended periods of time in inpatient units, the bedroom environment is critical. While it needs to accommodate the required equipment and services to support care, the design will seek to create a ‘normal home-like’ environment rather than an institutional environment.

Inpatient units also need to provide for visiting family members. Day or family lounges and balconies are especially required where patients are accommodated in multi–bed rooms.

Considerations of patient privacy and dignity are balanced with the need for nursing supervision. Care is also taken to ensure appropriate sight lines throughout the units to afford visual communication between staff whilst also considering paths of travel for non-clinical support services accessing inpatient areas.

The planning has recognised that clinical demands will change over time and that infrastructure will need to be able to adapt. A consistency in layout has been adopted wherever possible to enable the inpatient spaces to either 'swing' in response to short term changes in demand or be readily adapted to longer term changes in clinical needs.

4.2.4 Clinical Support Areas

Clinical Support Areas are spaces or departments which support the clinical functioning of the hospital, such as the Pathology or Pharmacy departments. These space types have been planned within the hospital based on the following principles:

— Department locations have been driven by ensuring efficient critical links between departments;
— Connections to staff only and clinical corridor pathways and access routes have been prioritised; and
— Functional and direct connections are available to centralised and satellite loading areas.

4.2.5 Non-Clinical Areas

Front of House

Front-of-House (FoH) spaces are the initial public interface for the hospital and provide orientation, information as well as a range of services including admissions, travel and cashier/accounts information. Key considerations for planning and character of these areas include ensuring a welcoming, calming and legible environment through material choices and access to light and views.

Intuitive way-finding strategies, as described below, are particularly important within these spaces to reduce confusion for visitors and patients who may visit a facility of this type only occasionally.

Connectivity to outdoor areas for both visual and physical access opportunities are also a critical component in ensuring the amenity of these areas.

FoH also includes key support spaces such as a family meeting room with direct access to outdoors for the Indigenous Community, support for volunteers as well as Changing Places and other facilities.

Back of House

Back-of-house (BoH) spaces, such as logistics – loading docks and distribution areas, and the kitchen are focused on enabling efficiency and connectivity. This also includes key facility support services such as cleaning, asset management as well as staff end-of-trip facilities. There are also workspaces so it is important that a level of amenity for staff is maintained.

4.2.6 Staff & Administration Areas

Hospitals are supported by a significant workforce across clinical, administrative, support and back-of-house functions. The Schematic Design Phase has included limited workforce planning and spatial allocations and workspaces are expected to be finalised in Detailed Design alongside the staffing profile.

Staff spaces are broadly defined into a number of different space types including:

– **Staff office and workstation areas within clinical and clinical support departments**

These spaces are based on providing work space as required within department where immediate adjacency to a clinical or support environment is required. These environments vary depending on department/unit requirements and often include a mix of private office, clinical workroom, and open workstation and hotdesk environments. They aim to support efficient and flexible working arrangements that can accommodate the everyday fluctuations in staff numbers that can occur at times such as clinical hand-over times.

– **Staff amenity areas within departments**

All departments have been provided with close access to staff amenity areas including toilets and beverage bays within departments. These enable efficient short breaks for staff without needing to leave the department.

– **Staff office and workstation spaces outside of clinical and clinical support departments**

These are effectively 'staff-only' zones, although they may receive visitors. In many instances these are not yet allocated to specific groups units and will be subject to review in conjunction with the detailed workforce planning. These spaces support a wide variety of administrative and office based services such as clinical support, finance, executive support, education and executive/hospital management offices. They are proposed to be designed to enable long term flexibility as commercial office type environments. The proposed layouts emphasise access to natural light by proposing that open workstation spaces are located with access to longer window expanses, while semi-transparent office spaces are located towards the building atriums or interiors.

Whole of Hospital Staff Amenities

In addition to departmental amenities, a central area is planned to provide staff with a respite area for meal or other extended breaks. Add notes regarding access to natural light, interior design to provide a break from clinical care etc.

– **Education Spaces**

Education spaces in the form of training rooms, simulation areas, gathering and write-up spaces are to be included within the hospital building. An Education Project Working Group has been established to continue the existing relationships between ERH and tertiary institutions including the Australian National University (ANU), University of Canberra (UC) and University of Wollongong (UoW).

A more detailed examination of education requirements, particularly the potential for integration with university partners, will continue into detailed design phases and will aim to replicate as well as build upon existing facilities within the Eurobodalla such as the ANU Medical School at Batemans Bay Hospital and UC/ANU Clinical Training Facility at Moruya Hospital. At present, planning includes a high-fidelity simulation space including support spaces such as a control room as well as a range of different sized meeting/training rooms that may be flexibly used for different types of training, meeting, simulation and education uses.

These spaces are anticipated to require more detailed internal planning based on user requirements in future design phases.

4.2.7 Departmental Planning

The key planning considerations outlined above, and particularly the adjacency and clinical flow requirements, have had significant impact on the overall departmental placement within the building. The departmental arrangement established during the Concept Design has continued to develop throughout Schematic Design as additional clinical and servicing requirements continued to be established as a result of extensive user group consultation. This should be read in conjunction with the Functional Design Brief which includes detailed summaries of the departments. The departmental arrangement of the Acute Building is summarised below and illustrated within

Lower Ground Floor:	IPU- SARU, Maternity & Paediatric, Perioperative, BOH
Ground Floor:	ED, Medical Imaging, Pathology, Front of House, Ambulatory Care
First Floor:	IPU- Surgical/ Medical, Medical ICU, Executive, Training & Research, Pharmacy, HIM

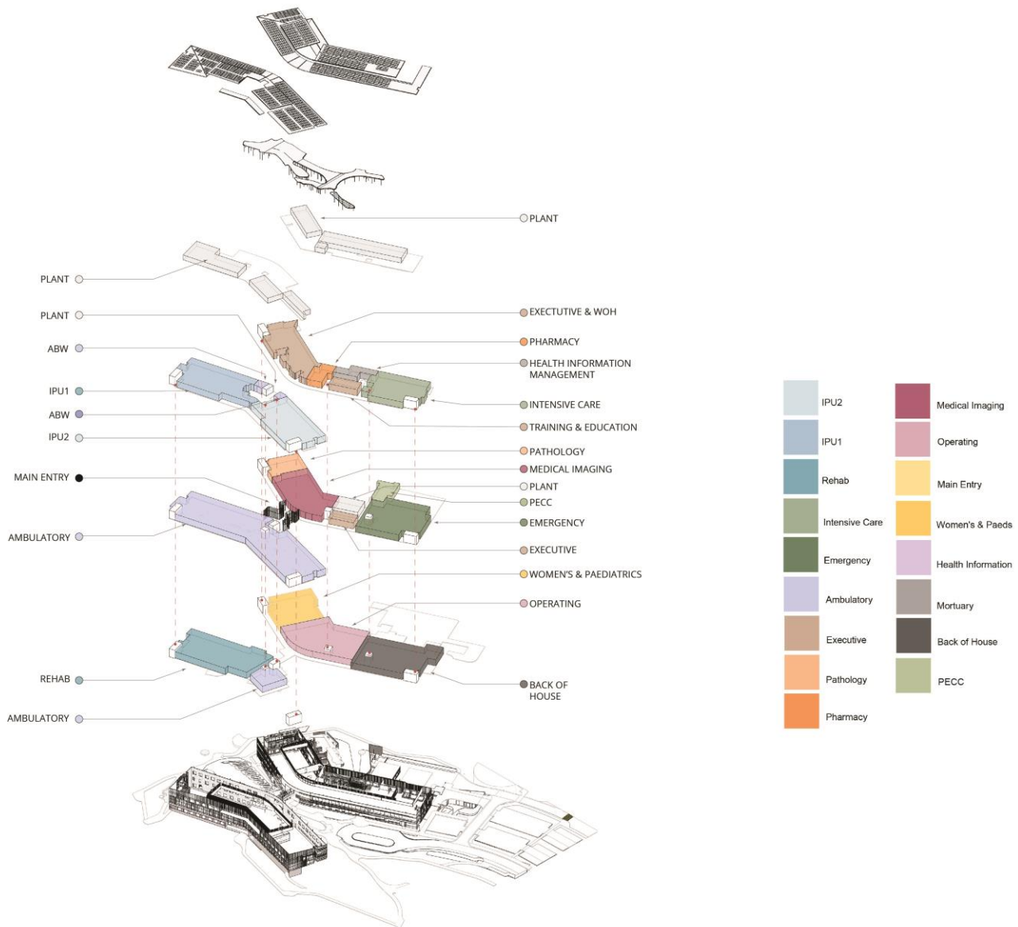

Figure 20: Exploded Axo – Eurobodalla Regional Hospital

4.2.8 Circulation Strategies

The key principle in developing the circulation strategies is clarity and coherency in separation and the creation of linear flows throughout the building. A clear design intent is established to minimise the flow conflicts between public, clinical and service circulation.

Public Circulation

For external public circulation, a network of walkways in various forms is established with respect to the site-wide context to ensure accessibility, safety and amenity. This network includes:

— Clear and accessible
— Covered drop off connecting the main entry, Ambulatory (secondary entrance) and ED entrances.

Clinical Circulation

The key design principles used to establish clinical circulation system for the Building are:

— Maximising provision of direct and straight clinical corridors between departments especially for those with required critical connections;
— Minimising interruption with other flows especially public circulation where feasible. If it is unavoidable, a crossover is preferred to an overlap with public flows;
— Minimising clinical travel distances between critical departments by appropriate department planning; and
— Promoting flexibility in connecting different clinical departments with multiples connections where achievable.

5.0 Master Planning Context

5.1 Summary of Masterplan Options

5.1.1 Option 1 Hospital Street Summary

The Option 1 masterplan is designed around the narrative of a Hospital Street; a linear space that provides clear delineation and wayfinding to different departments. The Hospital Street provides a clear identification spine for wayfinding and also a communal area for people to gather. The street has connections from the proposed hospital to the land, sky, and water. This provides a key relationship between the users and people visiting the facility, as well as Connecting with Country. The clinical zone is positioned to sit off the western side of the highest point of the site. This is to provide opportunity for under croft and lower levels that connect to the land.

The zonal masterplan has been designed to include Clinical Zones, Future Accommodation, Future Education, Community Park, and Future Private Providers, which creates a precinct plan with key relationships between buildings and landscape / external spaces.

Figure 21: Option 1 Zonal Masterplan

5.1.2 Option 2 Hospital Street (Linkways) Summary

The Option 2 masterplan is designed around the narrative of a Hospital Street; a linear space that provides clear delineation and wayfinding to different departments through a series of link ways. The Hospital Street provides a clear identification spine for wayfinding and also a communal area for people to gather. The linkways that connect the 3 different zones of the buildings provide connections from the proposed hospital to the land, sky, and water. This provides a key relationship between the users and people visiting the facility, as well as Connecting with Country. The clinical zone is positioned to sit off the western side of the highest point of the site. This is to provide opportunity for under croft and lower levels that connect to the land.

The zonal masterplan has been designed to include Clinical Zones, Future Accommodation, Future Education, Community Park, and Future Private Providers, which creates a precinct plan with key relationships between buildings and landscape / external spaces.

Figure 22: Option 2 Zonal Masterplan

5.1.3 Option 3 Town Square (West) Summary

The Option 3 masterplan is designed around the narrative of a Town Square; a central communal space that provides clear delineation and wayfinding for an arrival sequence. The Town Square helps provide a sense of community for the users and is designed to create connections from the proposed hospital to the land, sky, and water. This provides a key relationship between the users and people visiting the facility, as well as Connecting with Country. The blocking of the masterplan option embraces a pinwheel approach where different clinical departments radiate off the central Town Square. The clinical zone is positioned to sit on the highest point of the site. The siting of this options provides challenges with arrival sequences and the levels of the site. Opportunities for under croft spaces and connections to the land from lower levels are limited and do not create as good of a connection as other options.

The zonal masterplan has been designed to include Clinical Zones, Future Accommodation, Future Education, Community Park, and Future Private Providers, which creates a precinct plan with key relationships between buildings and landscape / external spaces.

Figure 23: Option 3 Zonal Masterplan

5.1.4 Option 4 Town Square (East) Summary

The Option 4 masterplan is designed around the narrative of a Town Square; a central communal space that provides clear delineation and wayfinding for an arrival sequence. The Town Square helps provide a sense of community for the users and is designed to create connections from the proposed Hospital to the land, sky, and water. This provides a key relationship between the users and people visiting the facility, as well as Connecting with Country. The blocking of the masterplan option embraces a pinwheel approach where different clinical departments radiate off the central Town Square. The clinical zone is positioned to sit off the western side of the highest point of the site. This is to provide opportunity for under croft and lower levels that connect to the land.

The zonal masterplan has been designed to include Clinical Zones, Future Accommodation, Future Education, Community Park, and Future Private Providers, which creates a precinct plan with key relationships between buildings and landscape / external spaces.

Figure 24: Option 4 Zonal Masterplan

5.1.5 Option 4b Town Square (East Flipped) Summary

The Option 4b masterplan is designed as an alternative option of 4 Town Square. A flipped format that provides a central communal space with clear delineation and wayfinding for an arrival sequence. The Town Square helps provide a sense of community for the users and is designed to create connections from the proposed Hospital to the land, sky, and water. This provides a key relationship between the users and people visiting the facility, as well as Connecting with Country. The blocking of the masterplan option embraces a pinwheel approach where different clinical departments radiate off the central Town Square. The clinical zone is positioned to sit off the western side of the highest point of the site. This is to provide opportunity for under croft and lower levels that connect to the land. The arrival sequence to emergency appears to be secondary and may pose challenges.

The zonal masterplan has been designed to include Clinical Zones, Future Accommodation, Future Education, Community Park, and Future Private Providers, which creates a precinct plan with key relationships between buildings and landscape / external spaces.

Figure 25: Option 4b Zonal Masterplan

5.2 Site Masterplan

Through four (4) rounds of user group meetings with key stakeholders, an endorsed zonal masterplan was nominated, below. The planning of the building itself has been progressed and tested in the next phases of the project.

The endorsed plan champions the hospital building in a key location along the ridge of the site, stretching out towards the lower areas and back towards the town and ranges. The areas closer to the PMF line have been prioritised as community parklands. The proximity of the future expansion sites, identified on the endorsed plan, allows for both efficient access to the hospital, as well as quick exit from the site. The other future expansion areas, being education, private provider, and accommodation, also maintain key connections to the central green, as well as appropriate proximity to the hospital building.

Figure 26: Endorsed Zonal Masterplan

The education building, which is likely to be utilised more frequently by hospital staff, is located closest to the main hospital, adjacent to the central green. Providing a greater sense of personal identity, the future private provider has been nominated on the far side of the future education building. This location allows the future provider a more personalised identity, whilst still retaining its location within the main 'hub' zone of the site. The future accommodation building has been located in the north-east corner, providing privacy and a sense of disconnect from the clinical setting of the hospital. The view out to the east of the site also provides a unique outlook for the accommodation building, further differentiating it from the main hospital. This building also sits in close proximity to the residential area to the north of the site, emphasising the domestic nature of this future building.

5.3 Options Analysis/ Value Engineering

A VE workshop was held with the consultants on 14.04.22, the long list of VE options is identified in Appendix 8. It is noted that of forty six items considered three items have been adopted into the Schematic Design as per the below.

No	Raised by	Discipline	Item Description	Indicative Extent / Scope Description	Potential Saving ($)	Opportunities / Pros	Potential Impact / Risks / Cons	Maintenance Impacts	Rating	Comments
7	Conrad Gargett	Loading dock	Reduce extent of loading dock circulation	Reduce turning circle circulation for trucks, pull back from boundary, reduce amount of fill	$ [redacted]	Reduce cost	Cost reduction, more efficiency in dock arrangement	Better line of site around dock, less hardstand to maintain		NOTE: Already actioned in project
8	Conrad Gargett	Façade material	Ceramic to Brick	Change the material proposed as ceramic cladding system to be brick veneer.	$ [redacted]	Reduce cost	Cost reduction, more readily available material, less reliance on imports, architectural outcomes are still achieved	Less maintenance		NOTE: Already actioned in project
9	Stantec	Mechanical	Combine toilet and dirty utility exhaust	Refer to ME-MEMO-008. Combining exhaust systems to reduce fans, ductwork and controls.	$ [redacted]	Removal of dedicated 2x cleaners store exhaust and 2x dirty utility exhaust	Connection of Dirty utility and cleaners exhaust onto system serving clinical space ensuites. Potential leakage of these spaces into ensuites upon failure of fan	N/A due to removal of plant. Maintenance still required for proposed toilet exhaust systems		Included in SD.

Figure 27: Excerpt of Appendix 8 – Value Engineering List

5.4 SoA Reconciliation (Design v Brief)

The Schedule of Areas has been progressively updated through the development of Schematic Design to track and confirm alignment with the outcomes of benchmarking and value engineering.

The department planning and brief has continued to develop throughout the design phase through a “design-led” approach. This has resulted in variations in areas within and between departments as more stakeholder feedback has been received. However, the overall target for functional areas and travel established within Concept Design and the benchmarking review have been reduced, as identified below.

Additional area efficiencies were able to further align the scope of the building with other recent bench-marked facilities. It is noted that the building also includes a number of region-specific requirements, including a district-wide administration component, a diverse range of outpatient services, and multiple distinct inpatient cohorts, which differentiate the building scope from other recent developments.

The SD as-drawn area shown now incorporates the PECC and additional areas as identified below, which were not previously incorporated within the Schedule of Areas.

HPU	$260m (v3.2)	Outdoor
FOH	367	110
ED	1034	
ICU	736	
Perioperative	1341	
IPU 1	1113	
IPU 2	1038	
Women's & Paeds	845	50
SARU	1322	30
Medical Imaging	967	
Pathology	359	
Pharmacy	200	
Amb & Com Care	2574	
Exec & WOH	728	
ETR	320	
Mortuary	100	
HIM	177	
BOH	937	135
SUB-TOTAL	14157	325
T&E (30.5%)	4318	
Planning Contingency	364	
TOTAL	**18838**	

Figure 28- SoA – As provided by Root Partnerships

5.5 Variances from Concept Design / AHFGs

The Australasian Health Facility Guidelines (AusHFG) has informed the development of the Functional Design Briefs and therefore, the Concept Design.

“The aims of the AusHFG are to:

- *assist with the design of safe health facilities that provide privacy and dignity for patients;*
- *support contemporary models of care and the needs of carers, visitors and staff;*
- *maintain public confidence in the standard of health facilities;*
- *achieve affordable solutions for the planning and design of health facilities; and*
- *promote built solutions that minimise recurrent costs and encourage operational efficiencies.”*

The AusHFG Health Planning Units have been utilised in the establishment of the Functional Design Briefs. With the briefing and consultation phases undertaken by Root Partnership and in consultation with the SNSWLHD user groups (PUGs), hence capturing the SNSWLHD requirements.

Given the AusHFG updates that are occurring, with the current reviews of components of the AusHFG, the project and RP has incorporated updates as necessary and as known to the current phase. (Refer to table below)

The project timing has coincided with the COVID-19 pandemic. The project team notes the ‘*Design Guidance Note NO.062 – COVID-19 Design Impacts.*’ This document has informed the briefing and design for the redevelopment. (Refer to table below.)

Given the changing environment and health care requirements during this period, this item and DGN will be monitored over the next phases. Further direction and advice from the HI Health Planning team will be sought including during the next phases, including for guidance, updates and review of any project (change) requests generated by COVID-19.

5.5.1 Concept Design – Major Variations

Minor and major variations are presently being reviewed for the project, in accordance with DGN037. Major variations will be detailed and submitted to governance for review and approval during Part 4.

Table 2: Concept Design Major Variations

Department	Description	Variation Type	Status
AHFG – (OT, Ambulatory)	Inclusion of additional bays to accommodate point of care cleaning (ultrasound probes) to accommodate a point of care disinfectant cleaner.		Under Review
ICU	Ratio of ensuites to patient rooms		
Periop	Scope reprocessing rooms plus receiving and dispatch rooms to utilise offsite sterilising		
ED	Neg Pressure Isolation room sized up to meet DGN062		

And:

Endorsement - Changes to briefs and scope in Schematic Design (SD)

During the Schematic Design (SD) Phase several briefs have been revised as a result of the additional funding (refer section 1.4.2) or amendments to service delivery. Key department that have been revised during SD are included in the table below.

The following departments Functional Design Briefs were further developed during the Schematic Design Phase.

Table 3: Schematic Design –Briefing scope changes

Department	Description	Brief updated/reviewed	Status
Medical Imaging	MRI and second xray	Yes	Endorsed by LHD
PECC	4 bed Psychiatric Emergency Care Centre co-located with ED	Yes	Under Review
Maternity & Paeds	Additional maternity beds and paediatric day only bays	Yes	Endorsed by LHD
ED	4 bed short stay unit	Yes	Endorsed by LHD

5.6 Architectural Design

This section aims to provide a detailed description of the specific architectural design outcomes developed as part of the Schematic Design and in response to the key principles outlined above.

The architectural design responses have been developed in conjunction with the design of engineering systems and services as well as consideration of sustainability, building certification, compliance strategies and fire engineering, as well as civil and traffic engineering design.

To optimise outcomes, stakeholder engagement and an open design process is utilised. A broad range of stakeholders make creative contributions and help to deliver significant benefits including: generating better ideas with a high degree of user value, sound understanding of clinical requirements and future models of care, improved knowledge of the LHD's needs, rapid validation of ideas or concepts, and more efficient decision making. Giving stakeholders design options is critical in robust analysis, achieving the best design outcome, and ensuring stakeholder support.

The Functional Design Brief enables the establishment of a footprint which is representative of the project requirements. This includes an indicative building envelope and access requirements.

Hospital and health projects, as part of public service delivery, have the opportunity to look beyond organisational boundaries with renewed aspiration and intent. This transformative ambition can build upon people and places and underpin visions in a radical and innovative way, to add value to projects on a macro and micro scale.

The following principles and activities have been undertaken to assist HINSW, SNSWLHD, and the wider design and project teams, in supporting a collaborative master planning process:

- Making strategic choices based on fundamental characteristics underpinning places, people, and communities so that the outcome is rooted in a deep understanding of the core values of the place;
- Clearly identifying the issues and opportunities that matter to local people, including local Indigenous communities, and the interdependencies between them, keeping these aspects at the forefront of thinking;
- Understanding the needs of the community, including First Nations people, and facility now and looking into the future as far as practicable;
- Developing a set of shared objectives and project vision which define the project intent;
- Addressing the commercial potential of publicly held assets to deliver investment offset where appropriate;
- Common estate strategies;
- Exploring opportunities to standardise and simplify common administrative processes, reducing duplication and fragmentation; and
- Being socially responsible and future-thinking, ESD and health service lifecycle.

5.7 Planning Principles

Respect for:

- The history of the site by telling the story of the place
- The Indigenous stories of the site and wider region
- A dignified and safe workplace
- The global markets, Eurobodalla, and neighbouring communities
- The desires of the occupants within the precincts; and
- Human as the centre of the hospital.

Respond to:

- The natural context
- The challenges and opportunities of the site topography
- Opportunities of views and aspects
- The wider region developments of infrastructure and urban planning
- The functional and operational requirements
  - Current and future demands to avoid duplicity
- Local placemaking strategies
- 'Connected Care' model – ambulatory models and 'hospital avoidance' strategies
- Flexible community needs, industry and education drivers
- Cultural protocols and customs; and
- Child-friendly, ageing-friendly, disability-friendly.

Rejuvenate the:

- Healing environment by quality design and integration of landscape elements
- Quality of life for consumers, staff, students, and general public by evidenced-based, innovative and integrated model of care
- People's health and wellness through people-centred design and wellness-focused environment
- Physical environment through passive design strategies and indoor/outdoor spaces
- Health services by embracing digital opportunities
- Public spaces with art and community activities
- Precinct as a conduit or a destination with coherent planning; and
- Collaborative environment with activated edges as part of the local community.

5.7.1 Context informing the Architectural Design

Key learnings from the context have informed the decision-making process of the architectural design for the site master plan.

The following list summaries the mapping aspects considered in the feasibility to optimise the Eurobodalla site:

- Public Transportation
- Education – TAFE & Tertiary Education
- Future residential developments to the north and north-west of our site
- Emergency Response locations – Ambulance
- Retail
- Community and Cultural
- Medical Services, including Private Hospitals
  - Parks and Parkland; and
- Green Travel opportunities.

This has culminated into the following opportunities for use:

- Transport hub
- Emergency Response Centre (Ambulance) - proximity to emergency department, helipad response and access to Princes Highway
- Private Provider; and
  - Accommodation
- Education.

5.8 Architectural Intent

The Eurobodalla Regional Hospital is developed as a direct expression of health, community and sustainability. A fundamental driver of the architectural intent is a Connecting with Country approach which emphasises an integration with nature, culture and community. Creating a hospital for the Eurobodalla community and the specific cultural characteristics and social networks it contains is at the forefront of the design approach. Being on a greenfield site the project also offers opportunities to respond to landscape in unique and innovative ways.

The narrative framework draws from elements of Country with a view to embedding Country in the project in a multifaceted way. The building is considered as a part of the landscape achieved in part via sympathetic siting of the building in relation to the topography and existing natural site features. At the entry the building form opens up to welcome people along their journey to both the hospital building but also to health. The idea of Country as healing is manifested by provision of native planting food and medicine gardens, multiple visual connections to important healing western views and the incorporation of biophilic connections to green space and natural light. Elevation and material treatments are inspired and respond to Country by drawing on adjacent landscape features and environmental conditions.

The idea of 'welcoming' is an integral theme of the public spaces and the architectural expression. Connection to landscape and to Country is a focus throughout the architecture – visually, spatially and experientially. Layering of local Indigenous cultural knowledge into public, accessible gathering space allows the whole community to experience the hospital in an environment which supports and validates all facets of the Eurobodalla community.

The architecture is considered as a whole of precinct opportunity with spaces and parkland throughout the site interplaying with the built form and also providing connection and recreation opportunities for Moruya town and the broader community. Combining social, cultural and spatial expression with the requirements of clinical program develops an exceptional outcome for the Eurobodalla community and broader coastal network.

5.9 Narrative Framework

An embedded part of the landscape

- Experience of the landscape is to begin at the entry to the site from the Princes Highway. The unique landscape qualities of the site are experienced as part of a journey into the site and through to the hospital building proper. The building is embedded in the landscape and is a considered as part of the natural environment. The building is sited within the northern quadrant of the site away from the Princes Highway which enables quiet and repose. On a building scale, façade treatments respond to the natural qualities of the surrounding landscape. At the scale of patients and staff, the façade creates a considered experience of the site landscape.

Welcoming

- This journey to the building culminates in landscape spaces which fold into gathering spaces which form the entry to the hospital building. The landscape and built form are articulated to create a wholly welcoming environment and a welcoming journey to the hospital. The main entry space is at the heart of this journey and has direct continuous connection with the land and also celebrates views to the western ranges. As part of a living journey the building acts as a threshold for experiencing Country and health.

Country as healing

- The built form responds to the landscape and is articulated to the surrounding views, topology and significant landscape elements. This articulation creates external volumes and spatial experiences which interplay with the internal spaces of the hospital. Direct connection with gardens and landscape is created. This promotes access to natural light and experience of nature - the healing qualities of the natural landscape are enhanced. Landscape spaces will incorporate bush tucker gardens with a variety of healing plants. External spaces with clinical functions will have native planting with medicinal qualities which relate to the clinical function i.e. planting specific for birthing on Country.

5.10 Site Setting

5.10.1 Strategy

The design has extended upon the master plan strategies for the development by exploring multiple options for siting, orientation, connectivity and accessibility. Multiple siting options for the project have been considered in detail which culminated in the preferred site area. The highest point of preferred site area is in the North East quadrant and sits 22m above sea level. A proposed preferred site area was determined in relation to this level when considering this highest level of the site, and subsequent building levels for entering the building. This site also considered lower levels that could take advantage of the slope of the land to reduce excessive costs in earth works. The remaining area of site appears to have opportunity for future development and sites have been identified within the masterplan options.

5.10.2 Connecting with Country approach

It was identified that the Meeting Place hill can be a place to be celebrated as part of the journey to the building. The Meeting Place is a vital landscape form within the precinct and, with its gentle rolling plane – accentuated with appropriate lower scale planting – a welcoming form within the landscape. The building is sited down from the top of the hill by approximately 80m. This is both a gesture to the importance of the landscape within the journey of the design as well as a response to the site topography. The building hugs the western facing side of the hill which presents the building as an embedded part of the landscape.

Views

Views through and around the building from East to West are fundamental in the siting and architectural design approach. Key view corridors are celebrated through the site. Views around the building, aspect of the building are celebrated. Further, a primary view corridor from the communal meeting place through the Walawaani is created using siting and the architectural form.

Figure 29: Connecting with Country approach

The above image is a view from the entry road looking North West toward the building. The building can be seen sitting down from the crest of the hill and blending into the landscape.

5.11 Built Form and Urban Design

The built form of the project draws on the narrative framework and the architectural intent. The spaces articulated by the built form respond to the landscape and topology of the site. These public spaces welcome the public into the building whilst also continuing through the building itself and creating connections with the landscape beyond. Three significant external spaces are established which correspond to the built form and are part of a journey through the landscape – these are the Meeting Place, Walawaani and Healing Space. Each has its own characteristics which relates to their function. The below provides a description of each of these spaces.

Meeting Place

An open welcoming landscaped area contacting lower planting types. This space has connecting pathways which surround a landscaped occupiable garden area. A meeting place and smoking ceremony area is provided. Views and connection to the sky are accentuated.

Walawaani (Dhurga for "welcome" and "safe journey")

A welcoming and arrival area with landscaping seating and covering protected canopy roofing. Contains the Emergency Department entry, the Ambulatory department secondary entry and the main entry. The main internal foyer is part of the Walawaani. Views through the foyer to the Duea Ranges are enabled. Organic pathway forms are emulated in the roof form. Planting is specific to the amount of sun and aspect available.

Healing Place

A hospital focused landscaped area. A place for quiet repose and dwelling. Landscaped seating provided and trees with shade canopies. Views and aspect to the west are facilitated.

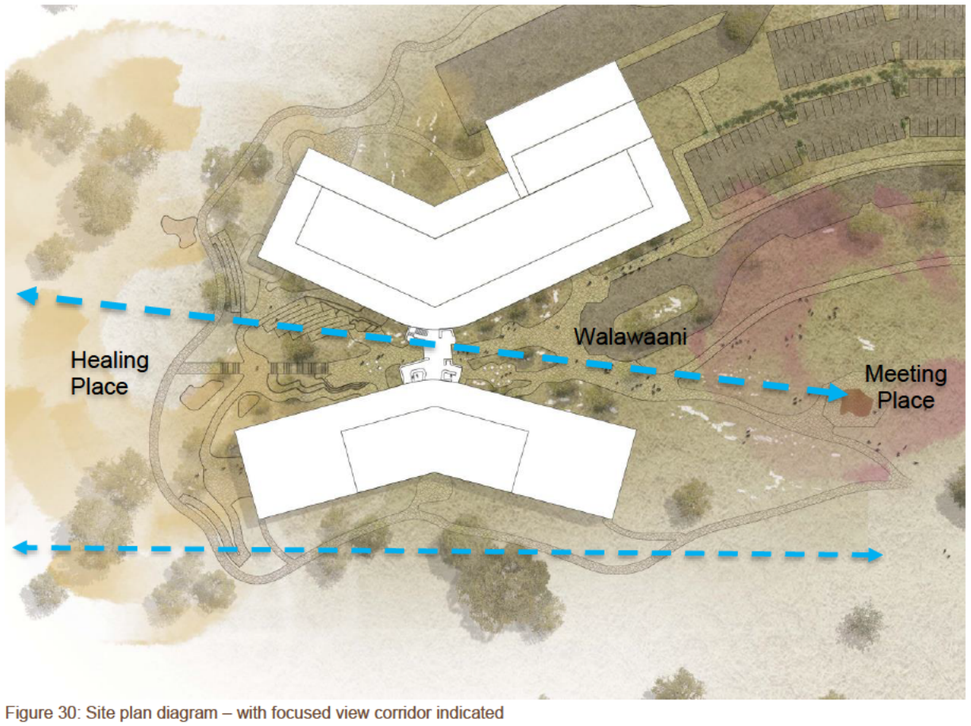

Figure 30: Site plan diagram – with focused view corridor indicated

5.11.1 Building Components

The component elements of the building consist primarily of two wings and a foyer. The building form creates external volumes which consist of landscape occupiable space. The relatively simple forms of the outer wings are complemented by the organic form of the Walawaani roof. The walls facing the are considered as the 'inner' skin and are textural and at a human scale. The walls to the north and south of the wings are considered as the 'outer' walls. The outer walls respond to Country at a macro scale both in articulation and materiality.

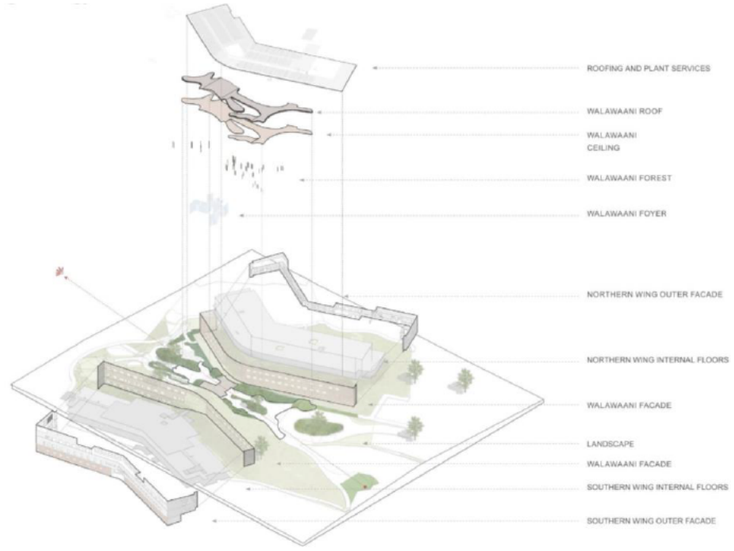

Figure 31: Figure Axonometric

5.11.2 Views to the Duea Ranges

View corridors to the Duea Ranges are celebrated through the site. Views around the building to the ranges are facilitated via siting strategies. Views through the central foyer are facilitated via detailing and material selections as well as articulation of the built form. The Walawaani roof undulates to create large view corridors through the roof, foyer and through to the ranges. A primary view corridor is created via carefully articulated roof form from the communal meeting place through the Walawaani and to the ranges beyond.

Figure 32: Longitudinal Section

5.11.3 Arrival & Entry Sequence

The carpark is located down from the top of high part of the useable site and primarily to the north of the building. This allows views to the ranges directly from the carpark whilst still facilitating easy walking to the hospital. Visual connection is enabled from the carpark to the Walawaani landscape spaces and through to the hospital proper. Shade structures (natural and built) are provided for rest, shade and weather protection. Visual connection from the carpark to natural geographical features forms part of the intuitive wayfinding strategy from the carpark to the hospital. Ground treatments vary in colour and texture which provide visual wayfinding cues. Signage panels are provided with English – Dhurga - English language translations.

Significant tree planting is provided for shading and weather protection for hospital users. Intermediate planting beds provide collection points for overland flow and rain water.

Figure 33: Site section – Carpark to Walawaani

Figure 34: Carpark

5.11.4 Meeting Place

The building presents as two storeys at the east entry and three storeys at the west. This scale complements existing site lines and connections to views and landscape elements. The building is structured so that there is no vertical expansion which would disrespect the existing buildings and the scale of surrounding development.

Figure 35: Meeting Place

5.11.5 Walawaani

The ground surface of the Walawaani is a concrete with aggregate finish resembling granite from the site. The form of the entry landscape pathway is seen to 'emerge' from earth and form the walking surface for entry to the hospital. Translated to the internal space this granite inspired concrete becomes a concrete tile with a similar appearing finish.

Figure 36: Walawaani Arrival

5.11.6 Foyer

The central Walawaani foyer provides a greeting place, circulation hub and retail centre of the building. The spatial arrangement of the foyer consists of elements within a volume – this allows for the maximisation of visibility through the central space vital for connecting views from the eastern Walawaani to the Healing Place and beyond to the Duea ranges whilst still functioning as the main entry to the hospital. Materiality of the foyer draws from the external façade treatments and the interior concept – all of which draw from Country.

Figure 37: Walawaani – Foyer Entry

Figure 38: Walawaani, Foyer & Healing Place

5.11.7 Healing Place

After moving through the foyer and entry sequence, the Healing Place offers opportunity for quiet repose and contemplation of the Duea Ranges.

Figure 39: Healing Place

5.11.8 Fire & Smoke Compartments

The Fire and Smoke compartmentation strategy achieves the area limits defined in the BCA, with some safety factor for minor adjustments in the future stages. Compartment boundaries locate corridor crossings in considered positions, aim to minimise unnecessary steps, and where practicable are collocated with mechanical service risers. The use of fire doors as frequently accessed circulation doors is generally avoided.

Exposure to adjacent fire compartments has been avoided and fire walls generally terminate to the underside of a concrete slab over to minimise the impact to roof framing.

5.11.9 Building Levels

The building adopts a typical 4500mm floor to floor level for the 2 lower storeys (lower ground and ground floor). Level 1 is partially covered by an overhead plant level at 4200mm floor to floor level.

These building levels allow the nominal 2700 / 3000 optimum ceiling heights identified in the AHFG's with consideration of the structure and service reticulation zones.

5.11.10 Car Parking

The carpark provides on grade car parking which aligns with the natural contours of the site and provides green, code compliant access to the main entry of the hospital. 366 hardstand carparks are provided based on an average demand as identified in the traffic engineering report. Space for possible future parking is identified which would allow for up to 460 cars: a figure identified as peak demand in the traffic engineering report. The car parking consists of 3 tiers of parking which fall to the north east of the site with the topography of the land. The uppermost tier sits at approx. RL 19500, the middle tier at approx. RL 17500 and the northern-most tier at an RL of approximately 16000. The tiers of car parking curve with the natural curve of the land and combined with the falls, integrate with the landscape to minimise earthworks. An access pathway sits at the uppermost edge of the carpark and provides pedestrian access to the main hospital entry. Parallel parking is provided to the south of main entry road adjacent the large external green space. Compliant pedestrian access is provided through the level changes of the carpark via walkways. Walkways are placed between banks of carparks and occur every 35m. The

access road for ambulance and servicing winds with the topography and also provides access to the loading dock. A swale sits adjacent the access road to collect water run-off which forms part of the water sensitive treatment strategy on the site.

The car parking strategy aims to:

— Provide car parking on site to meet the needs of the Hospital operations and allow for possible future expansion;
— Position car parking on the site to minimise vehicle conflicts and queueing around the Hospital entry or Emergency Department;
— Locate the designated staff parking to allow for safe and secure pedestrian movement for staff to and from the Hospital entrance at all times; and
— Position parking for persons with a disability (PWD) in close proximity to the Hospital entrance with appropriate pathway connections and crossing facilities.
— Acknowledge and support those that frequently access services that may require access to drop-off or closer carpark to receive treatment.

5.11.11 Building Access

The site gradients are such that access ways provided from any of the allotment boundaries prove difficult, though not impossible. Walking distances and topography elevation are major barriers associated with the Eurobodalla Regional Hospital.

People will primarily arrive at the hospital via car, bus (public), minibus and taxi including:

— Staff – Vehicle, bus or bike;
— Patients – Vehicle (generally drop-off or taxi) or bus; and
— Visitors – Vehicle or bus.

The campus roadway provides the transport network to drop-off points and car parking locations where pedestrian access can be re-established and provided from these destination hubs to the building entrance.

Guidance from the DSAPT Part 5 - Resting Points, has been considered for pedestrian movement. Resting points for pedestrians are recommended along access paths of the where the walking distance between facilities or services exceeds 60 metres to limit fatigue.

Car parks (including drop-off carparks) and bus stops have been located in close proximity to building entrances.

Schematic design has determined generally appropriate:

— Road infrastructure parameters including paths of travel to building entrances;
— Locations of designated accessible parking bays including consideration for accessible drop-off parking bays at building entrances;
— Location of Ambulance and Patient Transport Vehicles; and
— Location of Bus drop off.

5.11.12 Security and Access Control Zones

The ICT Infrastructure and Security services design will consider the systems overall flexibility in distribution, both from a redundancy perspective, and a facilities management perspective, when operating the ICT systems during its economic life.

The ICT Systems will be designed to account for safe access for future maintenance and servicing, such as sufficient clearances around all equipment racks. Plant and equipment selections, including fittings and fixtures will be based upon a standardised approach.

5.12 Building Materiality

The project materials are inspired by and draw from Country and significant elements of the landscape. The palette of materials for the building consists of natural tones and textures which respond to qualities of natural materials. Material selections have been focused on locally sourced and adaptive materials. Granite is being maintained as a fundamental inspiration for, and feature of, the landscape and architectural design. Where possible granite boulders are incorporated into the landscape and external areas both as potential seating elements, retaining wall elements and planting perimeters.

Strategies

- Strata in the landscape
- Qualities of granite as a 'grounding element'
- Qualities of tree bark as a 'protective skin'
- Rhythm of water flowing over and through the site creating texture in the granite surface
- Ideas of articulation in the façade draw reference tree hollows or cracks in granite
- Places of dwelling and welcoming in the building form

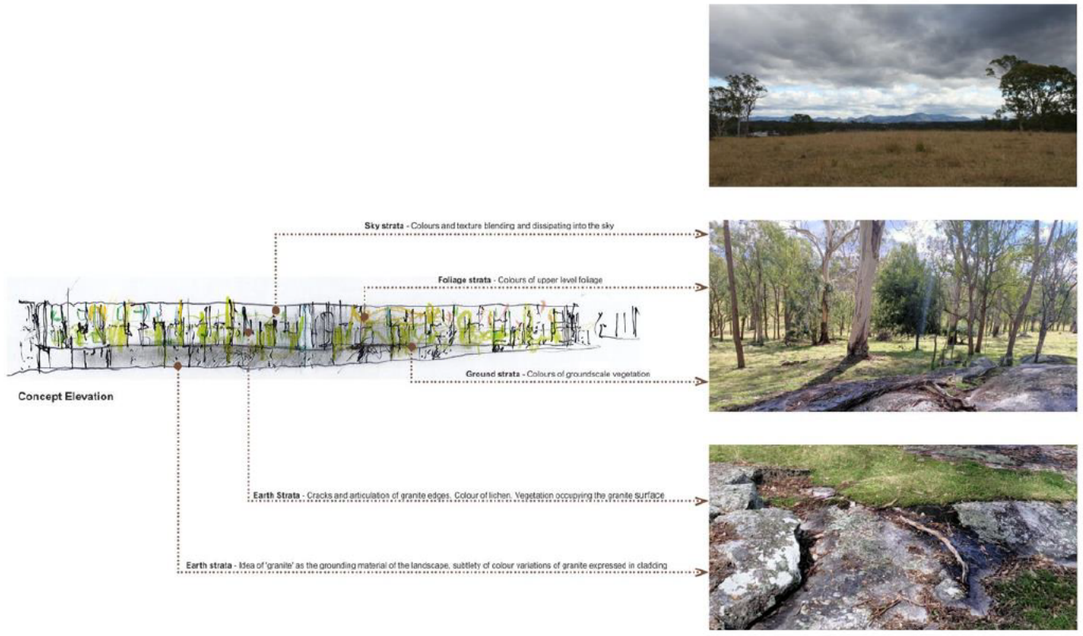

Figure 40: Concept images

5.12.1 Strata – Earth, Vegetation & Sky

The concept of strata is utilised to generate façade treatments that relate to Country in multiple scales. Strata identified as Earth, Vegetation and Sky have been translated into building material treatments which reflect the unique qualities of the landscape.

— For 'earth' a masonry and/or concrete is proposed.
— For 'vegetation' a vertically articulated façade system is proposed with a warmer colour.
— For 'sky' a vertically articulated façade system is proposed again with a cooler colour and broader articulation gesturing to the openness of the sky strata.

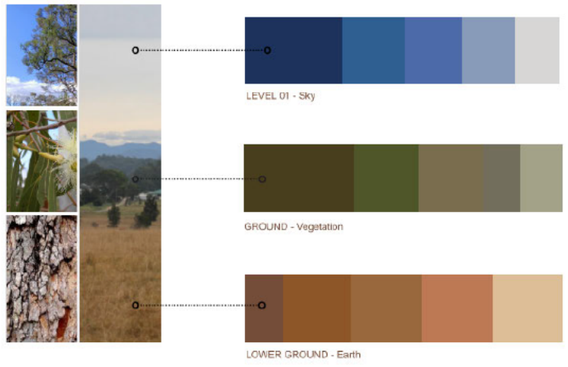

Figure 41: Strata concept

5.12.2 Façade

The facades are approached as an inner skin – the Walawaani brick façades – and an outer skin – the external metal facades. The inner skin draws from the qualities of granite, is textural and human scaled. The outer skin draws on a broader response to landscape.

Inner Skin

The inner skin responds to the journey through Country and into the building. Brickwork is used to achieve a finish which is textural, human scale and variegated at small scales. The outer edges of the inner skin are light and smooth. Toward the foyer the bricks become more textural and the colours become warmer.

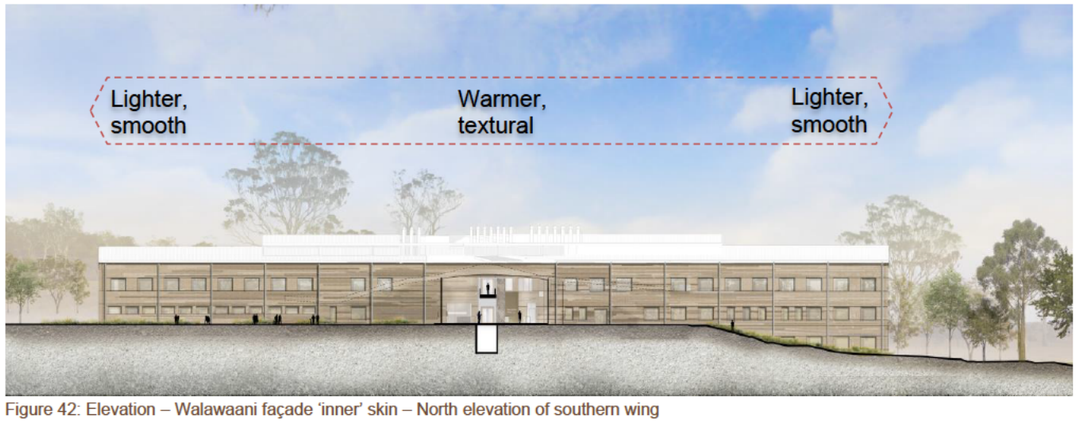

Figure 42: Elevation – Walawaani façade 'inner' skin – North elevation of southern wing

Brick Selections


GB Veneer Arcadia – Smokey Ash


GB Veneer Arcadia – Natural Earth


AB - Scholar

AB – Chillingham White


Bowral Highlands - Meryla

Outer skin

As with the inner skin and the ends, the outer skin expresses the idea strata and datum lines. The outer skin responds to the broad scale elements of the landscape. Earth, Vegetation and Sky are expressed and noted via datum lines. Additionally, the colours used to express the datum lines transition organically throughout the height of the façade.

Figure 43: Southern elevation – Outer skin

The proposed material for the outer skin is zinc metal cladding on metal sub-framing. This material enables a broad scale cladding which also has minimal maintenance requirements and also has long term durability. Subtle tonal variations are proposed in order to achieve an organic change through the height of the façade.

Zinc metal selections

VMZINC Pigmento Ash Blue

VMZINC Azengar

VMZINC Pigmento Lichen Green

5.13 Architectural ESD

The new Eurobodalla Regional Hospital presents a significant opportunity for NSW HI and the LHD to evolve the definition of sustainability in the healthcare sector. Through the Schematic Design stage, the project has continued to respond with an ambitious and holistic approach to sustainability that seeks to deliver a resilient, resource efficient asset that enhances health outcomes for the Eurobodalla community through bespoke site-specific, patient-centric design.

During the Concept Design stage the design made critical decisions regarding the building massing and orientation, setting the project up for success - primarily North and South orientation enabling streamlined management of solar access, light and air by considered architectural façade responses to be developed. During Schematic Design façade design responses have been developed that leverage the natural advantages of the building's massing. Patient rooms on the southern aspects of the building have minimal shading, preserving access to views and permitting diffuse daylight given the limited direct solar angles characteristic of the southern orientation. Similarly, the 'ends' of the building are predominantly opaque to limit low angle sun but offer opportunity to engage with the views to the mountains and afternoon sun with glazed spaces that lend themselves to casual or transient interaction, rather than patient rooms. Patient rooms with north aspects have optimised shading that cut off high angle summer sun, but permit useful winter time passive heating. Further, façade detailing has progressed to integrate envelope performance characteristics to support operational energy and DGN58 objectives.

The Schematic Design further capitalises on the massing characteristics of the Concept Design by preparing for the integration of a renewable energy photo-voltaic system on the building roofs. Roof area has been allocated with PV system design and layout to be confirmed in the Detailed Design stage. This is a critical element of the building's aspiration to be operationally a net zero carbon asset, with additional energy supply security, in keeping with NSW state government and Health Infrastructure objectives. It provides an external and visual reminder of the commitment this project is making to a zero-carbon future, beyond the elimination of fossil fuels effected by adopting an electrified approach to the building's systems.

The central lobby area has maintained its open and welcoming feel, providing an environment that is well shaded and can be naturally ventilated - providing access to fresh air and a connection to nature that is at the core of the building's ethos. The design allowance of the natural ventilation openings has progressed to incorporate appropriate opening sizes and locations to promote the necessary airflow for the strategy to provide an effective contribution to airflow, comfort and energy reduction.

The adoption of a caring for Country ethos is fundamental to the developments approach to its site and surroundings. The project has prioritised integration into the landscape, blending the building into the topography and encouraging a diverse range of native plants and animals to minimise the impact that a new building could have on an otherwise Greenfield site and help restore some biodiversity to the area. This approach has been further developed through Schematic Design through generation of more detailed landscaping plans and integration of Indigenous design elements. Site design has promoted the use of water sensitive urban design elements such as rain gardens, integrating bush tucker garden and regenerative landscape approaches. The integration of storm water retention and filtration systems will support the managed irrigation using treated and recycled storm water on site.

Schematic Design also saw the team begin to address potential risks facing Eurobodalla Regional Hospital as a result of climate change, identifying major climate risks and potential adaptations to be implemented. It is important that the role of Eurobodalla Regional Hospital is recognised as a community asset that may be need to be a critical piece of infrastructure in times of need brought on by external shocks and stresses that may be climate or non-climate related. Additional planning workshops are anticipated during Detailed Design to refine the strategy and approach.

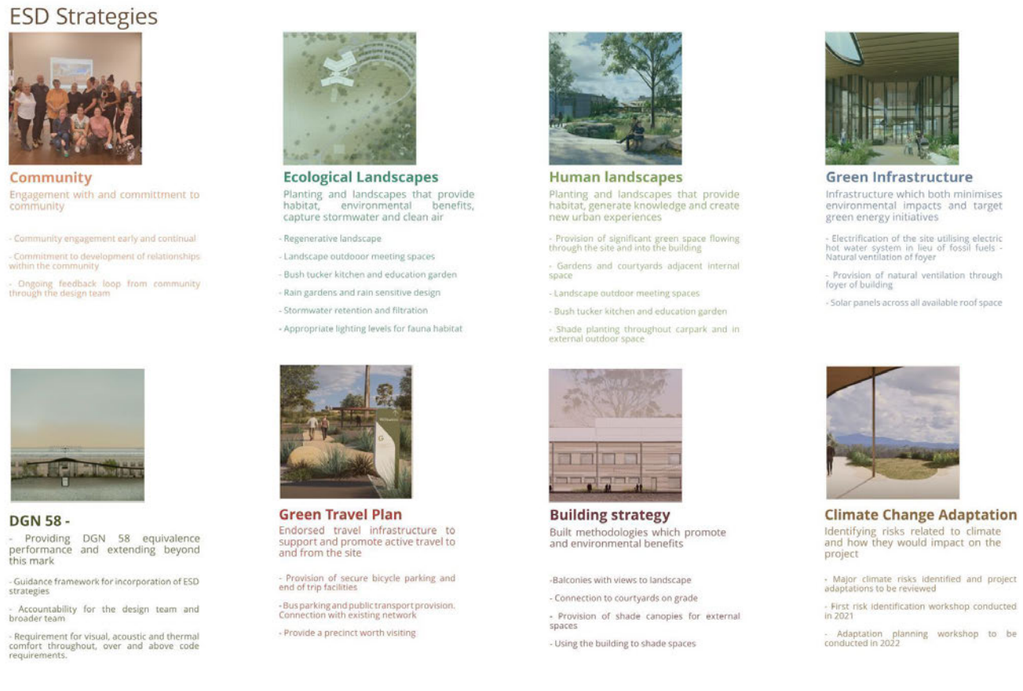

Figure 44: ESD Strategies

5.14 Interior Architecture

5.14.1 Overarching Philosophy

The interior design philosophy is to create a person-centred environment that focuses on promoting wellness. ‘Connections’ is proposed as the overarching design narrative which will guide the design as it unfolds.

The narrative draws inspiration from Moruya and surrounds to explore the idea of connection to Country. By bringing together key characteristics of culture, site and context, the design aims to create a cohesive, inclusive environment that celebrates the diversity of the town as well as its cultural history and landscapes. The narrative creates a physical connection while overlaying it with a person’s innate desire to have social connections and being surrounded by nature.

This narrative may be interpreted in multiple ways in relation to the new Eurobodalla Regional Hospital:

— Encouraging physical and social connections between people and services across the region;
— Connection to the natural environment: micro level of fractals in nature;
— Connection to the natural environment: macro level of biophilic design;
— Connection to the historical and cultural heritage of site and town; and
— Connection to Country as an overlayed experience through wayfinding and holistic design outcome.

5.14.2 Design Objectives

The design principles adopted for the interior environments reinforce the design objectives of the project below:

— People and Culture: Are at the forefront of the design approach through community involvement to empower and bring positive change and meaningful opportunities.
— Materiality: Natural sustainable materials local to site and region will be embedded through interior elements and provide a sensory experience and familiarity. The design will look to source from local supply chains to support a sustainable approach.
— Connection to Country: the design will maximise the connection to landscape, Indigenous culture and technologies to embed into the design providing a familiar and safe environment.
— Holistic Healing: A holistic approach to connect people with nature in positive and affirming ways to create a calm, healing environment.
— Human Centric Design: Consideration of the experience for all people in the hospital environment including patients, visitors, clinicians, researchers and staff to capture innovative outcomes for an all-inclusive environment.

Figure 45: Native plant species used for cultural healing

Figure 46: Landscaping’s influence on interiors

5.14.3 Design Principles

Developing design principles will engage with the broader context of the site. Taking inspiration in an approach to complement Country, the natural landscape and organic forms will build the interior strategy.

Taking reference from the strata of the landscape and locality, there are opportunities to develop concepts which relate to the earth, vegetation and sky. Incorporating the granite from site into the building elements like joinery and floor components will be embedded throughout the design.

Figure 47: Site and surrounding context

The concept will be implemented using the following design principles to influence the materiality application for all interior elements to enable a cohesive design language through furniture, joinery, feature wall, floor and ceiling treatments to directly reference the elements of Country.

5.14.4 Connection to Historical and Cultural Heritage

Wherever possible the design and spatial language aims to create a sense of continuity between the inside to outside, to take advantage of the natural context and elements specific to site.

Figure 48: Moruya's Cultural and Historical Context

5.14.5 Cohesion Between Interior and Exterior

The building is defined by the overarching concept of Thresholds. Each space will provide a threshold connection to the landscape through colour and natural elements informed by the site and context to create a cohesive design approach.

The design creates visual cues and wayfinding opportunities by framing views to the landscape providing moments of pause and reflection to provide the user with a sense of orientation and grounding throughout their journey.

5.14.6 Interior Legibility

The interior must be clearly and intuitively organised, arranged in a pattern or hierarchy that promotes individuals' privacy and at a scale and proportion that complements the activity they contain.

The entry and central zone will draw on the natural and familiar elements specific to site blurring the 'threshold' between inside and outside. The secondary zone will start to define the 'journey' between non-clinical and clinical environments. As the patient and visitor journey continues into the envelope, the department and patient zones will be defined by a deeper connection to Country and the landscape for a safe and calming experience.

The connection and building envelope links the interior spaces by focusing on the in-between moments and threshold to the surrounding landscape. The analogy of 'Thresholds' has been adopted in the design as a symbolic concept for the project and as a cognitive map to structure the overall design concept from the site and natural forms to the architecture envelop which are adopted into the interior spaces and circulation systems, ensuring the deeper idea of a Country-centred design approach.

"In the "Country-centred", or eco-centric circle the human and non-human are represented as integrated in a network of relationships through Country all supporting each other. (Connecting with Country Framework by NSW Government Architects)

Figure 6: Human-centred or Country-centred:
Image: Diagram adapted from German architect Steffen Lehmann, Eco v Ego diagram 2010

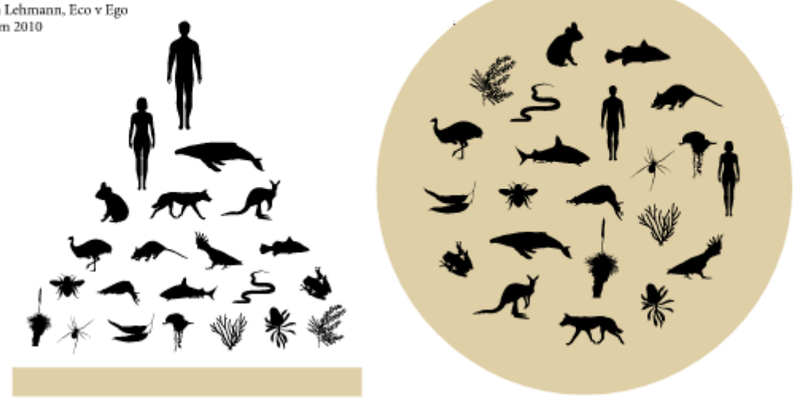

Figure 49: Human-centred or Country-centred

The 'Thresholds' is expressed as the major circulation pathway to connect departments and create a vibrant, light filled public realm. The expansive glazing connects patients, visitors and staff to the outdoors, continuing the biophilic theme. The 'Journey', in contrast, is articulated by activated, more intimate spaces such as lounges, circulation paths and pause points along the user experience.

In addition to spatial and departmental planning for the interior environments the characteristics of the interiors are also designed to facilitate users' cognitive mapping process for wayfinding, to reduce stress and enhance users' experience of the building whilst also supporting cognitively impaired patients such as those with dementia.

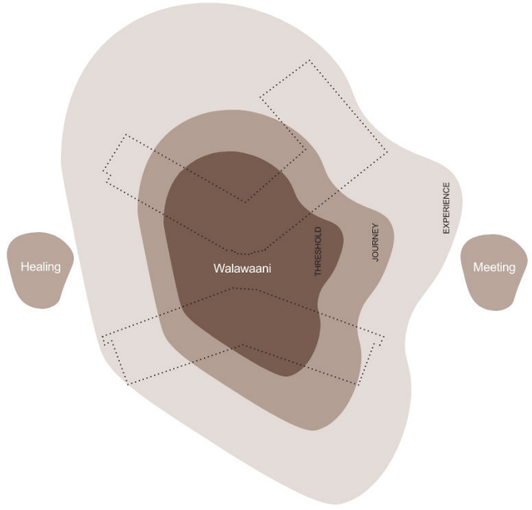

Figure 50: Interior strategy

Figure 51: Thresholds of colour

Materiality

The colour palette approach will translate from the landscape and reference the textural materials specific to site and connection to Country. Natural sustainable materials local to site and region will be embedded through the interior elements and provide a grounding and sensory experience for the users.

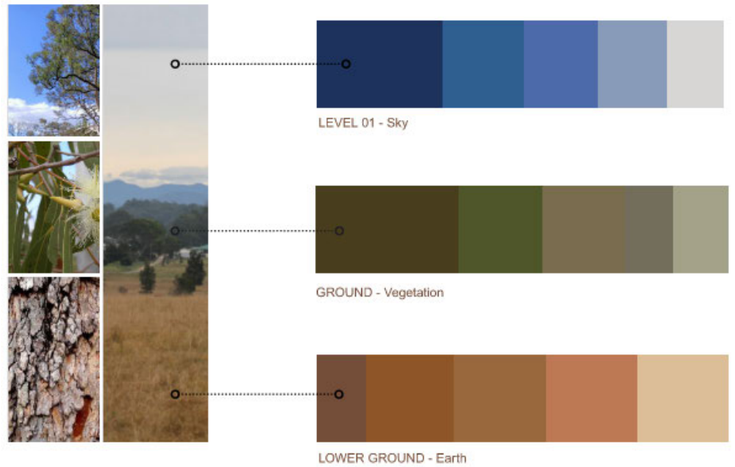

Figure 52: Colour scheme approach

Colours and patterns found in nature, can be embedded through fabrics, wall finishes, flooring materials, façade details. There is a repetition of pattern with pops of colour through each level. Where appropriate, timber is used to provide familiarity, warmth and connection to nature into the arrival experience.

The concept provides several opportunities for the design colour palette. Below are a series of conceptual interpretations of what the design colour palette could look like and the overall application.

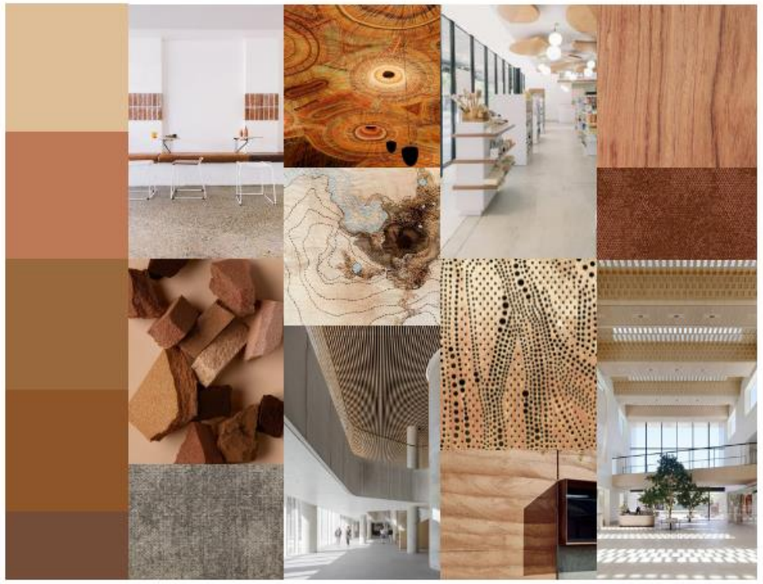

Figure 53: Inspired by the surrounding natural elements of ‘Earth’

Figure 54: Inspired by the surrounding natural elements of ‘Vegetation’

Figure 55: Inspired by the surrounding natural elements of ‘Sky’

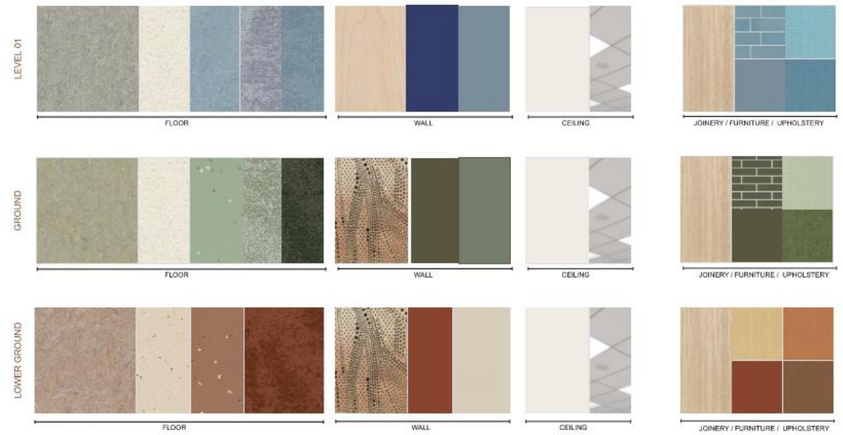

Figure 56: Colour Mapping

5.14.7 Colour Mapping

Warm and earthy tones and textures, drawn from the subdued reds and browns of earth, has been selected for the base palette. Each level assumes a unique identity through the use of colour. Colour is used to delineate each level and provide intuitive wayfinding cues.

5.15 Space Types

5.15.1 Patient Care and Diagnostic Areas

Patient care and treatment spaces will focus on the finer grained experience at the human scale. Spaces will aim to reduce the clinical feel wherever possible through a balance of practicality, safety, aesthetics and innovative and sustainable selection of materials.

A focus on improving inpatient experience in wards can be achieved by framing views and drawing a connection to the natural environment. Where possible, patient rooms will have a non-institutional feel with concealed services and natural and warm materials will be used to create an overall positive experience.

Internal Environment:

— Incorporate joinery which is considered and efficient and is part of an overall seamless element within the spaces;
— Enable visual connections to nature wherever possible;
— Include materials that are relevant to the local surroundings and that evoke a sense of warmth and comfort (i.e. timbers, colours that have an emotive response);
— Include lighting which is adjustable and sensitive and where possible, include colour adjustment capability; and
— Include low sills with high vista quality.

Figure 58: Patient Care Areas

Figure 57: Patient Care Areas

5.15.2 Visitor Areas

The visitor experience in the hospital will have a significant connection to the natural environment. Public circulation and lobby areas will expand visually to enhance the visitor and patient experience of views and enable longer view lines throughout the hospital to assist in orientation and wayfinding.

These connections are also achieved via an activated perimeter, comforting and inclusive spaces to gather and create a community, interiors to support the use of intuitive technology and ease of navigation through intuitive wayfinding (e.g. colourful super graphics, floor and wall treatments, integrated greenery and signage, landmarks, 3-dimensional signage, use of raw materials).

The visitor experience will be enhanced with modular furniture for flexibility, various settings for user comfort and inclusivity, gathering spaces and places to retreat.

Creating positive waiting experiences is an important aspect of the interior design strategy as it must accommodate visitors that may be in a vulnerable state, and also greatly impacts upon the perceived overall quality of the healthcare service.

This experience can be assisted by providing areas where families can sit together and talk, but also have chairs and couches for people who prefer a more private setting. Chairs should include arms and vary in height to allow for comfort of all users. Opportunities to engage visitor's imagination should also be considered as a way to soften the effects of waiting through distraction, relief, and engagement to de-institutionalise the hospital environment.

Soft and natural wall colours will also be utilised and will support intuitive wayfinding graphics. Joinery finishes that reflect those used on the facade of the building, creating one holistic design.

Figure 59: Visitor Areas

Figure 60: Visitor Areas

Figure 61: Visitor Areas

5.15.3 Staff Areas

It is important to create similar positive experiences in staff environments, by designing spaces that support efficiency, collaboration, teamwork and safety.

Key principles in increasing efficiency and effectiveness include providing the appropriate work settings that support the way employees work with the effective use of the available space. Appropriate amenity has also been carefully considered and incorporated to reduce staff stress levels and increase productivity.

To create spaces that are appropriate to the different teamwork types, they will be equipped with the facilities, technology and infrastructure to assist and optimise day-to-day routines and ensure that staff can develop and thrive in their roles.

Team lounges, sensitivity zones and other team-specific areas will include breakout spaces to provide relief from their high-stress work environments.

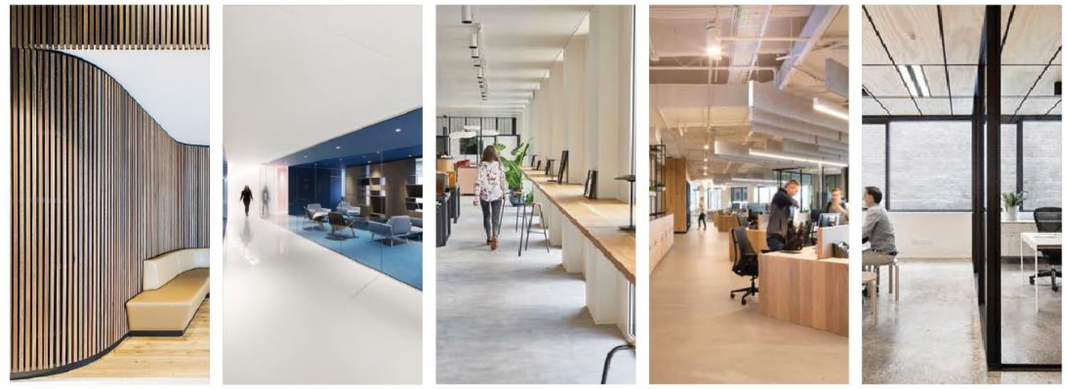

Figure 62: Staff Areas

5.16 Future-proofing and Expansion

A key principle articulated in the design process was to provide for future expansion. This was dealt with initially at the level of site planning.

The design team have focused on the configuration of the spaces to allow expansion to take place without disruption to service delivery.

At the finer grain of building planning, the Masterplan proposed the adoption of structural systems of regular grids with defined service zones and circulation spines to allow for the logical expansion and provide the ability for the adaptation of uses over time.

Planning is based on an efficient structural system which is based on the use of an 8.4 x 8.4m grid, which is widely acknowledged for its economy and efficiency.

Service zones in plan are defined by circulation zones. The planning allows the use of corridors wherever possible allows for the accommodation of major services runs affording the opportunity for alteration without impact on clinical space.

5.16.1 Exploring Modular / Standardisation Opportunities

The Eurobodalla Regional Hospital lends itself to the design freedom of conventional construction, however repetition of fit-out and service equipment may yield economies of modular pre-manufacture. With areas such as ensuites, bathrooms and inpatient bedrooms benefiting from pre-manufacture. Pre-manufacture provides construction efficiencies and opens up the potential for off-site manufacture of major elements potentially yielding further time and cost efficiencies. It also provides safety and efficiencies in operation, where functional spaces are consistent in layout.

5.16.2 Standardisation

Hospitals are highly complex and function-specific structures that must respond to multiple conflicting demands over their lifetimes, including changing clinical practice, technology, climate and service demand. Design initiatives should optimise a viable hospital by applying flexible and open-ended systems. Flexibility should be considered from the outset;

Standardisation – infrastructure and spaces will allow for change in the purpose or use of a space over time. Use of standardised and modular construction and design potentially facilitate flexible adaptation over time.

Initiatives towards standardised patient safety solutions have been implemented worldwide with the aim of preventing adverse events in health care. Evidence-based Design principles identify standardisation of the physical environment as a contributor to increasing staff effectiveness. The aims of room standardisation is also to allow for the room to change its use over time without the need for major capital works.

a. The Australasian Health Facility Guidelines (AusHFG) provides reference to a list of standard rooms and associated room layout sheets and room data sheets. These indicative plan layouts and elevations illustrate an example of good design and minimum area allowances.
b. The design response to the standard room arrangements by the design must address the following criteria:
    i. utilise generic room layouts and generic room arrangements wherever practical to do so;
    ii. use hand room layouts where departmental planning is best resolved with same handed layouts;
    iii. design for maximum flexibility, adaptability and convertibility for future changes to service delivery;
    iv. maximise functional work area space through the provision of wall and ceiling mounted equipment;
    v. include features which will effectively manage infection control;
    vi. support practices for optimal workplace health and safety; and
    vii. Provide opportunities for teaching and training at all clinical interfaces

c. Building and design requirements for non-generic rooms will be highlighted in the departmental planning and within the Schedule of Accommodation.

— Design must facilitate:

- Prevention of falls and adverse events;
- Patient safety, and ensure high indoor environment and safe water quality;
- Pragmatic and efficient;
- Overall spatial planning that supports standardisation of the configuration and fit-out of clinical areas;
- Integration of ergonomic principles into design;
- Design features that facilitate safe and effective care for people with disabilities and behavioural issues;
- Design that is salutogenic, that is, is a cause of good health and maximises use of positive elements related to natural light, colour, images of nature, access to fresh air, visual arts and music, and ‘spiritual’ spaces; and
- Align to the clinical and support service operating models of the organisation.

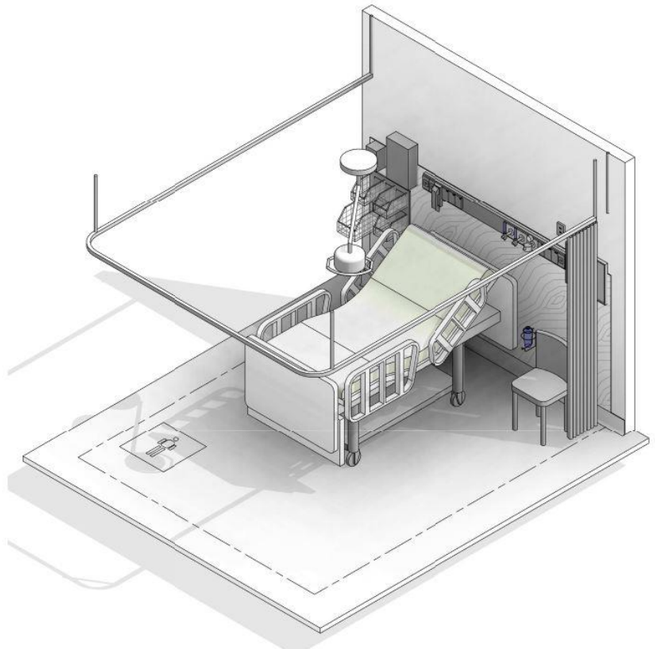

Figure 63: Standard patient holding bay. Source: Australasian Health Facility Guidelines (AusHFG)

5.17 Landscape Architecture

5.17.1 Design Philosophy

The landscape design aims to celebrate the natural setting of ERH – showcasing locally native lowland grassy woodland and swamp oak community species and respecting vistas across the district afforded by the ridgeline setting.

Through the co-design process key ideas around Country as medicine, and the site as a meeting place have been developed; woven into outcomes of providing a welcoming, equitable experience for patients, staff and visitors which complements architectural proposals.

5.17.2 SDRP Responses

Advice following a SDRP 4 session on the 9th March 2022 has been responded to in landscape documents and summarised below.

Comment	Response
7. Further develop the landscape plan and include the following: a. Illustrate how the proposed vegetation is designed to tie in and co-exist with the existing vegetation.	The proposed planting schedule features trees currently on the site and locally native species. The arrangement and style of planting is intended to sit within the landscape sympathetic to the existing grassland landscape. Wherever possible existing trees shall be retained. With replacement tree planting at a ratio of 1:3.4 (44 trees for removal, 153 proposed).
b. Propose more trees where possible e.g. along the south side of the car park. Provide a long-term plan for tree planting.	Additional tree planting has been proposed along the length of The Rainbow Serpent Drive and the carpark perimeter.
c. Whole of site water management demonstrating strategies to facilitate water permeating within the site and minimise run-off to adjacent areas, for example by incorporating permeable surfaces in parking and pathway areas.	Opportunities for both permeable paving and design of hardstand surfaces flowing into infiltration beds shall be explored further in design development phase. Preliminary discussions have identified the carpark beds could be used as infiltration beds for carpark runoff.
8. Improve the integration of the ramps and stairs within the landscape in the Healing Place. Apply a softer approach to the edges and transitional elements such as seating.	Ramp and stair design has been revised. The ramp proposal allows for opportunities for seating along the length of the ramp. Stair arrangement features additional pockets of planting framing the central lawn embankment.
9. Investigate whether the granite boulders as shown in the landscape design can realistically be excavated as part of the site works already required without creating any additional impact to the site and materials.	Further investigation will be undertaken in design development phase. The landscape strategy around the and reuse of granite on site aims to be flexible and responsive in its approach in the scale and positioning.

5.17.3 Key Objectives

Key objectives for the landscape design of Eurobodalla Regional Hospital are:

- Reflect design narratives as developed with the Yuin community;
- Protect and improve natural systems – including existing trees, biodiversity and water systems; and
- Support clinical facilities and user experience through treatment with the provision and access to quality outdoor spaces.

5.17.4 Therapeutic Landscapes

Landscape spaces provide a strong sense of connection to the outdoors and provide a pivotal role in the project and its connection with Country. Significant international attention is now focused on the role of nature in promoting healing, with growing interest specifically in therapeutic landscapes. Therapeutic landscapes are primary elements in the design of hospital projects, particularly in urban contexts. Therapeutic landscapes are green spaces designed to promote wellbeing, emotional, and cognitive restoration to patients, their families, and staff. Research in various theoretical fields demonstrates that human beings are physically, neurologically, and emotionally responsive to cues in their surrounding environments.

Using salutogenic (design for wellbeing) design, therapeutic landscapes and gardens feel comfortable and conducive to healing for the user. These spaces are designed to promote stress reduction through creating an environment that resonates with people's innate preference for nature, certain environmental conditions, and settings. Therapeutic landscapes influence the parasympathetic nervous system and allow for contemplation, relaxation and a sense of being grounded and safe.

Therapeutic landscapes connect with people's individual experiences and feel 'familiar' through the use of plants and natural materials from the region. They provide an immersive experience that visually, acoustically, and mentally takes people away from the often highly emotional, disorientating, and unfamiliar experience of being a patient or family member in a hospital, to an environment that feels familiar and normal.

A considered landscape approach can:

- Create a therapeutic relationship with local nature and natural features for the benefits of patients, their families, and staff for rehabilitation, enjoyment and comfort;
- Design for health and wellbeing using nature and nature-based environments; the significant role nature plays in promoting healing is well documented in the extant literature;
- Use biophilic (nature loving) design to connect people with the natural environment, utilising our innate emotional connection with nature to promote health, wellbeing, and healing;
- Use salutogenic design (designing for wellness) by considering the precursors and causes of good health, and how to create, enhance and improve mental, physical, and social wellbeing;
- Design outdoor space to appeal to all our senses to maximise healing benefits and enjoyment by visitors;
- Co-locate internal and external hospital functions to allow the visitor to immerse themselves in nature during therapy, rehabilitation and relaxation;
- Provide a variety of therapeutic landscape spaces for different uses (active, passive, organised, reflective) and users (Indigenous and other ethnic communities; people of all ages and abilities);
- Allocate adequate green spaces with careful considerations of preferred orientation and aspect;
- Consider operational, functional and aesthetic values to maximise visitor experience and provide value for money;
- Offer green spaces in easy reach which distract from the hospital environment;
- Deliver easy access to sunshine, fresh air and view of the sky;
- Provide different outdoor typologies (open, enclosed, roof terrace and garden) and scale of outdoor spaces – secret gardens, view orientated gardens, historically inspired gardens, secure gardens, sensory gardens, social meeting place gardens, adventure and play gardens, rehabilitation focus gardens;
- Maximise opportunities for therapeutic design by using nature in many ways. Use the landscape design lens to guide design thinking; and
- Local healing plants, in addition 'bush tucker' and native plants will be used within the landscaping.

5.17.5 Landscape zone diagram

Landscape areas can broadly be described in 3 categories:

Peripheral and access

— Rainbow Serpent Drive
— Carpark

Western Community Facing Areas

— The Meeting Place
— Walawaani
— Vehicle drop off

Eastern Courtyards

— The Healing Place
— Mortuary Courtyard
— Birthing and Paediatric
— Rehabilitation
— Palliative Care

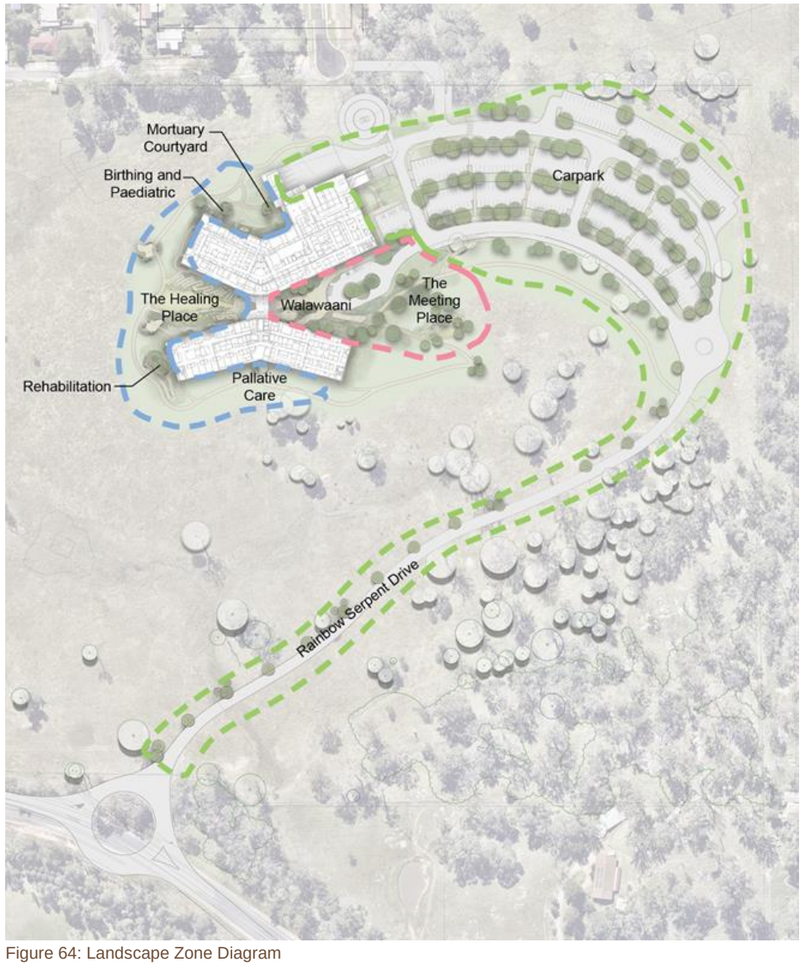

Figure 64: Landscape Zone Diagram

5.17.6 Landscape zones

The Rainbow Serpent Drive provides a sweeping journey from the Princes Highway to the new building. The alignment of the driveway has been designed to retain as many trees as possible and protect Scar Trees.

Existing and proposed trees along the drive reinforce the journey and shade hard surfaces.

Figure 65: Landscape zones - Rainbow Serpent Drive

5.17.7 Landscape zones – Carpark

The carpark features landscaped garden beds with canopy tree planting. Understory planting is to be low height to maintain sight lines for vehicles and pedestrians

An access path leads though the carpark to the Walawaani providing safe, equitable access. Shelters and seating along the extent of the path provide respite for pedestrians between entry and car parking.

Figure 66: Landscape zones - Carpark

5.17.8 Landscape zones – Walawaani

The Walawaani draws visitors into the building from the drop off and circulation pathways. Seating is proposed under the architectural canopy to allow users to retreat, rest or wait.

Wedges of planting to the building edge and centre of the space provides a green fringe to seating and pathways featuring texture and colour to reinforce a welcoming sense of arrival.

5.17.9 Landscape zones – Meeting Place

The meeting place provides a community facing area for ceremony, gatherings and the use of a variety of groups. A series of gardens will feature locally significant planting including food and medicinal species. Seating will cater for both gatherings and smaller intimate groups. Meandering paths connected to wider site circulation provides access though the series of spaces connecting to the broader site circulation network.

Figure 67: Landscape zones - Meeting Place

5.17.10 Landscape zones – Healing Place

The Healing Place provides a safe secure place for patients, their visitors and staff to access the outdoors. An accessible meandering pathway and a series of gardens nestle into the landscape. Along the path extent seating allows users to pause and rest.

The healing place is oriented towards views to the west. Informal nature play and a variety of seating will allow for a range of types and ages of users.

Figure 68: Landscape zones - Healing Place

5.17.11 Landscape zones – Mortuary Courtyard

The Mortuary Courtyard provides an external space for reflection as well as gatherings in a peaceful setting.

The space has been oriented to take in views. A range of intimate and group seating will be provided with locally significant planting. Shade will be provided though tree canopy earth mounding is proposed surrounding the courtyard to ensure separation and privacy between adjacent courtyards and back of house activities.

Figure 69: Landscape zones - Mortuary Courtyard

5.17.12 Landscape zones – Birthing Courtyard

A courtyard next to the birthing unit will provide an outdoor space for expectant mothers and their families to spend time while in the unit. Privacy is provided between spaces adjoining rooms though architectural screens, planting and land mounding.

A range of planting with significance to birthing and renewal is proposed. A variety of seating that can be used to provide comfort and respite from the indoor clinical environment and connect with Country.

5.17.13 Landscape zones – Palliative Care

The palliative care courtyard provides quiet reflective space that allows for patients to sit or have their bed taken outside as well as providing comfort for those supporting palliative care patients. Comfortable seating will cater for visitors and ambulant users.

Planting will allow users to connect with nature with familiar smells and sights with species of local significance and reflect seasonality though flowers, fruit and changing colour.

Figure 70: Landscape zones - Palliative Care

5.17.14 Landscape zones – Peripheral Landscape

Minimal landscaping works are proposed across the broader site with the exception of any tree removal for safety or Helipad related issues.

The creek line represents the connection to the Natural spring at the eastern boundary of the site. In future stages, under the principle of caring for Country, the opportunity to revegetate and provide spaces to interact with the creek line will be explored.

5.17.15 Planting Strategy

The planting strategy is centred around the local endemic communities – Lowland Grassy Woodland and Swamp Oak Floodplain. Local food and medicinal species will be incorporated into planting design for the Meeting Place and courtyards.

Proposed tree planting is located around the carpark, Walawaani and Meeting place.

Replacement of key tree species of *Eucalyptus tereticornis* and *Eucalyptus eugenioides* are proposed across the site with a native understorey.

Figure 71: Planting strategy imagery

Indicative Species List

Botanic Name	Common Name	Mature Size
TREES		
Allocasuarina littoralis	Black She-Oak	15 x 5
Acacia longifolia ssp longifolia	Sydney golden wattle	3 x 4
Eucalpyptus elata	River peppermint	15 x 8
Eucalyptus globoidea	White stringybark	30 x 8
Eucalyptus melliodora	Yellow Box	30 x 8
Eucalyptus tereticornis	Forest Red Gum	30 x 8
Pittosporum undulatum	Sweet Pittosporum	12 x 6
Angophora floribunda	Rough-barked apple	20 x 8
Backhousia myrtifolia	Cinnamon myrtle	7 x 4
Banksia integrifolia	Coast Banksia	20 x 8
Brachychiton populneus	Kurrajong	10 x 6
Melaleuca ericifolia	Swamp paperbark	10 x 6
Backhousia citriodora	Lemon Scented Myrtle	20 x 5
PALMS		
Archontophoenix cunninghamiana	Bangalow Palm	20 x 4
Livistona australis	Cabbage Palm	25 x 4
SHRUBS & ACCENTS		
Bursaria spinosa	Sweet Bursaria	4 x 3
Cassinia longifolia	Shiny cassinia	4 x 3
Hovea heterophylla	Creeping hovea	1 x 1
Hymenanthera dentate	Tree violet	2 x 3
Ozothamnus diosmifolius	Rice Flower	1.5 x 1.2
Acacia floribunda	Gossamer Wattle	3 x 4
Banksia spinulosa	Hairpin Banksia	1.5 x 2
Callistemon citrinus	Crimson Bottlebrush	3 x 2
Hibbertia aspera	Rough Guinea Flower	.5 x 1
Leptospermum polygalifolium	Yellow Tea Tree	1 x 3
Macrozamia communis	Burrawang	1.5 x 2
Pittosporum revolutum	Yellow Pittosporum	3 x 2
Doodia aspera	Prickly Rasp Fern	.4 x .6
Rubus rosifolius	Native raspberry	2 x 2.5
Persoonia linearis	Narrow leaf Geebung	5 x 3
Correa alba	White correa	1.5 x 1.5
Ceratopetalum gummiferum	NSW Christmas Bush	4 x 3
Westringia fruticosa	Coastal Rosemary	1.2 x 1.5
Doryanthes excelsa	Gymea lily	2 x 2
Grevillea banksii	Spider Flower	2.5 x 3
GRASSES & GROUND COVERS		
Arthopodium milleflorum	Pale Vanilla Lily	1 x .4

Ajuga australis	Austral Bugle	.5 x 3
Baumea juncea	Bare Twig Rush	.3 x 1
Bulbine glauca	Rock Lily	.5 x .3
Carex appressa	Tall Sedge	.8 x .6
Carpobrotus glaucescens	Pig face	.15 x 1
Chrysocephalum apiculatum	Yellow Buttons	.3 x 1.5
Dianella caerulea	Blue Flax Lily	.4 x .4
Dianella longifolia	Blue Flax Lily	.8 x .5
Dianella revoluta	Blue Flax Lily	.1 x .15
Dichondra repens	Kidney Weed	.1 x 2
Ficinia nodosa	Club Rush	1 x .8
Geranium solanderi	Austral Crane's-bill	.5 x .4
Gahnia aspera	Rough Saw-Sedge	.8 x .15
Hypericum gramineum	Johnswort	.25 x .2
Isolepis nodosa	Knobby Club-rush	.8 x .4
Imperata cylindrica	Blady Grass	.75 x .3
Lomandra longifolia	Mat Rush	1 x 1
Lomandra multiflora	Mat Rush	.4 x .8
Mentha satureoides	Bush Mint	.4 x .5
Plectranthus graveolens	Bush Basil	1 x 1
Poa labillardieri	Common Tussock	.6 x .6
Themeda australis	Kangaroo grass	1.5 x .5
Themeda triandra	Kangaroo Grass	1.5 x .5

5.17.16 Materiality

The landscape materials palette is centred thematically around granite from the site – these will be used both as decorative boulders and features in seating and paving as well as tones for colour palette broadly.

Proposed furniture will be durable in materials and form as well as equitable for a variety of users.

Figure 72: Materiality imagery

5.18 Signage and Wayfinding

5.18.1 Coherent Wayfinding

The foundation of the approach to wayfinding across the site and within buildings is to provide clear and logical planning and subsequently create buildings and arrangements which communicate or explain themselves.

This approach embraces passive wayfinding by creating a legible environment and through clear spatial organisation. It encompasses the circulation and navigation of pedestrians and vehicles, public transport integration, key entry and focal points and the legibility and visibility of messages and information to visitors and staff. This approach limits the need to rely on signage, which although necessary, should function to confirm direction rather be the primary wayfinding element.

Further to the site wide strategies for wayfinding established in the masterplan, the Schematic Design has incorporated the following key strategies to support these aims:

— Linear and continuous circulation paths throughout and between buildings;
— Clear hierarchical ordering of key main circulation paths - e.g. the development of “main street” type spaces which then clearly connect to secondary connecting paths;
— Lift Cores which are connected to main circulation pathways;
— Clear entrances are created to departments, without reliance on traversing through or past multiple departments to reach department entrances;
— View lines and focal points are enabled between levels to enable quick understanding of the building layout for first time visitors; and
— Fully integrated system to compliment the Architecture, Interior Design and models of care.

Eurobodalla Regional Hospital

Cues from the built environment are a fundamental aspect of intuitive wayfinding and navigation. Our ability to read the architecture, structures and landscape is a key factor in being able to understand the site. How legible a site or building is to the visitor is critical to establishing an effective wayfinding system.

Wayfinding is a complex task that involves many steps.

5.18.2 Campus Wayfinding

Wayfinding is a collaborative and people-centred process that effects the overall experience of a place. A campus wide wayfinding strategy considers the end to end journey to, from and on the greater campus of the master plan. It includes:

— Pre-visit information (finding out how to get to your desired destination);
— The journey there (following a consistent set of directions);
— The experience of the place (making you aware of what’s available and where); and
— The journey back (finding your way out).

The act of self-orientation is complex and a person’s state of mind can make simple tasks very difficult in stressed circumstances.

Hospitals and hospital campus’ are considered high stress environments, the least amount of directional information a patient or a visitor has to retain the more likely to decrease cognitive overload (the more information, the more processes the brain has to perform). Intuitive wayfinding will improve a consumer’s experience of a place and an organisation. It shows them where they are, where they’re going and lets them know when they’ve arrived. It reduces stress.

Poor wayfinding can lead to late appointments, missed connections and a frustrating stressful customer experience.

Wayfinding’s ultimate role is to connect all the elements of the built environment and guide experience so all users can easily navigate the space with equity. When brought in at the beginning of a project it can identify user needs and gaps and help shape an environment to maximise intuitive navigation and minimise the use of signs.

5.18.3 Passive Wayfinding

The architecture and built environment can assist wayfinding by providing cues that define pathways, arrival points and gathering spaces. The appearance of entries and all arrival points should be inviting. The location of entries and receptions should be intuitive and naturally follow the pedestrian flow.

Sites and buildings that provide intuitive wayfinding purely by the design of the spaces requires less signs. If a building fails to express to the user how the spaces work and how they connect to each other, then a higher level of signage is required to assist and direct these users.

Successful wayfinding involves many underlying elements and factors which users consider while making decisions at a conscious and subconscious level, these include:

— The surrounding environment and how easy it is to read and evaluate. While navigating unfamiliar environments, one of the most effective strategies that people use subconsciously is forming a mental map of the space they are confronted with;
— Successful communication at each level, includes information provided on the website, letter sent out, conversations over the phone, text messages, digital tools as well as verbal and written instructions provided on site; and
— Understanding of the facility’s processes that are user-focused, but also align with the hospital’s operational needs.

5.18.4 Wayfinding Consideration in Planning

The following are key principles that have been considered in the development of the planning options:

— Pedestrian circulation;
— Vehicular navigations;
— Public transport integration;
— Key entry points;
— Key focal points;
— Legibility and visibility of messages and information; and
— Equity / Accessible health care.

Designing the wayfinding system in the future stages for the new Eurobodalla Regional Hospital will require a legible environment and a spatial organisation that will have an essential role to play during navigation.

5.18.5 Navigational Aids

Good wayfinding is natural and instinctive. It is knowing where you are, knowing where you are going and comprehending how to get there easily. As a preference wayfinding should occur without using signage.

Navigational aids may include:

— Placement of built form, structures, buildings, landmarks;
— Landscape placement: hard and soft;
— Urban form, topography;
— Visual Signage;
— Typography with generous X heights to increase legibility at required distances;
— Braille and tactile signage;
— Pathways, walkways, roof cover;
— Look and Feel Aspects: Materials, Finishes, Colour, Texture;
— Identity: theme, branding, visual character;
— Vista, view creation, sightlines;
— Access to technology to assist in wayfinding;
— Audible cues;
— Communication and marketing;
— Artwork placement; and
— Lighting placements and directional.

5.18.6 Equitable and Accessible Wayfinding

Wayfinding must be accessible and equitable, considering a variety of ability; physical and psychological.

5.18.7 Experience Design in Placemaking

The following are key principles that have been considered in the development of the planning options:

— Memory association of the place;
— Interpreting community through public art and urban design;

— Integration of mental health narrative in planning and design;
— Integration of campus planning with First Nations diversity and non-English speaking people with particular significance to the incorporation of local language (Dhurga) and totemic species (Black Duck);
— Existing and significant green infrastructure on the site in mature trees and waterway; and
— Significance of granite iconography.

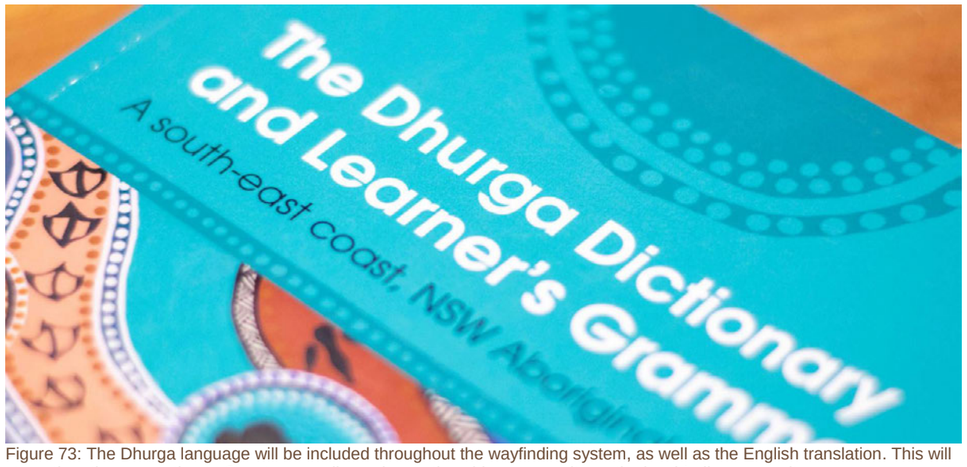

Figure 73: The Dhurga language will be included throughout the wayfinding system, as well as the English translation. This will strengthen the connection to Country as well as educate the wider community on the local Indigenous culture.

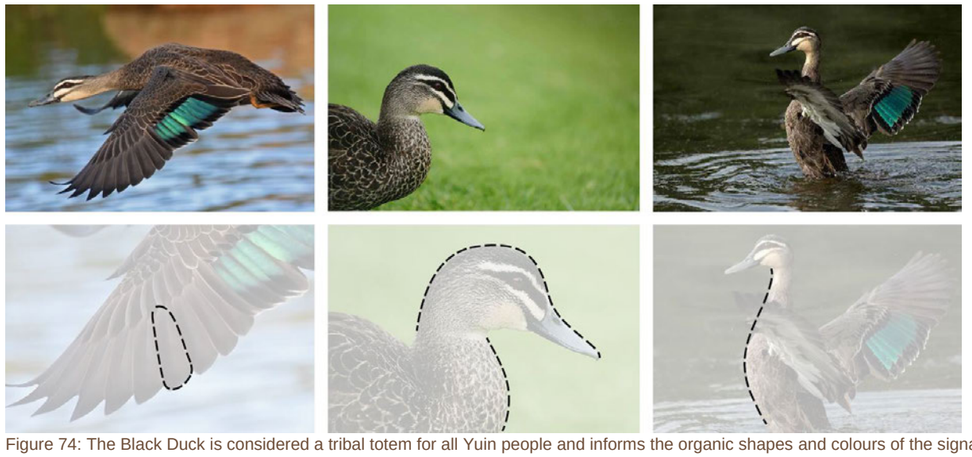

Figure 74: The Black Duck is considered a tribal totem for all Yuin people and informs the organic shapes and colours of the signage design

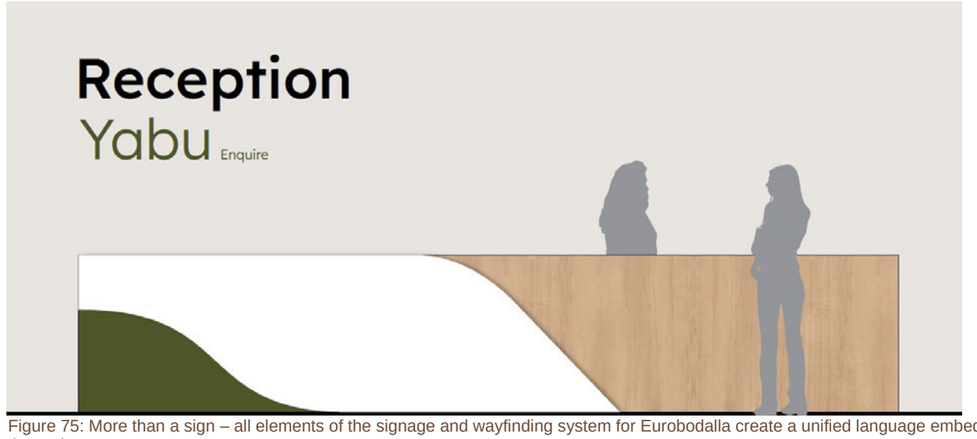

Figure 75: More than a sign – all elements of the signage and wayfinding system for Eurobodalla create a unified language embedded throughout the project

5.19 FFE

A Furniture Fittings & Equipment (FFE) schedule of existing furniture and equipment is to be provided by the Users/ Stakeholders to determine which items of FFE can be relocated/ re-used within the Eurobodalla Regional Hospital.

Generic Furniture and fittings are scheduled in RDS and shown on these plans for this SD report. The intent is that confirmation of what FFE will be supplied and what will be new will be developed further in the Design Development (DD) to allow for a detailed FFE schedule for costing and procurement purposes.

Room Data Sheets

Schematic Design Room Data Sheets (RDS) have been developed by the design team based on AusHFG as well as current best practice and design team's recent experiences.

5.20 Safety in Design

During the SD phase, the decisions and principles established during the concept design phase were elevated through a consultative process with the key stakeholders, and consultants. The following key actions were undertaken in developing options and determining the recommended Safety in Design (SiD) outcomes:

— Site Hazard Review undertaken prior to visiting the site and while visiting the site for the first time;
— Identified site observed conditions and risk conditions;
— Undertaken a second Design Safety in Design review midway through the Schematic Design stage (14 Feb 2022); and
— Re-reviewed and updated the SID and Risk Register.

Of the residual risks identified, all have been managed down to Negligible, Low or Moderate with the exception of six which still remain as Significant:

— Helicopter fumes – to be designed in detail in future stage;
— Falls from height – to be designed and managed in future stage;
— Staff safety – to be managed once carpark strategy is resolved;
— Egress travel distances – not Deemed to Satisfy (DtS) and will require full resolution and acceptance as part of Fire Engineering solution in future stages;
— On-site drug preparation – complex risk with standard controls, details to be resolved in future stages; and
— High value drugs on site – complex risk with standard controls, details to be resolved in future stages.

The Safety In Design (SiD) register will be further reviewed in all following stages to ensure existing risks are reviewed with a goal to reducing each residual risk.

6.0 Infrastructure Review

6.1 Civil & Structural Report

6.2 Mechanical Services & Medical Gases & Vertical Transport Report

6.3 Electrical, ICT and Security Report

6.4 Hydraulic & Fire Report

6.5 Traffic and Car Parking Report

6.6 Traffic Impact Assessment

6.7 ESD Performance Specification

6.8 BCA Assessment Report

6.9 Accessibility Report

6.10 Aboriginal Archaeological Assessment

6.11 Aboriginal Cultural Heritage Assessment Report

6.12 Historical Archaeological Assessment

6.13 Statement of Heritage Impact

6.14 Bushfire Assessment Report

6.15 Arborist Assessment Report

6.16 Flora and Fauna Assessment Report

6.17 Hazard Analysis Report

6.18 Aviation Report

6.19 Acoustic Report

6.20 Site Investigation Reports

6.20.1 Survey

6.20.2 Geotechnical

7.0 Appendices

7.1 Architectural Plans

7.2 Room Layout Sheets (key clinical rooms)

7.3 Room Data Sheets (key clinical rooms) (tbc)

7.4 Preliminary FFE Schedule (tbc)

7.5 Safety in Design Review (tbc)

7.6 Schedule of Accommodation (tbc)

7.7 User Consultation and Sign-offs (tbc)

7.8 Value Engineering List

Conrad Gargett

Conrad Gargett
mail@conradgargett.com.au
conradgargett.com.au
ABN 81 636 465 373
ACN 636 465 373

Nominated Architects
[redacted] NSW 10255
[redacted] NSW 6360
[redacted] NSW 11728

Brisbane Studio	Level 26 / 240 Queen Street, Brisbane Qld 4000 GPO Box 170, Brisbane Qld 4001 | t + 61 7 3229 3555 f +61 7 3221 7878
Sydney Studio	Suite 110, Jones Bay Wharf, 26-32 Pirrama Road, Pyrmont NSW 2009 t + 61 2 8218 9100
Townsville Studio	Level 1 / 45 Eyre Street, North Ward t +61 7 4795 0200 f +61 7 4724 1882
Melbourne Studio	Level 9, 2 Queen Street, Melbourne VIC 3000 t +61 3 9081 3587
Gold Coast	Level 1 / 37 Connor Street Burleigh Heads, QLD 4220 t +61 7 56193531
Ethiopia Studio	Africa Hall Project Office, Africa Hall, Level 1, Room 14, Menelik Avenue PO Box 3001, Addis Ababa, Ethiopia | t +251 11 544 4661