

HEALTH INFRASTRUCTURE

Review of Environmental Factors

Tamworth Mental Health Unit

Version Number 6



HI Planning Document Control

Version	Date	Author	Description	Reviewed by	Approved by
13	08/12/2022	RM	5.1 Assessment Guidelines		RM

Declaration

This Review of Environmental Factors (REF) has been prepared for NSW Health Infrastructure (HI) and assesses the potential environmental impacts which could arise from the development of a new Tamworth Mental Health Unit at Tamworth Hospital, located on land described as Lot 1 DP 1181268, Lot 2 DP 1181268, and Lot 3 DP 1181268.

This REF has been prepared in accordance with the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation), Department of Planning & Environment's (DPE) *Guidelines for Division 5.1 Assessments* (the Guidelines) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment. It addresses to the fullest extent possible, all the factors listed in the Guidelines, pursuant to section 171(1) of the EP&A Regulation and the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC ACT).

The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a SIS and/or BDAR is not required.

Based upon the information presented in this REF, it is concluded that, subject to adopting the recommended mitigation measures, it is unlikely there would be any significant environmental impacts associated with the activity. Consequently, an *Environmental Impact Statement* (EIS) is not required.

Declaration	
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AA	Outline Construction Management Plan		
AB	Acoustic REF Report		
AC	Green Travel Plan		
AD	Contaminated Land Search		
AE	Elec, Mech and Comms Plans		

Abbreviations

Abbreviation	Description
AHD	Australian Height Datum
ASB	Acute Services Building
CWC	Connecting with Country
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2021
EPBC Act (Cwth)	Environment Protection and Biodiversity Conservation Act 1999
EPI	Environmental Planning Instrument
ESD	Ecologically Sustainable Development
Ha	Hectares
HI	Health Infrastructure
LEP	Local Environmental Plan
LGA	Local Government Area
MNES	Matters of National Environmental Significance
NPW Act	National Parks and Wildlife Act 1974
OEHS	(Former) Office of Environment and Heritage
POEO Act	Protection of the Environment Operations Act 1997
Proponent	NSW Health Infrastructure
REF	Review of Environmental Factors
RF Act	Rural Fires Act 1997
Resilience and Hazards SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021
SEPP	State Environmental Planning Policy
SIS	Species Impact Statement
TISEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021

Executive Summary

This Review of Environmental Factors (REF) has been prepared by GeoLINK on behalf of NSW Health Infrastructure (HI) for the determination of the proposed development activity under Division 5.1 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The Proposal

NSW Health and HI propose to undertake the construction and associated works for a new Tamworth Mental Health Unit at Tamworth Hospital and car park expansions located at 31-35 Dean Street, North Tamworth NSW. The new facility would provide an integrated service to enable contemporary care for the community.

Need for the Proposal

The new Tamworth Mental Health Unit is one of several projects selected for inclusion within the State Wide Mental Health Infrastructure Program (SWMHIP) for a new and expanded mental health unit. The facility will be completely rebuilt to replace the aging infrastructure of the existing Banksia Unit facility. The new unit will be co-designed with people who have lived experience of mental health, family members, carers and staff to create a patient-centred service. This will achieve positive community and public health benefits.

Proposal Objectives

The proposed new Tamworth Mental Health Unit is intended to deliver more bedrooms and better co-designed facilities for people with mental health needs, their families, carers and staff.

Options Considered

A site review and design analysis has resulted in the preferred option's design response being the construction of a new facility. The proposal scope and design response achieve the appropriate balance of releasing the proposal's objectives by way of providing contemporary and expanded mental health facilities, whilst not adversely impacting the environment, residential amenity or heritage values associated with certain buildings on the site.

Site Details

The site is the existing Tamworth Hospital located at 31-35 Dean Street, North Tamworth within Tamworth Regional Local Government Area (LGA), and currently accommodates Tamworth Hospital and associated buildings/infrastructure. The legal description of the site is Lot 1 DP 1181268.

Planning Approval Pathway

Section 4.1 of the EP&A Act states that if an environmental planning instrument (EPI) provides that development may be carried out without the need for development consent, a person may carry the development out, in accordance with the EPI, on land to which the provision applies. However, the environmental assessment of the development is required under Division 5.1 of the Act.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) aims to facilitate the effective delivery of infrastructure across the State. Division 10 of the TISEPP outlines the approval pathways for health services facilities development. Section 2.61(1) of TISEPP enables the erection or alteration of and the demolition of buildings and development of car parks for the purposes of a health services facility to be carried out by or on behalf of a public authority, without consent, on any land provided the development is carried out within the boundaries of an existing health services facility and has a building height of less than 15m and is located no closer than 5m to any property boundary.

The project, however, becomes an 'activity' for the purposes of Division 5.1 of EP&A Act and is subject to an environmental assessment (Review of Environmental Factors). The development is considered an 'activity' in accordance with Clause 5.1 of the EP&A Act because the development involves the construction and demolition of buildings and carrying out of work by HI (public authority).

Statutory Consultation

The activity triggers statutory consultation requirements pursuant to Section 2.62 requiring notification to Council and adjoining occupiers of land.

Environmental Impacts

This REF provides an assessment of the activity that takes into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the activity as is required under the EP&A Act. The REF also sets out the commitments made by HI to manage and minimise potential impacts arising from the activity.. The REF finds an Environmental Impact Statement (EIS) is not required and this REF is an adequate level of impact assessment.

Justification and Conclusion

The REF has identified, considered, and determined the following:

- From an analysis of the environmental impacts associated with the activity, it has been determined that preparation of an EIS is not required.
- The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a species impact statement and/or biodiversity development assessment report is not required.
- From a review of environmental impacts resulting from the activity it has been determined that, subject to implementation of mitigation measures to be incorporated as identified requirements of approval, the activity will not have any significant adverse impact on the environment.
- The activity will not have any effect on matters of national significance and approval of the activity under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* is not required.
- There are no separate approvals, authorisations or notifications required in relation to the activity prior to determination under Division 5.1 of the EP&A Act or under any other Acts.
- It is recommended that HI approve the proposed activity in accordance with Division 5.1 of the EP&A Act and subject to adoption and implementation of matters outlined in **Section 6** and **Appendix Y**.

1. Introduction

NSW Health Infrastructure (HI) propose to construct a new Tamworth Mental Health Unit, which is part of the NSW Government's \$700 million State-wide Mental Health Infrastructure Program (the proposal) at the Tamworth Hospital, located at Lot 1 DP 1181268 (the site) as part of their delivery of infrastructure solutions and services to support the healthcare needs of the NSW communities.

This Review of Environmental Factors (REF) has been prepared by GeoLINK on behalf of HI to determine the environmental impacts of the activity related to the proposed new Tamworth Mental Health Unit, expansion of two existing on-grade car parks, and two new on-grade car parks at Tamworth Hospital. For the purposes of these works, HI is the proponent and the determining authority under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The purpose of this REF is to describe the proposal, to document the likely impacts of the proposal on the environment and to detail protective measures to be implemented to mitigate impacts.

The description of the proposed works and associated environmental impacts have been undertaken in the context of the Department of Planning & Environment's (DPE) *Guidelines for Division 5.1 Assessments* (the Guidelines) pursuant to section 171(1) of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The assessment contained within the REF has been prepared having regard to:

- whether the proposed activity is likely to have a significant impact on the environment and therefore the necessity for an EIS to be prepared and approval to be sought from the Minister for Planning under Division 5.1 of the EP&A Act;
- whether the activity is likely to significantly affect threatened species, populations, ecological communities or their habitats, in which case a SIS and/or BDAR is required; and
- the potential for the proposal to significantly impact *Matters of National Environmental Significance* (MNES) on Commonwealth land and the need to make a referral to the Australian Government Department of Environment and Energy for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

The REF helps to fulfil the requirements of section 5.5 of the EP&A Act, which requires that HI examine, and take into account to the fullest extent possible, all matters affecting, or likely to affect, the environment by reason of the proposed activity.

1.1 Proposal Need and Alternatives

Following a detailed review of the existing Banksia Mental Health Unit, it has been determined the facility will be completely rebuilt as an integrated service to enable contemporary care for the community. The new mental health unit will be co-designed with people who have lived experience of mental health, family members, carers, and staff to create a patient-centred service. The proposal will also include additional on-grade car parking areas across the campus to replace the displaced car parking as a result of the activity footprint and to provide for additional car parks for the expanded Mental Health Unit. This is the preferred option and will have the greatest community and public health benefits.

A Site review and design analysis has resulted in the preferred option's design response. The proposal scope and design response achieve the appropriate balance of releasing the proposal's objectives by way of providing contemporary and expanded mental health facilities, whilst not adversely impacting the environment, residential amenity or heritage values associated with certain buildings on the site. This is consistent with the principles of ecologically sustainable development (ESD) and the best option for the community's benefit and provision of high-quality mental health services.

2. Site Analysis and Description

2.1 The Site and Locality

The Tamworth Hospital is in Tamworth in the Northern Tablelands region of New South Wales and within the Hunter New England Local Health District. The hospital campus is located at 31-35 Dean Street, North Tamworth in the Tamworth Regional Local Government Area (LGA), and currently accommodates Tamworth Hospital and associated buildings/ infrastructure. The legal description of the site is Lot 1 DP 1181268 and is bounded by Dean Street to the west and Johnson Street to the south. It is approximately 20.62 hectares in area.

The Tamworth Hospital is located to the north of the Tamworth CBD on the northern outskirts of the city. The hospital is located within a residential zoned area (RE 1 General Residential). Most houses surrounding the hospital are single storey, detached houses incorporating styles from the Federation to the Post War periods. The Tamworth Correction Centre is located on the opposite side of Dean Street to the west of the hospital. Cleared land with patches of vegetation, zoned as RU4 Primary Production Small Lots, is located to the north of the hospital campus with cleared land and patches of vegetation extending down the east and west of the hospital and correctional facility connecting to Johnston Street.

The site for the new Tamworth Mental Health Unit is located within the existing hospital campus in a northern central location within the lot. This area currently consists of three existing buildings (Staff Accommodation building (TA34), Rotary Hostel (TA08) and Rotary Lodge (TA09)), pathways, parking and other landscaped areas. There are some existing mature trees within the activity site. The development area of the new Tamworth Mental Health Unit generally slopes from north-east to south-west with a fall of around 7.8 m. The site has an elevation of approximately 420 m AHD (Australian Height Datum). There are mixed plantings of native and exotic species at the site.

The proposal for Car Park A Zone 3 is for a new car parking area located along an existing road off of Dean Street that provides access to Car Park A Zone 4. Currently the sides of the road are open lawn with occasional trees and an existing gazebo that is inset from the road towards the south within the green space.

The proposal for Car Park A Zone 4 is for the expansion of the existing car park towards the south-western corner of the hospital campus, in the direction of the intersection of Dean Street and Johnston Street. The expansion area is currently lawn area with tree plantings.

The proposal for Car Park B Zone 2 is for a new car parking area located in the north-eastern corner of the hospital campus and west of the new TMHU building site. The area for the car park is currently lawn area with trees. An existing on-street parking area would be removed to accommodate the new car park.

The proposal for Car Park D Zone 1 is for the expansion of the existing car park located in the north-eastern corner of the hospital site. The expansion area is currently used as an informal parking area with a dirt surface.

A Locality Plan is provided at **Illustration 2.1** and a Site Plan is provided at **Illustration 2.2**.

The Architectural Plans - REF Submission are provided at **Appendix A** and the Landscape Plans are provided at **Appendix B**.

The landowner is NSW Health Administration Corporation.



Plate 1 View of activity site, including Rotary Hostel (TA08) and Rotary Lodge (TA09) buildings proposed for demolition.

2.1.1 Existing Development

The development area for the proposed TMHU building consists of three existing buildings, pathways, informal carpooling parking, a portion of existing car park and other landscaped areas. There are some existing mature trees within the proposed building footprint, however these do not have heritage or high retention value (refer to Arboricultural Impact Assessment - Building attached at **Appendix C**).

In addition to the proposed TMHU building, two new car parks and two existing car park expansions are proposed to provide additional on-grade car parking spots for staff and visitors. The car park areas contain some existing mature trees (refer to Arboricultural Impact Assessment - Car Parks attached at **Appendix D**).

The “Main Group of Hospital Buildings” is listed in the Tamworth Regional Local Environmental Plan 2010 as a heritage item. There are also a number of trees listed on Tamworth Council’s “Significant Tree Register”. Removal of two trees, as part of the Car Park A Zone 4 expansion, from the tree grouping identified on the significant tree list has been assessed and determined that the removal would not result in an impact on the interpretation of the tree grouping. The heritage impact is discussed in **Section 6.2.8** of this report and in the Heritage Impact Statement at **Appendix E**.

2.1.2 Existing Services

The existing buildings on the site of the proposed TMHU are serviced with water, sewage, and electricity. The removal of these buildings has been included in the calculations for the utility loads of the new building. There are no existing gas connections to the existing buildings and no gas connection is required for the new TMHU building.

The existing electrical load of the area is running at full capacity and the proposed activity would require the installation of a new substation. The location of the substation has not yet been approved by Essential Energy, therefore this component of the activity will be subject to a separate approval.

2.1.3 Access and Parking Facilities

The existing Banksia facility, currently provides 15 standard parking bays, 1 accessible parking bay and up to 8 spaces available within the driveway – a total of 24 parking bays.

Some existing parks will need to be removed to accommodate the new TMHU building and the addition and expansion of other car parks. These areas consists of a portion of the existing Car Park B that includes 94 general use car parking bays and 8 accessible parking bays at the location for the new building and the removal of 9 car parking bays across the four car parks, resulting in a total of 111 formal car parks being removed to accommodate the activity.

An informal car park accommodating approximately 22 vehicles would be removed to accommodate the new building, however, this informal car park services the three buildings that would also be removed as part of the activity and are not considered a loss due to the generated need being removed. Car parking to accommodate this loss and to accommodate the additional demand of the new facility will be provided in other areas within the Tamworth Hospital Campus (refer to **Section 3.1.2.3**). A Traffic Impact Assessment, including car parking study, is provided at **Appendix F**. The assessment has determined that the new facility will require a total of 44 car parks comprising of 36 for staff, seven for visitors and one accessible car park.

2.1.4 Site Considerations and Constraints

Section 10.7 Planning Certificate No. PC2022-0483 dated 30 August 2021 identifies that the site is located within the R1 General Residential zone under Tamworth Regional Local Environmental Plan 2010, and is provided at **Appendix G**.

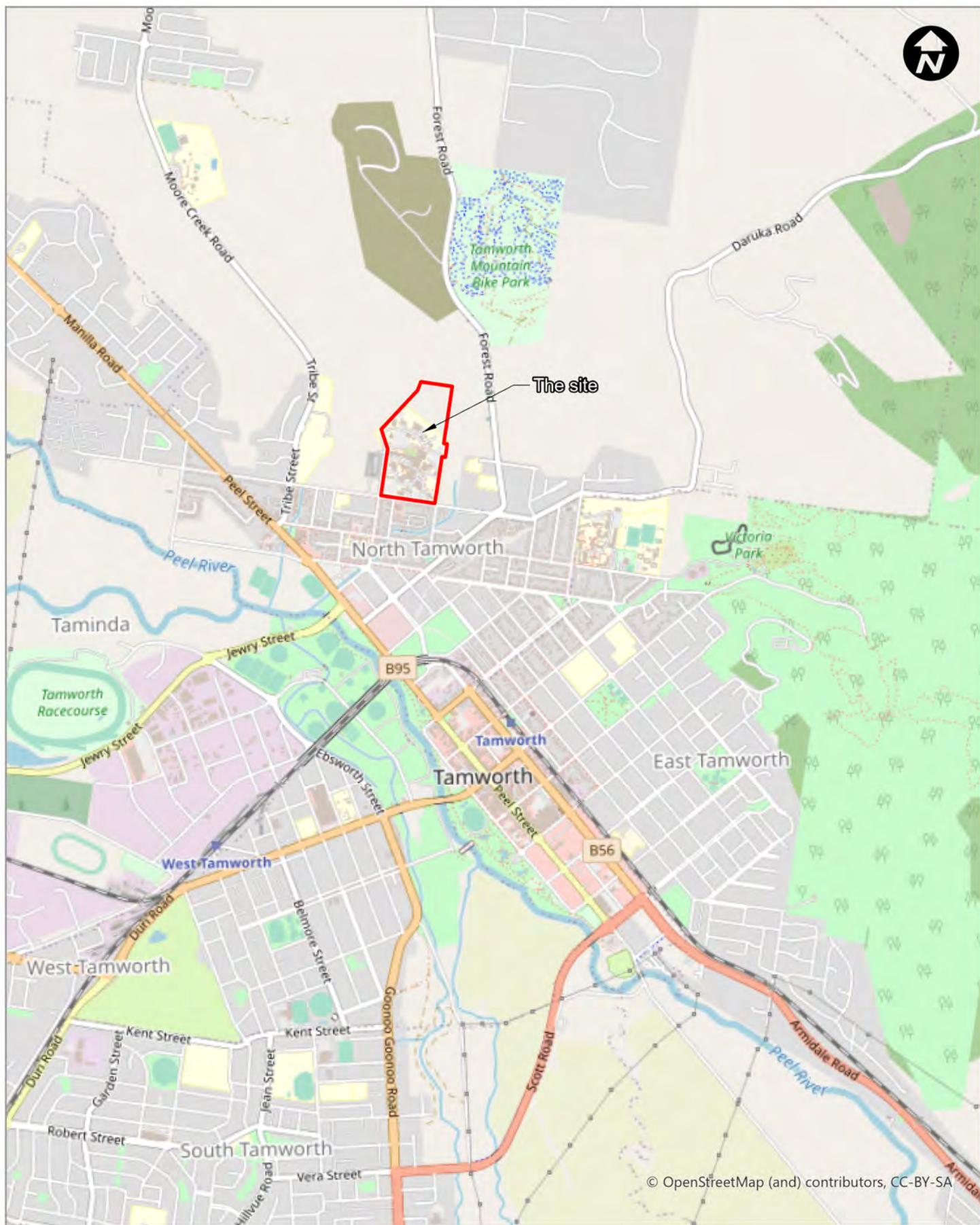
Table 1: Section 10.7 Planning Certificate

Affectation	Yes	No
Critical habitat		✓
Conservation area		✓
Item of environmental heritage	✓	
Affected by section 38 or 39 of the Coastal Management Act 2016 (CM Act)		✓
Proclaimed to be in a mine subsidence district		✓
Affected by a road widening or road realignment		✓
Affected by a planning agreement		✓
Affected by a policy that restricts development of land due to the likelihood of landslip		✓
Affected by bushfire, tidal inundation, subsidence, acid sulphate or any other risk		✓
Affected by any acquisition of land provision		✓
Biodiversity certified land or subject to any bio-banking agreement or property vegetation plan		✓
Significantly contaminated		✓
Subject to flood related development controls		✓
		Unconfirmed by the S10.7 Certificate, however based on review of the Tamworth City-wide Flooding Investigation (May 2019) the site is not identified as flood-prone.
List other relevant constraints	N/A	

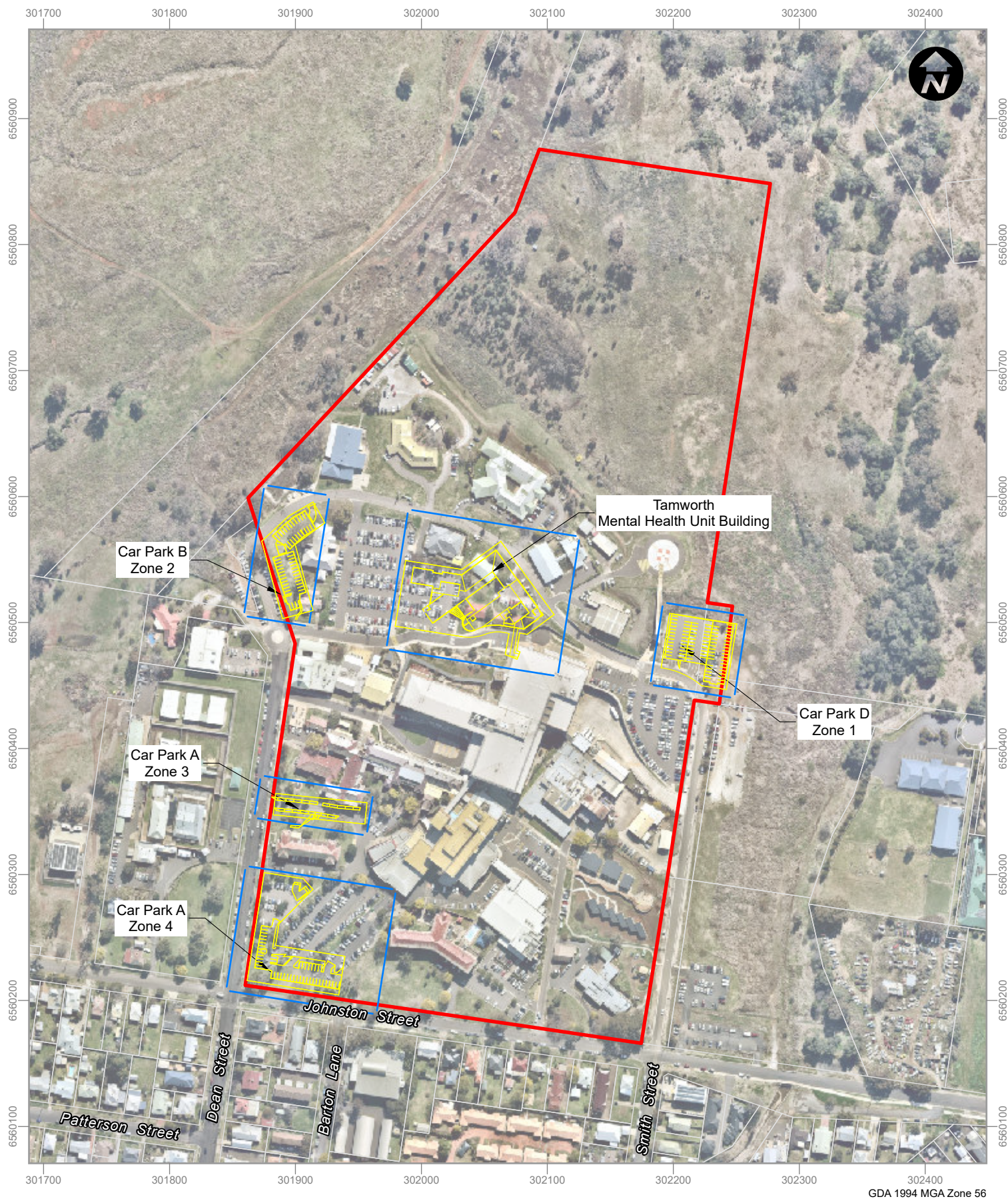
2.2 Surrounding Development

The proposed new TMHU facility is to be located within the north of the existing grounds of Tamworth Hospital and is surrounded by various health service facility uses and associated infrastructure. The location within the site was selected due to the proximity to the existing Acute Services Building (ASB) and the ability to provide clinical links to the new facility. Buildings within the site vary in scale, size and use, however all relate to the use of the site as a hospital/ health services facility. More broadly the hospital site is surrounded by residential, urban and rural lands/ development. The Tamworth Correction Centre is located on the opposite side of Dean Street to the west of the hospital. Cleared land with patches of vegetation, zoned as RU4 Primary Production Small Lots, is located to the north of the hospital campus with cleared land and patches of vegetation extending down the east and west of the hospital and correctional facility connecting to Johnston Street.

The proposed car park works are expansions related to existing car parks for zone 1 and zone 4 and new on-grade car parks for zone 2 and zone 3 within the Tamworth Hospital site.

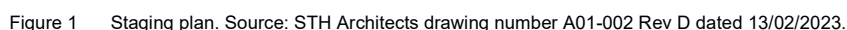


0 600 Metres



Site Context - Illustration 2.2

The activity is for construction of a new Tamworth Mental Health Unit (TMHU) and associated works within the grounds of the Tamworth Hospital. The activity would be completed in two stages (refer to **Figure 1**), Early Works and Main Works. This Review of Environmental Factors assesses both Stages.



The Early Works Stage would involve construction of additional car parking within the hospital to compensate for the removal of car parking required for the construction of the new TMHU and any additional demand created by the new facility. Two new car parks, Car Park A Zone 3 and Car Park B Zone 2, and two car park expansions, Car Park A Zone 4 and Car Park D Zone 1, would provide a net gain in car parking spaces within the Tamworth Hospital campus. The net gain of parking is described as follows:

- Construction of Car Park A Zone 3 - 17 car parking bays
- Redevelopment and expansion of Car Park A Zone 4 - 40 car parking bays
- Construction of Car Park B Zone 2 - 48 car parking bays
- Redevelopment and expansion of Car Park D Zone 1 - 32 car parking bays

The car parks, both new and expansions, would be on-grade car parks that would blend into the existing parking across the hospital campus. Carparking is further discussed in **Section 3.1.2.3**. Wayfinding signage would be added to direct staff and visitors to appropriate parking locations. Lighting would be incorporated into the new car parks and the car park expansions through the placement of pole mounted luminaires. The car park lighting would contribute to safety in design measures and allow the CCTV cameras to record at night. The construction of the carparks would involve earthworks, tree removal, service adjustments, landscaping, lighting, signage and way finding, access road adjustments and augmentations.

A set of Architectural Plans – REF Submission are provided at **Appendix A**, Landscape drawings are provided at **Appendix B**, a Built Form and Urban Design Report is provided at **Appendix H**, Civil drawings are provided at **Appendix M**, and Electrical, Mechanical and Communication Plan Sets are provided at **Appendix AE**.

3.1.2 Main Works Stage



Figure 2 Rendering of proposed Tamworth Mental Health Unit building. Source: STH Architects REF drawing cover page.



Figure 3 Artist impression of proposed Tamworth Mental Health Unit building, main approach. Source: Connecting with Country Concepts report (refer to Appendix K).

3.1.2.1 Description of the New Mental Health Unit

The new TMHU building would be a three-story building that follows the articulation of the adjacent Acute Services Building (ASB) and takes advantage of the sloping landscape of the site. The main entrance would be from the lowest natural ground level of the site with access through a landscaped entry plaza that provides a welcoming approach and usable outdoor space for staff, visitors, and patients. Off the main entrance on level 1, people can reach the Child and Adolescent Community Mental Health facility, while the enclosed transfer bay and engineering rooms, also located on level 1, are positioned away from the public view and would be accessed from the south side of the building along the internal road. Level 2 accommodates the Inpatient Unit, which has a direct link bridge to the existing Acute Services Building. The staff areas and main plant would be situated on level 3.

A biophilic design approach (a design connecting occupants to the natural environment) manifests as a large atrium garden in the middle of the building and the inclusion of courtyards in the inpatient areas. By including access for inpatients to enclosed courtyards, patients can experience the health benefits related to access to nature, fresh air, and natural light. The courtyards being enclosed and only accessible from within the inpatient area assists staff with safety of the patients and potentially allows for greater access to patients due to reduced security risks. The atrium and courtyards provide opportunities for landscape views and natural light to infiltrate the interior of the building, providing a stronger connection for those using the space to the community and landscape beyond.

The highest part of the new TMHU building would not exceed the height limit of more than 15 m above existing ground level as required for the planning approval pathway (refer to elevations in **Appendix A** and **Section 4.1**). The new building is substantially setback from the hospital's property boundaries and does not directly interface with adjoining properties or other sensitive uses such as dwellings.

The works required for the Main Works Stage are generally described as follows:

- The demolition of three existing buildings, including Staff Accommodation building (TA34), Rotary Hostel (TA08) and Rotary Lodge (TA09)
- Removal of informal staff carpool carpark
- Removal of trees (refer **Section 3.1.2.4** for specific numbers)
- Construction of new TMHU building
- Construction of stairs and pathways
- Construction of ancillary infrastructure, including stormwater drainage, retaining walls, and services/utility adjustments and connections
- Installation of campus wayfinding and signage throughout the hospital campus

A set of Architectural Plans – REF Submission are provided at **Appendix A**, a Built Form and Urban Design Report is provided at **Appendix H**, and Civil drawings are provided at **Appendix M**.

3.1.2.2 Demolition, Site Preparation and Earthworks

The Main Works Stage would require the demolition of three existing buildings located on the site for the new TMHU building. These buildings are identified as the Staff Accommodation building (TA34), Rotary Hostel (TA08) and Rotary Lodge (TA09). Asbestos has been identified in an Asbestos register for buildings TA08 and TA09. Refer to **Section 6.2.13** for further discussion. Demolition of a portion of the existing car park located to the east of the TMHU building site would be required to accommodate the new building design. Refer to **Section 3.1.2.3** and **Section 6.2.1** for further discussion.

Site preparation would be required for all locations for the activity and include removal of trees and vegetation. A total of 18 trees have been identified at the proposed TMHU building site related to the Main Works Stage. 14 trees are proposed to be removed to facilitate the construction. None of the trees have been assessed as being of high retention value (refer to Arboricultural Impact Assessment – Building at **Appendix C**).

A total of 48 trees have been identified within the proposed car parks related to the Early Works Stage. 17 trees are proposed to be removed to facilitate the construction (refer to the Arboricultural Impact Assessment – Car Parks at **Appendix D**). Two of the trees identified for removal are Canary Island Date Palms that form part of the early avenue planning (c. 1920s) lining the original main approach to the hospital. The 22 tree grouping delineating the previous approach are listed on the Tamworth City Council Register of Significant Trees. However, it has been assessed that the potential impact of removing the two trees has been mitigated during the design of the car park and the landmark will be maintained (refer to the Heritage Impact Statement at **Appendix E**). Therefore, there is no impact on the Significant Trees Register listing or the ability to interpret the distinctive landmark. Refer to **Section 6.2.8** for further discussion of the non-Aboriginal heritage impacts and mitigations. The biodiversity impacts of the removal of these trees are assessed as part of the Biodiversity Assessment Report (BAR)(refer **Appendix T**) and in **Section 6.2.9**. The BAR has determined that the removal of these trees will not result in a significant biodiversity impact.

Earthworks required for the activity are indicated in the quantities below:

- Main Building Site
 - Cut: 1,590 m³
 - Fill: 600 m³
- Car Parks
 - Cut: 2,870 m³
 - Fill: 115 m³

The depths considered for the bulk earthworks are:

- Main Building Site
 - Pavement: 590 mm
 - Building slab: 300 mm
- Car Park Sites
 - Pavement: 460 mm

Temporary batters would be maximum a 1:1 slope and permanent batters would be maximum 1:4 slope.

Civil drawings are provided at **Appendix M**.

3.1.2.3 Access, Circulation and Parking

The new 37-bed TMHU is expected to generate a demand for 44 parking bays, comprising 36 staff, seven visitors and one accessible parking bay. The overall strategy for the activity is to expand existing car parking areas and construct new parking areas within the hospital campus in order to replace the lost car parking bays as a result of the new Mental Health Unit footprint as well as accommodate the additional car parking need required by the increase in size of the facility .

To meet the demand and facilitate construction of the new building, the proposal will result in the following changes to existing parking provisions:

- Removal of car parking bays
 - Early works: 9 car parking bays removed
 - Main works: 102 car parking bays removed
 - Total removal of 111 car parking bays
- Creation of car parking bays
 - Early works: 146 car parking bays added
 - Main works: 11 car parking bays added
 - Total addition of 157 car parking bays

The above items total a net supply of 46 parking bays. Thus, the parking provisions exceed the demand and all lost parking provisions are replaced, with a surplus of two parking bays beyond the estimated demand of 44 parking bays.

The redistribution of car parking bays around the Tamworth hospital campus has resulted in a change in the numbers of spaces designated as general visitor parking and those dedicated to staff parking. Overall, car parking designated as general visitor parking will decrease by 27 car parking bays, while the dedicated staff parking will increase by 72 car parking bays. Accessible car parking bays will remain the same at eight bays. The final distribution across the 157 bays will be 79 staff parking, 70 visitor parking, and eight accessible parking. This change in distribution to increase dedicated staff parking aligns with the car park survey, conducted for the TIA (refer to **Appendix F**), where it was found that up to 30% of car park users for Car Park B were staff members and concluded there is a need to increase staff parking within the Tamworth hospital campus. The Traffic Impact Assessment is provided at **Appendix F**.

3.1.2.4 Landscaping and Public Domain

The landscape design for the main works site will focus on providing a range of new landscape opportunities including unique living and break out spaces for the residents. The initial schematic design principles focused on distinctive landmarks and characteristics of the region, such as: the mountains and bush, the river, and the valley. The resulting proposed courtyards will offer a range of active and passive engagement opportunities for both residents and staff.

The landscaping of the new and expanded car parks focuses on the requirements for regrading land adjacent to paved works to remove trip hazards and minimising the number of trees and vegetation required to be removed. In general, new plantings of trees and shrubs are strategically placed using predominantly native options. In addition, screen planting is included adjacent to the gazebo next to Car Park A Zone 3 to provide privacy. For Car Park A Zone 4, islands have been incorporated into the car park design to allow for the retention of trees and new low shrub plantings.

The Landscape Schematic Design Report is provided at **Appendix I**.

31 trees would be removed as a result of the activity, with 17 as part of the Early Work and 14 as part of the Main Work stages (refer to **Appendix C** and **Appendix D**). The planting schedule for the Early Work stage includes 34 trees and the planting schedule for the Main Works stage includes 127 new trees (refer to **Appendix B**). Overall, planting 161 trees while removing 31 trees results in an approximate 5:1 replacement ratio within the landscaping of the proposed Mental Health Unit and within the wider Tamworth Hospital site. The loss of biodiversity by removing the 31 trees has been assessed as part of a Biodiversity Assessment Report (refer **Appendix T** and **Section 6.2.9**)

3.1.2.5 Wayfinding and Signage

The wayfinding and signage for Tamworth Hospital would be updated and added to throughout the hospital campus to mark the drop off/ pick up location for the new TMHU building, provide direction to pedestrians and drivers, and identify the locations of car parking. New signage pylons and updating existing pylons would integrate with the existing signage (refer to **Appendix Z**).

3.1.2.6 Hours of Operation

Hours of operation for the TMHU would be:

- Inpatient Unit (level 2): 24 hours.
- Adolescent Community Mental Health (level 1): 5 days/ week, 8am – 5pm (extended hours by exception for group activities).
- Visitors: until 8pm, with some cases allowing for unrestricted visiting times.

Construction works will be undertaken during standard hours detailed below:

- Monday to Friday: 7:00 am to 6:00 pm
- Saturday: 7:00 am to 1:00 pm
- Sunday and Public Holidays: No work

3.1.2.7 Utilities

The existing substations are at full capacity and will not be able to accommodate the proposed TMHU works. Therefore a new substation will be required for the additional load. The new substation is expected to be a new 750 KVA Pad mount substation and will power the new TMHU building and provide capacity for future expansion. Essential Energy is the power supply authority responsible for the hospital's HV network and has yet to provide final approval of the final location of the new substation. The preferred proposed location for the new substation is on the south side of the internal ring road immediately north of the existing car park and west of Ronald McDonald House (refer to **Figure 1**), which has been reviewed by and is the preferred location by Tamworth Regional Council (refer to Consultation in **Section 5.1**). Once Essential Energy have approved the location, approval of the construction of the new substation will be sought under a separate approval.

The communication services for the new TMHU building would be provided by connecting to the existing Tamworth Hospital campus ICT network.

Water and sewage load calculations have been completed for the new TMHU building and have taken into account the existing load that will be demolished as part of preparing the site for the new building.

There are no gas connections required for the new TMHU building.

The Utility Services Reports have been provided at **Appendix N**.

3.1.3 Design Approach

3.1.3.1 Placemaking and Design

The design of the new TMHU facility has the vision to deliver the clinical requirements of the Tamworth Hospital service and the principles of the State-Wide Mental Health Infrastructure Program (SWMHIP) while enhancing the placemaking, environment, sustainability, and resilience of the project and hospital campus. The inclusion of design strategies that address the local site context, sustainability and adaptive design, safety and comfort, and fit for purpose requirements adds value to the Tamworth Hospital site and the greater community.

Workshops were held with the HI Design Advisor to establish concepts for placemaking and environment (refer to **Section 5.2** and **Appendix H**). The resulting key comments were as follows:

1. Provide public amenity to the Hospital campus.
2. Provide respite for staff and consumers.
3. Provide therapeutic amenity for mental health consumers.

Design studies were undertaken for the existing hospital campus to identify new opportunities, which found an option to expand on the existing Aboriginal Garden and establish the building entry location along the pedestrian pathway between the ASB and the main visitors car park. The result was the establishment of the 'green heart' concept and the following elements were created as a response for placemaking and environment:

1. The Entry Forecourt

- A public forecourt is introduced in response to improving the public amenity and allow better wayfinding to the campus by having direct access from the main visitor's carpark.
- The forecourt expands on the existing Aboriginal garden.
- The forecourt contains a landscaped and paved area, creating gathering spaces for visitors.

2. The Central Atrium

- The scheme introduced a central atrium connecting the public forecourt, the atrium and Adult Courtyard.
- The atrium provides respite for internal spaces for both staff and consumers.
- The atrium is a generous size to allow for natural light to enter internal spaces and provide views to the sky.

3. The Main Courtyard

- The main courtyard provides amenity for inpatient consumers.

It connects the main recreation spaces and the atrium.

The chosen location for the new TMHU was further supported by the benefits of the proximity and opportunity for a direct link to the ASB. With adjacency to the ASB, admissions to the TMHU from the Emergency Department can be undertaken in a dignified manner through a weather enclosed link, transfers of patients for medical treatments in the ASB are simplified, and essential services located in the ASB are within a short distance, such as central linen, food service, and waste disposal facilities. The connection between the TMHU and the ASB reduces the impact and improves the dignity and comfort of patients of the TMHU.

The design process of the TMHU project has incorporated consultation with community, stakeholders, staff, and people who have lived experience of mental health, their family members and carers. Responses from the consultations, which were conducted as meetings, workshops, and roadshows, resulted in six key design themes:

- Building aesthetics and the integration with the ASB and the Tamworth Hospital campus;
- Staff and public car parking;
- Ease of access for public, staff and maintenance;
- Wayfinding and artwork integration;
- Safety and security; and
- Integration of indoor and outdoor.

These key design themes translate the feedback received from the community and stakeholders into tangible elements that can be incorporated into the final design of the building and landscape. Feedback included desire for warm colours, non-institutional feel to the design, desires to remove stigma attached to mental health, and connections to the outdoors. Similar feedback, including incorporating the outdoors and landscape into the interiors, natural light and colours, connections to the sky and water, inclusions of medicine plants, spaces for family, and a welcoming and safe environment, were received during the Connecting with Country Design Jam sessions. The TMHU design has translated this feedback into ample light throughout the building, external outlooks, access to nature and outdoor spaces through the addition of courtyards and an atrium that patients also have access to during their journey at TMHU. Wayfinding elements in the form of locally inspired artwork and lighting that mimics the sky aid in connecting patients with the community and natural world beyond the walls of the building. The design team has listened to the community and integrated the feedback into the design process.

Better Places (GANSW, Maya 2017) is aimed at creating green spaces and better places through the greening of the site using open recreation space with urban tree canopy, bushland, and waterways. The key opportunity of locating the TMHU in the proposed location results in a less constrained footprint and allows for placemaking opportunities for the campus and greater connection with country. The public domain benefits that can be achieved are:

- Enhance public domain to improve staff and consumer experience of the campus;

- Improve service identity, access, and wayfinding;
- Acknowledge and establish visual connection with the Aboriginal garden and the new building landscape;
- Establish a new entry plaza with shade from Tamworth's dry and hot environment;
- The atrium or 'green heart' is a commitment to a consumer focused, recovery orientated approach to the overall therapeutic environment of the design. The visibility of the green heart from the initial wayfinding point of the campus was seen as a key arrival element in the building concept and biophilic response to SWMHIP principles of wellbeing and understanding of lived experience of consumers and carers. It provides a better sense of good treatment of family and enduring calmness; and
- The design connects the Aboriginal gardens, the forecourt, internal atrium, through the adult recreation areas to the on-ground adult courtyard – adopting the principles of connecting with country and connecting to the ground, sky and community as expressed from the Aboriginal co-design group.

The Built Form and Urban Design statement is provided in **Appendix H**.

The landscape design includes multiple courtyards and outdoor areas that will provide places for the consumers of the spaces to use and link the mental health unit to nature. The outdoor entrance space associates with the existing Aboriginal garden located across the internal road and provides outdoor green space for visitors and staff, while secure courtyards allow patients access to green spaces while maintaining the safety and security of patients and staff. The connection to the outdoors and nature provides value and purpose to the outdoor spaces. Additionally, the landscape designs endeavour to include elements and native plants of the Tamworth region to connect consumers to the wider community while staying at THMU. Landscaping around the car parks aims to maintain as many existing trees as practical and include new plantings to add value to the surrounding landscape. Landscape plans have been provided at **Appendix B** and the Landscape Schematic Design Report has been provided at **Appendix I**.

3.1.3.2 Connecting with Country/ Engagement

The Tamworth hospital site is located within the traditional lands of the Kamilaroi/ Gamilaraay/ Gomeroi people.

As part of the design process, a Connecting with Country (CwC) collaboration process has been undertaken. The presentation and engagement Design Jam was held on 30 November 2022 (refer to presentation in **Appendix J**). The Data Report begins to provide a picture of the feedback and design ideas collected during the Design Jam, with elements emerging about family and community and how Country can be included in the built spaces (refer to Data Report in **Appendix J**).

During the Design Jam session, groups came up with initial design ideas, presented them to the other group and received feedback. Initial design ideas for the groups related to:

- Incorporating outdoors and landscape into the interiors;
- Natural light;
- Natural colours;
- Views;
- Space for families;
- Non-institutional design;
- Sensory elements such as gardens and water;
- Local artwork;
- Warmth in space through colours and textures;
- View of the sky;
- Connection with water;
- Medicine plants;

- Welcoming and safe; and
- Variety of spaces with different levels of interaction.

Three key themes for Connecting with Country resulted from the Design Jam sessions (refer to Connecting with Country Concepts report in **Appendix K**). These themes are connection to sky, cultural care, and country as healing and are described as the following in the Connecting with Country Concepts report:

- Connection to the sky, from sunrise and sunset to the bright stars in the night sky. Connection to the ancestors and a world outside our own, bringing back perspective and wonder.
- The journey of life and seeking care. Creating spaces for people to come to for reflection or with family and friends. Ensuring a safe and welcoming design inside and out that people want to be part of.
- Learning from Country and further becoming physically and mentally well. Enhancing the senses to create experiences, being inspired by the forms, colours and textures of Country to bring the outside in and enhance the overall unit.

Connection to sky was incorporated into the design through framed views towards the mountains and sunset beyond, lighting in the undercroft that mimics scattered constellations to assist with wayfinding, overhead lighting in the atrium, and mature trees providing filtered light through to the landscape elements below.

Cultural care was incorporated into the design through planting schedules that include bush tucker, medicinal, and resource plants within the accessible garden areas, inclusion of communal and individual reflection nooks, and mountain and bush inspired mural to screen the acute courtyard with an informal gathering space with locally sourced sandstone boulders.

Lastly, country as healing was incorporated into the design with the use of organic forms and textures throughout landscape spaces to deinstitutionalise the hospital setting, inclusion of a dry creek bed and planting to emulate the transitional qualities of the landscape, culturally significant planting with mature trees providing sonic stimulation, paving treatment with integration of natural elements, featuring sculptural elements by local artists, and a central water feature to gabion wall providing sensory stimulation in rooms surrounding the atrium. In addition, within the acute courtyard on level 2, the design includes a walking track perimeter of the courtyard, raised vegetable garden, a water feature to enhance a calming ambience, and featuring mature trees and understory planning to create sensory interest.

These design elements capture the essence of the Connecting with Country key themes and translate them into tangible elements within the proposed THMU. By ensuring that elements are spread across different areas, such as the entrance way, atrium, and acute courtyard, consumers and staff can experience the benefits of the themes regardless of the point within their journey. The Connecting with Country Concepts report is provided in **Appendix K**.

At the time of writing this REF, the logic and assumptions testing with internal and external stakeholders is being presented. Once completed, the finalising of the TMHU design will occur with Country principles approved by the community.

The landscape design for the THMU has incorporated feedback from the Connecting with Country process. The themes for the outdoor spaces have been taken from the surrounding Tamworth region and aim to incorporate cultural values into the design and planting choices to create a positive healing environment. The holistic landscape environment design solution is guided by local indigenous cultural themes, and plants with a focus on healing are to be integrated in consultation with the local Aboriginal community (refer to **Appendix I**).

3.1.3.3 Sustainability

The proposed THMU project is committed to reducing its overall environmental impact using a resource hierarchy approach, with emphasis on avoiding then reducing. The ESD initiatives proposed for the project aim to reduce the environmental impacts typically associated with buildings during the construction and ongoing operation of the building. The project utilises a resource hierarchy approach, with emphasis on avoiding, then reduction of energy, water, waste and materials. Resource conservation is a key focus of the sustainability strategy, including strategies for energy, water, and material resources. The project also meets HI's sustainability targets from the HI ESD Evaluation tool and from DGN 058.

The project design has been implementing sustainable design principles and initiatives designed to target a 5 Star Best Practice rating under the Green Building Council Australia's Green Star Buildings v1. The design approach will incorporate key initiatives to meet the relevant ESD requirements, which targets Australian best-practice in

sustainability, and align with Health Infrastructure NSW and the Hunter New England Local Health District's ambitions of a carbon and waste neutrality by 2030.

Resource conservation, in the form of energy, water, and materials and waste, has been considered in the sustainability approach. For energy and water, a hierarchy methodology has been applied and emphasises avoidance as a priority. Reducing consumption by means of removing the need for energy or water results in less strain on existing resources. This is done through methods such as low flow water fixtures and high-performance building envelopes that remove heating and cooling energy use requirements. The next level is creating efficiencies that reduce the amount of energy or water consumption required. Using drip irrigation, LED light bulbs, and ensuring systems are fit for purpose are examples of efficient use. The last methodology involves applying a sustainable source. For energy this would be the use of renewable energy sources, such as solar or wind, and for water this would be through using on-site recycled water, for example grey water toilet flushing. All applied initiatives would have to be considered against the context of the use within the healthcare setting, which includes consideration of infectious disease control.

Energy consumption initiatives to be considered during detailed design for TMHU are high-performance building envelope, efficient external glazing, zoning for HVAC and lighting, high-efficiency plant, heat recovery systems for outside air intake, and relax internal thermal set points. Water initiatives include water efficient fixtures, rainwater reuse, and drip/ demand-controlled irrigation. These strategies apply the avoidance and reduction methodologies.

The sustainability approach for the TMHU project is presented in the ESD Design Development Report (refer to **Appendix L**) and ESD is also discussed and assessed in **Section 6.2.16** of this report.

The landscape design includes a sustainable approach through selecting plants that thrive within the Tamworth climate, the incorporation of passive design choices by using deciduous trees for summer shading, and sub surface drip irrigation systems for water conservation (refer to **Appendix I**).

3.2 Proposal Need, Options and Alternatives

3.2.1 Strategic Justification

Following a detailed review of the existing Banksia Unit, it has been determined the facility will be completely rebuilt as an integrated service to enable contemporary care for the community. The new unit at Tamworth Hospital will be co-designed with people who have lived experience of mental health, family members, carers and staff to create a patient-centred service. This is the preferred option and will have the greatest community and public health benefits.

3.2.2 Alternatives and Options

A Site review and design analysis has resulted in the preferred option's design response. The proposal scope and design response achieve the appropriate balance of realising the proposal's objectives by way of providing contemporary and expanded mental health facilities, whilst not adversely impacting the environment, residential amenity or heritage values associated with certain buildings on the site. This is consistent with the principles of ecologically sustainable development (ESD) and the best option for the community's benefit and provision of high-quality mental health services.

An overview of the alternatives, and an identification of the preferred alternative, for the Proposal are provided within **Table 2**.

Table 2 Alternatives considered for the proposal

Alternative description	Advantages and disadvantages	Preferred alternative
Refurbish/expand the existing Banksia Unit.	<p>Reduced cost but still would not result in an unacceptable level and standard of care for patients and their families. Audit of existing Banksia Unit identified a 71% non-compliance when audited against guidelines.</p> <p>The existing facility is isolated from the general hospital and using the existing facility would not allow for a direct linkage to Emergency Department to be added. The existing building design, particularly the pitch and low height of the roof, has been identified as contributing to approximately 27% of the absconding incidents of 2016.</p>	x
Build a completely new, contemporary Mental Health Unit.	<p>As identified above this option realises the proposal's objectives by providing contemporary and expanded mental health facilities, whilst not adversely impacting the environment, residential amenity or heritage values associated with certain buildings on the site. This is consistent with the principles of ecologically sustainable development (ESD) and the best option for the community's benefit and provision of high-quality mental health services.</p> <p>This option additionally allows for the new building to be located opposite to the Emergency Department, with the inclusion of a direct link bridge, which was identified as a critical requirement during the Master Planning activities.</p>	✓
Do nothing.	<p>No cost other than ongoing maintenance of buildings however would result in an unacceptable level and standard of care for patients and their families. Audit of existing Banksia Unit identified a 71% non-compliance when audited against guidelines.</p> <p>The existing building design, particularly the pitch and low height of the roof, has been identified as contributing to approximately 27% of the absconding incidents of 2016.</p>	x

3.3 Construction Activities

The full works are long term (22 Months). The program identifies the construction stages as the early works (3.5 months) and the main works (18.5 months):

- Early Works – Provision of on-grade parking delivered across four locations on the campus Including:
 - Car Park A Zone 3 – net gain of 17 parking bays
 - Car Park A Zone 4 – net gain of 40 parking bays
 - Car Park B Zone 2 – 48 parking bays
 - Car Park D Zone 1 – net gain 32 parking bays
- Main Works – Construction of new building and associated works

The early works site establishment and preferred contractor parking would be established in the location of Car Park D Zone 1 (refer to **Figure 4**). Contractor access would be off Johnston Street via the hospital ring road. Alternative car parking locations have been identified in the Outline Construction Management Plan (refer to **Appendix AA**), with

preference 2 being the car parking located in the south-east corner of the Tamworth hospital campus and preference 3 being road-side parking along Johnston Street (refer to **Figure 4**).

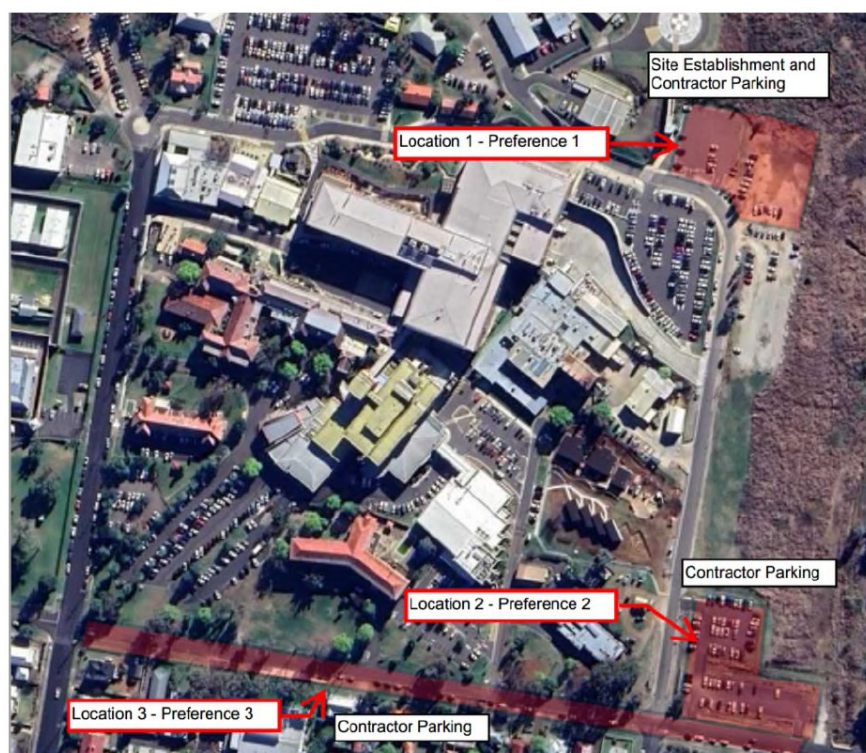


Figure 4 Preferred Contractors Parking. Source: Outline Construction Management Plan dated 15 February 2023 (Appendix AA).

The main works site compound would be located around the road edges surrounding the location of the existing buildings to be demolished and into the car park identified as part of the expansion area (refer to **Figure 5**). Contractor access to the site compound would be off Johnston Street via the hospital ring road.

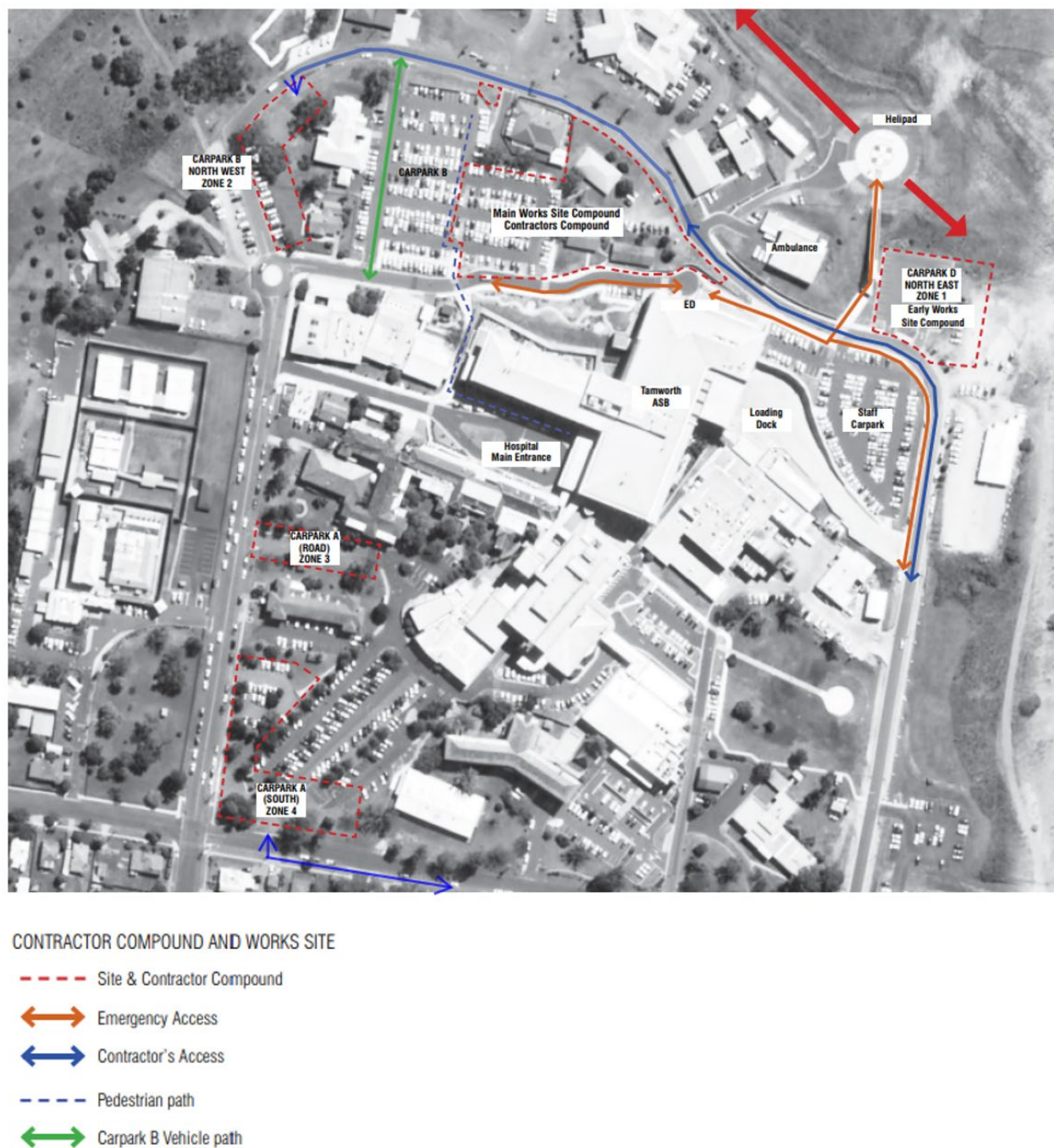


Figure 5 Location of Main Works Site Compound, including paths for contractor's access and maintaining of emergency access paths

The Car Park closure and sectioning for the works would be managed by the contractor. It is expected that the impact on the existing car parks would result in a minimal impact.

Table 3 Project Timeframes and Construction Activities

Construction activity	Description
Commencement Date	<ul style="list-style-type: none"> • Early Works anticipated commencement in March 2023 • Main Works anticipated commencement in June/ July 2023
Work Duration/Methodology	<p>The early works are expected to be undertaken over a period of 16 weeks.</p> <p>The main works are expected to be undertaken over a period of 80 weeks.</p> <p>The general works methodology would involve:</p> <ul style="list-style-type: none"> • site establishment and preparation • demolition works

Construction activity	Description
	<ul style="list-style-type: none"> • construction of alterations and additions • alterations to existing utility services • site clean-up and reinstatement.
Work Hours and Duration/Construction	<p>Works will be undertaken during standard hours detailed below:</p> <ul style="list-style-type: none"> • Monday to Friday: 7:00 am to 6:00 pm • Saturday: 7:00 am to 1:00 pm • Sunday and Public Holidays: No work
Workforce/Employment	Employment is estimated to be 97 Construction Jobs and an increase of 36.37 FTE in operational jobs
Ancillary Facilities	Any site compounds or stockpiles would be established in appropriate designated areas with the construction site and managed by the contractor. They would be removed at completion of works.
Plant Equipment	<p>The main plant likely to be used for the works would include, but are not limited to:</p> <ul style="list-style-type: none"> • Crane • Manitou • concrete pump • concrete truck • washout bay • Handheld power and battery operated tools • Other small equipment
Earthworks	Earthworks are required.
Source and Quantity of Materials	Materials and equipment will be sourced locally where feasible.
Traffic Management and Access	The contractor will be required to prepare a comprehensive construction access, traffic and parking and management plan to demonstrate who the site will operate during construction.

3.4 Operational Activities

As part of the project management, the principal contractor will be responsible for liaison with all relevant stakeholders to ensure that any disruption to the ongoing operations of hospital services is minimised.

3.4.1.1 Use

The new Tamworth Mental Health Unit will replace the existing Banksia mental health facility and provide an updated, contemporary service and facilities to the growing and changing community of Tamworth. The future use of the existing Banksia Unit is outside the project scope and LHD will determine a future repurpose of building at a later time which would be subject to a separate approval.

3.4.1.2 Operation Hours

There would be no change in operation hours between the old and new facilities.

Operation hours for the TMHU would be:

- Inpatient Unit (level 2): 24 hours.
- Adolescent Community Mental Health (level 1): 5 days/ week, 8am – 5pm (extended hours by exception for group activities).
- Visitors: until 8pm, with some cases allowing for unrestricted visiting times.

3.4.1.3 Staff/ Patients

The new TMHU facility would provide 37 bedrooms, interview rooms, treatment rooms, staff areas, and amenities to replace the existing 25 bed Banksia Unit building.

Overall, the staff FTE for the new TMHU would be 98.15, which is an uplift of 36.37 FTE over the existing Banksia Unit. The breakdown of the increase for the new TMHU unit would be:

- Inpatient Unit: uplift of 30.37 FTE.
- Adolescent Community Mental Health: uplift of 6 FTE.

3.4.1.4 Traffic and Parking

Four car parking areas across the Tamworth Hospital campus would be redeveloped and expanded or constructed as new as part of the activity. The proposed car park works would result in the parking provisions exceeding the demand for the new facility (refer Traffic Impact Assessment at **Appendix F**), and all lost parking provisions would be replaced.

4. Statutory Framework

4.1 Planning Approval Pathway

Section 4.1 of the EP&A Act states that if an EPI provides that development may be carried out without the need for development consent, a person may carry the development out, in accordance with the EPI, on land to which the provision applies. However, the environmental assessment of the development is required under Division 5.1 of the Act.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) aims to facilitate the effective delivery of infrastructure across the State. Division 10 of the TISEPP outlines the approval requirements for health service facilities. A 'hospital' is defined as a health service facility under this division.

The site is zoned R1 General Residential under the *Tamworth Regional Local Environmental Plan 2010*. The R1 zone is a prescribed zone under the TISEPP. Section 2.61(1) of the TISEPP permits the following works without consent on any land, provided that it is carried out by or on behalf of a public authority and the development is carried out within the boundaries of an existing health services facility:

- “(a) the erection or alteration of, or addition to, a building that is a health services facility,*
- (b) development for the purposes of restoring or replacing accommodation or administration facilities,*
- (c) demolition of buildings carried out for the purposes of a health services facility,*
- (d) development for the purposes of patient transport facilities, including helipads and ambulance facilities,*
- (e) development for the purposes of car parks to service patients or staff of, or visitors to, the health services facility (or to service staff of, or visitors to, other premises within the boundaries of the facility).”*

The activity involves activities identified at (a) and (c) above; alterations and additions to a health services facility and demolition of buildings carried out for the purposes of a health services facility. The works are within the grounds of the Tamworth Hospital and will enable development of the mental health unit facilities. It is being carried out on behalf of Health Infrastructure and NSW Health. Section 2.61(2) of the TISEPP does not preclude the activity as it does not involve the erection of any building taller than 15 m or closer than 5 metres to any property boundary.

Therefore, the proposal is considered an 'activity' for the purposes of Division 5.1 of the EP&A Act and is subject to an environmental assessment (REF). The proposal is considered an 'activity' in accordance with section 5.1 of the EP&A Act because the activity involves carrying out of identified works by HI (public authority).

TISEPP consultation is discussed within Section 6 of this REF.

Table 4 Description of proposed activities

Division and Section within TISEPP	Description of Works
Section 2.61(1)(a)	Erection or alteration of, or addition to a building that is a health services facility.
Section 2.61(1)(c)	Demolition of an existing building, which may be carried out by or on behalf of a public authority without consent on any land if the development is carried out within the boundaries of an existing health services facility.
Section 2.61(1)(e)	Development for the purposes of car parks to service patients or staff of, or visitors to, the health services facility (or to service staff of, or visitors to, other premises within the boundaries of the facility).

4.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do not affect the proposal as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency, nor does the proposed development affect any matters of national significance. An assessment against the EPBC Act checklist is provided at Table 4.2.

Table 5 EPBC Checklist

Consideration	Yes/No
The activity will not have any significant impact on a declared World Heritage Property?	No
The activity will not have any significant impact on a National Heritage place?	No
The activity will not have any significant impact on a declared Ramsar wetland?	No
The activity will not have any significant impact on Commonwealth listed threatened species or endangered community?	No
The activity will not have any significant impact on listed migratory species?	No
The activity does not involve nuclear actions?	No
The activity will not have any significant impact on Commonwealth marine areas?	No
The activity will not have any significant impact on Commonwealth land?	No
The activity does not relate to a water resource, a coal seam gas development or large coal mining development?	No

4.3 Environmental Planning and Assessment Act 1979

4.3.1 Duty to Consider Environmental Impact

Division 5.1 of the EP&A Act applies to activities that are permissible without consent and are generally carried out by a public authority. Activities under Division 5.1 of the EP&A Act are assessed and determined by a public authority, referred to as the determining authority. Health Infrastructure is a public authority and is the proponent and determining authority for the proposed works.

For the purpose of satisfying the objects of the EP&A Act relating to the protection and enhancement of the environment, a determining authority, in its consideration of an activity shall, notwithstanding any other provisions of the Act or the provisions of any other Act or of any instrument made under the EP&A Act or any other Act, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity (refer to sub-section 1 of section 5.5 of the EP&A Act).

The Guidelines issued under Section 170 (1) of the EP&A Regulation sets out the factors which must be considered when assessing the likely impact of an activity on the environment under Division 5.1 of the EP&A Act. Section 6.1 of this REF specifically responds to the factors for consideration.

Table 6 below demonstrates the effect of the activity on the matters listed for consideration in sub-section 3 of section 5.5 of the EP&A Act.

Table 6 Matters for consideration under Sub-Section, Section 5.5 of the EP&A Act

Matter for Consideration	Impacts of Activity
Sub-section 3: Without limiting subsection 1, a determining authority shall consider the effect of any activity on any wilderness area (within the meaning of the <i>Wilderness Act 1987</i>) in the locality in which the activity is intended to be carried on.	The land is not a wilderness area.
Note: If a biobanking statement has been issued in respect of a development under Part 7A of the <i>Threatened Species Conservation Act 1995</i> , the determining authority is not required to consider the impact of the activity on biodiversity values.	

4.4 Environmental Planning and Assessment Regulation 2021

The Guidelines, pursuant to Section 171(1) of the EP&A Regulation, provides a list of factors that must be taken into account for an environmental assessment under Division 5.1 of the EP&A Act. These requirements are considered at section 6.1 of this REF.

4.5 Other NSW Legislation

The following table lists any additional legislation that is required to be considered if it is applicable to the proposed activity.

Table 7 Other Possible Legislative Requirements

Legislation	Comment	Relevant? Yes/No
State Legislation		
Rural Fires Act 1997	<i>Is the site identified on the Bushfire Prone Land Map</i> No.	No
Biodiversity Conservation Act 2016	<i>Does the site contain any critical habitat, threatened species or ecological population or community?</i> Part 7 of the <i>Biodiversity Conservation Act 2016</i> (BC Act) sets out the requirements for biodiversity assessment and approvals under the EP&A Act. For the purposes of Division 5.1 of the EP&A Act, an activity is to be regarded as likely to significantly affect the environment if it is expected to significantly affect threatened species. The activity requires the removal trees. Removal of these trees would not impact threatened species, ecological communities (or their habitats), any declared area of outstanding biodiversity value (either directly or indirectly) or result in a key threatening process. A species impact statement or biodiversity development assessment report is therefore not required pursuant to Section 7.8 of the BC Act.	No Refer to Section 6.2.9
Water Management Act 2000	<i>Are the works within 40 metres of a watercourse?</i> No. The nearest watercourse is the Spring Creek which is approximately 240 m east of the site	
Contaminated Land Management Act 1997	<i>Is the site listed on the register of contaminated sites?</i> A search of the NSW Environmental Protection Authority (EPA) contaminated land data base was undertaken for the Tamworth area. The closest site is located over 1 km from the activity site, the Former Gasworks Elgas Depot at 115 Marius Street, Tamworth. The site would not have an impact on the activity. A copy of the search is attached as Appendix AD . The handling of asbestos containing material will be by an accredited contractor in accordance with EPA requirements. A mitigation measure requires an unexpected finds procedure be implemented as part of the project.	Yes Refer to Section 6.2.13
Heritage Act 1977	<i>Any impacts on local or state or national heritage? If any assessment provided, note where.</i> A Heritage Impact Statement was undertaken (refer to Appendix E) which identifies the Tamworth Base Hospital as a listed Local Heritage Item in Schedule 5 of the Tamworth Regional Local Environmental Plan 2010 (Item #I361). The "Main Block" is also listed on the Department of Health Section 170 Heritage Register and is listed on the (now defunct) Register of the National Estate. However, the three small buildings identified for removal in the proposal have no heritage significance and all heritage listed buildings will be retained. Two Canary Island Date Palm trees that make up the 22 tree grouping listed on the Tamworth Significant Tree Register have been identified for removal. Assessment in the Heritage Impact Statement concluded that removal of the two trees would not impact on the overall interpretation of the tree grouping. Accordingly, development proposals for this site do not require heritage approval under the <i>NSW Heritage Act 1977</i> . The archaeological provisions of the <i>NSW Heritage Act 1977</i> are applicable, however, as all "relics" are protected under the NSW Heritage Act, regardless of whether or not the place is listed as a heritage item at a local, State or national level.	Yes Refer to Section 6.2.8

Legislation	Comment	Relevant? Yes/No
	<p>The proposal would result in removal of up to six plantings of local high use Koala food trees (NSW Office of Environment and Heritage 2018), consisting of the species Red Ironbark and Apple Box, representing potential foraging habitat for the Koala. However, no evidence of usage of any of these trees at the site by Koalas was noted in the site survey (scat searches/scratches on trunks of accessible trees). Tests of Significance and Assessment of significance were undertaken for the Koala and it was determined the proposal is unlikely to result in any significant impacts to the Koala at the site or in a local context (refer to Appendix T).</p> <p>This represents a very small proportion of foraging habitat that occurs in the broader locality within eucalypt-dominated forests containing suitable koala food trees.</p> <p>Usage of the site by Koalas would be sporadic and opportunistic, most likely occurring during dispersal and when travelling between areas of foraging habitat. Therefore, the proposal would be unlikely to substantially reduce the area of occupancy of an important population of the Koala.</p> <p>Vegetation removal is unlikely to negatively affect Koala resources or opportunities for dispersal.</p> <p>The proposed activity will occur within managed land in an urban area. There would be no impact to Koala habitat as a result of the activity.</p>	
State Environmental Planning Policy (Resilience and Hazards) 2021	<p>Chapter 4 Remediation of land</p> <p>The objective of Chapter 4 of the RHSEPP is to provide for a State-wide planning approach to the remediation of contaminated land. It aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment. Chapter 4 applies to rezoning and development applications for development requiring consent. The proposed activity does not require development consent pursuant to provisions of TISEPP, therefore, Chapter 4 of the RHSEPP does not apply.</p> <p>A Site Contamination Assessment Report undertaken for the activity concluded that site remediation is not required, and the site is considered suitable for development from a site contamination perspective (refer to Appendix U). The findings of the report and potential impacts associated with hazardous materials and contamination are discussed further in Section 5.2.13.</p>	No
State Environmental Planning Policy (Transport and Infrastructure) 2021	<p>The relevant planning approval matters pursuant to TISEPP have been discussed in Section 4.1. The activity is defined as 'development permitted without consent' under Section 2.61 and Section 2.44 of TISEPP and therefore requires assessment under Division 5.1 of the EP&A Act.</p> <p>Sections 2.10-2.15, 2.62 and 2.45 of TISEPP set out requirements for consultation with councils, other public authorities and occupiers of adjoining land. These requirements are addressed in Section 5.1 of this REF.</p> <p>Section 2.122 of TISEPP outlines consultation requirements for traffic generating development and sets out thresholds for traffic generating development generally and also for traffic generating development within proximity to a classified road. The proposed activity is not within proximity (<i>access to classified road or to road that connects to classified road if access within 90m of connection, measured along alignment of connecting road to a classified road</i>) and does not trigger any of the size or capacity thresholds for traffic generating development generally as outlined in schedule 3 of TISEPP.</p>	Yes
State Environmental Planning Policy (Industry and Employment) 2021	<p>Chapter 3 of this SEPP relates to advertising and signage. Assessment of the proposed wayfinding and Signage Strategy against the aims and objectives of Chapter 3 and the assessment criteria specified in Schedule 5 is provided in Table 11 below.</p> <p>The sign is an identification sign and is ancillary to the existing Tamworth Hospital. Therefore, the proposed sign is considered development without consent under Section 2.61(1) of the T&ISEPP.</p>	Yes

Legislation	Comment	Relevant? Yes/No
Tamworth Regional Local Environmental Plan 2010		
Zone	The site is zoned R1 General Residential.	Yes
R1 zone objectives	<p>The objectives of the R1 zone are:</p> <ul style="list-style-type: none"> To provide for the housing needs of the community. To provide for a variety of housing types and densities. To enable other land uses that provide facilities or services to meet the day to day needs of residents. <p>The activity is consistent with the objectives of the R1 zone, being a land use providing facilities and services to meet the day to day needs of residents.</p>	Yes
R1 zone permissibility	<p><u>Permitted without consent:</u></p> <p>Home-based child care; Home occupations; Moorings; Roads</p> <p><u>Permitted with consent:</u></p> <p>Attached dwellings; Boarding houses; Centre-based child care facilities; Community facilities; Dwelling houses; Food and drink premises; Group homes; Home industries; Hostels; Kiosks; Markets; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Residential flat buildings; Respite day care centres; Semi-detached dwellings; Seniors housing; Shop top housing; Tank-based aquaculture; Any other development not specified in item 2 or 4</p> <p><u>Prohibited:</u></p> <p>Advertising structures; Agriculture; Air transport facilities; Amusement centres; Animal boarding or training establishments; Boat building and repair facilities; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Freight transport facilities; Heavy industrial storage establishments; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Marinas; Mooring pens; Mortuaries; Open cut mining; Passenger transport facilities; Pubs; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Restricted premises; Rural industries; Rural workers' dwellings; Service stations; Sex services premises; Storage premises; Transport depots; Vehicle body repair workshops; Vehicle repair stations; Waste or resource management facilities; Wharf or boating facilities; Wholesale supplies</p> <p>Hospitals and health services facilities are permitted with consent as they are not specified as permitted without consent or prohibited under the TRLEP 2010.</p> <p>However, Section 2.61 of TISEPP allows for development for the purpose of health services facilities to be carried out without development consent by a public authority on any land.</p>	
Clause 4.3 Height of Buildings	Maximum height of buildings is not adopted in the Tamworth Regional LEP 2010.	No
Clause 4.4 Floor Space Ratio	No Floor Space Ratio is specified for the site on the Tamworth Regional LEP 2010 Floor Space Ratio Map.	No
Clause 5.10 Heritage	The Main group of hospital buildings at the Tamworth Hospital form a locally listed heritage item on Schedule 5 of the LEP. A Heritage Impact Statement has been prepared (refer to Appendix E and Section 6.2.8) and concluded that the activity, including demolition and additions, are acceptable and would not adversely impact heritage significance.	Yes
Clause 5.21 Flood Planning	The hospital is outside the Flood Planning Area on the Tamworth Regional LEP 2010 Flood Planning Map.	No
Clause 7.1 Earthworks	The objectives of this clause are as follows—	Yes

Legislation	Comment	Relevant? Yes/No
	<ul style="list-style-type: none"> to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land, to allow earthworks of a minor nature without separate development consent. <p>The activity would require earthworks. The earthworks would be effectively managed as part of construction management and would not result in adverse impacts, consistent with the above objectives.</p>	

Table 8 State Environmental Planning Policy (Industry and Employment) 2021 Assessment

Section	Assessment
<p>Part 3.1 Aims, objectives etc</p> <p>(1) This Chapter aims—</p> <p>(a) to ensure that signage (including advertising)—</p> <p>(i) is compatible with the desired amenity and visual character of an area, and</p> <p>(ii) provides effective communication in suitable locations, and</p> <p>(iii) is of high quality design and finish, and</p>	<p>The wayfinding and signage package is consistent with the visual character of the area and will not appear out of place. Signage will be replacing, updating and augmenting existing signage for the Tamworth Hospital as shown in Appendix Z.</p>
Schedule 5 Assessment Criteria	
<p>1 Character of the area</p> <ul style="list-style-type: none"> Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located? Is the proposal consistent with a particular theme for outdoor advertising in the area or locality? 	<p>Yes. The proposed signage is located within an existing health precinct and is consistent with the nature of that development. The area does not have a particular character that would be disrupted by the proposed sign.</p>
<p>2 Special areas</p> <ul style="list-style-type: none"> Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas? 	<p>No.</p>
<p>3 Views and vistas</p> <ul style="list-style-type: none"> Does the proposal obscure or compromise important views? Does the proposal dominate the skyline and reduce the quality of vistas? Does the proposal respect the viewing rights of other advertisers? 	<p>The signage will not obscure any views and it will not dominate the skyline.</p> <p>It will not obscure the viewing of any other signs.</p>
<p>4 Streetscape, setting or landscape</p> <ul style="list-style-type: none"> Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape? Does the proposal contribute to the visual interest of the streetscape, setting or landscape? Does the proposal reduce clutter by rationalising and simplifying existing advertising? Does the proposal screen unsightliness? Does the proposal protrude above buildings, structures or tree canopies in the area or locality? Does the proposal require ongoing vegetation management? 	<p>The scale of the signage is proportionate to the Tamworth Hospital.</p> <p>The signage will contribute to the visual interest of the streetscape.</p> <p>The signage will replace/ improve existing signage and therefore will not increase signage clutter.</p> <p>The sign will not protrude above buildings, structures or tree canopies.</p> <p>The sign will not increase vegetation management requirements.</p>
<p>5 Site and building</p> <ul style="list-style-type: none"> Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located? Does the proposal respect important features of the site or building, or both? Does the proposal show innovation and imagination in its relationship to the site or building, or both? 	<p>The sign is typical for a Health Services Facility.</p>

Section	Assessment
6 Associated devices and logos with advertisements and advertising structures <ul style="list-style-type: none">• Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	No.
7 Illumination <ul style="list-style-type: none">• Would illumination result in unacceptable glare?• Would illumination affect safety for pedestrians, vehicles or aircraft?• Would illumination detract from the amenity of any residence or other form of accommodation?• Can the intensity of the illumination be adjusted, if necessary?• Is the illumination subject to a curfew?	The sign will not be illuminated.
8 Safety <ul style="list-style-type: none">• Would the proposal reduce the safety for any public road?• Would the proposal reduce the safety for pedestrians or bicyclists?• Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?	No.

5. Consultation

5.1 Statutory Consultation

Consultation requirements are established through Sections 2.10-2.15 and 2.62 of the TISEPP. The need for consultation for the proposed development is addressed in Table 8.

Section 2.62(1) of TISEPP excludes notification requirements required under Section 2.61(1)(b) and (c). Despite Section 2.61(1)(c) relating to “*demolition of buildings carried out for the purposes of a health services facility*”, the activity triggers the notification requirements of Section 2.62(1)(a) being the “*erection or alteration of, or addition to, a building that is a health services facility*”.

Section 2.62(2) requires that written notice of intent to carry out the activity be given to Tamworth Regional Council and occupiers of any adjoining land.

The activity does not trigger any further consultation requirements under Division 1 of TISEPP. Tamworth Base Hospital is listed as a Heritage Item on Schedule 5 of the Tamworth Regional Local Environmental Plan 2010 as “Main Group of Hospital Buildings” (Item #1361) and located at 31 Dean Street (Lot 2 of Deposited Plan 533835; Lot 99 and part Lot 109 of Deposited Plan 753848). However, the activity will not significantly impact on the significance of the listed heritage item (or any heritage conservation area), as documented in the Heritage Impact Statement (refer to **Appendix E** and **Section 6.2.8**). A grouping of 22 Canary Island Date Palms are listed on the Tamworth Significant Tree Register and two of the Date Palms are identified for removal. However, the Heritage Impact Statement concluded removing two of the 22 trees in the grouping would not result in a significant impact or impact the interpretation of the landmark. The site is also not flood liable or bushfire prone land. The proposal is not specified development under clause 2.15 and will not significantly impact on Council’s infrastructure.

The REF scope of works relevant to Section 2.62(2) was notified for 21 calendar days from 7/12/2022 to the required stakeholders outlined in Table 9. No responses from adjacent occupiers were received within the 21 calendar day notice period. A follow up email to Tamworth Regional Council was sent on 8 February 2023. A response was received from Council confirming no issues with the TMHU development. Copies of the notification letters and emails to and from Council are provided at **Appendix O**.

Table 9 Stakeholders required to be notified

Stakeholder	Relevant Section
Tamworth Regional Council	Section 2.62(2) and Section 2.10
Occupiers of adjoining land	Section 2.62(2)

5.2 Community & Stakeholder Engagement

Consultation on the project started in 2018, with the development of the Clinical Services Plan. To date, consultation has directly involved almost 1000 staff, consumers, carers and community members, including representatives from HI, HNELHD, clinical and management staff.

An overview of the comments received are outlined and responded to in the table below. Copies of the consultation plans and other associated information relating to consultation is attached as **Appendix O**.

Table 10: Other Consultation (non-statutory)

List of community engagement activities	Date	Feedback	Project response
Preliminary Design Pop-up Road Show	April/May 2021	Feedback received was representative from the lived experience of mental illness. Top choices for incorporation into the new design included: natural light and plants/ foliage, dedicated visitor/ family spaces, outdoor spaces to create a calming environment, and a staff station space that supports communication (refer to Design	Refer to Section 5.2.1 Project Response below.

List of community engagement activities	Date	Feedback	Project response
		consultation and engagement report – May 2021 at Appendix O).	
Schematic Design Regional Roadshow	November 2021	<p>Four locations in the New England North West area were included in the roadshow, being Armidale, Inverell, Moree, and Tamworth. Finalised Schematic Design and select themes for Detailed Design were presented. Feedback included:</p> <ul style="list-style-type: none"> • De-escalation room a big improvement on current; • Warmer colours for exterior; • Positive reception of more homely interior; • Desire for yarning circle in outdoor courtyard, native and medicinal garden, exercise park style equipment that is colourful; • Acoustic panelling required for youth area; • Inclusion of art, particularly on the floor, and featuring Aboriginal local totems; • Sensory rooms; • Lighting control by patient; • Dual language for wayfinding; • Comfortable and relaxing furniture, with potential to move around such as beanbag chairs; • Views of the outdoors and sky; • Smoking area; • Safety elements, such as high fences, no climbable trees, impact resistant glass; and • More parking required. <p>(refer to Schematic Design Consultation and Engagement – November 2021 at Appendix O).</p>	<p>Approximately 380 comments were collected during the community visits, 72 of which were incorporated into the concept and schematic design stages. 181 of the comments were related to detailed design and have been flagged for review during the detailed design process. The remaining comments were related to operations, information, or were confirmation on the design (refer to Community Engagement Statement December 2022 at Appendix O).</p> <p>Refer to Section 5.2.1 Project Response below.</p>
Internal Consultation meetings	Throughout 2022	The internal consultation process has generated more than 300 touchpoints with staff, consumers, or community representatives (refer to Community Engagement Statement December 2022 at Appendix O).	Refer to Section 5.2.1 Project Response below.
User groups and co-design team meetings	Throughout 2022	The most popular feedback items have been on landscaping, the façade, and the internal journey. Furniture samples were presented to staff and consumers to provide feedback and selections in late 2021 (refer to Community Engagement Statement December 2022 at Appendix O).	Refer to Section 5.2.1 Project Response below.
HI Design Advisor Workshop	23 June 2022	<p>Across all HI Design Advisor Workshops concepts were established for placemaking and environment and resulted in the following key comments:</p> <ul style="list-style-type: none"> • Provide public amenity to the Hospital campus. • Provide respite for staff and consumers. • Provide therapeutic amenity for mental health consumers. 	Response to the feedback established the 'green heart' concept, which breakdowns into the elements of the Entry Forecourt, the Central Atrium, and the Main Courtyard. Refer to Section 3.1.3.1 for further discussion.

List of community engagement activities	Date	Feedback	Project response
HI Design Advisor Workshop	29 June 2022	<p>Across all HI Design Advisor Workshops concepts were established for placemaking and environment and resulted in the following key comments:</p> <ul style="list-style-type: none"> • Provide public amenity to the Hospital campus. • Provide respite for staff and consumers. • Provide therapeutic amenity for mental health consumers. 	Response to the feedback established the 'green heart' concept, which breakdowns into the elements of the Entry Forecourt, the Central Atrium, and the Main Courtyard. Refer to Section 3.1.3.1 for further discussion.
Project newsletter	July 2022	NA	NA
HI Design Advisor Workshop	26 July 2022	<p>Across all HI Design Advisor Workshops concepts were established for placemaking and environment and resulted in the following key comments:</p> <ul style="list-style-type: none"> • Provide public amenity to the Hospital campus. • Provide respite for staff and consumers. • Provide therapeutic amenity for mental health consumers. 	Response to the feedback established the 'green heart' concept, which breakdowns into the elements of the Entry Forecourt, the Central Atrium, and the Main Courtyard. Refer to Section 3.1.3.1 for further discussion.
HI Design Advisor Workshop	10 August 2022	<p>Across all HI Design Advisor Workshops concepts were established for placemaking and environment and resulted in the following key comments:</p> <ul style="list-style-type: none"> • Provide public amenity to the Hospital campus. • Provide respite for staff and consumers. • Provide therapeutic amenity for mental health consumers. 	Response to the feedback established the 'green heart' concept, which breakdowns into the elements of the Entry Forecourt, the Central Atrium, and the Main Courtyard. Refer to Section 3.1.3.1 for further discussion.
Connecting with Country Design Jam	November 2022	<p>Two groups, as part of the Design Jam, came up with initial design ideas, presented them to the other group and received feedback. Initial design ideas for the groups related to:</p> <ul style="list-style-type: none"> • Incorporating outdoors and landscape into the interiors; • Natural light; • Natural colours; • Views; • Space for families; • Non-institutional design; • Sensory elements such as gardens and water; • Local artwork; • Warmth in space through colours and textures; • View of the sky; • Connection with water; • Medicine plants; • Welcoming and safe; and • Variety of spaces with different levels of interaction. <p>Refer to Design Jam Presentation at and Data Report at Appendix J</p>	Three key themes emerged from the Connecting with Country Design Jam sessions. These are connection to sky, cultural care, and country as healing. Project response is discussed further in Section 5.2.1 Project Response below and in Section 3.1.3.2 .
Contact with Tamworth Council – tree removal approval process	12 December 2022	<p>Clarification was sought to determine the approval process for the removal of trees if the early works occurred as exempt development. Feedback was that the</p>	No project response required as early works

List of community engagement activities	Date	Feedback	Project response
		Tamworth DCP does not have provisions for issuing permits for clearing under the BOS threshold. Advice included that a Biodiversity Conservation licence may apply. Refer to Appendix O .	included in REF assessment.
Contact with Tamworth Council – cast iron pipe	13 December 2022	Council was contacted for information relating to a cast iron pipe, which was flagged as being potentially related to a known underground council water service and located in the proposed location of Car Park B Zone 2. Council provided advice on typical conditions for relocation and concluded Council would likely allow the connection works to be conducted by the contractor under Council supervision. Refer to Appendix O .	NA
Contact with Tamworth Council – water main vs car park	13 December 2022	Clarification was sought to determine if the existing main would need to be diverted around the car park. Council confirm diversion would not be a requirement since the car park would be viewed similar to a road that can still be accessed. Council noted that consideration should be given to any cut/ fill and compaction being completed for the works with respect to underground assets in the area. Refer to Appendix O .	NA

5.2.1 Project Response

The project team completed User Group meetings, Co-design meetings and Connection with Country workshops. Collectively the responses from the meetings and workshops resulted in the following key design features: integrative and representative building aesthetics, staff and public car parking improvement, ease of access for public, staff and maintenance, wayfinding and artwork integration, safety and security, and integration of indoor and outdoor spaces (refer to Schematic Design Report – Consultation Page provided at **Appendix O**). Where possible, feedback received has been considered and incorporated during the schematic design phase or was flagged for detailed design. It should be noted that feedback received has been significant, varied, and sometimes conflicting. The project team has had to consider each feedback comment against the design and within context of other feedback.

The resulting design incorporates the feedback from the meetings, workshop, and Design Jam by grouping similar types of comments together and translating them into the key design features. These features are then used to develop tangible design elements to incorporate into the building design. Feedback was received for the inclusion of warm colours that was incorporated into the colour scheme for the exterior and internal materials. Other feedback asked for connections to the outdoors, inclusion of natural light, and views of the sky, which was included through the addition of courtyards and an atrium (refer to **Appendix H**). There is evidence in the design that feedback has been incorporated through the interpretation of the comments into design elements. Refer to **Section 3.1.3.1** and **Section 3.1.3.2** for discussion of placemaking and design and Connecting with Country.

6. Environmental Impact Assessment

6.1 Environmental Planning and Assessment Regulation 2021 – Assessment Considerations

The relevant assessment considerations under Department of Planning & Environment's (DPE) Guidelines for Division 5.1 Assessments (the Guidelines) pursuant to Section 171(1) of the EP&A Regulation are provided below.

Table 11 Summary of Environmental Factors Reviewed in Relation to the Activity

Relevant Consideration	Response/Assessment		
a) Any environmental impact on a community	<p>All works are within the grounds of the hospital. There is likely to be a minor increase in vehicles and noise during works, however this will be minimal and of temporary duration. Such impacts can be appropriately minimised by the imposition of mitigation measures.</p> <p>Hazardous materials will be handled and removed in accordance with EPA protocols to prevent impacts on hospital staff, patients, or the general public.</p> <p>The activity would result in improvements to the facilities at Tamworth Hospital that will benefit patients, staff, hospital stakeholders, and the wider community. The activity would provide a facility that will meet the needs of the changing demographics of the population of Tamworth and the surrounding locality, and support the provision of high quality mental health support services.</p>	-ve Nil +ve	 ✓
(b) Transformation of a locality	<p>The visual impacts from construction works are considered to be temporary and minor. The new TMHU building has been designed to fit with the existing Tamworth hospital environment and compliment the recently built ASB. The landscaping for the project will add aesthetically pleasing outdoor spaces that will be usable by staff, visitors and patients. Despite the temporary minor impact from construction, the overall visual impact from the activity will be positive. Visual amenity impacts are also assessed in Section 6.2.6.</p>	-ve Nil +ve	 ✓
(c) Any environmental impact on the ecosystem of the locality	<p>Environmental impacts associated with the activity are generally minor or of temporary duration. Tree removal would be necessary, however, none of the trees to be removed have been assessed as being of high retention value and their replacement with healthy, advanced size specimens could replace the loss of amenity within a short to medium timeframe (refer Arborist Report at Appendix C and D). Two trees are included in the 22-tree grouping that represents cultural significance, however, the removal of the two trees has been assessed as not having an impact on the interpretation of the grouping. A full assessment of environmental impacts, including ecology, water quality, and heritage, is contained in Section 6.2. Any environmental impacts will be minimal and will be subject to appropriate mitigation measures.</p>	-ve Nil +ve	 ✓
d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality.	No	-ve Nil +ve	 ✓
e) Any effect on locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific, or social significance or other special value for present or future generations.	<p>The activity will not adversely impact the heritage significance of any heritage items. Two trees, which are part of a 22-tree grouping listed in the Tamworth Significant Tree Register, will be removed as part of the activity. However, the assessment of the tree removal has concluded the two trees being removed will not have a significant impact on the interpretation of the tree grouping (refer Section 6.2.8).</p> <p>Based on the Due Diligence Code of Practice for the Protection of Aboriginal Objects (DECCW 2010) there is very low probability of Aboriginal objects occurring in the activity area. Therefore, additional assessment, including an ACHAR, is not required (refer Section 6.2.7).</p>	-ve Nil +ve	 ✓
(f) Any impact on the habitat of protected fauna (within the meaning of the National Parks and Wildlife Act 1974)	<p>The survey area did provide limited, low-quality habitat for a selection of threatened fauna species. The relevant ecological assessments and tests have been carried out (refer to Section 6.2.9 and Appendix T) and no significant effect on threatened species would occur.</p>	-ve Nil +ve	 ✓

Relevant Consideration	Response/Assessment		
(g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air	There were no threatened flora or fauna species listed under the BC Act or the EPBC Act observed within the survey area. The survey area provides limited, low-quality habitat for a selection of threatened species. There would be no significant impacts and measures would be put in place to minimise any potential impacts (refer to Section 6.2.9 and Appendix T).	-ve	
		Nil	✓
		+ve	
(h) Any long-term impacts on the environment	Impacts associated with the activity will be temporary and managed through the imposition of mitigation measures (e.g. noise, visual, air quality). These matters are discussed in further detail in Section 6 .	-ve	
		Nil	✓
		+ve	
(i) Any degradation of the quality of the environment	Excavation and soil disturbance is required to accommodate the proposed development which could result in erosion and sedimentation impacts if not effectively managed. Erosion control measures will be implemented on site to minimise soil erosion.	-ve	
		Nil	✓
		+ve	
j) Any risk of safety of the environment	No. Mitigation measures will be implemented to minimise any potential impact from contamination.	-ve	
		Nil	✓
		+ve	
(k) Any reduction in the range of beneficial uses of the environment	No. The activity will enable the site to continue to be utilised as a hospital. The inclusion of an improved mental health facility and increased parking will have a positive impact on the Tamworth hospital and the wider community.	-ve	
		Nil	
		+ve	✓
(l) Any pollution of the environment	No. Appropriate mitigation measures will be incorporated to minimise any potential pollution of the environment (e.g. erosion control, contamination).	-ve	
		Nil	✓
		+ve	
(m) Any environmental problems associated with the disposal of waste	No. Safeguards will be implemented during construction works to minimise potential waste impacts during construction (Section 6.2.12). Any hazardous materials will be disposed of at a licenced facility and in accordance with EPA protocol.	-ve	
		Nil	✓
		+ve	
n) Any increased demand on resources (natural or otherwise) that are, or are likely to become, in short supply	No. Materials salvaged as part of demolition works will be sorted and identified for recycling. Impacts associated with the consumption of natural resources through the use of machinery would be minimal.	-ve	
		Nil	✓
		+ve	
(o) Any cumulative environmental effects with other existing or likely future activities.	Cumulative impacts are discussed in Section 6.2.18 . The cumulative impacts of undertaking the proposed activity in the context of the local area is considered low.	-ve	
		Nil	✓
		+ve	
(p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions.	No. The site is not in the Coastal Zone as identified in the <i>Coastal Management Act 2016</i> .	-ve	
		Nil	✓
		+ve	
q) Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1	Tamworth is identified as a Regional City in the 'New England North West Regional Plan 2036'. The project is consistent with directions in the Plan relating to health care. The proposed activity is consistent with the relevant Planning Priorities and Actions identified in 'Tamworth Regional Blueprint 100' (Tamworth Regional Council 2020).	-ve	
		Nil	
		+ve	✓
r) Any other relevant environmental factors	No other factors are relevant in assessing impacts to the fullest extent	-ve	
		Nil	✓
		+ve	

6.2 Identification of Issues

6.2.1 Traffic, Access and Parking

Questions to consider	Yes	No
Will the works affect traffic or access on any local or regional roads?		✓
Will the works disrupt access to private properties?		✓
Are there likely to be any difficulties associated with site access?		✓
Are the works located in an area that may be highly sensitive to movement of vehicles or machinery to and from the work site (i.e. schools, quiet streets)?	✓	
Will full or partial road closures be required?		✓
Will the proposal result in a loss of onsite car parking?		✓
Is there onsite parking for construction workers?	✓	

Existing Environment

The footprint of the new TMHU building site currently consists of three existing buildings, informal car parking area, Car Park B, and vegetation, which will all be cleared as part of the activity. The activity area for the car parking additions and expansions consist of vegetation and existing car parking areas, which will be cleared as part of the activity. The existing Banksia facility provides 15 standard parking bays, one accessible parking bay and up to eight spaces available within the driveway, accommodating a total of 24 parking bays. There is no proposed future use of the existing Banksia Unit building, therefore, the existing parking provided at the Banksia Unit has not been included in the car parking calculations. The assumption has been made that should the building be reused in the future the existing parking would be required for the new use.

Access to the activity area is via the main entry to the Tamworth Hospital Precinct on Dean Street and via an internal road, which forms part of the internal road network within the hospital site. There is alternative access via Smith Street. The Hospital precinct is well signposted within the precinct.

There are several formal and informal parking areas provided within the Tamworth Hospital precinct connected by internal roads with various usage restrictions (e.g. staff only, etc). Car Park A Zone 4 and Car Park D Zone 1 are existing car parks that would be included in the car park expansions.

Impact Assessment

A Traffic Impact Assessment (TIA) was prepared by GeoLINK for the proposed facility which is attached at **Appendix F**. A summary of the conclusions and an assessment is provided below.

Road Classification: Dean Street and Smith Street are classified as local roads, and the majority of roads within the lot are private roads with a 'local road' classification. The nearest state road is the B95, also known as Peel Street, and is approximately 600 m south and 900 m west of the Tamworth hospital campus at its nearest point. The closest regional classified road is Jewry Street, which is located approximately 670 m southwest of the site. The TIA concluded that there would be a very low volume of traffic expected to be generated by the new TMHU. Due to the distance to the state road and the very low expected volume of traffic, it is anticipated there will be no impact on state or regional roads as a result of traffic.

Efficiency: The TIA has investigate traffic generation for the proposed activity in two ways. Firstly by using the Transport for NSW (formerly RTA) *Guide to Traffic Generating Developments* (GTGD, 2002) is commonly used as a tool for obtaining rates of trip generation for various development types. The GTGD defines a *private hospital* as 'premises at which patients are provide with medical, surgical or other treatment, and with ancillary nursing care, for fee, gain or reward'. The proposed TMHU, although part of a public hospital, will operate in a similar way to a private hospital. The main buildings of the Tamworth hospital precinct will have a higher trip generation rate, whether determined per bed or a per square metre gross floor area (GFA), due to the unscheduled arrivals and higher volume of visitors and staff (doctors, nurses, cleaners, caterers, maintenance staff etc.). However, the TMHU will operate with pre-arranged appointments and a smaller staff base similar to a private hospital.

The TIA also provides a rough trip generation calculation based on the assumed maximum number of staff arriving/departing at any one time, with an additional allowance for visitors arriving/departing at the same time. The resultant estimation equals the figure based on the GTGD calculation. The TIA has therefore determined that the GTGD formulae for private hospitals provides an appropriate estimation of trip generation for the TMHU.

The TIA has estimated the expected increase in traffic associated with the proposal during the peak hour is 7 veh/h. (Refer **Appendix F** for further detail on calculations). The proposal does not include a dedicated car park and as such, it is expected that traffic generated by proposal will park in various locations within the Hospital grounds. All traffic will enter the hospital precinct from Johnston Street, either via the intersection at Dean Street or the intersection at Smith Street. Both these intersections are in good condition and considered suitable for the existing traffic volumes. Given that the Johnston/Dean Street intersection gives priority to Dean Street and this is signposted as the main entrance to the Hospital, it is likely that the majority of traffic will enter at this location.

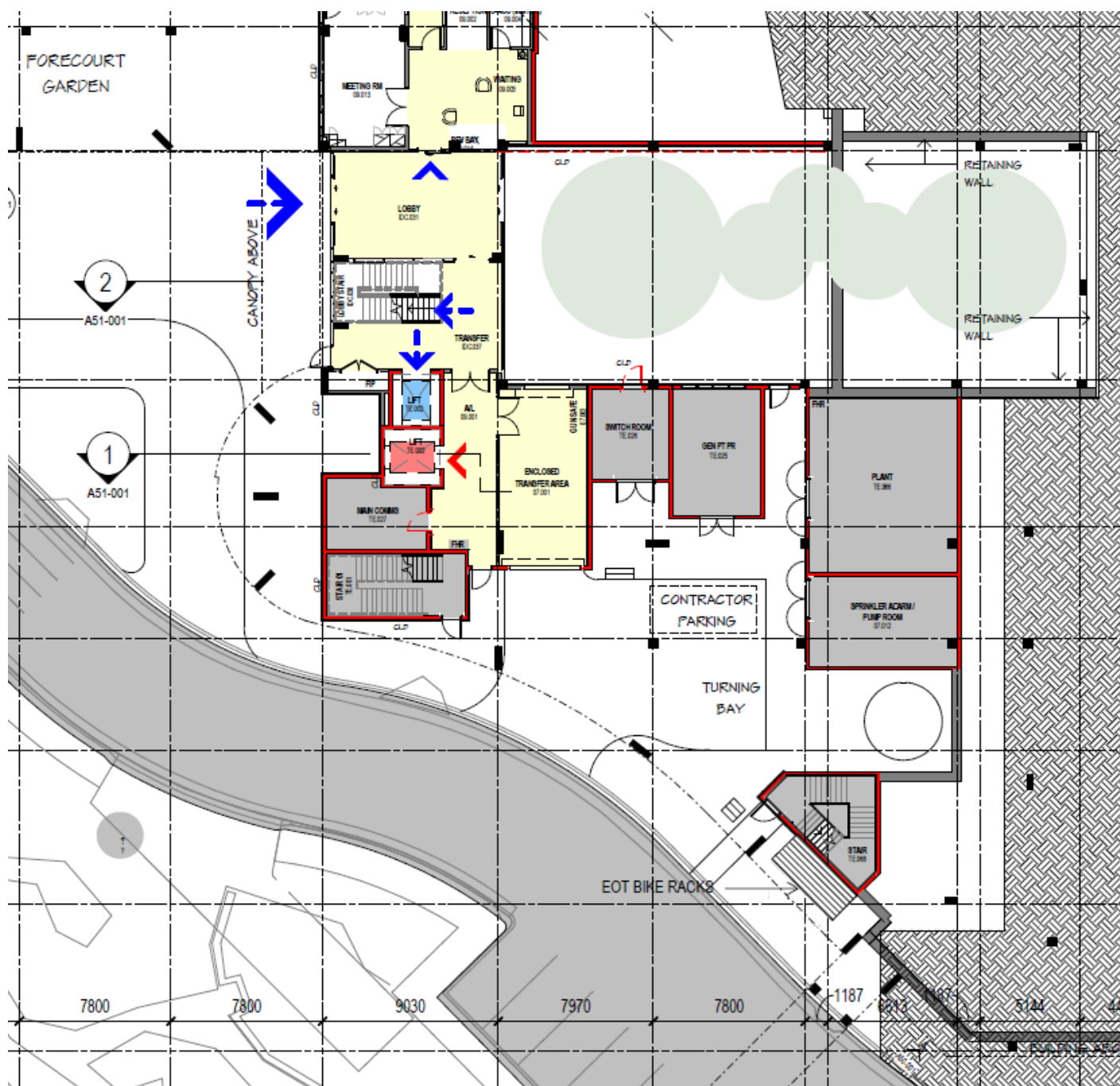
Due to the size and operations of the various components of the Tamworth Hospital site, including parking for an estimated 1,200 vehicles, it is expected that the peak hourly traffic arriving to (AM peak) or leaving (PM peak) the site will be in excess of 200 veh/h. Given the very low volume of traffic expected to be generated by the development (7 veh/h during the peak hour, less outside the peak), and the relatively high existing volumes, capacity analysis of key roadways and intersections was not considered warranted and has not been undertaken.

Safety: The proposal is not expected to introduce or exacerbate any hazards with regard to the safety of motorists, pedestrians or cyclists, including staff, visitors and patients of the proposed Unit or the surrounding hospital and health facilities. The expanded and new car parking will include new lighting and CCTV to improve the safety in these areas. Measures have been taken to ensure the design of the new facility has sufficient sight distances for the drop-off bay and no conflicts between the proposed and existing vehicular and pedestrian infrastructure have been identified. It is anticipated the measures taken would have a small positive impact on the safety of the hospital campus.

Amenity: The removal of the existing car parking while the early works are occurring will have a negative impact on the amenity, however, this will be short-term. Once the main works commence, and the portion of Car Park B is removed, the majority of that car parking will already be available since it is replaced as part of the early works. Overall, it is not expected for there to be any loss in amenity of the site or surroundings due to the existing uses within the Tamworth Hospital precinct.

Road Pavement: The relatively small increase in traffic generated by the new TMHU will have a negligible impact on the existing road pavement and infrastructure. During demolition and construction, heavy vehicles accessing the site may cause some damage to the existing road infrastructure. Future requirements for the activity to repair or replace existing pavement can be managed through independent dilapidation surveys undertaken pre- and post-construction. Generally, the impact to road pavement is anticipated to be negligible.

Pedestrians and Cyclists: There are several cycleways, pedestrian footpaths and pedestrian-safe crossing points to facilitate access to the site from the Tamworth city centre and surrounds on foot or by bicycle. Additional future cycleway connections are included in Tamworth Regional Council's plans for the future cycling network. The journey from the Tamworth city centre to the site would take a little over 30 minutes on foot and includes a 3-5% incline heading north along Dean Street. This is recognised as a possible hinderance to convincing people to use active modes of transport. However, walking could form a part of the journey when combined with other transportation options (refer to Green Travel Plan at **Appendix AC**). The inclusion of end-of-trip facilities such as showers and secure bike storage would aid in making cycling to work a viable option for staff. A covered and enclosed bike parking area, providing four bike parking spaces within a bike cage, has been included in the TMHU building design and is located on the southern side of the building (refer to **Figure 6**). The staff only entrance adjacent to the enclosed transfer area provides a direct path from the bicycle parking to the lift that ascends to Level 3. On Level 3, adjacent to the lift is an accessible shower and a property bay that includes lockers for staff use (refer to **Figure 7**). This combination provides end-of-trip facility requirements as identified in the Green Travel Plan (refer to **Appendix AC**) and provides the infrastructure required to boost the uptake of active transport. The landscaping, in particular the entry forecourt and the main courtyard, would provide green areas within the hospital campus for staff, visitors, and patients to take leisure walks and experience the outdoors. Overall, particularly in conjunction with the GTP, a positive impact on pedestrians and cyclists would be anticipated.



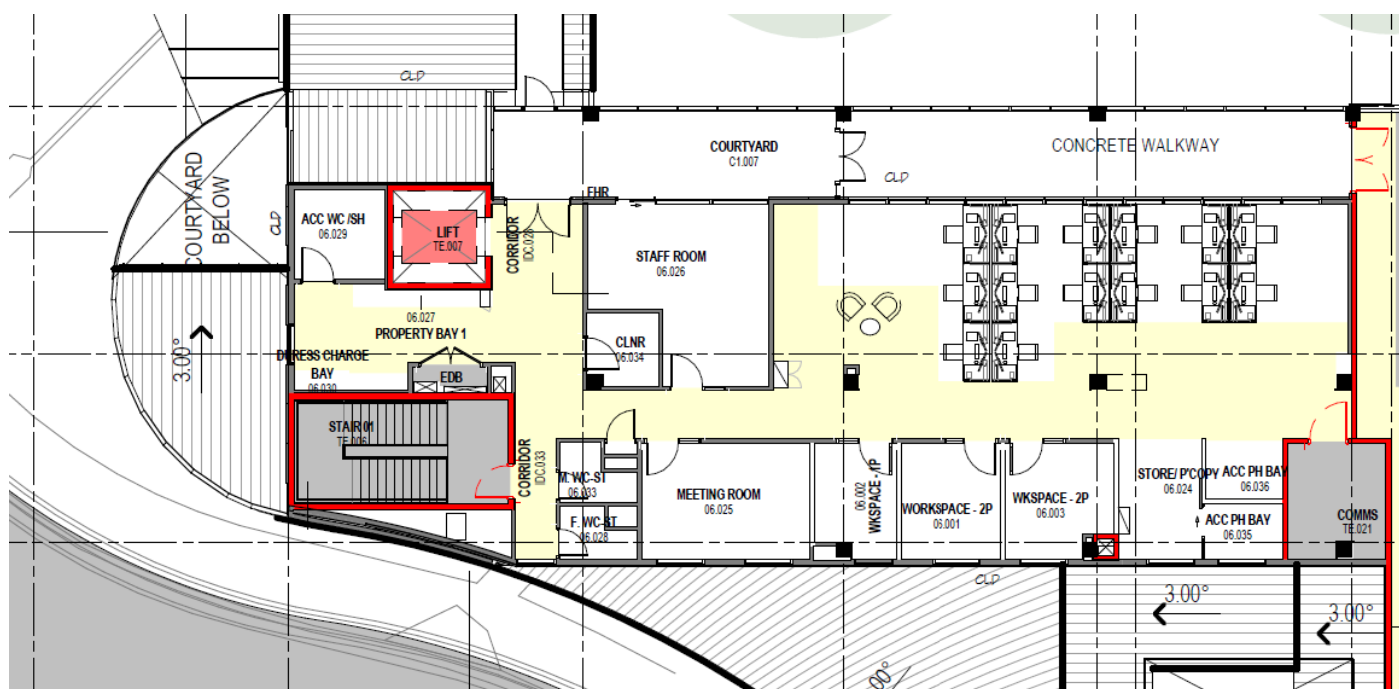


Figure 7 Section of Level 03 Floor Plan showing location of end-of-trip shower and property bay (lockers) on Level 3 and proximity to staff lift. Source: Architectural drawing A20-300(H) by STH.

Public Transport: The site is relatively well serviced by public transport, with bus stops close by and numerous services on weekdays and Saturdays. The potential small increase in public transportation demand as a result of the activity would require no change to the existing public transport systems. As discussed in the GTP, there would be an environmental benefit to encouraging staff and visitors to use public transport options in lieu of single occupied private vehicles. The small increase in demand as a result of the activity is anticipated to have no impact on public transport.

Car Parking: The proposed development of the TMHU building results in the removal of existing car parking bays located within the existing Car Park B to the west of the proposed building site, within Car Park A Zone 4 and Car Park D Zone 1 to accommodate the expansions of the car parks, and an informal parking lot on the eastern side of the proposed site. To accommodate the removed parking and account for the additional parking requirements of the new facility, two car parks are proposed to be expanded and two car parks are proposed to be constructed. The result is a loss of 111 car parking bays and the addition of 157 car parking bays. The required total for car parking bays to be added, which includes the 44 spots needed as a result of the new TMHU facility and the total of car parking bays required to be replaced due to loss, is 155 car parking bays. The outcome for the car parking is therefore a surplus of 2 beyond the required amount. The distribution of general visitor parking and dedicated staff parking would change with the redistribution of car parking bays throughout the hospital campus. The effect is an increase in staff parking and a decrease in general visitor parking. The TIA car park survey found that upwards of 30% of the users for Car Park B were staff, which provides support for an increase in staff parking (refer to the Traffic Impact Assessment at **Appendix F**). There would be no anticipated impacts in relation to the car parking since the required car parking bay numbers would be met and there is apparent need for additional staff parking.

Green Travel Plan: A Green Travel Plan (GTP) has been prepared for the activity (refer to **Appendix AC**). The GTP would promote alternative methods for travel to the Tamworth hospital campus, such as carpooling, public transit, walking, and cycling, as more sustainable and environmentally friendly options for staff and visitors. As identified in the GTP, current travel to the existing Banksia Unit is 100% travel by private car, which means there is room for improvement. However, only a small percentage of staff live within 5 km of the site, therefore, encouraging the use of carpooling and public transport may prove more useful than promoting active transport modes such as walking and cycling. The Action Plan of the GTP (refer to **Appendix AC**), describes measures that can be incorporated into the design and implemented through operational activities such as advertising and communication, staff inductions, and website content. Additionally, monitoring mechanisms are suggested for continual improvement of the GTP, which is not intended to be a one-off document. The formation of a Steering Committee (or similar) is to be formed once the TMHU is in operation for the ongoing implementation, review, and improvement of the GTP. Implementing the Action Plan described in the GTP, establishing a Steering Committee, and ensuring continued improvement of the GTP would be expected to result in an uptake in alternative travel methods, thus contributing to the sustainable initiatives of HI and having a positive impact.

Summary: The impacts resulting from the traffic, access, and parking related to the activity are generally considered to be negligible, with some elements resulting in positive contribution. Therefore, the overall impact would be anticipated to be negligible.

Mitigation Measures

The following mitigation measures would be implemented to manage impacts relating to traffic, access and parking:

- Clear signage is to be provided to direct vehicular and foot traffic to the Unit at the following locations, as appropriate:
 - The intersection of Johnston Street and Dean Street
 - The intersection of Dean Street and the 'Emergency Entrance' road
- Appropriate 'low clearance' signage is to be installed on both faces of the proposed pedestrian link bridge and in advance of the bridge in a location which will allow the driver of a large truck to turn around safely to avoid the bridge, if needed.
- An independent dilapidation survey is to be undertaken pre- and post-construction, to ensure that any undue damage attributed to the demolition and construction on the activity site can be identified and rectified.
- Establishment of a Steering Committee (or similar) to ensure successful initial implementation and ongoing implementation, review, and improvement of the Green Travel Plan (GTP) with the aim to initially meet the target of a 20% reduction of single occupancy private vehicle use. Responsibilities of the Steering Committee are outlined in the GTP (refer to **Appendix AC**).
- Clear signage should be installed to indicate the relevant restrictions for use of the various parking provisions.

6.2.2 Noise and Vibration

Questions to consider	Yes	No
Are there residential properties or other sensitive land uses or areas that may be affected by noise from the proposal during construction? (i.e. schools, nursing homes, residential areas or native fauna populations)?	✓	
Will any receivers be affected by noise for greater than three weeks?	✓	
Are there sensitive land uses or areas that may be affected by noise from the proposal during operation?		✓
Will the works be undertaken outside of standard working hours? Monday – Friday: 7am to 6pm Saturday: 8am to 1pm Sunday and public holidays: no work		✓
Will the works result in vibration being experienced by any surrounding properties or infrastructure?	✓	

Existing Environment

The activity site for the new TMHU building is located in a north central location within the existing hospital site and the car park activity sites are located in the north-east, north-west, and south-west corners of the hospital campus.

A noise survey was undertaken to quantify the existing noise environment and establish criteria for the noise emissions assessment of the activity. The prevailing background and ambient noise levels surrounding the site were determined in general accordance with the *NSW Noise Policy for Industry* (NPfI). Three unattended noise surveys were conducted from Tuesday 7 December 2021 to Friday 17 December 2021 and from Friday 3 February 2023 to Friday 10 February 2023. The locations were spread around the Tamworth hospital campus, with one located near the proposed TMHU building site, one located across Dean Street from Car Park A Zone 4, and one located at the south-east corner (refer to **Figure 5**).

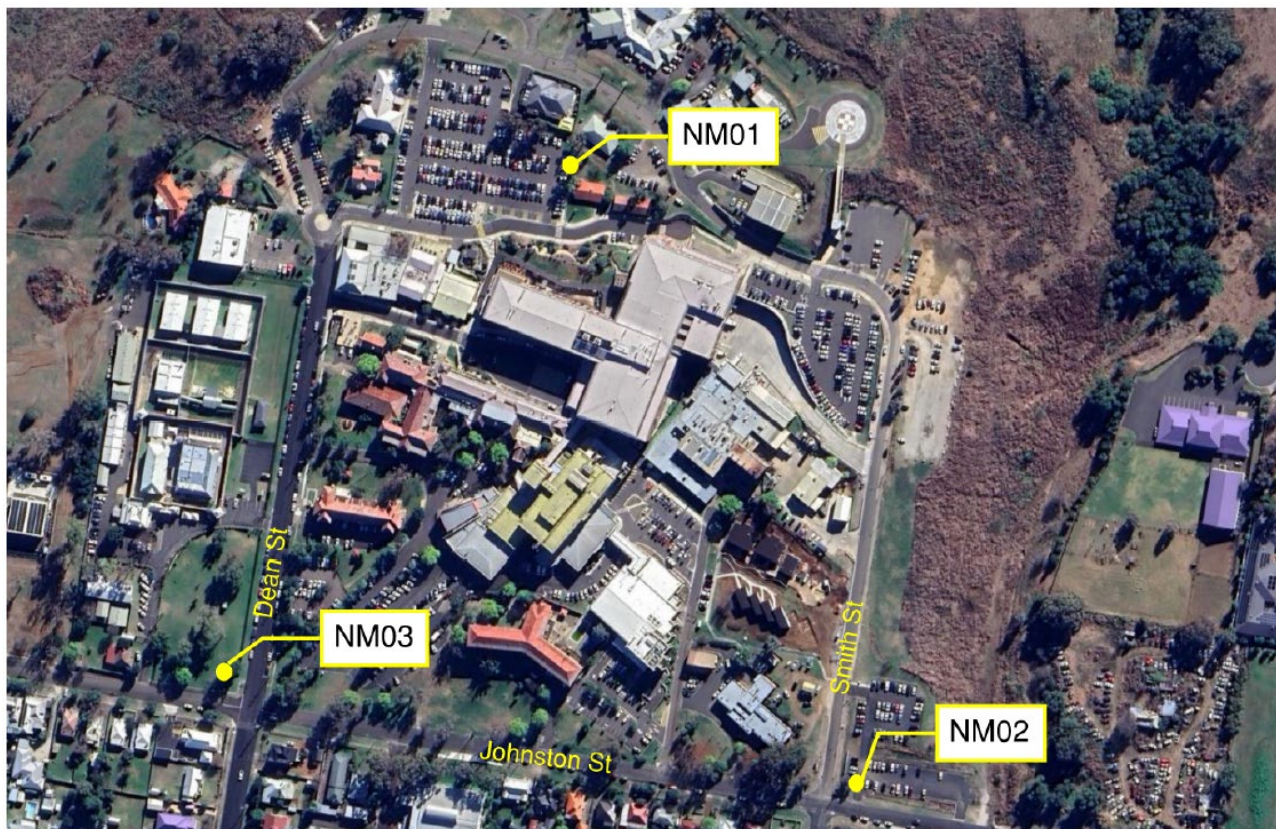


Figure 8 Unattended Noise Monitoring Locations. Source: Noise and Vibration Report by WSP, dated February 2023.

The nearest most potentially affected receivers are identified as a combination of residential, commercial, hospital, and educational classifications.

Table 11 and **Figure 6** indicate the locations of the nearest most potentially affected receivers.

Table 12 Identified nearest noise sensitive receivers. Source: Noise and Vibration Report by WSP, dated February 2023.

Receiver/ Location	Address	Type of receiver (as per NSW NPfl)
RC01	Ronald McDonald House	
RC02	Inala House	
RC03	Acute service building	
RC04	1883 Building	
RC05	Dean House Community Mental Health	
R1	131 – 147 Johnston St, North Tamworth NSW	
R2	174 Johnston St, North Tamworth NSW	
R3	117 Johnston St, North Tamworth NSW	
R4	103 - 115 Johnston St & 26 Dean St, North Tamworth NSW	
R5	7-11 Monterey St, North Tamworth NSW	
E1	University of Newcastle Department of Rural Health Tamworth Education Centre: 114/148 Johnston St, North Tamworth NSW	
E2	McCarthy Catholic College: Tribe St, North Tamworth NSW	
E3	TAFE NSW Tamworth, North Tamworth NSW	

Receiver/ Location	Address	Type of receiver (as per NSW NPfl)
C1	Tamworth Correctional Centre: 152-160 Johnston St, North Tamworth NSW	
C2	151-153 Johnston St, North Tamworth NSW	



Figure 9 Project site and sensitive receiver locations as detailed in Table 11. Source: Noise and Vibration Report by WSP, dated February 2023.

The Acoustic REF Report is provided at **Appendix AB**.

Impact Assessment

Construction

The construction activities are divided into two stages, which are the Early Works Stage and the Main Works Stage. The Early Works will be carried out over a 22-week period and the Main Works will be carried out over an 80-week period.

The construction hours for the activity would be as per standard hours, as defined in the Construction Noise and Vibration Guideline (Roads and Maritime 2016), which are:

- Monday to Friday: 7am to 6pm.
- Saturday: 8am to 1pm.
- Sundays and Public Holidays: No works.

Construction works would need to occur in continuous blocks not exceeding three hours each with a minimum respite from those activities and works of not less than one hour between each block.

No work will be permitted outside the normal working hours unless appropriate written approval has been obtained.

Potential noise impacts associated with construction has been conservatively assessed and potential maximum noise impact at the nearest residence has been used for identifying the most appropriate management and mitigation options throughout the construction works. The Acoustic REF Report (refer to **Appendix AB**) has determined that during both

Early works and Main works construction stages, maximum predicted noise levels will exceed construction noise levels at the most exposed receivers to the works areas. In particular, the residential receivers R1, R3, and R4 shown in **Figure 6** are predicted to be “highly noise affected” during the construction works for Car Park A Zone 4. Therefore, the construction works should have a detailed noise and vibration mitigation and management plan in place to minimise the impacts on sensitive receivers.

Operational Noise

The major mechanical plant items will be located on Level 3 of the TMHU building. Most of the plant will be enclosed within a plantroom with acoustic louvers installed around the perimeter. Due to the requirement for heat rejection, the pumps and chillers will not be fully enclosed and will be open-air. These open-air units have the highest potential of contributing to operational noise. The Acoustic REF Report (refer to **Appendix AB**) provides conservative calculations of the anticipated noise levels associated with the open-air plant. The report concluded that in a worse-case scenario with no mitigation measures the predicted noise levels would comply with relevant criteria at the nearest receivers. Once design development has been completed, the predicted noise levels are expected to be lower than those presented in the report due to more precise assumptions and the addition of mitigation measures.

Given the low volume of operational traffic to be generated from the activity, the Acoustic REF Report (refer to **Appendix AB**) anticipates that any operational traffic noise increase will be minimal and fall within the 2 dBA increase limit as outlined in the NSW Road Noise Policy, and no increase in noise impact is expected.

Sleep disturbance noise emissions were assessed as part of the Acoustic REF Report (refer to **Appendix AB**) and calculated the maximum noise levels for peak noise events from car door slams in the car parks. The report concluded the predicted noise levels would exceed the sleep disturbance criteria at the receiver location R1 (refer to **Figure 6**) nearest Car Park A Zone 4, however, concludes the predicted internal maximum noise levels would fall within the NSW Road Noise Policy noise level range where residents are unlikely to awaken from sleep. Therefore, the predicted sleep disturbance from the ongoing operational use of the activity is expected to be minimal.

Given the predicted noise levels for the operational noise, and their conservative nature, it is unlikely the on-going operation of the TMHU would generate significant noise impacts. Additional mitigation measures that will be detailed during design development would result in reducing any impacts further.

Vibration

Vibration can result in disruption to human comfort and can cause cosmetic damage to buildings if they are located within minimum working distances. The Acoustic REF Report (refer to **Appendix AB**) concluded that the vibration impact for off-site sensitive receivers or structures is to be considered minimal. Hospital structures, however, that are nearest to the construction sites may be located within the minimum working distance for cosmetic damage from some plant, such as vibratory rollers and piling rigs. A detailed noise and vibration management plan should be implemented to protect structures nearest to proposed construction.

Mitigation Measures

The following mitigation measures would be implemented to manage impacts relating to noise and vibration:

- Prior to commencement of construction works, a Construction Noise and Vibration Management Plan (CNVMP) is to be prepared and implemented in accordance with the requirements of the ICNG. The CNVMP would take into consideration measures for reducing the source noise levels of construction equipment by construction planning and equipment selection where practicable. The CNVMP should include a detailed noise assessment updated to consider potential noise impacts at all affected properties.

6.2.3 Air Quality and Energy

Questions to consider	Yes	No
Could the works result in dust generation?	✓	
Could the works generate odours (during construction or operation)		✓
Will the works involve the use of fuel-driven heavy machinery or equipment?	✓	
Are the works located in an area or adjacent to land uses (e.g. schools, nursing homes) that may be highly sensitive to dust, odours, or emissions?		✓

Existing Environment

The activity will occur within the hospital campus setting, with rural and residential land surrounding the boundaries of the site. The air quality within the area is generally considered good. Hospitals are sensitive to significant increases in dust and odour generation given the nature of their operation and the people who use these facilities. Dust and odour mitigation measures will need to be in place to ensure any increases are kept within acceptable standards.

Impact Assessment

The activity involves a range of earthworks and construction activities. During the short-term construction period, the activity has potential to generate dust and may cumulatively contribute to generating exhaust emissions locally through:

- Demolition, excavations, 'cutting' of hardstand areas, materials transport and construction activities, resulting in dust generation;
- Exhaust emissions from machinery and associated transportation; and
- Material blown from the site during high winds.

The activity may temporarily affect air quality through exhaust emissions from machinery and associated transportation. Furthermore, there is potential that emissions and dust generated from the works may result in air quality impacts to construction workers and adjacent sensitive receivers. The dust generated throughout the demolition may contain friable asbestos (although minimal amounts) and therefore it is likely that air monitoring will be required for the duration of the works that require removal of on any identified asbestos containing materials.

Given the temporary duration of the works and nature of the activity, the level of potential impact is not considered significant and can be managed or minimised through implementation of safeguards and management measures.

The activity would contribute to greenhouse gas emissions to a minor extent via the emissions from construction equipment and traffic, as well as the consumption of materials requiring carbon emissions and the removal of vegetation that may otherwise act as a carbon sink. Given the scale of the works however, the influence on greenhouse gas emissions would be negligible. However, it is appropriate to implement measures that can reduce or minimise such effects.

Mitigation Measures

The following mitigation measures would be implemented to manage impacts relating to air quality and energy:

- Air monitoring will be required throughout the demolition works.
- A Construction Environmental Management Plan will be completed prior to commencement of works on site. Amongst other things, it will address the minimisation and management of dust, odours and emissions during construction.
- No materials will be burnt on site.
- Vehicles transporting waste or other materials that may produce dust will be covered during transportation.
- Vehicles, machinery and equipment will be maintained in accordance with manufacturer's specifications in order to meet the requirements of the Protection of the Environment Operations Act 1997 and associated regulations.
- Vehicles and equipment will be switched off when not operating.
- Debris and waste will be immediately collected into appropriate storage facilities and removed from the site as soon as practical to ensure light-weight material is not dispersed by wind gusts.
- Stockpiles and exposed soils will be covered, stabilised or dampened to reduce incidence of dust dispersal.
- Appropriate practices are to be in place to minimise dust or fibre generation that could be dispersed during demolition.
- The new building, including appliances, fixtures and fittings, would be meet relevant water, thermal and energy efficiency standards.

6.2.4 Soils and Geology

Questions to consider	Yes	No
Will the works require land disturbance?	✓	
Are the works within a landslip area?		✓
Are the works within an area of high erosion potential?		✓
Could the works disturb any natural cliff features, rock outcrops or rock shelves?		✓
Will the works result in permanent changes to surface slope or topography?		✓
Are there acid sulphate soils within or immediately adjacent to the boundaries of the work area? And could the works result in the disturbance of acid sulphate soils?		✓
Are the works within an area affected by salinity?		✓
Is there potential for the works to encounter any contaminated material?	✓	

Existing Environment

Geotechnical Investigations were undertaken for the early works (carparking areas) and the main works (Mental Health Building) by Regional Geotechnical Solutions (refer **Appendix P1, P2, P3 and P4**). The geotechnical investigations found that the site is located within undulating residual topography on the mid-slope of a south facing hill. The surrounding slopes generally grade down to the south at about 5° to 8°. Various cut/ fill land modifications have been undertaken across the site to create level pads for the four masonry buildings within the site. All buildings were of masonry construction with slab on ground. The structures appeared to be in fair condition with only very minor cracking observed in the slabs. The adjoining existing carpark B area (to be utilised as part of the new building) comprises an asphalt wearing surface. The carpark has been cut into the slope. There are brick retaining walls running along the northern and eastern carpark boundaries. The carpark is graded to the west. There are minor garden beds vegetated with grass running along the northern boundary, and through the central portion of the carpark. Concrete curb and gutter are present around the boundary of the carpark.

The carparking areas were also investigated as part of the geotechnical investigations (refer **Appendix P3 and P4**). The northern site is located on the mid slope of the south facing hill. Some cut/ fill earthworks have been undertaken to create flat pads for the two masonry buildings located to the east of the proposed development area. Vegetation comprises grass and scattered trees, and there is a small garden bed in the southwest corner. There is an existing sealed on-grade carpark to the west of the site off the access road that wraps around the hospital. The carpark is in poor condition with multiple areas of cracking observed.

The southern site is located on the foot slopes of the south facing hill. The area is vacant. There is an on-grade sealed carpark to the north and a hospital building to the northeast. Vegetation comprises grass and scattered trees. There is a large garden bed in the southwest corner. There is a sealed on-grade carpark to the north of the site that is in poor condition. The carpark appears to have had multiple phases of repatching. Large asphalt patches down the centre of two arms of the carpark are in good condition.

The north-eastern carpark (Carpark D) is located within undulating residual topography on a south facing hill. The surrounding slopes generally comprise grades of about 5° to 8°. The proposed carpark extension is in the northeast corner of the hospital campus. The existing carpark and proposed extension footprint are in an area of cut/ fill earthworks undertaken to create a level area. The extension area comprises a maintained grass area directly adjacent to the existing carpark, and an unsealed area that is currently used as an unofficial carpark. The area upslope of the proposed development is densely vegetated with shrubs. There are signs of pavement deformation in the existing sealed carpark including longitudinal cracking and deformation to the curb.

The geotechnical investigations indicate that:

- The 1:250,000 Geology Map for Tamworth indicates the site is underlain by the Timor Limestone Member comprising cherty argillite, limestone, greywacke, and mudstone.
- The subsurface profile as uncontrolled fill to depths of up to 1.1 m covering natural colluvial soil grading into highly to extremely weathered siltstone/sandstone at variable depths.
- The site is classified as Class P in accordance with AS 2870. It recommends that all structural footings be extended to found within the underlying very stiff residual and colluvial soils.

- The depth to bedrock varies from 2.3 to 6.0 m below existing ground level.
- No groundwater was encountered within the depth of the investigation.

Impact Assessment

Some excavation would be required to accommodate the activity. The Geotechnical Investigations notes that there is no known occurrence of acid sulphate soils. Potential impacts from the activity to Soils and Geology that could arise from the disturbance of soils and loss of ground cover which could result in erosion and sedimentation impacts. A sediment and erosion control plan, in accordance with the Landcom/ Department of Housing Managing Urban Stormwater, Soils and Construction Guidelines (the Blue Book), would be implemented for the works to control and minimise the risk of erosion and sedimentation impacts.

The Geotechnical Investigations Reports did not identify any specific geotechnical constraints that would create significant impediments for the proposed activity. The recommendations contained in the Geotechnical Investigation Reports (refer to **Appendix P**) provide specific construction and design requirements for the proposed works in relation to, geotechnical considerations, earthworks and footings and foundation design. These recommendations would be taken into consideration during the detailed design and construction phases of the project.

Refer to **Section 6.2.13** in relation to potential site contamination.

Mitigation Measures

The following mitigation measures would be implemented to manage impacts relating to soil, erosion and sedimentation:

- Erosion and sediment controls would be implemented in accordance with the Landcom/ Department of Housing Managing Urban Stormwater, Soils and Construction Guidelines (the Blue Book).
- Works would only commence once all erosion and sediment controls have been established. The controls would be maintained in place until the works are complete and all exposed erodible materials are stable.
- Erosion and sedimentation controls would be checked and maintained (including clearing of sediment from behind barriers) on a regular basis (including after any precipitation events) and records kept and provided on request.
- All sediment control measures would be checked and repaired or re-installed (if required) if heavy rainfall was forecast.
- Imported materials would be sourced as clean-fill from an approved site.
- Disturbance of natural sediments and vegetation would be minimised.
- Implement the recommendations contained in the Geotechnical Assessments prepared by Regional Geotech Solutions (refer to **Appendix P**).

6.2.5 Hydrology, Flooding and Water Quality

Questions to consider	Yes	No
Are the works located near a natural watercourse?		✓
Are the works located within a floodplain?		✓
Will the works intercept groundwater?		✓
Will a licence under the <i>Water Act 1912</i> or the <i>Water Management Act 2000</i> be required?		✓

Existing Environment

The site is located approximately 240 m west of the nearest watercourse (Spring Creek). No groundwater seepage was encountered in boreholes during the geotechnical investigations. Based on review of the Tamworth City-wide Flooding Investigation (May 2019), the site is not identified as flood prone. Within the activity area, existing stormwater drainage includes stormwater drainage pits and underground drainage system.

Impact Assessment

Potential impacts that could arise from the activity generally relate to the disturbance of soil and chemical spills during construction that may enter the public stormwater system and potentially make their way into natural waterways.

The Desktop Groundwater Assessment (refer **Appendix Q**) indicates that the works are unlikely to impact on groundwater. Adequate erosion and sediment control measures would be proposed and implemented. No groundwater seepage was encountered in the boreholes during the geotechnical investigations, during and on completion of drilling. It is therefore unlikely that the proposed activity will intercept or impact on groundwater.

Mitigation Measures

The following mitigation measures would be implemented to manage impacts relating to hydrology, flooding and water quality:

- A spill containment kit would be available at all times. All personnel would be made aware of the location of the kit and trained in its effective deployment.
- Erosion and sediment controls would be implemented in accordance with the Landcom/ Department of Housing Managing Urban Stormwater, Soils and Construction Guidelines (the Blue Book).
- The development would be undertaken in accordance with a stormwater management plan prepared for the activity.

6.2.6 Visual Amenity

Questions to consider	Yes	No
Are the works visible from residential properties, or other land uses that may be sensitive to visual impacts?		✓
Will the works be visible from the public domain?	✓	
Are the works located in areas of high scenic value?		✓
Will the works involve night work requiring lighting?		✓

Existing Environment

The activity is located within an existing hospital campus setting, comprising various built form and infrastructure, generally consistent with a regional hospital. The height of the new mental health unit will be less than 15 meters above natural ground level and will be a maximum of three storeys. The new facility will sit behind the main hospital building and will not be prominent from any main roads (only the hospital ring road), public viewing areas or residential areas.

Impact Assessment

The activity will require the establishment of a construction site, including the presence of works crew, plant and equipment; representing short-term, localised changes to the visual environment. Upon completion of the activity, the visual setting of the site will be moderately changed, however given the site context and separation from adjoining land uses, there is unlikely to be any significant visual change from external surrounding land uses. Importantly, there are no proximal residential developments. Residential areas are distant from the site and have limited to no direct exposure to the existing health campus or the proposed extension development site. Land uses within the immediate locality are not sensitive to visual impact and are also substantially distant from the proposed development site to mitigate any potential impact. Most surrounding development would have limited, if any, direct views of the proposed activity.

For staff and visitors of the hospital and health campus, the development will create a notable and large visual change through the introduction of a new three-storey building. However, staff, users and visitors of the hospital would expect that they are attending a busy and growing regional hospital. The main aspect in terms of on-site visual amenity (compared to off-site visual amenity as discussed previously) is the design response. The Proposal provides for a design response that will ensure an adequately visually aesthetic and functional built form outcome that caters for its role as a hospital.

The key outcome for material selection has been the co-design engagement on the existing scheme which selected local blue stone from Tamworth, landscape species selection and natural gabion walls. These concepts will all be implemented into the new scheme. The façade panelling articulation of the unit is integrated into the existing Acute Services building while having its own expression in the material palette and riverside colours discussed through the

co-design engagement. The focus is to create the best possible surroundings for patients as well as staff, by ensuring ample light throughout the building, external outlook, access to nature and outdoor spaces. This allows consumers and staff to connect visually with ground, sky and community, acknowledging key connection with country principles.

Overall, the activity would result in a positive permanent variation to the visual environment of the hospital campus, with the addition of greenspaces and landscaping adding to the external visual environment or surrounding viewpoints. The proposed landscaping would expand on the existing Aboriginal garden and provide additional outdoor amenities to the hospital campus for patients, their families, and staff to enjoy, and adding to the health and wellbeing of users through access to natural elements (refer to **Appendix H** and **Appendix I**). The new carparks would also have landscaping to soften the impact.

The proposal would not result in any unreasonable environmental amenity impacts to adjoining properties, such as overshadowing, sunlight access reduction, privacy issues or visual bulk (refer to **Appendix H**).

Mitigation Measures

The following mitigation measures would be implemented to manage impacts relating to Visual Amenity:

- A Construction Environmental Management Plan is to be prepared prior to commencement of works.
- The work site is to be kept clean and orderly. All waste would be removed from the site at completion of works.
- The areas where demolition occurs is to be cleaned up and restored to a suitable standard following the removal of the structure.
- Removal of vegetation is to be kept to a minimum.

6.2.7 Aboriginal Heritage

Questions to consider	Yes	No
Will the activity disturb the ground surface or any culturally modified trees?		✓
Are there any known items of Aboriginal heritage located in the works area or in the vicinity of the works area (e.g. previous studies or reports from related projects)?		✓
Are there any other sources of information that indicate Aboriginal objects are likely to be present in the area (e.g. previous studies or reports from related projects)?		✓
Will the works occur in the location of one or more of these landscape features and is on land not previously disturbed? <ul style="list-style-type: none"> • Within 200m of waters. • Located within a sand dune system. • Located on a ridge top, ridge line or headland. • Located within 200m below, or above a cliff face. • Within 20m of, or in a cave, rock shelter or a cave mouth 		✓
If Aboriginal objects or landscape features are present, can impacts be avoided?		n/a
If the above steps indicate that there remains a risk of harm or disturbance, has a desktop assessment and visual inspection been undertaken?		n/a
Is the activity likely to affect wild resources or access to these resources, which are used or valued by the Aboriginal community?		✓
Is the activity likely to affect the cultural value or significance of the site?		✓

Existing Environment

The proposed activity is situated within the highly disturbed and developed Tamworth Hospital site. The subject area is located on a mid-slope, within the Nandewar bioregion, and primarily within the Orchard Creek Soil Landscape (oc). The Orchard Creek Soil Landscape is described as gently to moderately inclined foot slopes on alluvium and colluvium terrain. The subject area is not currently located in proximity to any waterways or streams. The subject area is located approximately 311m to the east of Spring Creek. Spring Creek is a first-order ephemeral stream which drains into the Peel River, which is approximately 1.9 km south-west from the subject area. Historical activities, including vegetation clearance, ground levelling and the construction of the existing buildings are determined to have caused a high level of

ground disturbance across the subject area, which has therefore significantly reduced the likelihood of Aboriginal objects being retained.

Impact Assessment

An Aboriginal Objects Due Diligence Assessment was prepared by Urbis to support this REF and act as evidence of the Due Diligence Process having been applied to the subject area (refer to **Appendix R**). The report has found no record of Aboriginal Sites or Places within the subject area. The site is disturbed land. The assessment has determined that no further archaeological assessment of the subject area is required in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects* (DECCW 2010). However, discovery of cultural material during development activities cannot be ruled out and precautionary protocols should be in place during works should there be unexpected finds.

The Due Diligence Assessment found that:

- No Aboriginal Objects or Aboriginal places are registered within the subject area.
- No previous Aboriginal archaeological investigations have been identified that directly address the subject area.
- Previous investigations of sites with similar landscape conditions to the subject area (i.e. shallow soils underlying hard residual clay) have had all previously recorded Aboriginal Objects found along the ground surface. There is no evidence to suggest that Aboriginal Objects could be retained in subsurface residual clay deposits.
- The predictive model demonstrate that evidence of high-density Aboriginal occupation is likely to be in areas with archaeologically sensitive landscape features, such as permanent freshwater sources. Evidence of low-density Aboriginal occupation is likely to be retained in areas of minimal disturbance and in proximity to ephemeral water sources. As such the subject area is not located in proximity to any water source and is highly disturbed, which significantly reduces the likelihood of Aboriginal Objects being retained.
- A recent geotechnical investigation conducted at the Tamworth Base Hospital, which contains boreholes within the southern section of the subject area found that the subject area contains topsoil/ filling of approximately 0.2-0.3m (20-30 cm) which overlies hard residual clay (i.e., gravelly sandy clay – anticipated to be below 1.2-2.85m). The shallow topsoil/ filling soil profile of 20-30 cm would have been truncated while the hospital was constructed and is most likely deposited fill and unlikely to retain Aboriginal objects.
- As there are no known Aboriginal sites within the subject area and historical human activity has changed the land's surface removing any likelihood for Aboriginal objects, the Due Diligence Code does not require further archaeological assessment of the subject area.

The Due Diligence Assessment recommended:

- The report should be kept as evidence of the Due Diligence Process having been applied to the subject area.
- No further archaeological assessment of the subject area is required in accordance with the Due Diligence Code. An Aboriginal Cultural Heritage Assessment will not be required. .
- The activity may proceed with caution subject to archaeological chance finds and human remains procedures being implemented and followed.

It is therefore unlikely that the proposed activity will have any significant impact on Aboriginal Cultural Heritage.

Mitigation Measures

The following mitigation measures would be implemented to avoid and manage impacts relating to Aboriginal Heritage:

- All relevant personnel, contractors and subcontractors would undergo an Aboriginal cultural heritage induction prior to any ground disturbing works. The induction would outline the legal obligations for Aboriginal cultural heritage under the *National Parks and Wildlife Act 1974* and *Heritage Act 1977*.
- Should any archaeological deposits be uncovered during any site works, the following steps must be followed:
 1. All works within the vicinity of the find must immediately stop, and the location of the find cordoned-off with signage installed to avoid accidental harm to the archaeological resource. The find must not be moved 'out of the way' without assessment.

2. The site supervisor or another nominated site representative must contact either the project archaeologist (if relevant) or Heritage NSW (Enviroline 131 555) to contact a suitably qualified archaeologist.
 3. The nominated archaeologist must examine the find, provide a preliminary assessment of significance, record the item and decide on appropriate management measures. Such management may require further consultation with Heritage NSW, preparation of a research design and archaeological investigation/salvage methodology and registration of the find with the Aboriginal Heritage Information Management System (AHIMS).
 4. Depending on the significance of the find, reassessment of the archaeological potential of the subject area may be required and further archaeological investigation undertaken.
 5. Reporting may need to be prepared regarding the find and approved management strategies.
 6. Works in the vicinity of the find can only recommence upon receipt of approval from Heritage NSW.
- In the unlikely event that human remains are uncovered during the proposed works, the following steps must be followed:
 1. All works within the vicinity of the find must immediately stop and the location should be cordoned-off with signage installed to avoid accidental harm to the remains.
 2. The site supervisor or other nominated manager must notify the NSW Police and Heritage NSW (Enviroline 131 555).
 3. The find must be assessed by the NSW Police, which may include the assistance of a qualified forensic anthropologist.
 4. Management recommendations are to be formulated by the NSW Police, Heritage NSW and site representatives.
 5. Works are not to recommence until the find has been appropriately managed.

6.2.8 Non-Aboriginal Heritage

Questions to consider	Yes	No
Are there any heritage items listed on the following registers within or in the vicinity of the work area? NSW heritage database (includes section 170 and local items) Commonwealth EPBC heritage list?	✓	
Will works occur in areas that may have archaeological remains?		✓
Is the demolition of any heritage occurring?		✓

Existing Environment

Tamworth Base Hospital is listed as a Heritage Item on Schedule 5 of the Tamworth Regional Local Environmental Plan 2010 as “Main Group of Hospital Buildings” (Item #I361) and located at 31 Dean Street (Lot 2 of Deposited Plan 533835; Lot 99 and part Lot 109 of Deposited Plan 753848). The “Main Block” is also listed on the Department of Health Section 170 Heritage Register and is listed on the (now defunct) Register of the National Estate. The site is not on the State Heritage Register.

The group of 22 *Phoenix canariensis* (Canary Island Date Palms) located within Car Park A zone 4 are a remnant of the original avenue planting that defined the entry drive and are listed on the Tamworth Significant Tree Register.

Impact Assessment

A search of the NSW Heritage’s State Heritage Inventory in November 2022 indicates one Heritage item occurs in the vicinity of the project area; Tamworth Hospital (Main Block only), and no items listed within or in the vicinity of the project area included on the Commonwealth Heritage List (refer to **Appendix S**).

A Heritage Impact Statement (HIS) has been prepared by Urbis (refer to **Appendix E**) which provides an assessment of the potential heritage impact of the proposed works on the hospital site and locally significant buildings in the vicinity. The proposal requires the demolition of three small, non-significant buildings, which have no heritage significance. All heritage listed and significant buildings within the hospital grounds, will be retained. The proposed new

mental health building will be located to the north of the heritage and significant buildings and not impact on views or setting.

The proposed new Mental Health Building is contemporary in design and will continue the contemporary layer of development established by the adjacent new Acute Services Building. The proposed building design, form and scale will add to and complement the contemporary setting of the northern extent of Tamworth Base Hospital guided by the design of the adjacent new Acute Services Building.

The proposed upgrade to the existing roadway to facilitate the construction of the Carpark A (Zone 3 Road) will provide for parallel parking on both sides of the internal road. Whilst this is adjacent to Dean House and the 1938 addition, which are identified as having some significance, it is removed from the earlier and more significant 1884 building. The roadway already provides unallocated parking and the proposed carparking spaces would have no impact on the significance of the buildings in proximity or on views towards the significant buildings.

The proposed upgrades to Car Park A Zone 4 would require the removal of two of the Canary Island Date Palm trees that are part of the early avenue planting that provides a distinctive landmark element delineating the original main approach to the hospital. However, Urbis consider that the removal of these two plantings does not affect the overall interpretation of the original avenue and will not have a significant impact (refer to **Appendix E**).

The heritage assessment has concluded that the proposed works would not impact on any heritage items or related significance. Standard unexpected finds and stop-works procedures would be followed as required.

Mitigation Measures

The following mitigation measures will be implemented in order to prevent adverse impacts to any items of non-Aboriginal heritage:

- Standard unexpected finds and stop-works procedures are to be in place and implemented if unexpected finds occur during the works. If unexpected archaeological remains or relics are uncovered during the works, all works must cease in the vicinity of the material/find. Council's heritage adviser, and if necessary, Heritage NSW and any other relevant authority, will be contacted. Work would not proceed in the vicinity of the find until appropriate clearance is given.

6.2.9 Ecology

Questions to consider	Yes	No
Could the works affect any <i>Environmental Protection and Biodiversity Conservation Act 1999 (Cth)</i> listed threatened species, ecological community or migratory species?		✓
Is it likely that the activity will have a significant impact in accordance with the <i>Biodiversity Conservation Act (2016)</i> ? In order to determine if there is a significant impact, the REF report must address the relevant requirements of Section 7.2 of the BC Act: <ul style="list-style-type: none">• Section 7.2 (a) – Test for significant impact in accordance with section 7.3 of the BC Act.• Section 7.2 (c) – it is carried out in a declared area of outstanding biodiversity value.		✓
Could the works affect a National Park or reserve administered by EES?		✓
Is there any important vegetation or habitat (i.e. Biodiversity and Conservation SEPP) within or adjacent to the work area?		✓
Could the works impact on any aquatic flora or habitat (i.e. seagrasses, mangroves)?		✓
Are there any noxious or environmental weeds present within the work area?		✓
Will clearing of native vegetation be required?	✓	

Existing Environment

The following desktop review was completed:

- A search of the BioNet Wildlife Atlas (10 km x 10 km grid centred on the site), completed February 2023;
- A search of the Protected Matters Search Tool for Matters of National Environmental Significance within a 10 km radius of the site, completed February 2023;

- A search of the NSW Department of Primary Industries (Fishing and Aquaculture) spatial data centred on the site and immediate surroundings, completed February 2023.

The Biodiversity Assessment Report is provided at **Appendix T**.

The first site assessment undertaken as part of the ecological assessment was undertaken by Environmental Scientist Theresa Choi on 16 July 2021 and the second site assessment by Ecologist Ben Millan on 22 December 2022 using the following methodology:

- Walking survey to identify vegetation types and identify threatened flora or ecological communities listed in the BC Act or EPBC Act;
- Identification of hollow-bearing trees (or other significant habitat features) and potential habitat for threatened fauna;
- Identification of native tree and associated groundcover requiring removal for the works; and
- Opportunistic fauna survey.

While the survey only provides a 'snapshot' of fauna usage, the techniques utilised provide suitable sampling for a range of fauna with an emphasis on targeting threatened species most likely to occur within the project footprint. Based on local fauna records and vegetation/ habitat present at the site, predictions of fauna usage can be made with a high level of confidence. Given the minor nature of the activity, within a substantially modified site, the scope of assessment is considered adequate.

Vegetation at the site is highly modified with planted native and exotic trees and a highly disturbed ground cover. Vegetation at the site is not characteristic of any Threatened Ecological Communities (TECs).

No threatened flora or fauna species listed under the BC Act or the EPBC Act were observed within the survey area. However, the survey area does provide limited, low quality foraging habitat for the following threatened fauna species (refer to **Appendix T**), including:

- Little Lorikeet (*Glossopsitta pusilla*) and Dusky Woodswallow (*Artamus cyanopterus cyanopterus*) – Marginal foraging habitat on site associated with Eucalyptus trees.
- Squirrel Glider (*Petaurus norfolcensis*) – Eucalyptus species are present on site and contribute nectar and pollen to the diet of Squirrel Gliders.
- Koala (*Phascolarctos cinereus*) – The Secondary Koala feed trees including Yellow Box (*Eucalyptus melliodora*) and Apple Box (*Eucalyptus bridgesiana*) were identified within the site provide potential foraging habitat for the species.

Grey-headed Flying-fox (*Pteropus poliocephalus*) – Eucalyptus species are present on site contribute nectar and pollen to the diet of Grey-headed flying foxes.

No primary Koala feed trees were identified within the site. Secondary Koala feed trees were identified within the site and are proposed to be impacted, however, no signs of Koalas present were found during the surveys (refer to **Appendix T**).

Eleven hollow-bearing trees were identified within the site and three hollow-bearing trees are required for removal as a result of the activity.

Impact Assessment

Arboricultural Impact Assessment reports prepared by ArborSafe (refer **Appendix C** and **Appendix D**) assessed 73 trees on the site. The reports identify a total of 31 trees (including 14 native trees; refer to **Table 11**) within the proposed activity site, comprised of the new TMHU building site and four car parks, that would need to be removed to accommodate the activity. None of the trees have been assessed as being of high retention value.

Table 13 **Trees Proposed for Removal**

Tree no.	Botanical Name	Common Name
5	<i>Olea europaea</i>	European Olive
6	<i>Olea europaea</i>	European Olive
7	<i>Cedrus deodara</i>	Himalayan Cedar
8	<i>Eucalyptus sideroxylon</i>	Red Ironbark

Tree no.	Botanical Name	Common Name
9	<i>Eucalyptus sideroxylon</i>	Red Ironbark
10	<i>Eucalyptus sideroxylon</i>	Red Ironbark
11	<i>Melaleuca armillaris</i>	Bracelet Honey Myrtle
12	<i>Melia azedarach</i>	White Cedar
13	<i>Tamarix sp.</i>	Salt Cedar
14	<i>Eucalyptus sideroxylon</i>	Red Ironbark
15	-	Dead tree
16	<i>Eucalyptus sideroxylon</i>	Red Ironbark
17	<i>Acacia pendula</i>	Weeping Myall
18	<i>Eucalyptus bridgesiana</i>	Apple Box
21	<i>Eucalyptus sp.</i>	Eucalypt
26	<i>Eucalyptus melliodora</i>	Yellow Box
28	<i>Ulmus parvifolia</i>	Chinese Elm
29	<i>Schinus areira</i>	Peppercorn
31	<i>Pistacia chinensis</i>	Chinese Pistachio
42	<i>Grevillea robusta</i>	Silky Oak
45	<i>Phoenix dactylifera</i>	Date Palm
47	<i>Brachychiton populneus</i>	Kurrajong
48	<i>Ulmus parvifolia</i>	Chinese Elm
49	<i>Cedrus deodara</i>	Himalayan Cedar
50	<i>Celtis sinensis</i>	Chinese Hackberry
52	<i>Schinus areira</i>	Peppercorn
60	<i>Phoenix dactylifera</i>	Date Palm
63	<i>Jacaranda mimosifolia</i>	Jacaranda
65	<i>Lagunaria patersonii</i>	Norfolk Island Hibiscus
66	<i>Jacaranda mimosifolia</i>	Jacaranda
73	<i>Pistacia chinensis</i>	Chinese Pistachio

Whilst the proposed activity will require direct removal of 31 planted trees at the THMU building site, impacts on biodiversity are likely to be limited to the removal of trees within the development footprint, and no other vegetation would be affected. The loss of trees and vegetation across the activity site is considered to be not significant. The addition of plantings related to the proposed atrium, courtyards, and landscaping would increase the amount of trees and vegetation on site, including adding native vegetation, resulting in a positive impact on biodiversity. Operation of the proposal is unlikely to result in any significant impacts to biodiversity at the site or in a local context (**Appendix T**).

Three hollow-bearing trees will require removal as a result of the Activity, with the total number of hollows expected to be impacted being:

- 10 small hollows.
- 3 medium hollows.
- 5 large hollows.

Although the removal of hollow-bearing trees is negative, the incremental and cumulative habitat loss is not significant given the existing modified state of the hospital campus. Mitigation measures related to the hollow-bearing tree removal in place will reduce the risks of impact on local fauna.

Mitigation Measures

The following mitigation measures would be implemented to avoid and manage impacts on existing vegetation within the activity area:

- The 31 trees to be removed are required to be replaced on a one-to-one basis. The location for the replanting will be within the landscaping of Mental Health Unit and in the wider Tamworth Hospital site.
- Implement the measures detailed in the Arboricultural Impact Assessment reports (**Appendix C** and **Appendix D**) and the Biodiversity Assessment Report (**Appendix T**).
- All trees to be retained require protection during the construction stage. Tree protection measures generally include a range of:
 - Activities restricted within the TPZ.
 - Protective fencing.
 - Trunk and ground protection.
 - Tree protection signage.
 - Involvement from the project arborist.
 - Project milestones.
 - Compliance reporting.
- Where generic tree protection measures can be undertaken as per the controls outlined in this report, no further arboricultural supervision should be required until post project (Final) sign-off (refer to Arboricultural Impact Assessments in **Appendix C** and **Appendix D**).
- Where there are variations to project scope impacting generic controls, input from the project arborist should be sought in advance of works.
- In relation to the car park locations, trees 46, 51, 62, 64, and 67 have proposed development within their TPZ of a percentage, slightly above the generally acceptable 10%, that should enable retention with minimal long-term impact. Further assessment following detailed design should be undertaken to assess their retention suitability.
- If no further design reviews are undertaken, site preparation excavation is to be carried out only under arborist supervision and works should be undertaken using techniques that are sensitive to tree roots to avoid unnecessary damage. Such techniques include:
 - Arborist supervision.
 - The use of machinery should be undertaken from areas of hardstand to avoid potential root compaction.
 - The proposed excavation should commence at the outer extent of the TPZ and move inwards to minimise root damage to the tree.
 - No excavation should occur within the SRZ of these trees.
 - Roots discovered are to be treated with care and minor roots (<40 mm diameter) pruned with a sharp, sterile handsaw or secateurs. All significant roots (>40 mm diameter) are to be recorded, photographed and reported to the project arborist.
- Protective fencing is to be installed as far as practicable from the trunk of any retained trees. Fencing should be erected as per the image below before any machinery or materials are brought to site and before commencement of works (including demolition).
- Once erected, protective fencing must not be removed or altered without approval from the project arborist. The TPZ

fencing should be secured to restrict access.

- TPZ fencing is to be a minimum of 1.8 m high and mesh or wire between posts must be highly visible. Fence posts and supports should have a diameter greater than 20 mm and should ideally be freestanding, otherwise be located clear of the roots.
- Tree protection fencing must remain intact throughout all proposed construction works and must only be dismantled after their conclusion. The temporary dismantling of tree protection fencing must only be done with the authorisation of a consulting arborist and/ or the responsible authority.
- The subject trees themselves must also not be used as a billboard to support advertising material. Affixing nails or screws into the trunks of trees to display signs of any type is not a recommended practice in the successful retention of trees.
- Given that proposed works are often within the TPZs of retained trees, standard protective fencing may not always be a viable method of protection. In these areas, trunk protection and ground protection should be installed prior to the commencement of works and remain in place until after construction works have been completed.
- Where construction access into the TPZ of retained trees cannot be avoided, the root zone of each tree must be protected using either steel plates or rumble board strapped over mulch/ aggregate until such a time as permanent above ground surfacing (cellular confinement system or similar) is to be installed.
- Trunk and ground protection should be undertaken in line with the Australian Standards AS 4790-2009: *Protection of Trees on Development Sites* as per the Arboricultural Impact Assessments (refer to **Appendix C** and **Appendix D**).
- Signs identifying the TPZ should be placed at 10 m intervals around the edge of the TPZ and should be visible from within the development site.
- An official “Project Arborist” must be commissioned to oversee the tree protection, any works within the TPZ’s and complete regular monitoring compliance certification.
- The project arborist must have minimum five years industry experience in the field of arboriculture, horticulture with relevant demonstrated experience in tree management on construction sites, and Diploma level qualifications in arboriculture – AQF Level 5.
- Inspections are to be conducted by the project arborist at several key points during the construction in order to ensure that protection measures are being adhered to during construction stages and decline in tree health or additional remediation measures can be identified.
- Measures must be implemented during construction works so that machinery and plant do not introduce weed propagules or plant pathogens to the site (e.g. by adoption and implementation of the ‘Arrive Clean, Leave Clean’ guidelines (DoE 2015).
- Any tree pruning or protection works must be completed by a certificate 5 arborist and in accordance with Australian Standard 4970-2009 *Protection of Trees on Development Sites*.
- Pre-clearing surveys must be undertaken each morning prior to vegetation clearing by an ecologist/ spotter-catcher to ensure nesting or roosting fauna are not present within vegetation to be removed; or undertake fauna capture, relocation or rescue as appropriate.
- Retained trees would be protected in accordance with Australian Standard 4970-2009 *Protection of Trees on Development Sites*. This includes installing no-go fencing and signage around tree protection zones.
- Felling of hollow-bearing trees would be supervised by an ecologist or spotter-catcher.
- Where trunk hollows or limb hollows require removal, an arboreal inspection of the hollow would be undertaken by the arborist or ecologist/ spotter-catcher.
- If unexpected, threatened fauna is discovered, then work would stop immediately, and a plan would be formulated by the ecologist/ wildlife carer to determine the most appropriate course of action.

- If the hollow is found to be occupied by a non-threatened arboreal mammal or reptile, where appropriate the hollow entrance would be covered (e.g. stuffed with a pillow case) and the tree limb cut at a suitable distance from the hollow to avoid any fauna impact.
- All hollow limbs and trunks containing fauna or are not able to be thoroughly inspected would be lowered to the ground using roping techniques.
- All hollows and habitat trees would be inspected by an ecologist/ spotter-catcher after being lowered to the ground to or undertake fauna capture, relocation or rescue as appropriate.
- On the day of clearing and prior to any clearing taking place, all trees within 50 m of those trees to be cleared are to be inspected for the presence of Koalas by an experienced Koala ecologist/ spotter-catcher.
- Should Koalas be present, clearing works must:
 - Be temporarily suspended within a range of 50 m from any tree which is occupied by a Koala.
 - Be avoided in any area between the koala and the nearest areas of habitat to allow the animal to move to adjacent refuge.
 - Must not resume until the koala has moved from the tree of its own volition.
- Should clearing continue in areas away from the Koala, the ecologist/ spotter-catcher would remain as a designated Koala spotter to monitor the animal until the clearing is finished that day in case the animal moves into proximity of the clearing (which would trigger the works to stop).

6.2.10 Bushfire

Questions to consider	Yes	No
Are the works located on bushfire prone land?		✓
Do the works include bushfire hazard reduction work?		✓
Is the work consistent with a bush fire risk management plan within the meaning of the <i>Rural Fires Act 1997</i> (RF Act) that applies to the area or locality in which the activity is proposed to be carried out?		n/a

Existing Environment

This site is the existing hospital site. It is not mapped as bushfire prone land under provisions of the *Rural Fires Act 1997*.

Impact Assessment

Given the site context and that it is not mapped bushfire prone land, there is no significant risk from bushfire or specific assessment requirements.

Mitigation Measures

No mitigation measures associated with bushfire management are required.

6.2.11 Land Uses and Services

Questions to consider	Yes	No
Will the works result in a loss of, or permanent disruption of an existing land use?		✓
Will the works involve the installation of structures or services that may be perceived as objectionable or nuisance?		✓
Will the works impact on, or be in the vicinity of other services?		✓

Existing Environment

The site is zoned R1 General Residential in the Tamworth Regional Local Environmental Plan (LEP) 2010, where health services facilities and hospitals are not listed as prohibited, therefore, being permitted with consent as per the LEP. The site is currently serviced by all essential services/ utilities.

Impact Assessment

The activity is for addition of a new and moderately expanded mental health unit. The works will not alter the existing land use, and the added structure and services are in line with the existing use of the Tamworth Hospital campus. The proposed addition would occur within the central parts of the hospital campus and would not likely be viewed as objectionable or causing nuisance to surrounding/ other land uses but would rather be viewed as anticipated development. The activity would not substantially change the intensity of the land use and therefore additional water and sewer demands are not expected to be substantial, however some additional use/ demand would result.

The works would involve relocating or decommissioning existing services located within the footprint of the proposed building, and augmentation/ installation of all services, pipes, fittings and equipment, including interconnection to existing services and utilities as required. A new electrical substation would be required to facilitate the electrical requirements of the new THMU building. This could require temporary interruptions of these services within the adjoining network. Any potential services interruptions will need to be communicated to the relevant services authorities to enable flow on notifications to any affected services customers. The location of the substation has not yet been approved by Essential Energy, therefore this component of the activity will be subject to a separate approval.

Mitigation Measures

The following mitigation measures would be implemented to manage impacts relating to Land Uses and Services:

- Any potential services/ utility interruptions shall be minimised as far as practical and communicated to the relevant services authorities to enable flow on notifications to any affected services customers.
- The primary contractor is to liaise with Hospital staff in relation to any work identified as being a potential disruption to the ongoing operations of the Gunnedah Hospital, including access by Staff, support services, and visitors.

6.2.12 Waste Generation

Questions to consider	Yes	No
Will the works result in the generation of non-hazardous waste?	✓	
Will the works result in the generation of hazardous waste?	✓	
Will the works result in the generation of wastewater requiring off-site disposal?		✓

Existing Environment

A variety of waste streams are generated from the site associated with the operation of the hospital. The following classes of waste are defined in clause 49 of Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act) and may potentially be generated from the ongoing operation:

- Special waste (clinical and related waste);
- Liquid waste;
- Hazardous waste and restricted solid waste;
- General solid waste (putrescible); and
- General solid waste (non-putrescible).

All waste is disposed of in accordance with NSW Health guidelines and relevant Council/EPA waste protocols.

Impact Assessment

The activity will be undertaken to ensure minimal impacts are generated from waste material produced on-site by ensuring that all waste is collected and disposed of or recycled in accordance with legislative waste disposal protocols and EPA guidelines. As discussed in **Section 6.2.13**, the age of the buildings to be demolished means they may contain hazardous materials such as asbestos, synthetic mineral fibre (SMF), polychlorinated biphenyls, and lead paint. Any hazardous materials would be handled, managed, transported, and disposed of according to applicable

regulations, including Work Health and Safety (WH&S) and EPA waste protocols (refer to **Section 6.2.13**). No materials will be used in a manner that poses a risk to public safety.

The proposed activity would generate waste in the form of spoil and vegetative matter removed to enable construction. Packaging, plastic and building waste would be generated during construction and would be disposed of in accordance with legislative waste disposal protocols and EPA guidelines. Waste bins will be established to separate waste streams to foster waste avoidance and resource recovery. A Construction Waste Management Plan would be prepared by the appointed contractor and will provide a framework to reduce waste directed to landfill. Overall, construction waste can be managed and disposed of effectively and responsibly, with opportunities for recycling also promoted where suitable.

Operational parameters of the new mental health unit would generally integrate and remain consistent with the various facets of the existing hospital operation and waste streams, which typically include:

- Special waste (clinical and related waste);
- Liquid waste;
- Hazardous waste and restricted solid waste;
- General solid waste (putrescible); and
- General solid waste (non-putrescible).

The new unit would form part of the overall hospital's operations and management practices, which would be in accordance with any existing Operational Waste Management Plan, legislative waste disposal protocols and EPA guidelines, particularly regarding any clinical waste. The new building would be connected to the internal sewer/stormwater system that links into the public network for both services.

Mitigation Measures

The following safeguards will be implemented in order to manage potential waste impacts:

- A Construction Waste Management Plan is to be prepared prior to commencement of works and form part of the CEMP. It is to detail the framework to reduce waste and manage, recycle or dispose of it responsibly.
- Working areas are to be maintained, kept free of rubbish and cleaned up at the end of each construction day.
- Waste material is not to be left on site once the works have been completed.
- The working areas will accommodate separate bins and other waste storage structures to cater for waste streams required to foster waste avoidance, resource recovery and acceptable disposal to a licensed waste management facility.
- The resource hierarchy detailed by the Waste Avoidance Resource Recovery Act 2001 would be adopted.
- All waste would be disposed of in accordance with Council, EPA, NSW Health guidelines and DPIE guidelines (as applicable).
- Operation of the new unit will be undertaken in accordance with the NSW Health Policy Clinical and Related Waste Management for Health Services.
- If required, the existing Operational Management Plan for the hospital should be updated to ensure effective and responsible waste management within the new unit. If there is no Operational Management Plan, one should be prepared.

6.2.13 Hazardous Materials and Contamination

Questions to consider	Yes	No
Is there potential for the works to encounter any contaminated material?		✓
Will the works involve the disturbance or removal of asbestos?	✓	
Is the work site located on land that is known to be or is potentially contaminated?		✓

Will the works require a Hazardous Materials Assessment?	✓
Is a Remediation Action Plan required?	✓
Is the work category 2 works under Resilience and Hazards SEPP?	✓

Existing Environment

The site is an existing hospital and has been in use for a long period of time. There are potential areas of environmental concern, contamination and hazardous materials present on site. These have been assessed and summarised below.

Impact Assessment

A Stage 1 and Stage 2 Site Contamination Assessment (refer to **Appendix U**) have been prepared by Regional Geotechnical Solutions (RGS) for the new building facility at the main works site. The results of the Stage 1 assessment identified three areas of environmental concern and recommended further site assessment (Stage 2 assessment), including sampling and analysis. The contamination investigation involved taking samples from 20 sampling points as well as 11 boreholes. The results of the laboratory analysis indicate there are no contaminants in exceedance of the adopted site investigation criteria at the test locations.

The assessment related to the main works site concluded that for all soil samples tested, the analysis found that heavy metals, TPH, BTEX, PAH, OC/OP pesticides, PCBs and the presence of asbestos were either at concentrations below the laboratory detection limits or at concentrations below the adopted health assessment criteria for Residential B land use.

A Stage 1 and Stage 2 Site Contamination Assessment (refer to **Appendix U**) have been prepared by Regional Geotechnical Solutions (RGS) for Car Park D Zone 1. The contamination investigation involved taking eight soil samples from eight shallow test pits, as well as eight surface samples. The results of the laboratory analysis revealed concentrations of the chemicals of concern were either below the laboratory detection limit, or below the adopted health investigation criteria for a Commercial D site. Asbestos was not detected in any of the soil samples submitted for analysis.

A Stage 1 and Stage 2 Site Contamination Assessment (refer to **Appendix U**) have been prepared by Regional Geotechnical Solutions (RGS) for Car Park A Zone 3, Car Park A Zone 4, and Car Park B Zone 2. The contamination investigation involved taking 36 soil samples, which were collected from 18 test pits. The results of the laboratory analysis revealed concentrations of the chemicals of concern were either below the laboratory detection limit, or below the adopted health investigation criteria for a Residential B site. Some elevated concentrations of TRH above the laboratory reporting limits were encountered, however, the levels were well below the adopted ecological investigation criteria and management limits for a Residential (B) site. Asbestos was not detected in any of the soil samples submitted for analysis.

RGS consider that a detailed Remedial Action Plan (RAP) is not considered necessary for the activity at this point. However certain recommendations have been put forward for implementation.

An Asbestos Audit/ Asbestos Register and Review Update had been prepared by Practical Environmental Solutions with regard to the TA08 and TA34 buildings proposed for demolition. The audit for building TA08, known as the Rotary Hostel, identified an electrical switchboard insulation panel that is known to contain asbestos based on its age and appearance (refer to **Appendix V**). Therefore, the panel is to be regarded as an asbestos containing material and measures are to be implemented to safely and effectively remove this material during demolition. The audit for building TA34, known as the Staff Accommodation, did not identify any asbestos containing material (refer to **Appendix W**). A Hazardous Material Survey conducted in 2009 identifies asbestos containing material, noted as the backing board to the electrical cabinet and the ceiling lining of the south side verandah, for building TA09, known as the Rotary Lodge (refer to **Appendix X**). Measures will be implemented to safely and effectively remove this material during demolition.

The Hazardous Material Survey conducted in 2009 identified the potential for buildings to contain synthetic mineral fibres and polychlorinated biphenyl material (refer to **Appendix X**). Measures will be implemented to safely and effectively remove this material during demolition.

Mitigation Measures

The following mitigation measures would be implemented to avoid and manage impacts relating to hazardous materials and contamination:

- Implement recommendations of the Contamination Assessment prepared by Regional Geotechnical Solutions (**Appendix U**).

- If a hazardous material register for the buildings is available, it should be reviewed prior to undertaking any demolition works. All demolition works should be undertaken by licenced contractors with appropriate asbestos removal accreditation. If the building is demolished a site clearance certificate must be provided on completion of the works.
- Regional Geotechnical Solutions should be consulted if details of the activity differs from those discussed herein.
- Regional Geotechnical Solutions or an alternative consultant should be contacted if any unidentified potential contamination is encountered, (including odorous or stained soils and fragments of cement sheeting that may contain asbestos).
- Material exported off site should be assessed in accordance with EPA guidelines for Excavated Natural Material (ENM) and Virgin Excavated Natural Material (VENM). As a preliminary guide based on the site contamination testing undertaken, the residual profile is likely to be classified as Virgin Excavated Natural Material. The fill encountered throughout the site would likely be classified as Excavated Natural Material, however further testing may be required to classify this when all filled locations accessible (i.e. fill below existing structures) and quantities are known.
- If the existing buildings are to be demolished, testing of the soils below the building is recommended.
- A spill containment kit would be available at all times. All personnel would be made aware of the location of the kit and trained in its effective deployment.
- Implement the recommendations of the Asbestos Register and Review Updates prepared by Practical Environmental Solutions (**Appendix V** and **Appendix W**).
- Any hazardous materials, including asbestos, would be handled, managed, transported, and disposed of according to applicable regulations, including WH&S and EPA waste protocols. This includes requirements to use licenced asbestos removalists.
- Light fixtures would be inspected for potential polychlorinated biphenyl material containing fixtures prior to disposal, and would be handled, managed, transported, and disposed of according to applicable regulations, including WH&S and EPA waste protocols.

6.2.14 Community Impact/ Social Impact

Questions to consider	Yes	No
Is the activity likely to affect community services or infrastructure?	✓	
Does the activity affect sites of importance to local or the broader community for their recreational or other values or access to these sites?		✓
Is the activity likely to affect economic factors, including employment numbers or industry value?	✓	
Is the activity likely to have an impact on the safety of the community?		✓
Will the activity affect the visual or scenic landscape? This should include consideration of any permanent or temporary signage.	✓	
Is the activity likely to cause noise, pollution, visual impact, loss of privacy, glare or overshadowing to members of the community, particularly adjoining landowners?	✓	

Impact Assessment

The activity would result in improvements to facilities at Tamworth Hospital that will benefit patients, staff, hospital stakeholders and the wider community. The activity will provide a facility that will meet the needs of the changing demographics of the population of Tamworth and the surrounding locality and support the provision of high-quality mental health support services.

There are no expected negative impacts to community services or infrastructure. The works will be managed to ensure hospital services and access are not adversely affected.

The activity will create temporary employment throughout its construction phase and additional employment throughout its operation. The short-term increase in employment is estimated to be 97 construction jobs and the increase of

employment once the new facility opens is estimated to be 36.37 FTE in operational jobs. There will be economic benefits to the community as a result of the construction and operation of the facility.

The visual impacts from construction works are considered to be temporary and minor.

Sensitive receivers, including residential properties and the existing hospital, are within the vicinity of the activity, however, the activity footprint is well set back within the hospital site and away from other adjoining uses. Adoption of standard construction noise management techniques and construction hours will ensure that noise impacts will be minimal. The noise generated from the activity during operation of the facility will be similar to the noise currently generated by the health facility. No notable long-term change is likely.

Potential pollution impacts during construction will be addressed through adoption of safeguards and the preparation of a Construction Environmental Management Plan.

The activity would not result in any significant or unreasonable environmental amenity impacts to adjoining properties/ landowners, such as overshadowing, sunlight access reduction, privacy issues or visual impact/ bulk.

Mitigation Measures

No mitigation measures are required.

6.2.15 Crime Prevention through Environmental Design (CPTED)

Questions to consider	Yes	No
Have CPTED principles (as outlined in the Department of Planning's guideline titled Crime Prevention and the Assessment of Development Applications (2001) been incorporated in the design and ongoing operation of the activity?	✓	
Does the design activity minimise criminal and anti-social behaviour (reflecting the NSW Health's NSW Health Directive on Protection of People and Property (PPP) and the NSW Government's Preventing and Managing Violence in the NSW Health Workplace)?	✓	

Existing Environment

The existing Tamworth Hospital Campus has, like all hospitals, an existing security system in place over the campus including Electronic Access Control, CCTV and intercom systems. The New Tamworth Mental Health Unit will be consistent and compatible with this new system whilst also incorporating additional security requirements of a mental health unit.

Impact Assessment

Crime Prevention Through Environmental Design (CPTED) is a crime prevention strategy that focuses on the planning, design and structure of cities and neighbourhoods. CPTED aims to create the reality (or perception) that the costs of committing crime are greater than the likely benefits. This is achieved by creating environmental and social conditions that:

- Maximise risk to offenders (increasing the likelihood of detection, challenge and apprehension).
- Maximise the effort required to commit crime (increasing the time, energy and resources required to commit crime).
- Minimise the actual and perceived benefits of crime (removing, minimising or concealing crime attractors and rewards).
- Minimise excuse making opportunities (removing conditions that encourage/ facilitate rationalisation of inappropriate behaviour).

CPTED employs four key strategies. These are territorial re-enforcement, surveillance, access control and space/ activity management.

In terms of assessing the Project security and crime prevention measures, the most appropriate document is the Department of Planning's guideline titled Crime Prevention and the Assessment of Development Applications (2001). The design of the Project has taken into consideration the principles of CPTED, which are outlined in the aforementioned guideline. CPTED principles that need to be considered when designing to minimise crime are:

- Surveillance.

- Access control.
- Territorial reinforcement.
- Space management.

Appendix A of the Architectural Design Statement prepared by STH Architects (refer **Appendix H** of this REF) provides summarises how CPTED principles have been considered in the design of the Mental Health Unit. Table 12 below provides an assessment.

Table 14 Assessment of the Activity Against CPTED principals

CPTED Principles	Comment
<p>Surveillance - The attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical. Good surveillance means that people can see what others are doing. People feel safe in public areas when they can easily see and interact with others. Would-be offenders are often deterred from committing crime in areas with high levels of surveillance. From a design perspective, 'deterrence' can be achieved by:</p> <ul style="list-style-type: none"> - Clear sightlines between public and private places - Effective lighting of public places - Landscaping that makes places attractive, but does not provide offenders with a place to hide or entrap victims. 	<p>The following security and surveillance measures have been adopted in the design for the Proposal:</p> <ul style="list-style-type: none"> - All access areas and pedestrian paths will be well lit and have security camera surveillance. - Active surveillance of external areas of the public forecourt, engineering undercroft area, new carparking areas will be achieved through the use of CCTV, Video Intercom access and will address Health's NSW Health Directive on Protection of People and Property and Sustainable Hospitals Carparking Infrastructure Programme Guidelines. - The entry to the facility will be clear and legible and building perimeter areas intentional access pathways, and new carparks will be lit. - The smooth integration between public and private spaces supports clear sightlines between various uses in the building. - Landscaping is well considered to promote the appearance of the development and maintain passive surveillance.
<p>Access Control - Physical and symbolic barriers can be used to attract, channel or restrict the movement of people. They minimise opportunities for crime and increase the effort required to commit crime. By making it clear where people are permitted to go or not go, it becomes difficult for potential offenders to reach and victimise people and their property. Illegible boundary markers and confusing spatial definition make it easy for criminals to make excuses for being in restricted areas. However, care needs to be taken to ensure that the barriers are not tall or hostile, creating the effect of a compound. Effective access control can be achieved by creating:</p> <ul style="list-style-type: none"> - Landscapes and physical locations that channel and group pedestrians into target areas - Public spaces which attract, rather than discourage people from gathering - Restricted access to internal areas or high-risk areas (like carparks or other rarely visited areas). This is often achieved through the use of physical barriers. 	<p>Access control will be achieved through the following measures:</p> <ul style="list-style-type: none"> - Building access is generally separated by function into the following groups: <ul style="list-style-type: none"> • Public access areas without escorted access. • Public access via secure corridors under escort by clinical staff. • Consumer secure areas for each of the four pods (plus additional potential separation in Adolescent and Adult areas. • Staff only spaces. • Engineering spaces (key-access). - Access control secures the building interior using electronic access control for clinical and non-clinical staff to suit the campus operational security policies. - Key access is provided to engineering spaces and key override for access to engineering plant on level 1 and 3, services cupboards and risers with the occupied building. - Only permitted access is available to the mental health inpatient unit level and other occupied staff areas. - Patient courtyards to be securely enclosed in accordance with the safety requirements of the Mental Health Act.
<p>Territorial Enforcement – Community ownership of public space sends positive signals. People often feel comfortable in, and are more likely to visit, places which feel owned and cared for. Well used places also reduce opportunities for crime and increase risk to criminals. If people feel that they have some ownership of public space, they are more likely to gather and to enjoy that space. Community ownership also increases the likelihood that people</p>	<p>The following design principles and measures have been adopted to provide for territorial enforcement:</p> <ul style="list-style-type: none"> - Provision of an attractive safe outdoor gathering space for staff and visitors in various parts of the Project area. - Contemporary and attractive finishes. - Specifically avoids the use of fences. - Passively reinforces acceptable areas for activity as opposed to areas for visual enhancement.

CPTED Principles	Comment
<p>who witness crime will respond by quickly reporting it or by attempting to prevent it.</p> <p>Territorial reinforcement can be achieved through:</p> <ul style="list-style-type: none"> Design that encourages people to gather in public space and to feel some responsibility for its use and condition Design with clear transitions and boundaries between public and private space Clear design cues on who is to use space and what it is to be used for. Care is needed to ensure that territorial reinforcement is not achieved by making public spaces private spaces, through gates and enclosures. 	<ul style="list-style-type: none"> Uses landscape planting in a manner that reinforces passive viewing spaces only. Detail design to activate the external spaces through various seasonal changes for sunny space seating, deep shade refuge, weather refuge from wind and rain, etc in conjunction with the building form, times of day, etc and with reference to sun and shade diagrams at the various times of seasons and day; and considered opportunities to use the spaces near the lower parking levels and areas closer to the entry for seating, meeting, volunteer fund raising stalls; engagement with local community for display of artwork in the forecourt areas.
<p>Space Management - Popular public space is often attractive, well maintained and well used space. Linked to the principle of territorial reinforcement, space management ensures that space is appropriately utilised and well cared for.</p> <p>Space management strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti, and the replacement of burned-out pedestrian and car park lighting and the removal or refurbishment of decayed physical elements.</p>	<p>The following measures and principles have been adopted to ensure appropriate space management:</p> <ul style="list-style-type: none"> Locally sourced and hardy planting schedule. Implementation of an ongoing maintenance program. Contemporary and attractive design of entries points and public gathering spaces. External surfaces will be selected with consideration of future cleaning, maintenance and durability.

It is considered that the proposed design measures will significantly reduce the risk of criminal activities. The Project provides adequate public surveillance and does not provide opportunities for concealed criminal behaviour; therefore, suitably addressing principles of crime prevention through environmental design. The security settings will continue to be developed throughout the detailed design phase of the Project.

Mitigation Measures

The following safeguards will be implemented in order to ensure Crime Prevention Through Environmental Design:

Nil – measures have already been incorporated into the design.

6.2.16 Ecologically Sustainable Development

Questions to consider	Yes	No
Have ESD principles (as defined in clause 7(4) of Schedule 2 of the EP&A Regulation) been incorporated in the design and ongoing operation of the activity?	✓	
Does the activity minimise greenhouse gas emissions (reflecting the Government's goal of net zero emissions by 2050) and consumption of energy, water (including water sensitive urban design) and material resources?	✓	

Existing Environment

As with most hospitals, there is a significant difference in age of buildings across the Tamworth Hospital campus. This means there exists varying degrees in how the buildings across the campus have been designed and responded to the principals of Ecologically Sustainable Development (ESD). Steensen and Varming have been engaged by HI to prepare an ESD report for the new Mental Health Unit to address how the development will meet HI's ESD principles and achieve building sustainability and energy, water and material performance.

Impact Assessment

The ESD initiatives proposed for the project aim to reduce the environmental impacts typically associated with buildings during the construction and ongoing operation of the building. The project utilises a resource hierarchy approach, with emphasis on avoiding, then reduction of energy, water, waste and materials. Resource conservation is a key focus of the sustainability strategy, including strategies for energy, water, and material resources.

NSW Health Infrastructure (HI) and the Local Health District (LHD) have defined high-level ESD targets for TMHU as follows:

- As per DGN 058 and considering the project's location, a minimum of 45 points + 5 buffer points (4-star equivalent) to be achieved by the design in accordance with HI's ESD Evaluating tool.
- The local health district (LHD) has set an aspirational target for this project to go beyond the minimum requirements and aim to meet 60 points + 5 buffer points (or 5-star equivalent) to be achieved by the design in accordance with HI's ESD Evaluating tool.
- A minimum 10% improvement in energy efficiency, compared to the NCC Section-J deemed-to-satisfy (DTS) baseline compliance requirements, applicable to the development.

Steensen and Varming have utilised the HI ESD Evaluation tool has during the schematic development process to assess and coordinate the targeted credits and define the overall ESD score. The selection of the credits targeted has been based on the following:

- ESD target requirements.
- Review of site, context, and proposed design.
- Opportunities & constraints identified within the current design.
- Key ESD healthcare specific considerations (As described in Section 5).
- Project team experience in other similar health care projects.

The status of the ESD assessment by Steensen and Varming indicates that 58 low/ medium risk points and 13 higher risk points (totalling 71 points) can be achieved and leaves a 13-point buffer above minimum LHD threshold which confirms that the minimum requirement of 60 points is feasible. The targeted credits require some further investigation to ensure they are adequately incorporated into the design and achieve the necessary performance. This work to confirm these credits will continue during the detailed design and construction stages.

Table 15 Ecologically Sustainable Development Assessment pursuant to Schedule 2 of the EP&A Regulation 2000

below outlines the project's response to the principles of ecologically sustainable development (ESD), as defined in Schedule 2 of the *EP&A Regulation 2000*.

Table 15 Ecologically Sustainable Development Assessment pursuant to Schedule 2 of the EP&A Regulation 2000

Item	ESD Principle	Project Response
(a)	<p>The Precautionary Principle</p> <p><i>Namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:</i></p> <p>(i) <i>Careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and</i></p> <p>(ii) <i>An assessment of the risk-weighted consequences of various options.</i></p>	<p>Adequate due diligence has been conducted to understand the local environment and investigate any risks the project may pose. The proposed development will be constructed on previously developed land, as it a redevelopment of the existing hospital campus. During the design and construction phases, the main contractor will implement an Environmental Management Plan (EMP) demonstrating formalised systematic and methodical approach to environmentally friendly construction that answers to site specific environmental risks and hazards. Project ESD responses align HI's sustainability targets from the HI ESD Evaluation tool and from DGN 058.</p>
(b)	<p>Inter-Generational Equity</p> <p><i>Namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations.</i></p>	<p>The proposed development ensures the health, diversity and productivity of the environment are maintained through the implementation of passive and active design measures that reduce operational energy and water use from the project. Energy consumption will be designed to achieve compliance to the National Construction Code NCC 2022 Section J requirements. The reduction in water use will be established</p>

Item	ESD Principle	Project Response
		<p>through use of WELS rated water fixtures and fittings, which significantly reduce potable water consumption. Waste generated during the construction phase will be separated in multiple streams to enable recycling and reuse with a consequent reduction in the amount of waste sent to landfill. Reducing energy, water and waste ensures that the health, diversity, and productivity of the environment is maintained for the benefit of future generations.</p> <p>The project will ensure that the health, diversity and productivity of the environment are maintained or enhanced by using HI's ESD Evaluation Tool to demonstrate compliance HI's sustainability targets from the HI ESD Evaluation tool and from DGN 058.</p>
(c)	<p>Conservation of Biological Diversity and Ecological Integrity</p> <p><i>Namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration.</i></p>	<p>The proposed development being in previously developed land alleviates much of the biological diversity concern for the development. Prior to commencement of construction, the Main Contractor will develop an Environmental Management Plan (EMP) to ensure that construction works do not adversely affect the biological diversity and ecological integrity of the site, including for example, measures to protect existing trees to be retained. The Main Contractor will monitor adherence to the EMP via an Environmental Management System (EMS) to ensure that all Sub-Contractors carry out their works in line with the EMP and mitigate any risks to the environment. A climate change adaptation plan will be prepared to help future proof the development to withstand the effects of climate change.</p>
(d)	<p>Improved Valuation, Pricing and Incentive Mechanisms</p> <p><i>Namely, that environmental factors should be included in the valuation of assets and services, such as—</i></p> <ul style="list-style-type: none"> (i) <i>Polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,</i> (ii) <i>The users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,</i> (iii) <i>Environmental goals, having been established, should be pursued in the most cost-effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.</i> 	<p>The valuation of the project's assets and services consider environmental factors through the implementation of various ESD initiatives. Environmental aspects are key criteria in the design and selection of building systems and materials. For example, the building façade is being designed for good daylighting, thermal comfort, glare mitigation and energy performance rather than a lower cost façade system. Mechanical, lighting and vertical transportation systems are being designed for low energy consumption and their components will be selected considering whole-of-life costs, i.e., including operational energy use in the equation. Materials will be selected based on a life cycle assessment which considers the cradle-to-grave environmental impact of materials. Environmental goals of the project and specific initiatives are identified in the HI ESD Evaluation Tool Score Summary (refer Appendix L), reflecting HI's targeted ESD requirements. This approach is in line with the NSW Government Resource Efficiency Policy (2019).</p>

Mitigation Measures

The following safeguards will be implemented in order to ensure Ecologically Sustainable Development:

- Project Design Team to review of the targeted items to determine achievability and further coordination with design teams for strategy development as design develops at the DD stage.
- Project Design Team to finalise calculations, modelling or analysis required to support strategies and achieve targeted points.
- Project Design Team to coordination with QS to ensure any cost impact from required strategies is included within the cost plan and within the procurement requirements.
- Finalise set of strategies to be agreed by the design team, stakeholders and the LHD, and to be confirmed by HI to include in the design moving forward.

6.2.17 Construction Management

Questions to consider	Yes	No
Has there been a Preliminary Construction and Environmental Management Plan prepared for the project?	✓	
Can adequate mitigation measures be implemented during the construction phase to prevent significant impacts to the environment, the existing hospital operations and adjoining land uses?	✓	

Existing Environment

The proposed activity involves additions to the hospital in the form of a new three storey building, associated works, and carpark additions and upgrades. The scale of the construction phase is not considered significant and presents minimal potential impacts on the surrounding environment, the existing hospital and to adjoining land uses that can be adequately addressed via safeguards outlined within the REF.

Impact Assessment

A preliminary Construction and Environmental Management Plan (CEMP) has been prepared by Root Projects Infrastructure to outline how construction activities and potential environmental impacts will be managed for the project. The preliminary CEMP is attached as **Appendix AA**. It provides information and requirements on staging of the project and key milestones, site management and operations, environmental and amenity, construction and general traffic management, waste management and service disconnections. The preliminary CEMP will guide the contractors CEMP for the Early works and Main Works.

Mitigation Measures

The following safeguards will be implemented in order to manage potential cumulative impacts:

- The contractor for the Early Works and Main Works must prepare a standalone Construction and Environmental Management Plan.

6.2.18 Cumulative Impact

Questions to consider	Yes	No
Has there been any other development approved within 500m of the site?	✓	
Will there be significant impacts (for example, including but not limited to, construction traffic impacts) from other development approved or currently under construction within 500m of the site?		✓

Existing Environment

The proposed activity involves additions to the hospital in the form of a new three storey building, associated works, and carpark additions and upgrades. The scale of the activity is medium, however, not considered significant and presents minimal potential environmental impacts that can be adequately addressed via safeguards outlined within the REF.

Impact Assessment

A search of the NSW Government HI Project Search returned the following projects within the Tamworth Hospital campus, which have been approved/completed:

- Tamworth Hospital Redevelopment - Stage 2 (Completed March 2017).
- New England and North West Regional Cancer Centre (completed December 2012).

A search of the Tamworth Regional Council DA Register returned one project which has been approved on the hospital site:

- Development application for hospital – Addition of dispatch room with kitchen and bathroom at Tamara Private Hospital (DA0676/2007; approved 29/06/2007).

Tamworth Regional Council DA Register did not indicate that any other major developments/ works have been approved in proximity to the hospital site in the last year.

A review of the Department of Planning, Industry and Environment (DPIE) major projects website revealed two major projects nearby, which were modification applications/ determinations related to the hospital itself. These determinations are from 2013 and it is assumed that related works are not current nor likely to contribute to cumulative impacts.

The scale of other typical DA related works that commonly occur in municipalities are mostly relatively minor, and the cumulative impacts are unlikely to result in significant implications in regard to traffic, infrastructure services, amenity and/or environmental impacts when considered in-light of the proposed activity.

It is expected that the activity would add to a number of common cumulative impacts, including resource consumption (e.g. construction material) and generation of greenhouse gas emissions (e.g. through operation of vehicles and equipment and use of electricity). However, the environmental management measures identified within this REF and the choice of methodology for completion of the activity would aim to minimise the extent to which the activity contributes to adverse cumulative environmental impacts.

As such, the cumulative impacts of undertaking the proposed activity in the context of the local area is considered low.

Mitigation Measures

The following safeguards will be implemented in order to manage potential cumulative impacts:

- HI and project staff shall monitor DPIE's major projects register and Council's Development Application tracker for any significant developments that may occur locally and with potential to coincide with the activity's construction period and contribute to cumulative impacts.
- Where required project staff will undertake pre-construction review and liaison with other development sites to co-ordinate works and minimise impacts (e.g. delivery times, parking).

7. Summary of Mitigation Measure

Mitigation measures are to be implemented for the proposal to reduce impacts on the environment. The mitigation measures are provided at **Appendix Y**.

7.1 Summary of Impacts

Based on the identification of potential issues, and an assessment of the nature and extent of the impacts of the activity, it is determined that:

- The extent and nature of potential impacts are generally low, and will not have significant adverse effects on the locality, community and the environment;
- Potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality, community; and
- Given the above, it is determined that an EIS is not required for the activity.

8. Justification and Conclusion

The proposed Tamworth Mental Health Unit at Tamworth Hospital is subject to assessment under Division 5.1 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As discussed in detail in this report, the proposal will not result in any significant or long-term impact. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to an existing need within the community;
- It generally complies with, or is consistent with all relevant legislation, plans and policies;
- It has minimal environmental impacts; and
- Adequate mitigation measures have been proposed to address these impacts.

The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a SIS and/or BDAR is not required. The environmental impacts of the proposal are not likely to be significant and therefore it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning and Homes under Division 5.1 of the EP&A Act. On this basis, it is recommended that HI determine the proposed activity in accordance with Division 5.1 of the EP&A Act and subject to the adoption and implementation of mitigation measures identified within this report.