



SITE ANALYSIS & URBAN DESIGN STRATEGY

PROPOSED TOURISM DEVELOPMENT AT
39-65 OLD CASTLEREAGH ROAD, CASTLEREAGH NSW
PROJECT NO. 17011 | REVISION 1 | 20/6/2025

Site Analysis & Urban Design Strategy

Proposed Tourism Development, Castlereagh NSW | Project No. 17011



Introduction

This report has been prepared in support of a Concept Development Application (DA) for a proposed tourism-focused development within the Stage 1 precinct of the Penrith Lakes Development Control Plan (DCP), adjacent to the Sydney International Regatta Centre. The proposal includes provision for permissible uses such as a hotel, indoor recreation facility, and club, all of which aim to contribute to the site's transformation into a premier tourism and recreation destination in Western Sydney. Strategically positioned within the broader Penrith Lakes scheme, the development is aligned with long-term regional planning objectives focused on economic growth, enhanced public amenity, and the provision of high-quality recreational infrastructure.

The site's proximity to the Sydney International Regatta Centre and the scenic Penrith Lakes Parklands positions it as a gateway to an emerging regional destination that blends natural assets with recreational and tourism-based offerings. The proposed development will complement existing facilities and contribute to a more diverse and activated visitor experience, drawing both local and regional patronage. It supports Penrith's vision of becoming a key recreational hub while fostering employment, tourism expenditure, and investment opportunities.

A comprehensive Site Analysis has been undertaken as a critical first step in shaping the Urban Design Response. This analysis identifies and evaluates key attributes of the site, including its topography, access and circulation patterns, solar orientation, ecological features, and visual connections to the surrounding landscape, as well as constraints such as flood risk, vegetation zones, and proximity to sensitive land uses. These insights have been instrumental in ensuring that the proposed layout and program respond sensitively and intelligently to the existing site conditions.

Guided by our 10 Urban Design Principles, the Urban Design Response seeks to maximise the site's potential while addressing contextual challenges. The principles have informed key design strategies including the configuration of built form, the integration of public open spaces, and the promotion of active frontages and pedestrian-friendly environments. The Site Analysis ensures that these design decisions are grounded in evidence, and that the proposal supports the creation of a cohesive, accessible, and enduring tourism precinct that adds long-term value to the Penrith Lakes region.

Peter Morson

Director | Morson Group

Contents

Context & Site Analysis	3
Analysis of Country	4
Broader Regional and Precinct	8
Detailed Site Analysis	24
Site Constraints	27
Site Opportunities	28
Urban Design Strategy	30
Design Excellence Strategy	31
Design Vision	32
Connecting with Country	34
Landscape	
Connection	37
Public Realm	38
Urban Design/Built form	39
Sustainability	41



Context & Site Analysis

The Context and Site Analysis for the proposed tourism development adopts a layered approach that begins at the macro scale and progressively narrows in focus to the micro scale. This hierarchical methodology ensures a comprehensive understanding of the site's position within broader urban, environmental and cultural systems, while also addressing the specific physical attributes and constraints that influence design outcomes.

At the macro level, the analysis situates the site within the wider context of Western Sydney and the Greater Sydney Metropolitan Area. It considers regional connections, transport infrastructure, economic drivers, and strategic planning frameworks such as the Greater Sydney Region Plan and a focus on the Western District Green Grid. These broader influences inform the site's potential role as a catalyst for tourism and recreation-based growth in the region.

The analysis then zooms in to the local and precinct level, examining the immediate context of the Penrith Lakes area, the Sydney International Regatta Centre, and adjoining land uses. This includes consideration of existing urban interfaces, environmental features, access and movement networks, and social infrastructure. Particular attention is paid to how the site interacts with its surroundings and contributes to the emerging character and identity of the Penrith Lakes precinct.

At the micro level, a detailed site analysis explores the site's physical attributes, including topography, vegetation, hydrology, solar orientation, and existing built elements. This scale of analysis is essential to understanding on-site opportunities and constraints, and directly informs the Urban Design Response in terms of layout, orientation, and connectivity.

A vital component of the analysis includes the recognition and respect for Country, with specific attention to Aboriginal cultural heritage. The site lies within the traditional lands of the Darug people, and our analysis acknowledges their enduring connection to the land, water, and sky. This includes the potential for both tangible and intangible cultural heritage values to be present. The process involves identifying known Aboriginal heritage items and consulting relevant heritage databases and local knowledge, as well as recognising broader cultural landscapes and patterns of significance. This culturally informed understanding of Country is essential to ensuring the proposed development respects Aboriginal heritage values and supports ongoing custodianship and storytelling in a meaningful and contemporary way.





VIRTUS HERITAGE

Analysis of Country

Understanding the Darug cultural heritage is critical for site context analysis. The project area is part of a broader Aboriginal cultural landscape and the site is located in the Dharug country.

This knowledge informs design themes and promotes positive outcomes for tourism development, which requires understanding the setting of Dharug country and its relationship to neighboring countries. Principles of place, including archeology, waterways, songlines, and language groups, provide a solid foundation for connecting with the country.

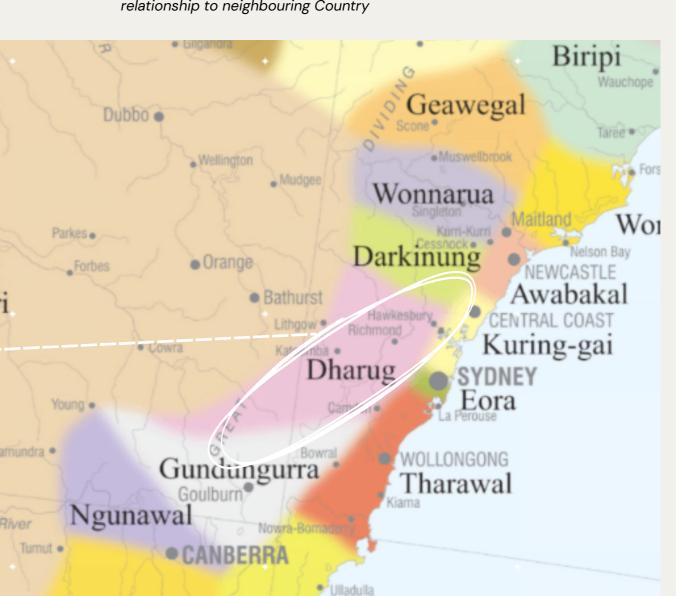


The project area is part of a broader Aboriginal cultural landscape of the Dharug-speaking peoples.



The Penrith Lakes area is associated with the Boorooberongal and Mulgoa clans. The Blue Mountains,
Cranebrook Escarpment and
Nepean River connect with shared songlines between Dharug,
Darkinjung and Gundungurra
Nations.

Understanding the setting of Dharug Country and its relationship to neighbouring Country





Analysis of Country

Incorporating indigenous place-making principles into the design can also enhance a sense of connection to the country.

Waterways that are important not only for their resources, but also as connective pathways for songlines and Dreaming stories, can also be a vital design aspect.

Mapping Dharug Country

Yarramundi
Where Dyarubbin, Yandhi and Grose
Rivers meet

Nurragingy Land Grant

1816: Governor Macquarie granted Colebee + Nurragingy 30 acres. Upon Colebee's death his sister, Maria Locke, applied for and was granted the land

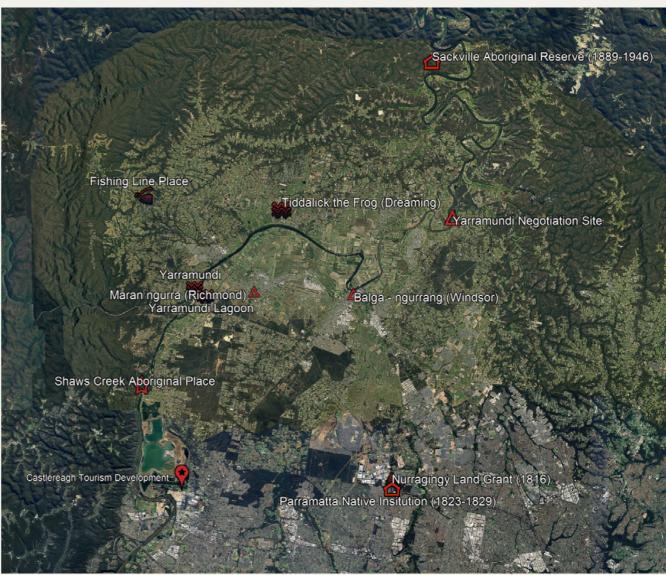
Tiddalick the Frog (Dreaming Story)

In Dreaming stories, Tiddalick the Frog described as a greedy frog who drank up all the water in the waterways.

Parramatta Native Institution

1829: Established by Gov Macquarie, Aboriginal children were sent here. Site was handed back to the Dharug people in 2018. Broader Cultural narratives and sites of significance, including important waterway features to shape our design themes





Shaws Creek Aboriginal Place
Holds major cultural and historical significance,
featuring engravings and axe grinding groove
sites situated along the Yandhai (Nepean
River).

Yarramundi Negotiation Site
1804: Leaders Yaragowhy and
Yarramundi met with local magistrates
here to broker peace



Analysis of Country

Connecting to the country involves connections to the remnant landscape, waterways, and wider Dharug country, incorporating First Nation narrative, respects local geology, and provides community gathering spaces.

Principles of Place

The following Country-based principles have informed our understanding of place and ways which Country can be restored and embraced within our proposal





Archaeology

- Stone artefacts
- Art (Pigment or engraved)
- Grinding grooves
- Ceremony and Dreaming Sites

The project area is situated within the Cranebrook Terrace, a highly sensitive archaeological landform.



Waterways

Rivers such as the *Dyarubbin* and *Yandhai* were important not only for their resources, but also as connective pathways for Songlines, and Dreaming stories, and are described as living beings.



Songlines

The *Dyarubbin* flows through sandstone Country encircling Sydney and the Cumberland Plain. Songlines conerning water-related stories include Tiddalick the Frog, and Gurungatty (the Giant Eel).



Language groups

Groups that spoke Dharug (part of the wider Yuin-Kuric language group) included:

- Mulgoa (Black Swan)
- Boorooberongal
- Gomerrigal
- Cattai
- Bediagal
- Burramattagal



Analysis of Country

The proposed design should emphasize waterways, celebrate ties to Cranbrook Terrace's geological and cultural landscapes, and engage the community in physical spaces that consider the cultural significance of the place while designing for comfort and creating a sense of place.

Connecting with Country

Engaging with, understanding, and connecting to Country, while incorporating design themes into the Castlereagh Tourism Development to support and promote positive outcomes for Country, with a focus on eco-centric design.





Connection to remnant landscape:

Celebrate ties to Cranebrook Terrace and the original geological and cultural landscapes of the area.



Incorporate sandblasting techniques and a sandstoneinspired color palette to reflect the natural sandy layers of the Cranebrook Terrace.

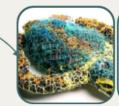


Retain existing bushland and grassland, characterise the site with a native canopy cover, as well as using Water Sensitive Urban Design.



Connection to Water Country:

Emphasise waterways in design, which acted not only as areas for resource gathering but for meetings, trade, and ceremony.



Facilitate the natural movement of people throughout the Tourism Development; create gathering spaces and circulation points



Connection to wider Dharug Country:

The Blue Mountains, Cranebrook Escarpment, and Nepean River are linked by shared songlines connecting the Dharug, Darkinjung, and Gundungurra Nations.

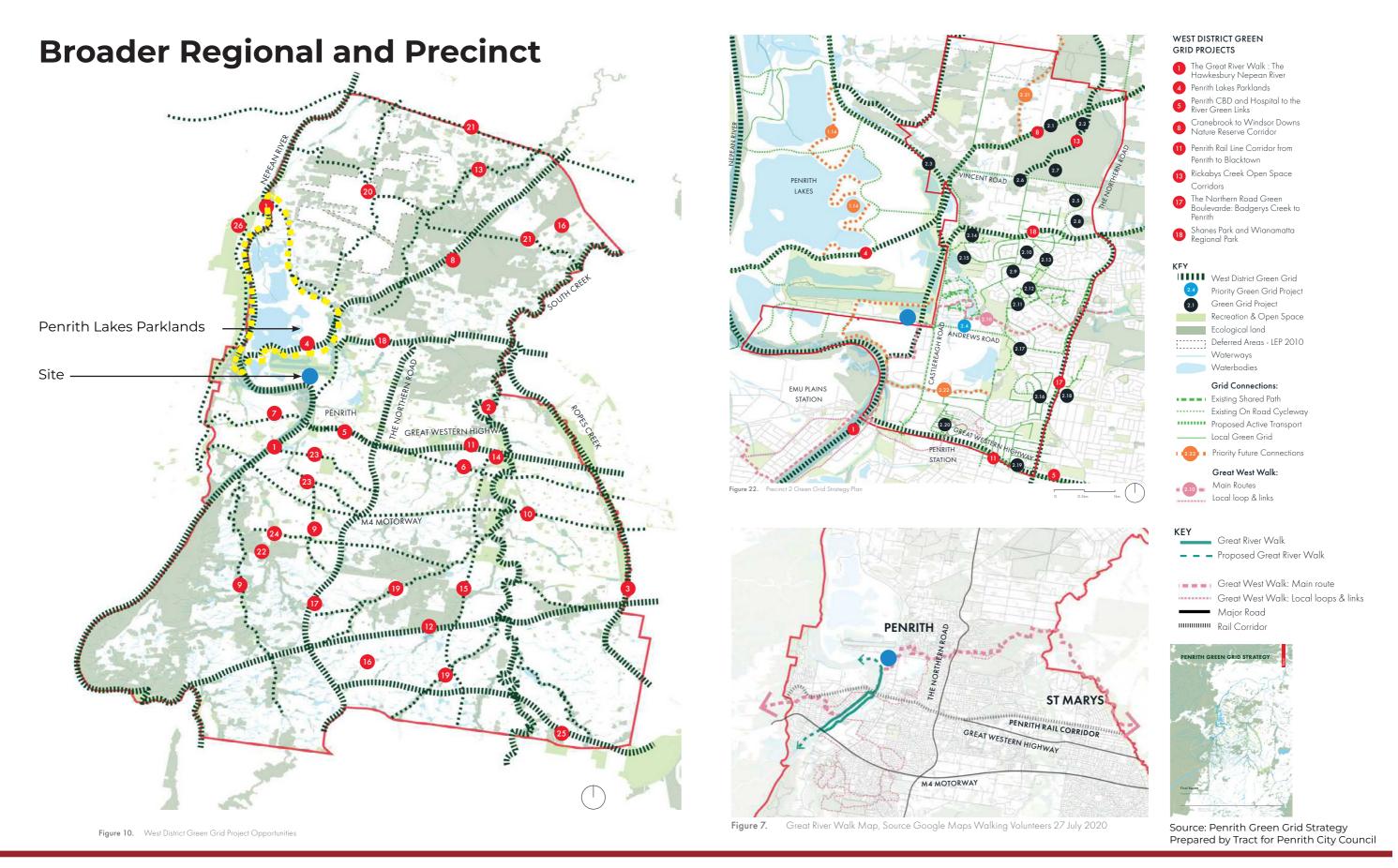


Engagement of community and public through engaging landscape with interconnected physical spaces, including access tracks around Penrith Lakes



Design places to support connection and comfort while creating a sense of place.







Broader Penrith Lakes DCP - Stage 1 Analysis

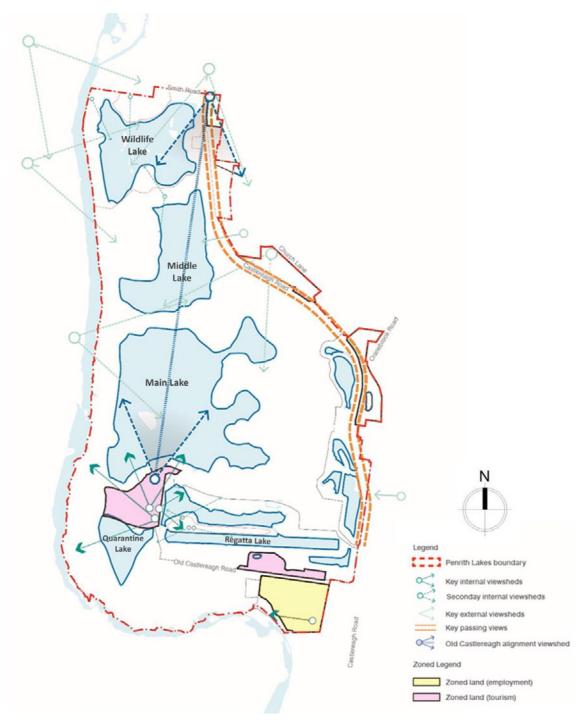


Figure 1. Key views

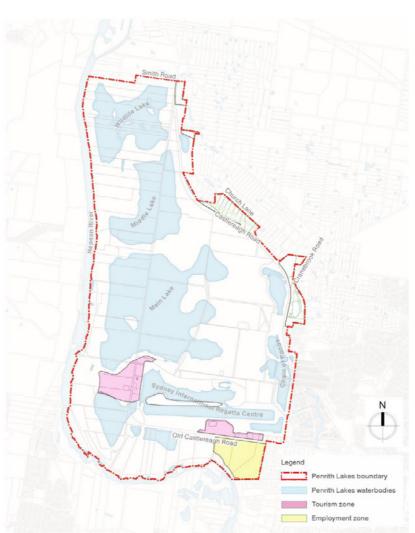
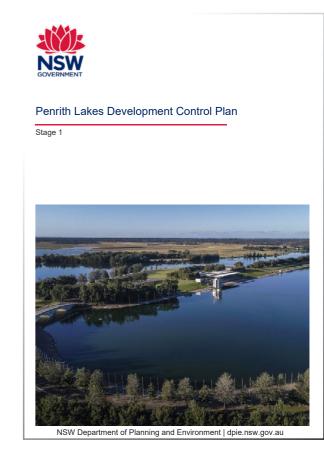


Figure 2. Precinct diagram

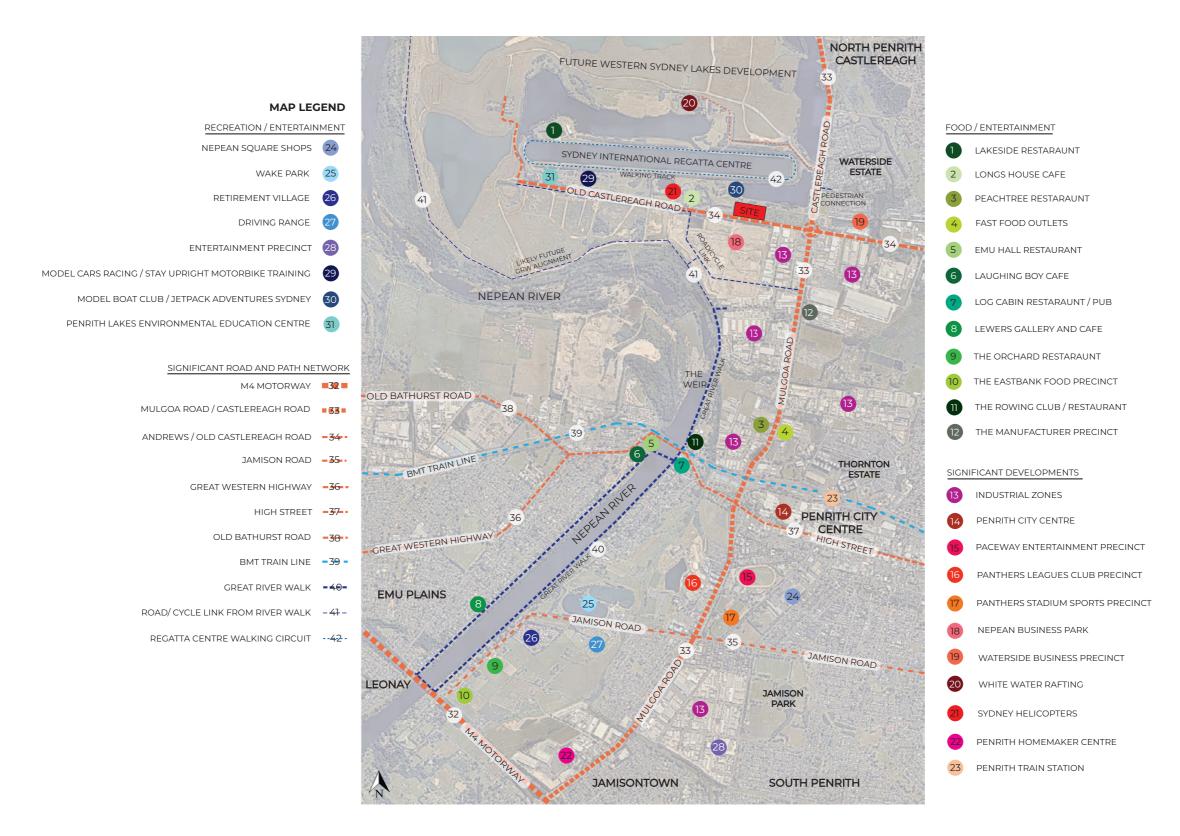


Source: Penrith Lakes DCP Stage 1

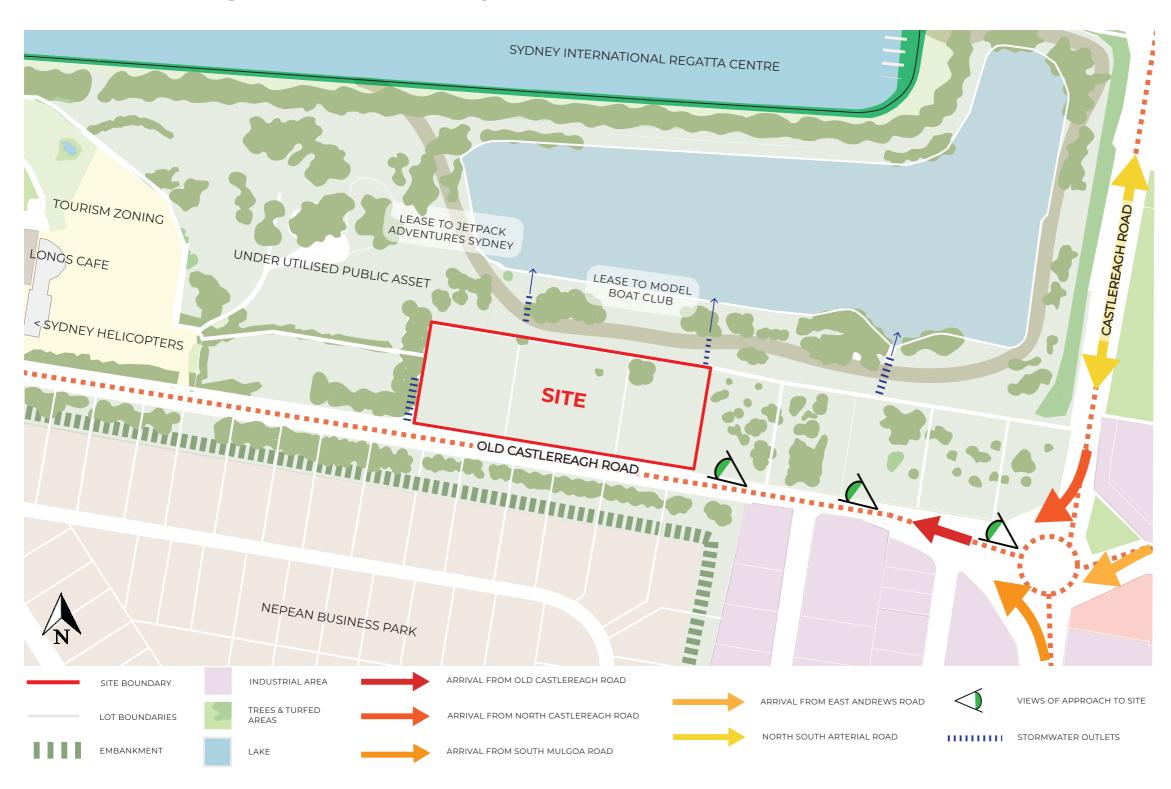
	Controls	Proposed
Height	22m	Ranges 8.7m-24.6m (minor encroachment for Lot 12)
FSR	1.25 : 1	0.80:1
Landscaped Area	Min. 30% of site area	32.5% of site area
Deep Soil	Min. 20% of site area	32.5% of site area
Setbacks		Front Boundary : 14-27m (varies) Side Boundaries : 6-9m (varies) Rear Boundary : 5-10m (varies)



Broader Site context and connections







This Surrounding Context Analysis diagram illustrates the strategic location of the proposed development site within the Penrith Lakes precinct, directly adjacent to the Sydney International Regatta Centre. The site is framed by Old Castlereagh Road to the south and sits within an area of significant tourism and recreational potential, surrounded by underutilised public land and existing leisure-based leases.

The diagram identifies key vehicular arrival points from surrounding arterial roads, as well as primary approach views to the site, indicated by the eye symbols. These approaches help define the site's visual prominence and inform how it is experienced on arrival. The analysis also highlights the presence of existing stormwater drainage infrastructure, with outlets located to the immediate north of the site. These discharge points pass through a berm separating the site from the adjacent lake system, representing a critical environmental consideration for future development and water management strategies.

This contextual understanding, encompassing access, views, and drainage, ensures that the urban design response is well-informed, resilient, and sensitive to both functional and environmental site characteristics



MOUNTAIN VIEW RESERVE

DEVELOPMENT SITE AREA

PENRITH LAKE SYSTEM

DETENTION BASIN & WETLANDS

PENRITH LAKES BOUNDARY

REGATTA CENTRE BOUNDARY

TOURISM SOUTH PRECINCT BOUNDARY

NEPEAN BUSINESS PARK BOUNDARY

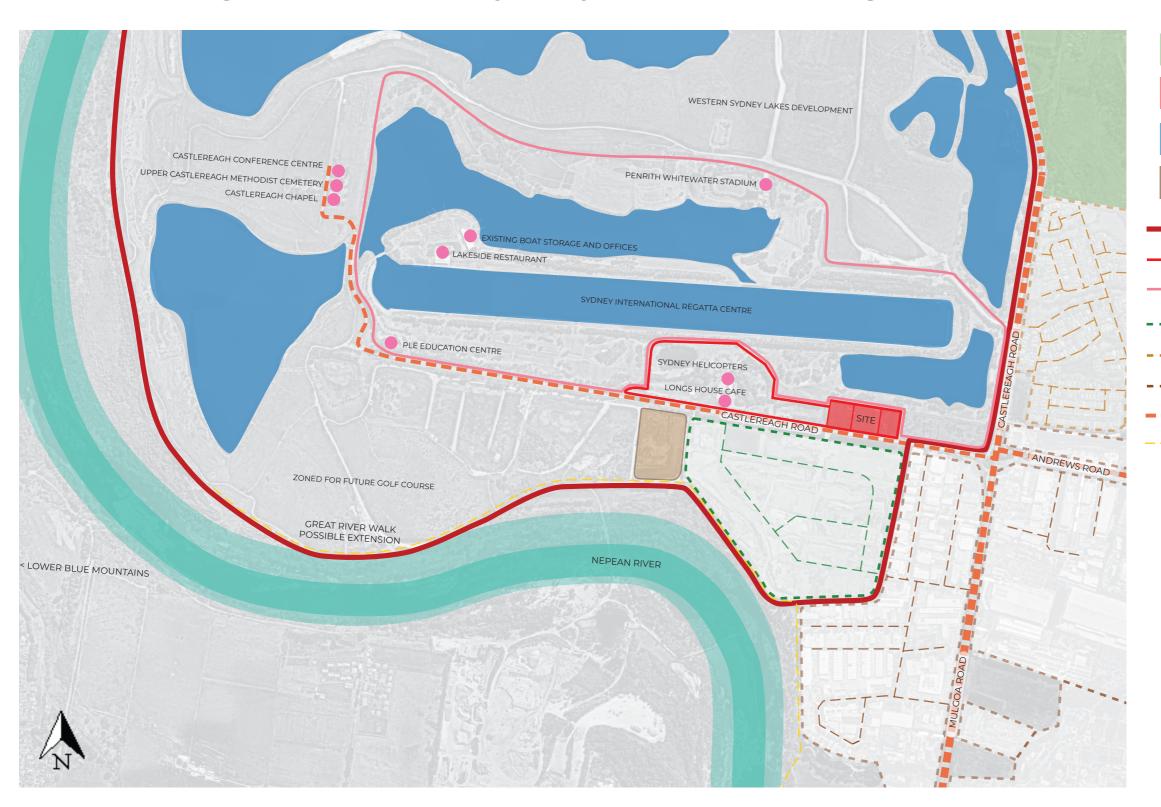
RESIDENTIAL ZONING BOUNDARY

INDUSTRIAL ZONING BOUNDARY

WALKING AND CYCLING TRACK

ROAD NETWORK

Surrounding Context and Sydney Internation Regatta Centre



This diagram illustrates the surrounding context of the Sydney International Regatta Centre, highlighting key landmarks, zoning boundaries, and infrastructure. It shows adjacent recreational facilities, proposed developments, and nearby natural features such as the Nepean River and Penrith Lake System. The map also outlines future development zones, including residential, industrial, and business areas, alongside active transport links like walking and cycling tracks.



Surrounding Context - Parks, Greenspace and Outdoor/Indoor Recreation

This diagram illustrates the surrounding recreational context of the Sydney International Regatta Centre, focusing on access to parks, water bodies, and indoor facilities. While there are notable accessible water bodies like Penrith Beach and the Regatta Centre itself, the broader Penrith Lakes system remains largely restricted, with extensive areas marked as non-accessible. This limited access presents a significant missed opportunity for public engagement and outdoor activity in a region abundant with natural and recreational potential.

Despite the presence of several outdoor walking tracks and parks—particularly to the east and south of the Regatta Centre indoor recreation and gymnasium facilities are sparse, with only a couple of locations identified within the broader area. This scarcity limits year-round, all-weather activity options for residents and visitors alike. The spatial imbalance between available greenspace and built recreational infrastructure underscores the need for more holistic planning. Enhancing indoor amenities and unlocking more of the Penrith Lakes area for community use could transform the site into a key recreational and wellness destination in Western Sydney.



NON-ACCESIBLE WATER BODIES SURROUNDING THE SITE

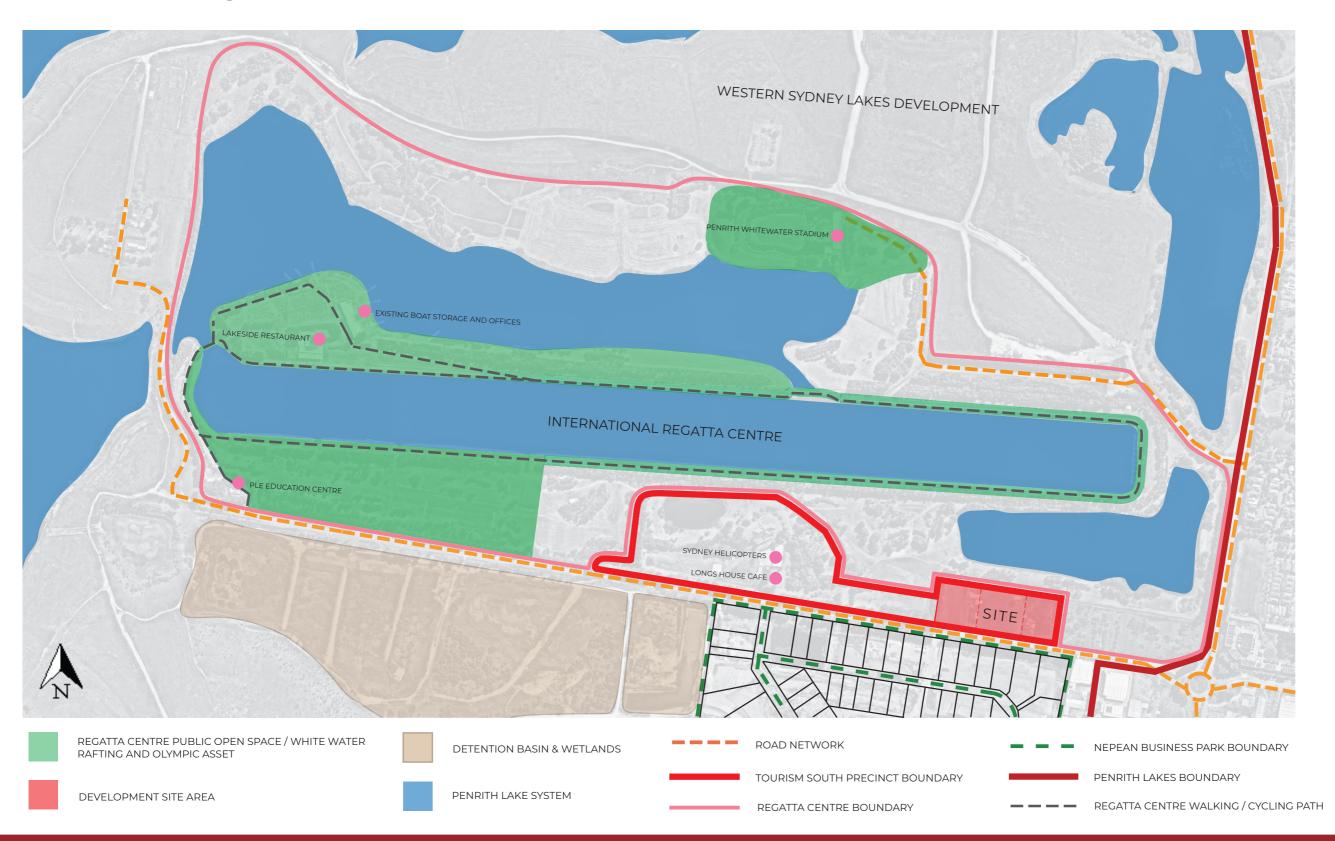
ACCESIBLE WATER BODIES

OUTDOOR RECREATION - PARKS AND WALKING TRACKS

INDOOR RECREATION AND GYMNASIUM LOCATIONS



Surrounding Context - Penrith Lakes Tourism South Precinct





Surrounding Public and Active Transport Routes





Surrounding Context Overview







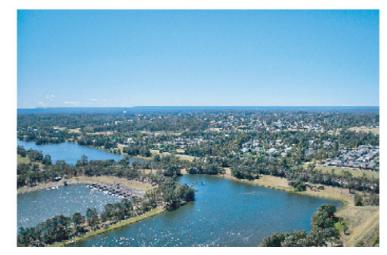






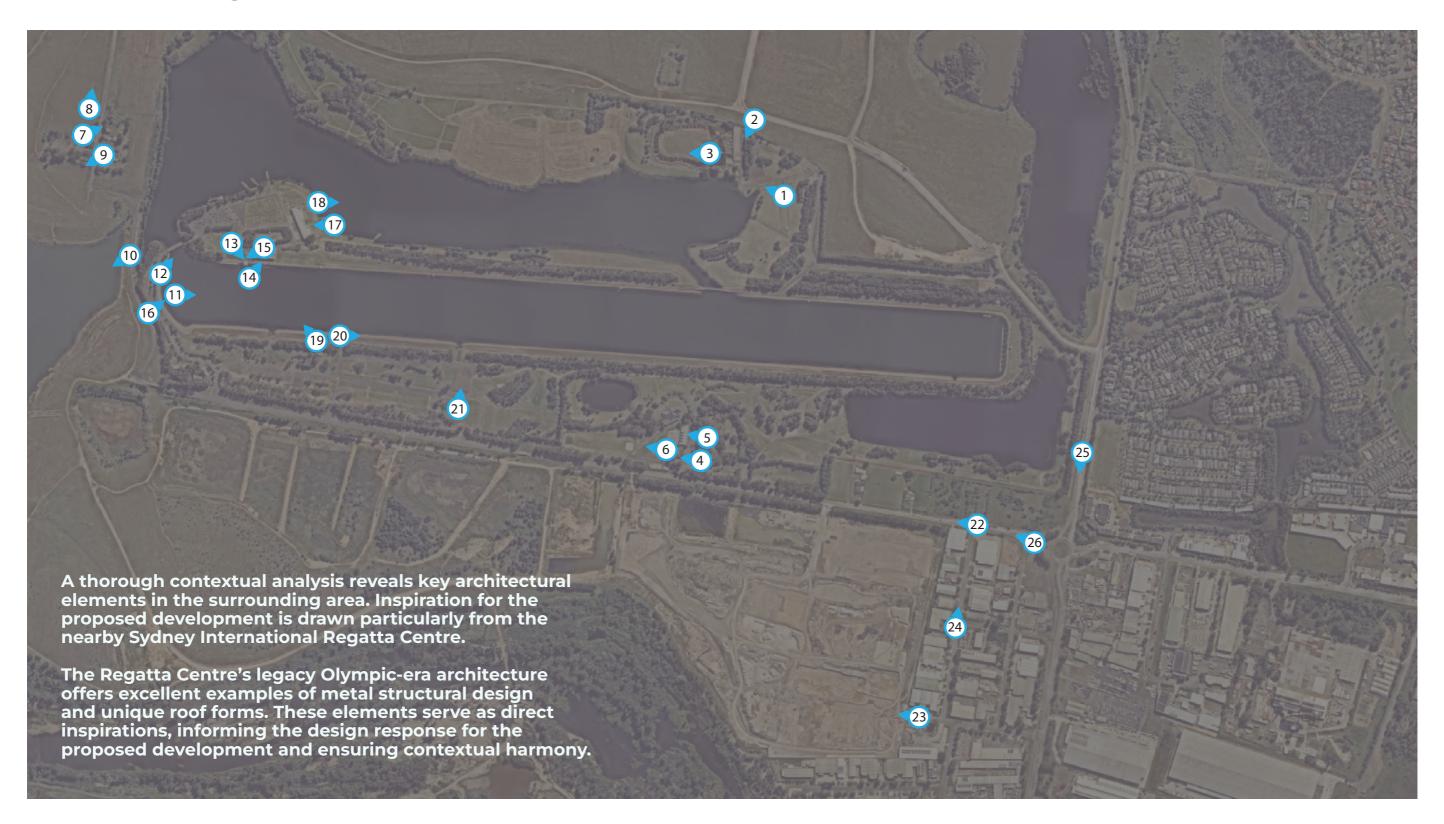








Surrounding Context & Character





The Penrith Whitewater Stadium (PWS) is a purpose-built Whitewater rafting sporting facility constructed for the 2000 Sydney Olympic Games. Events held at this facility during the Olympics were Canoeing and Kayaking slalom. The facility continues to be used today for training and recreational purposes and features a walking track and grassy hills for spectator viewing surrounding the facility.



4

Longs House Café (marked as 1. on aerial image) is a recently opened hospitality venue (July 2024) located 200m West of the Proposed Tourism Development. Longs House is located on the neighbouring site to the proposal at 89-151 Old Castlereagh Road. The existing dwelling on the property is of brick-built construction dating back to late 1880's.

The building on site is of infill concrete block construction underneath an expansive exposed galvanised steel flat plane roof. The roof continuously extends over the infill fill blockwork and mesh volumes which comprise public entry points, boat sheds and undercover seating spaces. The roof and infill volumes harmoniously follow the fall of the land.



Adjacent to the Café is the Sydney
Helicopters and Aerotech Sydney facility
(2) – providing SES safety training and
tourism helicopter flights along the blue
mountains lower ridge. The Aerotech
Sydney facility maintains and repairs
helicopters for broader Sydney region.

Key building features of the Olympic legacy are the various watch towers throughout the regatta. This watch tower at the PWS is comprised of simple planar forms featuring robust materials such as galvanised steel, profiled metal and concrete blocks which are the commonly used material palette in the regatta.



5

The Sydney Helicopters facility is a heliport and a business premises comprising large sheds used for storage and maintenance of the helicopters. The Aerotech Park use is not a tourism use, however, is compatible with the neighbouring business park on the southern side of Old Castlereagh Rd. To the north of the industrial buildings of the Aerotech Sydney facility is a single storey office building (3) occupied by Sydney Helicopters and Penrith Lakes Corporation.





The helicopters, staging areas and landing pads adjoin the Longs House Café boundary

The most Western accessible area of the Penrith Lakes region is the Castlereagh Conference Centre and Christ Church. These facilities accommodate for daily events and religious practices. The chapel was a slab building built in 1847 with neighbouring weatherboard buildings built later.

A small methodist cemetery also adjoins the chapel. The street scape is characterised by pavilion style buildings with varied pitched roofs forms.











View facing north at the end of the publicly accessible Old Castlereagh Road. The vast expansive lakes precinct is characterized by grassy plateaus, expansive water bodies, with a majestic backdrop located at the foot of the blue mountains. Unfortunately, this land is currently inaccessible to the public.

Brick cottages at 305 Old Castlereagh Road line the road at the western tourism precinct.

View looking West out to the mountains at the most Western point of Old Castlereagh Road overlooking the lake known as Quarantine Lake.

Unfortunately, this land is currently inaccessible to the public and these views are only achievable from the road.



The Regatta Centre is a Purpose-built rowing facility for the Sydney 2000 Olympic Games. The 2300metre long rowing lake supports multiple functions to this day such as rowing events for GPS schools and a training facility. The lake is surrounded by a walking/cycling track which contributes to daily walking and running for locals and visitors to the area. The regatta is further activated by the restaurant and function centre located within the existing grandstand.



The off form concrete bridge arching over the waterway connects vehicles and pedestrians to the island beyond.

The bridge features the Olympic Rings emblem.



The regatta lake is surrounded by a concrete and bitumen walking and cycling path. Floating Jetties are in the lake to support rowing activities.







The regatta is further activated by the restaurant and function centre located within the existing grandstand. Over the years many music and food and wine festivals have been held at the island continuing the activation and use of the precinct. It is anticipated these festivals will continue to be held at the island in the future

The large, tiered grandstand comprises a large and flat steel awning spanning over the entire seating area and associated floor areas including the restaurant and kiosk. Concrete pavement and landscaping surround this area.

At the finish line end of the rowing lake is a steel framed watch tower cantilevered over the lake. This tower was used by rowing officials during events and training and is still used to this day during rowing events and training.

The unique building form comprises a compact floor plan with a heroic curved roof arching towards the lake. The building features a robust material palette of exposed galvanised steel framing, profiled metal, glass and metal louvres.



The flag poles line the water's edge at the finish line end of the lake. This Olympic legacy was a place for competing nations to fly their flag during event time.

A mark of the spirit of inclusion in the Olympic games whereby all competing nations can fly their flag.



19

An image of the Regatta from the southern side of the lake shows the character of the grandstand and officials tower in a natural setting. The bitumen running and cycling path can be seen in the foreground. The iconic horizontal planar building form of the grandstand is juxtaposed against the compact building form of the officials tower which are further characterised by natural surrounds.

Surrounding structures on the Regatta island include industrial shed type buildings which are used to store boats and maintenance facilities. The boat shed comprises long planar roof forms with infill light weight profiled metal sheeted volumes underneath.

The building features a large first floor terrace office spaces which are leased out to local businesses.





The Regatta Lake features a perimeter walking and cycling track. There are multiple bridges and bays for resting or viewing enriching the experience along the walk.





Adaptive re-use features in Regatta Centre Precinct include the motorbike training/licencing courses which run on a weekly basis. A portion of the existing carpark is cordoned off only 20m from the primary lake.



Views opening along down Old
Castlereagh Road as you head west
towards the proposed Tourism
Development. Longstanding industrial
precinct to the left and natural reserve
landscape as a part of the surrounding
Regatta Centre land to the right.
Overhead powerlines line the South side
of the entire road





Photograph facing the route along the Castlereagh Road, approaching the Regatta Centre Roundabout. Castlereagh Road is two lanes wide each way with a median strip in the middle. Deep grass verges line either side of the road with landscaping and lakes beyond to the west, which are not visible from the roadway.

An entry point to the stage 1 works of the Nepean Buisiness Park on Lugard Street is still under significant earth works and development. The NBP stage 1 subdivision works is due for completion in late 2025.





An image looking west from the intersection of Old Castlereagh Road and Castlereagh Road Roundabout. The median strip widens allowing for single lane Old Castlereagh Road to fit roundabout circulation. The industrial precinct is prominent and visible to the south with landscaping visible to the north. The lakes are and blue mountains are not visible from this approach to the site.

The existing industrial precinct adjoining Castlereagh and Old Castlereagh Road has many established warehouses, factories and large industrial businesses within. Wide streets and driveways form ease of access for trucks and machinery servicing the area.





Nepean Business Park Character



The adjacent Nepean Business Park is currently under development and is extpected to produce various styles of modern, industrial architectural styles.

The proposed tourism development is locate between the business park and the Sydney International Regatta Centre.



It is anticipated that metal cladding and modern forms will be prevalent throughout the business park. Steelwork and metal sheeting is also a feature of the Sydney Olympic architecture of the nearby regatta centre.



Detailed Site Analysis

The site analysis diagram outlines key physical, environmental, and infrastructural features of the proposed Tourism Development adjacent to the Sydney International Regatta Centre. The site is bounded by Old Castlereagh Road, the Nepean Business Park, and recreational facilities such as Jetpack Adventures and the Model Boat Club. The topography is gently sloping with several existing trees, some of which are to be retained or transplanted. A key constraint is an existing embankment that limits ground-level views to the lakes and Blue Mountains, although elevated positions (around 3 metres) provide potential for scenic vistas.

Access and services are addressed, with the potential for a right-hand turn into the site from Old Castlereagh Road pending road widening. The site is currently serviced by overhead power, private sewer lines, and a potable water main, though upgrades may be needed. Drainage lines traverse the site, and there are identified flood risks due to limited drainage through the embankment.

Environmental considerations include exposure to undesirable westerly winds and the benefits of a northerly solar aspect. Vegetation management is carefully planned to retain ecological value. Overall, the analysis supports a development approach that responds sensitively to site conditions while maximizing visual and environmental assets.



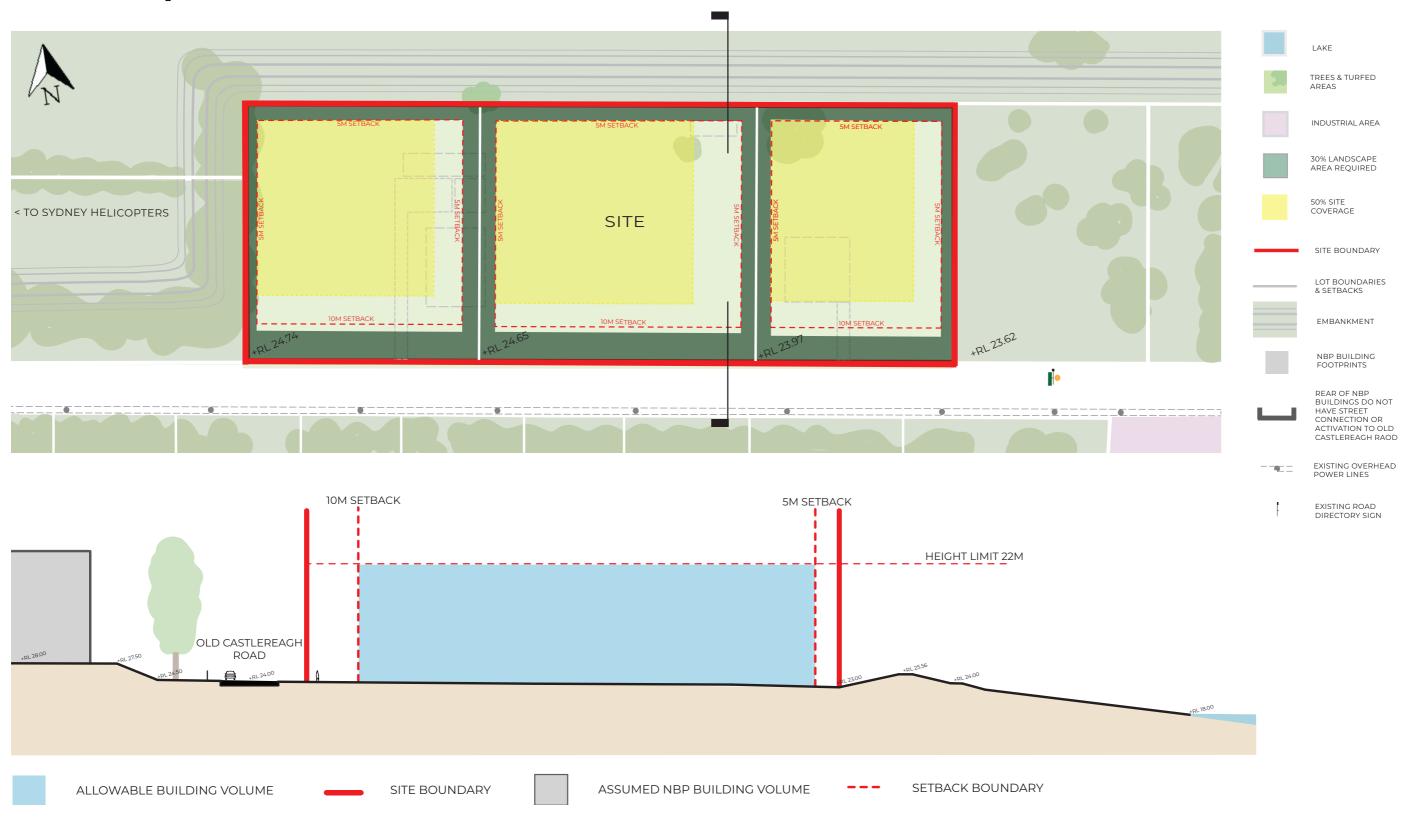


Site Extents



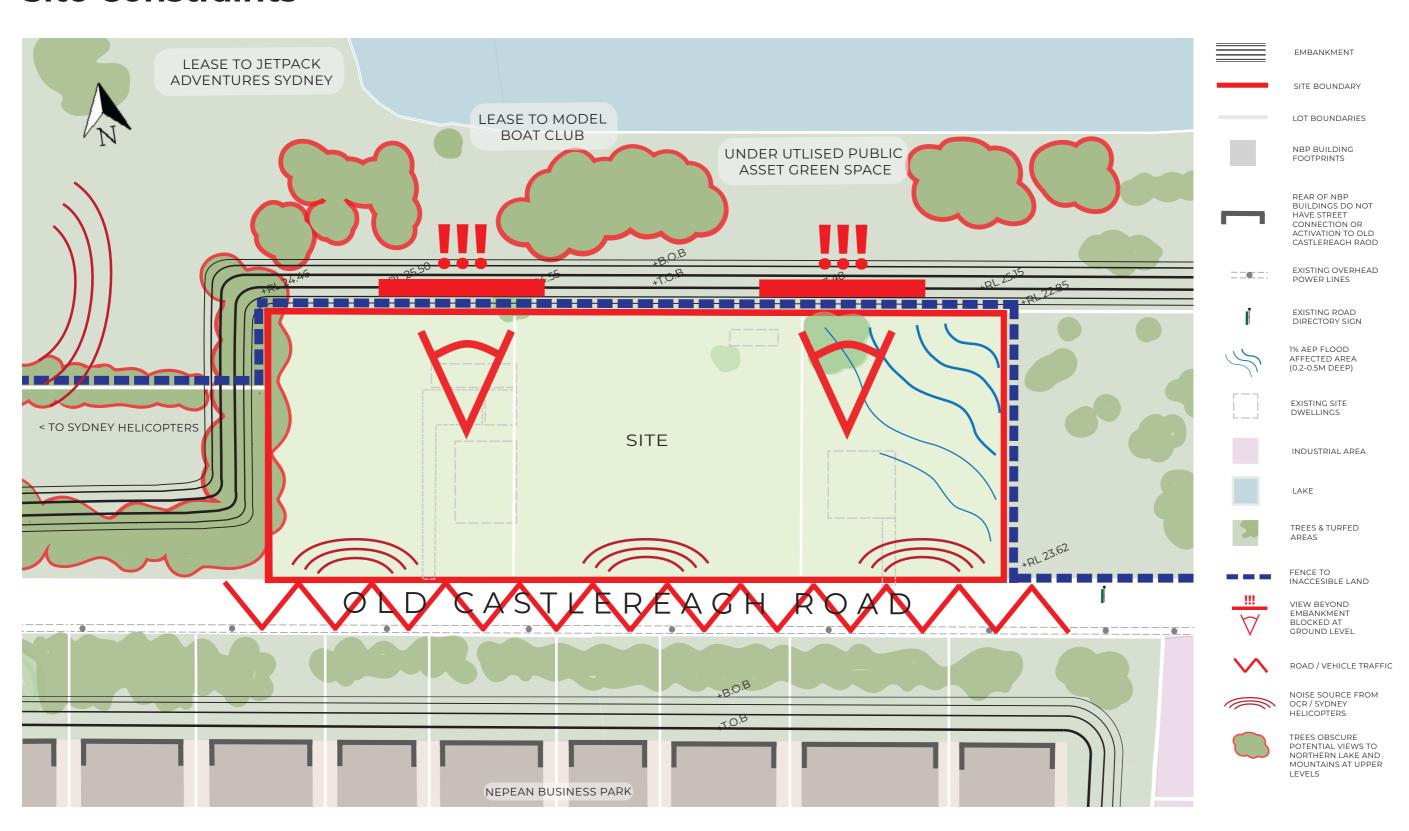


Site compliance with Penrith Lakes LEP / DCP



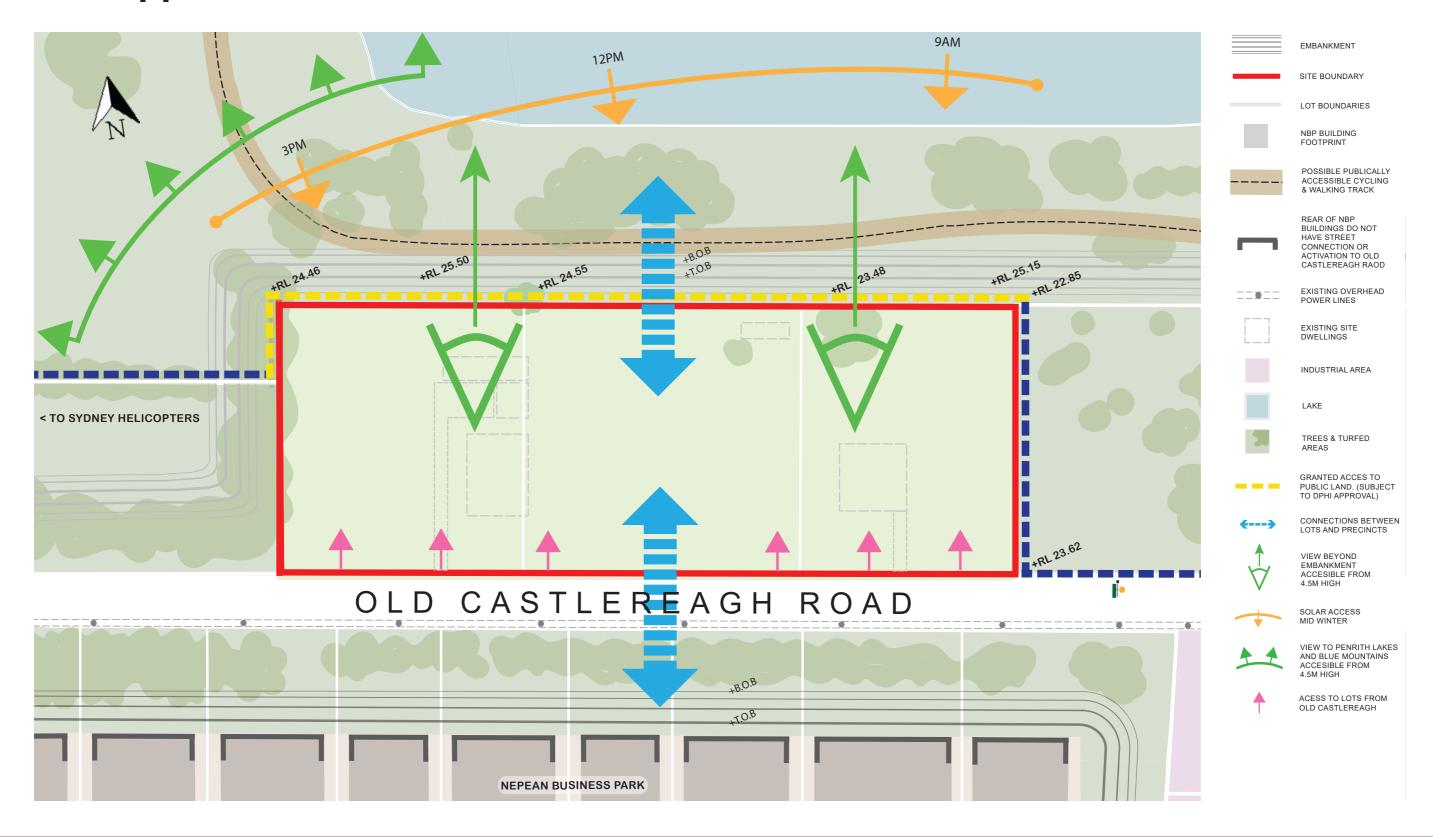


Site Constraints



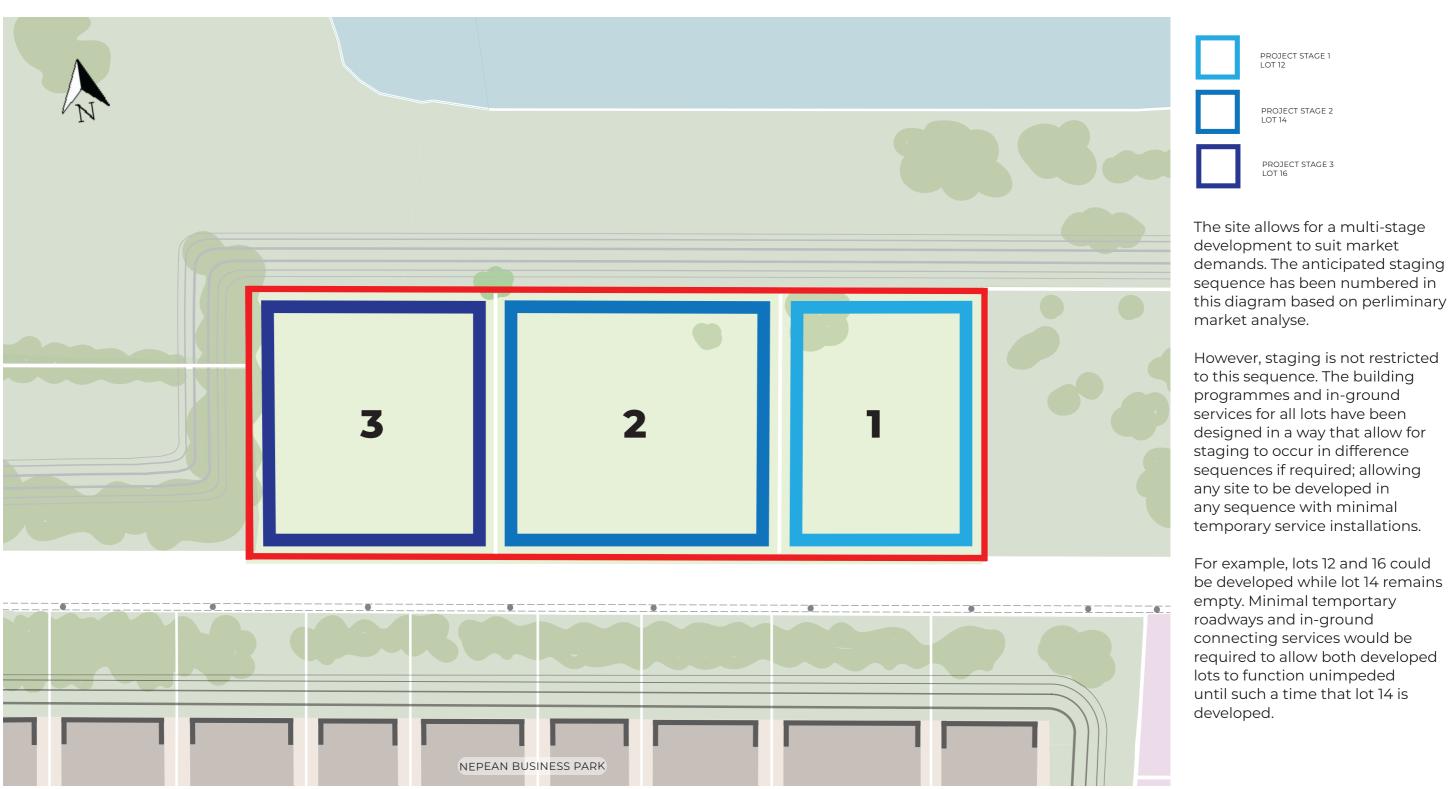


Site Opportunities





Site Development Staging Diagram



The site allows for a multi-stage demands. The anticipated staging sequence has been numbered in

designed in a way that allow for

be developed while lot 14 remains required to allow both developed



Urban Design Strategy

Project Brief:

A proposed tourism development comprising a mix of uses, including a hotel, indoor recreation facilities, drive-through restaurants, and a club.

All car parking is provided above grade in response to flood constraints. The existing 3 x lots are to be maintained as separate development sites and be constructed in stages.

Conceptual Intent:

The goal is to create a precinct with a development that spans three individual lots. Each building on the lots works together to form a harmonious ecosystem. This ecosystem will integrate the buildings with each other and with their surrounding environment, establishing a unique destination and sense of place.

By emphasising connection and placemaking, we aim to harness the site's unique opportunities—such as scenic views and natural landscape connections— while skilfully addressing challenges such as flood management and parking requirements.

Urban Design Principles

Morson Group and Audux Urban developed a series of 10 Urban Design principles that to inform design decisions as the project developed:

Principle 1 - Respond to Country

The proposal aims to respond to the unique aspects of the site's history and natural attributes.

Principle 2 - Respond to the Surrounding Context

The proposal aims to create a positive contextual fit with the area's existing and evolving character and streetscape.

Principle 3 - Create a 'Sense of Arrival'

The proposal creates memorable sense of arrival and a sense of destination.

Principle 4 - Create a 'Sense of Place'

The proposal aims to create a 'sense of place' with a combination of natural and man-made elements that makes a person remember or want to return to a place

Principle 5 - Increase Connectivity & Permeability

The proposal aims to create a network of circulation spaces that link the various spaces and program within the site and surrounding destinations.

Principle 6 - Respond to Topography and Flooding

The proposal will respond to the site's existing topography and mitigate the effects of flooding.

Principle 7 - Integrate Landscape

The proposal integrates landscape as an integral component of the development.

Principle 8 - Achieve High Quality Design

The proposal exhibits high quality architecture and urban design.

Principle 9 - Create a Responsive Parking Strategy

The proposal will aim to create a responsive parking strategy.

Principle 10 - Exhibit Sustainability

The proposal will imbue sustainability.

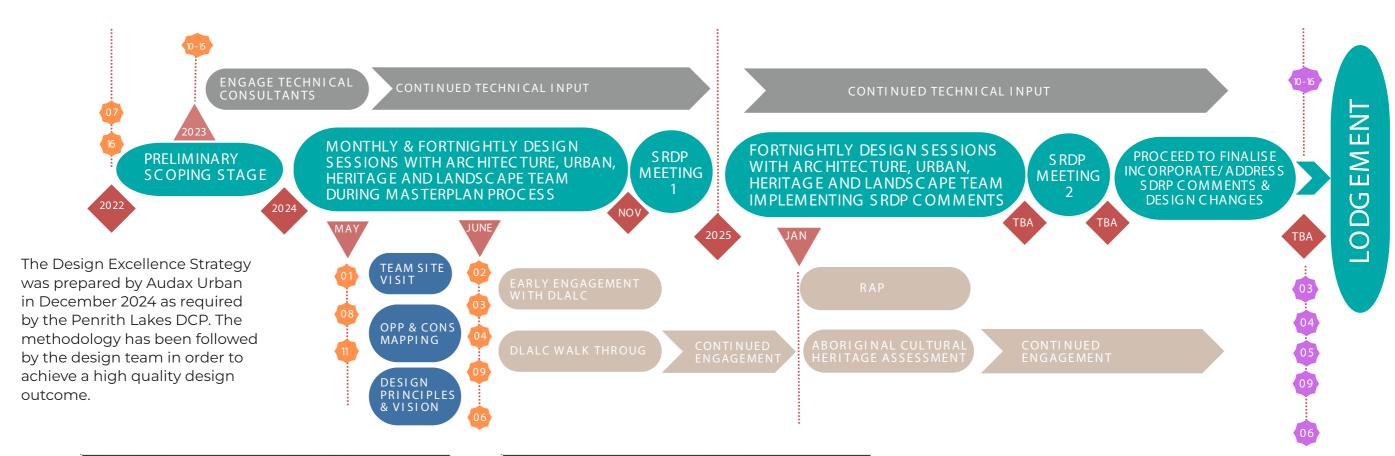
The Urban Design Strategy outlined in this report aims to demonstrate how each Design Principle has informed various design decisions. Certain design aspect need to consider multiple Design Principles at once.

At the same time, Design Excellence is demonstrated by following the Design Excellence Strategy developed by Audax Urban.





Design Excellence Strategy



Item	Task	Consultancy
1	Design Excellence Strategy (Submitted for assessment prior to preparation of the masterplan).	Audax Urban – Urban Design
2	Connecting with Country Strategy	Virtus Heritage - Anthropologist
3	Aboriginal Archaeologist Due Diligence	Virtus Heritage - Archaeology
4	Landscape Design Strategy	Distinctive Living Design - Landscape Architect
5	Landscape Architectural Design	Distinctive Living Design - Landscape Architect
6	Urban Design Strategy	Audax Urban – Urban Design
7	Surrounding Context Analysis	Morson Group - Architects
8	Site Analysis – Constraints & Opportunities	Morson Group - Architects
9	Architectural Drawings	Morson Group - Architects

Item	Task	Consultancy
10	Site Drainage & Stormwater Design	Stormwater Engineer
11	Flood Engineering advice (excluding flood evacuation)	Flood Engineer
12	Traffic Report	Traffic Engineer
13	Preliminary Site Investigation	Hydrologist
14	Sewer and Water Services Design	Sydney Water Coordinator
15	HV Power Services	Level 3 ASP Designer
16	Town Planning Input	Tomasy Planning

Table 01 List of Design Tasks & Consultancies







Urban Design Principle 8 - Achieve High Quality Design



Design Vision

The people of Sydney's west have longed for a way to visit and experience the Penrith Lakes. This is due to the attraction of its pristine natural beauties, its setting at the foot of the blue mountains, its position adjoining the banks of the Nepean River, and the vast lakes system. The Penrith Lakes is located close to the Penrith city centre, features a tranquil ambience, and is highly suited to tourism uses.

The development of the Olympic Regatta Centre and White-water Rafting facility and, more recently, the opening of Penrith's beach have somewhat activated the Penrith Lakes environment. However, this experience is limited due to the narrow range of uses, mainly focusing on outdoor recreational functions.

The proposed tourism development is an opportunity to deliver a facility that fills that void and demand for various additional compatible uses within the Penrith Lakes precinct. The proposal delivers indoor recreation, food and beverage, club facility and visitor accommodation in a combined development. The combined mix of these uses strengthens the potency and attraction of the development as visitors of the site are likely to attend a variety of the functions on offer in one visit. Therefore, we consider the proposed uses form a valuable contribution to the Penrith Lakes setting and its emerging character as a recreational and tourism destination.

The project comprises a hotel with resort-style amenities, marking the first opportunity for guests to stay directly at the picturesque Penrith Lakes. Visitors are expected to stay at this accommodation for various reasons, such as catering to the needs of the regular events at the Regatta and the Penrith area, supporting overnight stays for surrounding businesses, and just embracing the natural beauty and unique offerings of the lakeside environment.



By incorporating various indoor recreational options, club facilities and food and beverage offerings into one precinct, the development will enrich the overall visitor experience, establishing itself as an asset to the area's tourism and leisure landscape.

The concept of place is created by blending multiple buildings with a range of uses. The ground level comprises a shared carpark area interspersed with landscape features, sleeved by building forms and open to the landscaped side setbacks.

The carpark area unites all three buildings at the ground level, permitting access to all building uses through vertical circulation nodes which are generous and landscaped. These vertical circulation nodes comprise lift cores and open stairs connecting the upper floors with the common parking area.

To the rear of the development, an external terrace is provided, which is open towards the views, connects the club and indoor recreation building and is directly accessible from the parking area. The terrace is intended to be a zone for numerous functions, such as circulation for the building entries, outdoor dining and seating, and outdoor recreation and is softened with integrated landscape planters.

The serene surroundings of Penrith Lakes, complemented by the mountain backdrop and newly created lake views, further enrich the experience of this dynamic environment.

Urban Design Principle 2 - Respond to the Surrounding Context



Design Vision



The design of a ground level carpark with building program located on a podium was the driving vision for the project. A strong sense of landscaping and inspiration from the floating roofs of the adjacent SIRC architecture was the starting point for a precedent study.

Urban Design Principle 8 - Achieve High Quality Design

Urban Design Principle 4 - Create a 'Sense of Place'

The tourism facility offers a means for families and people of all ages to visit and experience the centre's various uses, contributing to the community's well-being. This proposal will provide the community with a destination facility to use daily, a place to go on weekends and special events. This development will meet the demand for more tourism facilities in Penrith. Meeting this demand will create more jobs in these sectors, benefiting the community.

The precincts' unique location and distance from residential areas will permit extended trading hours without restriction and will significantly contribute to Penrith's nighttime economy with a unlimited potential of indoor recreation activities from bowling and VR amusments to bouldering, skating, mini golf or even indoor karting.













Connecting with Country

A detailed Connecting with Country report has been provided with the submission. Engagement with local communities has been carried out on site with Steve Randall at a 'Walk on Country'. Through the ACHA process, further engagement with relevant RAPs has been undertaken. A further site visit with the RAPs is proposed to continue the engagement process and extend their contribution.

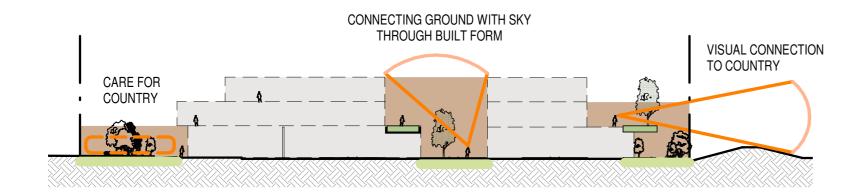
The themes arising from the 'Walk on Country', further engagement with the RAP's, and developing the connecting with country report concurrently with the design process are detailed below:

Connection to Water Country:

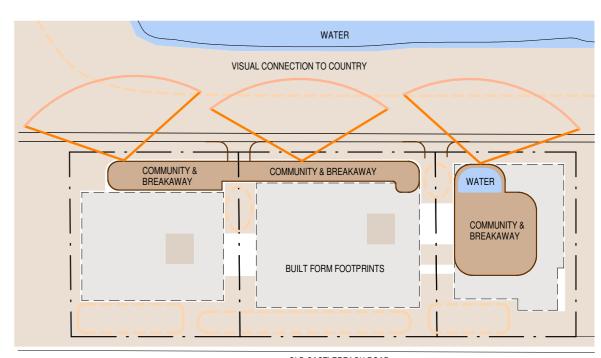
The response to this theme is to maximise the opportunity to provide visual connections to surrounding water bodies. Although the Penrith Lakes directly adjoining the site area are manmade, they form part of the process and story of restoring the land and country. The development further contributes to the restoration of country through the development of its landscaping and the visual connection to water. The spaces created through this theme are both internally and externally are suitable for gathering, community breakout, and connection to the sky

Connection to Wider Dharug Country:

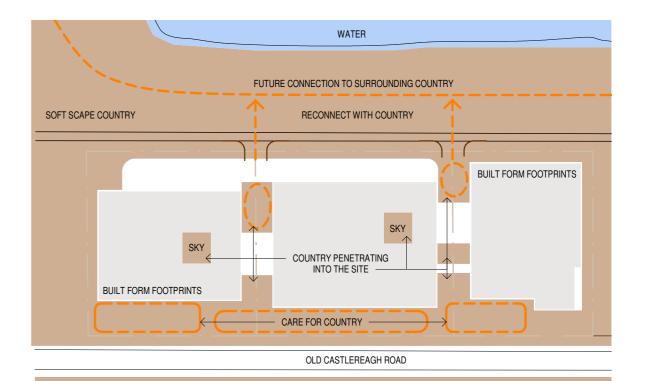
The response to this theme is to create possibilities for physical connection to areas beyond the site, which are accessed through spaces and pathways within the site area. These pathways and circulation areas for pedestrians and vehicles will be enriched with landscaping exhibiting 'restored country', artworks and signage aids to further engage with the community and express the meaning and ethos of the Dharug country. The project team is also committed to exhibiting and integrating any aboriginal artefacts found during excavation in these pathways and the buildings.



Urban Design Principle 1 - Respond to Country



OLD CASTLEREAGH ROAD





Connecting with Country

Connection to Remnant Landscape:

The response to this theme involves incorporating local materials, such as the sandstone and sandy layers of Cranebrook Terrace. Although the site area has been developed for agricultural purposes and housing, the new landscaping on site restores country through the planting of original and native plants and tree species assumed to have existed pre-development.

In developing the urban design strategy, collaboration with the landscape architect ensured the design not only achieved a high standard of excellence but also demonstrated a deep respect for Country. Recognising the site's cultural and environmental significance, we engaged with Traditional Custodians and incorporated Aboriginal perspectives to inform spatial planning, material selection, and landscape expression.

The design approach prioritised the protection and celebration of cultural landscapes, native ecologies, and significant topographies, embedding stories and connections to Country within the public realm. This co-design process with the landscape architect was instrumental in translating cultural values into tangible design elements—such as interpretive pathways, native planting schemes, and water-sensitive features creating a place that is both contemporary and grounded in the enduring cultural heritage of the land.

KEY ISSUES FOR DHARUG DESIGN

CONNECTING THE SITE, BUILT FORM, PEOPLE & COUNTRY

This site was on the edge of important waterways and resources, crossings and other cultural and settlement related activities. How might we honour Country and ensure it's dignity is still intact after the project?

Any new building should honour Country and the people associated with this land through tangible and intangible outcomes.



OPENING THE SITE

Ensuring the building is welcoming to people of all ages, culturally safe and educational

How might the building bring people closer to important themes? Water, the Archaeology, Songlines, Language groups etc.?



CELEBRATE COUNTRY

TELL OUR STORIES

Use colour, material, public art, vegetation to celebrate and enhance connection to Country. Can the project provide a space to celebrate



Penrith Lake parkland is a place of ceremony lore and settlements. There are many latent stories associated with this place waiting to be told through place based interventions

How might we tell the stories of this Country and it's first peoples in the design of this





Urban Design Principle 7 - Integrate Landscape

Urban Design Principle 1 - Respond to Country

INDIGENOUS ELEMENTS & DESIGN RESPONSE

CONNECTING TO REMNANT LANDSCAPE

- Dharug culture and restoration of indigenous vegetation
- Cranebrook Terrace and the original geological









CONNECTING TO WATER COUNTRY

- and built form
- Reflecting Reginal Landmarks







Engaging community and public for shared



CONNECTING TO WIDER DHARUG COUNTRY

Connection to wider context: the Blue

Mountains, Cranebrook Escarpment,

Connection to Country culture: Dharug, Darkinjung, and Gundungurra Nations





JACOB4765 INVESTMENTS PTY LTD 2.2 DESIGN PRINCIPLES - CONNECTING WITH COUNTRY

distinctive



Landscape

From a landscape perspective, the subject site presents a series of opportunities for place-making in its raw, current state. Based on the concept of 'Genius Loci' and through considered contextual analysis of the site; exploring the local and regional physical and visual connections, views, and vistas, borrowed natural landscape and a sense of destination to discern the qualities the site already contains that therefore can be elevated.

The Walk On Country further informed the layering of these existing qualities to form a landscape architectural design response that is strongly about connection to land, sky and water. Delivered through both strong and subtle elements such as design form, arrangement, layering of landscape and integration of architecture as well as through more direct design elements such as providing a Welcome to Country, public art, informative art, and use of local first nations language within the landscape.

5.000 m

UP TO 30m BUILDING SETBACK
(INSTEAD OF 10m AS REQUIRED BY PLDCP)

LANDSCAPE ZONE

CONTINUATION OF LANDSCAPE CHARACTER

OLD CASTLEREAGH ROAD

Deep Landscaped Streetfrontage

Urban Design Principle 7 - Integrate Landscape

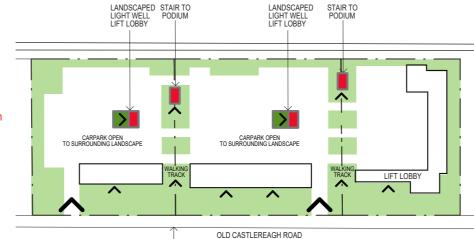
Urban Design Principle 3 - Create a 'Sense of Arrival'

The interconnected nature of the site extends internally, across and through the site and out into the natural landscape and surrounds. The building form is porous in its approach to site coverage as it is interspersed with garden wells, vast pockets of deep soil and landscapes cut into the building form and deep landscape setbacks surrounding the buildings. Although not physically connected, these interconnected, interspersed landscaped zones form part of a combined ecosystem of the site's approach to landscaping.

The abundance of landscape through deep setbacks garden wells, and gardened terraces allows the visitor to circulate through the site surrounded by landscape and the 'restored country'.

The visitor is led towards an internal public domain space set at the rear of the site that visually connects you to the Penrith Lakes landscape. It is hoped, within time, that physical connections can be made to access the Penrith Lakes and provision of the potential of this has also gently informed the design.

Landscape is a key element of the overall proposal, developed hand in hand with Architectural and Urban design disciplines. The design ethos considers sustainability outcomes such as delivering substantial deep soil, green architectural design responses, green podium landscapes, broad canopy cover and the use of local native species in the landscape.







Developed Landscape Design

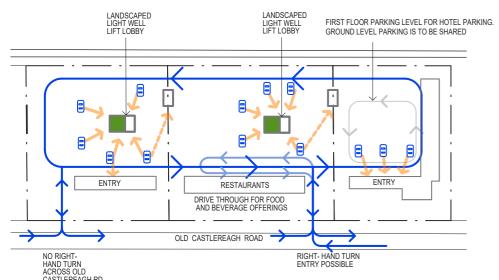
The landscape design strategy considers how a sense of place can engage, inform, and create zones within the strategy for activation and social interaction. The desire is to create an understanding of place, how this unique site can connect you to the equally unique landscape of the Penrith Lakes system and beyond, and in the process, inform and engage the visitor through the telling of First Nations stories that lay beyond the site, with the support of local elders.

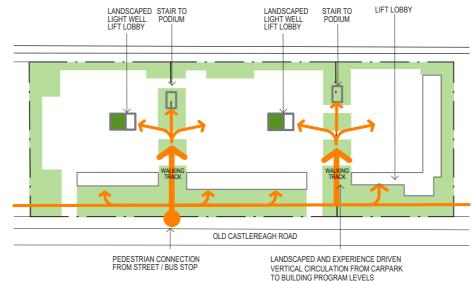


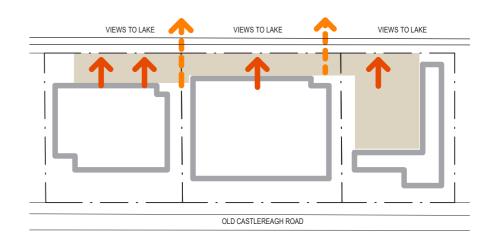
Connection

Connection on this site begins with the unique condition of elevation. All buildings are raised above the natural ground level to accommodate a flood-resilient design. This creates a layered spatial experience, where the ground plane is freed for landscape and water-sensitive urban design interventions, while activity and occupation occur at the lifted podium level. The act of moving upwards becomes symbolic—rising from the earth toward a place of outlook and gathering—emphasising a deliberate and sequential experience of connection.

The ground plain is mostly liberated to allow for an on-grade carpark. These parking areas are not merely functional spaces: they are open-sided, fringed with lush plantings and framed by vegetation. This landscape approach fosters a sense of grounding and respect for Country, providing moments of stillness and reflection that connect users with the natural and cultural layers of the land







Given the site's emerging context, the first point of connection is via car. As public transport options are currently limited, vehicles remain the primary means of arrival. A proposed bus stop and drop-off area will support future modal diversity, but in the short term, connection begins with access by road.

From either the bus stop or nearby parking areas, visitors make a short walk through carefully landscaped pedestrian routes to vertical circulation points—lifts and stairs—that rise to the podium.

Urban Design Principle 9 - Create a Responsive Parking Strategy

Urban Design Principle 5 - Increase Connectivity & Permeability



Initial Concept designs demonstrating connection between podium and landscape

The podium level represents the culminating gesture of connection. As a shared, elevated ground, it offers expansive views northward over the flood berm, across the waters of the Sydney International Regatta Centre and the broader Penrith Lakes. It is from here that the deep relationship between people and place is most powerfully felt.

The design invites people to move through this platform, to pause, to orient themselves, and ultimately to connect with the lakes as the enter and exit the building to experience the various activities within. The podium is more than circulation; it is a threshold to water, sky, and Country.



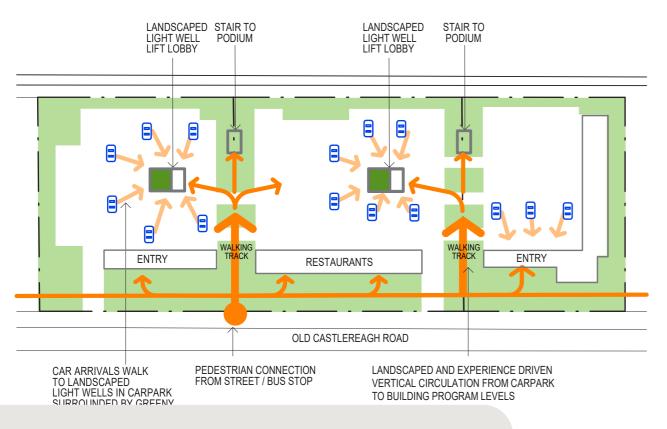
Public Realm

The project incorporates two distinct levels of public realm, each offering a unique experience for visitors. At ground level, the public realm is primarily defined by a landscaped car park. This area is designed to be visually softened by perimeter planting and trees, with the parking screened from Old Castlereagh Road by active frontages, including entry lobbies and restaurants that engage with the streetscape.

While the majority of visitors will arrive by car, provisions are made for alternative modes of transport, including occasional bus arrivals and limited bicycle access. Carefully considered entry points guide visitors from this car-oriented landscape into the heart of the precinct.

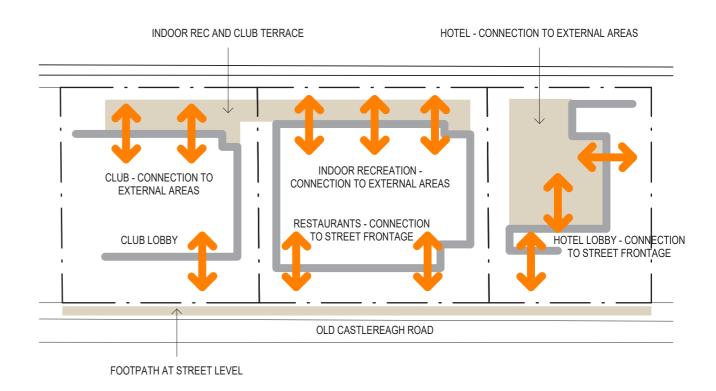
From the ground plane, visitors transition to the podium level via landscaped light wells, stairs, or lift lobbies. This elevated public realm offers a distinctly different spatial experience, with panoramic views over the lakes of the Sydney International Regatta Centre and Penrith Lakes. A generous, linear walkway spans the podium, lined with lush planting and oriented toward the lakes and the long, vegetated berm along the northern boundary.

Large overhanging roof structures provide shelter from the elements, supporting a climate-responsive design that enables a seamless indoor/outdoor experience. This podium-level public realm becomes a key social spine of the project—connecting spaces, inviting exploration, and offering a protected, comfortable environment year-round.



LAKE

Urban Design Principle 5 - Increase Connectivity & Permeability





LAKE

Urban Design/Built form

The Urban Design Strategy develops upon the urban design principles established in the foregoing. The 'Key design considerations' outlined in the presentation package demonstrate how these principles have further developed into a strategy and built form.

Namely, these design considerations involve the following key strategies which influence the design of the built form:

When applied to this project, creating connectivity is a key guiding principle that poses a significant

opportunity to connect the site area with the Penrith Lakes to the rear. Connection is achieved by embracing the car as the primary form of transport to the site and attributing a strong focus on the amenity of the circulation spaces from inside the carpark up to the podium level. The deep landscaped zone at the street provides an opportunity to characterise the development with 'restoring country' landscaping which enriches the experience when circulating in and out of the site by car or active transport.

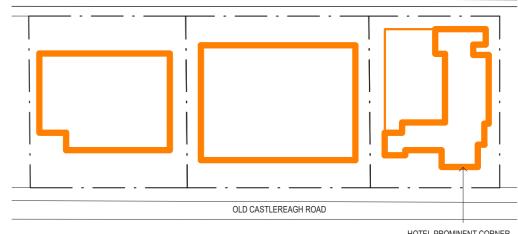
The connection to the views is made by providing an expansive terrace at the rear of the site with views to the Penrith lakes and blue mountains beyond. The external terrace is designed to allow circulation to building entries, outdoor recreational activities, and external dining. The terrace and podium height are at a level where expansive views over the embankment are achieved. The buildings are oriented towards the views; future design development will show how this is achieved through operable walls and glazing to address these views.

Establishing a responsive parking strategy was critical to supporting and enriching pedestrian movement across the site. The strategy involves maintaining a single level of on-grade parking underneath the building's podium level.

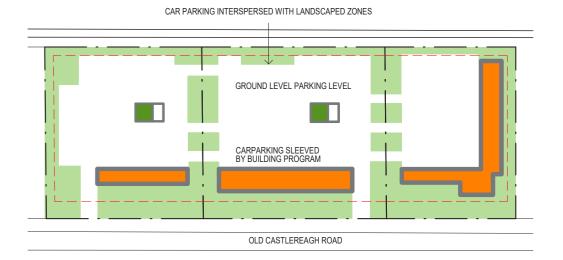
The ground-level parking area is softened and filled with landscaping pockets and garden wells, which deintensify the carpark area and provide amenities such as green backdrops, a refuge from parking areas, and access to sunlight and clean air. The overall experience of visiting the centre is enhanced by these features.

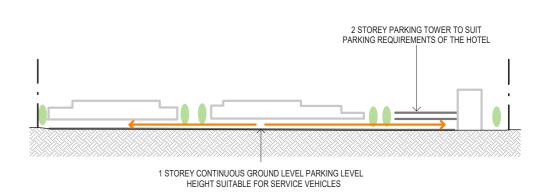
The parking level is shared across all three lots to meet access to parking demand at peak times.

The appointed team of design professionals strives to and is committed to achieving high-quality design outcomes. A design Excellence Strategy has been prepared to establish how this commitment will be achieved. Furthermore, the design of buildings will vary from a modulated and fine-grained response to the hotel design, which is reflective of its function, contrasting with the strategy of celebrating the 'large box'.



HOTEL PROMINENT CORNER FACING STREET MAIN ROADS WITH ARTICULATION AND VISUAL INTEREST





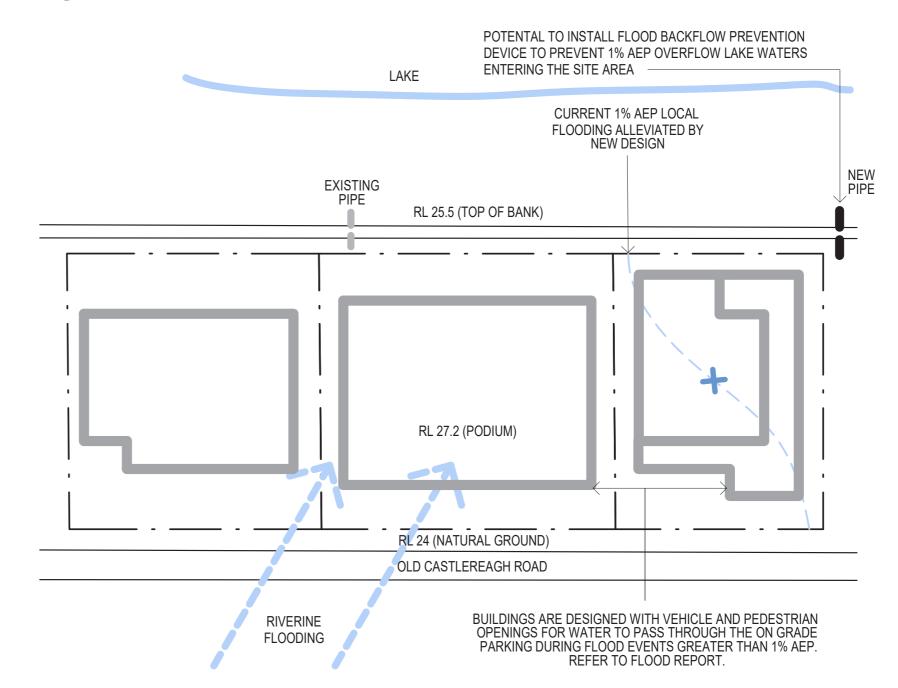
Urban Design Principle 9 - Create a Responsive Parking Strategy



Response to Flooding Management

Responding to flooding has driven key design decisions such as the prohibition of basement car parking, setting of ground floor design levels above the 1% AEP and the requirement to allow riverine flood water to pass through the building in severe events such as the 1 in 1000 and 1 in 2000-year floods. The design responds accordingly by providing all car parking on grade or in multi-level above-ground parking structures.

The on-grade parking level comprises open and permeable accessways and driveways to permit the transmission of flood waters in severe events.



Urban Design Principle 6 - Respond to Topography and Flooding



Sustainability

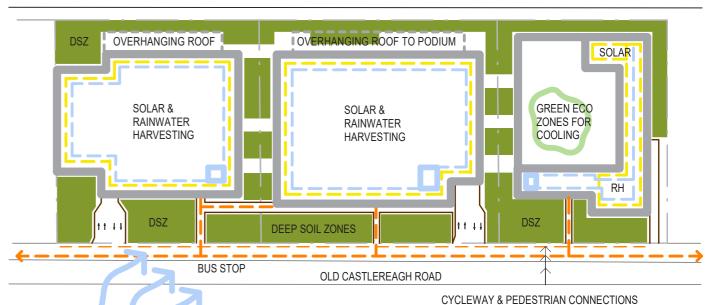
Sustainability through Built form:

- · Integration of passive cooling and heating design techniques when climatic conditions permit.
- · Adoption of façade materiality which achieves a high level of environmental performance
- Provision of robust and low maintenance materials to minimise and avoid ongoing maintenance such as re-painting or replacing materials. Where possible, provide locally sourced materials.
- · Avoiding basement car parking reduces damage to the landscape and maintains contour lines. Proposed parking is to be above ground.
- · Large box roof form permits an opportunity to maximise solar collection on the roof.
- · Large box roof forms permit maximising water harvesting by collecting water from the roof system and reusing it on-site.

Sustainability through landscaping:

- Broadly, the concept is to deliver a green frontage and enable the landscape to intertwine with the built form and publicly accessible areas, connecting with the surroundings and sense of place through the landscape.
- Extensive deep soil planted areas to support large-scale canopy trees.
- \cdot Extensive landscaped podium areas, able to also support small and medium scaled trees, shrubs and groundcovers.
- · Permeable paving and recyclable landscape materials, with locally sourced hardscaped materials
- · Low voltage landscape lighting, powered by on-site PVC.
- · Natural airflow is drawn through the landscaping into the built form.
- · Connections into the surrounding local cycleway and walkways that encourage walkability and bicycle use.
- · Water collected from the roof will be harvested on-site and reused in the landscape.

LARGE OVERHANGING ROOFS PROVIDE PASSIVE COOLING IN SUMMER WHILE ALLOWING SUN PENETRATION IN WINTER



COOLING WINDS DRAWN THROUGH LANDSCAPE

Urban Design Principle 10 - Exhibit Sustainability