Amended Statement of Environmental Effects

Crown Development Application for a Community & High Performance Centre

For the St George Illawarra Dragons

Submitted on behalf of the University of Wollongong

Ethos Urban

Prepared by Ethos Urban

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1.0 Introduction

This Amended Statement of Environmental Effects (SEE) is submitted to Wollongong City Council (Council) in support of a Crown Development Application (DA) for the St. George Illawarra Dragons (the Dragons) Community and High Performance Centre (CHPC) at the University of Wollongong's (UoW) Innovation Campus. This DA is made pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is Crown Development within the meaning of Division 4.6 of the EP&A Act as the Applicant, the University of Wollongong, is an Australian university within the meaning of the *Higher Education Act 2001*.

The DA, as amended, seeks approval for:

- Site preparation works, including removal of existing at-grade car parking, earthworks, tree protection and removal, and termination of utilities.
- Construction and use of a new Community and High Performance Centre, including facilities such as:
  - Gymnasium;
  - Player amenities such as locker rooms, players lounge, viewing balcony and dining areas;
  - Elite player amenities for the Women's NRL team at the same standard as the Men's team
  - Staff amenities, including end of trip facilities and bike storage;
  - Allied health and training rooms, including medical and physical recovery rooms;
  - Sleep recovery room;
  - Classrooms, lecture theatre and educational spaces;
  - Club administration and community outreach program office spaces;
  - Back of house and administration services and rooms (such as plant, laundry rooms, uniform and merchandise rooms and the like).
- Construction and use of two new playing fields, comprising:
  - new NRL-standard elite training field for training by the Dragons' first grade men and women's teams.
  - new community field with floodlighting to allow early evening community uses including the All Abilities Squad, Indigenous Programs, After School Programs.
- Landscaping and public domain works within the curtilages of the proposed development including improved open space areas, landscape embellishment works and improved pedestrian and cyclist pathways.
- New at-grade car park comprising 60 parking spaces.
- Amended parking arrangement for the Kid's Uni early learning centre

This SEE has been prepared and based on the Architectural Drawings and Design Report prepared by Populous (see **Appendices B** and **C**) and other supporting technical information appended to the report (see Table of Contents).

This Amended SEE supports changes to DA-2022/1126 as lodged with Council, pursuant to clause 37 of the *Environmental Planning and Assessment Regulation 2021*, in order to respond to matters raised by Council, NSW Heritage and other stakeholders during the initial DA assessment. Key changes to the proposed development comprise:

- Relocation of the proposed CHPC building to the south, whilst retaining generally the same design, configuration and functions as those originally proposed;
- Relocation of the elite performance playing field to the south, remaining to the north of the CHPC;
- Retention of the State heritage-listed Nissen and Quonset huts in their existing position, which were being relocated under a separate development application;
- Minor redesign of the community playing field to facilitate retention of the Nissen and Quonset huts, and reduction in the number of floodlights from six to four; and
- Minor amendment to the Kids Uni early centre parking arrangements that are required due to detailed flood modelling
- Minor changes to other aspects of the development in order to reflect the primary changes outlined above.

This report describes the site, its environs and the proposed development, and provides an assessment of the environmental impacts and identifies the steps to be taken to protect or limit potential impacts on the environment. The application is recommended for approval given the following reasons:

- The proposed development is consistent with the aims and objectives of the Wollongong LEP 2009 and the Wollongong DCP 2009, including the site specific provisions that relate to the UoW Innovation Campus, as well as the relevant State Environmental Planning Policies;
- The proposed development will provide high-quality facilities for elite, development and community sporting groups to maintain and strengthen the Illawarra region's reputation and social connection with rugby league and increase participation, particularly within the growing women's game;
- The proposed development will build on the existing partnership between UoW and the Dragons relating to research and development, and facilitates increased opportunities in the fields of sports science, exercise physiology, health, community development and sports administration to drive innovation and research implementation outcomes, consistent with the planning and development objectives for the UoW Innovation Campus;
- The development will provide opportunities for increased recognition of the importance of First Nations culture and stories through the integration of architectural design features such as the anodised screen, highlighting of views towards Mt Keira and the delivery of a Yarning Circle that is accessible to all campus users and visitors;
- The development provides an opportunity to increase biodiversity in the region, enhancing and building on the existing strip of remnant South Coast Floodplain Grassy Swamp Forest.
- The development will include purpose-built space to accommodate the charitable and community development programs operated by the Dragons within the Illawarra region and wider Australian community;
- The project will support the creation of 229 FTE jobs during the construction phase and accommodate at least 60 FTE jobs on an ongoing basis; and
- Supporting technical studies which accompany this DA confirm that the environmental impacts associated with the proposal are generally positive and will not give rise to any adverse impacts that cannot be appropriately managed; and
- The proposed development is suitable for the site and is in the public interest.

Figure 1 Artist impression of the CHPC

Source: Populous

2.0 Project History and Background

2.1 Planning Approvals Context

Determining Authority

The proposed development has a Capital Investment Value (CIV) of more than $30 million and is also Crown Development of more than $5 million and is therefore 'regional development' under Schedule 6 of the State Environmental Planning Policy (Planning Systems) 2021. The application will be assessed by Council and determined by the Southern Regional Planning Panel. A cost summary report is submitted under separate cover.

Crown Development

This DA is defined as Crown development under Division 4.6 of the EP&A Act. Clause 226(1) of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulations) provides that a development carried out by an Australian University (under the meaning of *Higher Education Act 2001*) is a Crown development. UOW is recognised as an Australian University under Schedule 1 of the *Higher Education Act 2001*.

Under the special provisions for Crown developments:

- The DA cannot be refused (except with approval of the Minister for Planning and Public Spaces).
- Council cannot impose conditions of consent without the applicant's agreement.
- The applicant has the opportunity to review any draft conditions.

If the consent authority fails to determine the application within the prescribed period, the application may be referred to the Minister for approval.

Relationship with Nissen and Quonset Hut Relocation Development Application

A separate Development Application (DA) was previously submitted to Council for the relocation of the heritage-listed Nissen and Quonset Huts within the Innovation Campus site (the Huts Relocation DA, DA-2022/1124). However, following ongoing feedback from Council, Heritage NSW and other relevant agencies, the scheme has been amended in order to retain the huts in their current location to limit heritage impact. DA-2022/1124 will be withdrawn promptly following submission of this amended DA.

This Development Application does not seek consent for any physical works associated with the Nissen and Quonset Huts.

Relationship with Innovation Campus Master Plan Review

The UoW Innovation Campus is subject to a number of site-specific local planning controls, including provisions within the Wollongong Local Environmental Plan 2009 (the LEP) and Wollongong Development Control Plan 2009 (the DCP), which the proposed development is generally consistent with as set out in **Section 6.1** of this report. These controls include a master plan which was incorporated into the DCP by Council in July 2013. UoW in conjunction with Council are currently reviewing the master plan to ensure that local planning controls for the site reflect the contemporary opportunities and aspirations for the Innovation Campus. This review of the master plan is ongoing and is intended to guide future stages of development within the Innovation Campus. However, the CHPC DA does not depend on nor require this review to be completed, as:

- The location and operations of the proposed CHPC, including learning and educational outcomes, have been the subject of extensive discussions between the Dragons and UoW to ensure that the project aligns with current and future aspirations for the Innovation Campus;
- The proposed development complies with the standards and objectives for the Innovation Campus set out in Clause 7.15 of the LEP (refer **Section 6.1.2**);
- The proposed development achieves the objectives for development of the Innovation Campus set out in Chapter D14 of the DCP (refer **Section 6.1.3**);
- The proposed development does not meet the thresholds that would require a review of the master plan as set out in the DCP (refer **Section 6.1.3**).

Accordingly, the CHPC DA is not dependent nor in conflict with the master plan review, and is able to be determined in accordance with the existing planning framework.

Current DA proposed for Health and Wellbeing Precinct

An Integrated Crown DA (DA-2021/101) was lodged with Council on 29 January 2021 in respect of a 'Health and Wellbeing Precinct' proposed to be developed within the southern portion of the UoW Innovation Campus. The DA has been publicly exhibited and is under assessment. The DA seeks to establish and integrated precinct with non-surgical health care, seniors living and child care facilities within UoW's research and teaching environment in order to deliver innovation and research outcomes. The project will also provide a new park and public facilities. The proposed Health and Wellbeing precinct is located over 500 metres away from the proposed CHPC, and as a result there would not be any direct interface or significant cumulative impacts between the two projects that cannot be resolved through standard conditions of development consent (in respect of matters such as construction management etc.).

2.2 Pre-DA Meeting

A Pre-DA Meeting with Wollongong City Council officers was held on 11 March 2022 to discuss the key planning and development matters relating to the project, and key issues required to be addressed in the DA. Key matters raised during the Pre-DA Meeting are summarised as follows:

- UOW IC Master Plan
- Land use:
- Flooding
- Connecting to Country
- Bushfire
- Heritage
- Traffic & Parking
- Permeability
- Site Layout & Design
- DRP Process
- Timeframes & deliverables

These matters are addressed in this DA, including detailed responses at **Appendix D**.

An additional meeting was held with Council on the 1 August 2023, prior to the resubmission of this amended SEE. The issues raised by Council in this meeting have been incorporated into this amended SEE. The key topics discussed in this meeting are as follows:

- General discussion regarding the revised scheme following retention of the heritage items on the site.
- Traffic and parking: clarification regarding the amendments made to the parking arrangements as part of the revised scheme. Further clarification regarding allocation of parking between the university and club, as well as ongoing parking for the Kid's Uni childcare centre.
- Flooding: clarification regarding the flooding implications as a result of the revised scheme and subsequent amended documentation to be submitted as part of the application.
- Retention and removal of trees as a result of the revised scheme.

2.3 Design Excellence Panel

Populous and Arcadia presented the preliminary design to Council's Design Review Panel (DRP) on 26 May 2022. This session provided an opportunity for consultation and independent review during the design phase to ensure that the project ensures the highest standard of architecture and urban design. The discussion was focused on site and context analysis and response to environmental constraints. The DRP provided written comments following the discussion, with a full response provided within **Appendix AA**.

It is noted that another meeting was held with the DRP on 6 December 2022. It is anticipated that ongoing engagement with DRP will be required following the submission of this application.

2.4 Community Engagement

As outlined in the Consultation Outcomes Report (**Appendix E**) prepared by Ethos Urban, a range of community consultation activities have been undertaken during the preparation of the DA package to seek community input and ensure matters raised are addressed as part of the project. The objectives to guide stakeholder and community engagement are:

- To make better decisions as a result of community insights and feedback;
- To inform the community of the project status;
- To obtain feedback from the community and user groups using their local knowledge and experiences of the site to inform the design, proposal and delivery;
- To be clear and transparent on the project areas which the community can influence and those which are set; and
- To implement the Community Consultation Plan and Framework in a landmark project.

Key consultation activities have included:

- targeted outreach and online briefing of direct neighbours;
- letter box drops of information regarding the project;
- establishment of dedicated enquiry points for community feedback and information;
- hosting of online community information sessions; and
- direct engagement with key local interest groups.

Key themes raised in community consultation are summarised as follows:

- Nature of proposed facility and usage including operational details;
- Potential impacts on local amenity in respect of traffic, parking, noise and lighting;
- Timing and duration of construction associated with the project;
- Local flooding impacts; and
- Heritage and interpretation.

Responses to matters raised during stakeholder and community engagement are detailed in **Appendix E**, and informed by the detailed technical assessment that accompanies the DA.

2.5 Actions since lodgement of DA-2022/1126

DA-2022/1126 was submitted to Wollongong City Council on 18 August 2022, and was publicly notified between 7 December 2022 and 30 January 2023.

Following lodgement, the proponent has engaged with key stakeholders including:

- Wollongong City Council – four meetings post-lodgement to discuss the scheme as lodged and the proposed amendments
- Wollongong Design Review Panel – briefing on 6 December 2022
- Southern Regional Planning Panel – initial briefing meeting on 21 February 2023
- Heritage NSW – on-site meeting on 9 February 2023

As a consequence of this engagement, the proponent has made amendments to the proposed development, as described in **Section 5.0**, which generally comprise:

- Relocation of the proposed CHPC building to the south, whilst retaining generally the same design, configuration and functions as those originally proposed;
- Relocation of the elite performance playing field to the south, remaining to the north of the CHPC;
- Retention of the State heritage-listed Nissen and Quonset huts in their existing position;
- Minor redesign of the community playing field to facilitate retention of the Nissen and Quonset huts, and reduction in the number of floodlights from six to four; and
- Minor changes to other aspects of the development in order to reflect the primary changes outlined above.

In making these amendments, the proponent has sought to address key matters raised by Council, key agencies and community submissions. A detailed response to matters raised during the assessment of the DA is provided as an attachment to the accompanying cover letter dated 22 August 2023.

3.0 UoW and Dragons Partnership

In partnership with the University, the Dragons are proposing a Community and High Performance Centre (CHPC) on the University of Wollongong Innovation Campus. The Centre will enable the Dragons' NRL and NRLW teams along with community programs to be housed in one state of the art venue in the heart of Wollongong. The following section provides further information regarding the Dragons and UoW and their proposed collaborative model for the CHPC.

3.1 About UoW

Established in 1975, the University has expanded its teaching locations to a network of 10 UOW campuses and several global partners, delivering world-class research and education. The university has consistently delivered research of outstanding quality and impact, with the distribution of research to user communities, including industry, being one of UOW's key goals with the university possessing a strong reputation for engagement with industry. The university's Strategic Plan is centred around three core goals:

- Empowering students for their future;
- Creating knowledge for a better world;
- Making a difference in communities.

Collaboration with industry and community partners to provide unique opportunities for learning, research and dissemination of knowledge within its local and global networks is a core element of UoW's approach.

3.2 About the Dragons

The St George Illawarra Dragons is a professional Australian rugby league football club which represents both the Illawarra and St George regions of NSW. The club has competed in the National Rugby League since 1999 with a mission statement "to have a positive impact on people's lives within our community; a community that stretches from Earlwood in the north to Batemans Bay in the south" . With this mission statement are various objectives including:

- The support and encouragement of young people, especially youth, to make positive choices around health, education and other social issues.
- The promotion of respect for self and others, responsibility and self-esteem.
- The promotion of rugby league players as a means of delivering health benefits and promoting positive social interaction.
- To use their profile and strength of brand to assist selected local charities and associations.

3.3 Holistic Approach to Integrated Community Sporting Outcomes

The proposed CHPC at the UoW Innovation Campus has been developed through an integrated approach between the UoW and the Dragons that aligns closely with strategic objectives of both parties. The proposal builds on a Memorandum of Understanding (MoU) that has been in place since 2009, which commits to pursue positive outcome for both organisations regarding research, scholarships, community programs, internships, promotions and facility use. Bringing together the Dragons' elite, community outreach and club administration facilities from three main existing locations to a 'single roof' model within the Innovation Campus will deliver a wide range of benefits for the Dragons, including increased collaboration and connection between the Dragons' elite, community sporting, social outreach and club operation arms.

Locating this facility within the UoW's Innovation Campus, which is intended to foster collaboration and innovation between UoW and industry partners, will allow direct access to and collaboration between students and researchers of UoW with the high-performance elite sport programs, community outreach programs and sports administration users. UoW staff and students will gain direct access to the CHPC to participate in learning opportunities, direct industry engagement and research activities, whilst the Dragons will benefit from immediate access to implement leading research and innovation outcomes generated by UoW's research program.

This collaborative model will see students of UoW gain access to the CHPC for 30-45 hours per week, including opportunities for work experience and internships with the Dragons, PhD scholarships focused on direct collaboration with the Dragons' sports, business and community activities. This will be further supplemented by NRL-related placement programs that offer 300+ student hours per week and ongoing scholarship opportunities

for UOW students, with a greater focus on being a catalyst to encourage women and Indigenous persons in sports. The CHPC has also been designed to include space to accommodate community and innovative education programs, which will be open for broader community use either as stand-alone offerings or in collaboration with UoW.

The proposed development for the CHPC is based on this integrated model, bringing together grassroots, civic context, elite sporting initiatives and an array of programming opportunities under the 'one roof' to benefit the local community and UoW. The synergies and holistic approach ensure the whole is greater than the sum of the parts. As a collaborative model under the existing Dragons and UoW partnership, the new CHPC will deliver state of the art facilities, efficiencies across multiple uses, sustainable design practices and an overarching community-focus. This demonstrates a unique opportunity to deliver significant improvements to the Innovation Campus and a long-term legacy for its users.

The partnership is structured through the existing MoU with the stated intention to work together "cooperatively and collaboratively".

The MoU provides a partnership framework and identifies priority areas including commercial collaboration, social inclusion, education and the Community & High Performance Centre. The CHPC is a central component of the MoU because of the opportunity to leverage the project for research, community and student benefits.

There are several agreements under development between the Club and the university that provide formal structure around the development and operation of the CHPC. These include:

- A Project Delivery Agreement / Umbrella Agreement which establishes parties responsibilities for planning and delivering the Project.
- A Ground Lease - for lease of the CHPC site and license for use and operation of the fields.
- A Collaboration Agreement - similar to the MoU currently in place, the Collaboration Agreement will establish the principles and the plan / program of which the parties will deliver during the operation of the CHPC. This includes community programs, educational opportunities, scholarships, university research, use of community / university spaces within the building, use of the fields, etc.

As part of the MoU, and the Collaboration Agreement under development, an Alliance Committee has been established between the Dragons and UoW. This Committee is reasonable in determining areas of collaboration, operational priorities, implementation of agreements and programs in the interim, and once the CHPC is operational.

4.0 Site Analysis

4.1 Site Location and Context

The site is located on Dharawal land of the Illawarra region. It is specifically located at 7-9 Squires Way, North Wollongong within the City of Wollongong Council Local Government Area in a locality characterised by a mixture of low rise residential development, educational facilities, light industry and recreational spaces. As has been previously identified, the site forms part of UOW's Innovation Campus which is associated with main UoW Campus located approximately 1.7km south-west of the site, on the western side of the Princes Highway. The site is located approximately 250m south-east of Fairy Meadow Railway Station and is next to Puckeys Estate and Fairy Meadow Beach. Refer to **Figure 2**

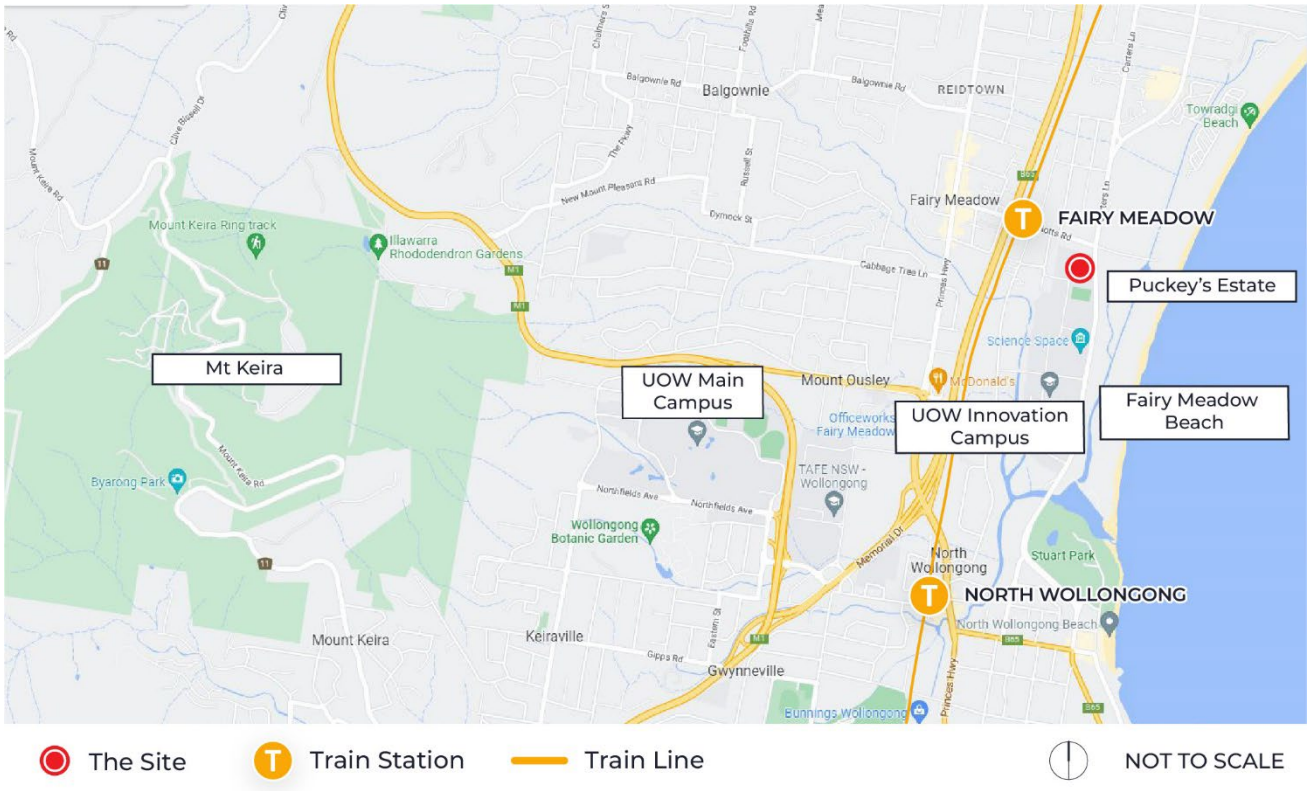

Figure 2 Site location

Source: Google Maps/Ethos Urban

4.2 Site Description

The site is legally described as Part Lot 1 and Lot 2 in Deposited Plan 1172135. The site has a primary frontage to Innovation Way within the Innovation Campus site, with a secondary frontage to Innovation Way to the east. The land is owned by the University of Wollongong.

The area of the site is approximately 4.3 hectares and is irregular in shape. An aerial photograph of the site is provided at **Figure 3** on the following page.

Figure 3 Aerial photograph of the site

Source: Nearmap/Ethos Urban

4.3 Existing Development

Currently, the site is comprised of open lawn with a perimeter of established trees to the western, northern and eastern site boundaries. An existing shared pedestrian pathway runs through the site that connects the central part of the Innovation Campus to Squires Way, toward the intersection of Elliotts Road.

Located centrally within the site are the Nissen and Quonset Huts. These structures are associated with the former Balgownie Migrant Workers' Hostel which operated between 1951 and 1982. Buildings within this portion of the campus comprise:

- Building 201 – Quonset Hut with later additions – Former dining hall for the Balgownie Migrant Workers' Hostel, currently utilised as a child care centre (known as 'Kid's Uni').
- Building 204 – Nissen Hut – Formerly used as laundry exchange for the Balgownie Migrant Workers' Hostel, now utilised as the University Alumni Bookshop.
- Building 210 – Quonset Hut – Formerly used as staff accommodation for the Balgownie Migrant Workers' Hostel, now utilised as the University Alumni Bookshop.

Located to the south of the lot is:

- An informal gravel parking area
- An informal maintenance yard

Figure 4 to **Figure** 9 illustrate the character of existing site conditions.

Figure 4 Existing playing field

Source: Ethos Urban

Figure 5 Existing playing field

Source: Ethos Urban

Figure 6 Existing pedestrian path leading to Squires Way

Source: Ethos Urban

Figure 7 Existing car park south of Building 201

Source: Ethos Urban

Figure 8 Existing Building 204

Source: Ethos Urban

Figure 9 Existing Building 201

Source: Ethos Urban

4.4 Access and Transport

4.4.1 Pedestrian Access

Pedestrian footpaths are located within the site and along the majority of adjoining roads including Squires Way, Elliotts Road, Cowper Street and Puckey Avenue. Local pedestrian connections provide access to a broader regional pedestrian network that provides access to local shops, services, open space (including Thomas Dalton Reserve) and the coastline.

4.4.2 Cycle Connectivity

Ample off-road cycle lanes can be accessed from the CHPC site and provide connectivity to key trip origins and destinations such as Wollongong CBD to the south, East Corrimal to the north, and UoW main campus to the south-west. The local bicycle network is shown in Figure 11.

4.4.3 Public transport

The site is well-serviced by public transport, including:

- Heavy Rail: The site is located approximately 250m west north of Fairy Meadow Station (approximately 13 minutes' walk) which is serviced via the South Coast Line, operating between Central Station (Sydney), Bomaderry (Nowra) and Port Kembla.
- Bus: A free shuttle bus service (number 55A and 55C) is offered within North Wollongong, running in a bi-directional loop from Wollongong Station to Wollongong University (Main Campus) via Wollongong Hospital, Burelli Street and the Innovation Campus. The shuttle bus operates every 10 minutes between 7am and 6pm during weekdays, and every 20 minutes on evenings and weekends. The nearest shuttle service stop to the site is located on Squires Way, at the Puckey Avenue intersection.

4.4.4 Vehicle access and parking

Vehicular access to the site is via Innovation Way, which can be accessed from the south-east and south-west via Puckey Avenue/Squires Way/Montague Street or from the north-west via Elliotts Road and Cowper Street.

There are currently 13 staff / visitor car parking spaces, including accessible and bus parking, located within the site immediately adjacent to the Kid's Uni and Alumni Bookshop. Substantial areas of permanent and temporary at-grade parking are provided within the Innovation Campus to the south of the site, including approximately 220 existing off-street parking spaces located in the parking areas indicated in **Figure 10**. Unrestricted on-street parking is also available along the local roads to the west of the site, including Cowper Street, Bourke Street and Montague Street.

It is noted that the future development is proposed to be located where the current south-eastern off-street parking is located, as shown in **Figure 10** below. This parking will be removed, and supplemented through other parking provided by the development. This is discussed further in **Section 5.7**.

Figure 10 Existing parking near the development site

Source: Aurecon

Figure 11 Cycling connectivity

Source: Populous / TfNSW

4.5 Flooding

The site falls within the Cabbage Tree Creek and Towradgi Arm catchments and is located north of the confluence of Fairy and Cabbage Tree Creeks. The Fairy and Cabbage Tree Creeks total a catchment area of approx. 20km² at the point of confluence in the vicinity of the proposed development site. The catchment area is generally characterised by high urban uses and has steep high rainfall headwaters into the escarpment to the west.

The existing site is subject to flooding in a range of minor and major rainfall events as outlined in the Flood Report by Aurecon (**Appendix P**). During major flood events such as the 1% Annual Exceedance Probability (AEP), much of the site is subject to inundation with flows from Cabbage Tree Creek flowing directly through the site towards Puckeys Estate and Towradgi Arm (**Figure 13**). During these (and smaller) events the Kid's Uni is affected by flooding along with the immediately surrounding areas.

Figure 12 Photographs of localised flooding on 7 April 2022

Source: University of Wollongong

Figure 13 Existing flooding extent and flows for 1% AEP

Source: Aurecon

4.6 Bushfire Prone Land

The site is mapped as being partially located within bushfire prone land, as the eastern portion of the site being subject to a vegetation buffer that is primarily associated with the density of vegetation located within Puckeys Estate. Notwithstanding this, the proposed development is not a 'special fire protection purpose' for which a bushfire safety authority would be required pursuant to Section 100B (1b) of the *Rural Fires Act 1977*, and therefore, the DA does not require referral to the NSW Rural Fire Service. Refer to **Figure 14**.

Figure 14 Bushfire prone land mapping

Source: Blackash Bushfire Consulting

4.7 Surrounding development

The surrounding context of the site is characterised by the following development:

- **North**: The northern boundary of the site abuts the rear of low density detached dwelling houses with a primary frontage to Elliotts Road. Further north are low density houses, with Thomas Dalton Park to the north-east (containing a baseball field, on grade car park and other multi-use playing fields). Refer to **Figure 15** and **Figure 16**.

Figure 15 Northern boundary of the site as it abuts residential development to the north

Source: Ethos Urban

Figure 16 Residential development on the northern side of Elliotts Road

Source: Ethos Urban

- **East**: to the immediate east of the site, on the eastern side of Squires Way is Puckeys Estate Reserve, a natural densely vegetated area that does not comprise any development. Further east of Puckeys Estate Reserve is Fairy Meadow Beach, accessible via Elliotts Road. Refer to **Figure 17** and **Figure 18**.

Figure 17 Puckeys Estate on the eastern side of Squires Way

Source: Ethos Urban

Figure 18 Fairy Meadow Beach further east

Source: Ethos Urban

- **South**: To the immediate south of the site is an existing facilities maintenance compound and temporary at-grade car park. Further to the south is an unnamed road providing service access to the Sustainable Buildings Research Centre, part of the wider Innovation Campus. Further to the south are recently completed new education buildings, set in a landscaped setting. The southernmost part of the UOW Innovation Campus comprises vacant land and car parking areas proposed to be developed for the purpose of a "Health and Wellbeing" Precinct (DA-2021/101). To the south of the UOW Innovation Campus contains vegetated open space and Fairy Creek. Refer to **Figure 19** and **Figure 20**.

Figure 19 Sustainable Buildings Research Centre

Source: Ethos Urban

Figure 20 Innovation Campus buildings

Source: Ethos Urban

- **West**: The western edge of the of the site is formed by Innovation Way and a block of low-density residential dwellings with frontage to Cowper Street. Further to the west of the site, beyond Cowper Street is Fairy Meadow Train Station and mixed-use development along the Princes Highway. Refer to **Figure 21** and **Figure 22**.

Figure 21 Residential development to the west of the site

Source: Ethos Urban

Figure 22 Residential development to the west of the site

Source: Ethos Urban

5.0 Description of Proposed Development

This Development Application comprises a new Community and High Performance Centre and seeks approval for the following works:

- Site preparation works, including removal of existing at-grade car parking, earthworks, tree protection and removal, and termination of utilities.
- Retention of the State heritage listed Nissen and Quonset Huts.
- Construction and use of a new Community and High Performance Centre, including facilities such as:
    - Gymnasium;
    - Male & Female Player amenities such as locker rooms, players lounge, viewing balcony and dining areas;
    - Staff amenities, including end of trip facilities and bike storage;
    - Allied health and training rooms, including medical and physical recovery rooms;
    - Sleep recovery room;
    - Classrooms, lecture theatre and educational spaces;
    - Club administration and community outreach program office spaces;
    - Back of house and administration services and rooms (such as plant, laundry rooms, uniform and merchandise rooms and the like).
- Construction and use of two new playing fields, comprising:
    - new NRL-standard elite training field for training by the Dragons' first grade teams.
    - new community field with floodlighting to allow evening community uses including the All Abilities Squad, Indigenous Programs, After School Programs.
- Landscaping and public domain works within the curtilages of the proposed development including improved open space areas, landscape embellishment works and revised pedestrian and cyclist pathways.
- New at-grade car park comprising 60 parking spaces.
- 300m^2 indoor training facility and 355m^2 for community programs and commercial partnerships.

An overview of the key aspects of the proposal and further detail regarding the development is provided in the following sections. Full details of the proposed development are set out in the Architectural Drawings prepared by Populous (**Appendix B**), Landscape Drawings prepared by Arcadia (**Appendix F**), Playing Field Drawings prepared by SportEng (**Appendix V**) and Civil Engineering Drawings prepared by Aurecon (**Appendix G**) that accompany this DA.

Extracts showing the proposed site plan (**Figure 23**) and indicative photomontages of the proposed development (**Figure 24** and **Figure 25**) are included over page.

Figure 23 Proposed site plan

Source: Populous

Figure 24 Artist impression – aerial view from north

Source: Populous

Figure 25 Artist impression – view of western façade and main entrance from Innovation Way

Source: Populous

5.1 Numerical Overview

The key numerical information for the new CHPC development is summarised in **Table 1**.

Table 1 Key development information

Component	Proposal
Site area	4.3 hectares
GFA	4,598m^2
Maximum Height (above natural ground level)	12.08 metres
Boundary Setbacks • **North** • **East** • **West.**	 • 12m setback to the northern boundary • 15m setback to the eastern boundary • 10m setback to the western boundary
Car spaces	60

5.2 Site Preparation

5.2.1 Demolition

This application seeks approval for the demolition of the existing parking lot, internal roadway and part of the shared pathway through the site.

This DA does not relate to nor seek consent for any physical works in relation to the Nissen and Quonset Huts. These huts will be retained in their existing location.

5.2.2 Tree Removal and Retention

This DA seeks approval for the removal of 132 trees located within the site boundary as detailed in the Arborist Report (**Appendix H**) and illustrated in **Figure 26**. A total of 379 existing trees within the site will be retained, of which 24 would have some encroachment from the proposed development that is able to be managed through generic and site-specific mitigation measures. The Arborist Report includes a Tree Protection Plan that would be implemented to ensure the protection and ongoing health of retained trees through the construction and operational phases of the project.

Total Tree Numbers on Site

Existing trees to be Retained *	379
Existing trees to be Removed	132
Proposed trees	135
Total Trees on Site	514

Figure 26 Tree retention and removal plan

Source: Arcadia

5.2.3 Earthworks

Grading and Cut/Fill

Civil Engineering drawings prepared by Aurecon illustrating the final levels of the site are included at **Appendix G**. Regrading is required for the purpose of managing of stormwater across the site during rainfall events.

An approximate cut volume of 5,248m^3 is proposed with an approximate fill volume of 9,009m^3 which is equal to a deficit of 3,761m^3. The proposed cut and fill depths relative to current grades will be distributed across the site as follows:

NRL Field 1:

- Stripping the site of grass and topsoil as a minimum to expose a suitable subgrade.
- Cutting section to 0.5m and Filling to 0.5m thickness over the entire field to create the desired surface.

Community Field 2:

- Stripping the site of grass and topsoil as a minimum to expose a suitable subgrade.
- Cutting between 0.25m to 0.5m depth over the entire field to allow for introduction of controlled filling of suitable materials to improve field drainage and surface

Building Footprint:

- Stripping the site of grass and topsoil as a minimum to expose a suitable subgrade.
- Filling between 0.25m and 1.1m depth to create the building subgrade earthworks surface.

Carpark:

- Filling between 0.25 to 0.75m depth to create the carpark subgrade earthworks surface..

Overall, the site regrading will allow for a 3.1 RL to the middle of NRL Field 1 and a 3.0 RL to the middle of the Community Field 2. Refer to **Figure 27**

Environmental Management

Based on the recommendations of the Detailed Site Investigation Report by Tetra Tech Coffey (**Appendix K**), the following measures would be required to be implemented prior to the commencement of any earthworks within the site in order to appropriately manage site environmental conditions:

- Complete additional ground gas monitoring events over a range of atmospheric conditions to refine the assessment of potential risks and need for gas protection measures to be incorporated within the proposed structure.
- An Acid Sulfate Soil Management Plan (ASSMP) should be prepared to reduce potential for unacceptable environmental impacts associated with the disturbance of ASS within and surrounding the area of the proposed works. The ASSMP should be prepared by a suitably experienced consultant in general accordance with the Acid Sulfate Soil Manual, published by the Acid Sulfate Soils Management Advisory Committee (ASSMAC).
- An Unexpected Finds Plan should be prepared as part of the construction management process to account for any non-specific and specific unexpected finds including asbestos. Non-specific unexpected finds refer to any possible occurrence within any area of the site not investigated. Specific unexpected finds refer to areas of the site where, for example, contamination was identified yet the source or the extent was not confirmed.
- Preparation of a Construction Environmental Management Plan (CEMP) by the principal contractor to manage environmental risk posed to construction workers, neighbouring site users and to the surrounding environment.

These recommendations are proposed to be implemented prior to the commencement of any works, and can be required through implementation of appropriate conditions of development consent.

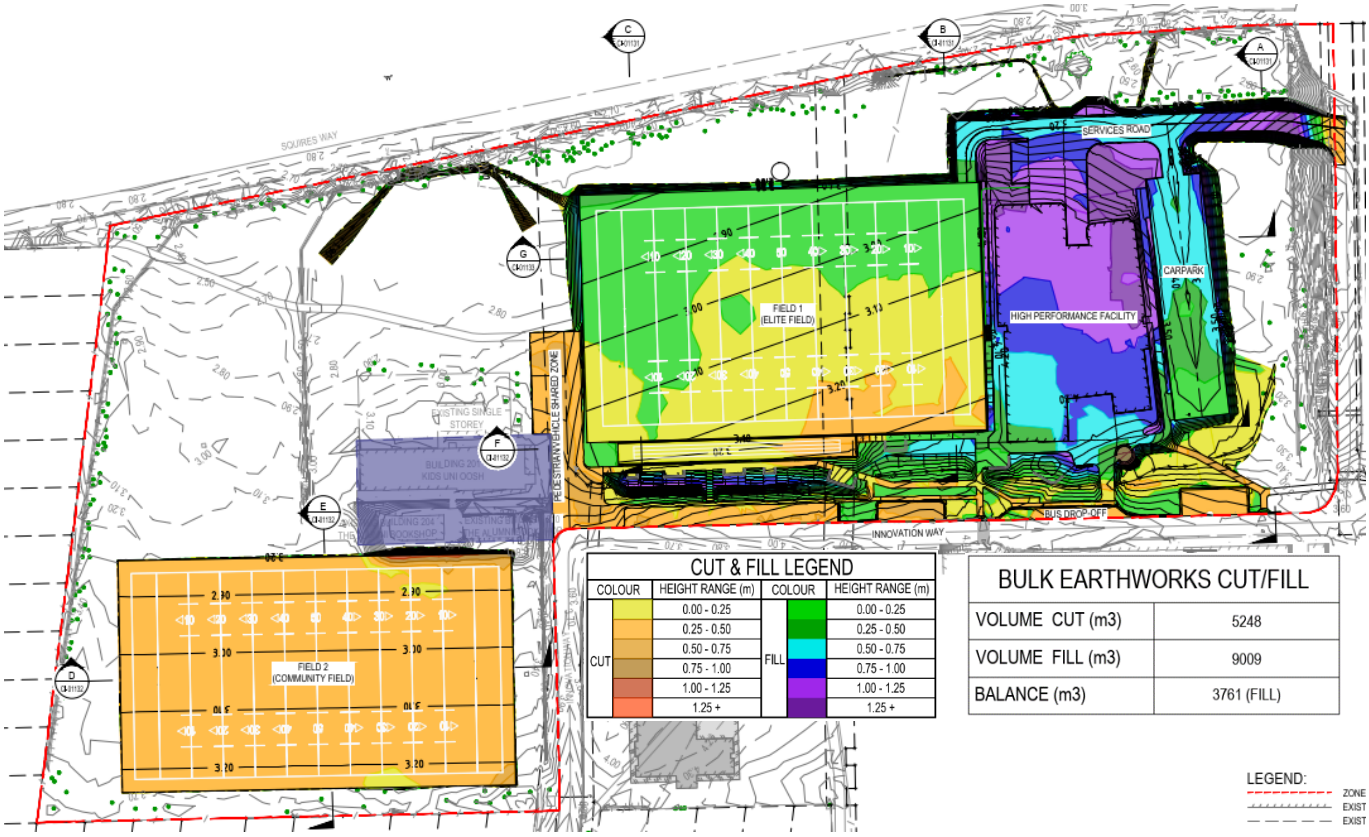

Figure 27 Bulk Earthworks site plan

Source: Aurecon

5.3 Land Use and Operation

5.3.1 Land Use and Development Components

The proposed building and playing fields are principally intended to be used for the purpose of a Community and High Performance Centre, which includes a range of elite sports, community sports, Club administration, learning and research, educational, health services and community programs.

The principal user of the proposed facility will be the St George Illawarra Dragons, who will construct and operate the CHPC under a lease and innovation agreement from UoW. UoW students and research staff will utilise parts of the CHPC both independently and in conjunction with the Dragons for a range of educational and research purposes. Community sporting and other groups will be able to utilise the Community field and internal spaces (i.e. lecture theatre and meeting rooms) on a hire-basis by prior agreement with the Dragons. Allied health professionals may also provide services on a commercial basis to patients (e.g. hydrotherapy or physiotherapy) through a small dedicated area, with the potential for collaboration and cross-employment between practitioners between these services, the Dragons and UoW research and training functions.

The proposal comprises the following land uses:

- Recreation facilities (indoor) and (outdoor) in relation to the elite and community use of the proposed playing fields, indoor gymnasium, medical, recovery and player facilities.
- Office premises in relation to the office-based administrative aspects of the proposed use, including Club administration and
- Educational establishment in relation to uses by and in collaboration with UoW.
- Health services facility in relation to ancillary use for allied health purposes.
- Community facility in relation to community usage of spaces such as the lecture theatre, community rooms etc.

The internal allocation of floor space within the CHPC is outlined in **Table 2** which provides an indication of the mix of uses within the proposed building, noting that a number of spaces are intended to be used flexibly to accommodate the broad range of users within the facility.

Table 2 Assignment of GFA

Use	GFA	Use	GFA
Ground floor		**Level 1**	
Allied Health	262.38m^2	Club Administration	670.45m^2
Classroom	85.32m^2	Partner Space	139.95m^2
Gym & Cardio	591.15m^2	Lecture	87.30m^2
Medical & Physio Recovery	193.97m^2	Football Department	391.25m^2
Aquatic Recovery	163.45m^2	Player & Staff Dining	245.96m^2
Sleep Recovery	45.61m^2	Players' Lounge	79.91m^2
Sauna	16m^2		
Staff EOT	89m^2		

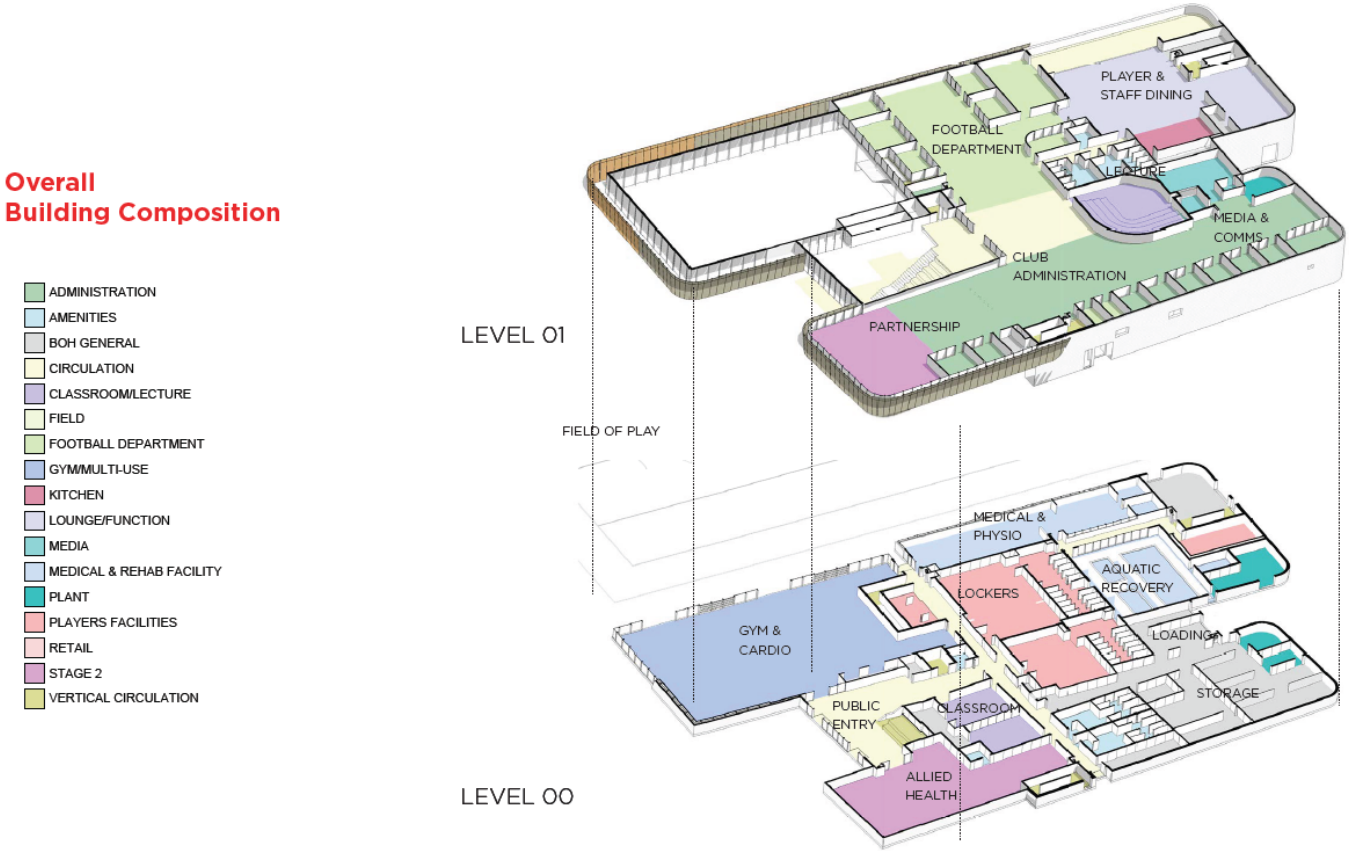

Figure 28 Distribution of Uses

Source: Populous

5.3.2 Operation

An Operational Plan of Management (OPoM) has been prepared by Bridge42 and is provided at **Appendix S**. The purpose of the OPoM is to document the Dragons and UoW's approach to managing the ongoing operation of the proposed development. The Plan covers ownership, lease arrangements and programming as well as details regarding the management and operations of CHPC and the new sporting fields.

The new CHPC is expected to accommodate a variety of employees associated with the Dragons sporting, administration and community programs and with UoW.

5.4 Built Form

The proposed CHPC building will be two storeys in height. The building volumes are designed in response to the inherent requirements of the intended uses of the facility. The Architectural Drawings and Schematic Design Report provided at **Appendix B** and **C** demonstrate the harmonisation of all uses within the one building which is intended to create an integrated centre for community, education and high performance sport (refer to ***Figure 29***). The visual bulk of the building has been offset by the integration of the landscape and architectural design.

5.4.1 Design Drivers and Principles

The architectural design of the proposed building is informed by a number of design drivers and principles which have formed the basis of underpinning the design parameters and principles used for the proposed CHPC. They are noted as follows:

- The incorporation of local industry, materials and knowledge in the construction and maintenance of the CHPC.
- The maximisation of club high performance provisions through incorporating the latest available, and best practice athlete training facilities.
- Strong relationship between the CHPC built form elements and the outdoor fields, ensuring the creation of a sense of enclosure for the fields to maximise player focus as well as to facilitate high levels of maintenance and managed access between the fields and the CHPC building.
- The maximisation of environmental performance and user wellbeing through the use of passive solar and natural ventilation principles, access to natural light and views, the enablement and encouragement of pedestrian and bike links to and from the site, ensuring that the facility is accessible to all users.
- Being sympathetic to existing landscapes and site conditions, specifically trees and other significant flora, potential biodiversity corridors, overland water flows and flood mitigation, potential contamination and heritage.
- Aligning with existing Innovation Campus master plan principles, such as continuing to ensure vehicular and pedestrian access is facilitated and that a development outcome adheres to the relevant planning controls and urban design guidelines.
- Creating a presence for the Dragons on the site, including as a visible bookend to the northern end of the Innovation Campus.

5.4.2 External Materials and Finishes

A simple, sleek and sympathetic palette of materials and finishes has been selected. The materials and finishes featured on the building have been selected to appropriately complement the surrounding Puckeys Estate and beachside context. The materials primarily comprise of masonry and metal panelling (refer to **Figure 30**). The design of the CHPC incorporates the following design features:

- The external façade of the building is predominantly in anodised screening, to provide solar sun shading..
- Structural V columns have been provided to reference the history of the local industry.
- Subtle use of the colour red pays homage to the distinct Dragons branding and is utilised as part of the ceiling palettes.

Further details have been provided in the Design Report at **Appendix C**.

Figure 29 Entry Perspective showcasing the proposed external materials and colours

Source: Populous

5.4.3 Business Identification Signage

This DA also seeks approval for three (3) signage zones located at the western and northern elevations of the CHPC building. The future signage is intended to serve the purpose of either building or business identification and will assist with future wayfinding. Further detail regarding signage content and illumination fixtures will be submitted to Council prior to the issuing of a Construction Certificate (CC).

Images of the zones are provided at **Figure 30** and **Figure 31**, and the approximate zone measurements are located in **Table 3**.

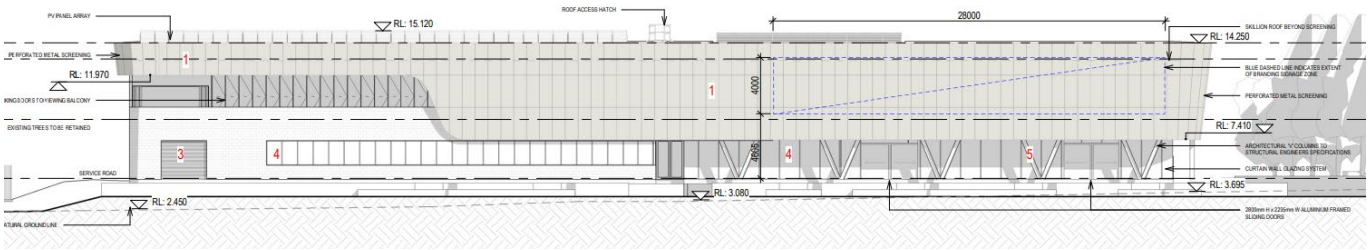

Figure 30 Northern elevation showcasing signage zone denoted in blue

Source: Populous

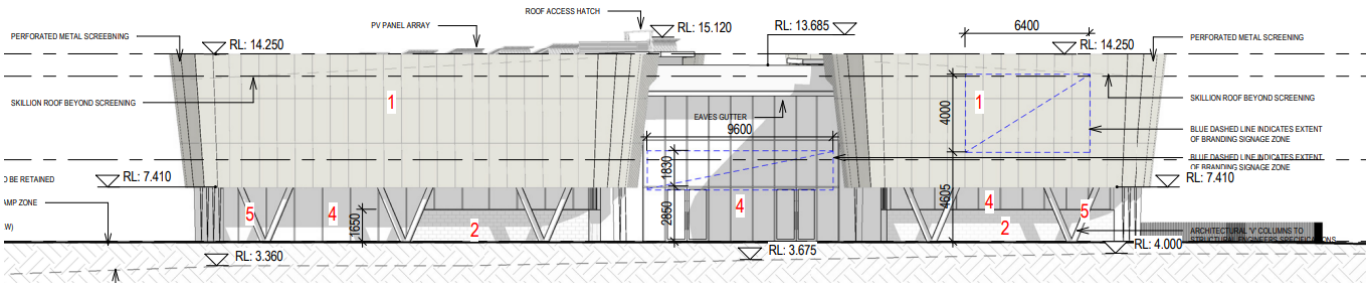

Figure 31 Western elevation showcasing two signage zones denoted in blue

Source: Populous

Table 3 Signage zone specifications

Location	Width x Height
West elevation	**6.4m x 4m** **9.6m x 1.83m**
North elevation	**28m x 4m**

5.5 Playing Fields

The proposal includes the construction of two new full-sized rugby league playing fields, comprising:

- new NRL-standard elite training field (Field 1) for training by the Dragons' first grade teams.
- new Community field (Field 2) with floodlighting to allow evening community uses including the all-abilities Squad, Indigenous Programs, After School Programs.

Both fields will be natural turf (grass) with each field having the following dimensions:

- Field 1: typical dimensions of 68m (width) by 116m (length).
- Field 2: dimensions of 65m (width) by 116m (length).
- A narrow (74m by 3.6m) synthetic turf warm-up and sprinting track will also be located to the west of Field 1.

Flood lighting is proposed to the Community Field and will be designed in accordance with *AS4282 – Control of the Obtrusive Effects of Outdoor Lighting*. A total of four, 20 metre light poles are proposed with three floodlights each, as shown with the Lighting Performance Report by Aurecon (**Appendix Y**).

It is anticipated that lighting to the fields will be in operation between the hours of dusk and 11pm throughout the week.

5.6 Landscaping and Public Domain

The proposed landscaping scheme is outlined within the Landscape Design Report prepared by Arcadia and provided at **Appendix F**. The landscape design is centred around the visitor experience expressed through the design of the arrival journey into the CHPC and towards the playing fields.

The design utilises landscaping (detailed in **Appendix F**) to improve the human scale relationship to the building through the incorporation of the Yarning Circle, and public domain area at the main entry approach to the building, as well as within the curtilage of the new NRL field 1 and Community field 1, reintroducing mature planting on site.

The open landscape is specifically designed for communal use, providing functionality as well as interest through the urban character of the space. This public space design will facilitate a myriad of users through usable flexible space and has first and foremost been influenced by Designing with Country principles and objectives at the crux of the proposed urban fabric that surrounds the CHPC building and fields. The landscape design allows for access to nature by having the landscape tucked up against the building, thereby encouraging activation yet also respite.

External lighting is proposed within the public domain and will be operated to provide safe and secure means for pedestrians to move in and around the centre and associated car parking.

5.7 Transport and Parking

5.7.1 Site Access

Vehicle Access

Vehicle access into the site will be facilitated by a new two-way entry / exit driveway located off the northern side of the new southern internal road, accessed via Innovation Way. Innovation Way will provide the main access point to the site, via Cowper Road from the west or via Puckey Avenue from the south. The location of access points and drop-off areas within the site are shown at **Figure 33**.

Parking

A new at-grade car park is proposed immediately south of the proposed development and will be accessible via the new southern internal access road. The car park has capacity for 60 cars, including two universally accessible parking spaces and will provide a direct and short connection to the main entrance of the CHPC, the Yarning Circle and to the pedestrian access areas to the NRL field 1 and Community field 2. Secure bicycle parking will be provided in the CHPC for staff, while visitor bicycle parking will also be provided in the public domain near to the main entrance and Yarning Circle.

The proposal also seeks to modify the Kids' Uni, Innovation Campus childcare on-street parking area to provide a dedicated service vehicle parking space, and to relocate seven existing carparking spaces from the eastern end of the existing external carpark to a new on-street carparking area along the eastern side of Innovation Way. The relocated childcare visitor spaces will remain in close proximity to the Kids' Uni, Innovation Campus building, as shown in **Figure 32** below.

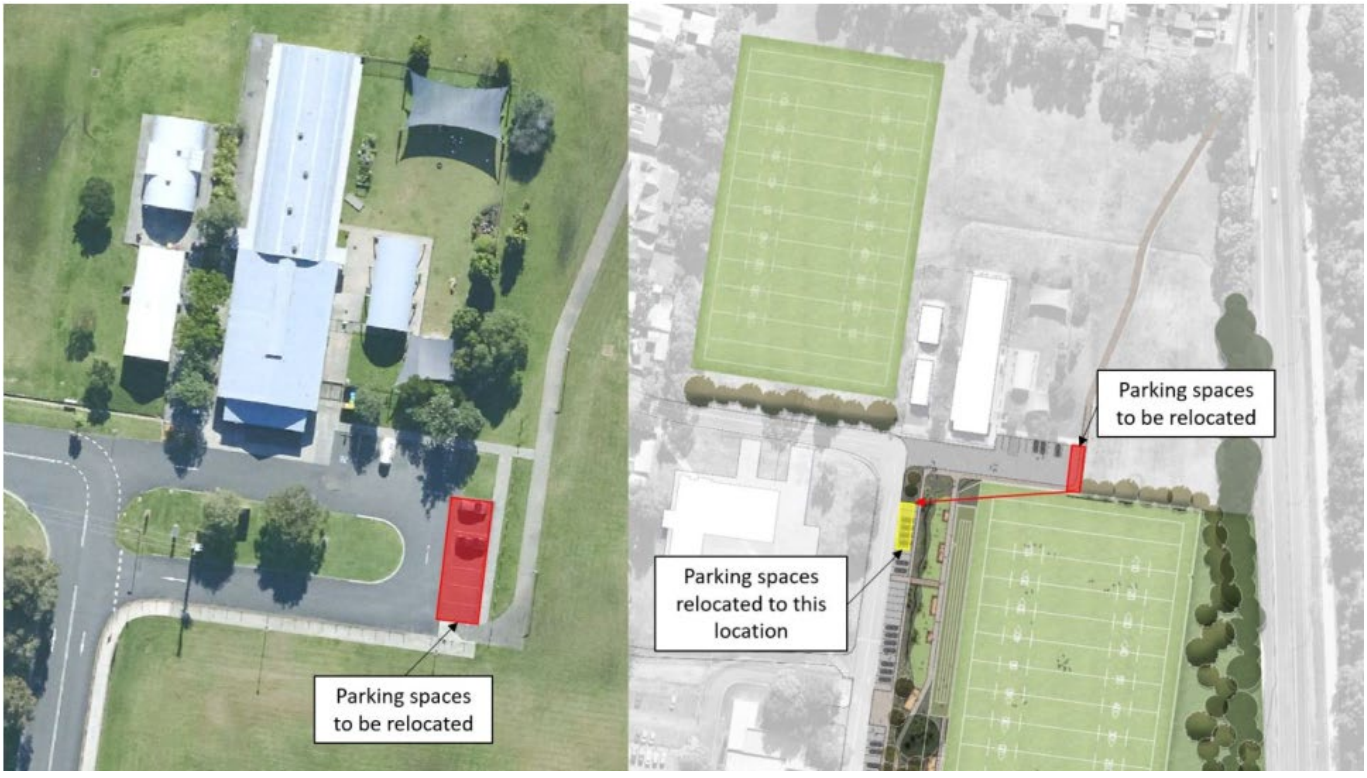

Figure 32 Relocated parking in relation to the existing childcare centre

Source: Aurecon

Loading and Servicing

A single loading dock is proposed at the CHPC's eastern elevation which will be accessible from the new internal roadway via the at-grade car park. Refer to **Figure 33** on the previous page.

Figure 33 Proposed vehicular access arrangement

Source: Aurecon

5.8 Water Management

Given that the site is partially prone to holding water during significant rainfall events, a series of water sensitive urban design solutions have been provided, including:

- Two diversion walls, one at the eastern edge of Field 1 and the second to the south of the Nissen Huts.
- A series of pit and pipe systems, including two main diversion drains.
- Landscaping bioswales.

The physical barriers are required to protect and redirect overland flow. A low level wall is proposed to the south of the Nissen Hut, to the north of Field 1. This flood wall limits increases in flood levels across the existing buildings. This wall will have a height of approximately 300mm and works in conjunction with a proposed drain that conveys flows towards the east. The wall will be incorporated into public domain works and used to form an informal bench.

The second form of flood protection is the earth bund that is proposed to be located along the western side of Field 1. This bund is specifically required to protect the sprint track, the surface of which cannot be flood affected due to risk of degradation. The earth bund will have a maximum elevation of 4.4m AHD, and is 100 metres in length. Seating will be incorporated into the side of this bund to allow for visitors and onlookers to utilise this raised location for viewing Field 1. Refer to **Figure 34** for the location of the bund.

The proposed main building does constrict a portion of the overland flow travelling from Innovation Way to Squires Way. This results in increases in flood levels to the west and in front of the building. To manage this risk, a diversion drain has been incorporated in the design to convey flows more efficiently from the western face of the main building around to the south of the main carpark, into the existing floodway.

Figure 34 Water management solutions to address flooding risks across the site

Source: Aurecon

5.9 Sustainability

The proposed development seeks to incorporate a variety of Ecological Sustainable Development (ESD) measures into the building design and operations to achieve a high standard of environmental performance and efficiency. A Sustainability Report has been provided by Aurecon (**Appendix O**). The report outlines how the design of the CHPC has considered a holistic view of sustainable development, prioritising whole of life strategies for both conservation and enhancement of the environment and contributes to a positive social outcome for the community.

A Sustainability Strategy has been developed for the CHPC and includes four main priorities, consisting of health and wellbeing, community, building performance and integration with the site. Intrinsic to the sustainable design of the development has also been informed by recognised sustainability benchmarks, utilising existing rating tools such as Green Star & WELL to further demonstrate the projects alignment with 'National Best Practice' measures for sustainability and wellness.

Further, the project has embarked on six unique sustainable design initiatives, summarised below and explained in further detail within **Appendix O**:

- **Energy and carbon**: designing the building to be 'net zero ready'. A rooftop solar photovoltaic (PV) system is proposed to be installed, with sizing of the system and any associated storage to be determined during the detailed design phase.
- **Integrated water management**: recognising that water is finite resource and prioritising strategies which allow responsible consumption of water.
- **Sustainable materials**: consideration of sustainability will be prioritised when selecting materials.
- **Waste**: concerning both operational and construction waste, the project will promote recycling and limit landfill.
- **Indoor environment quality**: health and wellbeing of users is prioritised whilst aligning functional space requirements and environmental targets.
- **Biodiversity**: the public realm landscape design will celebrate biodiversity and character of the site as well as the incorporation of local Indigenous species through acknowledgment and consultation with First Nations people of the Dharawal Country.

6.0 Environmental Assessment

This section considers the planning issues relevant to the proposed development and provides an assessment of the relevant matters prescribed in Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

6.1 Environmental Planning Instrument

The DA's consistency and compliance with the relevant environmental planning instruments, strategies and policies is considered in the sections below. Key standards and guidelines are highlighted in **Table 4** below and are also discussed further in the following sections of this environmental assessment where relevant.

Table 4 Summary of consistency with key statutory plans and policies

Plan	Comments
Strategic Plans and Policies	
Illawarra Shoalhaven Regional Plan 2041	The Illawarra Shoalhaven Regional Plan 2041 was released in May 2021. This Regional Plan identifies the University of Wollongong as being a key contributor to education and innovation in the region, including contributing $1.4 billion to the economy in 2018. The proposed development supports the role and status of the University recognised in the Regional Plan through: • Complimenting and building on the range of research facilities that occupy the Innovation Campus through the integration of classrooms, lecture theatres and other education related uses within the new CHPC building. • The Region Plan identifies that there are future opportunities for health industries in Wollongong where University students would be able to obtain industry experience through the Dragons NRL team. • The proposed development addresses the Region Plan's objective of providing high quality open space.
Wollongong Local Strategic Planning Statement 2020	The Wollongong Local Strategic Planning Statement (LSPS) 2020 prepared by Council sets the 20-year vision for the Wollongong LGA. The LSPS recognises the importance of assets such as the University of Wollongong and its Innovation Campus for the region, providing a space for education and recreational use, alongside enabling a more inclusive and connected community. The proposed CHPC will support education, research and administration in the fields of elite sporting performance, applied health and sports administration, facilitate community recreational usage of the sporting facilities and through a range of other community outreach activities facilitated by the CHPC project.
Summary of consistency with relevant Legislation	
Biodiversity Conservation Act 2016	The Biodiversity Conservation Act 2016 identifies and protects threatened species populations and ecological communities in NSW. A Flora and Fauna Assessment has been prepared by Ecological Australia (**Appendix L**) in accordance with this Act. The report addresses the potential impact of the proposed development on any threatened species, populations and ecological communities listed under the *Biodiversity Conservation Act 2016*.
Rural Fires Act 1997	The proposed development is not for a 'special fire protection purpose' and accordingly approval is not required under the ***Rural Fires Act 1997***.
Roads Act 1993	The proposed development does not impact on or intend to dedicate land as a public road, and accordingly approval is not required under the ***Roads Act 1993***.
Water Management Act 2000	As the proposal is not located on waterfront land, nor is it within 40 metres of a watercourse, a controlled activity approval (CAA) is not required under section 91 of the ***Water Management Act 2000***.
National Parks and Wildlife Act 1974	No identified Aboriginal items of heritage significance are known to be present on site and accordingly approval under the ***National Parks and Wildlife Act 1974*** is not required. Standard conditions of consent in relation to unexpected finds are recommended. NGH Environmental has prepared a Aboriginal Heritage Due Diligence Assessment. The desktop and field investigation found that due to disturbance and lack of potential for Aboriginal sites within the Project area, the area does not require further investigation and assessment. (**Appendix Z**). In accordance with the *Guide to investigating, assessing and reporting on*

Plan	Comments	
	Aboriginal cultural heritage in NSW (OEH 2011), an Aboriginal Cultural Heritage Assessment Report is not required by the findings of the Due Diligence Assessment.	
Heritage Act 1977	No works are proposed within the heritage of the curtilage of the remnant building of the Balgownie Migrant Workers' Hostel, SHR 61075. A Heritage Impact Statement has been prepared **(Appendix E)**	
State Environmental Planning Policies		
State Environmental Planning Policy (Planning Systems) 2021	As the proposed development is Crown development with a value of more than $5 million and has a capital investment value of more than $30 million, the proposed is a class of development described in Schedule 4A of the EP&A Act. Under Part 4 of the SEPP the Council's consent function is exercised by the Southern Regional Planning Panel.	
State Environmental Planning Policy (Transport and Infrastructure) 2021	Chapter 3 Part 5 states that the aim of the SEPP is to facilitate the encouragement of "*new developments or modified premises and consent authorities to facilitate the joint and shared use of the facilities of educational establishments with the community through appropriate design*". Section 3.46 states that "*A university (including any part of its site and any of its facilities) may be used, with development consent, for the physical, social, cultural or intellectual development or welfare of the community, whether or not it is a commercial use of the establishment*." As the proposed development is already permitted under the Wollongong LEP, this provision is not relied upon insofar as permissibility of the proposal is concerned.	
State Environmental Planning Policy (Resilience and Hazards) 2021	Chapter 2 – Coastal Management	Refer to **Section 6.1.1.**
	Chapter 4 – Remediation of Land	A Detailed (Phase 2) Site Investigation has been prepared for the site by Tetra Tech Coffey (**Appendix K**) which concludes that the site can be made suitable for the proposed development subject to the implementation of the recommendations set out in their report, which have been incorporated in the proposed development at **Section 5.2.3**.
State Environmental Planning Policy (Biodiversity and Conservation) 2021	Chapter 4 – State Koala Habitat Protection 2021 (KHP 2021)	The subject site is located within the Wollongong LGA which is listed in Schedule 4 of the Biodiversity and Conservation SEPP. As there is no approved Koala Plan of Management for the land and the area of the subject site exceeds >1 ha, the KHP 2021 applies. Clause 11(5) of the KHP SEPP provides that consent may only be granted if the subject site does not include any trees belonging to the listed koala use tree species **or** is not core koala habitat. The Flora and Fauna Assessment prepared by Eco Logical Australia (**Appendix L**) states that the proposed development will not result in any impacts on listed koala use tree species, and is not core koala habitat, and accordingly consent may be granted to the proposal.
State Environmental Planning Policy (Industry and Employment) 2021	State Environmental Planning Policy (Industry and Employment) 2021 – Chapter 3 (Advertising and Signage) applies to all signage that, under an environmental planning instrument, can be displayed with or without development consent and is visible from any public place or public reserve. The proposed signage zones meets the objectives of the Industry and Employment SEPP 2021 in that: • the proposed signage zones will provide a space for future detailed signage content which will identify a business associated with the redevelopment of the site; • the proposed signage zones will result in an outcome that will have any adverse impacts on significant views or the amenity of development within the immediate surrounds; and • the proposed signage zones are intended to facilitate signage that will be of a high-quality design and finish, and will be designed directly into the façade of the building, utilising the structural elements of the façade to enable discrete but identifiable future signs. An assessment of the proposed development's compliance with the criteria as specified in Schedule 5 of the Industry and Employment SEPP 2021 is detailed below.	

Plan	Comments		
	Assessment Criteria	**Assessment**	**Compliance**
	1. Character of the Area		
	Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	Yes. The signage zones will enable a framework for future detailed signage that will eventually complement the existing and future character of the CHPC, synonymous with the zoning for the land being SP1 Special Activities, which permits recreational facilities (indoor, outdoor and major), and is in keeping with the character of similar facilities of this nature.	Yes
	Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed signage is not for the purposes of outdoor advertising signage and will relate to future detailed signage content that will be used to convey business and building identification.	N/A
	2. Special Areas		
	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?	No. The future detailed signage will not detract from the amenity or visual quality of the Innovation Campus or any other environmentally sensitive areas. The proposed signage is of an appropriate size and scale in the context of the building and sporting field facilities and will not detract from the visual quality of the area as all signs and signage zones are appropriately located and oriented relative to the proposed development and internally within the Innovation Campus site.	Yes
	3. Views and Vistas		
	Does the proposal obscure or compromise important views?	No. The signage zones will not obscure or compromise any additional views to or from the area as they are not proposed to protrude above the parapet of the proposed building or reduce the quality of any existing vistas across the site.	Yes
	Does the proposal dominate the skyline and reduce the quality of vistas?		
	Does the proposal respect the viewing rights of other advertisers?	No other existing advertising structures are located near the vicinity of the proposed signage zones and thus the viewing rights of advertisers are respected.	Yes
	4. Streetscape, Setting or Landscape		
	Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	Yes. The proposed signage zones have been designed to be compatible with the proportion and form the proposed development, making it appropriate for the setting. It will be complementary with the bulk and scale of the proposed CHPC, and will form part of the façade, able to be integrated and visually read as a part of the development.	Yes
	Does the proposal contribute to the visual interest of the	Yes. The proposed zones will enable signage that enhances the visual interest of the proposed development	Yes

Plan	Comments		
	streetscape, setting or landscape?	and will enhance the visibility of the site as a recreational landmark for the Dragons and UoW.	
	Does the proposal reduce clutter by rationalising and simplifying existing advertising?	Not applicable. There is no existing signage on site.	N/A
	Does the proposal screen unsightliness?	Not applicable to the proposal. The signage zones will not screen unsightliness.	N/A
	Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage zones are considered to be positioned appropriately and will not protrude above buildings, structures or tree canopies in the area or locality.	Yes
	Does the proposal require ongoing vegetation management?	The proposed signage zones will not require vegetation management.	N/A
	5. Site and Building		
	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?	Yes. The proposed signage zones have been designed to be compatible with the scale, proportion and form of the proposed building, integrating it into the design of the CHPC façade and being scaled appropriately to the relative proportion of the football fields, making it appropriate for the setting.	Yes
	Does the proposal respect important features of the site or building, or both?	Yes. The signage zones have been appropriately designed to respect the scale of the building and the surrounding recreational context.	Yes
	Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The future detailed signage applications will demonstrate an innovative and imaginative approach, being incorporated into the structural anodised façade materiality of the CHPC building.	Yes
	6. Associated Devices and Logos with Advertisements and Advertising Structures		
	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?	The proposed signage zones are proposed at the façade, with no associated devices intended to be attached.	Yes
	7. Illumination		
	Would illumination result in unacceptable glare?	No, the proposal seeks consent for signage zones only.	N/A
	Would illumination affect safety for pedestrians, vehicles or aircraft?		
	Would illumination detract from the amenity of any residence or other form of accommodation?		

Plan	Comments		
	Can the intensity of the illumination be adjusted, if necessary?		
	Is the illumination subject to a curfew?		
	8. Safety		
	Would the proposal reduce the safety for any public road?	No. Signage zones will not be flashing, moving or in any other way distracting for any drivers, pedestrians or cyclists on Squire Way or Innovation Way.	Yes
Local Environmental Plans and Policies			
Wollongong Local Environmental Plan 2009	2.1 – Land use zones	The site is zoned SP1 Special Activities. The proposed development is consistent with the objectives of the zone. All proposed land uses are permitted with development consent within the zone as outlined in **Section 6.1.2**.	
	4.3 – Height of buildings	The proposed development is well within the maximum permitted building height standard of 24 metres.	
	4.4 – Floor space ratio	No FSR applies to the site.	
	4.6 – Exceptions to development standards	N/A – the development complies with the applicable development standards.	
	5.10 – Heritage conservation	Clause 5.10 requires the assessment of the impacts of proposed development on a heritage item. The proposed development that is the subject of this DA would not result in any adverse impact on the Nissen and Quonset Huts.	
	5.21 – Flood planning	Whilst the site is not mapped as being flood affected land under the LEP, the site is known to be flood affected. A detailed Flooding Assessment prepared by Aurecon is provided at **Appendix P** and nominates suitable flood planning levels to be provided across the fields and building, as well as appropriate shelter in the event of an emergency. Refer to the discussion in **Section 6.2** below.	
	7.2 – Natural resource sensitivity – biodiversity	The site is not identified on land that is identified as "Natural resource sensitivity—biodiversity".	
	7.5 – Acid sulfate soils	The site is mapped as being part Class 3 and 5 Acid Sulfate Soils. The Detailed Site Investigation prepared by Tetra Tech Coffey recommends the preparation of an Acid Sulfate Soils Management Plan.	
	7.6 – Earthworks	Earthworks are proposed across the site in order to re-grade the land and manage stormwater flow across the site.	
	7.15 – Wollongong Innovation Campus	Refer to **Section 6.1.2**.	

6.1.1 State Environmental Planning Policy (Resilience and Hazard) 2021

The site is located on land mapped as being within the Coastal Environment and Coastal Use Areas under Chapter 2 of State Environmental Planning Policy (Resilience and Hazards) 2021. The proposed development is consistent with the requirements of the SEPP in respect of these areas as it:

- Will not impact on the biophysical, hydrological or ecological environment;

- Will not impact on natural coastal processes;
- Will not impact on water quality within the marine estate;
- Will not result in any impacts on marine or native vegetation;
- Will not impact on the use of the surf zone;
- Will not impact on any existing public open space;
- Will not impact on access to the foreshore or the coast;
- Will not give rise to any overshadowing, wind or view impacts from public places to the foreshore;
- Will not impact upon the visual amenity or scenic qualities of the coast; and
- Will not impact on Aboriginal cultural heritage, practices or places.

The proposed relocation site is also partially located on land mapped as being within the Coastal Wetland Proximity Area (**Figure 11**). The proposed development will not result in any significant impacts on the biophysical, hydrological or ecological integrity of the coastal wetlands to the east of Squires Way, nor will the development result in any significant impacts to the quantity and quality of surface and ground water flows to these wetlands.

Figure 35 Extract from Coastal Wetlands (blue fill) and Proximity Area (hatch)

Source: NSW Planning Portal, annotated by Ethos Urban

6.1.2 Wollongong Local Environmental Plan 2009

Permissibility

Under the WLEP 2009, the site is zoned 'SP1 - Special Activities'. The permitted land uses within the zone are defined by the land use table and the annotations on the WLEP 2009 mapping. The following land uses that are relevant to the proposed development are all permitted with consent:

- Community facilities
- Recreation facilities (indoor)
- Recreation facilities (outdoor)
- Office premises
- Educational establishment
- Health consulting rooms (pursuant to Section 2.60 of State Environmental Planning Policy (Transport and Infrastructure) 2021)

LEP definitions for recreation facility are set out below, noting that the proposed land use is appropriately characterised as both indoor and outdoor recreation facility:

- ***recreation facility (indoor)*** *means a building or place used predominantly for indoor recreation, whether or not operated for the purposes of gain, including a squash court, indoor swimming pool, gymnasium, table tennis centre, health studio, bowling alley, ice rink or any other building or place of a like character used for indoor recreation, but does not include an entertainment facility, a recreation facility (major) or a registered club.*
- ***recreation facility (outdoor)*** *means a building or place (other than a recreation area) used predominantly for outdoor recreation, whether or not operated for the purposes of gain, including a golf course, golf driving range, mini-golf centre, tennis court, paint-ball centre, lawn bowling green, outdoor swimming pool, equestrian centre, skate board ramp, go-kart track, rifle range, water-ski centre or any other building or place of a like character used for outdoor recreation (including any ancillary buildings), but does not include an entertainment facility or a recreation facility (major)*

In assessing the appropriateness of the land use, consistency with the zone objectives must be established. Those objectives are:

- To provide for special land uses that are not provided for in other zones.
- To provide for sites with special natural characteristics that are not provided for in other zones.
- To facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land.

Fundamentally, the objective of the zone is to facilitate the development of an innovation campus and manage environmental impacts. The term "in keeping with" does not mean directly being for the "existing or intended use". Rather, the aim is to facilitate development that has a synergistic relationship with the University, to support the overall vision and economic use and development of land.

It is also relevant that the LEP permits a wide range of uses, not all of which are directly for innovation purposes. This provides flexibility and discretion to support university objectives, reflective of the University's intention to deliver a precinct that that supports research functions, grows commercial partnerships and advances the regional profile of Wollongong.

Consistent with the objective of the zone, the CHPC supports the Innovation Campus by:

- facilitating increased opportunities for research and collaboration in the fields of sports science, exercise physiology, health, community development and sports administration to drive innovation and research implementation outcomes.
- enabling future partnerships with other businesses and community enterprises within the Illawarra region.
- providing high-quality facilities for elite, development and community sporting groups to maintain and strengthen the Illawarra region's reputation and social connection with rugby league and increase participation, particularly within the growing women's game.
- managing environmental impacts during construction and operation phases, as comprehensively documented within the supporting consultant reports.
- Making a substantial investment into the northern end of the Innovation Campus which would otherwise be significantly underutilised having regard to flood affectation and other constraints that are resolved by the CHPC.

Clause 7.15 – Innovation Campus

Clause 7.15 of the WLEP 2009 specifically relates to the UOW Innovation Campus. It sets out two site specific provisions, as follows:

> *(3) Development consent must not be granted for the subdivision of land to which this clause applies unless the consent authority is satisfied that the subdivision is for the purpose only of defining the boundaries of lots that are to be the subject of leases.*
>
> *(4) Development consent must not be granted to development for the purposes of building on land to which this clause applies if the gross floor area of the building would be greater than 135,000 square metres.*

The clause provides numerous objectives to guide the exercise of discretion in relation to the above requirements and to provide context to the purpose of the provisions. The DA does not propose subdivision and the GFA cap is not exceeded and therefore the site-specific provisions are satisfied.

The objectives are also reflected in the WDCP and, for the purpose of completeness, an assessment of consistency with the Clause 7.15 objectives is provided at Table 5.

Table 5 Consistency with objectives under LEP Clause 7.15(1)

Objective	Consistency
(a) to permit the establishment of a research and development campus that includes a hotel, student and campus related residential accommodation and necessary support services and facilities	The CHPC will directly support research and development activities within the fields of sport sciences, applied health and sports administration through partnerships between the Dragons and UoW.
(b) to provide an area where enterprises that carry out research and development as an integral part of their operations can be located	Innovation, research and development are integral components of the Dragons' sporting, community and administration functions to maximise success and community outcomes delivered by the Club. Locating the CHPC within the Innovation Campus will facilitate the strengthening of long-standing collaboration between UoW and the Dragons in research and education.
(c) to promote collaborative research and development between users of the land to which this clause applies and the University of Wollongong and other enterprises in the Illawarra region	The CHPC will directly facilitate collaborative research between UoW and the Dragons in fields including sports science, health, sports administration and community development, which is also expected to extend to a number of existing and future partnerships with other businesses and community enterprises within the Illawarra region.
(d) to promote links between the University of Wollongong's research activities and the initiatives of the business community	The development of the CHPC provides a direct opportunity for research undertaken by UoW in fields including sports science, health, community development and business administration to be directly linked with the activities of the Dragons' business activities.
(e) to ensure that the development of the site is undertaken in a manner that demonstrates design of a high quality with respect to the context of the site, scale, built form and density of the development, resources, energy and water efficiency, landscape, amenity, safety and security, social dimensions and aesthetics	The proposed CHPC has been designed by national and international award-winning architects Populous and landscape architects Arcadia to design a high quality architectural outcome for the site that responds to the site's context and unique usage and operating model. The proposed CHPC maintains the open landscaped nature of the existing precinct whilst facilitating an innovative design outcome for the new building that achieves a high level of sustainability, delivers high amenity for users and visitors to the site, and responds to the cultural heritage of the Illawarra and the escarpment landscape by orienting the main entrance and aspect towards Mount Keira.
(f) to ensure that development of the site is in harmony with the coastal and foreshore landscape	Development of the site will be in harmony with the coastal and foreshore landscape through the maintenance of the open lawn character of the existing northern precinct, designing new buildings to sit well below the maximum permitted building height, incorporating a range of new native landscaping within the public domain that is suited to the coastal climate, and ensuring that the development does not adversely impact on water quality or flooding.
(g) to permit the provision of university related facilities including student and campus related	The CHPC includes campus related support services in the form of public domain, opportunities for cultural heritage awareness and

Objective	Consistency
residential accommodation and support services, incidental or ancillary to research and development activities	connection through the new Yarning Circle, community and health spaces, and shared pedestrian /cycling pathways.

Clause 7.15 of the WLEP 2009 also specifies a maximum gross floor area (GFA) for all development within the Innovation Campus, which is capped at 135,000m^2. As set out in **Table 6** there remains significant capacity for future development within the Innovation Campus within the existing GFA limit.

Table 6 GFA compliance schedule

Development	Gross Floor Area
Existing campus development	**61,969m^2**
Proposed campus development	
Community and High Performance Centre (this DA)	**4598m2**
Health & Wellbeing Precinct Concept Proposal (DA-2021/101)	**41,600m^2 (maximum)**
Proposed Primary Community Health Building (SSD-9316635)	**6,000m^2** (indicative)
Remaining GFA ***(assuming completion of all proposed development)***	**20,833m^2**

Having regard to the above, it is evident that the proposed development is consistent with the LEP objectives for the Innovation Precinct and with the applicable site-specific development standard.

Remaining GFA will be utilised across the site in accordance with the relevant provisions of the LEP. This DA does not seek to pre-determine the utilisation of the available GFA remaining within the limit imposed by Clause 7.15.

Notwithstanding the above, UOW advises that it intends to utilise the remaining GFA for UOW or UOW-partnered projects for research, education and potentially community facilities. Future developments are yet to be determined but Council would have the opportunity to review and assess these as part of the development assessment process.

UOW is currently undertaking a strategic review of the iC Master Plan, in collaboration with Council and Department of Planning & Environment. Should campus requirements evolve, this would be addressed as part of the review.

It is important to note that every project undertaken and contemplated by UOW either directly or indirectly aligns with the original and ongoing objectives of the Campus and original intent of the land sale.

Commercial tenants engage in university collaboration activities with most executing formal collaboration agreements. UOW partners with a host of local, regional, and national businesses through the Sustainable Business Research Centre, iAccelerate, AIIM, ANCORS, SmartSpace and the Science Centre. Businesses established, or proposed, for the Campus:

- Generate employment.
- Promote economic growth.
- Promote and foster collaboration and research.
- Encourage and create interaction between organisations and the UOW – events, internships, scholarships, and employment.
- Create and development a community of innovation and collaboration.
- Provide offices and facilities for research and education.
- Integrate workplace and education environments with social, retail, service, and recreational/community facilities.
- Provide residential accommodation linked to student accommodation and other Innovation Campus facilities.

The Dragons CHPC is no exception. It provides a substantial opportunity to drive excellence in education, academia and research, improve community engagement and reach and build a vibrant and innovative precinct.

6.1.3 Wollongong Development Control Plan 2009

The Wollongong Development Control Plan 2009 (the DCP) applies to the site, with Chapter D14 Wollongong Innovation Campus setting out site-specific controls in relation to development of the wider Innovation Campus site.

Section 4.15(3A) of the EP&A Act provides that where a DCP contains standards or performance criteria that relate to a development, the consent authority must be flexible in applying those provisions in the assessment of a DA and must allow reasonable alternative solutions that achieve the objects of those standards.

Part A Section 1.1.4 of Chapter D14 of the DCP states that the provisions of the DCP should be read in conjunction with the objectives and provisions of Clause 7.15 of the LEP. As set out in **Section 6.1.2**, the proposed development is wholly consistent with these objectives.

The consistency of the proposed development with the each of the objectives set out in Chapter D14 of the DCP is assessed in **Table 7**. This assessment clearly demonstrates that the proposed development achieves the objectives of the relevant provisions of the DCP, and accordingly the consent authority may be satisfied that the DA is consistent with the requirements of Section 4.15(3A) of the EP&A Act.

Section 2.3(2) sets out the circumstances in which a formal review of the Precinct Plan is required, being:

- *A change to project objectives; or*
- *An increase in total Gross Floor Area (GFA) for the site; or*
- *An increase in building heights; or*
- *When development reaches 95,000m² GFA.*

The proposed CHPC does not meet any of these criteria.

Table 7 Proposed development alignment with the Wollongong DCP 2009

Objective	Compliance comment	Complies?
1.1 Key Master Plan Outcomes		
(a) Generate employment and promote economic growth in the Illawarra Region;	The proposed development will support the creation of 229 FTE jobs during the construction phase and will accommodate at least 60 FTE jobs on an ongoing basis. The development will result in over $45 million in capital investment within the Illawarra Region and over $3.3 million in value-add economic activity each year.	✓
(b) Promote and foster collaborative research and development initiatives involving tenants of the Wollongong Innovation Campus, the University of Wollongong and other enterprises in the Illawarra Region;	The CHPC will directly foster collaborative research and development between the Dragons and UOW, as well as a range of other businesses, sporting and community organisations in the Illawarra Region through a rage of initiatives and programs in the fields of sports science, health, community development and sports administration.	✓
(c) Encourage creative interaction between organisations and individuals on the campus and the development of a sense of community;	The proposal supports opportunities for creative interaction between organisations and individuals within the CHPC by co-locating a wide range of user groups within a single roof and in close proximity to other Innovation Campus tenants and users. Further opportunities for social and community development are provided though opportunities for community use of indoor spaces within the CHPC and the community sporting field, along with opportunities for improved cultural awareness and connection through the proposed Yarning Circle.	✓

Objective	Compliance comment	Complies?
(d) Provide offices and facilities for organisations involved in a range of research and development activities;	The CHPC directly provides offices and facilities that will be utilised for a range of collaborative research and development activities within the fields of sports science, health, exercise physiology, community development and sports administration.	✓
(e) Integrate workplace and educational environments with social, retail, service and recreational facilities in a landscaped campus setting; and	The CHPC will link a range of workplace, education and social uses under a single roof, with the proposed architecture, new landscaping and tree retention, along with the large areas of turf, contributing to a highly landscaped campus setting.	✓
(f) Provide on-site residential accommodation linked to the University student accommodation and Wollongong Innovation Campus facilities.	Not applicable	**N/A**
1.3 Precinct Plan Objectives		
a) To state the goals of the planning process in support of the project vision;	The proposed development is wholly consistent with the UOW Innovation Campus project vision.	✓
b) To establish the intended future character of the development;	The proposed development is consistent with the intended character of future development both with regards to the land use and the physical characteristics of the development.	✓
c) To provide the site with a sense of place that proclaims its purpose, distinction and domain;	The proposal will deliver a strong sense of place that reflects the intended use of the CHPC and its role as a place of collaboration within the wider Innovation Campus.	✓
d) To provide a planning framework to facilitate the staged development of the site by the University of Wollongong;	Not applicable.	**N/A**
e) To establish a framework flexible enough to accommodate changing circumstances and conditions;	The CHPC was not directly envisaged within the development of the original master plan. The CHPC involves a flexible approach to this master plan framework that facilitates a use that is suitable for this land which is consistent with the overall objectives for the Innovation Campus.	✓
f) To provide a plan to facilitate and ensure that physical resources are effectively managed; and	The proposal provides for the efficient use of land and resources.	✓
g) To provide guidelines for the development of individual buildings.	The CHPC building is consistent with the design and development objectives set out in this Chapter.	✓
4 Development Concept Objectives		
(a) To create a university campus environment supportive of research, business and development activities	The CHPC will directly contribute to the university campus environment through the high quality built form and public domain and the incorporation of research, business and community development uses.	✓

Objective	Compliance comment	Complies?
(b) To achieve an appropriate campus scale and character by: 1. Providing a well defined pedestrian spine and network to link activity zones and precincts and a series of landscaped features; 2. Developing a chain of ponds / stormwater management system as an integral feature of the campus; 3. Reducing the visual impact of surface parking by provision of carparks under buildings and multi storey parking facilities; 4. Consistency of landscape detail including street furniture, paving, lighting, signage and other elements; 5. Landscaping used as a positive element to unify site; 6. Consistency in architectural design taking into account project objectives and commercial realities; 7. Consistency of buildings scale and height; 8. Providing an accessible and legible campus structure.	1. The development of paths and open space to walk will support the established pedestrian spine and network linking activity zones. 2. N/A. No ponds are proposed nor is any stormwater management system forming part of an integral feature of the development 3. Car parking associated with the CHPC will incorporate high levels of landscaping in order to mitigate potential visual impacts. Underground parking is not feasible in this area of the campus due to existing flood conditions and high water table. 4. The proposed development will integrate landscaping detail such as street furniture, paving, lighting, signage and other elements into the design. 5. Landscaping is used as a positive element to unify the site, as demonstrated in **Appendix F**. 6. Architectural design directly supports the project objectives for the CHPC by providing high quality internal and external spaces within the project's funding envelope. 7. The proposal is consistent with the maximum building height development standard applicable under the LEP. 8. The proposal complies with relevant accessibility standards and will support legible wayfinding within the campus.	✓
(c) To provide opportunities for formal and informal interaction;	The CHPC includes an array of spaces and opportunities for formal and informal interaction between CHPC users, broader campus users, visitors and the wider community.	✓
(d) To develop a sense of community;	The CHPC will facilitate a strong sense of community through the diverse and multiple opportunities for the wider community to interact with the facility through formal programs and informal opportunities for public access through and around the site. The strong visual identity of the proposed building, which reflects the usage of the CHPC by the Dragons, will further contribute to the strong sense of connection and sporting community which is associated with the Club's sporting teams.	✓
(e) To provide a stimulating working environment integrated with social, recreation, cultural and support services;	The CHPC will provide a stimulating working environment with high levels of internal amenity, opportunities for integration of a wide range of uses within the facility, and improved access to recreational, social and cultural programs for the wider community.	✓
(f) To encourage a positive lifestyle mix of 'work, live and play' activities;	The encouragement of a positive lifestyle mix of 'work, live and play' is established through the proposed playing fields, indoor exercise and health spaces, and the learning areas and opportunities within the CHPC.	✓
(g) To incorporate best practice ecologically sustainable development principles;	The design of the proposal incorporates best practice ecologically sustainable development principles as set out in **Appendix O**.	✓
(h) To create a physical setting which helps to reshape the image of Wollongong as a City of Innovation;	The CHPC will deliver a high quality architecturally-designed building within a landscaped setting that has a clear visual presence and identity as an innovative sporting, educational and community facility that is strongly identifiable with the Wollongong and wider Illawarra region.	✓

Objective	Compliance comment	Complies?
(i) To ensure the Wollongong Innovation Campus becomes an integral part of the life of the region;	The wide range of sporting and community programs hosted by the CHPC will quickly ensure that the facility supports the community's interaction and identification with the Innovation Campus as an integral part of the Illawarra region's economy and culture.	✓
5 Site Uses		
a) To provide education and research facilities supported by residential, social, recreational, cultural and commercial services.	The CHPC incorporates a range of education and research integrations within the recreational, cultural, social and business activities of the Dragons and associated programs and services.	✓
6 Gross Floor Area		
a) To develop the site at a campus scale as described in section 4 of the approved Precinct plan;	The proposed development complies with the gross floor area cap as set out in **Section 6.1.2**	✓
b) To provide sufficient floor area to generate a critical mass of activity to support 'interaction' and other project objectives;	The proposed development will support the establishment of a critical mass of activity and interaction by delivering an addition of 5,204m^2 of floor space within the campus.	✓
c) To meet project feasibility requirements.	The proposed development is a feasible approach to achieving the CHPC project objectives.	✓
7 Building Heights and Floor Levels		
a) To meet the density and development floor area objectives required for the project; b) To achieve the character and scale of a university campus by limiting site coverage and providing buildings in a landscaped setting.	The proposed development complies with the LEP height limit and the maximum building heights envisaged for this location within the Innovation Campus.	✓
8 Setbacks		
a) To achieve a university campus character of buildings in a landscaped setting;	The proposed development maintains a clear and strong landscaped setback to Squires Way and retains and seeks to supplement the existing landscaped site edges to the north and west of the proposed playing fields.	✓
b) To provide riparian corridors to Cabbage Tree Creek and Fairy Creek; and	Not applicable.	**N/A**
c) To locate buildings to reinforce activity on the main pedestrian spine and East / West link.	The orientation of the main entrance to Innovation Way will support the main pedestrian spine through the campus.	✓
9 Building Character and Appearance		
a) To ensure a high standard of urban and architectural design in the development of the site and buildings;	The proposed building, landscaping and public domain have been designed to achieve a high standard of design quality within the site and Innovation Campus.	✓

Objective	Compliance comment	Complies?
b) To ensure buildings contribute architecturally to the university campus character of the development;	The proposal comprises a modern, innovative and high quality architectural approach to the site that clearly speaks to the intended usage and character of the CHPC that supports the image of the Innovation Campus as a centre of innovation and excellence.	✓
c) To achieve an overall consistency in the design of buildings and the selection of façade systems, materials and finishes; and	The proposed building design, façade systems, materials and finishes are consistent with the modern qualities of other existing and future buildings within the campus whilst providing a clear identity that is linked with the purpose of the CHPC.	✓
d) To encourage innovative design solutions.	The proposal represents an innovative design response to a facility that will serve a wide range of purposes and user groups to support collaboration both within the CHPC building and within the surrounding public domain and wider campus/	✓
10.1 Landscape Character		
a) To reinforce the site as part of the regional coastal landscape particularly in its relationship to Puckeys Estate, surrounding creeks and its visual connection to the Illawarra escarpment;	The proposal maintains a sizeable landscaped setback to Squires Way that maintains the landscaped relationship of the campus with Puckeys Estate, and provides for a building that sits comfortably within the scale of existing tree canopy. The proposal strongly emphasises the visual and cultural connections with the Illawarra Escarpment by orienting the main entrance and double-height space towards Mt Keira.	✓
b) To promote the relationship of the character of the Wollongong Innovation Campus to the landscape character of the University of Wollongong;	The proposal provides for a landscape and public domain approach that is consistent with UoW's broader public domain approach.	✓
c) To create a landscape setting that reflects the campus scale and character qualities of the project;	The proposal will support the delivery of a high quality landscaped setting that is consistent with the scale and character qualities of the Innovation Campus as a place of excellence in research, enterprise, education and innovation.	✓
d) To create a landscape setting which encourages the public to interact visually and physically with the Wollongong Innovation Campus; and	The proposed public domain and landscaping approach encourages community interaction with and movement throughout the CHPC site and campus by reducing barriers to movement and creating great places to visit and congregate within.	✓
e) To establish a landscape framework which unifies the various elements and structures of the development.	The proposed landscape and public domain approach provides a unified approach to the site whilst featuring the unique usage and character of the CHPC.	✓
f) To reinforce ESD principles in landscape design, plant selection and built form.	Proposed building, landscaping and public domain is responsive to local environmental conditions and climate, and seeks to promote and embody the principles of ESD as outlined in **Appendix O**.	✓
10.2 Open Space		
a) To provide a central open space or "Campus Green" as a focal point for the Wollongong Innovation Campus;	Not applicable.	**N/A**
b) To create a visually strong, attractive and safe series of public open spaces;	The proposed development supports the delivery of high quality public open spaces particularly within the site's	✓

Objective	Compliance comment	Complies?
	Innovation Way frontage to support connection and movement throughout the Innovation Campus.	
c) To create a series of pedestrian forecourts and green spaces linked by a pedestrian spine;	The proposed Innovation Way forecourt and other landscaping and public domain works support the creation of a series of landscaped spaces along Innovation Way through the north-south pedestrian spine of the campus.	✓
d) To provide positive and safe linkages to open spaces adjoining the Innovation Campus;	The proposal maintains safe pedestrian and cyclist connectivity between Innovation Way and Squires Way, including green spaces to the north at Thomas Dalton Park and to the east within Puckeys Reserve, and improves active and passive surveillance of this linkage.	✓
e) To integrate open space and stormwater design to create a functional and aesthetic landscape; and	The proposed playing fields play an important functional role in the management of stormwater and flooding within a landscaped setting.	✓
f) To provide both passive and active recreation opportunities.	The proposal directly supports the provision of both active (playing fields) and passive (Yarning Circle, landscaped forecourt) recreational opportunities within the Innovation Campus.	
10.3 Vegetation		
a) To preserve the "Swamp Oak Forest" at the southern end of the site;	Not applicable.	**N/A**
b) To preserve, revegetate and rehabilitate the riparian corridor to Cabbage Tree Creek adjoining the site;	Not applicable.	**N/A**
c) To create a "green campus" by use of appropriate native vegetation;	The proposed landscaping scheme includes a variety of native vegetation that is suitable for the local environment and proposed site uses.	✓
d) To integrate the proposed vegetation with that found in Puckeys Estate, the escarpment and the existing University of Wollongong;	Refer response above.	✓
e) To consider planting locations to maximise solar access to key areas.	The proposal includes a wide range of landscaped areas with species appropriate to the level of solar access and desired shading.	✓
10.4 Safety and Security		
Refer to CPTED Assessment (**Appendix J**).		✓
10.5 Furniture		
Refer to Landscape Design Report (**Appendix F)**		✓
10.6 Lighting		
Refer to Lighting Performance Report (**Appendix Y**).		✓

Objective	Compliance comment	Complies?
Sections 10.7 – 10.10		
Refer to Architectural Design Report (**Appendix C**)		✓
11 Transport and Access		
a) To provide a convenient and safe transport system for users of the Wollongong Innovation Campus	The proposal maintains safe pedestrian access to key public transport stops and provides a safe environment for pedestrians, cyclists and vehicle users within the campus.	✓
b) To reduce car dependency by encouraging alternative modes of transport	The proposal balances the provision of adequate on-site parking in order to mitigate against potential off-site parking impacts, whilst incorporating end-of-trip facilities to support active travel and ensuring safe walkability to nearby public transport services.	✓
c) To cater for non-vehicular transport such as cycling and walking	The proposal includes end-of-trip facilities and bicycle parking to support non-vehicular travel modes.	✓
d) To minimise the environmental impact of transport	The proposal is consistent with the existing road network servicing the site.	✓
e) To improve air quality	Air quality mitigation measures will be employed throughout construction.	✓
f) To maintain the transport network in good order	The proposed development will not result in any significant impacts on the transport network.	✓
g) To maximise the efficient use of transport infrastructure – both existing and proposed	The proposal relies on existing local transport infrastructure with respect to the local road network and public transport network.	✓
12 Floodplain Management		
1. The Flood Management Strategy aims to: a) To ensure the safety of existing and future occupants of the floodplain b) To maximise the development potential for the site c) Ensure compliance with appropriate guidelines and policies, including: i) Wollongong City Council's Development Control Plan (Chapter E13); and ii) NSW Government Policy	The proposal ensures the safety of future occupants of the CHPC and of existing occupants of surrounding development by: • Ensuring the development does not result in adverse off-site flooding impacts; • Designing buildings to comply with flood planning levels to provide safety during flood events; • Complying with the relevant flood plans and policies.	✓
a) To provide for occupant safety during flood events.	Occupant safety is ensured through the provision of appropriate flood planning levels for the proposed building and consistency with the Flood Management Strategy.	✓
13 Heritage		
To ensure that the heritage value of the site is recognised.	No works are proposed to or within the heritage curtilage of the Balgownie Migrant Workers huts. A Heritage Impact Statement has been prepared. A small 300mm high diversion wall, which will be incorporated into landscaping will be built in front of the huts and alleviate existing and future flooding.	✓

Objective	Compliance comment	Complies?
14 Sustainability		
Refer to **Appendix O**.		✓
15 Environmental Design and Management		
a) To minimise the impact of the development on adjoining residential development. b) To generally reduce the background acoustic levels within the site consistent with a campus environment.	The proposed development has been carefully designed to mitigate the impacts of noise, visual privacy and light spill to ensure that the impact of development within the Innovation Campus is minimised.	✓
16 Services and Infrastructure		
Refer to **Appendix M.**		✓
17 Water Sensitive Urban Design		
Refer to **Appendix X**.		✓
18 Lifestyle Health		
a) To provide a healthy environment and improved lifestyle opportunities for workers, residents, visitors and others.	The proposed development will support the provision of a healthy environment and lifestyle by providing facilities that directly and indirectly contribute to the fitness and health within the Dragons and wider community.	✓
19 Disabled Persons Requirements		
a) To provide best practice in the design of access provisions and facilities for people with a disability.	Refer to **Appendix N**.	✓
20.2 Notional Staging Strategy		
a) To facilitate the effective staged development of the site.	The proposed development staging is consistent with the UoW's campus approach to development.	✓

6.2 Flooding

A Flood Study Report has been prepared by Aurecon and is provided at **Appendix P**. Aurecon have confirmed that the design has been developed in accordance with the flooding related development controls outlined in Flood Management Study prepared for the Innovation Campus in 2017, as well as the Fairy and Cabbage Tree Creeks Flood Study (from 2020) as well as in accordance with Chapter E13 - Floodplain Management in the Wollongong DCP. The following conclusions were outlined:

- The proposed CHPC is located within the Fairy and Cabbage Tree Creeks floodplain with the proposed site predominantly located within the "Medium" flood risk precinct.
- With reference to Chapter E13 of the Wollongong DCP, the CHPC was categorised as Recreational & Non-Urban in general with areas of Commercial & Industrial.
- The car park was designed to allow for partial flooding in the 1% AEP design event, while ensuring that all flooded carparking spaces are still within hydraulic hazard category H1, in reference to Combined Flood Hazard Curves (Smith et al., 2014).
- The changes in flood levels as a result of site re-grading for the PMF, 1% AEP, and up to 20% AEP events have been modelled by Aurecon using TUFLOW and indicate that the impacts to the surrounding properties are within the acceptable levels under the categorised in the PMF, 1% and 20% AEP events. The modelling indicates that the afflux at the western bend of Innovation Way is within the limit requirement of 50mm for Recreational Land (as dictated by the requirements of Chapter 13 of the Wollongong DCP).
- The proposed development was found to not increase flood affectation beyond required limits elsewhere in the 20% AEP, 1% AEP and PMF flood events when modelled by TUFLOW. The changes to floodplain storage have been dynamically assessed using the 2D TUFLOW flood model. Results procured by Aurecon indicated that no adverse flood impacts are expected as a result of changes to floodplain storage (refer Figure 25).
- The proposed main carpark within site is not flooded in the 1% AEP. This satisfies Council requirements for acceptable levels of risk.
- The design provides flood immunity for the elite Field 1 in the 5% AEP flood event. The design allows (in extreme weather events) drainage of waterflow to congregate on the western community Field 2 to be flooded as part of the proposed system. The western field was proposed to be lowered compared to the existing ground levels in the interest of providing sufficient flood storage capacity within the site post-development to avoid adverse flooding impacts.
- The proposed site has been categorised as a Medium Flood Risk Precinct. In the absence of floodway areas defined by an adopted Flood Study or FRMS, the DCP allows for a floodway to be defined using a Velocity-Depth (VD) product greater than 0.4m2/s. (Page 5 or the DCP). This has been applied as an approximate method to assist in defining floodways in the current study. Areas of floodway can indicate that the proposed site would be categorised as a High Flood Risk Precinct and would significantly restrict development.

Having regard to this assessment, the proposal will be acceptable on flooding grounds as it will not result in any adverse off-site impacts, provides levels within the proposed building, car park and public domain that ensure appropriate levels of safety within the context of the anticipated usage of these areas, and will not result in flooding hazards to human life or safety.

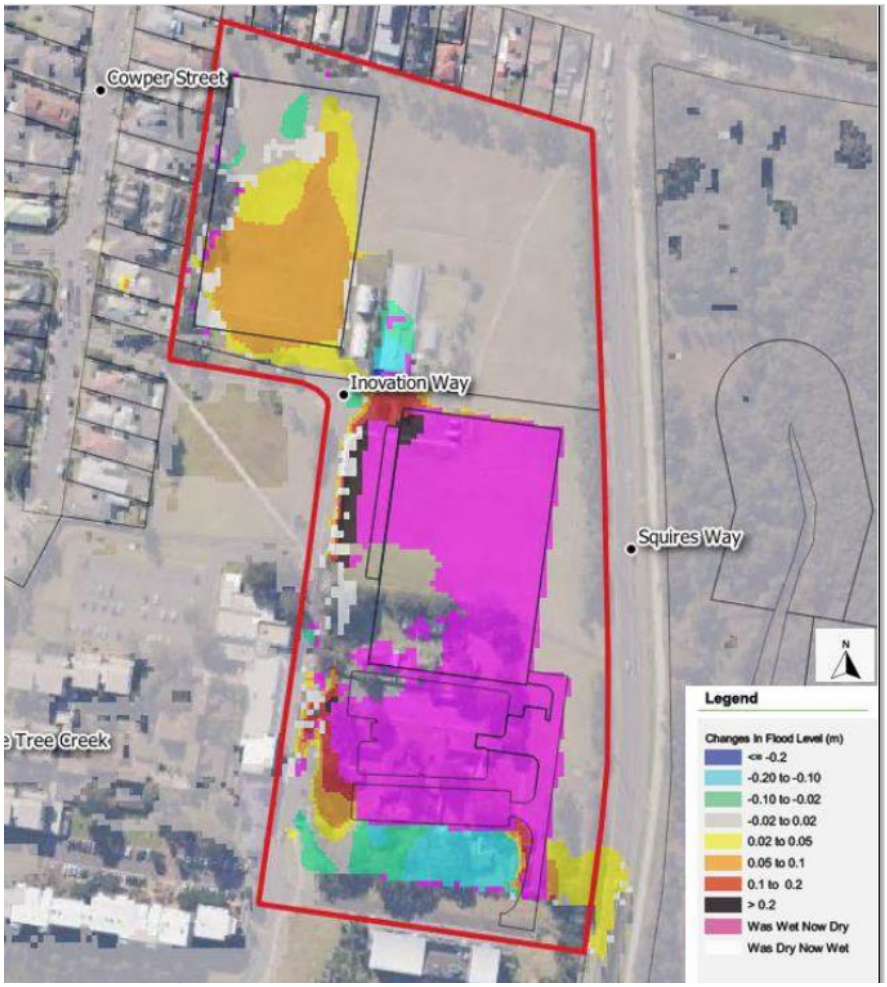

Figure 36 Changes in Peak Flood levels (afflux) in a 1% AEP Design Event

Source: Aurecon

6.3 Heritage

European Heritage

Located to the north of Field 1 are the State heritage-listed Nissen and Quonset Huts. These huts are proposed to be retained, with no works proposed to either of the buildings. The existing uses of the huts will also remain unchanged. A Heritage Impact Statement has been prepared by Megan Jones Architect and is included at **Appendix CC**. This statement concludes the following:

- The redevelopment of the land to the west to provide a dedicated rugby league playing field will have a negligible impact on the setting of the huts and will not visually dominate the buildings.
- No buildings or works are proposed adjacent to or within the heritage site. The new community field (Field 2) is set back 3580mm to the west of the heritage curtilage boundary. Access around the heritage buildings will not be affected.
- The redevelopment of the land to the South of the road and Buildings 201 and 210 for Field 1 and the Community and High Performance Centre will have a negligible impact on the setting of Buildings 201 and 210 and will not visually dominate the buildings.
- The heritage curtilage of the Balgownie Migrant Workers' Hostel will not be encroached upon.
- No archaeological deposits will be affected.

Further heritage assessment is provided at **Appendix CC**.

Aboriginal Archaeology

An Aboriginal Heritage Due Diligence Assessment has been prepared by NGH and is provided at **Appendix Z**. This assessment finds that no Aboriginal sites, objects or places, or areas of potential Aboriginal archaeological sensitivity were identified within the site or immediate surrounds during the site inspection. Therefore, it is considered unlikely that in situ Aboriginal heritage deposits are present within the site, and further archaeological assessment of the site is not likely to increase the current understanding of the local region. Given this, no further assessment is required, and the project can proceed with caution.

6.4 Built Form and Amenity

6.4.1 Design Quality

Whilst the site is not subject to any statutory design excellence processes under the LEP, the applicant has nonetheless sought to ensure that the project attains a high standard of design in building architecture, landscaping and public domain in order to make a positive contribution to the character of the Innovation Campus that reflects the aspirations for the project as a centre of excellence and innovation in the sporting, education and community sectors. Project architects Populous and landscape architects Arcadia are both highly reputed and recognised design practices which bring significant expertise and experience of similar facilities to ensure high quality design outcomes for the project.

The building is proposed to be substantially lower than the maximum permitted building height on the site, sitting comfortably within the landscape and established tree canopy that retains the existing landscaped character and edge of the campus to Squires Way. The proposed building provides a sculpted form that maximises amenity, activation and surveillance of key spaces including the playing fields and Innovation Way. High quality materials are proposed to be utilised to ensure enduring quality of the built form and the delivery of a building that is consistent with the Innovation Campus's character.

A detailed description of the design approach is set out in the Architectural Design Report (**Appendix C**) and Landscape Design Report (**Appendix F**).

6.4.2 Connecting to Country

St George Illawarra CHPC provides an opportunity to engage, collaborate with and benefit First Nations people. The orientation of the main building entrance and double-height space to address and celebrate Mount Keira is an important recognition of the cultural importance of this feature within the Illawarra Escarpment. The design of the building has also incorporated Indigenous narratives, artwork and design, designing in spaces for First Nations people to practice culture, including the proposed Yarning Circle within the building's forecourt. The design process has sought to engage with First Nations stakeholders through a process of Designing with Country, informed by several workshops including an initial Indigenous 'Walkshop' which informed the design. The anodised screening has been provided in a pattern that is synonymous with Indigenous artistic expression to create a unique screening design that reflects an authentic interpretation of maintaining this design intent. Establishing these connections and providing spaces for First Nations culture within the development is particularly important given the wide range of First Nations programs and engagements undertaken by both the Dragons and UoW, some of which will be facilitated within the CHPC site.

6.4.3 Visual Privacy

The new CHPC building is setback in the order of 100m from the boundary of any neighbouring property and is unlikely to impede on residential amenity or breach visual privacy of any of the neighbouring properties. The sports fields are setback at a distance of 12m from the rear of the southern boundaries of residential properties to the north, and 10m from the rear of the eastern boundaries of residential properties to the west. The distance from the viewing balcony and windows of the first floor of the CHPC building, combined with the design of the façade of the building incorporating anodised façade mesh materiality, will not allow for any overlooking into the residential properties that surround the site to the north or the west.

6.4.4 Light Spill

There are four floodlights proposed to light the community field. These flood lights will be designed and controlled to minimise potential light spill to adjoining properties. A Lighting Performance Report has been prepared by Aurecon (**Appendix Y**) which outlines the relevant Australian Standard for the control of light spill from sport lighting.

The report outlines that the community field will be illuminated to achieve an average horizontal maintained illumination of 100lux and a maximum of 10lux vertical illumination on the windows of neighbouring residential properties. This will be achieved by specifying premium light fittings that enable highly precise light distribution with minimum spill. The control of light spill will be further assisted by the retention of existing landscape buffers at the residential interfaces and the barriers created by boundary fencing.

A full spill lighting report will be prepared during detailed design, demonstrating compliance with technical requirements.

6.4.5 Solar Access

The design of the proposed development has ensured no overshadowing on the neighbouring sites, specifically those in residential nature. In turn, proposed development will not reduce the amount of access to solar to any surrounding developments. Any overshadowing caused by the proposed building is entirely contained within the site and the proposed car park and new internal road reserve. It will not impact on any private property within the curtilage of the site.

6.5 Ecology

A Flora and Fauna Assessment (FFA) has been prepared by Eco Logical Australia (**Appendix L**). During their field survey, Eco Logical note that no threatened flora or fauna species or ecological communities were identified within the site.

Whilst Chapter 4 of the Biodiversity SEPP (Koala Protection) applies to the site, the proposed development will have low to no impact on koalas and the site does not meet any of the applicable planning criteria for further assessment.

The development of the CHPC will result in the removal of native trees and shrubs, approximately 0.41 ha of planted native vegetation. Eco Logical note that evidence of a habitat for threatened species within the subject site is poor and limited to marginal foraging habitat for highly mobile threatened birds and bats, concentrated at the northern and eastern boundaries. Eco Logical conclude that given the small area of planted native vegetation impacted (0.41 ha) and the lack of connectivity to remnant native vegetation, the loss of any foraging habitat in these locations will have a negligible impact on threatened fauna. They note that any threatened species occurring within the locality are likely to forage within existing highly vegetated riparian corridors outside the site boundaries where connectivity to large intact habitats are preserved. This is supplemented by the retention of the majority of trees within the site.

The Flora and Fauna Assessment also considers potential impacts associated with flood lighting. It is identified that the site contains marginal foraging habitat for four microbat species listed as Vulnerable under the BC Act. Consistent with the recommendation of the project ecologist, potential impacts will be minimised through the application of spill lighting requirements in accordance with AS4282. More specifically, light fittings that minimise spillage to the adjacent vegetation will be utilised to provide habitat for microbat movement and foraging. In the overall assessment, it is concluded that the usage of lighting on the sports field is unlikely to result in significant impacts to the survival of the species.

6.6 Traffic and Transport

A Traffic Impact Assessment (TIA) has been prepared by Aurecon (**Appendix R**) which considers the anticipated transport impacts of the proposed development with regards to pedestrian and bicycle requirements, traffic generation, site access and transport impacts on the surrounding road network.

6.6.1 Traffic Generation

Assessment has focused on trip generation during weekday peak periods, which coincide with peak traffic in the surrounding road network. Whilst the development may generate additional service vehicle and bus trips during off-peak hours and on the weekends, especially during use of the community fields, the absence of office staff during these periods, the cumulative impact on the road network is expected to be less significant than during the weekday periods.

Based on a traffic generation assessment conducted by Aurecon based on the anticipated volume of staff, visitors, players and students (refer to **Table 4.1** in **Appendix R**), it is expected that the proposed development will generate the following additional traffic on the local road network:

- **Daily:** 336 additional bi-directional trips (12 heavy vehicles, 324 light vehicles)
- **AM Peak:** 67 additional light vehicle trips, 1 heavy vehicle trip.
- **PM Peak:** 76 additional light vehicle trips, 1 heavy vehicle trip.

The impact of these additional trips on the performance of key intersections in the local network in a 2024 with development scenario are explored in Section 6.9.2 below.

It is noted that this level of traffic generation from the development and use of CHPC is well within the envelope provided for through the overarching campus-wide transport assessments that informed the adoption of Chapter D14 of the Wollongong DCP.

6.6.2 Intersection Performance

Traffic modelling was undertaken using SIDRA for arrival and departure pedestrian crossings to evaluate the intersection performances in a future 2024 scenario, including the modelled traffic generation impacts with the development. SIDRA vehicle and model parameters were set up in accordance with the suggested parameters in the TfNSW Traffic Modelling Guidelines. Level of Service (LoS) were applied as per the guideline definition which ranks movement performance from “A”, being a low level of delay, to “F” being a high level of delay.

SIDRA results for the Carters Lane/Elliotts Road/Squires Way are presented in **Table 7**. This modelling by Aurecon demonstrates that the proposed development would have only a marginal impact on the future performance of this intersection when compared to a ‘No Development’ scenario. The proposed development would have not impact on the overall Level of Service at this intersection during either the AM or PM peak periods, within minimal changes to intersection delays. Accordingly, the proposed development will not result in any significant adverse impacts to the performance of the local road network and would not warrant any local road upgrades or access changes to support the proposed use.

Table 8 Carters Lane / Elliotts Road / Squires Way Modelling Results AM and PM

	With Proposed CHPC				Compared to ‘No Change’	
	Volume	**Degree of Saturation**	**Delay (s)**	**Level of Service (LOS)**	**Change in LOS**	**Change in Delays**
	2024 with Development – AM Peak					
Squires Way (S)	567	1.014	52	D	No change	+9.1 sec
Elliotts Road (E)	34	0.038	23.5	B	No change	-3.2 sec
Carters Lane (N)	953	0.849	17.3	B	No change	-0.7 sec
Elliotts Road (W)	379	1.001	46.8	D	No change	-1.9 sec
Overall	**1,933**	**1.014**	**33.4**	**C**	**No change**	**+0.825 sec**

	2024 with Development – PM Peak					
Squires Way (S)	1,037	0.937	36.6	C	No change	+3.8 sec
Elliotts Road (E)	77	0.254	36	C	No change	Nil
Carters Lane (N)	577	0.916	26.2	B	No change	+1.1 sec
Elliotts Road (W)	440	0.956	48.8	D	No change	-0.2 sec
Overall	**2,212**	**1.01**	**48.3**	**D**	**No change**	**+1.175 sec**

6.6.3 Internal road network and car parking

Chapter D14 of the WDCP 2009 sets out specific rates for the UoW Innovation Campus. The DCP specifies an average rate between the range of 1 space per 40 to 80m^2 of GFA proposed. Based on this rate, the required parking for the development's proposed GFA of 4598m^2 equates to between 58 to 115 spaces. The proposed provision of 60 spaces, including 2 accessible car parking spaces, to be located within the new car park proposed immediately south of the new CHPC building, complies with this standard.

The Project compliant number of parking was further benchmarked against similar facilities across Australia, of the eight community and high performance facilities benchmarked 60 spaces was the equal highest number of dedicated parking spaces. The benchmarked facilities were for similar uses and similar distances to train and bus stops.

The Project will also modify the Kids' Uni, Innovation Campus childcare on-street parking area to provide a dedicated service vehicle parking space, and to relocate seven car parking spaces from the eastern end of the existing external car park to a new on-street car parking area along the eastern side of Innovation Way. The relocated childcare visitor spaces will remain in a close proximity to the Kids' Uni, Innovation Campus Building.

Aurecon's review of the carpark layout also shows that it complies with the Australia Standard 2890.1, 2 and 6 requirements. Swept path analysis also prepared by Aurecon show that the new internal roadway from Innovation Way is able to provide a car parking and access layout that is sufficient and enables safe vehicle manoeuvring.

6.7 Acoustic

A Noise and Vibration Development Assessment report has been prepared by Aurecon and is provided at **Appendix W**. The Report assesses the potential noise impacts form the facility to the surrounding community including commercial and residential noise sensitive receivers. Separate assessments were provided for the operation training noise emissions, building services noise emissions, the car park noise emissions and the additional traffic noise emissions. A summary of each assessment is provided below.

Operational Training Noise

An assessment of the operational training noise emissions has been undertaken for the development, with the following assumptions:

- Both fields are being utilised simultaneously, with two NRL training sessions being undertaken.
- Each of the NRL training sessions consist of whistles and shouting.
- The propagation of the noise emissions from the training activities have been assumed from the middle of each of the fields as an average location of the training activities.

The assessment concludes that the predicted operational noise levels for the trainings operations will operate below the noise criteria and therefore the acoustic impacts of the use of fields will not result in any unacceptable impacts on local amenity, including during evening hours.

Building Services Operation

Two scenarios were assessed based on the operation of the development during the day period and the evening period. All rooftop plant is assumed to be in operation during the day period and only specific rooftop plant in operation when the development is being used in the evening. The predicted noise levels for both the day and evening scenarios comply with both the intrusiveness noise criteria and the project amenity noise as outlined in the Compliance with the Noise Policy for Industry (NPfI).

Carpark Assessment

A carpark assessment has been undertaken on the new carpark located south of the development. The assessment is based on industry standard methodology with criteria is based upon the NPfI for noise intrusiveness and project amenity. The predicted sound power level of the car park operations was 40 dBA, which would present no issues to nearby noise sensitive receivers with respect the NPfI daytime noise criteria.

Additional Traffic Noise Assessment

A review of the additional traffic induced by the project was undertaken to ascertain whether increase in induced traffic would exceed the 2 dBA change in noise level criteria as detailed in the Road Noise Policy (RNP), as the development would not be changing the design of surrounding roads. The largest change in traffic volumes is approximately 13% for Elliotts Road and Cowper St as a result of the proposed development. This change in traffic would not induce a change in road traffic noise of 2 dBA. Therefore, it is expected that there are no noise impacts of the additional generated traffic due to the development.

6.8 Social and Economic Outcomes

The delivery proposed CHPC at the UoW will deliver a number of significant positive social and economic effects, including:

- Providing high-quality facilities for elite, development and community sporting groups to maintain and strengthen the Illawarra region's reputation and social connection with rugby league;
- Providing purpose-built female player dressing room facilities to support the growing participation of women in rugby league;
- Facilitate increased opportunities for research and development through the partnership between UoW and the Dragons in the fields of sports science, exercise physiology, health, community development and sports administration to drive innovation and research implementation outcomes;
- Increasing opportunities for increased recognition of the importance of First Nations culture and stories through the integration of architectural design features such as the anodised screen, highlighting of views towards Mt Keira and the delivery of a Yarning Circle that is accessible to all campus users and visitors;
- Providing purpose-built space to accommodate the significant charitable and community development programs operated by the Dragons within the Illawarra region and wider Australian community;
- Support the creation of 229 FTE jobs during the construction phase and accommodating at least 60 FTE jobs on an ongoing basis; and
- Over $45 million in capital investment within the Illawarra Region and over $3.3 million in value-add economic activity each year.

6.9 Site Suitability and Public Interest

The proposed development is suitable for the site and in the public interest for the following reasons:

- The proposed uses are permitted with consent within the SP1 Special Activities (Innovation Campus) zone that is applicable to the site, and the proposal is consistent with the objectives of the zone;
- The proposal is wholly consistent with the objectives for the UoW Innovation Campus as set out in Clause 7.15 of the Wollongong LEP and Chapter D14 of the Wollongong DCP;
- The proposed development will support the relevant strategic planning policies to support the development of the UoW Innovation Campus with uses that facilitate innovation, development and partnership between businesses and the university;
- The selection of the proposed site is the next step in the longstanding partnership between the Dragons and UoW which will increase collaboration and innovation by each of the respective organisations;
- The relocation of the Nissen and Quonset Huts to a more suitable location within the site (subject to separate DA) will result in the subject site being underutilised and capable of development for the purpose of the CHPC;
- The large site area provides space for a building that is sufficiently sized to meet the functional requirements for the facility whilst sitting comfortably within established and desired future character the surrounding landscape, including the provision of a substantial landscaped buffer to Squires Way;
- The project will make a positive contribution to the quality and recreational value of this part of the Innovation Campus;
- The detailed design positively contributes to the character of the Innovation Campus and the surrounding locality; and
- The proposal will not result in any environmental impacts which cannot be resolved through the imposition of standard conditions of development consent.

6.10 Other Impacts of the Development

An assessment of the other impacts of the development have been undertaken by the relevant specialist consultants and are appended to this SEE as set out in **Table 9** below.

Table 9 Summary of other technical assessments

Consideration	Consultant	Summary	Reference
Bushfire	BlackAsh	A Bushfire Hazard Assessment has been prepared which notes that the site is located partially on bushfire prone land within the 'vegetation buffer' category, as illustrated in **Figure 21**. The assessment denotes that the development does not trigger a class of development considered for 'Special Fire Protection Purpose' provisions under Division 4.8 of the EP&A Act and as such, a Bush Fire Safety Authority (BFSA) is not required for the development.	**Appendix I**
Environmental Ground Conditions	Tetra Tech Coffey	As outlined in **Sections 5.2.3** and **6.1**, the Detailed Site Investigation confirms that the site can be made suitable for the proposed use, subject to standard recommendations that are able to be satisfied prior to the commencement of physical works and can be required as a condition of development consent. The Geotechnical Report sets out the approaches to construction required in response to local site conditions, which are not atypical for this region.	**Appendices K and BB**
Sustainability	Aurecon	A Sustainability Report has been prepared to provide an assessment of the assessment of the design documentation submitted with the application against the ESD objectives and requirements outlined in the Wollongong DCP 2016. Aurecon confirms that the sustainability initiatives adopted for the project meets the requirements outlined by Wollongong City Council.	**Appendix O**
Tree Removal	Tree Survey	An Arboricultural Impact Assessment and Protection Plan has been prepared to assess the current trees on the site, assess the current health and condition of the subject trees and evaluate the significance of the subject trees. The PTA confirms that there are 511 trees on site with 105 being of low priority for retention, 396 trees being of medium priority for retention and 10 trees assessed as high priority for retention. The PTA also provides recommendations for implementing tree sensitive methods for works within for certain Tree Protection Zones.	**Appendix H**
Waste Management	Foresight Environmental	An Operational Waste Management Plan (OWMP) has been prepared to support the design and sustainable performance of the building. The OWMP identifies the different waste streams likely to be generated during the operational phase of the development, as well as how the waste will be handled and disposed, details of bin sizes/quantities and waste rooms, descriptions of the proposed waste management equipment used, and information on waste collection points and frequencies.	**Appendix T**
Construction Impacts	Bridge42	The Preliminary Construction Management Plan (CMP) provides a summary of the works and the proposed methodology on how the works will be constructed whilst minimising the impacts of the construction activities. The Preliminary CMP will inform the detailed Construction Management Plans that swill be prepared by the building contractor prior to works commencing.	**Appendix U**
BCA and Accessibility	Blackett Maguire + Goldsmith	The BCA Compliance Report outlines the development is capable of complying with the performance provisions of the BCA. Compliance can be achieved via a performance-based approach as well as complying with the relevant deemed-to-satisfy requirements as outlined within the BCA. Furthermore, the report confirms the subject development is capable of achieving compliance with the accessibility provisions of the	**Appendix N**

Consideration	Consultant	Summary	Reference
		BCA, either by complying with the prescriptive requirements or via a performance-based approach.	
Utilities and Services	Aurecon	A Site Wide Stormwater Management Plan has been prepared to identify wastewater, stormwater, gas, electrical, telecommunications and potable water services. The report has identified that the proposed development will connect to the existing infrastructure that currently supplies the site.	**Appendix X**
CPTED	Ethos Urban	The Crime Prevention Through Environmental Design (CPTED) Assessment Report identifies the potential security concerns in and around the site and provides recommendations to guide crime prevention, safety and security arrangements of the proposed development. It is anticipated that these recommendations could form conditions of consent.	**Appendix J**

7.0 Conclusion

The proposed development seeks approval for a new Community and High Performance Centre at the University of Wollongong's Innovation Campus, located at 7 - 9 Squires Way, North Wollongong. The CHPC will provide a diverse range of uses centred around the delivery of excellence in elite, development and community sports by consolidating the Dragons' operations in one location. Location of the CHPC within the Innovation Campus will enhance the existing, long-term partnerships between the Dragons and UoW and will provide new opportunities for research, innovation and education in the fields of sports science, exercise physiology, health, community development and sports administration. The two new playing fields will provide opportunities for elite and community sporting training programs, whilst new internal spaces within the building and public domain will provide opportunities for community development and enhanced cultural awareness. The new CHPC represents a significant investment in community and high-performance recreational facilities by the Dragons that will improve the offering of facilities provided at the UoW Innovation Campus and benefit the wider Illawarra community.

This SEE has provided a detailed assessment of the proposal against the relevant matters under section 4.15(1) of the EP&A Act. The application is recommended for approval given the following reasons:

- The proposed development is consistent with the aims and objectives of the Wollongong LEP 2009 and the Wollongong DCP 2009, including the site specific provisions that relate to the UoW Innovation Campus, as well as the relevant State Environmental Planning Policies;
- The proposed development will provide high-quality facilities for elite, development and community sporting groups to maintain and strengthen the Illawarra region's reputation and social connection with rugby league and increase participation, particularly within the growing women's' game;
- The proposed development will facilitate increased opportunities for research and development through the partnership between UoW and the Dragons in the fields of sports science, exercise physiology, health, community development and sports administration to drive innovation and research implementation outcomes, consistent with the planning and development objectives for the UoW Innovation Campus;
- The development will provide opportunities for increased recognition of the importance of First Nations culture and stories through the integration of architectural design features such as the anodised screen, highlighting of views towards Mt Keira and the delivery of a Yarning Circle that is accessible to all campus users and visitors;
- The development will include purpose-built space to accommodate the charitable and community development programs operated by the Dragons within the Illawarra region and wider Australian community;
- The project will support the creation of 229 FTE jobs during the construction phase and accommodate at least 60 FTE jobs on an ongoing basis; and
- Supporting technical studies which accompany this DA confirm that the environmental impacts associated with the proposal are generally positive and will not give rise to any adverse impacts that cannot be appropriately managed; and
- The proposed development is suitable for the site and is in the public interest.