



Built Form and Urban Design Report

Wyong Hospital Redevelopment

644 Pacific Highway, Hamlyn Terrace, NSW



Date	15.08.2023
Project No.	22-0064
Issue	B

For further information or clarification of information contained within this document please contact the following:

David Carstens
Associate Design Director
Email: david.c@dwp.design

dwp Australia Pty Ltd Registered Business Name dwp Australia

16 Telford Street, Newcastle NSW 2300
T +61 2 8080 7917
Nominated Architect – Angus Rose NSW ARB 8341
www.dwp.design

Cover Image: aerial view of Wyong Hospital by NearMaps

Control

*additions are shown in red italics while deletions are shown in grey with a strikethrough. e.g. *Additions* ~~Deletions~~

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Issue	Description	Date	Checked	Authorised
A	For REF Submission	09.08.2023		DC
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Abbreviations

HI	Health Infrastructure NSW
LHD	Local Health District
CCLHD	Central Coast Local Health District
REF	Review of Environmental Factors
CPTED	Crime Prevention Through Environmental Design
WWCC	Wyong Women's Centre Clinics
CSU	Carer's Support Unit
CDU	Cancer Day Unit
NAHU	Nunyarra Aboriginal Health Unit

Contents

1. Executive Summary	3
2. Project Context and Design Vision	4
3. Selection of preferred alternative	6
4. Design	7
5. Existing Site	9
6. Placemaking	12
7. Connecting with Country	14
8. Crime Prevention Through Environmental Design Principles	15
9. Sustainable Design	15
10. Conclusion	16

1. Executive Summary

dwp is engaged by NSW Health Infrastructure in the role of architect for the stage 3 redevelopment of Wyong Hospital. The Built Form and Urban Design Report summarises the analysis and interpretation of the site conditions and design principles guiding the design influence of the redevelopment. The report also summarises, security and crime prevention and ecological sustainable design considerations. The purpose of this report is to address aims and guidance within the following documents:

- Government Architect of NSW - Better Placed
- Government Architect of NSW - Better Placed Design Guide for Health
- Health Infrastructure - Policies for Design, Placemaking and Sustainability
- Crime Prevention Through Environmental Design Principles
- Government Architect - Connecting with Country Framework

The Wyong Hospital Redevelopment Stage 3 Refurbishment works comprises adaptive reuse of the existing decanted spaces within both blocks B and C.

Block B will be refurbished to accommodate the following departments.

- Nunyara Aboriginal Health Unit
- Wyong Women's Centre Clinics
- Medical Staff Workspace
- New South Wales Health Pathology

Block C will be refurbished to accommodate the following departments

- Expanded Cancer Day Unit
- Carer Support Unit

The works involve the reuse of existing buildings vacated by the recently built Block H and providing a consistent look and feel to the internal spaces of the campus.

The need has been established through a clinical services plan and service drivers include population growth and ageing, changing models of care, workforce retention and attraction and changing technology. This requires the existing buildings to be upgraded and refurbished to be fit for the intended purpose and to accommodate new technologies.

The design was informed by a master plan, site investigations, existing constraints of building envelope, structural design & services requirements and consultation with project user groups.

Sustainability measures that have been incorporated include the electrification of the hot water system in the parts of the buildings being reused and specification and selection of environmentally friendly finishes such as low VOC paints. We also seek to minimise site wastage reusing existing infrastructure and building fabric. Material selections are based on block H as a precedent.

The Wyong Hospital Redevelopment project team acknowledges the Darkinjung people of the Wyong region, the traditional owners of this land. They have occupied and cared for this Country over countless generations, and we celebrate their continuing contribution to the life of this region. We pay respects to Elders past, present, and emerging.

2. Project Context and Design Vision

Hamlyn Terrace is a suburb of the Central Coast of New South Wales, within the Central Coast Local Health District. The district services over 350,000 people. The hospital site is zoned SP2 Infrastructure Health Services Facility under the Central Coast Local Environmental Plan 2022.



Central Coast Healthcare Facilities taken from Central Coast Local Health District CARING FOR OUR COMMUNITY PLAN 2021-2031

Wyong Hospital, first built in 1980 and has had multiple refurbishment and expansion projects to meet the growing healthcare needs of the community. Block H the most recent new build, was completed in 2022, and includes the following:

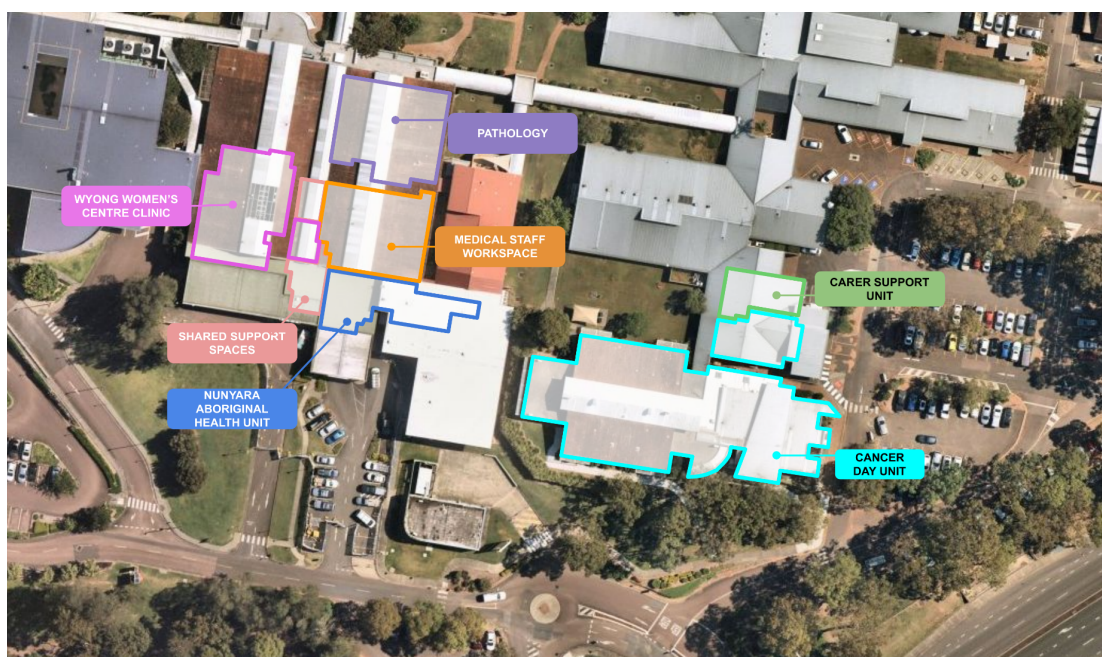
- new and expanded Emergency Department
- a new and expanded Intensive Care Unit
- a new Psychiatric Emergency Care Centre
- a new Paediatric Assessment Unit
- a new and expanded Medical Imaging Department
- a new and expanded Medical Assessment Unit
- additional inpatient beds with future expansion space

In parallel with the construction of the new building, refurbishment of some areas of the existing hospital were undertaken to expand the infrastructure. The refurbishment of the existing hospital included: more operating theatre capacity, an expanded Medical Day Unit and an expanded Transit Lounge.

This is to meet the need of the future service provision noted in the clinical services plan namely:

- An increasing range of sub-specialty services will be developed at Wyong Hospital to meet the growing population demand and to reduce the need for transfer to Gosford Hospital for non-tertiary care. Subspecialty services will continue to be networked with Gosford Hospital.
- Priority sub-specialty services for development are: cardiology, neurology including acute stroke services, respiratory, and diabetes services as well as capacity for after-hours emergency endoscopies.
- An expanded range of diagnostic services will be available onsite to support the sub-specialty services and reduce the need for transfer to Gosford Hospital in particular Trans Oesophageal Echocardiogram (TOE) and respiratory investigations
- There will be an expanded general medicine model consistent with that available at Gosford Hospital.

The Wyong Hospital Stage 3 redevelopment continues to deliver on these expanded services by providing new services on site (Nunyarra Aboriginal Health Unit, Carer Support Unit and Wyong Women's Centre Clinics) and expanding existing services and support capacity (Medical Staff Workspace, NSW Pathology and Cancer Day unit.) The design remit was adaptive reuse of the existing buildings vacated by the recently built Block H and providing a consistent look and feel to the internal spaces of the campus. The functional design brief informed the accommodation requirements and the approved master plan provided the locations of the services within the existing buildings. The interior site design approach was adopted from block H with feedback from users on site incorporated.



The Stage 3 of work in the context of the existing Block B and Block C buildings

3. Selection of preferred alternative

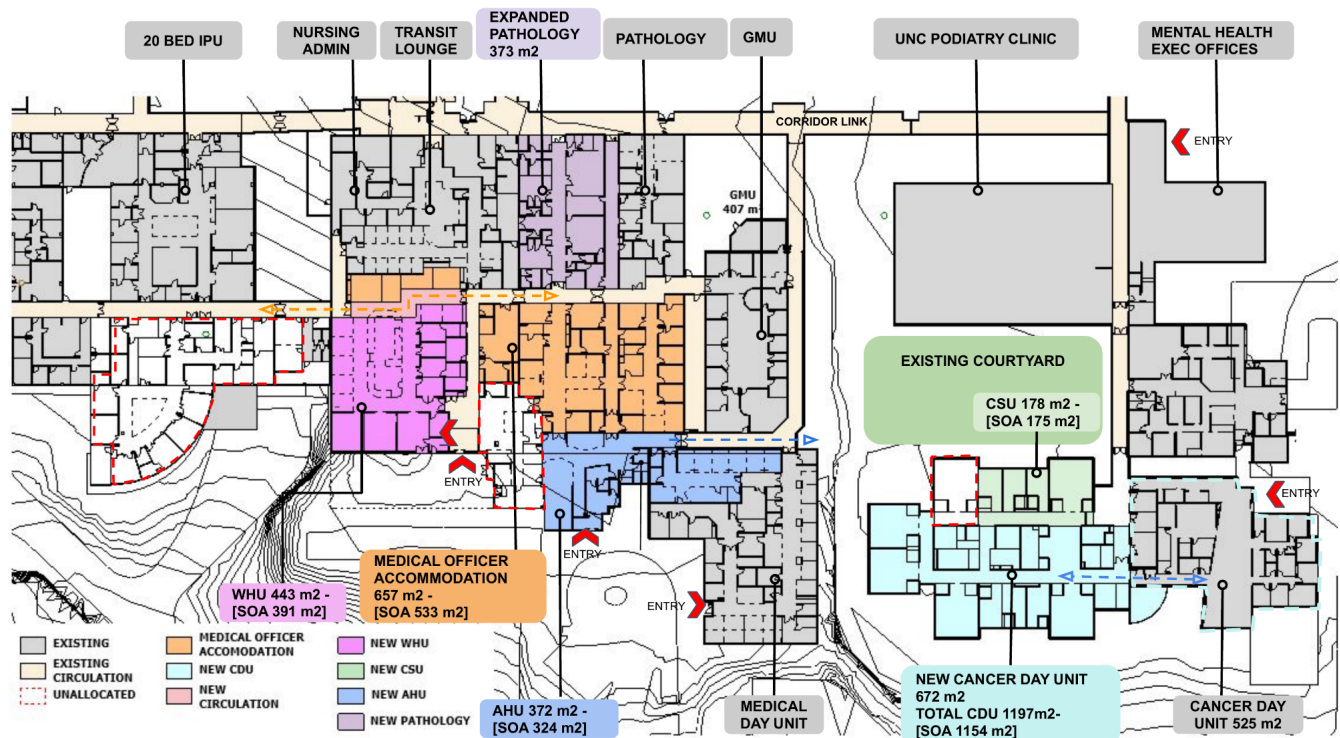
The master plan selection was reviewed and option D4 was selected. The primary focus was on utilising the decanted spaces within the Hospital, following the commissioning of the newly built Block H.

The following aspects were considered in the review of the master plan options

- Patient and visitor entry routes and access to parking.
- Staff access and connectivity to existing staff facilities and clinical spaces.
- Potential for adaptive reuse of existing services infrastructure within clinical spaces and office spaces.
- Extent of heavy, medium and light refurbishment.
- Access to natural light and existing courtyard spaces in the context of well-being and user experience.
- Potential for future use of unallocated spaces.

The final three options were B4, D4 and D5. These options were evaluated against the criteria noted above and the preferred master plan option was selected. Option D4 was selected as the preferred master plan based on the following contributing features.

- WWCC and NAHU were provided with independent departmental entry points with access to parking.
- Pathology and CDU were located adjacent to the existing departments which benefited from staff, public and patient circulation routes currently in place.
- CSU is located adjacent to CDU to which is beneficial for the CSU consumers, whilst achieving connectivity to the existing courtyard for respite and relaxation.
- MSW was noted to have no external outlook; however, based on the functionality within the department and the user profile this was accepted.



Preferred master plan option D4

4. Design

The design has given consideration to the key aspirations and principles that holistically include:

- **People Focus** - a design addressing the values of safety, privacy and respect,
- **Culturally Appropriate** - the provision of facilities that are culturally appropriate and respond to the needs of the community,
- **Healthy Design** - incorporating desirable qualities including access to natural daylight and green spaces,
- **Clarity of Movement** - the provision of clear and intuitive wayfinding assisted layout and outlook,
- **Connectivity** - the development of connections between the existing facilities to provide efficient public, service and clinical flows,
- **Flexibility and Adjacencies** - opportunities for sharing collaborative environments,
- **Staging opportunities** - ensuring the continued operation of the hospital throughout the different stages of the redevelopment,

The collaborative design process has seen consultation and engagement with a number of user groups to inform a design that responds to the local needs of the clinical staff and the community users as advocated in the Better Placed policy's design process.

Throughout the design process and review of the guidance documents, the design principles have been distilled as the key priorities to inform the design of the hospital redevelopment. There are many clinical, cultural, social and community considerations that are encompassed by the seven core principles of the better placed design guide for health.

- Design for dignity
- Design for wellbeing
- Design for efficient and flexible delivery of care
- Design with Country
- Design for the neighbourhood and surrounding environment
- Design for connection
- Design for sustainability

Design for dignity Providing refurbished and modernised spaces for patients, carers, staff and visitors fosters an environment that improves experiences and outcomes. By creating a cared for environment that people feel better working in or more confident when being treated in allows for more effective transfers of care, reduced lengths of stay and readmissions, as well as less cases of hospital avoidance.

Design for wellbeing will create a quality health facility for use by patients, their carers and the staff providing clinical care to support improved health, healing and wellbeing in difficult and stressful times. Installing the artworks created for the hospital and departments by local artists helps to address the institutional feeling the spaces may otherwise have. Access to natural light in the chemotherapy treatment spaces.

Design for efficient and flexible delivery of care planning was reviewed in consultation with the users to respond to the models of care with a few of flexibility for future use. Telehealth facilities allow for virtual care and consultation in private meeting rooms. Enhancing family support via a specific carers support unit.

Design with Country aims to establish meaningful and culturally appropriate references to Country by facilitating family connectivity and gathering through the design. The consultations with the Nunyara Aboriginal Health Unit user group has been particularly valuable in informing the design. This principle is guided by the Connecting with Country framework which focuses on 'place-led' design approaches and outlines strategies for designing with Country in order to value and respect our First Nations cultures. We have consulted not only on the design of the spaces, but where artworks and motifs would be best placed to create a welcoming space.

Design for the neighbourhood and surrounding environment the reuse of existing buildings means that there is very little impact on the surrounding environment. In considering the neighbourhood, the introduction of an aboriginal health unit on the campus, promotes and supports employment of Aboriginal people including Aboriginal health workers as well as cultural awareness and training for LHD staff. The addition of new services contributes to the wellbeing of patients in the community and reduces travel and/or waiting times to access health services.

Design for connection: maintaining hospital street connections and by eliminating, where possible, trafficable routes through departments a logical order to circulation can be maintained.

Design for Sustainability Green buildings, places and precincts improve individual health outcomes for patients, staff and visitors by providing optimised interior environments, improved air quality and a reduction in the toxins associated with construction. This project has specified total volatile organic compound limits

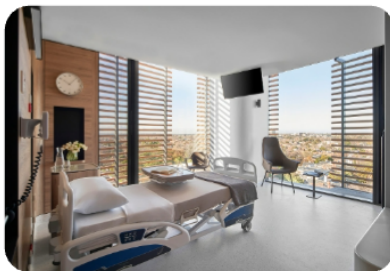
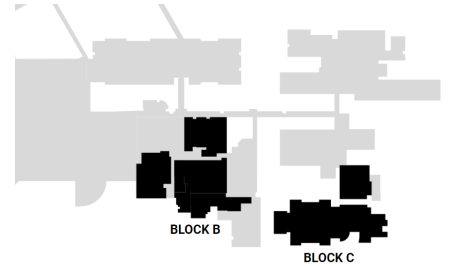


Figure above: Better Placed objectives

Source: Government Architect NSW (2017). "Better Placed" NSW Government

5. Existing Site



Existing Block B and Block C buildings

The area of focus for the refurbishment works is Block B and Block C. Many stages of renovation have been observed on site, which has resulted in a mixture of wall construction across Block B consisting of masonry load bearing walls and plasterboard walls with steel posts. The spaces with the more recent renovations are in a significantly better condition, such as a part of the area allocated for the Nunyara Aboriginal Health Unit, which was formerly the UCC.

The building envelopes are generally in a suitable condition for reuse, and require some cleaning and general maintenance to keep the buildings usable. There appears to be a leak at one of the windows in the former geriatric ward in Block C, for example.

Block B has a few areas that are in good condition with the majority of the spaces in the former Emergency Department in a moderate condition that would require new finishings and wall linings. Existing fire and smoke compartment walls have been identified from available drawing information and most have been visually identified on site. Significant services such as comms rooms, services ducts and EDBs have been noted and marked for retention. The Medical Staff Workspace is one such area, where the comms room and EDBs will be retained. A recently constructed 1100 x 2500mm service duct in the middle of the Wyong Women's Centre Clinic is another example.

The entry approach to the Wyong Women's Centre Clinic is via the former ED Ambulance bay which is currently in a poor condition, largely due to the uninviting nature of the former ambulance bay. It is, however, not within the scope of the Stage 3 project to renovate the external spaces and building envelope.

The space allocated for the Pathology department expansion, adjacent to the present Pathology department consists of the original masonry load bearing walls, which support the plant above the roof slab, and are required to be retained for structural integrity. This space was formally the medical imaging area. Of note also is the relatively low floor to underside of slab height of 3260mm.

In block C, the finishes in the former Paediatric Assessment Unit (PAU) are in poor condition, but the underlying substrates are sound and new finishes can be applied. There is a disused service pit in the floor of one of the rooms in the former PAU which should be filled, if possible, as we have been anecdotally informed that this pit has a flooding issue. The existence of asbestos within the ceiling void has been identified.

The existing Cancer Day Unit (CDU) is in good condition with some cleaning and general upkeep required to the external facing brickwork. The internal finishes are in reasonable condition, however some of the room dimensions are not compliant with the current Australasian health facility guidelines.

The former geriatric ward which the CDU will be expanding into, has structural masonry walls throughout and is in good condition. The finishes are in need of replacement, but services and the sanitary ware are in reasonable condition. Some non-compliances exist such as no wash hand basin in some of the WC's.

Generally speaking, all the buildings identified for occupation, as part of the project, are suitable for reuse with modifications to the layouts and upgrades to the finishes. This will require some structural and services changes to the existing infrastructure, along with a review of the impact to the existing fire egress routes and compliance with national construction code and the Australasian Health facility Guidelines.

Nunyarra Aboriginal Health Unit



Medical Staff Workspace



Wyong Women's Centre Clinics



Photographs above: Existing site conditions of area allocated to each department

Pathology



Cancer Day Unit



Carer Support Unit



Photographs above: Existing site conditions of area allocated to each department

6. Placemaking

The key aim of the redevelopment is to provide a contemporary healthcare facility that is culturally appropriate, welcoming and inclusive to service the community now and into the future. Through assessment of the Better Placed policy's seven distinct objectives, the following placemaking and design principles have been considered and implemented to highlight important factors that contribute to good design outcomes.

Better fit: contextual, local and of its place

The services provided are directly linked to the clinical services plan that is a needs based assessment of the community's health service requirements with a forecast of future requirements.

Better performance: sustainable, adaptable and durable

Environmental sustainability, responsiveness and adaptivity is essential for better performance and providing a functional, whole of life design. The refurbishment reuses existing built fabric and the functionality is enhanced by internal replanning to meet the functional requirements.

Better for community: inclusive, connected and diverse

The design seeks to address economic and social disparity and inequity by creating an inclusive, welcoming and equitable healthcare facility. It has developed in consultation with various local stakeholders to ensure spaces resonate and embrace the community that it will serve. Connecting with Country is one important consideration that has been further explored in this report.

Better for people: safe, comfortable and liveable

Providing a safe, comfortable and liveable environment has a significant impact on people's wellbeing is becoming increasingly important, particularly within hospitals. Similarly people have a right to feel safe when accessing healthcare and so crime prevention through environmental design principles are outlined later in this report.

Better working: functional, efficient and fit for purpose

Review of the Clinical Services Plan, collaboration with the Local Health District and the Project User Groups throughout the design process identified a number of key functional relationships to be maintained in order to achieve a practical and fit for purpose hospital which are listed further in this section of the report. Hospitals are one of the most complex building types with specific functional and clinical requirements while needing to enhance patient care and comfort. The solution to this challenge was constantly questioned and tested throughout the planning process and is continually being refined to achieve a more efficient solution that supports productivity and effectiveness for staff while also prioritising patient wellbeing.

Better value: creating and adding value

Good design creates ongoing value for people and communities and minimises costs over time while raising standards and quality of life for users, as well as adding return on investment. The stage 3 redevelopment of Wyong hospital is a desperately needed investment into the community that hopes to attract new staff. The social and health value of creating a new and enhanced public space providing such important and vital care is immeasurable. The redevelopment utilises existing infrastructure in order to maximise the monetary investment into the development and prioritise services that have the greatest need to be upgraded and renewed.

Better look and feel: engaging, inviting and attractive

It is important for healthcare facilities to be welcoming and aesthetically pleasing so that it encourages communities to use and enjoy the spaces that provide such vital care. The hospital infrastructure and condition of the facilities should not be a barrier to users accessing healthcare. The feel of a place, how we use and relate to our environment is dependent upon the aesthetic qualities that ultimately promote positive engagement. A successful outcome depends on a considered and sensitive balance of materials, finishes, proportions and details to enhance its value and usage by the community. Meaningful consultation, iterative design reviews and continually pushing the design to ask questions and challenge assumptions moves the design towards an improved and resolved architectural solution.

The above factors begin to highlight some of the ways in which the design considered placemaking and design principles to achieve a quality design outcome aligned with the Better Placed policy's vision and objectives. These objectives are further expanded upon throughout this report and reiterate the redevelopment's goal to provide a contemporary healthcare facility that is culturally appropriate, welcoming and inclusive to service the community in Wyong now and into the future.

In order to create a better working environment through the assessment review of the Clinical Services Plan and discussions with the Local Health District and the Project User Groups, the key functional relationships are identified as:

- Cancer Day Unit maintains its own entry and identity, but expands into a former geriatriatric ward. Separate staff entry available.
- Carer's Support is proximal to the CDU with access to the courtyard space.
- The Nunyara Aboriginal Health Unit has its own entry and a drop off point. There is also a link to the main hospital street for access by inpatients from other areas of the hospital.
- Pathology expands into the former imaging department and has access from the main hospital street.
- Wyong Women's Centre Clinic shares an entry with the transit unit but is entered directly after the lobby with a discrete entry for the early pregnancy assessment unit.
- Medical staff workspace to have access from multiple sides to facilitate access to the hospital or out of the building

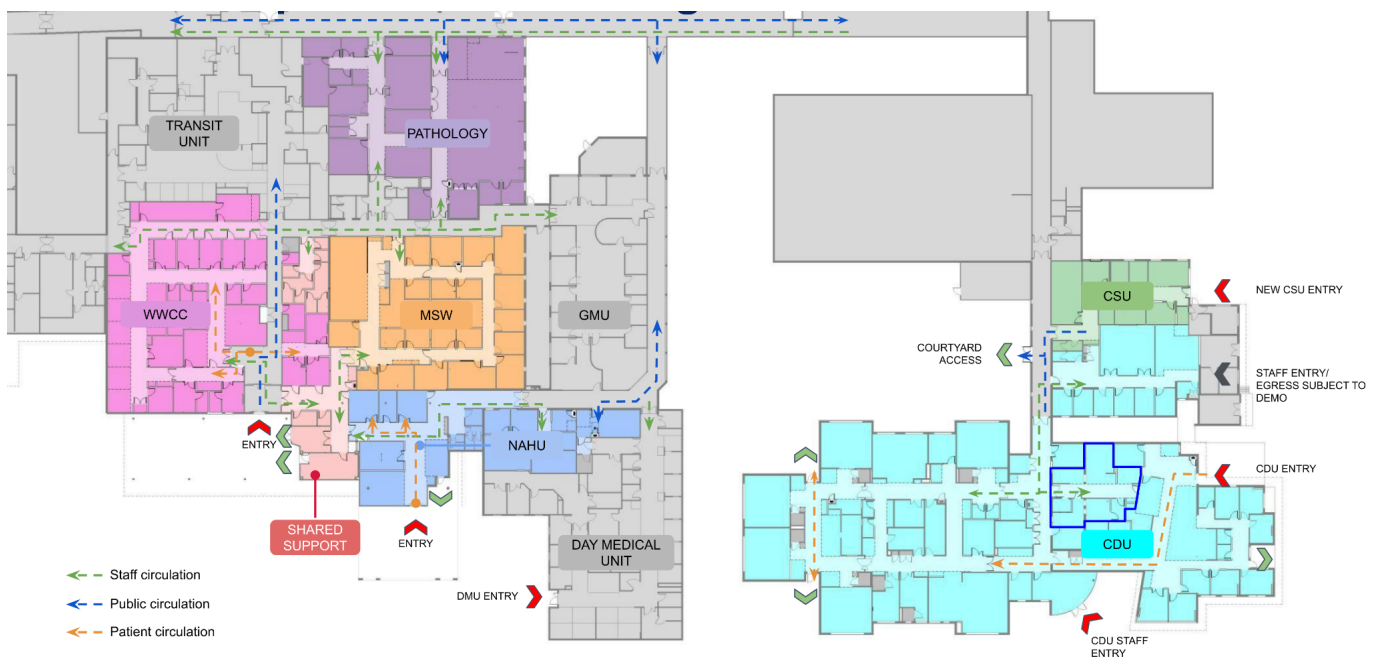


Figure above: Masterplan diagram of the hospital showing entry points

The conceptual design was developed to make use of the existing courtyard at the CDU to provide an outlook and access to nature, an important component of the Connecting with Country Framework, and provides a valuable emotional impact on the wellbeing of patients, carers and staff. This synergy between nature, people and design also forms part of the Connecting with Country framework where nature and landscaping can be celebrated and embraced. This also addresses the 'better for community' objective within the Better Placed policy to create an inclusive and connected environment for all members of the community. The functional relationships between departments underwent a comprehensive consultation process to identify the most appropriate location of the program within the development zone so that key relationships and adjacencies are maintained and strengthened.

Connection to nature will also be achieved by hospital street links with views into the surrounding landscaped courtyards. Several courtyard spaces break up the campus providing views to native landscaping and shared outdoor spaces for patients, staff and carers to enjoy, undertake therapeutic care and gather with visiting friends and family.

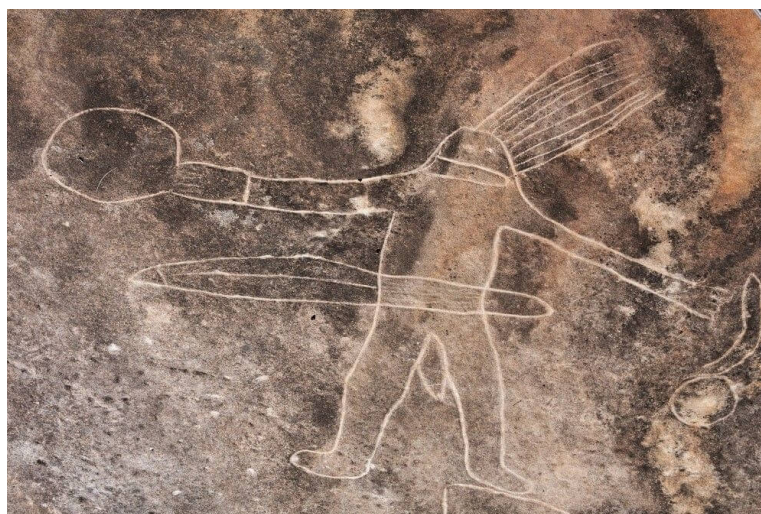
7. Connecting with Country

Connecting with Country is a framework for the design of built environments that aims to support the health and wellbeing of Country by valuing and respecting the guidance of First Nations people who know that if we care for Country - it will care for us. Country has a significant and specific meaning for First Nations peoples as it relates to the culture and land one belongs to, yearns for, finds healing from and will return to. Country not only includes the physical land but is the place of origin in cultural, spiritual and literal terms including the family connections, access to knowledge and cultural practices associated with the land.

Designing with Country includes connecting with the natural environment and considering people, animals, resources and plants equally. This approach aligns with the biophilic design principles that are a crucial part of the design of health facilities, and with sustainable design practices. Designing with Country brings these together with Indigenous cultural knowledge of identity and place. This is fundamental to creating places that are culturally safe and inclusive for Aboriginal people and fulfils several of the Better Placed objectives ensuring the design will be healthy, responsive, integrated, equitable and resilient.

The design of the built environment has the opportunity within a healthcare facility to enable health and healing by providing spaces for improved wellbeing that are safe, welcoming, inclusive and secure. The redevelopment of Wyong Hospital aims to achieve this through the following design responses:

- **Entry** - to create a welcoming entry that incorporates local art, clear signage, local language and wayfinding guidance,
- **Connection to Outdoors** - design of internal spaces with access to natural light and connections to landscaped courtyard.
- **Nunyara Aboriginal Health Unit** - support large family groups and gathering for family connections and support while accessing healthcare on Country. The Aboriginal specific service encompasses: hospital liaison for inpatients and outpatients, chronic care management and follow-up, palliative care service, cancer care navigator, outpatient clinics for drug and alcohol, mental health, child and family health and immunisation. In addition Nunyara coordinates and facilitates the annual NAIDOC Day, promotes and supports employment of Aboriginal people including Aboriginal health workers as well as cultural awareness and training for LHD staff.
- **Cancer Day Unit** - contemporary and compliant design with access to improved indoor space and visual connection to landscaped courtyards, access to natural light in treatment areas and designing to provide comfort and privacy,
- **Carers support unit** - providing facilities and support for family carers to feel well informed, supported and nurtured are more readily able to support the most vulnerable patients
- **Keeping Place** - considered as part of the design and arts strategy to introduce Country connections through the display of artefacts.



Rock engraving image taken from

<https://www.lovecentralcoast.com/things-to-do/school-excursions/watanobbi/darwinjung-aboriginal-cultural-education-tours>

8. Crime Prevention Through Environmental Design Principles

Crime Prevention Through Environmental Design (CPTED) is a multi-disciplinary approach of crime prevention that uses urban and architectural design and the management of built and natural environments. The strategies aim to reduce victimisation, deter offender decisions that precede criminal acts, and build a sense of community among inhabitants so they can gain territorial control of areas, reduce crime, and minimise fear of crime. These strategies are also aligned with the Better Placed policy's vision and objectives to create better places for people that are safe, comfortable and liveable. There are four main principles of CPTED that have been considered in the design; surveillance, both natural and technical (mechanical or electronic), access control, territorial reinforcement, and space management.

Natural and technical surveillance combines to make 'passive' or 'active' surveillance that can reduce the attractiveness of antisocial activities occurring, ultimately improving the safety of staff, patients, carers and visitors. Natural surveillance is achieved through visibility of waiting spaces from reception, entry doors from staff stations, avoidance of blind corners, locating entries that are clearly visible from the street, installing doors and windows that allow natural observation, installing effective lighting in public places and ensuring landscaping does not obstruct surveillance or provide a place to hide or entrap victims. Technical surveillance adds another layer of protection to supervise isolated, higher risk locations by installation of security cameras, mirrors and help points. This highlights the importance of building layout, orientation and location, as well as the strategic use of design, landscaping and lighting.

Access control refers to the management of who enters an area. Entries are clearly visible from the drive ailes and accessed from the associated car parks providing clear entry points for the public. These access points are enhanced by a strategic wayfinding and signage strategy. Within the hospital itself, internal circulation is further controlled by the use of access controlled doors with card reader access to prevent unauthorised persons from entering restricted areas.

Territorial reinforcement means that users of the space are more likely to protect territory they feel they own and have a certain respect for the territory of others. The redevelopment was designed with the needs of the community at its centre, aiming to provide a contemporary healthcare facility that is culturally appropriate, welcoming and inclusive for the community. The community ownership of the space is enhanced by references to the local context, art strategies by local artisans and implementation of design principles outlined in the Connecting with Country framework which aims to create a safe and respectful environment where Indigenous people can feel valued while accessing healthcare. The territorial reinforcement means the community are more likely to enjoy the space and increase the likelihood to report or prevent crime.

Space management strategies are an important means of generating and maintaining activity, serviceability, and natural community control ensuring the space is appropriately utilised and cared for. This is also linked to the principle of territorial reinforcement. Strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti, and the refurbishment of decayed physical elements. Space management is controlled through dual egress doors to consult and interview rooms and safe assessment rooms and removing any concealment / entrapment points by eliminating dead-end corridors in patient areas.

9. Sustainable Design

The redevelopment aims to achieve an environmentally sensitive and highly sustainable design outcome. This requires a holistic and integrated approach which addresses a broad range of sustainability considerations. The design builds on an increased awareness of site opportunities, form and function, to encompass and target a broad range of sustainable objectives including specific healthcare considerations for wellbeing.

Aligning to the principles of performance and sustainability in the Better Placed policy, creating a healthy indoor environment that enhances wellbeing and is conducive to staff productivity is becoming increasingly important, particularly within hospitals. Hospitals are one of the most complex building types. Their greatest challenge is to reduce their energy consumption while maintaining their specific functional needs to enhance patient care and comfort. They are typically considered to be stressful places and so the physical environment can have a significant effect on both patient and staff health and wellbeing. Daylight is found to be beneficial and a critical requirement for humans, for both psychological and physiological well being. Maximising windows for solar access and views to the outside, establishes a connection to the natural environment and has been associated with reduced anxiety, pain and depression. Similarly, integration of greenery through

biophilic design also improves views, air quality and connection to nature. Air quality is also important in controlling and preventing airborne infections. Providing clean, filtered air and effectively controlling indoor air pollution through ventilation are key aspects of maintaining good air quality. Lastly poorly designed acoustical environments can have a serious impact on patient and staff outcomes therefore installation of high-performance sound absorbing acoustic treatments results in shorter reverberation times, reduced sound propagation and improved speech intelligibility. All these factors play an important role in providing a sustainable healthy indoor healthcare environment that promotes health and wellbeing.

Additionally, Ecologically Sustainable Development (ESD) initiatives are being considered to meet HI's ESD requirements and targets, acknowledging the unique requirements of the redevelopment reusing existing buildings for new clinical services functions. The team has sought to reduce the environmental impact by upgrading HVAC plant to modern more efficient units, using electrified hot water units, upgrading lighting to LED, specifying low environmental impact finishing systems and reusing existing facilities.

The current strategies implemented for the redevelopment may include but not limited to:

- **Energy** - LED and sensor lighting, utilising energy efficient electrical equipment,
- **Waste** - maintain recycling strategies, targets and separation of waste streams introduced in block H,
- **Water** - replace thermostatic mixing valves and new water efficient sanitaryware
- **Transport** - reduce staff business travel through the use of technology advancements including telehealth

10. Conclusion

The purpose of this report is to illustrate the design principles, vision and framework informing the design and build of stage 3 of the Wyong Hospital Redevelopment and how it responds to Government Architect frameworks. This report also outlined security and crime prevention, and ecological sustainable design considerations.

The project context and design vision illustrated how the design process has been, a collaborative process involving consultation and engagement with a number of user groups to inform the design and ensure it responds to the clinical users and community's needs. There were a number of clinical, cultural, social and community considerations that were encompassed.

The redevelopment seeks to respond to the existing site conditions and provide a contemporary healthcare facility that is culturally appropriate, welcoming and inclusive to service the community of Wyong now and into the future.. The reuse of the existing buildings considers an outlook and access to nature - an important component of the Connecting with Country Framework.

The design addresses concerns with regards to crime prevention through four main environmental design principles including: surveillance, access control, territorial reinforcement and space management. Strategies implemented aim to reduce victimisation, deter offenders and build a sense of community among the inhabitants. The development also aims to achieve an environmentally sensitive design outcome and targets a number of sustainable objectives including specific healthcare considerations for wellbeing.

Together these principles and considerations result in a building design that responds to the local context, incorporating culturally sensitive elements and utilising natural light and artwork to dilute the clinical character of the hospital to a more welcoming place with a functional layout to serve the Wyong and Central Coast community.