

Wollongong Local Planning Panel Assessment Report | 29 August 2023

WLPP No.	Item No. 2
DA No.	DA-2023/50
Proposal	Residential - demolition of existing structures, tree removal and construction of a residential flat building including ten (10) units and associated basement parking
Property	4-6 Blacket Street North Wollongong
Applicant	ADM Architects
Responsible Team	Development Assessment and Certification - City Centre Major Development Team (NL)
Prior WLPP meeting	N/A

ASSESSMENT REPORT AND RECOMMENDATION

Executive Summary

Reason for consideration by Local Planning Panel

The proposal has been referred to Local Planning Panel pursuant to clause 2.19(1)(a) of the Environmental Planning and Assessment Act 1979. Under 4(b) of Schedule 2 of the Local Planning Panels Direction of 30 June 2020, the proposal is development to which State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development applies.

Proposal

The proposal is for demolition of existing structures and construction of a four storey residential flat building above two levels of basement car parking. The building contains 10 units, 4 three bedroom and 6 four bedroom units.

Permissibility

The site is zoned R1 General Residential pursuant to Wollongong Local Environmental Plan 2009. The proposal is categorised as a residential flat building and is permissible in the zone with development consent.

Consultation

The proposal was notified in accordance with Council's Notification Policy and received five submissions which are discussed at section 2.9 of the assessment report.

The proposal has been reviewed by Council's Design Review Panel, Environment, Stormwater, Traffic, Landscape, Geotechnical, Architecture and Heritage Officers. There are outstanding concerns with regard to stormwater and architectural matters.

Additional information was requested of the applicant on a variety of matters and amended plans submitted to Council. There are a number of concerns that remain outstanding. The applicant was offered the opportunity to make further amendments or have the application determined by the Panel on the basis of current plans and indicated their preference for the latter.

Planning controls and compliance

Main Issues

- Design excellence & SEPP65/ADG
- GFA in relation to oversupply of carparking
- WDCP2009 non-compliances
- Issues raised in submissions.

RECOMMENDATION

There are a variety of concerns raised by the Design Review Panel and Council that remain outstanding and the proposal is not supported in its current form. It is recommended that the proposal be refused for the reasons contained at **Attachment 7**.

1 APPLICATION OVERVIEW

1.1 PLANNING CONTROLS

The following planning controls apply to the proposal:

State Environmental Planning Policies:

- SEPP (Resilience and Hazards) 2021
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development
- SEPP (Building Sustainability Index: BASIX) 2004

Local Environmental Planning Policies:

- Wollongong Local Environmental Plan (WLEP) 2009

Development Control Plans:

- Wollongong Development Control Plan 2009

Other policies

- Wollongong City Wide Development Contributions Plan
- Wollongong Community Participation Plan 2019

1.2 DETAILED DESCRIPTION OF PROPOSAL

- Demolition of two dwelling houses
- Construction of a four storey residential flat building above two levels of basement car parking
- The proposal contains 4 three bedroom and 6 four bedroom units, the upper most unit with a swimming pool.
- The basement car park identifies 21 resident car parking spaces (including one accessible), 2 visitor spaces, one motorbike space, and large amounts of ancillary storage.

1.3 ISSUES IN DETAIL

- The proposal does not demonstrate design excellence as required under Clause 7.18 of Wollongong Local Environmental Plan 2009.
- The proposal is inconsistent with the design quality principles of State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development with respect to:
 - Principle 2 Built form and scale
 - Principle 3 Density
 - Principle 4: Sustainability
 - Principle 5: Landscape
 - Principle 8: Housing diversity and social interaction
- The proposal does not adequately address the Apartment Design Guide with regard to the following:
 - 3D Communal and public open space
 - 4K Apartment mix
 - 4Q Universal design

- The proposal does not comply with Wollongong Local Environmental Plan 2009 with regard to the following:
 - The proposal involves surplus car parking areas which are to be included as gross floor area. This results in the overall FSR exceeding the maximum under Clause 4.4A of the LEP. No clause 4.6 has been provided nor are the circumstances considered to warrant a variation.
 - The proposal does not demonstrate design excellence under clause 7.18.
- The proposal does not comply with Wollongong Development Control Plan 2009 with regard to the following:
 - Chapter D13 Wollongong City Centre
 - 2.4 Building depth and bulk
 - 2.5 Side and rear building setbacks and building separation
 - 2.7 deep soil zone
 - 4.4 On-site car parking
 - 6.2 Housing choice and mix
 - 6.6 Basement car parks
 - 6.7 Communal open space
 - Chapter E1: Access for People with a Disability: Equitable access is not provided to the rear communal open space area.
 - Chapter E3: Car Parking, Access, Servicing/Loading Facilities and Traffic Management: The proposal exceeds the car parking requirements of the DCP.
 - Chapter E6: Landscaping: The arborist report does not accurately show the extent of basement excavation encroaching into the tree protection zone of a large street tree.
 - Chapter E7: Waste Management: A Site Waste Minimisation and Management Plan has not been provided.
 - Chapter E13 Floodplain Management: It has not been demonstrated how the basement carpark is to be protected from inundation from stormwater flows along the street.
 - Chapter E14 Stormwater Management: The proposal does not satisfy the requirements of the DCP with respect to stormwater disposal.
 - Chapter E19 Earthworks (Land Reshaping Works): The proposal does not minimise impacts associated with excavation and construction by being excessive in size in consideration of the needs to service the building.
- Excessive excavation has additional environmental impacts (sustainability, noise and disruption during excavation, truck movements) and encroaches into tree protection zone to the south, reduces opportunity for boundary landscaping.

1.4 BACKGROUND

There are no relevant development consents for the land.

No pre-lodgement meeting was held for the proposal.

Customer service actions

There are no outstanding customer service requests of relevance to the development.

1.5 SITE DESCRIPTION

The site incorporates two adjacent lots, 6 Blacket (Lot 3 DP 18332) containing a single storey dwelling house, and 4 Blacket Street (Lot 2 DP 18332) containing a three storey dwelling house. Both dwellings are to be demolished.

The combined area is 1,536.5m² with a site width of approximately 30.5m to Blacket Street and rear site boundary fronting the car park measuring 37.9m.

The site has a fall towards the rear of approximately 2-3m.

A large ficus obliqua (small leaved fig) is located adjacent no. 6 Blacket Street within the road reserve with a canopy extending over the site and root zone into the site. This tree is proposed to be retained.

Adjoining development is as follows:

- North: Narrow strip of land owned by Wollongong City Council (Lot 7 then a narrow strip of land owned by Crown Lands (Lot 12 DP 865220), then narrow strip of land owned Council car park
- East: Approval by the court originally for a four story residential flat building with 13 units building originally approved by the Court under DA-2018/1316 and subsequently changed to serviced apartments under DA-2021/1143. That development has yet to commence.
- South: Blacket Street and the Novatel Hotel
- West: Four story residential flat building with one unit per floor

Property constraints

Council records identify the land as being impacted by the following constraints:

- Acid sulphate soils (class): See discussion at clause 7.6 of WLEP below.
- Flooding: Council's Stormwater Officer has reviewed the application in regard to flooding and has raised no concerns.
- Heritage: The site is within the vicinity of the State Heritage listed North Beach Precinct which includes a range of local heritage listings including the Bathers Pavilion, The Kiosk and the SLSC. The development is also in the vicinity curtilage for the landscape listing relating to the significant plantings in Stuart Park. See discussion at clause 5.10 of the LEP in this regard.

There are no restrictions on the title.



Figure 1: View looking west along Blacket Street (yellow dotted line indicates site frontage)



Figure 2: View looking east along Blacket Street (yellow dotted line indicates site frontage)



Figure 3: View looking east from within car park to the north of the site (yellow dotted line indicates site frontage)

1.6 SUBMISSIONS

The application was notified in accordance with Council's Community Participation Plan 2019. Five submissions were received and the issues identified are discussed below.

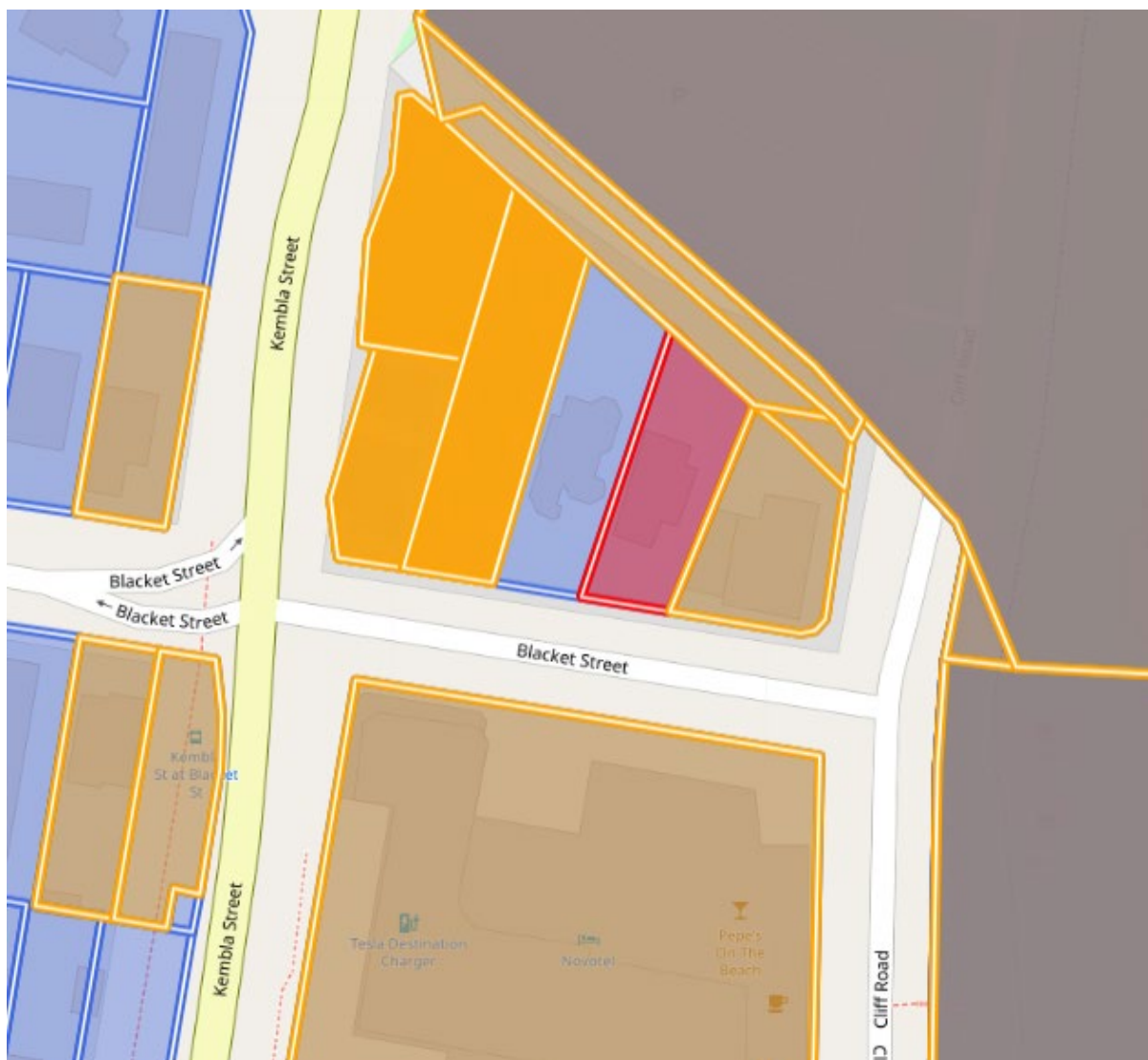


Figure 4: Notification map

Table 1: Submissions

Concern	Comment
National Trust of Australia (Illawarra Shoalhaven branch) requested a formal heritage assessment be prepared.	<p>The 1950's dwelling and 1980's three storey development proposed for demolition are not of heritage significance and the site is not within a heritage conservation area.</p> <p>It is noted that to the east of the site is the State Heritage listed North Beach Precinct which includes a range of local heritage listings including the Bathers Pavilion, The Kiosk and the SLSC. The development is also in the vicinity curtilage for the landscape listing relating to the significant plantings in Stuart Park to the north. This is illustrated below.</p>

Concern	Comment
	<div data-bbox="729 241 1031 488" data-label="Image"> </div> <div data-bbox="1038 199 1410 560" data-label="Image"> </div> <p data-bbox="729 577 1423 824">Further, the historic tramway alignment runs adjacent to the rear property boundary of the site. Any services, cut and fill or other development to the rear outside of the property boundary should consider the historic archaeological potential. An unexpected finds condition will be required to manage the issue. It is noted the site management plan shows access from this area.</p> <p data-bbox="729 842 1423 875">No formal heritage assessment has been provided.</p> <p data-bbox="729 893 1423 1176">In regard to the requested heritage assessment, the site is separated from items of significance, either by the car park to the north or future development on the land immediately to the east (for which approval has been granted to a four storey serviced apartment development). In consideration of this and the character and scale of the proposal, adverse heritage impacts are not expected.</p>
Potential noise impacts from rooftop pool	<p data-bbox="729 1198 1423 1265">The rooftop pool sits adjacent to the eastern boundary on the fourth level and is setback 6m from that boundary.</p> <p data-bbox="729 1283 1423 1462">The site to the east has a serviced apartment development approved (yet to be commenced) under DA-2021/1143. That development also has a communal rooftop pool area. The floors below have bedrooms on the western elevation adjacent the pool.</p> <p data-bbox="729 1480 1423 1581">Given the pool is for private use of the rooftop unit only, noise impacts are not expected to be significant or require redesign.</p> <p data-bbox="729 1599 1423 1666">Conditions of consent would apply in relation to the location of pool equipment and noise attenuation.</p>

Concern	Comment
<p>The height and location of the planter boxes in the north-eastern corner of the site in relation to the ground floor landscape area of No 2 Blacket Street. Suggestion that this planter is set lower into the podium.</p>	<p>Amended plans have been provided that remove a section of the roof above the visitor car parking area creating a void adjacent to the eastern boundary as shown below.</p>
	 <p>The image contains four architectural drawings. The top two are site plans: the left one shows a building footprint with a blue dashed line indicating a proposed planter box area, and the right one shows a similar plan with an orange dashed line indicating a different proposed area. Below these are two elevation renderings of a building facade. The top rendering shows a building with a planter box on the roof, and the bottom rendering shows the same building with the planter box removed, creating a void. A red vertical line is drawn through both renderings to show the same section.</p>
	<p>Whilst this does reduce the extent of wall adjacent to the eastern boundary, it creates an awkward interface and questionable relationship with UG03 which now looks down into the car park.</p>
<p>Additional “storage” areas that could readily be converted to parking in future.</p>	<p>This was raised as a concern with the proponent however the basement remains unchanged and larger than the requirements of WDCP2009 to service the development.</p>
<p>Encroachment of entry awning into 4m setback and associated impacts to streetscape and views from private and public domain.</p>	<p>The awning encroachment has been removed.</p>

Concern	Comment
Request that tree plantings be low at front and rear to preserve view corridors	This would be manageable via conditions of consent were the application to proceed.

1.7 CONSULTATION

1.7.1 INTERNAL CONSULTATION

Architectural

Council's in house architect reviewed the initially submitted plans and raised a variety of concerns. These were communicated to the applicant and revised drawings were submitted. The revised submission has been reviewed and several outstanding concerns remain.

Geotechnical Engineer

Council's Geotechnical Officer has reviewed the application and has provided a satisfactory referral. Conditions of consent were recommended and are included in the consent.

Stormwater Engineer

Council's Stormwater Officer has reviewed the application and the submission does not suitably address stormwater management. It is noted that this may be resolvable through provision of a level spreader to the rear boundary however that would further encroach into deep soil planting that does not meet the minimum dimensions.

Landscape Architect

Council's Landscape Officer has reviewed the application and given a satisfactory referral. Conditions of consent were recommended.

Traffic Engineer

Council's Traffic Officer has reviewed the application and given a satisfactory referral. Conditions of consent were recommended.

Heritage Officer

Council's Heritage Officer has reviewed the application and has not raised any particular heritage concerns.

Environment Officer

Council's Environment Officer has reviewed the application and given a satisfactory referral subject to conditions of consent.

1.7.2 EXTERNAL CONSULTATION

Design Review Panel

The proposal was considered to the Design Review Panel in accordance with clause 28 of SEPP 65 on 28 February 2023 as contained at **Attachment 4**. A number of concerns raised by the Panel have not been addressed in amended documentation.

1.8 SECTION 4.15(1)(A)(1) ANY ENVIRONMENTAL PLANNING INSTRUMENT

1.8.1 STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

Chapter 2 Coastal management

The site is located within the coastal use, coastal environment and buffer to coastal wetlands areas under the maps to this policy.

Division 1 Coastal wetlands and littoral rainforests area

- 2.8 Development on land in proximity to coastal wetlands or littoral rainforest

The proposal is not expected to significantly impact on the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.

Division 3 Coastal environment area

- 2.10 Development on land within the coastal environment area

The proposal is not expected to have adverse impacts on the coastal environment nor is it identified as being subject to coastal hazards.

Division 4 Coastal use area

- 2.11 Development on land within the coastal use area

The proposal will not detrimentally impact access to the foreshore, nor will it overshadow the foreshore area or unreasonably impact on views toward the foreshore. Visual impacts are acceptable and there are not expected to be any adverse heritage impacts.

Division 5 General

- 2.12 Development in coastal zone generally—development not to increase risk of coastal hazards

Satisfactory

- 2.13 Development in coastal zone generally—coastal management programs to be considered

The site is not identified as being impacted by coastal hazards.

Chapter 4 Remediation of land

4.6 Contamination and remediation to be considered in determining development application

A desktop audit via Council's land information system database for property constraints and previous uses was undertaken to understand the likelihood of contamination issues.

The audit revealed there are no constraints or past uses that give rise to concerns or the need for further investigation regarding land contamination and LPP as determining authority can be satisfied that clause 4.6 matters are thus satisfied. Conditions of consent would apply in regard to an unexpected finds protocol.

1.8.2 STATE ENVIRONMENTAL PLANNING POLICY NO 65—DESIGN QUALITY OF RESIDENTIAL APARTMENT DEVELOPMENT

The development meets the definition of a 'residential flat building' as it is more than 3 storeys and comprises more than 4 dwellings. Therefore, the provisions of SEPP 65 apply. The application is accompanied by a statement by a qualified designer in accordance with Clauses 50(1A) & 50(1AB) of the Environmental Planning and Environment Regulation 2000.

With regard to Clause 28(2)(a), the advice from the DRP has been considered as outlined in Part 1.6.1 of this report. With regard to Clause 28(2)(b), the design quality of the development has been considered in accordance with the design quality principles is outlined below. With regard to Clause 28(2)(c), an assessment of the application against the ADG is contained at Attachment 5 to this report and found to be compliant, with the exception of variations in respect of 3D Communal and public open space, 4g Storage, 4K Apartment mix, 4Q universal design.

Principle 1: Context and neighbourhood character

The proposal is generally consistent with the desired future character of the area as identified through the development standards and controls applicable to the land. There is no particular character for the locality identified in the DCP. There are a number of heritage items in the vicinity however there is sufficient separation from those for a specific design response to be unnecessary. Existing built form nearby is of varying scales with a large hotel development to the south, medium density residential development to the west and a dwelling to the east (also with an approval for a four storey serviced apartment development). The proposal is satisfactory with regard to the context and neighbourhood character.

Principle 2: Built form and scale

The proposal seeks variations to setbacks and deep soil planting which are considered to represent over development of the site.

The bulk and scale could be improved through greater articulation and sculpting of the floor plate along with varying roof forms.

The side elevations are dominated by privacy screening which increases the perceived bulk and scale.

Principle 3: Density

The excessive size of the basement and corresponding surplus car parking would result in cumulative impacts to traffic in the locality.

Principle 4: Sustainability

Within the submitted design SEPP 65 Design Report the following is noted under sustainability:

Statement of Compliance:

Apartments have been designed to optimise thermal performance, provide increased amenity to occupants and reduce greenhouse emissions and therefore the cost of energy supply. Where possible, layouts promote cross ventilation and good solar orientation. Areas of deep soil planting have been provided at the rear of the property and under the existing FigTree to promote biodiversity. Additional canopy trees are provided to the deep soil area at the rear to compliment the existing canopy of trees to be retained.

This statement simply repeats requirements under separate controls. Notwithstanding this, there are measures incorporated to address sustainability in the submission which include:

- Provision of EV parking for residents
- PV on the rooftop
- Water capture and reuse in landscaped areas
- Waste separation (FOGO/green, general, recyclable and bulky waste streams)

Other avenues to address sustainability that have not been investigated include the following:

- Use of permeable pavement in COS areas.
- Details of building construction and materials to demonstrate minimisation of the projects carbon footprint.

- Reduction in basement size and corresponding impacts associated with the works (e.g. impacts to neighbours during excavation, truck trips to dispose of excavate material).

Principle 5: Landscape

The design of the landscaped areas is considered to provide reasonable amenity to occupants of the building and to positively contribute to the streetscape.

The proposal does not however provide a compliant deep soil area to the rear and there is however the opportunity to provide an improved landscaped interface with the neighbouring properties through reduction in the extent of the basement.

Principle 6: Amenity

The proposal meets the minimum requirements for solar access, private and communal open space, storage, visual and acoustic privacy, access and the like.

Principle 7: Safety

The proposal is satisfactory with regard to safety and security.

Principle 8: Housing diversity and social interaction

The proposal does not provide a mix of housing, being all 3 or 4 bedroom units. The submission does not justify the mix by taking into consideration the following:

- the distance to public transport, employment and education centres
- the current market demands and projected future demographic trends
- the demand for social and affordable housing
- different cultural and socioeconomic groups

The proposal does not provide the minimum of 20% of units (2) with the silver level universal design features.

Principle 9: Aesthetics

The proposal is generally considered to be of a high quality with regard to aesthetics. A mixture of materials and finishes is provided and the bulk of the development is well articulated.

A full assessment of the application against the Apartment Design Guide (ADG) is contained at **Attachment 5**. Areas of non-compliance are addressed below.

Part 3 Siting the development

3D Communal and public open space

Objective 3D-1

An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping

Design criteria

1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)
2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)

Design guidance

Communal open space should be consolidated into a well designed, easily identified and usable area

Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions

Communal open space should be co-located with deep soil areas

Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies

Where communal open space cannot be provided at ground level, it should be provided on a podium or roof

Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:

- provide communal spaces elsewhere such as a landscaped roof top terrace or a common room
- provide larger balconies or increased private open space for apartments
- demonstrate good proximity to public open space and facilities and/or provide contributions to public open space

The proposal provides approximately 13% (~200m²/1,536.5) of the site area as communal open space. This is below the recommended 25%. It is noted the proposed development is small in scale (only 10 units) and satisfies the minimum requirement of the DCP for 5m² per unit (50m²).

However, the configuration and program of the COS in the south-western corner is unclear and is awkwardly dissected by the external structural columns and the glass line of the lobby. The entire COS area to the west presents as a lengthy circulation path with no meaningful program. The connection to the NW communal garden remains unresolved.

The platform lift to gain access to the rear NW COS garden is not considered an acceptable solution and the area lacks appropriate amenity given its good orientation.

The entire COS area to the west presents as a long narrow area dominated by circulation paths with no meaningful pockets of active program.

Objective 3D-2

Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting

Design guidance

Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements:

- seating for individuals or groups
- barbecue areas
- play equipment or play areas
- swimming pools, gyms, tennis courts or common rooms

The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts

Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks

Unsatisfactory

4K Apartment mix**Objective 4K-1**

A range of apartment types and sizes is provided to cater for different household types now and into the future

Design guidance

A variety of apartment types is provided

The apartment mix is appropriate, taking into consideration:

- the distance to public transport, employment and education centres
- the current market demands and projected future demographic trends
- the demand for social and affordable housing
- different cultural and socioeconomic groups

Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households

Does not comply.

Standards/controls	Comment
4Q Universal design <div> <p>Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members</p> <p>Design guidance Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features</p> </div>	<p>Only one unit incorporates the livable housing guideline's silver level universal design features. The SEE notes that 8 are capable of complying however a minimum of two must achieve the features, not be capable of complying.</p>

1.8.3 STATE ENVIRONMENTAL PLANNING POLICY (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

The proposal is BASIX affected development to which this policy applies. In accordance with Part 3 Division 1 Section 27 of the Environmental Planning and Assessment Regulation 2021, a BASIX Certificate has been submitted in support of the application demonstrating that the proposed scheme achieves the BASIX targets.

The BASIX certificate was issued no earlier than 3 months before the date on which the development application was lodged.

1.8.4 WOLLONGONG LOCAL ENVIRONMENTAL PLAN 2009

Clause 1.4 Definitions

residential flat building means a building containing 3 or more dwellings, but does not include an attached dwelling, co-living housing or multi dwelling housing.

Part 2 Permitted or prohibited development

Clause 2.2 – zoning of land to which Plan applies

The zoning map identifies the land as being zoned R1 General Residential.

Clause 2.3 – Zone objectives and land use table

The objectives of the zone are as follows:

- *To provide for the housing needs of the community.*
- *To provide for a variety of housing types and densities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposal is satisfactory with regard to the above objectives.

The land use table permits the following uses in the zone.

Attached dwellings; Bed and breakfast accommodation; Boarding houses; Centre-based child care facilities; Community facilities; Dual occupancies; Dwelling houses; Environmental facilities; Exhibition homes; Group homes; Home businesses; Home industries; Hostels; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Recreation areas; Residential flat buildings; Respite day care centres; Roads; Semi-detached dwellings; Seniors housing; Serviced apartments; Shop top housing; Signage; Tank-based aquaculture

The proposal is categorised as a residential flat building as defined above and is permissible in the zone with development consent.

Part 4 Principal development standards

Clause 4.3 Height of buildings

The proposed building height of 16m does not exceed the maximum of 16m permitted for the site.

Clause 4.4A Floor space ratio – Wollongong city centre

The proposed gross floor area is as follows:

Ground:	520m ²
Level 1:	584m ²
Level 2:	584
Level 3:	423
	2111
Excess parking in basement:	540
Total:	2,651
Site area:	1,536.5m ²
FSR proposed	1.73*
Maximum FSR permitted:	1.5:1

**(The above ground built form FSR is approximately 1.37:1, excluding surplus car parking)*

Clause 4.6 Exceptions to development standards

A clause 4.6 request has not been submitted therefore development consent cannot be granted.

Part 5 Miscellaneous provisions

Clause 5.10 Heritage conservation

The proposal does not impact on nearby heritage items.

Part 7 Local provisions – general

Clause 7.1 Public utility infrastructure

Condition would apply requiring approval from the relevant authorities for the connection of electricity, water and sewerage to service the site.

Clause 7.5 Acid Sulfate Soils

The site is identified as being affected by class 5 acid sulphate soils. The site is within 500 metres of adjacent Class 2 land however that land is not below 5 metres Australian Height Datum. The works do not meet the requirements under this clause for an Acid Sulfate Soils Management Plan to be prepared.

Conditions of consent would apply with regard to treating excavated soil.

Clause 7.6 Earthworks

The proposal comprises excavation for two levels of basement car parking.

(3) Before granting development consent for earthworks, the consent authority must consider the following matters—

- (a) *the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,*

The proposal has been reviewed by Council's Geotechnical Officers who has not raised any concern regarding stability.

- (b) *the effect of the proposed development on the likely future use or redevelopment of the land,*
Satisfactory

- (c) *the quality of the fill or of the soil to be excavated, or both,*

Excavated material would be subject to a requirement for classification and treatment for acid sulfate soils prior to disposal. The site is not identified as being contaminated.

- (d) *the effect of the proposed development on the existing and likely amenity of adjoining properties,*

Amenity impacts arising from the proposed excavation generally relate to noise, vibrations, dust and traffic movements. Conditions of consent could apply in this regard. It is noted that the duration of impacts could be reduced if the size of the basement(s) were reduced.

- (e) *the source of any fill material or the destination of any excavated material,*

Excavated material will be classified prior to off site disposal / reuse.

- (f) *the likelihood of disturbing Aboriginal objects or other relics,*

The site is not identified as potentially containing Aboriginal objects or relics.

- (g) *proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.*

N/A

Clause 7.14 Minimum site width

The site achieves the minimum site width of 24m for residential flat buildings.

Clause 7.18 Design excellence in Wollongong city centre and at key sites

- (4) *In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters:*

- (a) *whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*

Satisfactory.

- (b) *whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,*

The proposal is generally of a form and appearance that will positively contribute to the public domain.

- (c) *whether the proposed development detrimentally impacts on view corridors,*

The proposal will not impact on any identified key view corridors. Sight lines along the street towards the foreshore will be minimally impacted by the encroachment of an approximately 1.8m high wall around the POS area for unit G01. It is noted that the approved form to the east has a setback to the building of only 3m and there is an encroachment of a bin storage area and fence into the 4m setback on the property to the west.

- (d) *whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,*

N/A

(e) *how the proposed development addresses the following matters:*

(i) *the suitability of the land for development,*

The site is suitable for the proposal.

(ii) *existing and proposed uses and use mix,*

The proposal is of a character that is compatible with the locality.

(iii) *heritage issues and streetscape constraints,*

The proposal will not adversely impact on heritage items and suitably deals with streetscape constraints (e.g. retention of street tree, management of stormwater, waste servicing).

(iv) *the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*

The building does not comply with side or rear setbacks as detailed at Chapter A1.

(v) *bulk, massing and modulation of buildings,*

The building is articulated and uses a mixed materials and finishes palette.

(vi) *street frontage heights,*

N/A

(vii) *environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*

Sustainability is discussed at SEPP 65.

Overshadowing impacts are acceptable.

The proposal is not of a scale that would generate significant adverse wind impacts.

The proposal does not involve significant areas of glazing that would contribute to adverse reflection.

(viii) *the achievement of the principles of ecologically sustainable development,*

See discussion at SEPP 65

(ix) *pedestrian, cycle, vehicular and service access, circulation and requirements,*

The proposal is satisfactory with regard to pedestrian access,

(x) *impact on, and any proposed improvements to, the public domain.*

The proposal would be required to upgrade the footpath for the frontage and remove redundant vehicle crossings. Provision of additional street trees is not possible or necessary given the existing street tree on the frontage that is being retained.

(5) *Development consent must not be granted to the following development to which this clause applies unless a design review panel has reviewed the design of the proposed development—*

(a) *development in respect of a building that is, or will be, greater than 35 metres in height,*

(b) *development having a capital value of more than \$1,000,000 on a key site,*

(c) *development for which the applicant has chosen to have such a review.*

N/A

Overall the proposal is not to meet design excellence.

Part 8 Local provisions—Wollongong city centre

Clause 8.1 Objectives for development in Wollongong city centre

The proposal is satisfactory with regard to this clause.

1.9 SECTION 4.15(1)(A)(II) ANY PROPOSED INSTRUMENT

None applicable.

1.10 SECTION 4.15(1)(A)(III) ANY DEVELOPMENT CONTROL PLAN

1.10.1 WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

Full compliance tables for the DCP are contained at **Attachment 6**. Areas of non-compliance are addressed below.

CHAPTER A1 – INTRODUCTION

8 Variations to development controls in the DCP

Street setback

(a) The control being varied;

Chapter D13, 2.2 Building to street alignment and street setbacks: A 4m setback is required.

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

The proposed 1.8m high wall enclosing the private open space of Unit G01 encroaches as shown below.



There are no particularly unique circumstances.

(c) Demonstrate how the objectives are met with the proposed variations; and

a) To provide a hierarchy of street edges from commercial core with no street setbacks to residential locations with landscaped setbacks.

Generally satisfactory

b) To establish the desired spatial proportions of the street and define the street edge.

Generally satisfactory

c) To increase a clear transition between public and private space.

Generally satisfactory

d) To locate active uses, such as shopfronts, closer to pedestrian activity areas.

N/A

e) To assist in achieving visual privacy to apartments from the street.

Satisfactory

f) To create good quality entry spaces to lobbies, foyers or individual dwelling entrances.

Satisfactory

g) To allow an outlook to, and surveillance of, the street.

Satisfactory

h) To allow for street landscape character, where appropriate.

The POS encroachment into the 4m setback does reduce the amount of landscaping within the front setback.

i) To maintain shared views to the ocean.

The encroachment would not significantly impact views from the public domain toward the foreshore.

j) To maintain sun access to the public domain.

N/A

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

Impacts are considered acceptable.

Building depth

(a) The control being varied;

Chapter D13 2.4 Building depth and bulk: Maximum 18m building depth recommended.

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

The building reaches a depth of ~20.7m. There are no unique circumstances.

(c) Demonstrate how the objectives are met with the proposed variations; and

The objectives are as follows:

a) To promote the design and development of sustainable buildings.

Habitable areas exceeding 8m from a window would rely more on artificial lighting and mechanical ventilation.

b) To achieve the development of living and working environments with good internal amenity and minimise the need for artificial heating, cooling and lighting.

See above.

c) To provide viable and useable commercial floor space.

N/A

d) To achieve usable and pleasant streets and public domain at ground level by controlling the size of upper level floor plates of buildings.

Satisfactory

e) To achieve a city skyline sympathetic to the topography and context.

Satisfactory

f) To allow for view sharing and view corridors.

The exceedance does not impact on view sharing or view corridors.

g) To reduce the apparent bulk and scale of buildings by breaking up expanses of building wall with modulation of form and articulation of facades

The facades are articulated and use a mixture of materials and finishes. The side elevations are highly defensive as a result of reduced setbacks as discussed below and a compliant depth may allow for less reliance on louvres to achieve suitable privacy.

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

See discussion above.

Side and rear setbacks

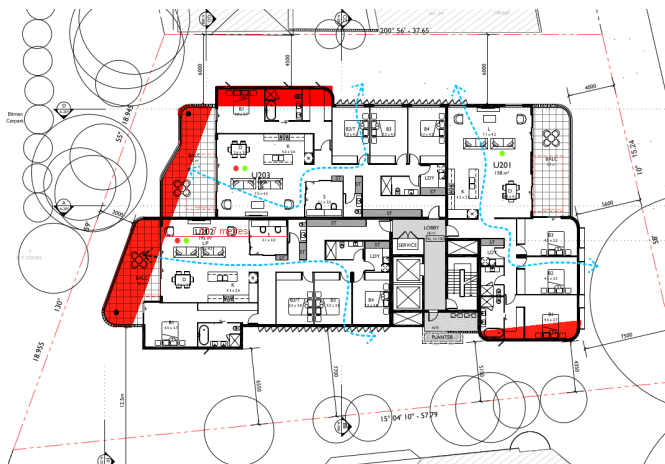
(a) The control being varied;

Chapter D13, section 2.5 Side and rear building setbacks and building separation.

Building condition	Minimum side setback	Minimum rear setback
Residential uses up to 12m in height		
- habitable rooms with openings and balconies	6m	6m
- non-habitable rooms and habitable rooms without openings	3m	4.5m

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

The proposal does not comply on the southwest corner, northeast corner and rear as illustrated below.

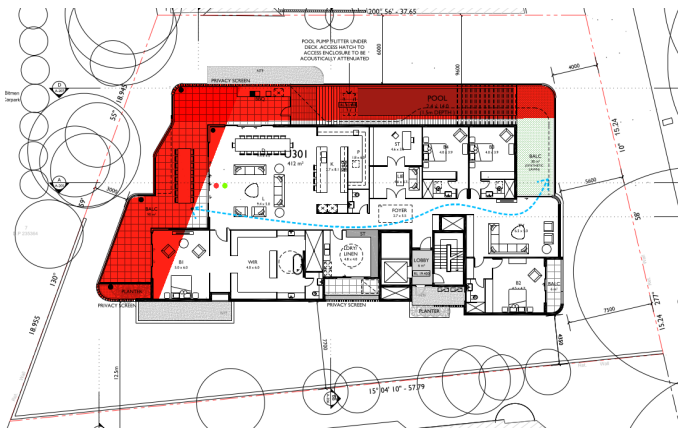


There are no particularly unique circumstances.

The upper portion of the top floor also does not increase setbacks as recommended as illustrated below.

Residential uses between 12m & 24m

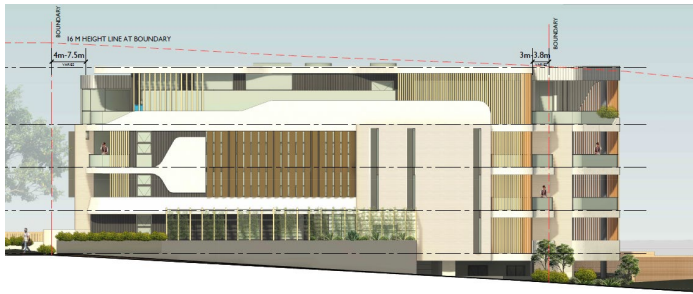
- habitable rooms with openings and balconies 9m 9m
- non-habitable rooms and habitable rooms without openings 4.5m 4.5m



A comparison of the proposal with adjoining existing or approved development is provided below.



The 4m setback is not out of context with the adjoining developments. It is noted the building immediately to the west has closer setbacks and that the built form setback increases towards the rear which facilitates greater solar access to that development. The approved form to the east has reduced setbacks and a largely defensive facade



(c) Demonstrate how the objectives are met with the proposed variations; and

The objectives of the control are as follows:

- a) *To ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation, and privacy.*

Daylight to adjoining development will be impacted to some degree by the non-compliant areas however would not compromise primary living or POS areas.

The non-compliant portion will impact on views / outlook from certain parts of the existing flat building to the west.

Ventilation is somewhat compromised by the variations as the facades on the non-compliant sections are very defensive, reducing available openings on those parts of the building or relying on vertical louvres.

The development is small in scale and wind impacts will not be significantly different than from a compliant form.

Privacy is managed by way of defensive facades where there are non-compliances.

- b) *To achieve usable and pleasant streets and public domain areas in terms of wind mitigation and daylight access.*

The variations do not impact on the streetscape or public domain with regard to wind or daylight.

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

There are impacts arising from the variation.

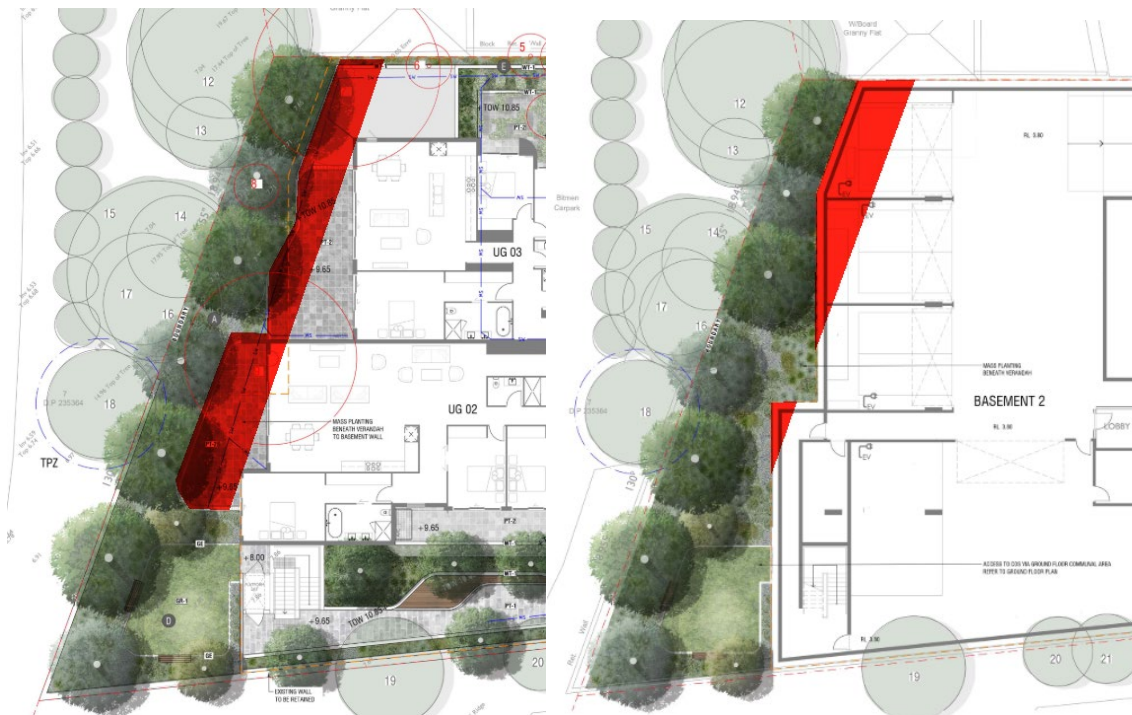
Deep soil zone

(a) The control being varied;

Chapter D13, section 2.7 deep soil zone: 6m minimum dimension.

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

The deep soil zone is not 6m minimum dimension for the entirety. Part along western boundary reduced to 3m as shown on the ground and basement floors below. This may need to be reduced further to manage stormwater based on a level spreader.



(c) Demonstrate how the objectives are met with the proposed variations; and

The objectives are as follows:

- To provide an area on sites that enables soft landscaping and deep soil planting, permitting the retention and/or planting of trees that will grow to a large or medium size.*
- To limit building bulk on a site and improve the amenity of developments, allowing for good daylight access, ventilation, and improved visual privacy.*
- To provide passive and active recreational opportunities*

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

On-site car parking

(a) The control being varied;

Chapter D13, section 4.4 On-site car parking

c) Car parking and associated internal manoeuvring areas which are surplus to Council's specified parking requirements will count towards the gross floor area, but not for the purpose of determining the necessary parking.

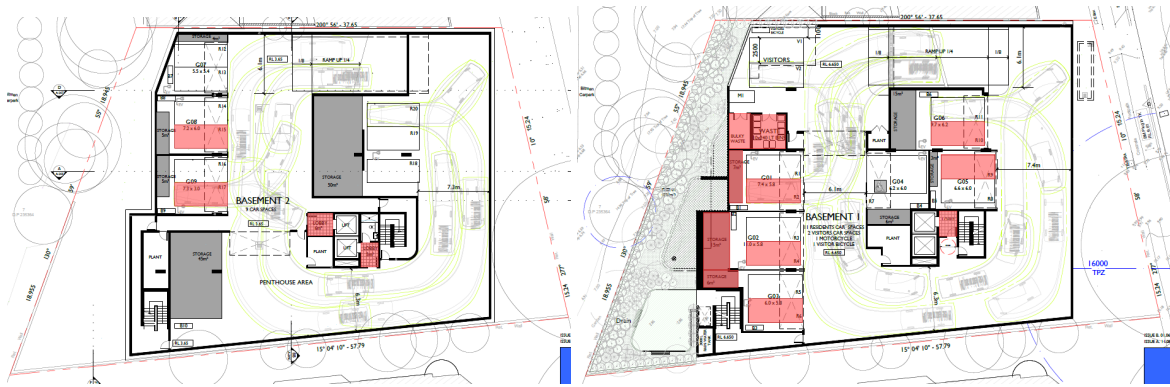
(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

The proposal exceeds the number of car parking spaces required under the controls.

The proposal is required to provide 13 resident car parking spaces. The proposal indicates 20 car parking spaces.

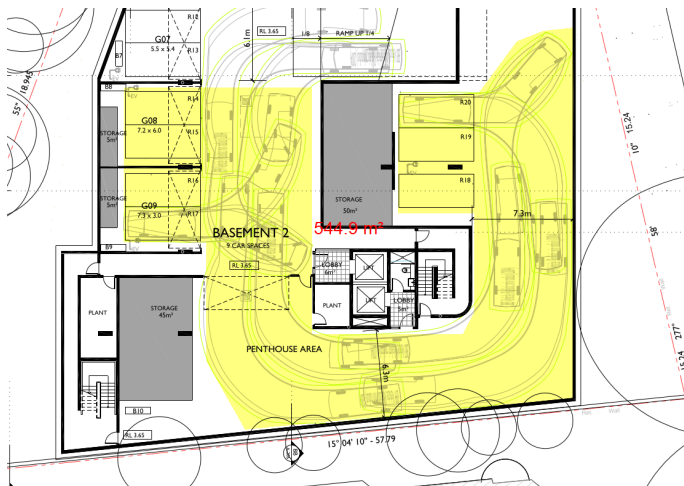
The LEP definition of gross floor area excludes car parking to meet any requirements of the consent authority (including access to that car parking).

The applicant has identified 7 spaces (2.4 x 5.5m) as being included as gross floor area as shown below



The contribution to FSR based on the above is 117m² (basement 1) and 37m² (basement 2).

The way this has been quantified is not supported. The seven spaces should be located adjacent one another and the access to those space also included. This could look more like the image below and equates to somewhere in the order of 545m².



(c) Demonstrate how the objectives are met with the proposed variations; and

The objectives are as follows:

- a) *Facilitate an appropriate level of on-site parking provision in the city to cater for a mix of development types.*

Satisfactory but surplus to requirements.

- b) *Minimise the visual impact of on-site parking.*

The exposed portion of the basement car park in the northeast corner has a poor relationship to the adjoining residential unit within the development.

- c) *Provide adequate space for parking and manoeuvring of vehicles (including service vehicles and bicycles).*

Satisfactory but surplus to requirements.

- d) *To promote Wollongong city centre as a more lively and vibrant place by providing parking incentives for certain developments in the city centre.*

N/A

- e) *To encourage economic growth in the city centre.*

N/A

- f) *To recognise the complementary use and benefit of public transport and non-motorised modes of transport such as bicycles and walking.*

N//A

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

The unnecessary excavation will result in adverse impacts from the works themselves (e.g. increased truck movements, noise and vibration impacts to adjoining properties during work) along with undermining Council objectives to reduce reliance on private vehicles and reduce traffic within the city centre.

Housing choice and mix

(a) The control being varied;

Chapter D13, 6.2 Housing choice and mix: Studio and one bedroom units must not be less than 10% of the total mix of units within each development.

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

No studios or one bedroom units are proposed. There are no particularly unique circumstances.

(c) Demonstrate how the objectives are met with the proposed variations; and

a) *Ensure that residential development provides a mix of dwelling types and sizes to cater for a range of household types.*

The proposal has only three and four bedroom units. Suitable justification for this has not been provided.

b) *Ensure that dwelling layout is sufficiently flexible for residents' changing needs over time.*

Satisfactory.

c) *Ensure a sufficient proportion of dwellings include accessible layouts and universally designed features to accommodate changing requirements of residents.*

Satisfactory

d) *Ensure the provision of housing that will, in its adaptable features, meet the access and mobility needs of any occupant.*

Satisfactory

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

If the approach taken for this development was to be adopted for the locality more broadly, there would be no housing options for those requiring smaller units.

Basement car parking

(a) The control being varied;

Chapter D13, section 6.6 Basement car parks

a) *The scale and siting of the basement car park must not impact upon the ability of the development to satisfy minimum landscaping and deep soil zone requirements*

b) *The roof of any basement podium, measured to the top of any solid wall located on the podium, must not be greater than 1.2m above natural or finished ground level, when measured at any point on the outside walls of the building. On sloping sites, a change in level in the basement must be provided to achieve this maximum 1.2m height. Generally variation to this 1.2m height will not be supported however Council recognises that there may be occasions where this standard cannot be achieved.*

Should such a circumstance arise, the additional portion of the basement podium above 1.2m height must be included in the total gross floor area calculation for the development.

d) The following setbacks from front, side and rear boundaries apply to basement podiums:

i) Where the height of the basement podium (measured to the top of any solid wall located on the podium) is less than 1.2m above natural or finished ground level (whichever distance is greater), the basement podium may extend to the property boundary. A minimum 1.5m wide landscaped planter must be provided on the perimeter of any section of the basement podium which is located on a side or rear property boundary. Such planter must prevent direct access to the outer edge of the podium, to minimise direct overlooking of adjacent dwellings and open space areas.

ii) Any portion of the basement which exceeds 1.2m above natural or finished ground level (whichever distance is greater) must be setback from the property boundaries by a ratio 1:1 (height: setback). A minimum setback of 1.5m applies in this instance, with this area to be landscaped. For the purpose of determining the height of the basement, any solid walls located on the podium shall be included in the overall height calculation.

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

Part of the basement extends greater than 1.2m above ground on the eastern side as shown below and is not set back from the boundary.

The red shaded area being basement wall exceeding 1.2m above natural ground built to boundary, the purple area being part of the basement open and exposed which is unlikely to be supported and if enclosed would also represent non-compliance.



(c) Demonstrate how the objectives are met with the proposed variations; and

The objective of this control is to integrate the siting, scale and design of basement parking into the site and building design. The variation precludes a better interface with adjoining development by not allowing for boundary landscaping.

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

See above.

Communal open space

(a) The control being varied;

Chapter D13, 6.7 Communal open space:

- The communal open space must be easily accessible and within a reasonable distance from apartments, be integrated with site landscaping, allow for casual social interaction and be capable of accommodating recreational activities.
- The communal open space area must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.

(b) The extent of the proposed variation and the unique circumstances as to why the variation is requested; and

- The rear COS area is only accessible for people that have mobility impairment via a platform lift. This is not considered ideal or equitable given that area is best situated to take advantage of northerly aspect.
- The primary accessible COS area would not receive 3 hours of direct unlight between 9.00am and 3.00pm on June 21.

There are no unique circumstances.

(c) Demonstrate how the objectives are met with the proposed variations; and

The objectives are as follows:

a) Ensure that communal open spaces are of adequate size to be functional.

The size and layout of the communal open spaces does not maximise utility for residents.

b) Provide communal open space which is accessible by all residents

The rear COS area is not equitably accessed, relying on a wheelchair platform lift for people who are mobility impaired.

(d) Demonstrate that the development will not have additional adverse impacts as a result of the variation.

See above.

CHAPTER A2 – ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Measures incorporated to address sustainability include the following:

- Provision of EV charging to resident car parking spaces
- PV panels incorporated onto the rooftop
- A 3000L water tank has been included in Basement 01 (noting the capacity of the tank could be enlarged given the total available roof area and the amount of landscaped area requiring irrigation – this could be addressed by way of conditions).

Further areas that require attention to adequately address sustainability are as follows:

- Use of permeable pavement in deep soil zones.
- Details of building construction and materials to demonstrate minimization of the projects carbon footprint.
- Reduction in the scale of excavation (associated environmental impacts, construction noise impacts, construction traffic, removal and disposal of excavated material)
- Reduction in excessive basement excavation.

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

The northern COS area does not provide equitable access.

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

6 Traffic impact assessment and public transport studies

6.1 Car Parking and Traffic Impact Assessment Study

A Traffic Statement was submitted with the proposal which parking, traffic generation and access for the proposal. This report has been reviewed by Council's Traffic Officer who has not raised any concerns subject to conditions of consent.

6.2 Preliminary Construction Traffic Management Plan

N/A

7 Parking demand and servicing requirements

7.1 Car Parking, Motor Cycle, Bicycle Requirements and Delivery / Servicing Vehicle Requirements

Parking requirements for the proposal are addressed below:

	Medium density residential (2-20 dwellings)	Required	DCP		Proposed
Residential car parking	1/unit	10	0.75<70m ²		
4 x three bedroom	1/2-3 bedroom unit	4	1 70-110		
6 x four bedroom	1/5 bed unit	0	1.25 >110	12.5	21*
14					
Visitor car parking	1/5 units	2			2
Motorbike parking	1/15 units	1			1

*The plans indicate only 20 car spaces however there is a double garage that is the accessible parking where an accessible parking space only needs to be 3.8m wide.

The number of car parking spaces exceeds Council requirements and those spaces including access to those spaces must be included in GFA calculations. This is discussed elsewhere in this report.

7.2 Disabled Access and Parking

An accessible car parking space is provided.

7.3 Bicycle Parking / Storage Facilities and Shower and Change Facilities

Suitable areas are provided for bicycle storage.

7.7 Car Parking Layout and Design

The layout and design of the basement parking area is satisfactory subject to other comments in this report.

7.8 Basement Car Parking

- A minimum 2.4m headroom height is provided.
- A geotechnical report has not been provided however the proposal has been reviewed by Council's Geotechnical Officer who has recommended conditions of consent with regard to excavation.
- Flood-proofing of the vehicular access, fire escapes and ventilation are detailed on the plans.
- On site waste servicing is not proposed.
- Wheel stops are to be provided to all spaces.

8 Vehicular access

Driveway grades and sight distances comply.

9 Loading / unloading facilities and service vehicle manoeuvring

Waste servicing is proposed from the kerb. There are a small number of units and sufficient frontage within which this can occur without adversely impacting on the street.

10 Pedestrian access

The proposal is satisfactory with regard to pedestrian access into the site and along the frontage.

11 Safety & security (Crime Prevention through Environmental Design) measures for car parking areas

The proposal is satisfactory with regard to the principles of CPTED.

CHAPTER E6: LANDSCAPING

- A suitable site plan and a Landscape Concept Plan prepared by a suitably qualified person have been submitted.
- Significant trees are accurately plotted.
- The landscaping is of a character that suitably responds to the streetscape and adjoining development.
- The landscaped areas are situated to provide amenity to the occupants.
- This has been reviewed as satisfactory by Council's Landscape Officer.

The Arborist Report does not accurately show the extent of encroachment of the basement into the TPZ as illustrated in red below.

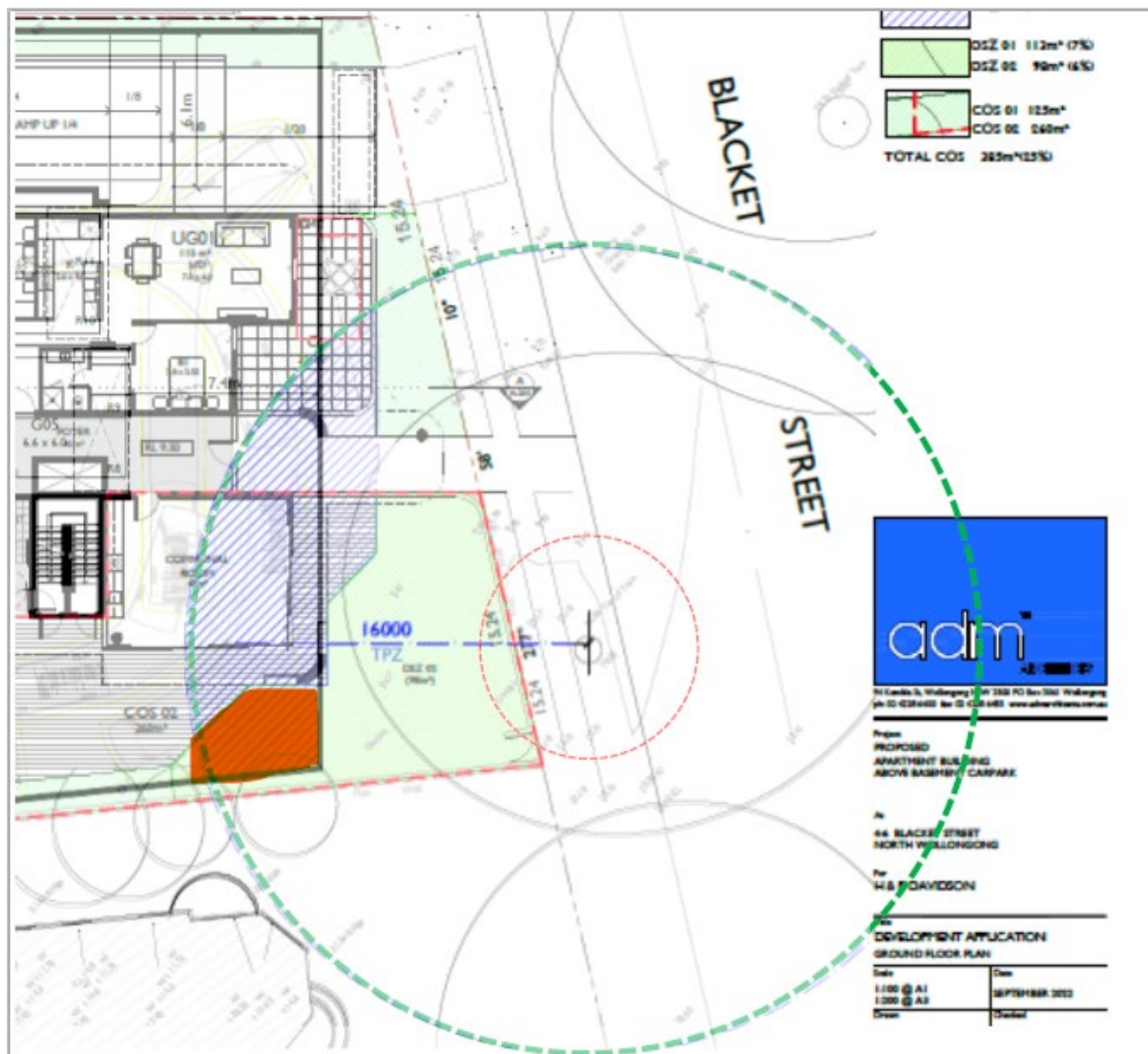


Fig 2:

Tree 1

TPZ- Tree Protection Zone = 16.0 metres

SRZ- Structural Root Zone= 3.4 metres

TPZ Encroachment 80m²: < 10%

CHAPTER E7: WASTE MANAGEMENT

A Site Waste Minimisation and Management Plan has not been provided.

The proposal involves demolition of two dwellings and a demolition plan has accordingly been provided.

The proposal provides for general, recyclable and FOGO waste separation and a suitable waste storage area is provided within the basement. ‘

Waste collection is to occur from the kerbside. This arrangement is satisfactory given the small number of units and adequate frontage to accommodate bins.

CHAPTER E13 FLOODPLAIN MANAGEMENT

Although flood coded, the proposed development within the subject site is not considered to be subject to conditions relating to this chapter as the results of Council's adopted flood model are not considered to constitute mainstream flooding or flooding due to overland flow.

The flood mapping does indicate overland flow located within the frontage of the development within Blacket Street, with depths of up to 0.15m. In this regard, it will need to be demonstrated that the development complies with Section 6.5.3(d), requiring the basement carpark to be protected from inundation from the 1%AEP flood + 0.2m.

CHAPTER E14 STORMWATER MANAGEMENT

The existing site falls to the rear by approximately 2 metres. To the North-east (rear) of the site is Lot 7, DP 235364 a Council owned lot, then Lot 12, DP 865220 owned by Crown Lands, then Lot 3, DP 1136814 owned by the State of NSW.

Council's Property Services section has previously advised (letter dated 20/12/2022 provided by Jones Nicholson Engineers) a drainage easement through the rear Council land would not be supported.

An alternative would be to obtain an easement through adjacent Lot 4, DP 1259855 (east of the site). There is however an approved development application for a serviced apartment development with basement parking located up to the northern boundary of this site, which would prevent this occurring.

The Jones Nicholson Drainage plan indicates drainage to an underground rainwater tank then to the existing Council pit in Blacket St. Per Section 9.3.6, sites that fall away from the road reserve require an easement obtained through downstream or adjacent properties, and in all cases it must be clearly demonstrated that the post development flow rates are no greater than the pre development condition. As there is no pre development flow to Blacket St, post development flow to Blacket St is required to be zero. As this will be unachievable, it will be required to demonstrate no adverse runoff impacts as a result of the development on the Council drainage system. The objectives of the WDCP – Chapter E14, are also required to be demonstrated.

From previous request for information, the applicant has provided a DRAINS file for the proposed development. However, no reference plan or survey has been provided, so no further assessment is possible. If proposing to drain to Blacket St, further detailed information is required.

Section 9.3.9 and Section 9.3.12 allow the use of level spreaders/transpiration trench, where a development drains to a Public Reserve. As the narrow piece of land to the rear is classified community land, the applicant could propose a level spreader in this instance. That would likely have to be for the full width of the site and would encroach into the deep soil planting area.

Suitable stormwater disposal has not been provided.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

Two objectives of this chapter of relevance to the proposal which are not adhered to are as follows:

- h) Minimise amenity impacts upon surrounding neighbourhoods;*
- j) Ensure that buildings are designed to fit the lot and ensure that the nature, extent and depth of land reshaping works are kept to appropriate levels;*

The proposal does not minimise impacts associated with excavation and construction by being excessive in size in consideration of the needs to service the building.

1.10.2 WOLLONGONG CITY WIDE DEVELOPMENT CONTRIBUTIONS PLAN

The Wollongong City-Wide Development Contributions Plan applies to the subject property. This Plan levies a contribution based on the estimated cost of development.

- The proposed cost of development* is over \$200,001 – a levy rate of 1% applies:

Contribution Amount = Cost of Works \$7,799,000 x 1% levy rate = \$77,990

1.11 SECTION 4.15(1)(A)(IIIA) ANY PLANNING AGREEMENT THAT HAS BEEN ENTERED INTO UNDER SECTION 7.4, OR ANY DRAFT PLANNING AGREEMENT THAT A DEVELOPER HAS OFFERED TO ENTER INTO UNDER SECTION 7.4

There are no planning agreements entered into or any draft agreement offered to enter into under S7.4 which affect the development.

1.12 SECTION 4.15(A)(IV) THE REGULATIONS (TO THE EXTENT THAT THEY PRESCRIBE MATTERS FOR THE PURPOSES OF THIS PARAGRAPH)

Environmental Planning and Assessment Regulation 2021

61 Additional matters that consent authority must consider

Conditions of consent would apply in regard to demolition.

1.13 SECTION 4.15(1)(B) THE LIKELY IMPACTS OF DEVELOPMENT

The non-compliances discussed within this report are considered to result in adverse impacts and are not supported.

1.14 SECTION 4.15(1)(C) THE SUITABILITY OF THE SITE FOR THE DEVELOPMENT

Does the proposal fit in the locality?

As proposed the building does not fit the character of the locality.

Are the site attributes conducive to development?

The site can accommodate a residential flat building.

1.15 SECTION 4.15(1)(D) ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR THE REGULATIONS

See discussion at Section 1.3.

1.16 SECTION 4.15(1)(E) THE PUBLIC INTEREST

There are unreasonable impacts arising from the proposal as discussed above. The proposal involves a number of non-compliances with the applicable planning controls and variations are not considered well founded.

The proposal is not in the public interest.

CONCLUSION

This application has been assessed having regard to the Heads of Consideration under Section S4.15(1) of the Environmental Planning and Assessment Act 1979, the provisions of Wollongong Local Environmental Plan 2009 and all relevant Council DCPs, Codes and Policies.

The submissions received have been considered in the assessment as outlined in this report. There are outstanding concerns regarding stormwater and architectural matters and the DRP matters have not been resolved. The current design does not adequately respond to the site constraints. The proposed development has not demonstrated adequate stormwater disposal can be achieved. In its current form the design does not adequately respond to SEPP 65, nor various objectives under the Apartment Design Guide or WDCP2009. The proposed development does not achieve design excellence as required under Wollongong LEP and the provisions of Clause 4.6 have not been satisfied in relation to FSR. Given lack of a clause 4.6 submission there is no power to grant consent.

RECOMMENDATION

It is recommended that the development application be refused for the reasons outlined at **Attachment 7**.

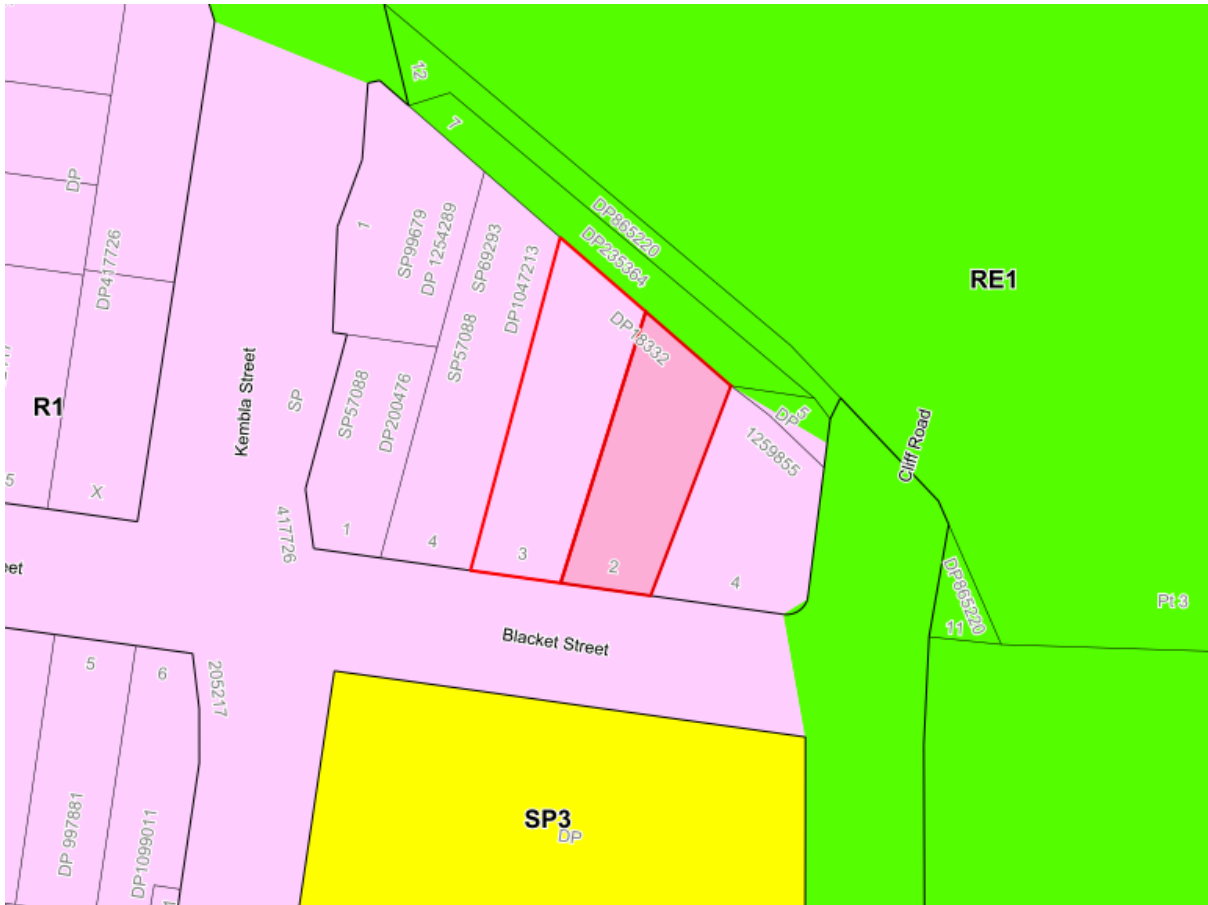
ATTACHMENTS

- 1 Aerial photograph
- 2 WLEP zoning map
- 3 Plans
- 4 Design Review Panel notes
- 5 Apartment Design Guide assessment table
- 6 Wollongong DCP 2009 assessment table
- 7 Draft refusal reasons conditions of consent

ATTACHMENT 1



ATTACHMENT 2



Project : 4-6 BLACKET STREET, NORTH WOLLONGONG

Controls	
Site Area (m²)	1,536.5m²
Wollongong LEP 2009	
Land use	General Residential
FSR	1.5 : 1
Height (m)	16 m

Level	Commercial GFA	Residential GFA	2Bdrm	3Bdrm	4Bdrm	Unit Totals
Basement 02 (2 surplus car spaces)		37m²				
Basement 01 (5 surplus car spaces)		117m²				
Ground		518.0m²	-	2	1	3
Level 1		578.0m²	-	1	2	3
Level 2		578.0m²	-	1	2	3
Level 3		418.0m²	-	-	1	1
Total		2,246.0m²	-	4	6	10
Unit Mix			-	40%	60%	100%
Total Units		10				
Total GFA		2,246.0 m²				
Proposed FSR		1.46:1				
Maximum Permissible GFA		2,304.75 m²				

Car Parking Requirements (DCP)	Min. Rate	Required	Provided
3 Bed Unit (> 110 sqm)	1.25/unit	5.00	7
4 Bed Unit (> 110 sqm)	1.25/unit	7.50	13
Total		13	20 (including 1 accessible)
Visitor	1/5 units	2	2
Total			22

Accessible Parking Requirements	No. Accessible Units	Required	Provided
Accessible Units	1	1	1

Note: Accessible spaces are provided as part of overall total.

Bicycle Requirements	Min. Rate	Required	Provided
Residential	1 / 3 units	3.3	4
Visitor	1 / 12 units	1	1
Total			5

Motorcycle Requirements	Min. Rate	Required	Provided
Residential	1 / 15 units	1	1
Total			1

Waste Management	General	Green	Compost	Recycling
Rate	80L/unit/week			80L/unit/f.night
Total per Collection	800 L			1440L
Total Bins Required @ 240L	4	1	1	4
Overall Total Bins Provided		10		

Communal Open Space Requirements	Min Rate	Required	Provided
Residents	25%	384.125	390m² (25 %)

Figure A: Land Zoning Map

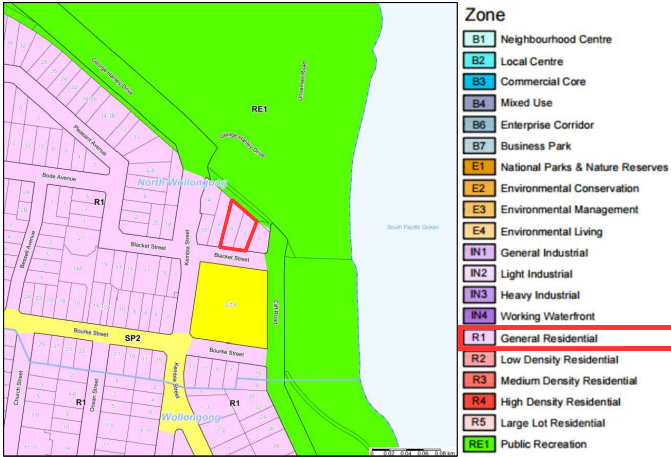


Figure B: Height of Building Map

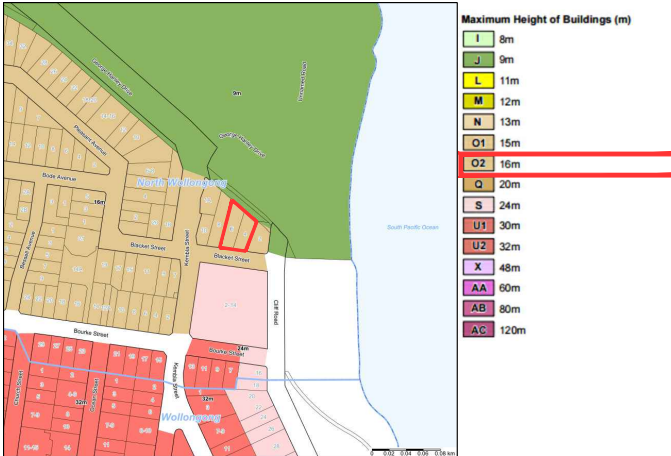


Figure C: Heritage Map

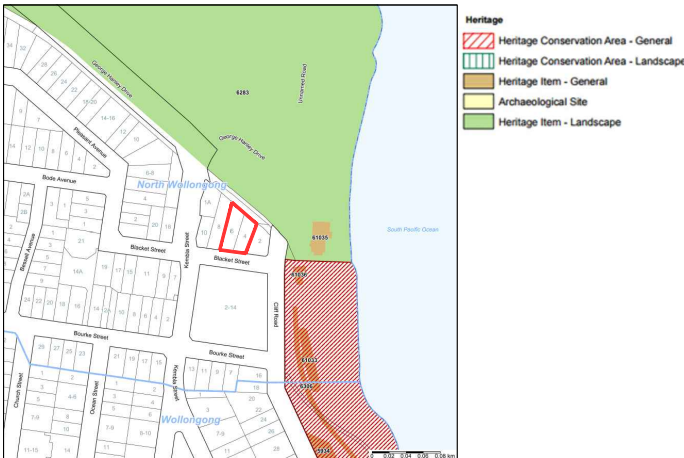
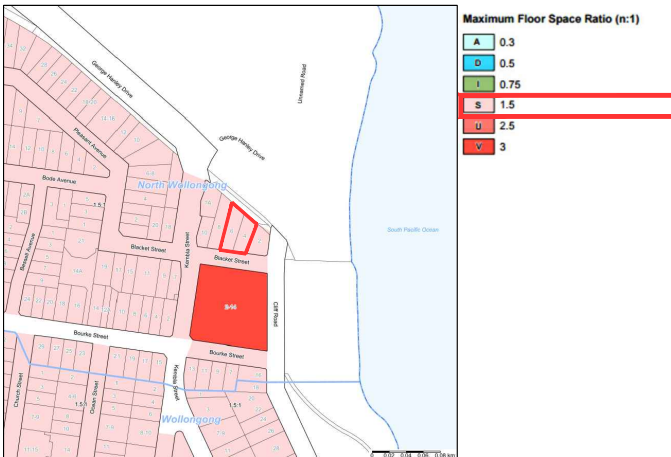


Figure D: Maximum Floor Space Ratio (n:1)



NatHERS Thermal Performance Specification

NatHERS Thermal Performance Specification - North Wollongong			
External Walls			
Wall Type	Insulation	Colour	Comments
Brick Veneer	R2.5	Light - SA < 0.475	As per the elevations
Hebel	R2.5	Dark - SA > 0.70	As per the elevations
Metal Cladding	R2.5	Medium - SA 0.475 - 0.70 Dark - SA > 0.70	As per the elevations
SA - Solar Absorptance			
Internal Walls			
Wall Type	Insulation	Comments	
Plasterboard stud	None	Internally in units	
Hebel, Plasterboard on studs	None	Party walls between units	
Hebel, Plasterboard on studs	None	Shared walls with lobbies/corridors	
Concrete Panel, Plasterboard on studs	None	Shared walls with stairs/lift	
Floors			
Floor Type	Insulation	Comments	
Suspended concrete slab	R2.5	All units with suspended slab over carpark: G01, G02, G03	
Suspended concrete slab	R1.5	Part of Living floor of 101	
Concrete	None	All units with adjoining unit below	
Ceilings			
Ceiling Type	Insulation	Comments	
Plasterboard	None	Unit above	
Plasterboard	R2.5	Roof/ balcony above: G01, 201 (exposed Living), 301	
Insulation loss due to downlights has been modelled in this assessment. A sealed exhaust fan has been included in every kitchen, bathroom, laundry and ensuite.			
Roof			
Roof Type	Insulation	Colour	Comments
Concrete with waterproofing membrane	None	Light - SA < 0.475	Throughout (no roof space)
SA - Solar Absorptance			
Glazing			
Opening type	U-Value	SHGC	Glazing & Frame Type
Sliding + Fixed + Double hung (Throughout)	4.1	0.52	e.g. Double glazed clear Aluminium frame
Awning + Hinged door (Throughout)	4.1	0.47	e.g. Double glazed clear Aluminium frame
U and SHGC values are based on the AFRC Default Windows Set. Glazing systems to be installed must have an equal or lower U value and a SHGC value ± 10% of the above specified values.			
Skylights			
Skylight Type	Frame Type		Comments
Double glazed - Fixed	Timber & Aluminium		Laundry + Ensuite 1

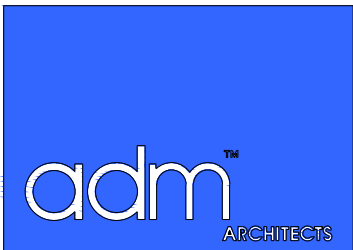
ARCHITECTURAL DRAWING SCHEDULE

No.	DESCRIPTION	SCALE @ A3
A-001	SITE/DEVELOPMENT SUMMARY	NTS
A-002	SITE ANALYSIS 01	NTS
A-002a	SITE ANALYSIS 02	NTS
A-003	CONTEXTUAL ANALYSIS	NTS
A-003a	PROPOSED BUILDING SEPARATION	NTS
A-004	CONTEXTUAL STREETScape	NTS
A-101	SITE & ROOF PLAN	1:200
A-102	BASEMENT 02 FLOOR PLAN	1:200
A-103	BASEMENT 01 FLOOR PLAN	1:200
A-104	GROUND FLOOR PLAN	1:200
A-105	LEVEL 1 FLOOR PLAN	1:200
A-106	LEVEL 2 FLOOR PLAN	1:200
A-107	LEVEL 3 FLOOR PLAN	1:200
A-201	NORTH ELEVATION	1:200
A-202	EAST ELEVATION	1:200
A-203	SOUTH ELEVATION	1:200
A-204	WEST ELEVATION	1:200
A-205	SECTION A - A	1:200
A-206	INTERFACE SECTION 01	1:200
A-207	SECTIONS	AS NOTED
A-208	INTERFACE SECTIONS 02	1:100
A-209	FACADE DESIGN SECTION	AS NOTED
A-301	PRE & POST ADAPTATION PLAN	1:100
A-401	SHADOW ANALYSIS 01	NTS
A-402	SHADOW ANALYSIS 02	NTS
A-403	SUN EYE VIEW STUDY 01	NTS
A-404	SUN EYE VIEW STUDY 02	NTS
A-410	HEIGHT PLANE DIAGRAM	NTS
A-501	COLOUR AND MATERIALS SCHEDULE	NTS
A-601	DEMOLITION AND SITE MANAGEMENT PLAN	NTS

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Project
PROPOSED BOUTIQUE RESIDENTIAL
APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title
DEVELOPMENT APPLICATION
SITE / DEVELOPMENT SUMMARY

Scale
NTS
Date
JUNE 2023

Drawn
LGD, HR
Checked
ADM

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2021-35
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VIEW 1 Looking east from Kembla St towards subject site



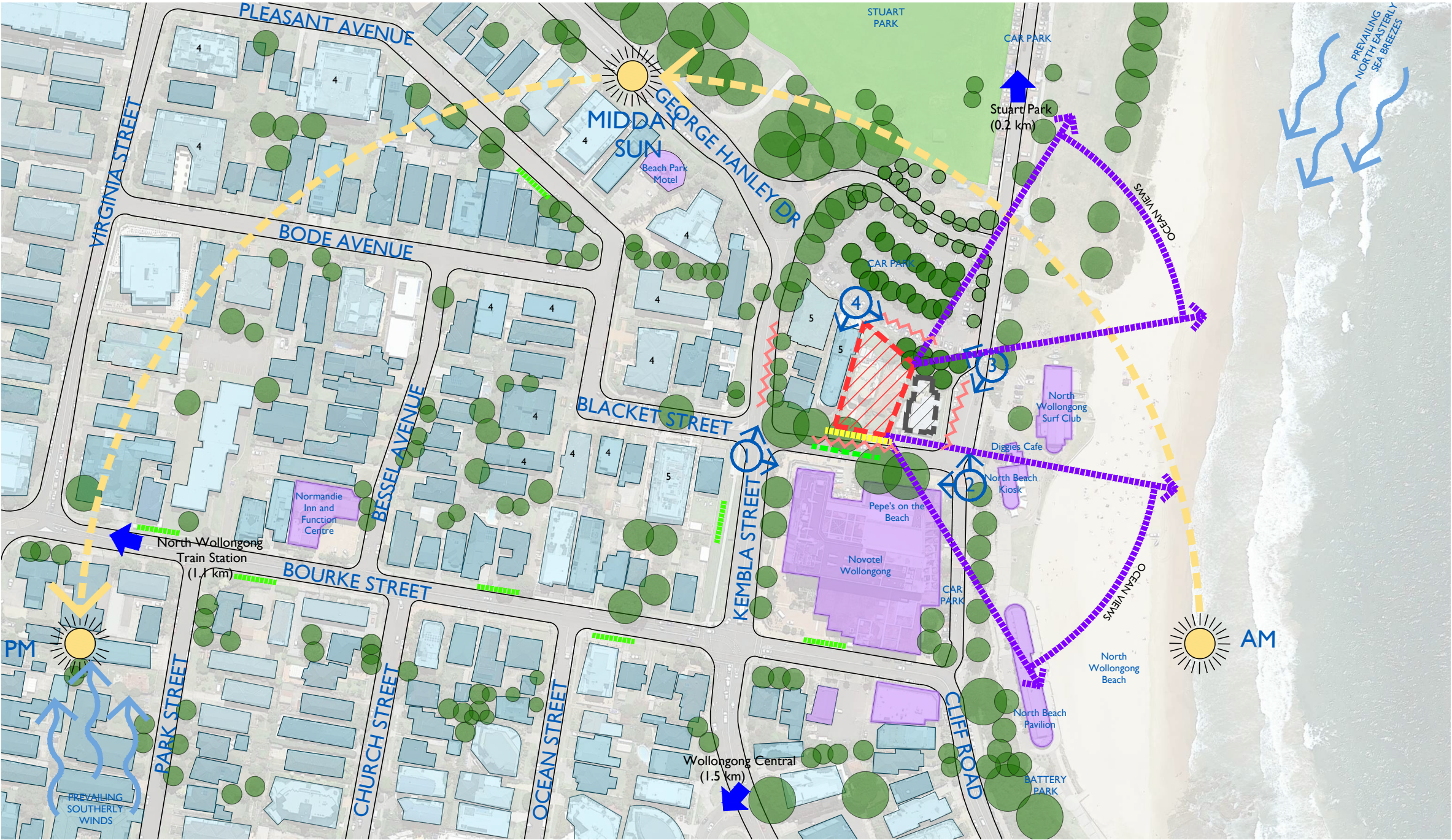
VIEW 2 Looking northwest from Cliff Rd towards subject site



VIEW 3 Looking southwest from Cliff Rd towards subject site



VIEW 4 Looking east from north beach carpark towards subject site



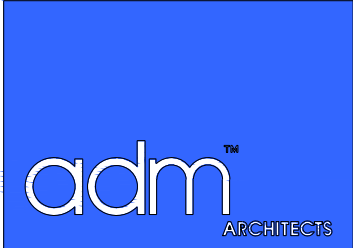
SITE ANALYSIS

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- PROPOSED DEVELOPMENT
- DA APPROVED
- POTENTIAL BUILDING FOOTPRINT
- HERITAGE LISTED ITEM
- GREEN &/OR PUBLIC SPACES
- PEDESTRIAN CONNECTIONS
- VIEW VISTAS TO BE RETAINED
- ACTIVE STREET FRONTAGE
- BUS STOP
- WIND DIRECTION
- SOURCE OF NOISE
- LOCATION OF PHOTO
- SIGNIFICANT TREES IN PUBLIC DOMAIN
- RESIDENTIAL USE
- RESIDENTIAL USES ABOVE 3 STOREY + HEIGHT
- BUSINESS / COMMERCIAL PREMISES



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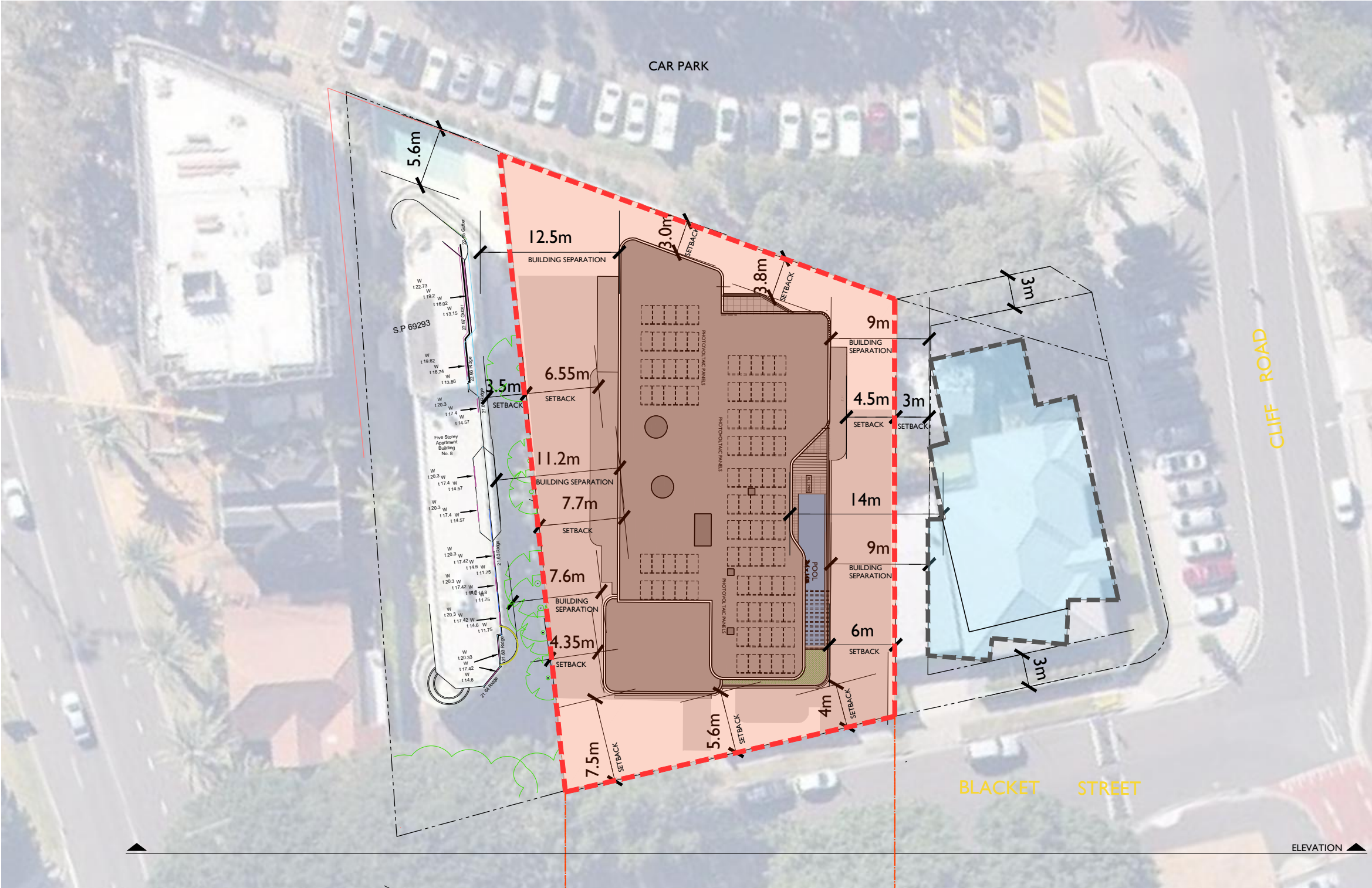
For
PARAGON ILLAWARRA PTY LTD

Title DEVELOPMENT APPLICATION SITE ANALYSIS-01		
Scale NTS	Date JUNE 2023	
Drawn LGD, HR	Checked ADM	
Project No. 2021-35	Drawing No. A-002	Issue B

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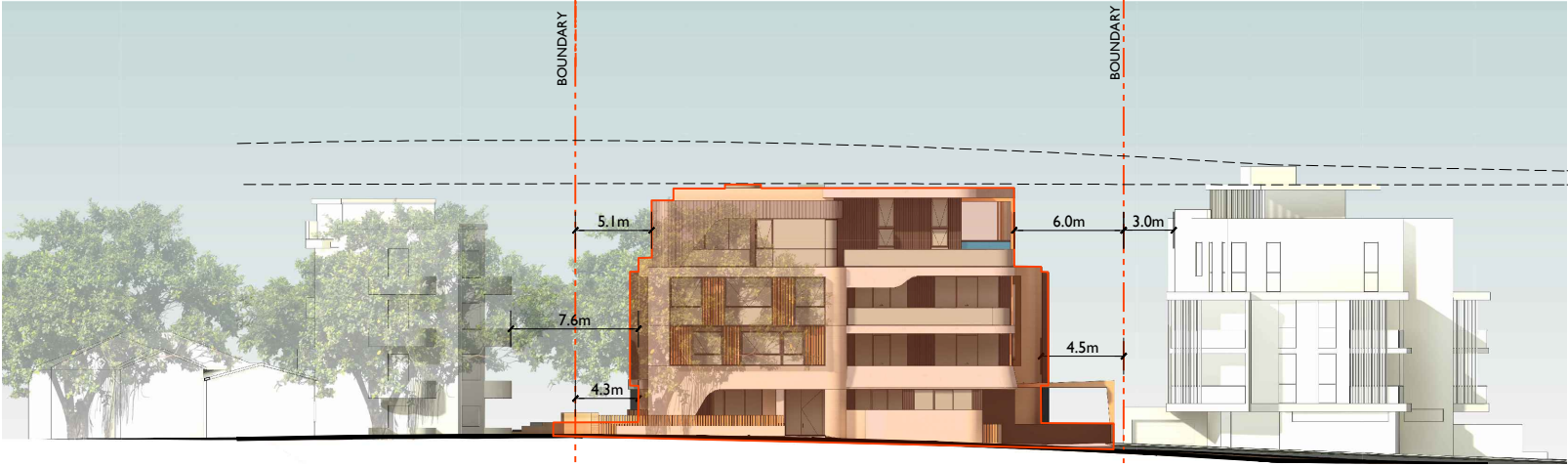
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CITY BLOCK PLAN

8 BLACKET STREET, WOLLONGONG 4-6 BLACKET STREET, WOLLONGONG
PROPOSED DEVELOPMENT 2 BLACKET STREET, WOLLONGONG
DA APPROVED FUTURE DEVELOPMENT

CONTEXTUAL STREETSCAPE
(BLACKET STREET)
CONTEXTUAL ANALYSIS



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NORTH WOLLONGONG

For
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Title		
DEVELOPMENT APPLICATION CONTEXTUAL ANALYSIS		
Scale 1:200 @ A1 1:400 @ A3	Date JUNE 2023	
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DSZ PLANTING ZONE

PROPOSED DEVELOPMENT

BASEMENT 2	RL 3.650
BASEMENT 1	RL 6.650
GROUND	RL 9.650
LEVEL 1	RL 12.900
LEVEL 2	RL 16.150
LEVEL 3	RL 19.400
ROOF	RL 23.700

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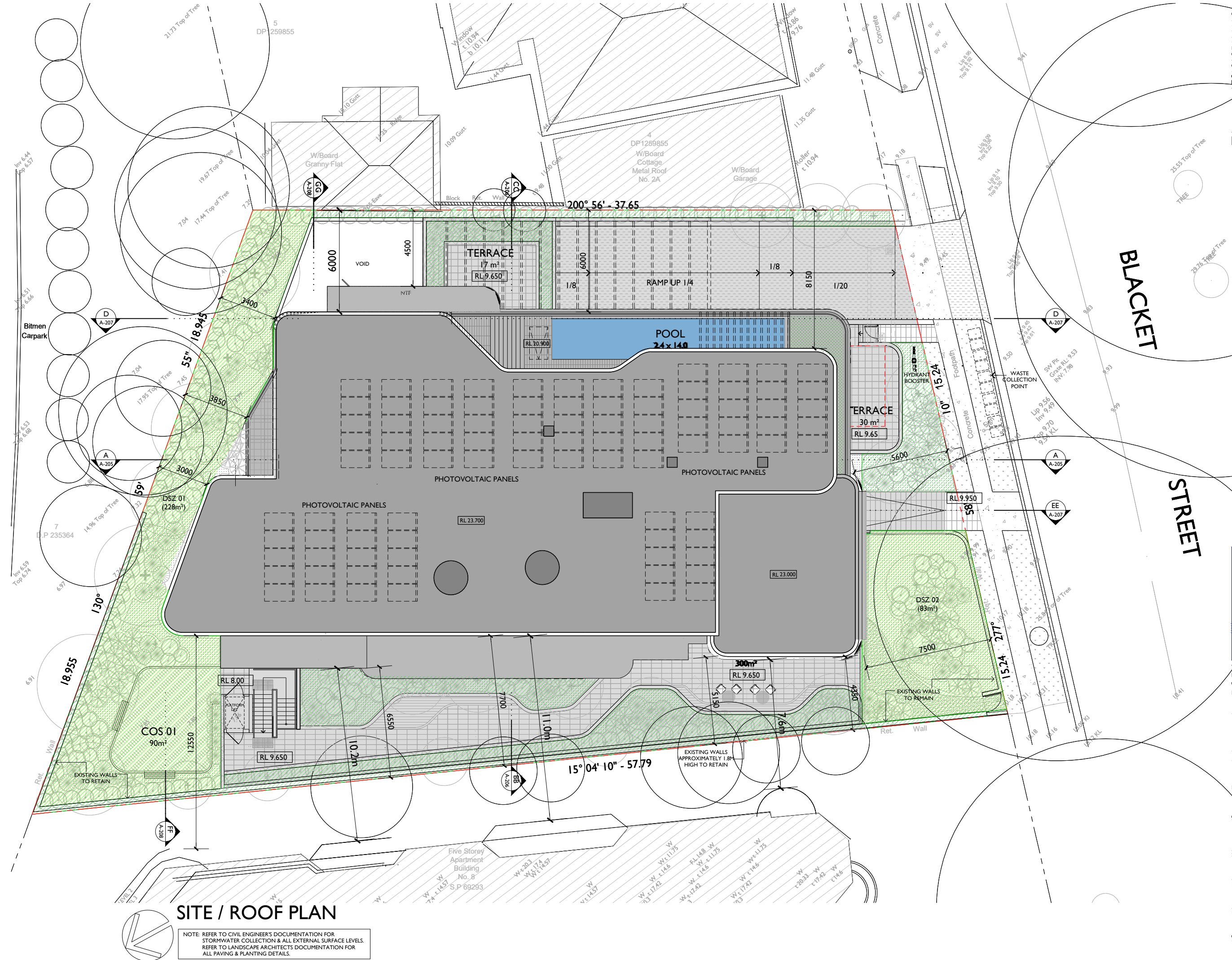
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NORTH WOLLONGONG

For
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Title DEVELOPMENT APPLICATION SITE / ROOF PLAN		
Scale 1:100 @ A1 1:200 @ A3	Date JUNE 2023	
Drawn	Checked	
LGD, HR	ADM	
Project No. 2021-35	Drawing No. A-101	Issue B

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SITE / ROOF PLAN

NOTE: REFER TO CIVIL ENGINEER'S DOCUMENTATION FOR
STORMWATER COLLECTION & ALL EXTERNAL SURFACE LEVELS.
REFER TO LANDSCAPE ARCHITECTS DOCUMENTATION FOR
ALL PAVING & PLANTING DETAILS.

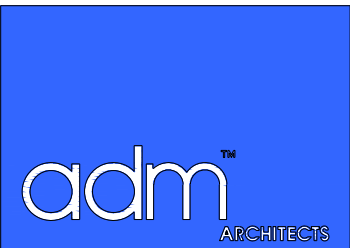
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STORAGE 109sqm (9.8%)



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For
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Title
DEVELOPMENT APPLICATION
BASEMENT 02 FLOOR PLAN

Scale
1:100 @ A1
1:200 @ A3

Date
JUNE 2023

Drawn
LGD, HR

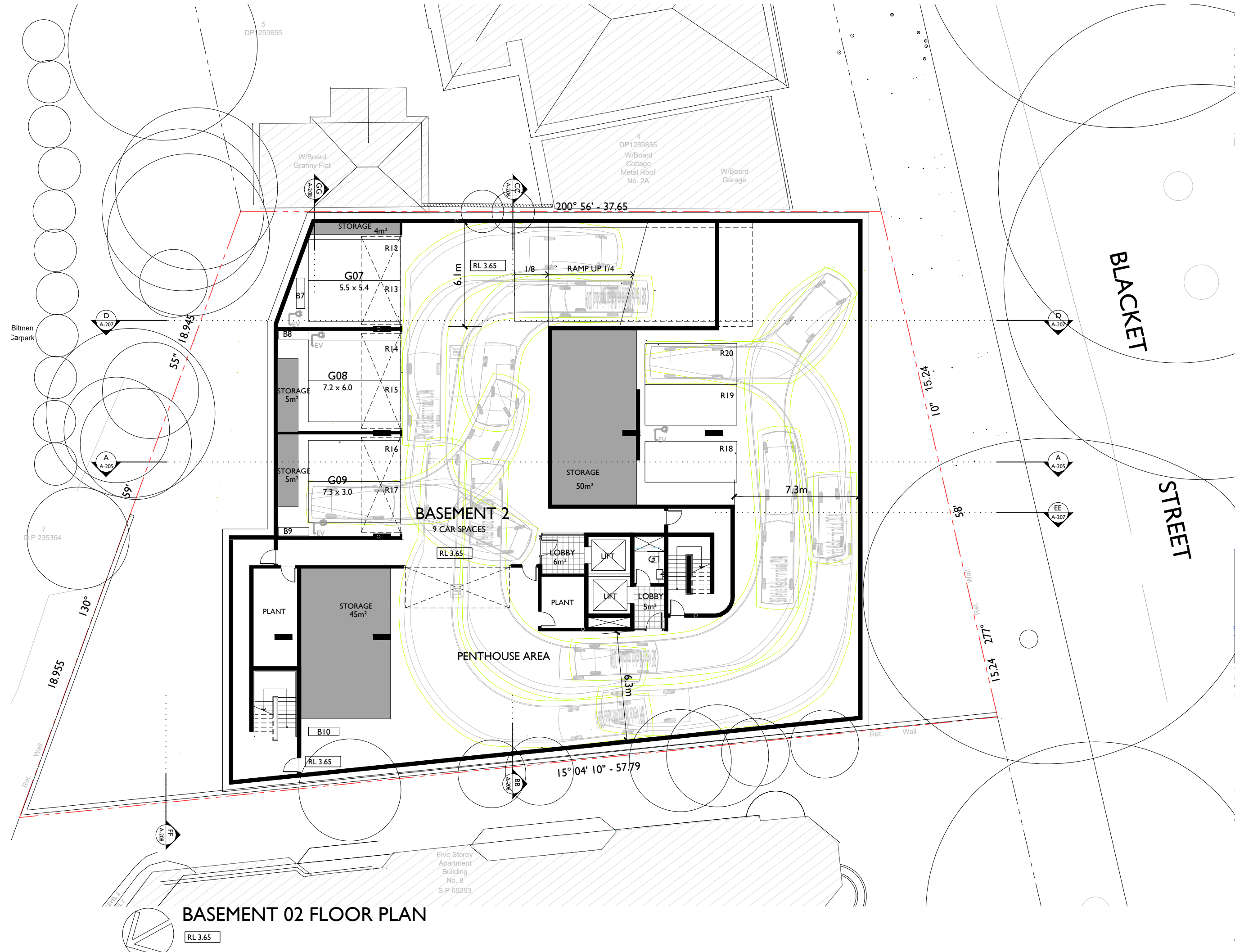
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Drawing No.
A-102

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BASEMENT 02 FLOOR PLAN

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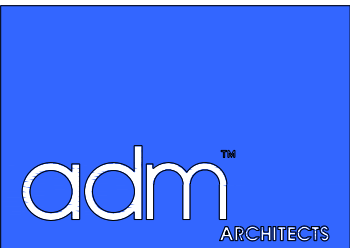
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TPZ<10% (75 m²)

STORAGE



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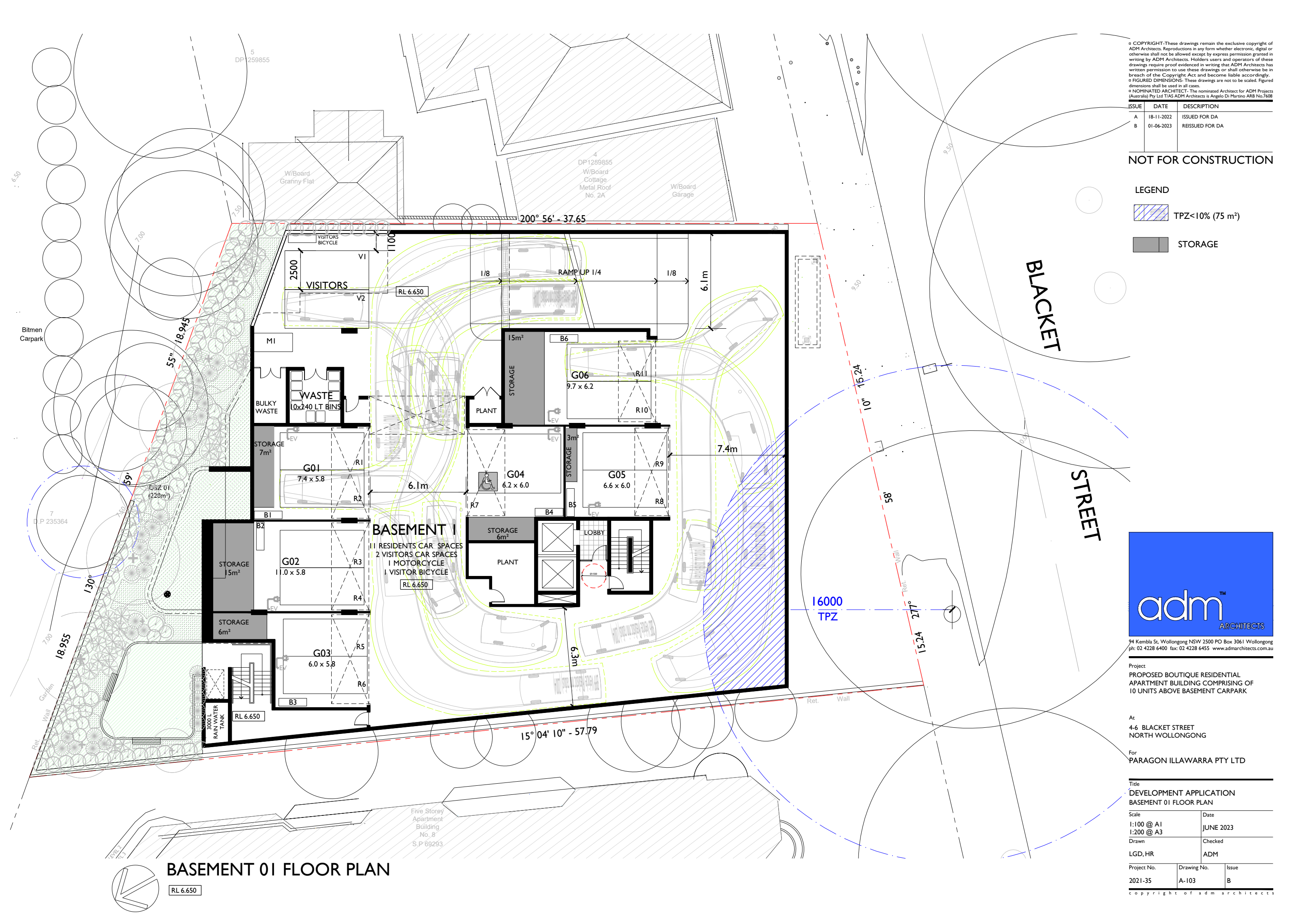
Title
DEVELOPMENT APPLICATION
BASEMENT 01 FLOOR PLAN

Scale 1:100 @ A1 1:200 @ A3	Date JUNE 2023
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Drawn LGD, HR	Checked ADM
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Project No. 2021-35	Drawing No. A-103	Issue B
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BASEMENT 01 FLOOR PLAN

RL 6.650

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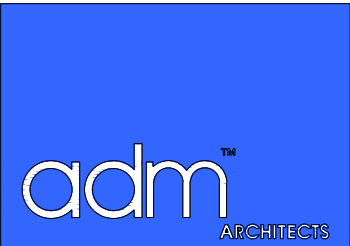
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DSZ PLANTING ZONE

DSZ > 371m² (24%)

STORAGESUNLIGHT ACCESSCROSS VENTILATION

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NORTH WOLLONGONG

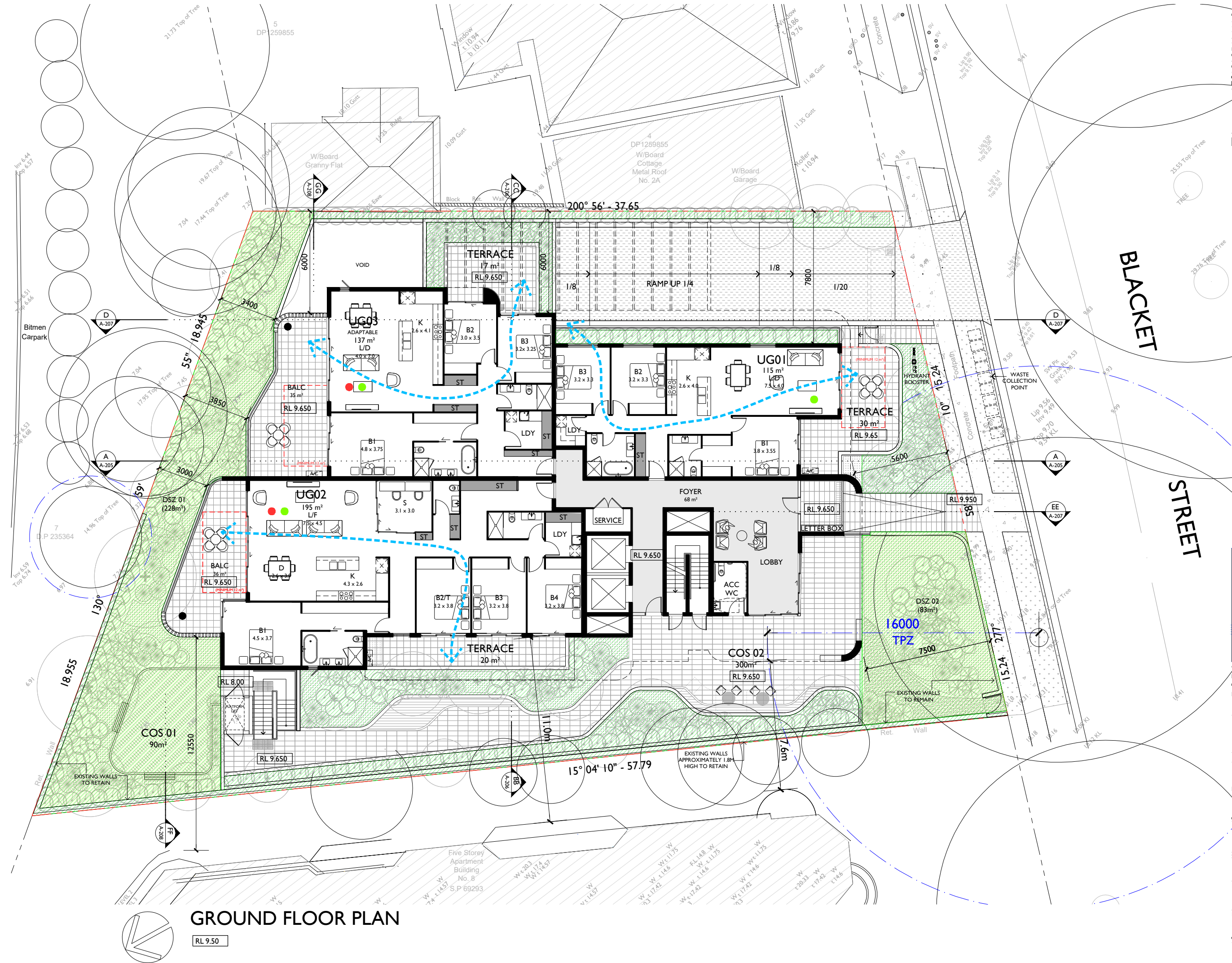
For
PARAGON ILLAWARRA PTY LTD

Title
DEVELOPMENT APPLICATION
GROUND FLOOR PLAN

Scale 1:100 @ A1 1:200 @ A3	Date JUNE 2023
Drawn	Checked
LGD, HR	ADM

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GROUND FLOOR PLAN

RL 9.50

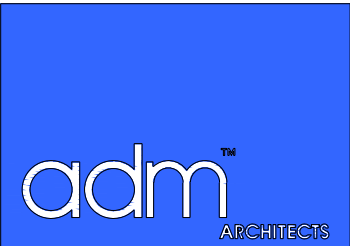
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NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title
DEVELOPMENT APPLICATION
LEVEL 01 FLOOR PLAN

Scale
1:100 @ A1
1:200 @ A3

Date
JUNE 2023

Drawn
LGD, HR

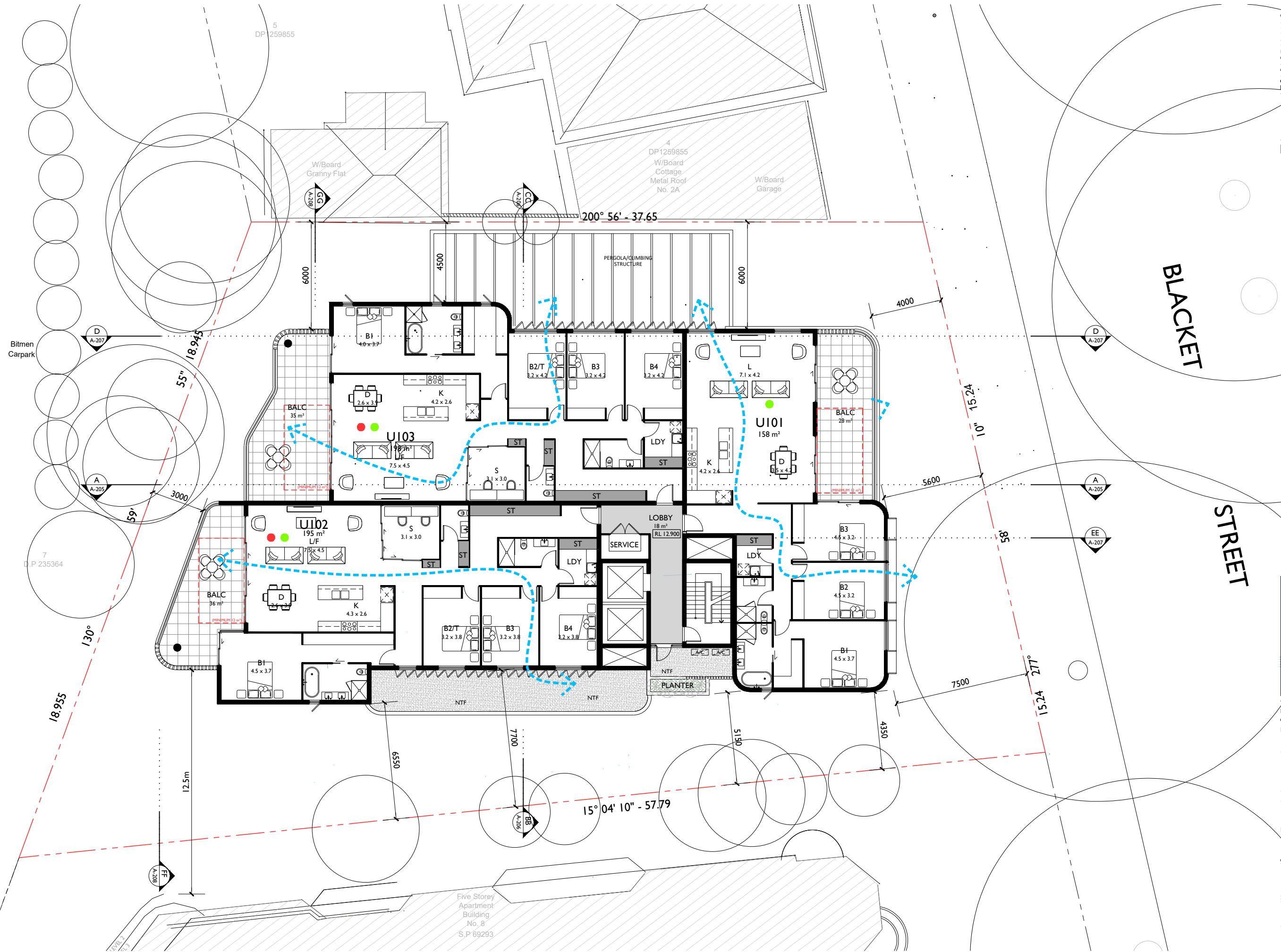
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LEVEL 01 FLOOR PLAN

RL 12.900

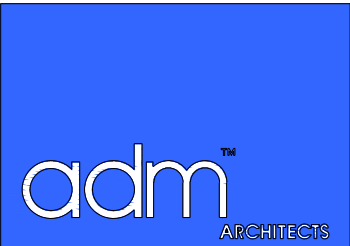
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For
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Title DEVELOPMENT APPLICATION LEVEL 02 FLOOR PLAN		
Scale 1:100 @ A1 1:200 @ A3	Date JUNE 2023	
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LEVEL 02 FLOOR PLAN

RL 16.150

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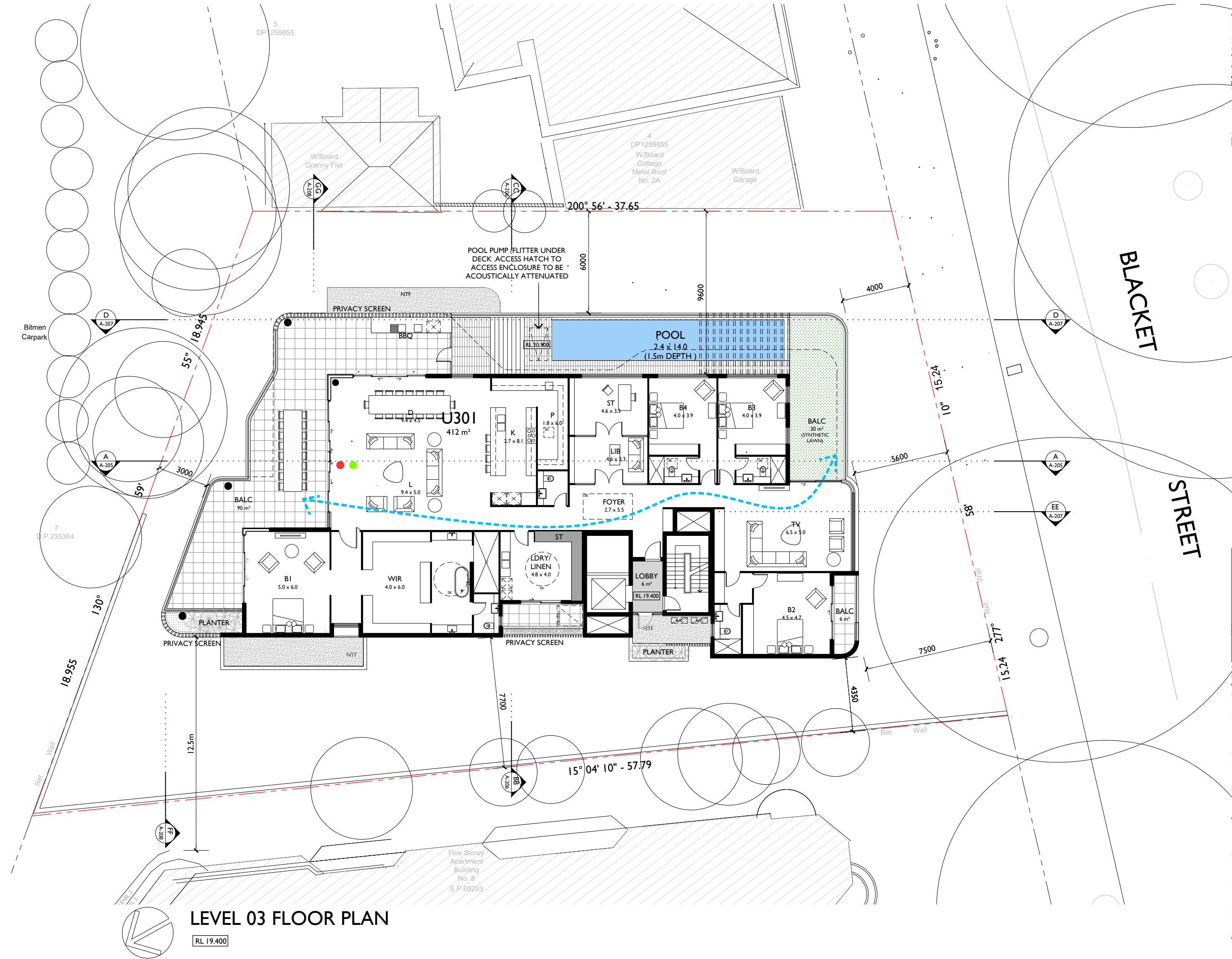
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At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
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Title DEVELOPMENT APPLICATION LEVEL 03 FLOOR PLAN		
Scale 1:100 @ A1 1:200 @ A3	Date JUNE 2023	
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NORTH ELEVATION



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At
4-6 BLACKET STREET
NORTH WOLLONGONG

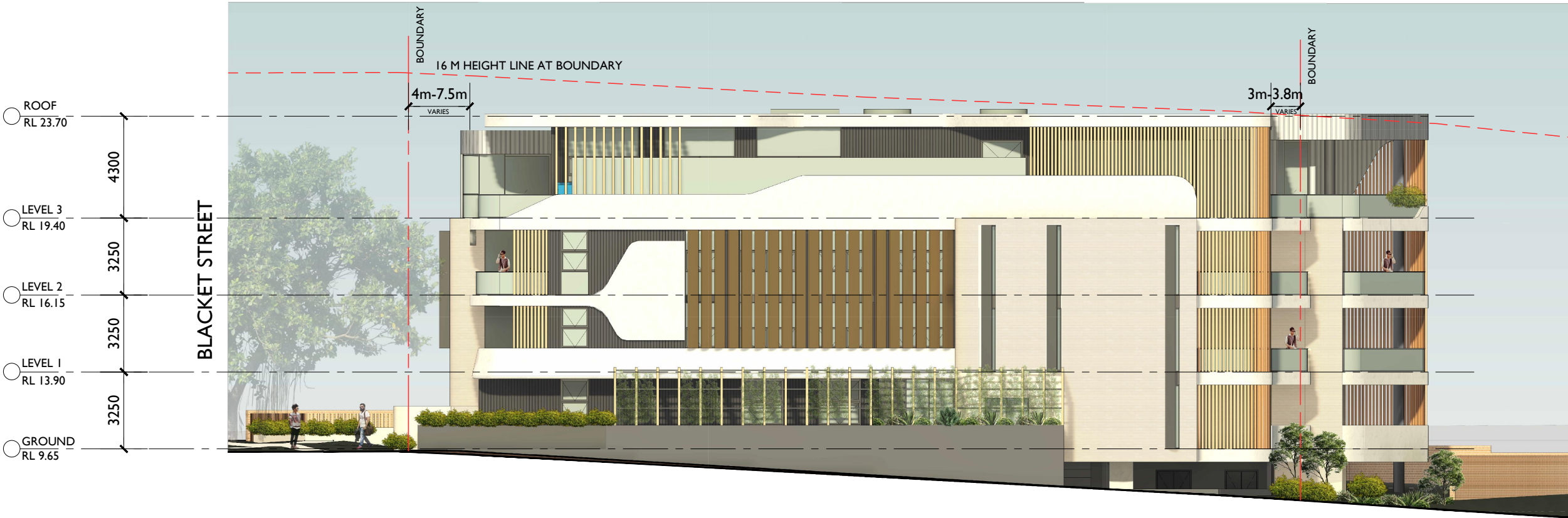
For
PARAGON ILLAWARRA PTY LTD

Title		
DEVELOPMENT APPLICATION NORTH ELEVATION		
Scale		Date
1:100 @ A1 1:200 @ A3		JUNE 2023
Drawn		Checked
LGD, HR		ADM
Project No.	Drawing No.	Issue
2021-35	A-201	B

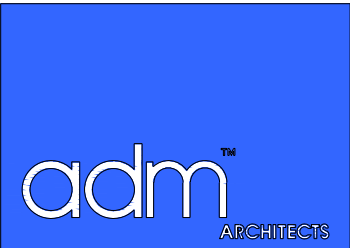
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ISSUE	DATE	DESCRIPTION
A	18-11-2022	ISSUED FOR DA
B	01-06-2023	REISSUED FOR DA

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EAST ELEVATION



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Project
PROPOSED BOUTIQUE RESIDENTIAL
APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

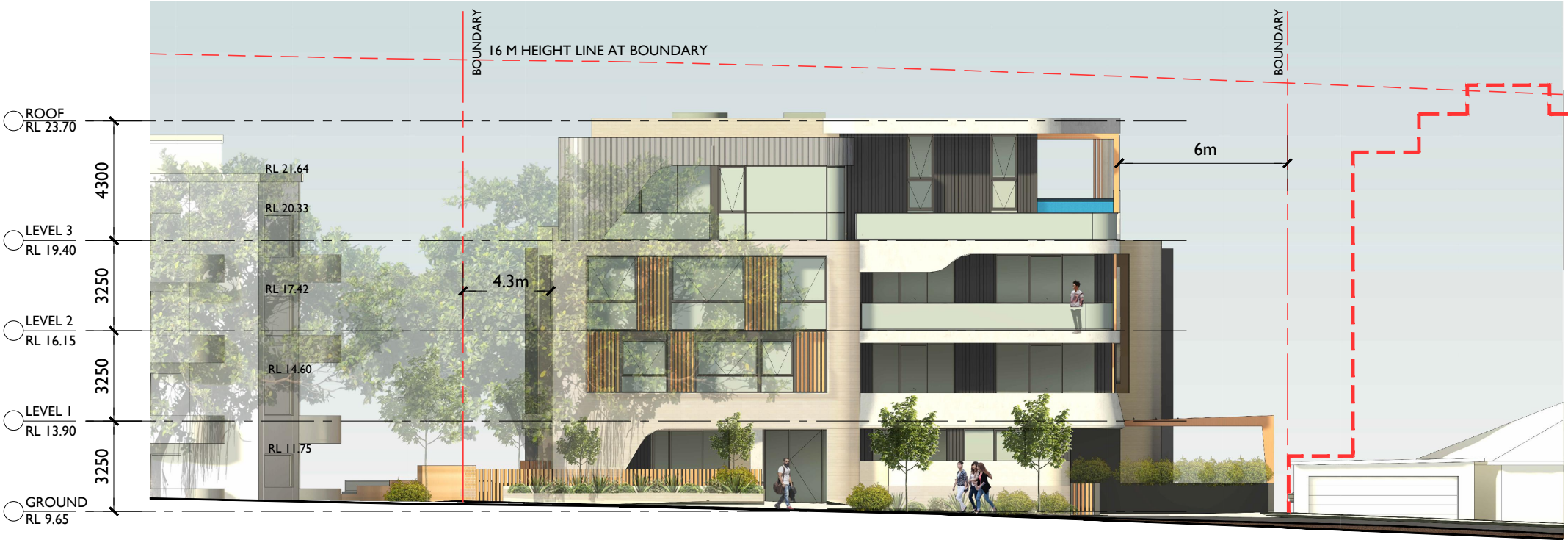
Title		
DEVELOPMENT APPLICATION EAST ELEVATION		
Scale		Date
1:100 @ A1 1:200 @ A3		JUNE 2023
Drawn		Checked
LGD, HR		ADM
Project No.	Drawing No.	Issue
2021-35	A-202	B

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SOUTH ELEVATION
BLACKET STREET ASPECT



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APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title		
DEVELOPMENT APPLICATION SOUTH ELEVATION		
Scale		Date
1:100 @ A1 1:200 @ A3		JUNE 2023
Drawn		Checked
LGD, HR		ADM
Project No.	Drawing No.	Issue
2021-35	A-203	B

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WEST ELEVATION



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APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title DEVELOPMENT APPLICATION WEST ELEVATION		
Scale 1:100 @ A1 1:200 @ A3		Date JUNE 2023
Drawn LGD, HR		Checked ADM
Project No. 2021-35	Drawing No. A-204	Issue B

ISSUE	DATE	DESCRIPTION
A	18-11-2022	ISSUED FOR DA
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This architectural section drawing illustrates the vertical profile of a building facade, detailing levels, heights, and room layouts. The drawing is oriented with the building's front facade on the left and the rear on the right.

Vertical Levels and Heights:

- ROOF:** RL 23.70
- LEVEL 3:** RL 19.40
- LEVEL 2:** RL 16.15
- LEVEL 1:** RL 12.90
- GROUND:** RL 9.65
- BASEMENT 1:** RL 6.65
- BASEMENT 2:** RL 3.65

Horizontal Dimensions and Features:

- Blacket Street:** Indicated on the left side of the drawing.
- 16 M HEIGHT LINE:** A dashed red line indicating a height constraint.
- 4m-7.5m Varies:** Dimension for the width of the building at the roof level.
- 3m-3.8m Varies:** Dimension for the width of the building at the ground level.
- NATURAL GROUNDLINE:** A dashed line indicating the ground level below the basement.
- CARPARK:** Located at the bottom right of the drawing.

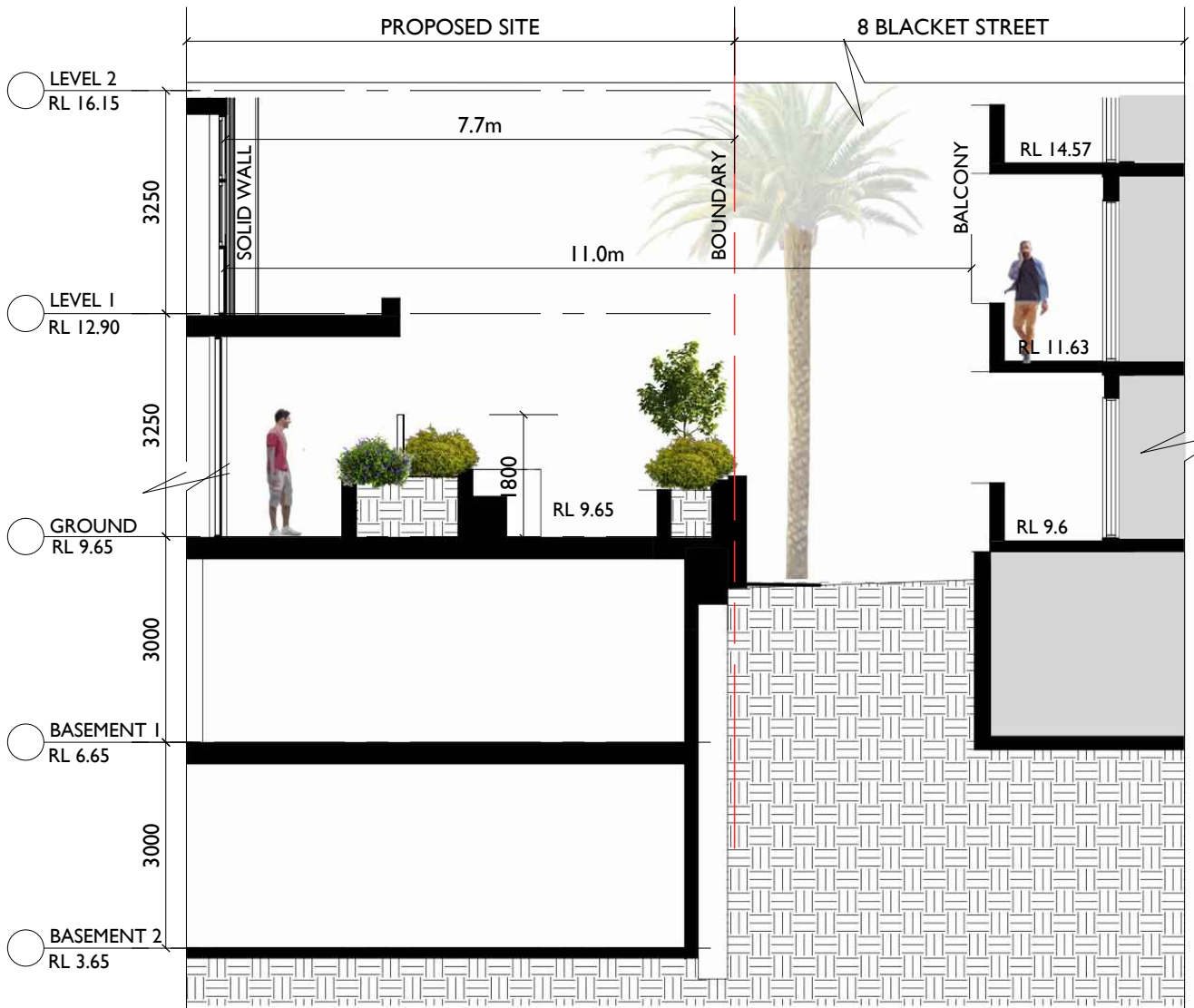
Room Layouts and Details:

- Level 3:** Contains room U301.
- Level 2:** Contains rooms U201 and U203.
- Level 1:** Contains rooms U101 and U103.
- Ground Level:** Contains rooms UG01 and UG03.
- Basement 1:** Contains rooms UG01 and UG03.
- Basement 2:** Contains rooms UG01 and UG03.
- Staircase:** Located on the right side of the building, between Level 2 and Level 3.
- Entrances:** Indicated by small figures of people at the ground level and on Level 2.
- Windows:** Large windows are shown on Level 2 and Level 3.
- Minimum 3400:** Dimension for the height of the building from the ground level to the roof.

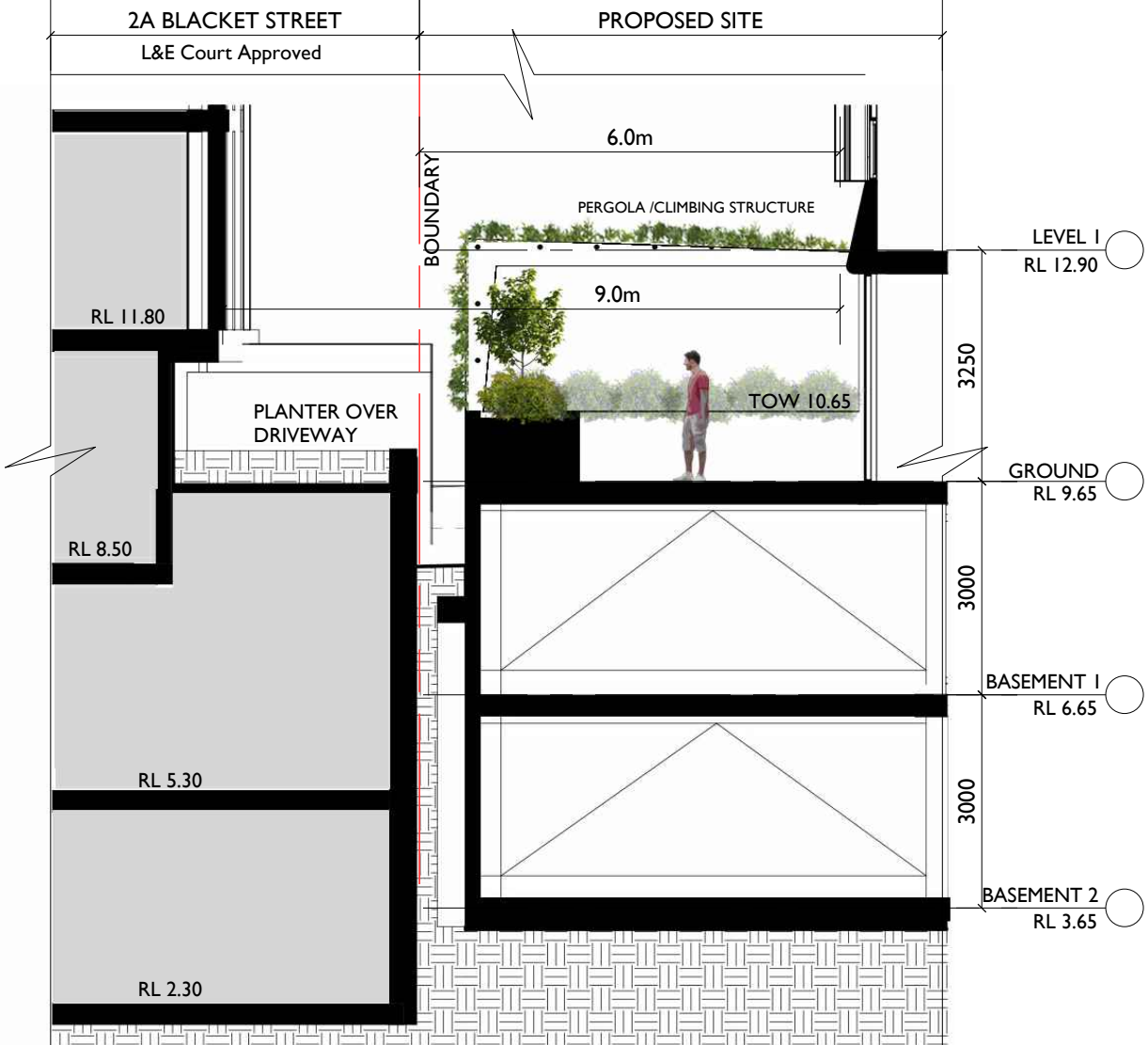


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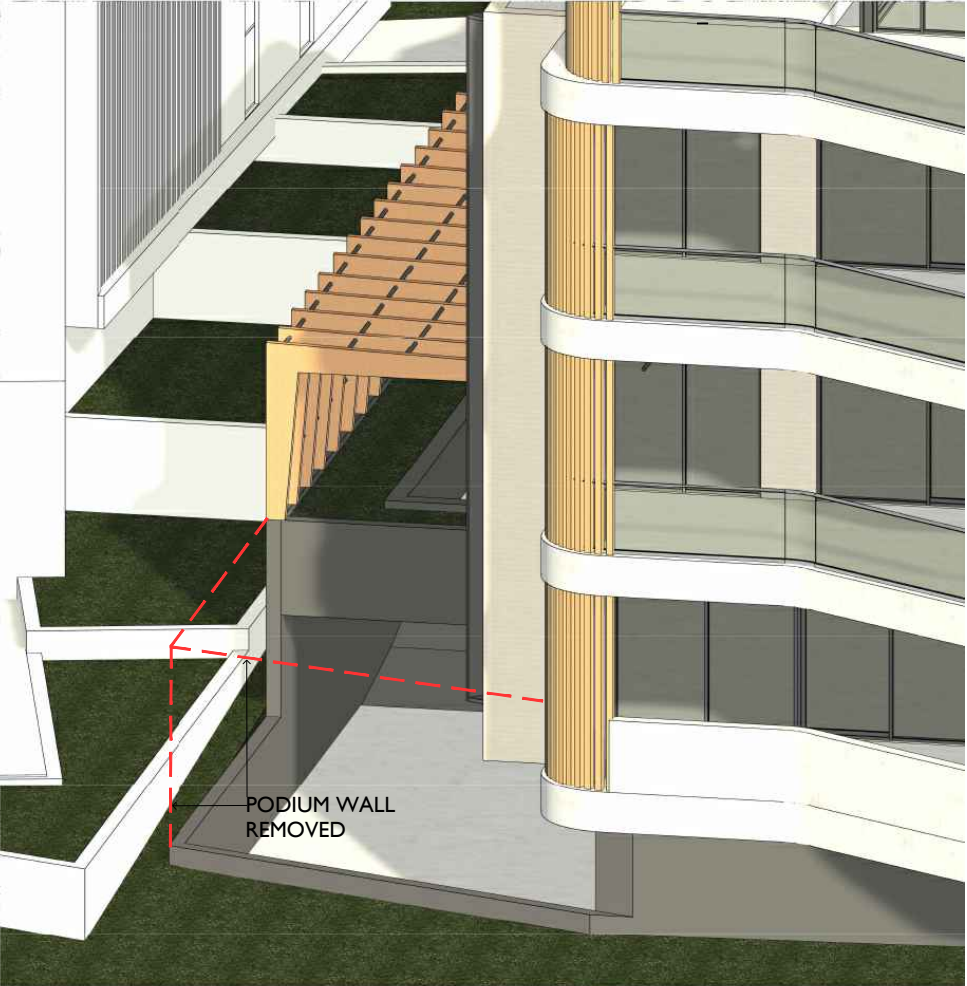
Tide		
DEVELOPMENT APPLICATION		
SECTION A-A		
Scale 1:100 @ A1 1:200 @ A3	Date JUNE 2023	
Drawn LGD, HR	Checked ADM	
Project No. 2021-35	Drawing No. A-205	Issue B



INTERFACE PART SECTION BB



INTERFACE PART SECTION CC



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ISSUE	DATE	DESCRIPTION
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Project
PROPOSED BOUTIQUE RESIDENTIAL
APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

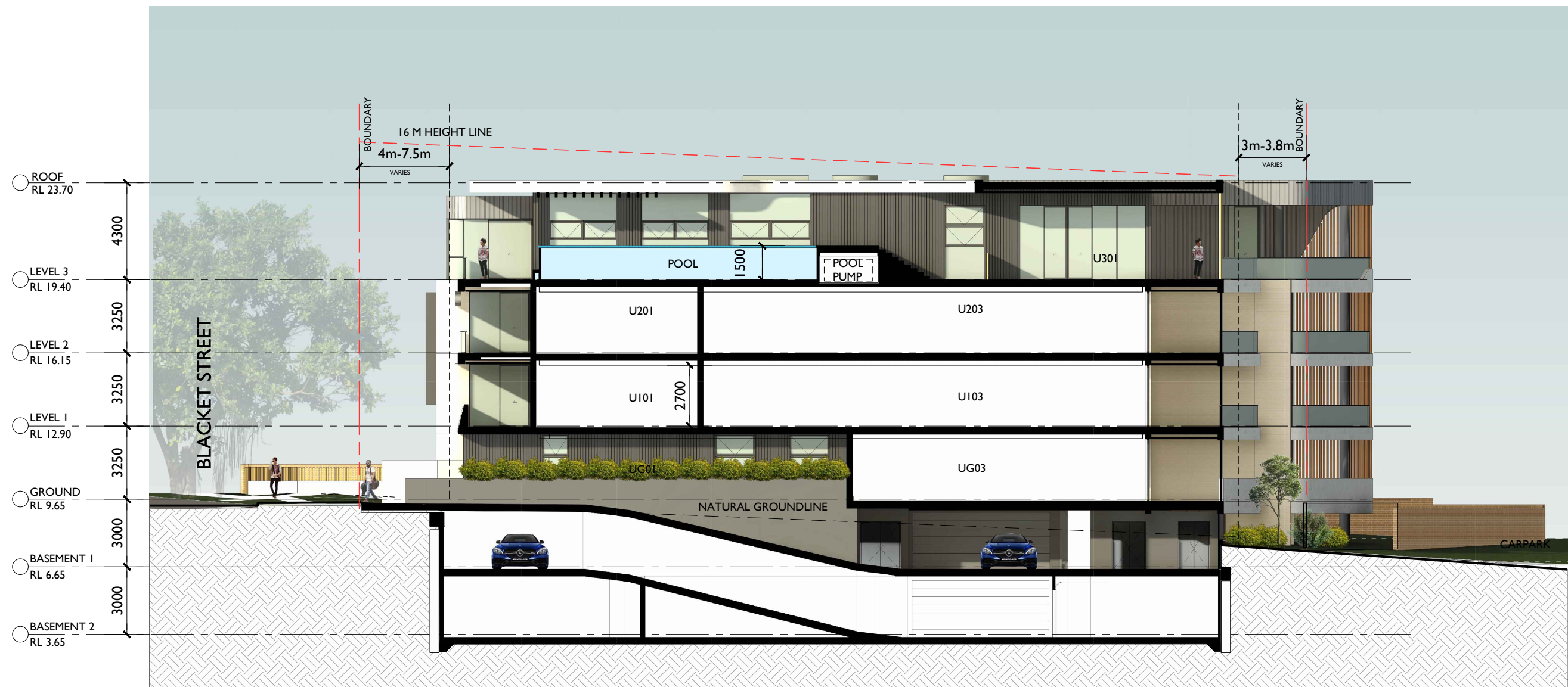
Title
DEVELOPMENT APPLICATION
INTERFACE SECTIONS 01

Scale
1:50 @ A1
1:100 @ A3
Date
JUNE 2023

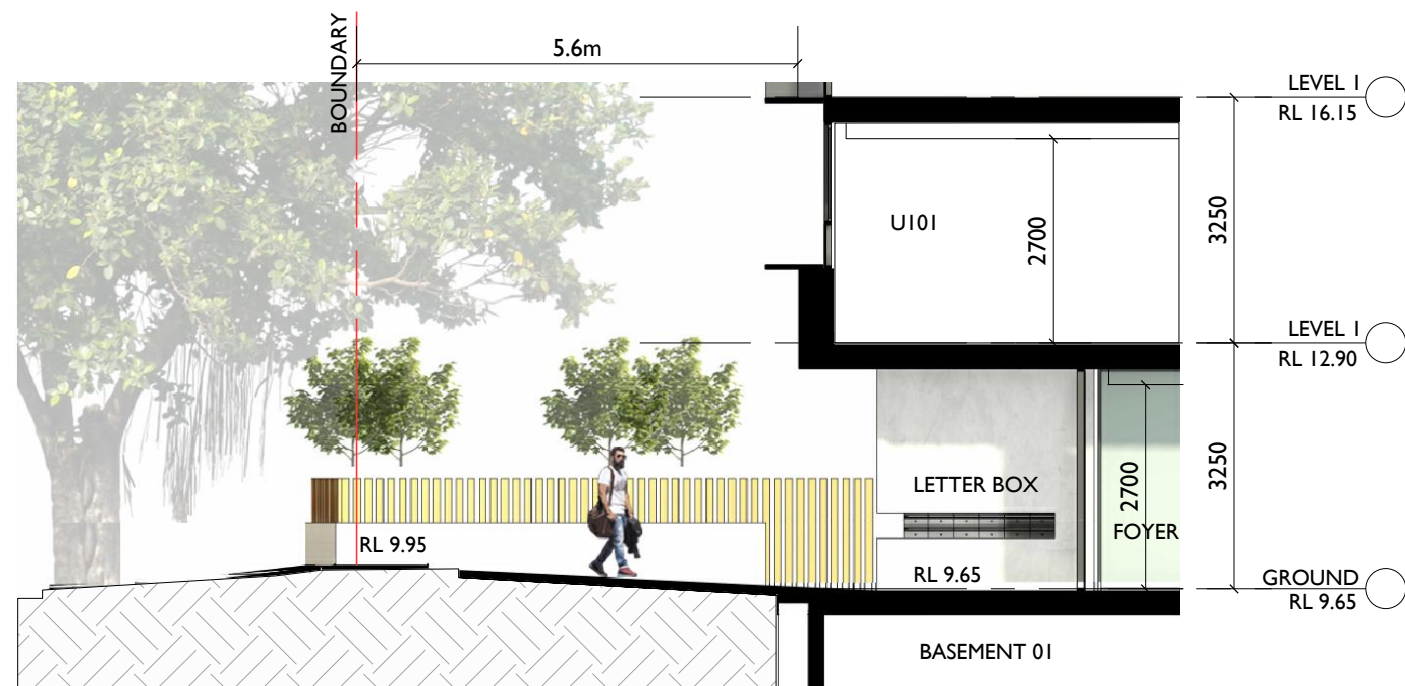
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Project No.
2021-35
Drawing No.
A-206
Issue
B

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01 SECTION DD
SCALE : 1:200@ A3

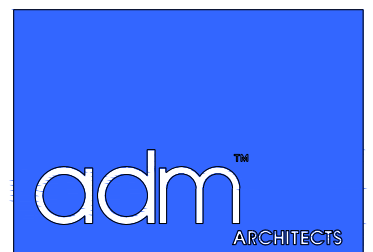


02 SECTION EE PART SECTION ENTRY (BLACKET STREET)
SCALE : 1:100@ A3

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Project
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APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title
DEVELOPMENT APPLICATION
SECTIONS

Scale
1:100 @ A1
1:200 @ A3

Date
JUNE 2023

Drawn
LGD, HR

Checked
ADM

Project No.
2021-35

Drawing No.
A-207

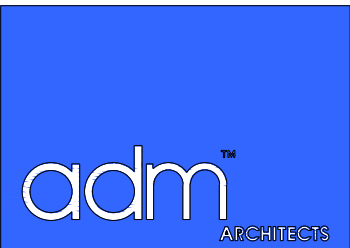
Issue
A

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ISSUE	DATE	DESCRIPTION
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Project
PROPOSED BOUTIQUE RESIDENTIAL
APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

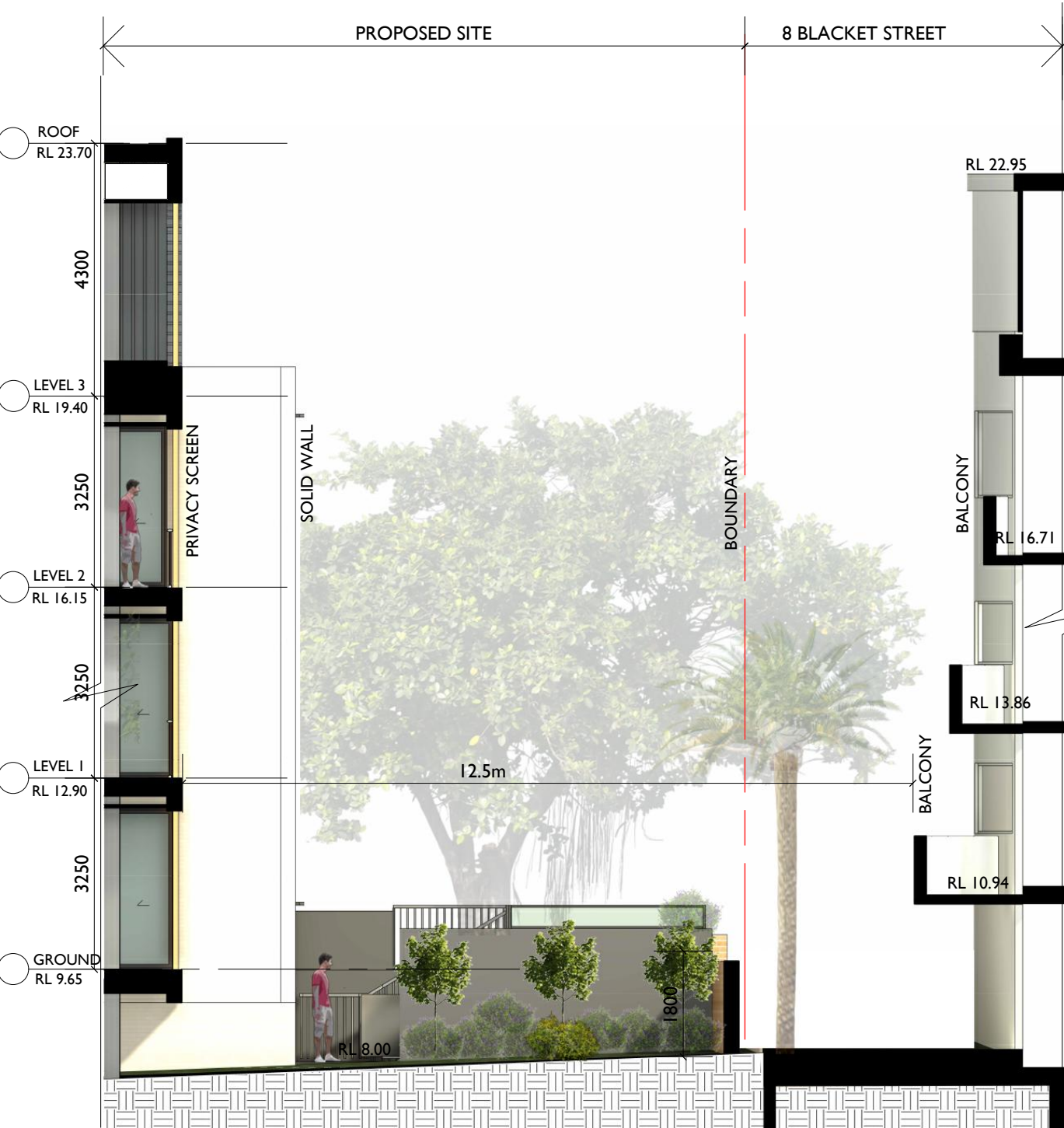
Title
DEVELOPMENT APPLICATION
INTERFACE SECTIONS 02

Scale 1:50 @ A1 1:100 @ A3	Date JUNE 2023
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Drawn LGD, HR	Checked ADM
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Project No. 2021-35	Drawing No. A-208	Issue A
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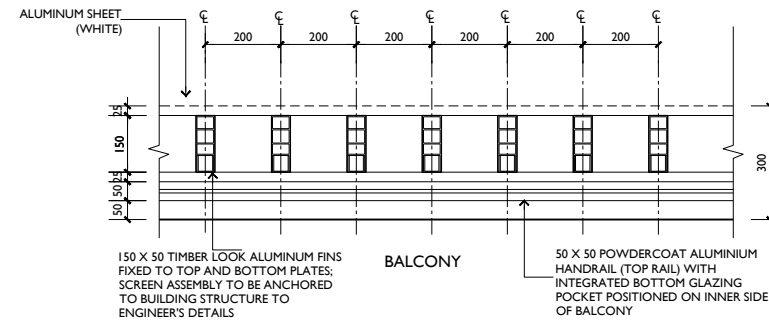
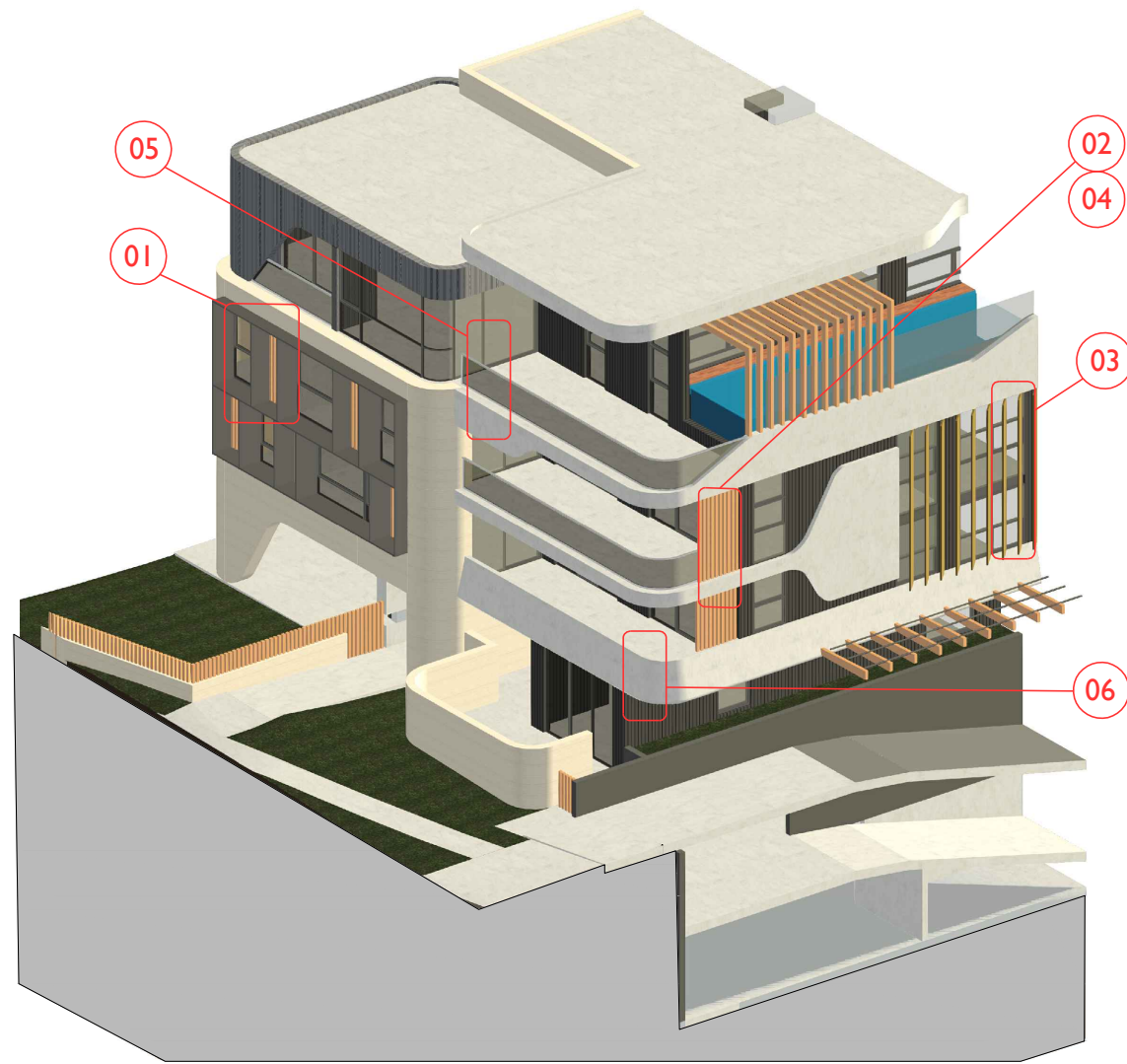


INTERFACE PART SECTION FF

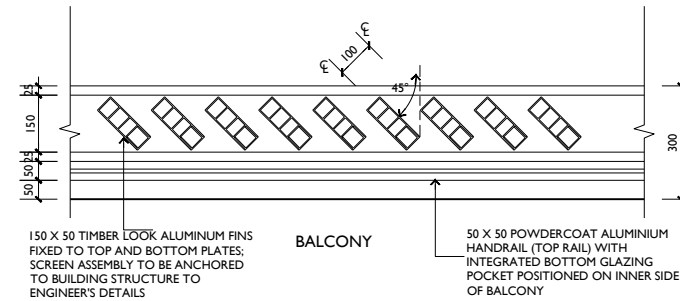
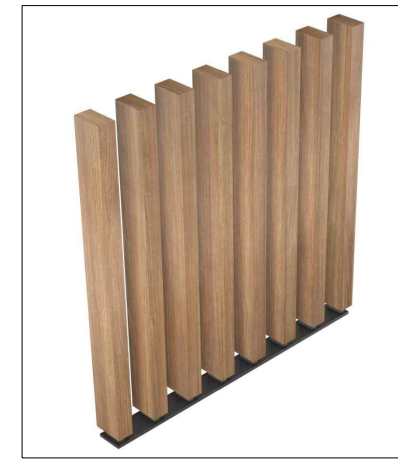


INTERFACE PART SECTION GG

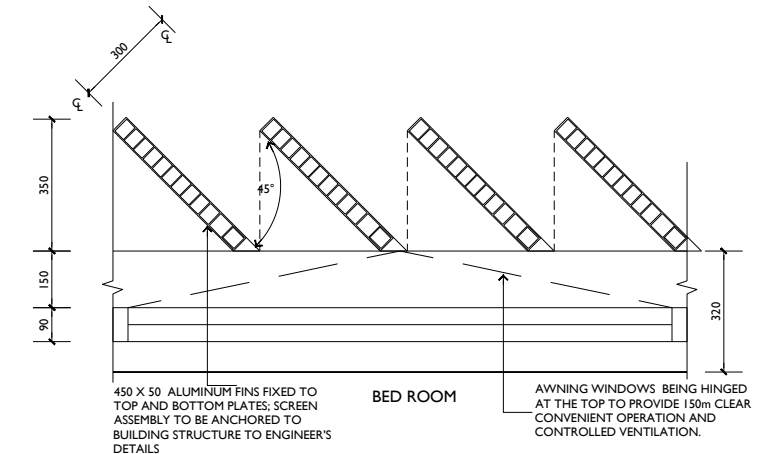
FACADE DETAIL- ISOMETRIC



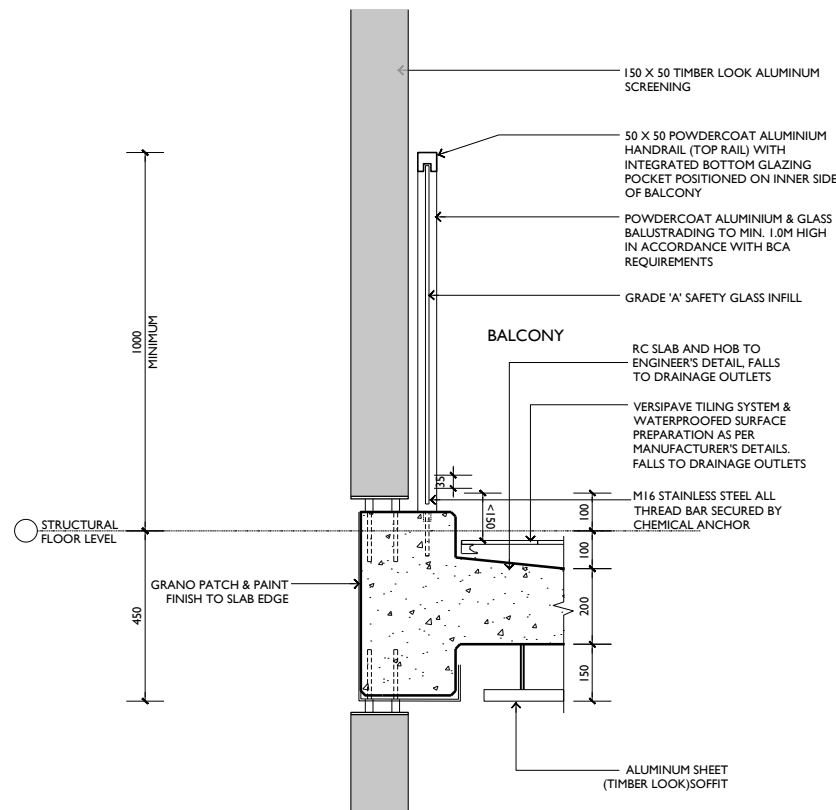
01 TYPICAL GLAZED BALUSTRADE & SCREEN PLAN
SCALE 1:10 @ A1 (NO PRIVACY ISSUE)



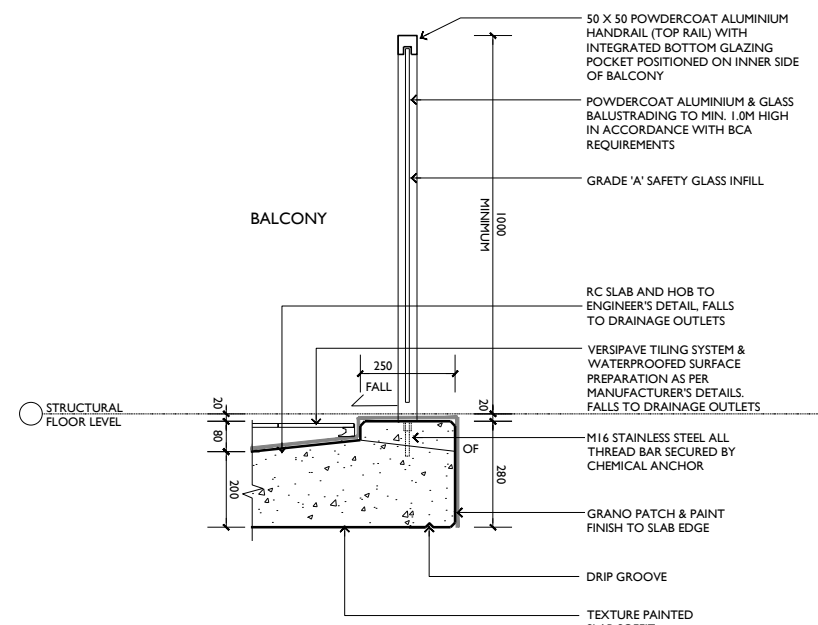
02 TYPICAL SOLID BALUSTRADE & SCREEN PLAN
SCALE 1:10 @ A1 (FOR PRIVACY)



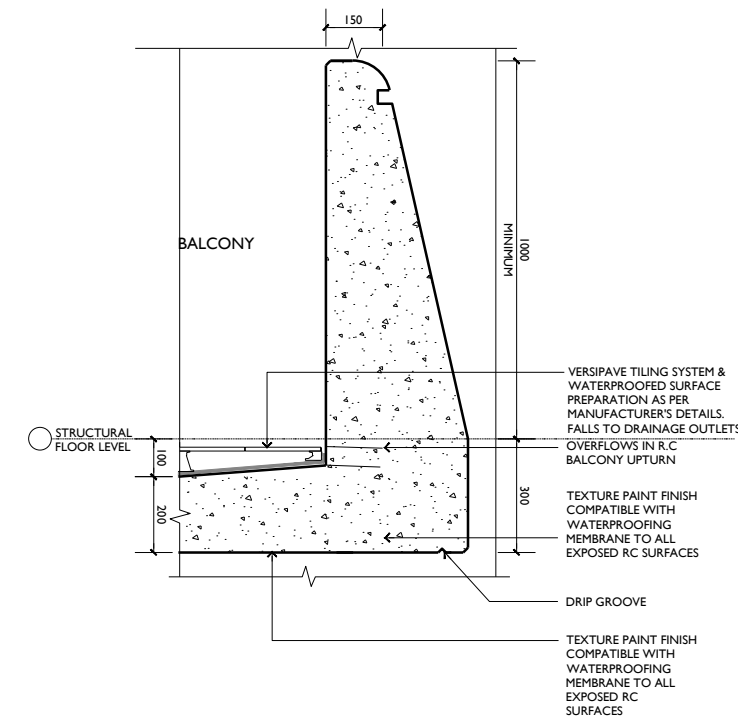
03 TYPICAL WINDOWS & SCREEN PLAN
SCALE 1:10 @ A1 (FOR PRIVACY)



04 TYPICAL GLAZED BALUSTRADE & SCREEN SECTION
SCALE 1:10 @ A1



05 TYPICAL GLAZED BALUSTRADE
SCALE 1:10 @ A1



06 TYPICAL SOLID BALUSTRADE
SCALE 1:10 @ A1

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Project
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APARTMENT BUILDING COMPRISING OF
10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title
DEVELOPMENT APPLICATION
FACADE DESIGN SECTION

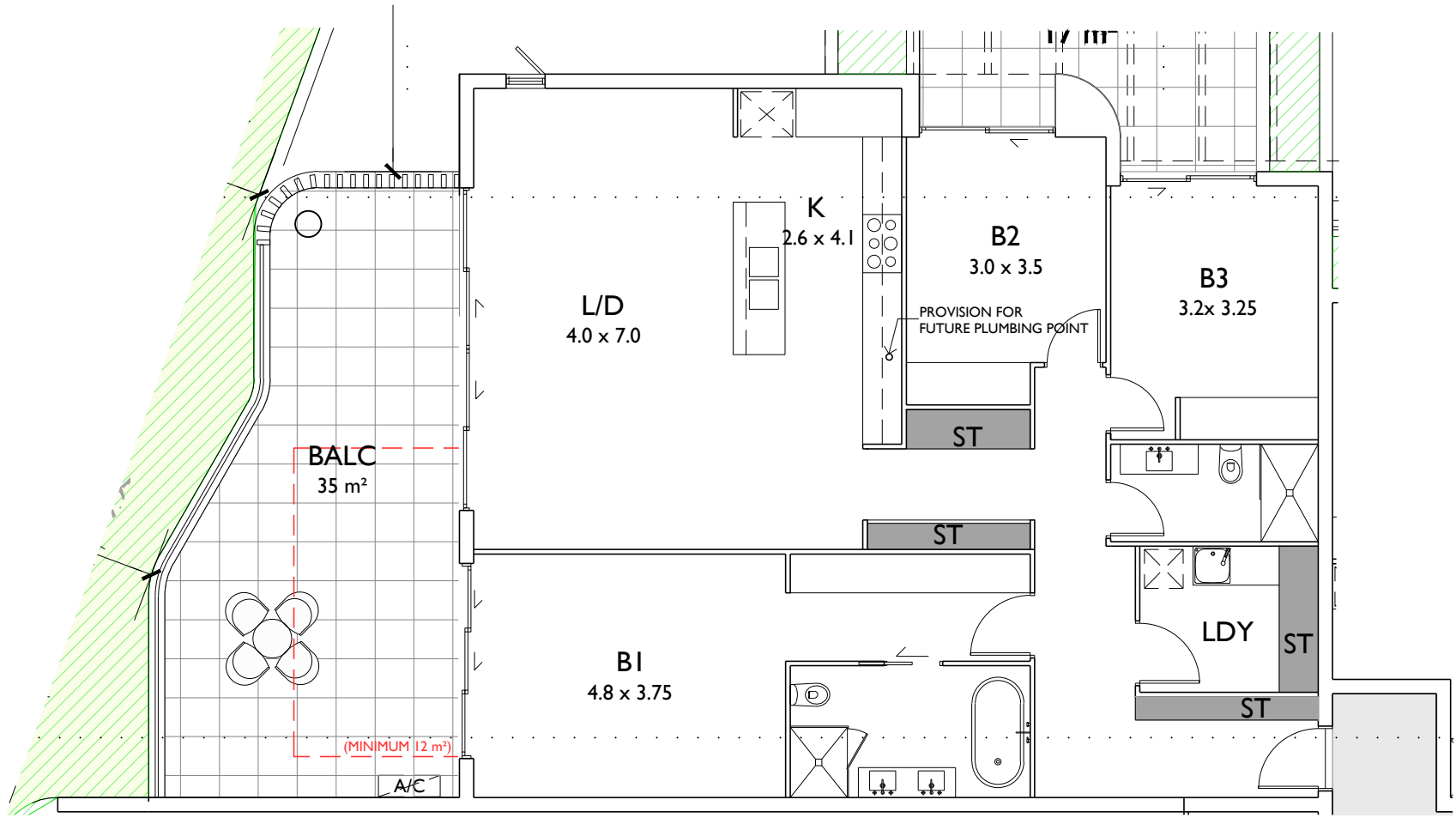
Scale	AS NOTED	Date	JUNE 2023
Drawn	LGD, HR	Checked	ADM
Project No.	2021-35	Drawing No.	A-209
		Issue	A

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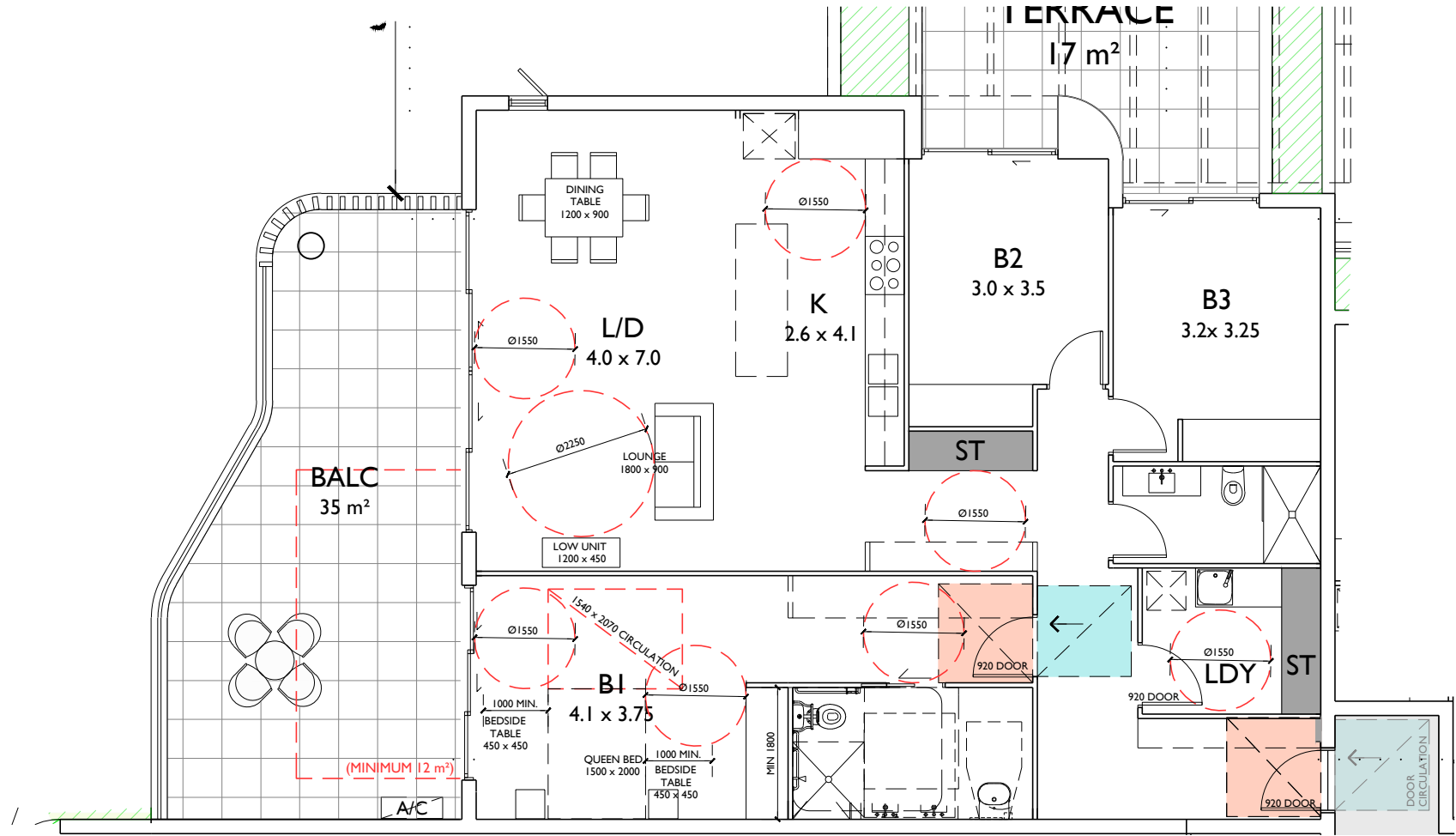
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PRE - ADAPTATION PLAN

UNIT UG03 (AS SHOWN)
CLASS C ADAPTABLE UNIT TO AS 4299



POST - ADAPTATION PLAN

UNIT UG03 (AS SHOWN)
REFER TO ACCESS CONSULTANTS REPORT



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10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title		
DEVELOPMENT APPLICATION PRE AND POST ADAPTATION PLAN		
Scale	Date	
1:50 @ A1 1:100 @ A3	JUNE 2023	
Drawn	Checked	
LGD, HR	ADM	
Project No.	Drawing No.	Issue
2021-35	A-301	B



COLOUR AND MATERIALS SCHEDULE

1

DULUX
MONUMENT
WALLING , WALL RENDER

2

DULUX
LEXICON WHITE
CONCRETE EDGES,
WALLING,WALL RENDER

3

TIMBER LOOK
ALUMINIUM
LIGHT OAK
SCREENING
PANELS

4

TINTED GLAZING
GLAZING ELEMENTS AND
BALUSTRADES

5

POWDERCOAT
MONUMENT
DOOR AND WINDOW
FRAMES, HANDRAILS, AND
SCREENING

6

AUSTRAL
CHILLINGHAM BRICK

WALLING

7

ALUMINUM SHEET
CLADDING WITH JOINTS
(NON COMBUSTIBLE)
WINDSPRAY

8

ALUMINUM SHEET
CLADDING WITH JOINTS
(NON COMBUSTIBLE)
MONUMENT

9

METALLIC LOUVERS
ELECTRO
NEW COPPER KINETIC

LOUVRES & SUNSHADES

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10 UNITS ABOVE BASEMENT CARPARK

At
4-6 BLACKET STREET
NORTH WOLLONGONG

For
PARAGON ILLAWARRA PTY LTD

Title		
DEVELOPMENT APPLICATION COLOUR & MATERIALS SCHEDULE		
Scale	Date	
NTS	JUNE 2023	
Drawn	Checked	
LGD, HR	ADM	
Project No.	Drawing No.	Issue
2021-35	A-601	B

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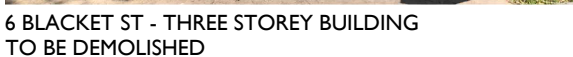
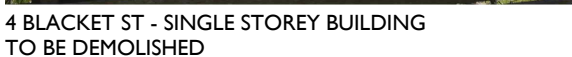
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SEDIMENT FENCE NOTES

1. Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in this drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water-flow if concentrated at one point to 50 litres per second in the design storm (1 in 10 years).
2. Cut a 150 mm deep trench along the slope line of the fence for the bottom of the fabric to be entrenched.
3. Drive 15 mm rebar long stakes into ground at 2.5 metre intervals (max) at the downslope edge of the trench. Ensure any stake points are fitted with safety caps.
4. Fill self-supporting geotextile to the upper edge of the posts ensuring it goes to the base of the trench. Tie the geotextile with wire or tie it as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth is not recommended.
5. Join sections of fabric at a support post with a 150 mm overlap.
6. Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

- Construct sediment fences as close as possible to being parallel to the contours of the site, but with small returns as shown in the drawing to limit the catchment area of any one section. The catchment area should be small enough to limit water flow concentrated at one point to 50 litres per second in the design storm event, usually the 10-year event.
- Cut a 150-mm deep trench along the upslope line of the fence for the bottom of the fabric to be entrenched.
- Drive 1.5-metre long star pickets into ground at 2.5-metre intervals (max) at the downslope edge of the trench. Ensure any star pickets are fitted with safety caps.
- Use self-supporting geotextile to the upslope side of the posts ensuring it goes to the base of the trench. Fix the geotextile with wire ties or as recommended by the manufacturer. Only use geotextile specifically produced for sediment fencing. The use of shade cloth for this purpose is satisfactory.
- Join sections of fabric at a support post with a 150-mm overlap.
- Backfill the trench over the base of the fabric and compact it thoroughly over the geotextile.

10







MASTER LEGEND

SITE BOUNDARY
Refer To Project Survey Drawing

EXISTING TREE LOCATIONS
To Be Removed

EXISTING TREE LOCATIONS
To Be Retained & Protected

FINISHES

PT-1	UNIT PAVING	PT-4	PERMEABLE PAVING
PT-2	UNIT PAVING	PT-5	CONCRETE PATH Black Oxide Coloured Concrete, Exposed Blue Metal Aggregate Finish In Accordance With WCC PDTM
PT-3	DRIVEWAY CONCRETE Plain Cove Finish Concrete in accordance with WCC PDTM	PT-6	TIMBER DECKING
WT-1	RAISED PLANTERS & WALL	GE	GARDEN EDGING
GR-1	TURF	GR-2	SYNTHETIC TURF
TIMBER BENCH SEATING Integrated Bench Seating To Planter Wall		ARBOR STRUCTURE	
STORMWATER Refer to Engineers Detail			

SPECIES LIST				
CODE	BOTANICAL NAME	COMMON NAME	MIN. SIZE	MATURE SIZE
TREE SPECIES				
DRd	Dracena draco	Dragon Tree	75L	15.0m / 6.0m
DYl	Dypsis lutescens	Golden Cane Palm	75L	9.0m / 3.0m
Lla	Livistona australis	Cabbage Tree Palm	75L	20.0m / 8.0m
Lis	Lagerstroemia indica x L. Fauriei 'Biloxi'	Crape Myrtle	75L	4.0m / 4.0m
Mtb	Magnolia grandiflora 'Teddy Bear'	Saucer Magnolia	75L	4.0m / 3.0m
Pla	Plumeria acutifolia	Frangipani	75L	7.0m / 6.0m
Wfs	Waterhousea floribunda	Waterhousea	75L	10.0m / 5.0m
Yuf	Yucca filamentosa	Yucca	75L	1.0m / 1.5m

SHRUB SPECIES - Mix Native & Exotic				
Aln	Alpinia nutans	Dwarf Cardamom	200mm	1.2m / 1.0m
BAI	Banksia 'Little Pal'	Dwarf Swamp Banksia	200mm	0.5m / 1.5m
Cor	Correa reflexa var. nummularifolia	Prostrate Correa	200mm	0.5m / 1.5m
Eua	Euphorbia amygdaloides var. robbiae	Mrs. Robb's Hatbox	200mm	0.4m / 0.6m
Hym	Hydrangea macrophylla 'Pia Mina'	Pia Mina Hydrangea	200mm	0.6m / 0.6m
HLg	Hebe 'Lime Green'	Lime Green Hebe	200mm	0.6m / 0.6m
Lam	Lavandula munstead	Dwarf Lavender	200mm	0.7m / 0.7m
Mly	Michelia yunnanensis	Scented Pearl Magnolia	200mm	2.5m / 1.5m
POT	Pittosporum tobira 'Miss Muffet'	Dwarf Pittosporum	200mm	1.0m / 1.2m
PHx	Philodendron 'Xanadu'	Philodendron	200mm	0.9m / 1.2m
STR	Strelitzia reginae	Bird of paradise flower	200mm	1.5m / 2.5m
Gal	Gardenia augusta 'Florida'	Fragrant Gardenia	200mm	1.0m / 0.5m
WEg	Westringia 'Grey Box'	Coastal Rosemary	200mm	0.5m / 0.5m

GRASSES & SUCCULENTS - Mix Native & Exotic				
DLcb	Dianella 'Cassa Blue'	Flax Lily	140mm	0.5m / 0.4m
Dig	Dielsia grandiflora 'Grand Star'	African Iris	140mm	0.5m / 0.4m
LDip	Lomandra 'Little Pal'	Superbush	140mm	0.8m / 0.5m
LPs	Liriope 'Samantha'	Liriope	140mm	0.5m / 0.5m
FEg	Festuca glauca	Blue Fescue	140mm	0.3m / 0.3m

GROUND COVER SPECIES - Mix Native & Exotic				
CAC	Casuarina 'Cousin It'	Cousin It	140mm	0.15m / 1.0m
CAG	Carpobrotus glaucescens	Pig Face	140mm	0.2m / 2.0m
CVs	Convolvulus sabatius	Ground Morning Glory	140mm	0.15m / 0.6m
Dir	Dichondra repens	Kidney Weed	140mm	0.15m / 2.0m
DCs	Dichondra argentea 'Silver Falls'	Dichondra	140mm	0.15m / 0.8m
Gao	Gardenia augusta 'O So Fine'	O So Fine Gardenia	140mm	0.3m / 1.0m
MYp	Myoporum parvifolium 'Yareena'	Creeping boobialla	140mm	0.1m / 1.0m
SES	Senecio serpens	Blue Chalksticks	140mm	0.3m / 0.7m
THs	Thymus serpyllum	Creeping Thyme	140mm	0.1m / 0.8m
TRa	Trachelospermum asiaticum 'Shooting Star'	Asiatic Jasmine	140mm	0.3m / 1.5m
Wtm	Westringia fruticosa 'Mundi'	Coastal Rosemary	200mm	2.0m / 2.0m
VOh	Viola hederacea	Native Violet	140mm	0.2m / 0.4m

ACCENTS SPECIES				
ASn	Asplenium nidus	Bird's Nest Fern	140mm	0.8m / 1.5m
AGA	Agave attenuata	Foxtail agave	140mm	1.3m / 2.0m
AGu	Agave utahensis	Utah Agave	200mm	0.5m / 0.7m
DOa	Doodia aspera	Native Rasp Fern	140mm	0.4m / 0.6m
DOe	Doryanthes excelsa	Gymea Lilly	140mm	1.5m / 1.5m
Efa	Echium fastuosum	Pride of Madeira	140mm	1.5m / 1.5m

CLIMBERS				
TRj	Trachelospermum jasminoides	Star Jasmine	140mm	0.5m / 3.0m

DESIGN NOTES

- A** DEEP SOIL ZONE
Mixture Of Native & Exotic Plantings

B DRIVEWAY ENTRY
Tree Lined Driveway Entry With Coastal Themed Plantings

C STREETScape INTERFACE
Driveway Threshold & Streetscape Interface Design In Accordance With WCC Public Domain Technical Manual For Mixed Use /Residential Streets

D GRASS TERRACE
Level Grass Quiet Space With Bench Seating

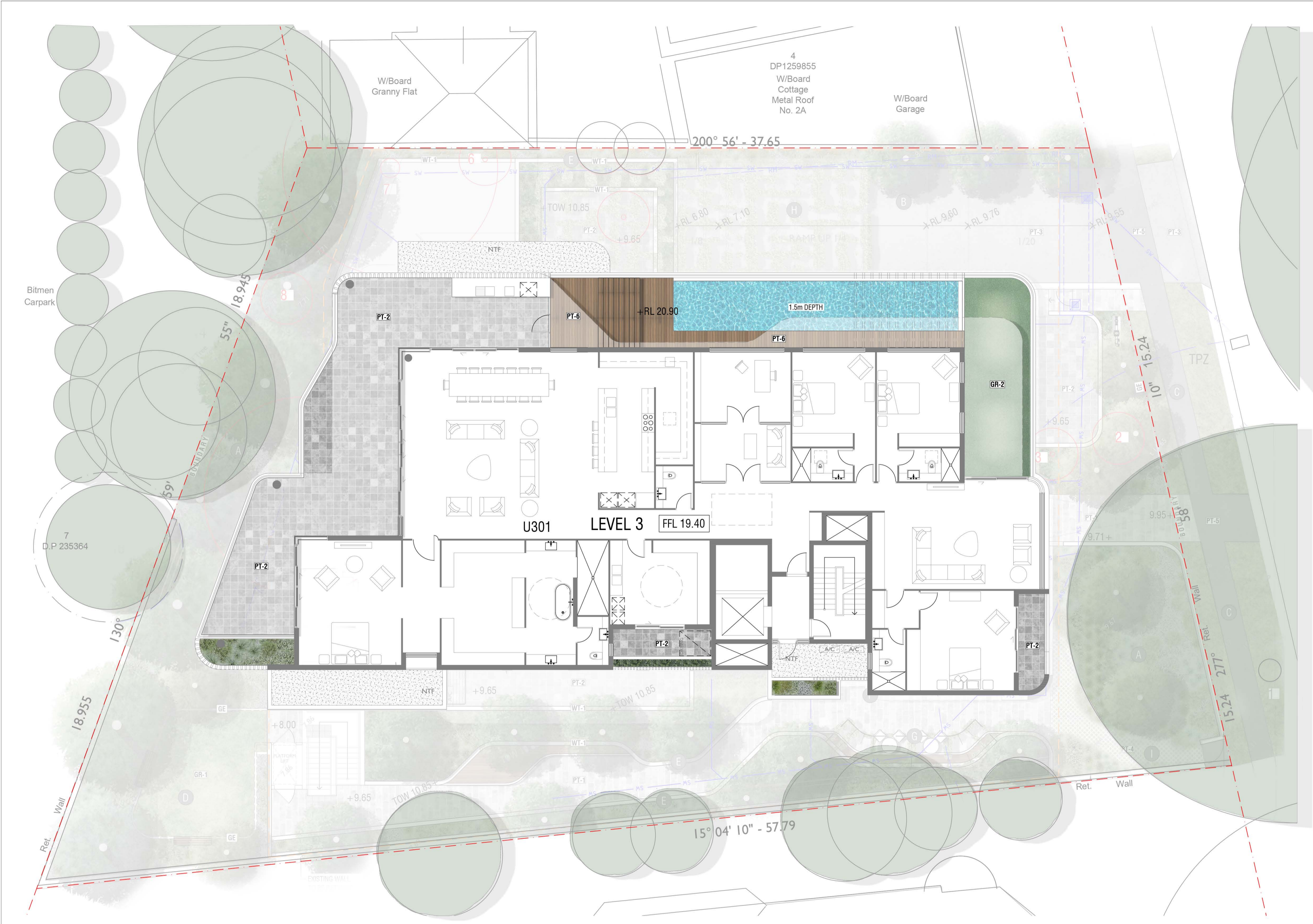
E RAISED PLANTER
Raised Planter With Screen Plantings Providing Separation & Privacy To COS Area & Walkway

F COMMUNAL OPEN SPACE
Communal Open Space Area With Plinth Seating Walls / Picnic Setting Over Flush Timber Decking Breaking Up Extent Of Unit Paving

G ARBOR
Cantilevered Arbor Structure With Integrated Trellis For Green Wall / Roof Providing Privacy & Mitigating Overlooking From Adjacent Building

H WIRE TRELLIS
With Climber Species At Base For 'Green Screen'

I EGRESS PATH
Porous Pavement To Underside Of Tree Retained



MASTER LEGEND

	SITE BOUNDARY Refer To Project Survey Drawing		BASEMENT Refer To Architects Documentation
	EXISTING TREE LOCATIONS To Be Removed		EXISTING TREE LOCATIONS To Be Retained & Protected
FINISHES			
	UNIT PAVING		PERMEABLE PAVING
	UNIT PAVING		CONCRETE PATH Black Oxide Coloured Concrete, Exposed Blue Metal Aggregate Finish In Accordance With WCC PDTM
	DRIVEWAY CONCRETE Plain Cove Finish Concrete in accordance with WCC PDTM		TIMBER DECKING
	RAISED PLANTERS & WALL		GARDEN EDGING
	TURF		SYNTHETIC TURF
	TIMBER BENCH SEATING Integrated Bench Seating To Planter Wall		ARBOR STRUCTURE
	STORMWATER Refer to Engineers Detail		

SPECIES LIST

CODE	BOTANICAL NAME	COMMON NAME	MIN. SIZE	MATURE SIZE Height / Width
TREE SPECIES				
DRd	<i>Dracena draco</i>	Dragon Tree	75L	15.0m / 6.0m
DYl	<i>Dypsis lutescens</i>	Golden Cane Palm	75L	9.0m / 3.0m
Lla	<i>Livistona australis</i>	Cabbage Tree Palm	75L	20.0m / 8.0m
Lis	<i>Lagerstroemia indica</i> x <i>L. Fauriei</i> 'Biloxi'	Crepe Myrtle	75L	4.0m / 4.0m
Mtb	<i>Magnolia grandiflora</i> 'Teddy Bear'	Saucer Magnolia	75L	4.0m / 3.0m
Pla	<i>Plumeria acutifolia</i>	Frangipani	75L	7.0m / 6.0m
Wfs	<i>Waterhousea floribunda</i>	Waterhousea	75L	10.0m / 5.0m
Yuf	<i>Yucca filamentosa</i>	Yucca	75L	1.0m / 1.5m

Note:
Trees shall be grown, containerised and supplied in accordance with AS 2303.

SHRUB SPECIES - Mix Native & Exotic				
Aln	<i>Alpinia nutans</i>	Dwarf Cardamom	200mm	1.2m / 1.0m
BAl	Banksia 'Little Pal'	Dwarf Swamp Banksia	200mm	0.5m / 1.5m
CoR	<i>Correa reflexa</i> var. <i>nummularifolia</i>	Prostrate Correa	200mm	0.5m / 1.5m
Eua	<i>Euphorbia amygdaloides</i> var. <i>robbae</i>	Mrs. Robb's Hatbox	200mm	0.4m / 0.8m
HYm	<i>Hydrangea macrophylla</i> 'Pia Mina'	Pia Mina Hydrangea	200mm	0.6m / 0.8m
HLG	<i>Hebe 'Lime Green'</i>	Lime Green Hebe	200mm	0.6m / 0.8m
LAm	<i>Lavandula munstead</i>	Dwarf Lavender	200mm	0.7m / 0.7m
Myl	<i>Michelia yunnanensis</i>	Scented Pearl Magnolia	200mm	2.5m / 1.5m
POT	<i>Pittosporum tobira</i> 'Miss Muffet'	Dwarf Pittosporum	200mm	1.0m / 1.0m
Phx	<i>Philodendron 'kanadu'</i>	Philodendron	200mm	0.9m / 1.2m
STR	<i>Strelitzia reginae</i>	Bird of paradise flower	200mm	1.5m / 2.5m
Gaf	<i>Gardenia augusta</i> 'Florida'	Fragrant Gardenia	200mm	1.0m / 0.5m
WEg	<i>Westringia 'Grey Box'</i>	Coastal Rosemary	200mm	0.5m / 0.5m

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LDlp	<i>Lomandra 'Little Pal'</i>	Superlute	140mm	0.8m / 0.5m
LPs	<i>Liriope 'Samantha'</i>	Lilyturf	140mm	0.5m / 0.5m
FEg	<i>Festuca glauca</i>	Blue Fescue	140mm	0.3m / 0.3m

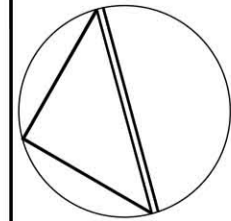
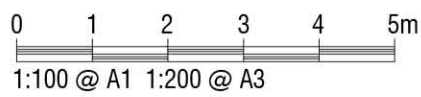
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Cag	<i>Carpobrotus glaucescens</i>	Pig Face	140mm	0.2m / 2.0m
CVs	<i>Convolvulus sabaeus</i>	Ground Morning Glory	140mm	0.15m / 0.6m
Dk	<i>Dichondra repens</i>	Kidney Weed	140mm	0.15m / 2.0m
DCs	<i>Dichondra argentea</i> 'Silver Falls'	Dichondra	140mm	0.15m / 0.8m
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AGu	<i>Agave utahensis</i>	Utah Agave	200mm	0.5m / 0.7m
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DOe	<i>Doryanthes excelsa</i>	Gymea Lilly	140mm	1.5m / 1.5m
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CLIMBERS				
TRj	<i>Trachelospermum jasminoides</i>	Star Jasmine	140mm	0.5m / 3.0m

A	DP	YZ	DP		31/05/2023	ISSUE FOR DEVELOPMENT APPLICATION
NO.	DESIGN	DRAWN	CHECKED	VER'D	DATE	AMENDMENT / ISSUE

- NOTES
- © COPYRIGHT
 - DRAWINGS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION.
 - DIMENSIONS ARE IN MILLIMETRES, UNLESS NOTED OTHERWISE.
 - USE FIGURED DIMENSIONS - DO NOT SCALE FROM DRAWINGS.
 - CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK OR MAKING ANY SHOP DRAWINGS. ANY DISCREPANCIES TO BE REFERRED TO THE SUPERINTENDENT.
 - PROVIDE SAMPLES OF ANY SPECIFIED OR PREFERRED MATERIALS OR FINISHES (E.G. BRICKS, PAVERS) FOR SUPERINTENDENTS APPROVAL PRIOR TO PLACING ORDERS.



Project
MULTI UNIT DEVELOPMENT
4-6 Blacket St,
Nth Wollongong, NSW

Client
PARAGON ILLAWARRA PTY LTD

Drawing Title
LANDSCAPE PLAN
LEVEL 3

Scale 1:100 @ A1
Drg. No. 4490-F202 A

Sheet No.
2.2

ATTACHMENT 4

Wollongong Design Review Panel Meeting minutes and recommendations

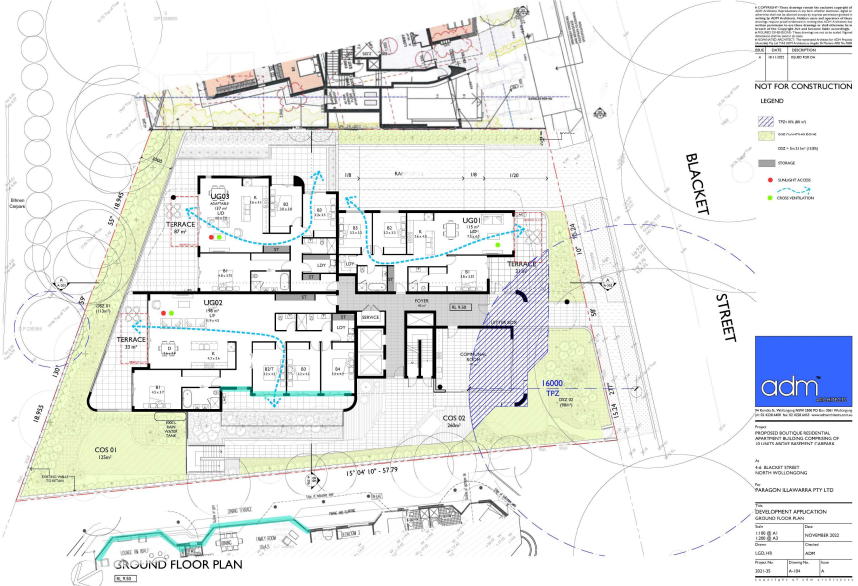
Date	28 February 2023
Meeting location	Wollongong City Council Administration Offices
Panel members	(Chair) Karla Castellanos (Member) Brendan Randles (Member) Brigitta Schyns
Apologies	None
Council staff	Pier Panozzo – City Centre & Major Development Manager Nigel Lamb – Senior Development Project Officer Amanda Kostovski – Council Design Expert
Guests/representatives of the applicant	Angelo Di Martino – ADM Architects Luke Rollinson – MMJ Wollongong Hamish and Pat Davidson – Client David Pearse – DSBLA (MS Teams)
Declarations of Interest	None
Item number	1
DA number	DA-2023/50
Reason for consideration by DRP	SEPP 65, Design excellence cl 7.18 WLEP 2009
Determination pathway	Wollongong Local Planning Panel
Property address	4-6 Blacket Street, North Wollongong
Proposal	Demolition of existing structures, tree removal and construction of a residential flat building consisting of ten (10) units and associated basement parking
Applicant or applicant's representative address to the design review panel	The meeting was conducted in person and by video link between the Panel and the applicants' team.
Background	The site was Inspected by the Panel on 28 February 2023.
Design Quality Principles SEPP 65	
Context and Neighbourhood Character	<p>The proposal lacks a well-documented site and context analysis evincing the site constraints and characteristics that lead to the proposed design outcomes. While the Panel understands there are limitations Imposed by Privacy And disclosure of personal information in obtaining plans and documentation of the recent court approval at No. 2 Blacket St., it is crucial to understand how the new proposal impacts on adjoining habitable spaces and external areas and how the design successfully ameliorates these impacts.</p> <p>Also, the Panel believes that the proposal itself could benefit from a more comprehensive site analysis to inform and refine the design narrative.</p> <p>As shown in Contextual Streetscape 03 (Drawing A-004 Issue A), the proposed architectural expression will achieve a contextual fit with the evolving character of the area in terms of architectural expression. However, aspects of the design require further resolution in order to better respond to the future desired character:</p> <p>Site coverage and siting, overall bulk and scale, and contribution toward the locality's landscape character, which will be discussed in the following sections of this report.</p>

Built Form and Scale	<p>The proposal is a single residential flat building over two consolidated lots. Positive aspects include the split façade design and angular lines at the front and rear elevation which add architectural interest.</p> <p>Elements that require further resolution include:</p> <ul style="list-style-type: none"> • The siting of the form on the site. • Setbacks and separation distances to adjacent existing and future development. • Streetscape presentation • Flat roof and lack of roof features • Internal space amenity <p>The basement appears much larger than it needs to be – even to accommodate the same number of cars currently proposed. It was demonstrated at the meeting that the reduction of storage along the northern side of the proposal would allow the ramp to be relocated much further north, therefore significantly increasing the amount of deep soil facing the street.</p> <p>Although it was explained to the Panel why the vehicular ramp was located on the eastern rather than western side of the site (this should have been explained in a thorough site analysis), it would be preferable for the ramp to be housed within the built form. If this is not achievable, the garage door must be moved closer to the street and a clear landscaped setback provided the length of the basement on the eastern and western sides of the property.</p> <p>The Panel queries the location of the communal room, which does not serve the optimal communal garden in the NW corner of the site. This room would be compacted to align with the front doors and egress stairs as a street facing entry lobby. Accessible access to the NW communal garden must also be demonstrated.</p> <p>The overhanging awning makes an unnecessary incursion into the front setback and should be removed.</p> <p>Solar access to Unit U101 needs to be demonstrated; this may require that glazing is refined to allow greater sun penetration.</p> <p>The built form proposed appears very bulky on the site and struggles to achieve compliant side setbacks and building separation. As a result of the depth of this bulk, both north facing units have very deep internal spaces that exceed the ADG's 8m maximum depth requirement. Rather than providing minor formal inflections and a west facing service corridor, it would be better to create a deeper incursion into both sides of the volume to provide these deep spaces with light and air.</p> <p>The screened west facing balcony is liable to block outlook to the north, which is a lost opportunity. It may be better to introduce a staggered geometry into the western and eastern facades to provide all rooms with northern outlook.</p> <p>To integrate the lift shaft and provide spaciousness internally, the proposed flat roof has been raised significantly. This measure also increases the impacts of visual and physical bulk on the public domain as well as both adjoining properties, which is of concern. Considering that many of the spaces within the top floor do not benefit from very high ceilings (bedrooms, bathrooms, even kitchens...) it may be better to allow the roof to slope or be composed of multiple roof forms. Not only would this reduce visual bulk, it could also improve the form and character of the building.</p>
Density	<p>The proposal is purported to be under the allowable FSR; however, several support and non-essential areas in the basement seem to have been</p>

		<p>excluded from the calculation, which puts in doubt the proposal's compliance with the density controls.</p> <p>The applicant is encouraged to quantify these areas and to rationalise the basement layout in favour of a more compact design.</p>
Sustainability		<p>The basement parking extends beyond the footprint of the proposed building above ground and includes two basement levels with approximately 10 additional parking spaces. Multiple non-essential support areas increase the expanse of the footprint and leads to additional excavation, erosion of permeable surfaces and a lower contribution of deep soil and water filtration. This is contrary to sustainability principles.</p> <p>For a project in this location and at this quality, sustainability initiatives should exceed basic BASIX requirements. Opportunities to consider include:</p> <ul style="list-style-type: none"> • Photovoltaic power generation for at least all the Communal areas within the project. • Stairs designed to encourage residents to use them in preference to lifts for lower levels (consider direct access from lobby, daylight, attractive stair door or electronic opener, visual connection to stair from circulation) • Electric charging stations provided for carparking and e-bicycle storage areas. • Water storage and collection for irrigation purposes. • Use of permeable pavement in deep soil zones. • Details of building construction and materials to demonstrate minimization of the projects carbon footprint.
Landscape Open Space	and	<p>The basement extends to the side boundaries limiting the provision of deep soil and vegetative buffering along the side setbacks.</p> <p>Access to the communal open space at the rear of the site is compromised and the front communal open space is not considered to have high levels of amenity due to the irregular configuration of the space, circulation paths through it and substantial hardscape areas. If the Applicant's desire is to celebrate the existing street tree (Fig) by providing COS underneath, consider reconfiguration of the space to maximise use of the space day and night.</p> <p>The applicant is encouraged to further refine the rear communal open space, to add proper access and amenities and to maximise its good orientation.</p> <p>Consider use and amenity of COS for both existing and future residents. Provide alternative settings and diversity of choice.</p> <p>The Applicant stated that 13.7% of deep soil has been provided; however, the Panel is of the opinion that given the size of the site, the proposal could make a larger deep soil contribution if the basement were to be more compact.</p> <p>The Applicant should consider roof and balcony planting along the façade to minimise bulk of the built form while assist with cooling of the building and contribute to the existing green nature of the street.</p>
Amenity		<p>As noted above, numerous internal areas are deeply imbedded into the floorplate having no direct access to solar amenity i.e., UG02, U102, U103 U202 (areas between the living room and the entry hallway).</p> <p>Due to the reduced separation distances to adjacent development, numerous habitable areas face the common boundaries with No. 2 and No.</p>

	<p>8 Blacket St. All of these openings require screening, which reduces solar access and limits outlooks.</p> <p>See notes above regarding communal room, access to NW communal space and excessive basement size.</p> <p>The location of the proposed swimming pool on Level 3 within the 9m separation distance to the boundary may create acoustic, privacy and overlooking issues with the adjacent development at No, 2 Blacket St. The Applicant is encouraged to check the layout of the pool surrounds against NSW regulations.</p> <p>The Applicant is encouraged to re-assess the location of the BBQ as the entrance of the pool. While close to the kitchen, the BBQ is better suited along the northern edge of the balcony with the dining furniture as space is limited at the pool entrance, there are also potential risks associated with heat and slippage which need to be understood and resolved.</p> <p>The open ramp configuration may result in acoustic and visual impacts to future residents at No. 2 Blacket St.</p> <p>Bedroom windows on Unit G01 look directly to the under-croft area above the vehicle ramp for outlook, daylight and ventilation. This is not a positive outcome.</p> <p>Juliette balconies to side elevation do not have enough space for the placement of furniture and require screening to prevent privacy issues with the neighbours directly across. As noted above, the applicant is encouraged to redirect the bedroom windows and to reconfigure these superfluous balconies.</p>
Safety	<p>The open nature of the ramp, narrow frontage for unit UG01, and the communal room facing Blacket Street do not assist in maximising the street's natural surveillance and activation. A reconfiguration of the communal open room and the vehicular entrance to better integrate with the façade should be considered.</p> <p>To secure the vehicular ramp, the garage door should be located closer to the street.</p>
Housing and Interaction	Diversity Social
	<p>The proposal does not cater for a cross section of the population as the typology of units is limited. The upper unit, which is a 4 bedroom + Study unit is meant to be occupied by the Applicant and family. The remaining 9 units are a combination of 3 and 4-bedroom units (No two or one-bedroom units are provided). This is contrary to the ADG Principle 8: Housing Diversity and Social Interaction.</p>
Aesthetics	<p>The proposed architectural expression attempts to break the perception of bulk and scale with a split façade design that divides the elevation into two halves. However, the additional internal floor to ceiling height on the upper level makes the proposal top-heavy as seen on the South Elevation (Refer to Dwg A203). The taller floor to ceiling height on the upper most level and the lack of meaningful setbacks above street wall height along the western boundary, contribute to the perception of bulk and scale.</p> <p>The side elevations are long and relatively planar. Not enough articulation and sculpting of the floorplate has been achieved to carve out the form and reduce its monolithic appearance when observed obliquely from the street and Council's carpark to the north.</p>
Design Excellence WLEP2009	
Whether a high standard of architectural design,	<p>Prominent elements in the elevation have been assigned wall render i.e., Dulux Monument and Lexicon White. The Applicant is encouraged to reduce the extent of painted surfaces in favour of more integral and hardy</p>

materials and detailing appropriate to the building type and location will be achieved	materials such as brick, stone and cladding that are less vulnerable to the harsh coastal climatic conditions.
Whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	The lower ground interface to Blacket St has reduced levels of activation given the configuration of the vehicle ramp and the communal room. As per section A-A (DWG A-205, Issue A), the basement carparking protrudes above the natural ground level to an unspecified height similar to the height of the rear boundary fence. There seems to be no easy access or recreational purpose to the planted area between the protruding basement and the boundary fence at the rear. This area is likely to have no activity or use thus presenting as a high fenced area with no useable space within.
Whether the proposed development detrimentally impacts on view corridors,	The Panel noted during its site observations that numerous habitable windows on No. 8 Blacket Street look diagonally to the street over the front portion of the site. The onus is on the Applicant to document any existing views from neighbouring properties that may be affected.
Whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,	No areas of the Sun Plane Protection map are affected. However, given the proposal's deliberate increase of the floor to ceiling height of the upper most penthouse, a shadow analysis evincing the difference or overshadowing increase should be provided.
How the development addresses the following:	
the suitability of the land for development,	The land is suitable for the proposed development.
existing and proposed uses and use mix	Existing and proposed uses are residential, which is a permissible use on the site.
heritage issues and streetscape constraints,	<p>While the proposal is not directly adjacent to a conservation area, the streetscape in front of the subject site is characterised by large mature street trees. These trees are contributory to the landscape and streetscape character of Blacket St. The panel has concerns on the extent of encroachment not only into the root zone, but to the canopy above.</p> <p>While the Panel acknowledge the extents of which the Applicant has undergone to decrease harm to the Fig, the Applicant should assess the condition of the root system and encourage a root mapping survey to be undertaken to make sure the basement is setback accordingly.</p> <p>The current condition of the property is significant hardscape above the root zone. To ensure longevity and optimal health of the Fig, consider decking and softscape under the tree instead of hardstand paving.</p> <p>A generous setback (built form and basement) combined with decking and maximised softscape above the root system, will allow for the canopy to</p>

	<p>expand and prosper as well as allow rainwater to penetrate the ground within the tree protection zone.</p> <p>Consider what implications construction and delivery will have on the tree, both canopy and root system. Have setbacks been allowed for in regard to scaffolding etc?</p>
<p>the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,</p>	<p>The proposal is for a 4-storey residential flat development; however, given the proposed separation distances with similar development across the east and western boundaries, the applicant is encouraged to look more carefully at the relationships facing the side elevations with existing and future neighbouring developments. The following composite prepared by the Panel shows the proposed ground level in context with portions of the existing and approved developments on adjacent sites.</p> <p>Habitable windows are highlighted in teal.</p> 
<p>bulk, massing and modulation of buildings</p>	<p>The overall footprint of some of the units e.g., UG02, U102, U103 U202, the addition of balcony areas along the side elevations U202, and upper most floor to ceiling height, contribute to the perception of bulk and scale. The Panel appreciates the effort to conceal the lift overrun; however, maintaining a consistent roof height across the entire proposal may not be necessary.</p>
<p>street frontage heights</p>	<p>The overall proposal presents as a 4 stories to Blacket St and as a 4.5 storey to the north elevation as seen from Council's carpark/reserve to the north due to the elevated nature of Basement 1 protruding above the ground level (refer to the north elevation, Dwg A201). The proposed massing is generally below the allowable height, however, the upper most level has a floor-to-floor height of 4.3 m, which is 1.2 m above the recommended ADG height of 3.1m. The additional height combined with the overall footprint contribute to increasing the perception of bulk and scale.</p>
<p>environmental impacts such as sustainable design, overshadowing, wind and reflectivity</p>	<p>The Panel would be interested to see a comparison of the overall shadows cast by the proposal against a proposal that complied with the minimum floor-to floor heights as per the ADG.</p> <p>No other sustainability measures are evident in the design. Therefore, there is insufficient information for the panel to comment.</p>
<p>the achievement of the principles of ecologically</p>	<p>No other sustainability measures i.e., rainwater harvesting, solar panels, outdoor drying areas, photovoltaics, are evident in the design. Given the expansive nature of the basement levels, it is the Panel's opinion that a</p>

sustainable development	<p>more compact basement layout will be more sustainable in terms of excavation and the proposal's long-term contribution to water filtration and the reduction of hard surfaces above basement levels, which can increase solar reflectivity and contribute to the heat island effect. Further work is required to achieve an ecologically sustainable development.</p>
pedestrian, cycle, vehicular and service access, circulation and requirements	<p>The vehicle entrance presents as a 'black hole' along Blacket Street given its open ramp configuration and partial encroachment over the side setback. The absence of a security grille and lack of encapsulation within the building footprint also contribute to its dominance along the streetscape.</p> <p>Fire egress stairs are not encapsulated within the building footprint and displace areas of deep soil along the edges of the site, which in turn increase the hardscape areas and circulation along the setbacks.</p>
impact on, and any proposed improvements to, the public domain	<p>No plantings have been nominated for the public domain. The landscape plan indicates "driveway threshold and streetscape interface design in accordance with WCC public Domain Technical Manual ...". However, there is no indication on plan what these treatments include.</p>
Key issues, further Comments & Recommendations	<p>The Applicant should provide further information and clarification on the following issues:</p> <ul style="list-style-type: none"> • A better understanding of the overland flow path is needed. • A more comprehensive site analysis Overall FSR including all program spaces in the basement, floor to ceiling heights. • Sustainability measures proposed • Extent of encroachment onto street tree root zone <p>Elements that require further resolution include:</p> <ul style="list-style-type: none"> • The siting of the built form on the site • Setbacks and separation distances to adjacent existing and future development • Overall bulk and scale • Streetscape presentation and activation • Flat roof and lack of roof features • Internal space amenity and solar access • Reconfiguration of the extent of the basement • Presentation of the vehicular ramp to the street • Access to the rear communal open space • Location of the communal room • Location of fire egress stairs and extent of hardscape pathways • Larger provision of deep soil • Use of screening and location of balconies off bedrooms • Location of BBQ and pool • Solar access and ventilation off vehicular ramp • Extent of painted surfaces • Relocation of the stockpile or other construction requirements away from street tree rootzone

ATTACHMENT 5 - APARTMENT DESIGN GUIDE ASSESSMENT

Standards/controls	Comment
<p>Part 3 Siting the development</p> <p>3A Site analysis</p> <p>Site analysis uses the following key elements to demonstrate that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context:</p> <ul style="list-style-type: none">- Site location plan- Aerial photograph- Local context plan- Site context and survey plan- Streetscape elevations and sections- Analysis <p>A written statement explaining how the design of the proposed development has responded to the site analysis must accompany the development application.</p> <p>3B Orientation</p> <div><p>Objective 3B-1</p><p>Building types and layouts respond to the streetscape and site while optimising solar access within the development</p><p>Design guidance</p><p>Buildings along the street frontage define the street, by facing it and incorporating direct access from the street (see figure 3B.1)</p><p>Where the street frontage is to the east or west, rear buildings should be orientated to the north</p><p>Where the street frontage is to the north or south, overshadowing to the south should be minimised and buildings behind the street frontage should be orientated to the east and west (see figure 3B.2)</p></div>	<p>The site analysis allows an understanding of how the proposal has been designed taking into account the character and form of the surrounding development and locality.</p> <p>The development provides a clear and accessible entry and orients units to overlook the street and take advantage of aspect, light, ventilation</p>

Standards/controls	Comment
<p data-bbox="161 208 782 320">Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid winter</p> <p data-bbox="161 353 384 383">Design guidance</p> <p data-bbox="161 405 831 539">Living areas, private open space and communal open space should receive solar access in accordance with sections 3D Communal and public open space and 4A Solar and daylight access</p> <p data-bbox="161 573 788 636">Solar access to living rooms, balconies and private open spaces of neighbours should be considered</p> <p data-bbox="161 669 794 804">Where an adjoining property does not currently receive the required hours of solar access, the proposed building ensures solar access to neighbouring properties is not reduced by more than 20%</p> <p data-bbox="161 837 831 936">If the proposal will significantly reduce the solar access of neighbours, building separation should be increased beyond minimums contained in section 3F Visual privacy</p> <p data-bbox="161 969 807 1032">Overshadowing should be minimised to the south or down hill by increased upper level setbacks</p> <p data-bbox="161 1066 826 1234">It is optimal to orientate buildings at 90 degrees to the boundary with neighbouring properties to minimise overshadowing and privacy impacts, particularly where minimum setbacks are used and where buildings are higher than the adjoining development</p> <p data-bbox="161 1267 820 1330">A minimum of 4 hours of solar access should be retained to solar collectors on neighbouring buildings</p>	<p data-bbox="940 208 1198 237">Generally satisfactory</p>

3C Public domain interface**Objective 3C-1**

Transition between private and public domain is achieved without compromising safety and security

Design guidance

Terraces, balconies and courtyard apartments should have direct street entry, where appropriate

Changes in level between private terraces, front gardens and dwelling entries above the street level provide surveillance and improve visual privacy for ground level dwellings (see figure 3C.1)

Upper level balconies and windows should overlook the public domain

Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m

Length of solid walls should be limited along street frontages

Opportunities should be provided for casual interaction between residents and the public domain. Design solutions may include seating at building entries, near letter boxes and in private courtyards adjacent to streets

In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions:

- architectural detailing
- changes in materials
- plant species
- colours

Opportunities for people to be concealed should be minimised

Concern has been raised with regard to the exposed basement ramp.

The proposal generally has a high quality presentation to the street.

The proposal retains the large street tree.

The proposal would involve upgrading of footpath.

Standards/controls	Comment
<p>Objective 3C-2 Amenity of the public domain is retained and enhanced</p> <p>Design guidance</p> <p>Planting softens the edges of any raised terraces to the street, for example above sub-basement car parking</p> <p>Mail boxes should be located in lobbies, perpendicular to the street alignment or integrated into front fences where individual street entries are provided</p> <p>The visual prominence of underground car park vents should be minimised and located at a low level where possible</p> <p>Substations, pump rooms, garbage storage areas and other service requirements should be located in basement car parks or out of view</p> <p>Ramping for accessibility should be minimised by building entry location and setting ground floor levels in relation to footpath levels</p> <p>Durable, graffiti resistant and easily cleanable materials should be used</p> <p>Where development adjoins public parks, open space or bushland, the design positively addresses this interface and uses a number of the following design solutions:</p> <ul style="list-style-type: none"> • street access, pedestrian paths and building entries which are clearly defined • paths, low fences and planting that clearly delineate between communal/private open space and the adjoining public open space • minimal use of blank walls, fences and ground level parking <p>On sloping sites protrusion of car parking above ground level should be minimised by using split levels to step underground car parking</p>	<p>Satisfactory</p>

3D Communal and public open space**Objective 3D-1**

An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping

Design criteria

1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3)
2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)

Design guidance

Communal open space should be consolidated into a well designed, easily identified and usable area

Communal open space should have a minimum dimension of 3m, and larger developments should consider greater dimensions

Communal open space should be co-located with deep soil areas

Direct, equitable access should be provided to communal open space areas from common circulation areas, entries and lobbies

Where communal open space cannot be provided at ground level, it should be provided on a podium or roof

Where developments are unable to achieve the design criteria, such as on small lots, sites within business zones, or in a dense urban area, they should:

- provide communal spaces elsewhere such as a landscaped roof top terrace or a common room
- provide larger balconies or increased private open space for apartments
- demonstrate good proximity to public open space and facilities and/or provide contributions to public open space

The proposal provides approximately 13% (~200m²/1,536.5) of the site area as communal open space. This is below the recommended 25%. It is noted the proposed development is small in scale (only 10 units) and satisfies the minimum requirement of the DCP for 5m² per unit (50m²).

However, the configuration and program of the COS in the south-western corner is unclear and is awkwardly dissected by the external structural columns and the glass line of the lobby. The entire COS area to the west presents as a lengthy circulation path with no meaningful program. The connection to the NW communal garden remains unresolved.

The platform lift to gain access to the rear NW COS garden is not considered an acceptable solution and the area lacks appropriate amenity given its good orientation.

The entire COS area to the west presents as a long narrow area dominated by circulation paths with no meaningful pockets of active program.

Standards/controls	Comment
<p>Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting</p> <p>Design guidance</p> <p>Facilities are provided within communal open spaces and common spaces for a range of age groups (see also 4F Common circulation and spaces), incorporating some of the following elements:</p> <ul style="list-style-type: none"> • seating for individuals or groups • barbecue areas • play equipment or play areas • swimming pools, gyms, tennis courts or common rooms <p>The location of facilities responds to microclimate and site conditions with access to sun in winter, shade in summer and shelter from strong winds and down drafts</p> <p>Visual impacts of services should be minimised, including location of ventilation duct outlets from basement car parks, electrical substations and detention tanks</p>	Unsatisfactory
<p>Objective 3D-3 Communal open space is designed to maximise safety</p> <p>Design guidance</p> <p>Communal open space and the public domain should be readily visible from habitable rooms and private open space areas while maintaining visual privacy. Design solutions may include:</p> <ul style="list-style-type: none"> • bay windows • corner windows • balconies <p>Communal open space should be well lit</p> <p>Where communal open space/facilities are provided for children and young people they are safe and contained</p>	Satisfactory

Objective 3D-4

Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood

Design guidance

The public open space should be well connected with public streets along at least one edge

The public open space should be connected with nearby parks and other landscape elements

Public open space should be linked through view lines, pedestrian desire paths, termination points and the wider street grid

Solar access should be provided year round along with protection from strong winds

Opportunities for a range of recreational activities should be provided for people of all ages

A positive address and active frontages should be provided adjacent to public open space

Boundaries should be clearly defined between public open space and private areas

Satisfactory

3E Deep soil zones**Objective 3E-1**

Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality

Design criteria

1. Deep soil zones are to meet the following minimum requirements:

Site area	Minimum dimensions	Deep soil zone (% of site area)
less than 650m ²	-	7%
650m ² - 1,500m ²	3m	
greater than 1,500m ²	6m	
greater than 1,500m ² with significant existing tree cover	6m	

The proposal provides approximately 13.7% (~210/1,536.5) of the site area as deep soil.

Standards/controls	Comment
<p>Design guidance</p> <p>On some sites it may be possible to provide larger deep soil zones, depending on the site area and context:</p> <ul style="list-style-type: none"> • 10% of the site as deep soil on sites with an area of 650m² - 1,500m² • 15% of the site as deep soil on sites greater than 1,500m² <p>Deep soil zones should be located to retain existing significant trees and to allow for the development of healthy root systems, providing anchorage and stability for mature trees. Design solutions may include:</p> <ul style="list-style-type: none"> • basement and sub basement car park design that is consolidated beneath building footprints • use of increased front and side setbacks • adequate clearance around trees to ensure long term health • co-location with other deep soil areas on adjacent sites to create larger contiguous areas of deep soil <p>Achieving the design criteria may not be possible on some sites including where:</p> <ul style="list-style-type: none"> • the location and building typology have limited or no space for deep soil at ground level (e.g. central business district, constrained sites, high density areas, or in centres) • there is 100% site coverage or non-residential uses at ground floor level <p>Where a proposal does not achieve deep soil requirements, acceptable stormwater management should be achieved and alternative forms of planting provided such as on structure</p>	<p>Satisfactory</p>

3F Visual privacy**Objective 3F-1**

Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

Design criteria

1. Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:

Building height	Habitable rooms and balconies	Non-habitable rooms
up to 12m (4 storeys)	6m	3m
up to 25m (5-8 storeys)	9m	4.5m
over 25m (9+ storeys)	12m	6m

Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)

Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties

The proposal seeks variations to separation distances however the treatment of the facades is such that visual privacy is not of concern.

Standards/controls	Comment
<p>Design guidance</p> <p>Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance</p> <p>For residential buildings next to commercial buildings, separation distances should be measured as follows:</p> <ul style="list-style-type: none"> • for retail, office spaces and commercial balconies use the habitable room distances • for service and plant areas use the non-habitable room distances <p>New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:</p> <ul style="list-style-type: none"> • site layout and building orientation to minimise privacy impacts (see also section 3B Orientation) • on sloping sites, apartments on different levels have appropriate visual separation distances (see figure 3F.4) <p>Apartment buildings should have an increased separation distance of 3m (in addition to the requirements set out in design criteria 1) when adjacent to a different zone that permits lower density residential development to provide for a transition in scale and increased landscaping (figure 3F.5)</p> <p>Direct lines of sight should be avoided for windows and balconies across corners</p> <p>No separation is required between blank walls</p>	<p>Satisfactory</p>

Standards/controls	Comment
<p data-bbox="161 210 363 246">Objective 3F-2</p> <p data-bbox="161 255 812 358">Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space</p> <p data-bbox="161 389 384 421">Design guidance</p> <p data-bbox="161 439 818 577">Communal open space, common areas and access paths should be separated from private open space and windows to apartments, particularly habitable room windows. Design solutions may include:</p> <ul data-bbox="161 595 818 1178" style="list-style-type: none"> • setbacks • solid or partially solid balustrades to balconies at lower levels • fencing and/or trees and vegetation to separate spaces • screening devices • bay windows or pop out windows to provide privacy in one direction and outlook in another • raising apartments/private open space above the public domain or communal open space • planter boxes incorporated into walls and balustrades to increase visual separation • pergolas or shading devices to limit overlooking of lower apartments or private open space • on constrained sites where it can be demonstrated that building layout opportunities are limited, fixed louvres or screen panels to windows and/or balconies <p data-bbox="161 1205 826 1308">Bedrooms, living spaces and other habitable rooms should be separated from gallery access and other open circulation space by the apartment's service areas</p> <p data-bbox="161 1335 815 1402">Balconies and private terraces should be located in front of living rooms to increase internal privacy</p> <p data-bbox="161 1429 778 1496">Windows should be offset from the windows of adjacent buildings</p> <p data-bbox="161 1523 772 1590">Recessed balconies and/or vertical fins should be used between adjacent balconies</p>	<p data-bbox="940 201 1078 232">Satisfactory</p>

Standards/controls	Comment
<p>Objective 3G-3 Large sites provide pedestrian links for access to streets and connection to destinations</p> <p>Design guidance</p> <p>Pedestrian links through sites facilitate direct connections to open space, main streets, centres and public transport</p> <p>Pedestrian links should be direct, have clear sight lines, be overlooked by habitable rooms or private open spaces of dwellings, be well lit and contain active uses, where appropriate</p>	N/A
<p>3H Vehicle access</p> <p>Objective 3H-1 Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</p> <p>Design guidance</p> <p>Car park access should be integrated with the building's overall facade. Design solutions may include:</p> <ul style="list-style-type: none"> • the materials and colour palette to minimise visibility from the street • security doors or gates at entries that minimise voids in the facade • where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed 	The car park ramp is exposed which is not an ideal outcome. This is partly a function of the desire to keep the visitor parking area outside of any secure area.

Standards/controls	Comment
<p>Car park entries should be located behind the building line</p> <p>Vehicle entries should be located at the lowest point of the site minimising ramp lengths, excavation and impacts on the building form and layout</p> <p>Car park entry and access should be located on secondary streets or lanes where available</p> <p>Vehicle standing areas that increase driveway width and encroach into setbacks should be avoided</p> <p>Access point locations should avoid headlight glare to habitable rooms</p> <p>Adequate separation distances should be provided between vehicle entries and street intersections</p> <p>The width and number of vehicle access points should be limited to the minimum</p> <p>Visual impact of long driveways should be minimised through changing alignments and screen planting</p> <p>The need for large vehicles to enter or turn around within the site should be avoided</p> <p>Garbage collection, loading and servicing areas are screened</p> <p>Clear sight lines should be provided at pedestrian and vehicle crossings</p> <p>Traffic calming devices such as changes in paving material or textures should be used where appropriate</p> <p>Pedestrian and vehicle access should be separated and distinguishable. Design solutions may include:</p> <ul style="list-style-type: none"> • changes in surface materials • level changes • the use of landscaping for separation 	

3J Bicycle and car parking**Objective 3J-1**

Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas

Design criteria

1. For development in the following locations:

- on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or
- on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre

the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less

The car parking needs for a development must be provided off street

Design guidance

Where a car share scheme operates locally, provide car share parking spaces within the development. Car share spaces, when provided, should be on site

Where less car parking is provided in a development, council should not provide on street resident parking permits

See discussion at Chapter E3.

Objective 3J-2

Parking and facilities are provided for other modes of transport

Design guidance

Conveniently located and sufficient numbers of parking spaces should be provided for motorbikes and scooters

Secure undercover bicycle parking should be provided that is easily accessible from both the public domain and common areas

Conveniently located charging stations are provided for electric vehicles, where desirable

Satisfactory

Standards/controls	Comment
<p>3J Bicycle and car parking</p> <div data-bbox="151 259 844 869"> <p><i>Objective 3J-3</i> Car park design and access is safe and secure</p> <p>Design guidance</p> <p>Supporting facilities within car parks, including garbage, plant and switch rooms, storage areas and car wash bays can be accessed without crossing car parking spaces</p> <p>Direct, clearly visible and well lit access should be provided into common circulation areas</p> <p>A clearly defined and visible lobby or waiting area should be provided to lifts and stairs</p> <p>For larger car parks, safe pedestrian access should be clearly defined and circulation areas have good lighting, colour, line marking and/or bollards</p> </div>	<p>Satisfactory</p>

Standards/controls	Comment
<p>Objective 3J-4</p> <p>Visual and environmental impacts of underground car parking are minimised</p> <p>Design guidance</p> <p>Excavation should be minimised through efficient car park layouts and ramp design</p> <p>Car parking layout should be well organised, using a logical, efficient structural grid and double loaded aisles</p> <p>Protrusion of car parks should not exceed 1m above ground level. Design solutions may include stepping car park levels or using split levels on sloping sites</p> <p>Natural ventilation should be provided to basement and sub basement car parking areas</p> <p>Ventilation grills or screening devices for car parking openings should be integrated into the facade and landscape design</p>	Satisfactory
<p>Objective 3J-5</p> <p>Visual and environmental impacts of on-grade car parking are minimised</p> <p>Design guidance</p> <p>On-grade car parking should be avoided</p> <p>Where on-grade car parking is unavoidable, the following design solutions are used:</p> <ul style="list-style-type: none">• parking is located on the side or rear of the lot away from the primary street frontage• cars are screened from view of streets, buildings, communal and private open space areas• safe and direct access to building entry points is provided• parking is incorporated into the landscape design of the site, by extending planting and materials into the car park space• stormwater run-off is managed appropriately from car parking surfaces• bio-swales, rain gardens or on site detention tanks are provided, where appropriate• light coloured paving materials or permeable paving systems are used and shade trees are planted between every 4-5 parking spaces to reduce increased surface temperatures from large areas of paving	N/A

Standards/controls	Comment
<p>Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised</p> <p>Design guidance</p> <p>Exposed parking should not be located along primary street frontages</p> <p>Screening, landscaping and other design elements including public art should be used to integrate the above ground car parking with the facade. Design solutions may include:</p> <ul style="list-style-type: none"> • car parking that is concealed behind the facade, with windows integrated into the overall facade design (approach should be limited to developments where a larger floor plate podium is suitable at lower levels) • car parking that is 'wrapped' with other uses, such as retail, commercial or two storey Small Office/Home Office (SOHO) units along the street frontage (see figure 3J.9) <p>Positive street address and active frontages should be provided at ground level</p>	N/A
<p>4A Solar and daylight access</p> <p>Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space</p> <p>Design criteria</p> <ol style="list-style-type: none"> 1. Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas 2. In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter 3. A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter 	Satisfactory

Standards/controls	Comment
<div data-bbox="165 226 397 259">Design guidance</div> <div data-bbox="165 277 782 344">The design maximises north aspect and the number of single aspect south facing apartments is minimised</div> <div data-bbox="165 383 775 450">Single aspect, single storey apartments should have a northerly or easterly aspect</div> <div data-bbox="165 488 836 555">Living areas are best located to the north and service areas to the south and west of apartments</div> <div data-bbox="165 593 791 694">To optimise the direct sunlight to habitable rooms and balconies a number of the following design features are used:</div> <div data-bbox="197 725 713 900"> <ul style="list-style-type: none"> • dual aspect apartments • shallow apartment layouts • two storey and mezzanine level apartments • bay windows </div> <div data-bbox="165 931 836 1066">To maximise the benefit to residents of direct sunlight within living rooms and private open spaces, a minimum of 1m² of direct sunlight, measured at 1m above floor level, is achieved for at least 15 minutes</div> <div data-bbox="165 1097 823 1164">Achieving the design criteria may not be possible on some sites. This includes:</div> <div data-bbox="197 1196 810 1429"> <ul style="list-style-type: none"> • where greater residential amenity can be achieved along a busy road or rail line by orientating the living rooms away from the noise source • on south facing sloping sites • where significant views are oriented away from the desired aspect for direct sunlight </div> <div data-bbox="165 1449 826 1550">Design drawings need to demonstrate how site constraints and orientation preclude meeting the design criteria and how the development meets the objective</div>	<p>Generally satisfactory</p>

Objective 4A-2

Daylight access is maximised where sunlight is limited

Design guidance

Courtyards, skylights and high level windows (with sills of 1,500mm or greater) are used only as a secondary light source in habitable rooms

Where courtyards are used :

- use is restricted to kitchens, bathrooms and service areas
- building services are concealed with appropriate detailing and materials to visible walls
- courtyards are fully open to the sky
- access is provided to the light well from a communal area for cleaning and maintenance
- acoustic privacy, fire safety and minimum privacy separation distances (see section 3F Visual privacy) are achieved

Opportunities for reflected light into apartments are optimised through:

- reflective exterior surfaces on buildings opposite south facing windows
- positioning windows to face other buildings or surfaces (on neighbouring sites or within the site) that will reflect light
- integrating light shelves into the design
- light coloured internal finishes

Satisfactory

Objective 4A-3

Design incorporates shading and glare control, particularly for warmer months

Design guidance

A number of the following design features are used:

- balconies or sun shading that extend far enough to shade summer sun, but allow winter sun to penetrate living areas
- shading devices such as eaves, awnings, balconies, pergolas, external louvres and planting
- horizontal shading to north facing windows
- vertical shading to east and particularly west facing windows
- operable shading to allow adjustment and choice
- high performance glass that minimises external glare off windows, with consideration given to reduced tint glass or glass with a reflectance level below 20% (reflective films are avoided)

Satisfactory

4B Natural ventilation**Objective 4B-1**

All habitable rooms are naturally ventilated

Design guidance

The building's orientation maximises capture and use of prevailing breezes for natural ventilation in habitable rooms

Depths of habitable rooms support natural ventilation

The area of unobstructed window openings should be equal to at least 5% of the floor area served

Light wells are not the primary air source for habitable rooms

Doors and openable windows maximise natural ventilation opportunities by using the following design solutions:

- adjustable windows with large effective openable areas
- a variety of window types that provide safety and flexibility such as awnings and louvres
- windows which the occupants can reconfigure to funnel breezes into the apartment such as vertical louvres, casement windows and externally opening doors

Complies although the free flowing of air is somewhat compromised by extensive vertical louvres.

Objective 4B-2

The layout and design of single aspect apartments maximises natural ventilation

Design guidance

Apartment depths are limited to maximise ventilation and airflow (see also figure 4D.3)

Natural ventilation to single aspect apartments is achieved with the following design solutions:

- primary windows are augmented with plenums and light wells (generally not suitable for cross ventilation)
- stack effect ventilation / solar chimneys or similar to naturally ventilate internal building areas or rooms such as bathrooms and laundries
- courtyards or building indentations have a width to depth ratio of 2:1 or 3:1 to ensure effective air circulation and avoid trapped smells

N/A

Standards/controls	Comment
<p data-bbox="172 208 368 241">Objective 4B-3</p> <p data-bbox="172 253 802 353">The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents</p> <p data-bbox="172 383 360 416">Design criteria</p> <ol data-bbox="172 432 802 768" style="list-style-type: none"> <li data-bbox="172 432 802 645">1. At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed <li data-bbox="172 656 802 768">2. Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line <p data-bbox="172 797 389 831">Design guidance</p> <p data-bbox="172 846 802 947">The building should include dual aspect apartments, cross through apartments and corner apartments and limit apartment depths</p> <p data-bbox="172 976 802 1144">In cross-through apartments external window and door opening sizes/areas on one side of an apartment (inlet side) are approximately equal to the external window and door opening sizes/areas on the other side of the apartment (outlet side) (see figure 4B.4)</p> <p data-bbox="172 1173 802 1240">Apartments are designed to minimise the number of corners, doors and rooms that might obstruct airflow</p> <p data-bbox="172 1270 802 1337">Apartment depths, combined with appropriate ceiling heights, maximise cross ventilation and airflow</p>	<p data-bbox="938 208 1050 241">Complies</p>

4C Ceiling heights**Objective 4C-1**

Ceiling height achieves sufficient natural ventilation and daylight access

Design criteria

1. Measured from finished floor level to finished ceiling level, minimum ceiling heights are:

Minimum ceiling height for apartment and mixed use buildings	
Habitable rooms	2.7m
Non-habitable	2.4m
For 2 storey apartments	2.7m for main living area floor 2.4m for second floor, where its area does not exceed 50% of the apartment area
Attic spaces	1.8m at edge of room with a 30 degree minimum ceiling slope
If located in mixed used areas	3.3m for ground and first floor to promote future flexibility of use

These minimums do not preclude higher ceilings if desired

Design guidance

Ceiling height can accommodate use of ceiling fans for cooling and heat distribution

Complies

Objective 4C-2

Ceiling height increases the sense of space in apartments and provides for well proportioned rooms

Design guidance

A number of the following design solutions can be used:

- the hierarchy of rooms in an apartment is defined using changes in ceiling heights and alternatives such as raked or curved ceilings, or double height spaces
- well proportioned rooms are provided, for example, smaller rooms feel larger and more spacious with higher ceilings
- ceiling heights are maximised in habitable rooms by ensuring that bulkheads do not intrude. The stacking of service rooms from floor to floor and coordination of bulkhead location above non-habitable areas, such as robes or storage, can assist

Satisfactory

Objective 4C-3

Ceiling heights contribute to the flexibility of building use over the life of the building

Design guidance

Ceiling heights of lower level apartments in centres should be greater than the minimum required by the design criteria allowing flexibility and conversion to non-residential uses (see figure 4C.1)

Satisfactory

4D Apartment size and layout**Objective 4D-1**

The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity

Design criteria

1. Apartments are required to have the following minimum internal areas:

Apartment type	Minimum internal area
Studio	35m ²
1 bedroom	50m ²
2 bedroom	70m ²
3 bedroom	90m ²

The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each

A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each

2. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms

Design guidance

Kitchens should not be located as part of the main circulation space in larger apartments (such as hallway or entry space)

A window should be visible from any point in a habitable room

Where minimum areas or room dimensions are not met apartments need to demonstrate that they are well designed and demonstrate the usability and functionality of the space with realistically scaled furniture layouts and circulation areas. These circumstances would be assessed on their merits

Complies

Standards/controls	Comment
<div data-bbox="164 203 368 241">Objective 4D-2</div> <div data-bbox="164 248 813 282">Environmental performance of the apartment is maximised</div> <div data-bbox="164 311 359 344">Design criteria</div> <div data-bbox="164 362 809 562"> <ol style="list-style-type: none"> Habitable room depths are limited to a maximum of 2.5 x the ceiling height In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window </div> <div data-bbox="164 591 389 624">Design guidance</div> <div data-bbox="164 642 786 743">Greater than minimum ceiling heights can allow for proportional increases in room depth up to the permitted maximum depths</div> <div data-bbox="164 772 772 840">All living areas and bedrooms should be located on the external face of the building</div> <div data-bbox="164 887 352 920">Where possible:</div> <div data-bbox="180 940 831 1075"> <ul style="list-style-type: none"> bathrooms and laundries should have an external openable window main living spaces should be oriented toward the primary outlook and aspect and away from noise sources </div>	Satisfactory

Standards/controls	Comment
<p>Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs</p> <p>Design criteria</p> <ol style="list-style-type: none"> 1. Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space) 2. Bedrooms have a minimum dimension of 3m (excluding wardrobe space) 3. Living rooms or combined living/dining rooms have a minimum width of: <ul style="list-style-type: none"> • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments 4. The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts <p>Design guidance</p> <p>Access to bedrooms, bathrooms and laundries is separated from living areas minimising direct openings between living and service areas</p> <p>All bedrooms allow a minimum length of 1.5m for robes</p> <p>The main bedroom of an apartment or a studio apartment should be provided with a wardrobe of a minimum 1.8m long, 0.6m deep and 2.1m high</p> <p>Apartment layouts allow flexibility over time, design solutions may include:</p> <ul style="list-style-type: none"> • dimensions that facilitate a variety of furniture arrangements and removal • spaces for a range of activities and privacy levels between different spaces within the apartment • dual master apartments • dual key apartments <i>Note: dual key apartments which are separate but on the same title are regarded as two sole occupancy units for the purposes of the Building Code of Australia and for calculating the mix of apartments</i> • room sizes and proportions or open plans (rectangular spaces (2:3) are more easily furnished than square spaces (1:1)) • efficient planning of circulation by stairs, corridors and through rooms to maximise the amount of usable floor space in rooms 	Complies

4E Private open space and balconies**Objective 4E-1**

Apartments provide appropriately sized private open space and balconies to enhance residential amenity

Design criteria

1. All apartments are required to have primary balconies as follows:

Dwelling type	Minimum area	Minimum depth
Studio apartments	4m ²	-
1 bedroom apartments	8m ²	2m
2 bedroom apartments	10m ²	2m
3+ bedroom apartments	12m ²	2.4m

The minimum balcony depth to be counted as contributing to the balcony area is 1m

2. For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m

Design guidance

Increased communal open space should be provided where the number or size of balconies are reduced

Storage areas on balconies is additional to the minimum balcony size

Balcony use may be limited in some proposals by:

- consistently high wind speeds at 10 storeys and above
- close proximity to road, rail or other noise sources
- exposure to significant levels of aircraft noise
- heritage and adaptive reuse of existing buildings

In these situations, juliet balconies, operable walls, enclosed wintergardens or bay windows may be appropriate, and other amenity benefits for occupants should also be provided in the apartments or in the development or both. Natural ventilation also needs to be demonstrated

Complies

Standards/controls	Comment
<p>Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents</p> <p>Design guidance</p> <p>Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space</p> <p>Private open spaces and balconies predominantly face north, east or west</p> <p>Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms</p>	Satisfactory
<p>Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building</p> <p>Design guidance</p> <p>Solid, partially solid or transparent fences and balustrades are selected to respond to the location. They are designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony. Solid and partially solid balustrades are preferred</p> <p>Full width full height glass balustrades alone are generally not desirable</p> <p>Projecting balconies should be integrated into the building design and the design of soffits considered</p> <p>Operable screens, shutters, hoods and pergolas are used to control sunlight and wind</p> <p>Balustrades are set back from the building or balcony edge where overlooking or safety is an issue</p> <p>Downpipes and balcony drainage are integrated with the overall facade and building design</p> <p>Air-conditioning units should be located on roofs, in basements, or fully integrated into the building design</p> <p>Where clothes drying, storage or air conditioning units are located on balconies, they should be screened and integrated in the building design</p> <p>Ceilings of apartments below terraces should be insulated to avoid heat loss</p> <p>Water and gas outlets should be provided for primary balconies and private open space</p>	Satisfactory

Standards/controls	Comment
<p>Objective 4E-4 Private open space and balcony design maximises safety</p> <p>Design guidance</p> <p>Changes in ground levels or landscaping are minimised</p> <p>Design and detailing of balconies avoids opportunities for climbing and falls</p>	Satisfactory
<p>4F Common circulation and spaces</p> <p>Objective 4F-1 Common circulation spaces achieve good amenity and properly service the number of apartments</p> <p>Design criteria</p> <ol style="list-style-type: none"> 1. The maximum number of apartments off a circulation core on a single level is eight 2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40 	Complies

Standards/controls	Comment
<p>Design guidance</p> <p>Greater than minimum requirements for corridor widths and/or ceiling heights allow comfortable movement and access particularly in entry lobbies, outside lifts and at apartment entry doors</p> <p>Daylight and natural ventilation should be provided to all common circulation spaces that are above ground</p> <p>Windows should be provided in common circulation spaces and should be adjacent to the stair or lift core or at the ends of corridors</p> <p>Longer corridors greater than 12m in length from the lift core should be articulated. Design solutions may include:</p> <ul style="list-style-type: none"> • a series of foyer areas with windows and spaces for seating • wider areas at apartment entry doors and varied ceiling heights <p>Design common circulation spaces to maximise opportunities for dual aspect apartments, including multiple core apartment buildings and cross over apartments</p> <p>Achieving the design criteria for the number of apartments off a circulation core may not be possible. Where a development is unable to achieve the design criteria, a high level of amenity for common lobbies, corridors and apartments should be demonstrated, including:</p> <ul style="list-style-type: none"> • sunlight and natural cross ventilation in apartments • access to ample daylight and natural ventilation in common circulation spaces • common areas for seating and gathering • generous corridors with greater than minimum ceiling heights • other innovative design solutions that provide high levels of amenity <p>Where design criteria 1 is not achieved, no more than 12 apartments should be provided off a circulation core on a single level</p> <p>Primary living room or bedroom windows should not open directly onto common circulation spaces, whether open or enclosed. Visual and acoustic privacy from common circulation spaces to any other rooms should be carefully controlled</p>	<p>Satisfactory</p>

Standards/controls	Comment
<p data-bbox="169 203 371 237">Objective 4F-2</p> <p data-bbox="169 248 831 315">Common circulation spaces promote safety and provide for social interaction between residents</p> <p data-bbox="169 344 395 378">Design guidance</p> <p data-bbox="169 398 815 533">Direct and legible access should be provided between vertical circulation points and apartment entries by minimising corridor or gallery length to give short, straight, clear sight lines</p> <p data-bbox="169 562 592 595">Tight corners and spaces are avoided</p> <p data-bbox="169 624 659 658">Circulation spaces should be well lit at night</p> <p data-bbox="169 687 831 754">Legible signage should be provided for apartment numbers, common areas and general wayfinding</p> <p data-bbox="169 784 807 851">Incidental spaces, for example space for seating in a corridor, at a stair landing, or near a window are provided</p> <p data-bbox="169 880 839 1014">In larger developments, community rooms for activities such as owners corporation meetings or resident use should be provided and are ideally co-located with communal open space</p> <p data-bbox="169 1043 823 1111">Where external galleries are provided, they are more open than closed above the balustrade along their length</p>	<p data-bbox="940 203 1078 237">Satisfactory</p>

4G Storage**Objective 4G-1**

Adequate, well designed storage is provided in each apartment

Design criteria

1. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:

Dwelling type	Storage size volume
Studio apartments	4m ³
1 bedroom apartments	6m ³
2 bedroom apartments	8m ³
3+ bedroom apartments	10m ³

At least 50% of the required storage is to be located within the apartment

Design guidance

Storage is accessible from either circulation or living areas

Storage provided on balconies (in addition to the minimum balcony size) is integrated into the balcony design, weather proof and screened from view from the street

Left over space such as under stairs is used for storage

Objective 4G-2

Additional storage is conveniently located, accessible and nominated for individual apartments

Design guidance

Storage not located in apartments is secure and clearly allocated to specific apartments

Storage is provided for larger and less frequently accessed items

Storage space in internal or basement car parks is provided at the rear or side of car spaces or in cages so that allocated car parking remains accessible

If communal storage rooms are provided they should be accessible from common circulation areas of the building

Storage not located in an apartment is integrated into the overall building design and is not visible from the public domain

Complies

Satisfactory

4H Acoustic privacy**Objective 4H-1**

Noise transfer is minimised through the siting of buildings and building layout

Design guidance

Adequate building separation is provided within the development and from neighbouring buildings/adjacent uses (see also section 2F Building separation and section 3F Visual privacy)

Window and door openings are generally orientated away from noise sources

Noisy areas within buildings including building entries and corridors should be located next to or above each other and quieter areas next to or above quieter areas

Storage, circulation areas and non-habitable rooms should be located to buffer noise from external sources

The number of party walls (walls shared with other apartments) are limited and are appropriately insulated

Noise sources such as garage doors, driveways, service areas, plant rooms, building services, mechanical equipment, active communal open spaces and circulation areas should be located at least 3m away from bedrooms

Satisfactory

Objective 4H-2

Noise impacts are mitigated within apartments through layout and acoustic treatments

Design guidance

Internal apartment layout separates noisy spaces from quiet spaces, using a number of the following design solutions:

- rooms with similar noise requirements are grouped together
- doors separate different use zones
- wardrobes in bedrooms are co-located to act as sound buffers

Where physical separation cannot be achieved noise conflicts are resolved using the following design solutions:

- double or acoustic glazing
- acoustic seals
- use of materials with low noise penetration properties
- continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements

Satisfactory

Standards/controls	Comment
<p>4J Noise and pollution</p> <p>Objective 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings</p> <p>Design guidance</p> <p>To minimise impacts the following design solutions may be used:</p> <ul style="list-style-type: none"> • physical separation between buildings and the noise or pollution source • residential uses are located perpendicular to the noise source and where possible buffered by other uses • non-residential buildings are sited to be parallel with the noise source to provide a continuous building that shields residential uses and communal open spaces • non-residential uses are located at lower levels vertically separating the residential component from the noise or pollution source. Setbacks to the underside of residential floor levels should increase relative to traffic volumes and other noise sources • buildings should respond to both solar access and noise. Where solar access is away from the noise source, non-habitable rooms can provide a buffer • where solar access is in the same direction as the noise source, dual aspect apartments with shallow building depths are preferable (see figure 4J.4) • landscape design reduces the perception of noise and acts as a filter for air pollution generated by traffic and industry <p>Achieving the design criteria in this Apartment Design Guide may not be possible in some situations due to noise and pollution. Where developments are unable to achieve the design criteria, alternatives may be considered in the following areas:</p> <ul style="list-style-type: none"> • solar and daylight access • private open space and balconies • natural cross ventilation 	<p>Satisfactory</p>

Standards/controls	Comment
<p>Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission</p> <p>Design guidance</p> <p>Design solutions to mitigate noise include:</p> <ul style="list-style-type: none"> • limiting the number and size of openings facing noise sources • providing seals to prevent noise transfer through gaps • using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens) • using materials with mass and/or sound insulation or absorption properties e.g. solid balcony balustrades, external screens and soffits 	Satisfactory
<p>4K Apartment mix</p> <p>Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future</p> <p>Design guidance</p> <p>A variety of apartment types is provided</p> <p>The apartment mix is appropriate, taking into consideration:</p> <ul style="list-style-type: none"> • the distance to public transport, employment and education centres • the current market demands and projected future demographic trends • the demand for social and affordable housing • different cultural and socioeconomic groups <p>Flexible apartment configurations are provided to support diverse household types and stages of life including single person households, families, multi-generational families and group households</p>	Does not comply.
<p>Objective 4K-2 The apartment mix is distributed to suitable locations within the building</p> <p>Design guidance</p> <p>Different apartment types are located to achieve successful facade composition and to optimise solar access (see figure 4K.3)</p> <p>Larger apartment types are located on the ground or roof level where there is potential for more open space and on corners where more building frontage is available</p>	Satisfactory

4L Ground floor apartments**Objective 4L-1**

Street frontage activity is maximised where ground floor apartments are located

Design guidance

Direct street access should be provided to ground floor apartments

Activity is achieved through front gardens, terraces and the facade of the building. Design solutions may include:

- both street, foyer and other common internal circulation entrances to ground floor apartments
- private open space is next to the street
- doors and windows face the street

Retail or home office spaces should be located along street frontages

Ground floor apartment layouts support small office home office (SOHO) use to provide future opportunities for conversion into commercial or retail areas. In these cases provide higher floor to ceiling heights and ground floor amenities for easy conversion

Satisfactory

Objective 4L-2

Design of ground floor apartments delivers amenity and safety for residents

Design guidance

Privacy and safety should be provided without obstructing casual surveillance. Design solutions may include:

- elevation of private gardens and terraces above the street level by 1-1.5m (see figure 4L.4)
- landscaping and private courtyards
- window sill heights that minimise sight lines into apartments
- integrating balustrades, safety bars or screens with the exterior design

Solar access should be maximised through:

- high ceilings and tall windows
- trees and shrubs that allow solar access in winter and shade in summer

Satisfactory

4M Facades**Objective 4M-1**

Building facades provide visual interest along the street while respecting the character of the local area

Design guidance

Design solutions for front building facades may include:

- a composition of varied building elements
- a defined base, middle and top of buildings
- revealing and concealing certain elements
- changes in texture, material, detail and colour to modify the prominence of elements

Building services should be integrated within the overall facade

Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include:

- well composed horizontal and vertical elements
- variation in floor heights to enhance the human scale
- elements that are proportional and arranged in patterns
- public artwork or treatments to exterior blank walls
- grouping of floors or elements such as balconies and windows on taller buildings

Building facades relate to key datum lines of adjacent buildings through upper level setbacks, parapets, cornices, awnings or colonnade heights

Shadow is created on the facade throughout the day with building articulation, balconies and deeper window reveals

Satisfactory

Objective 4M-2

Building functions are expressed by the facade

Design guidance

Building entries should be clearly defined

Important corners are given visual prominence through a change in articulation, materials or colour, roof expression or changes in height

The apartment layout should be expressed externally through facade features such as party walls and floor slabs

Satisfactory

Standards/controls	Comment
<div><div>Objective 4N-3 Roof design incorporates sustainability features</div><div>Design guidance Roof design maximises solar access to apartments during winter and provides shade during summer. Design solutions may include:<ul style="list-style-type: none">the roof lifts to the northeaves and overhangs shade walls and windows from summer sun Skylights and ventilation systems should be integrated into the roof design</div></div>	Satisfactory
4O Landscape design	
<div><div>Objective 4O-1 Landscape design is viable and sustainable</div><div>Design guidance Landscape design should be environmentally sustainable and can enhance environmental performance by incorporating:<ul style="list-style-type: none">diverse and appropriate plantingbio-filtration gardensappropriately planted shading treesareas for residents to plant vegetables and herbscompostinggreen roofs or walls Ongoing maintenance plans should be prepared Microclimate is enhanced by:<ul style="list-style-type: none">appropriately scaled trees near the eastern and western elevations for shadea balance of evergreen and deciduous trees to provide shading in summer and sunlight access in wintershade structures such as pergolas for balconies and courtyards Tree and shrub selection considers size at maturity and the potential for roots to compete (see Table 4)</div></div>	Satisfactory

Standards/controls	Comment
<p>Objective 4O-2 Landscape design contributes to the streetscape and amenity</p> <p>Design guidance</p> <p>Landscape design responds to the existing site conditions including:</p> <ul style="list-style-type: none"> • changes of levels • views • significant landscape features including trees and rock outcrops <p>Significant landscape features should be protected by:</p> <ul style="list-style-type: none"> • tree protection zones (see figure 4O.5) • appropriate signage and fencing during construction <p>Plants selected should be endemic to the region and reflect the local ecology</p>	Satisfactory
<p>4P Planting on structures</p> <p>Objective 4P-1 Appropriate soil profiles are provided</p> <p>Design guidance</p> <p>Structures are reinforced for additional saturated soil weight</p> <p>Soil volume is appropriate for plant growth, considerations include:</p> <ul style="list-style-type: none"> • modifying depths and widths according to the planting mix and irrigation frequency • free draining and long soil life span • tree anchorage <p>Minimum soil standards for plant sizes should be provided in accordance with Table 5</p>	Satisfactory

Standards/controls	Comment
<p>Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance</p> <p>Design guidance</p> <p>Plants are suited to site conditions, considerations include:</p> <ul style="list-style-type: none"> • drought and wind tolerance • seasonal changes in solar access • modified substrate depths for a diverse range of plants • plant longevity <p>A landscape maintenance plan is prepared</p> <p>Irrigation and drainage systems respond to:</p> <ul style="list-style-type: none"> • changing site conditions • soil profile and the planting regime • whether rainwater, stormwater or recycled grey water is used 	Satisfactory
<p>Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces</p> <p>Design guidance</p> <p>Building design incorporates opportunities for planting on structures. Design solutions may include:</p> <ul style="list-style-type: none"> • green walls with specialised lighting for indoor green walls • wall design that incorporates planting • green roofs, particularly where roofs are visible from the public domain • planter boxes <p>Note: structures designed to accommodate green walls should be integrated into the building facade and consider the ability of the facade to change over time</p>	Satisfactory
<p>4Q Universal design</p> <p>Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members</p> <p>Design guidance</p> <p>Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features</p>	Only one unit incorporates the livable housing guideline's silver level universal design features. The SEE notes that 8 are capable of complying however a minimum of two must achieve the features, not be capable of complying.

Standards/controls	Comment
<p>Objective 4Q-2 A variety of apartments with adaptable designs are provided</p> <p>Design guidance</p> <p>Adaptable housing should be provided in accordance with the relevant council policy</p> <p>Design solutions for adaptable apartments include:</p> <ul style="list-style-type: none"> • convenient access to communal and public areas • high level of solar access • minimal structural change and residential amenity loss when adapted • larger car parking spaces for accessibility • parking titled separately from apartments or shared car parking arrangements 	Satisfactory
<p>Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs</p> <p>Design guidance</p> <p>Apartment design incorporates flexible design solutions which may include:</p> <ul style="list-style-type: none"> • rooms with multiple functions • dual master bedroom apartments with separate bathrooms • larger apartments with various living space options • open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom 	

Standards/controls	Comment
<p>4R Adaptive reuse</p> <div data-bbox="151 264 842 936"> <p>Objective 4R-1 New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place</p> <p>Design guidance</p> <p>Design solutions may include:</p> <ul style="list-style-type: none"> • new elements to align with the existing building • additions that complement the existing character, siting, scale, proportion, pattern, form and detailing • use of contemporary and complementary materials, finishes, textures and colours <p>Additions to heritage items should be clearly identifiable from the original building</p> <p>New additions allow for the interpretation and future evolution of the building</p> </div>	<p>N/A</p>

Standards/controls	Comment
<p data-bbox="165 210 371 244">Objective 4R-2</p> <p data-bbox="165 253 774 320">Adapted buildings provide residential amenity while not precluding future adaptive reuse</p> <p data-bbox="165 349 389 383">Design guidance</p> <p data-bbox="165 400 812 535">Design features should be incorporated sensitively into adapted buildings to make up for any physical limitations, to ensure residential amenity is achieved. Design solutions may include:</p> <ul data-bbox="165 557 812 672" style="list-style-type: none"> • generously sized voids in deeper buildings • alternative apartment types when orientation is poor • using additions to expand the existing building envelope <p data-bbox="165 701 812 871">Some proposals that adapt existing buildings may not be able to achieve all of the design criteria in this Apartment Design Guide. Where developments are unable to achieve the design criteria, alternatives could be considered in the following areas:</p> <ul data-bbox="165 893 823 1373" style="list-style-type: none"> • where there are existing higher ceilings, depths of habitable rooms could increase subject to demonstrating access to natural ventilation, cross ventilation (when applicable) and solar and daylight access (see also sections 4A Solar and daylight access and 4B Natural ventilation) • alternatives to providing deep soil where less than the minimum requirement is currently available on the site • building and visual separation – subject to demonstrating alternative design approaches to achieving privacy • common circulation • car parking • alternative approaches to private open space and balconies 	<p data-bbox="938 201 986 230">N/A</p>

4T Awnings and signage**Objective 4T-1**

Awnings are well located and complement and integrate with the building design

Design guidance

Awnings should be located along streets with high pedestrian activity and active frontages

A number of the following design solutions are used:

- continuous awnings are maintained and provided in areas with an existing pattern
- height, depth, material and form complements the existing street character
- protection from the sun and rain is provided
- awnings are wrapped around the secondary frontages of corner sites
- awnings are retractable in areas without an established pattern

Awnings should be located over building entries for building address and public domain amenity

Awnings relate to residential windows, balconies, street tree planting, power poles and street infrastructure

Gutters and down pipes should be integrated and concealed

Lighting under awnings should be provided for pedestrian safety

N/A

Objective 4T-2

Signage responds to the context and desired streetscape character

Design guidance

Signage should be integrated into the building design and respond to the scale, proportion and detailing of the development

Legible and discrete way finding should be provided for larger developments

Signage is limited to being on and below awnings and a single facade sign on the primary street frontage

N/A

Standards/controls	Comment
4U Energy efficiency	
<div> Objective 4U-1 Development incorporates passive environmental design </div> <div> Design guidance Adequate natural light is provided to habitable rooms (see 4A Solar and daylight access) Well located, screened outdoor areas should be provided for clothes drying </div>	Satisfactory
<div> Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer </div> <div> Design guidance A number of the following design solutions are used: <ul style="list-style-type: none"> the use of smart glass or other technologies on north and west elevations thermal mass in the floors and walls of north facing rooms is maximised polished concrete floors, tiles or timber rather than carpet insulated roofs, walls and floors and seals on window and door openings overhangs and shading devices such as awnings, blinds and screens Provision of consolidated heating and cooling infrastructure should be located in a centralised location (e.g. the basement) </div>	Satisfactory
<div> Objective 4U-3 Adequate natural ventilation minimises the need for mechanical ventilation </div> <div> Design guidance A number of the following design solutions are used: <ul style="list-style-type: none"> rooms with similar usage are grouped together natural cross ventilation for apartments is optimised natural ventilation is provided to all habitable rooms and as many non-habitable rooms, common areas and </div>	Satisfactory

Standards/controls	Comment
4V Water management and conservation	
<div> <p>Objective 4V-1 Potable water use is minimised</p> <p>Design guidance</p> <p>Water efficient fittings, appliances and wastewater reuse should be incorporated</p> <p>Apartments should be individually metered</p> <p>Rainwater should be collected, stored and reused on site</p> <p>Drought tolerant, low water use plants should be used within landscaped areas</p> </div>	Satisfactory
<div> <p>Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters</p> <p>Design guidance</p> <p>Water sensitive urban design systems are designed by a suitably qualified professional</p> <p>A number of the following design solutions are used:</p> <ul style="list-style-type: none"> • runoff is collected from roofs and balconies in water tanks and plumbed into toilets, laundry and irrigation • porous and open paving materials is maximised • on site stormwater and infiltration, including bio-retention systems such as rain gardens or street tree pits </div>	Satisfactory
<div> <p>Objective 4V-3 Flood management systems are integrated into site design</p> <p>Design guidance</p> <p>Detention tanks should be located under paved areas, driveways or in basement car parks</p> <p>On large sites parks or open spaces are designed to provide temporary on site detention basins</p> </div>	Satisfactory

Standards/controls	Comment
4W Waste management	
<div> <p>Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents</p> <p>Design guidance</p> <p>Adequately sized storage areas for rubbish bins should be located discreetly away from the front of the development or in the basement car park</p> <p>Waste and recycling storage areas should be well ventilated</p> <p>Circulation design allows bins to be easily manoeuvred between storage and collection points</p> <p>Temporary storage should be provided for large bulk items such as mattresses</p> <p>A waste management plan should be prepared</p> </div>	Satisfactory
<div> <p>Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling</p> <p>Design guidance</p> <p>All dwellings should have a waste and recycling cupboard or temporary storage area of sufficient size to hold two days worth of waste and recycling</p> <p>Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core</p> <p>For mixed use developments, residential waste and recycling storage areas and access should be separate and secure from other uses</p> <p>Alternative waste disposal methods such as composting should be provided</p> </div>	Satisfactory

4X Building maintenance**Objective 4X-1**

Building design detail provides protection from weathering

Design guidance

A number of the following design solutions are used:

- roof overhangs to protect walls
- hoods over windows and doors to protect openings
- detailing horizontal edges with drip lines to avoid staining of surfaces
- methods to eliminate or reduce planter box leaching
- appropriate design and material selection for hostile locations

Satisfactory

Objective 4X-2

Systems and access enable ease of maintenance

Design guidance

Window design enables cleaning from the inside of the building

Building maintenance systems should be incorporated and integrated into the design of the building form, roof and facade

Design solutions do not require external scaffolding for maintenance access

Manually operated systems such as blinds, sunshades and curtains are used in preference to mechanical systems

Centralised maintenance, services and storage should be provided for communal open space areas within the building

Satisfactory

Objective 4X-3

Material selection reduces ongoing maintenance costs

Design guidance

A number of the following design solutions are used:

- sensors to control artificial lighting in common circulation and spaces
- natural materials that weather well and improve with time such as face brickwork
- easily cleaned surfaces that are graffiti resistant
- robust and durable materials and finishes are used in locations which receive heavy wear and tear, such as common circulation areas and lift interiors

Satisfactory

ATTACHMENT 6 - WOLLONGONG DEVELOPMENT CONTROL PLAN 2009 ASSESSMENT

CHAPTER B1 – RESIDENTIAL DEVELOPMENT

4.0 General Residential controls

Control	Comment
<u>4.13 Fire Brigade Servicing</u>	
	The development can be readily accessed from the street frontage.
<u>4.18 Swimming pools and spas</u>	
Water from paved areas must not be discharged to any watercourse.	Conditions would be applicable in this regard.
Discharge and/or overflow pipe(s) from the swimming pool and filtration unit are:	Conditions would be applicable in this regard.
<ul style="list-style-type: none">To be discharged in accordance with an approval under the Local Government Act 1993 if the lot is not connected to a sewer mainNot to discharge water to any watercourse.	
A swimming pool must be surrounded by a child resistant barrier complying with the requirements of the Swimming Pools Act 1992 (and Regulations) and the appropriate Australian Standard as referenced by the Building Code of Australia.	Conditions would be applicable in this regard.
The wall of a residential building may form part of the child restraint barrier so long as the wall contains no openable door, window or other opening through which access may at any time be gained to the swimming pool.	Complies
A minimum of 50% of the perimeter of a pool must be accessible for rescue purposes.	Complies
The pool pump / filter must be located as far away as practicable from any adjoining dwelling and should be enclosed in an acoustic enclosure / structure.	Complies

CHAPTER D13 – WOLLONGONG CITY CENTRE

2 Building form

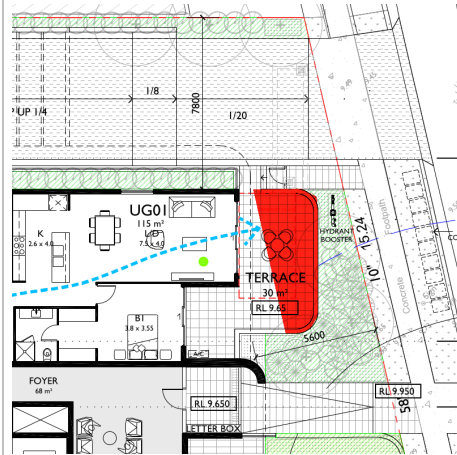
Objectives/controls

Comment

2.2 Building to street alignment and street setbacks

4m front setback

The proposed terrace area for UG01 does not comply. This is identified as having a solid ~1.9m high wall around it.



2.3 Street frontage heights in commercial core

N/A

2.4 Building depth and bulk

18m maximum

The maximum building depth reaches ~20.7m and the SEE does not identify this variation.

2.5 Side and rear building setbacks and building separation

Building condition	Minimum side setback	Minimum rear setback
Residential uses up to 12m in height		
- habitable rooms with openings and balconies	6m	6m
- non-habitable rooms and habitable rooms without openings	3m	4.5m
Residential uses between 12m & 24m		
- habitable rooms with openings and balconies	9m	9m
-non-habitable rooms and habitable rooms without openings	4.5m	4.5m

The proposal does not comply. See discussion at Chapter A1.

2.6 Mixed used buildings

N/A

2.7 Deep soil zone

Deep soil area 15% of site area

Complies

<i>Objectives/controls</i>	<i>Comment</i>
Minimum dimension of 6m	70(front)+160(rear – inc. COS?) = 20/1,536.5 = 15% Does not comply for the entirety.
<u>2.8 Landscape design</u>	Satisfactory
<u>2.9 Green roofs, green walls and planting on structures</u>	N/A
<u>2.10 Sun access planes</u>	N/A
<u>2.11 Development on classified roads</u>	N/A

3 Pedestrian amenity

<i>Objectives/controls</i>	<i>Comment</i>
<u>3.2 Permeability</u>	N/A
<u>3.3 Active street frontages</u>	N/A
<u>3.4 Safety and security</u>	Satisfactory
<u>3.5 Awnings</u>	N/A
<u>3.6 Vehicular footpath crossings</u>	
One vehicle entry permitted	Complies
5.5m maximum width	Complies
Doors to vehicle access points are to be roller shutters or tilting doors fitted behind the building façade.	Complies
<u>3.7 Pedestrian overpasses, underpasses and encroachments</u>	N/A
<u>3.8 Building exteriors</u>	
a) Adjoining buildings (particularly heritage buildings) are to be considered in the design of new buildings in terms of:	The building is considered to relate well to adjoining buildings and approved future form on adjoining land.
i) Appropriate alignment and street frontage heights.	
ii) Setbacks above street frontage heights.	
iii) Appropriate materials and finishes selection.	
iv) Façade proportions including horizontal or vertical emphasis.	
v) The provision of enclosed corners at street intersections.	
b) Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of	Satisfactory

buildings. Gardens on the top of setback areas of buildings are encouraged	
c) Articulate facades so that they address the street and add visual interest.	Satisfactory
d) External walls should be constructed of high quality and durable materials and finishes with 'selfcleaning' attributes, such as face brickwork, rendered brickwork, stone, concrete and glass.	Satisfactory
e) Finishes with high maintenance costs, those susceptible to degradation or corrosion from a coastal or industrial environment or finishes that result in unacceptable amenity impacts, such as reflective glass, are to be avoided.	Satisfactory
f) To assist articulation and visual interest, avoid expanses of any single material.	Satisfactory
g) Limit opaque or blank walls for ground floor uses to 30% of the street frontage.	Complies
h) Maximise glazing for retail uses, but break glazing into sections to avoid large expanses of glass.	N/A
i) Highly reflective finishes and curtain wall glazing are not permitted above ground floor level (see Section 5.3).	Satisfactory
j) A materials sample board and schedule is required to be submitted with applications for development over \$1 million or for that part of any development built to the street edge.	A schedule of materials and finishes has been provided.
k) Minor projections up to 450mm from building walls in accordance with those permitted by the Building Code of Australia may extend into the public space providing it does not fall within the definition of gross floor area and there is a public benefit	N/A
l) The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building.	Complies
<u>3.9 Advertising and signage</u>	
	N/A
<u>3.10 Views and view corridors</u>	
Existing views shown in Figure 3.12 are to be protected	N/A
Align buildings to maximise view corridors between buildings.	Non-compliant setbacks however views between buildings not critical in this situation.

4 Access, parking and servicing

<i>Objectives/controls</i>	<i>Comment</i>
<u>4.2 Pedestrian access and mobility</u>	
a) Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.	Satisfactory
b) The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, AS 2890 Pt 1, or as amended) and the Disability Discrimination Act 1992 (as amended).	Complies or addressed via conditions.

Objectives/controls	Comment
<p>c) The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.</p> <p>d) The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access.</p> <p>e) Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours in accordance with Council's Public Domain Technical Manual.</p> <p>f) Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1:2001, AS/NZS 2890.1:2004 and the Disability Discrimination Act.</p>	<p>The rear COS area requires those who are mobility impaired to use a wheelchair platform lift.</p> <p>Satisfactory</p>
<p><u>4.3 Vehicular driveways and manoeuvring areas</u></p> <p>a) Driveways should be:</p> <ul style="list-style-type: none"> i) Provided from lanes and secondary streets rather than the primary street, wherever practical. ii) Located taking into account any services within the road reserve, such as power poles, drainage pits and existing street trees. iii) Located a minimum of 6 metres from the perpendicular of any intersection of any two roads. iv) If adjacent to a residential development setback a minimum of 1.5m from the relevant side property boundary. 	<p>Complies</p>
<p>b) Vehicle access is to be designed to:</p> <ul style="list-style-type: none"> i) Minimise the impact on the street, site layout and the building façade design; and ii) If located off a primary street frontage, integrated into the building design. 	<p>Satisfactory</p>
<p>c) All vehicles must be able to enter and leave the site in a forward direction without the need to make more than a three point turn</p>	<p>Complies</p>
<p>d) Design of driveway crossings must be in accordance with Council's standard Vehicle Entrance Designs, with any works within the footpath and road reserve subject to a s138 Roads Act approval.</p>	<p>Complies</p>
<p>e) Driveway widths must comply with the relevant Australian Standards.</p>	<p>Complies</p>
<p>f) Car space dimensions must comply with the relevant Australian Standards.</p>	<p>Complies</p>
<p>g) Driveway grades, vehicular ramp width/grades and passing bays must be in accordance with the relevant Australian Standard, (AS 2990.1).</p>	<p>Complies</p>
<p>h) Vehicular ramps less than 20m long within developments and parking stations must have a maximum grade of 1 in 5 (20%). Ramp widths and design must be in accordance with AS 2890.1.</p>	<p>N/A</p>

<i>Objectives/controls</i>	<i>Comment</i>
<p>i) Access ways to underground parking should not be located adjacent to doors or windows of the habitable rooms of any residential development.</p> <p>j) For residential development in the General Residential zone, use semi-pervious materials for all uncovered parts of driveways/spaces to provide for some stormwater infiltration.</p> <p><u>4.4 On-site parking</u></p> <p>General (all development)</p> <p>a) On-site parking must meet the relevant Australian Standard (AS2890.1 2004 – Parking facilities, or as amended).</p> <p>b) Council may require the provision of a supporting geotechnical report prepared by an appropriately qualified professional as information to accompany a development application to Council.</p> <p>c) Car parking and associated internal manoeuvring areas which are surplus to Council's specified parking requirements will count towards the gross floor area, but not for the purpose of determining the necessary parking.</p> <p>d) Any car parking provided in a building above ground level is to have a minimum floor to ceiling height of 2.8m so it can be adapted to another use in the future.</p> <p>e) On-site vehicle, motorcycle and bicycle parking is to be provided in accordance with Part E of this DCP</p> <p>(f) To accommodate people with disabilities, provide a minimum of 1% of the required parking spaces, or minimum of 1 space per development, (whichever is the greater) as an appropriately designated and signed disabled parking space.</p> <p><u>4.5 Site facilities and services</u></p> <p>Mail boxes</p> <p>a) Provide letterboxes for residential building and/or commercial tenancies in one accessible location adjacent to the main entrance to the development.</p> <p>b) They should be integrated into a wall where possible and be constructed of materials consistent with the appearance of the building.</p> <p>c) Letterboxes shall be secure and large enough to accommodate articles such as newspapers.</p> <p>Communication structures, air conditioners and service vents</p> <p>a) Locate satellite dish and telecommunication antennae, air conditioning units, ventilation stacks and any ancillary structures:</p> <p>i) Away from the street frontage,</p> <p>ii) Integrated into the roof scape design and in a position where such facilities will not become a skyline feature at the top of any building, and</p> <p>iii) Adequately setback from the perimeter wall or roof edge of buildings.</p>	<p>Satisfactory</p> <p>N/A</p> <p>Australian Standards are met.</p> <p>The proposal has been reviewed by Council's Geotechnical Officer who has recommended conditions with regard to excavation.</p> <p>The proposal exceeds the number of car parking spaces required under the controls and calculation of the contribution this makes to gross floor area has not be done correctly as detailed at Chapter A1.</p> <p>Parking is all below ground.</p> <p>The proposal complies with motorcycle and bicycle parking requirements and accessible parking.</p> <p>Satisfactory</p> <p>Satisfactory</p>

Objectives/controls	Comment
<p>b) A master antennae must be provided for residential apartment buildings. This antenna shall be sited to minimise its visibility from surrounding public areas.</p> <p>Waste (garbage) storage and collection</p> <p>General (all development)</p> <p>a) All development is to adequately accommodate waste handling and storage on-site. The size, location and handling procedures for all waste, including recyclables, is to be determined in accordance with Council waste policies and advice from relevant waste handling contractors.</p> <p>b) Access for waste collection and storage is preferred from rear lanes, side streets or rights of ways.</p> <p>c) Waste storage areas are to be designed to:</p> <p>i) Ensure adequate driveway access and manoeuvrability for any required service vehicles,</p> <p>ii) Located so as not to create any adverse noise impacts on the existing developments or sensitive noise receptors such as habitable rooms of residential developments, and</p> <p>iii) Screened from the public way and adjacent development that may overlook the area.</p> <p>d) The storage facility must be well lit, easily accessible on grade for movement of bins, free of obstructions that may restrict movement and servicing of bins or containers and designed to minimise noise impacts.</p> <p>Location requirements for Waste Storage Areas and Access</p> <p>a) Where waste volumes require a common collection, storage and handling area, this is to be located:</p> <p>i) For residential flat buildings, enclosed within a basement or enclosed carpark,</p> <p>ii) For multi-housing, at ground behind the main building setback and façade, or within a basement or enclosed carpark,</p> <p>iii) For commercial, retail and other development, on-site in basements or at ground within discrete service areas not visible from main street frontages.</p> <p>b) Where above ground garbage collection is prohibitive or impractical due to limited street frontage, or would create an unsafe environment, an on-site basement storage area must be provided.</p> <p>c) Where a mobile compaction vehicle is required to enter the site, the access and circulation area shall be designed to accommodate a vehicle</p>	<p>Waste storage areas are of a suitable size and location.</p> <p>On-street collection is proposed.</p>

<i>Objectives/controls</i>	<i>Comment</i>
<p>Service docks and loading/unloading areas</p> <p>a) Provide adequate space within any new development for the loading and unloading of service/delivery vehicles.</p> <p>b) Preferably locate service access off rear lanes, side streets or rights of way.</p> <p>c) Screen all service doors and loading docks from street frontages and from active overlooking from existing developments.</p> <p>d) Design circulation and access in accordance with AS2890.1.</p> <p>Fire service and emergency vehicles</p> <p>a) For developments where a fire brigade vehicle is required to enter the site, vehicular access, egress and manoeuvring must be provided to, from and on the site in accordance with the NSW Fire Brigades Code of Practice – Building Construction – NSWFB Vehicle Requirements.</p> <p>b) Generally, provision must be made for NSW Fire Brigade vehicles to enter and leave the site in a forward direction where:</p> <p>i) NSW Fire Brigade cannot park their vehicles within the road reserve due to the distance of hydrants from the building or restricted vehicular access to hydrants; or</p> <p>ii) The site has an access driveway longer than 15m.</p> <p>Utility Services</p> <p>The provision of utility services and access for regular servicing and maintenance must be considered at the concept stage of site development.</p> <p>a) Development must ensure that adequate provision has been made for all essential services including water, sewerage, electricity and telecommunications and stormwater drainage to the satisfaction of all relevant authorities.</p> <p>b) The applicant must liaise with the relevant power authority with regard to the need for a conduit to be installed within the foot way area for the future provision of an underground power supply and extension of the conduit up to the wall of the existing or proposed building.</p> <p>c) The development must ensure that ready connection of the building(s) can be made in future when underground power is installed and the overhead connection is replaced with a connection to the underground line.</p> <p>d) The applicant must liaise with the power authority with regard to the retention, relocation, or removal of any existing power pole.</p>	<p>The visitor parking area is large enough to accommodate a small van.</p> <p>The building is readily accessible from the street.</p> <p>Satisfactory subject to conditions.</p>

5 Environmental management

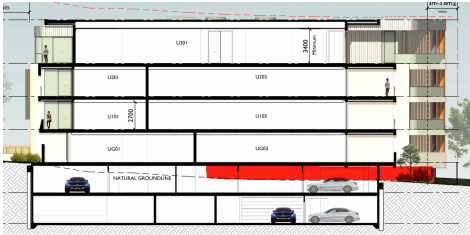
<i>Objectives/controls</i>	<i>Comment</i>
<p><u>5.2 Energy efficiency and conservation</u></p> <p>New dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy –</p>	<p>The proposal exceeds the minimum requirements for cross ventilation and solar access under the ADG.</p>

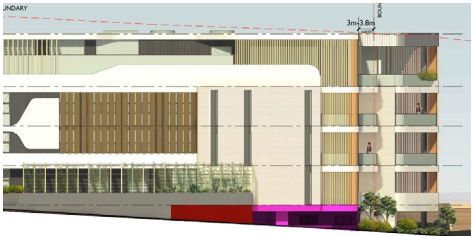
<i>Objectives/controls</i>	<i>Comment</i>
<p>Building Sustainability Index (BASIX). Council encourages all applicants to go beyond minimum BASIX requirements incorporating passive solar design and energy efficiency measures for residential development.</p> <p><u>5.3 Water conservation</u></p> <p>New dwellings, including a residential component within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with State Environmental Planning Policy – Building Sustainability Index (BASIX). Council encourages all residential development to go beyond the minimum BASIX requirements and enhance the water efficiency for their development.</p> <p><u>5.4 Reflectivity</u></p> <p><u>5.5 Wind mitigation</u></p> <p><u>5.6 Waste and recycling</u></p> <p>Provision must be made for the following waste generation:</p> <p>a) In developments not exceeding six dwellings, individual waste storage facilities may be permitted.</p> <p>b) In development of more than six units or dwellings, or where the topography or distance to the street collection point makes access difficult for individual occupants, a collection and storage area is required. The storage area must be located in a position which is;</p> <p>i) Not visible from the street,</p> <p>ii) Easily accessible to dwelling occupants,</p> <p>iii) Accessible by collection vehicles (or adequately managed by the body corporate to permit relocation of bins to the approved collection point),</p> <p>iv) Has water and drainage facilities for cleaning and maintenance, and</p> <p>v) Does not immediately adjoin private open space, windows or clothes drying areas.</p> <p>c) Subject to Council collection policy, common garbage storage areas must be sized to either accommodate the number of individual bins required or to accommodate sufficient larger bins</p>	<p>Solar Panels are proposed on the roof.</p> <p>EV charging is provided to resident car spaces.</p> <p>The general layout and orientation is considered to facilitate natural heating and cooling of the building.</p> <p>The proposal provides for water capture and reuse in landscaped areas.</p> <p>N/A</p> <p>N/A</p> <p>The proposal provides a suitably sized waste room.</p> <p>Kerbside collection is proposed.</p>

6 Residential development standards

<i>Objectives/controls</i>	<i>Comment</i>
<p><u>6.1 SEPP 65</u></p> <p>See above.</p> <p><u>6.2 Housing choice and mix</u></p> <p>a) Where residential units are proposed at ground level within the Mixed Use (City Edge) and Special Activities zone, a report must be provided with the development application</p>	<p>N/A</p>

Objectives/controls	Comment
<p>demonstrating how future commercial uses can be accommodated within the ground level design. The report must address:</p> <p>i) Access requirements including access for persons with a disability (Compliance with Disability Discrimination Act 1992),</p> <p>ii) Any upgrading works necessary for compliance with the Building Code of Australia, and</p> <p>iii) Appropriate floor to ceiling heights.</p> <p>b) To achieve a mix of living styles, sizes and layouts within each residential development, comply with the following mix and size:</p> <p>i) Studio and one bedroom units must not be less than 10% of the total mix of units within each development,</p> <p>ii) Three or more bedroom units must not be less than 10% of the total mix of units within each development, and</p> <p>iii) For smaller developments (less than six dwellings) achieve a mix appropriate to locality.</p> <p>c) For development built by (or on behalf of) the Department of Housing, an alternative mix of unit types may be approved, subject to housing needs being demonstrated by the Department.</p> <p>d) For residential apartment buildings and multi-unit housing, 10% of all dwellings (or at least one dwelling) must be designed to be capable of adaptation for disabled or elderly residents. Dwellings must be designed in accordance with the Australian Adaptable Housing Standard (AS 4299-1995), which includes "pre-adaptation" design details to ensure visitability is achieved.</p> <p>e) Where possible, adaptable dwellings shall be located on the ground floor, for ease of access. Dwellings located above the ground level of a building may only be provided as adaptable dwellings where lift access is available within the building. The lift access must provide access from the basement to allow access for people with disabilities</p> <p>f) The development application must be accompanied by certification from an accredited Access Consultant confirming that the adaptable dwellings are capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS 4299-1995).</p> <p>g) Car parking and garages allocated to adaptable dwellings must comply with the requirements of the relevant Australian Standard for disabled parking spaces.</p> <p>h) For all residential apartment / flat buildings, 10% of all dwellings (or at least 1 dwelling) must be designed to achieve the Silver Standards of the Livable Housing Design Guideline (Livable Housing Australia 2015). All proposed livable dwellings must be clearly identified on the submitted DA plans.</p> <p>i) Ceiling heights of apartments must be selected to encourage the penetration of natural sunlight into all areas of the building. Provide the following minimum floor to ceiling heights, for residential zones, as required by the Residential Flat Design Code:</p> <p>i) 2.7m minimum for all habitable rooms on all floors;</p> <p>ii) 2.25m to 2.4m minimum for non-habitable rooms on all floors;</p>	<p>The proposal does not provide any one or two bedroom units.</p> <p>N/A</p> <p>Complies (UG03)</p> <p>Complies</p> <p>Provided</p> <p>Complies</p> <p>One accessible unit is provided that would satisfy this standard. In addition, units G01, G02, 101, 102, 103, 201 and 203 are "capable" of compliance".</p> <p>Complies</p>

Objectives/controls	Comment
<p>iii) for two storey apartments, 2.4m minimum for the second storey if 50% or more of the apartment has 2.7m minimum ceiling heights;</p> <p>iv) for two storey units with a two storey void space, 2.4m minimum ceiling heights</p> <p>v) attic spaces, 1.5 minimum wall heights at edge of room with a 30 degree minimum ceiling slope.</p> <p><u>6.3 Dwelling houses</u></p> <p><u>6.4 Multi dwelling housing</u></p> <p><u>6.5 Dual occupancy</u></p> <p><u>6.6 Basement Carparks</u></p> <p>a) The scale and siting of the basement car park must not impact upon the ability of the development to satisfy minimum landscaping and deep soil zone requirements</p> <p>b) The roof of any basement podium, measured to the top of any solid wall located on the podium, must not be greater than 1.2m above natural or finished ground level, when measured at any point on the outside walls of the building. On sloping sites, a change in level in the basement must be provided to achieve this maximum 1.2m height. Generally variation to this 1.2m height will not be supported however Council recognises that there may be occasions where this standard cannot be achieved. Should such a circumstance arise, the additional portion of the basement podium above 1.2m height must be included in the total gross floor area calculation for the development.</p> <p>c) In addition, the following must be satisfied:</p> <p>i) Landscaped terraces are provided in front of the basement podium to reduce the overall visual impact;</p> <p>ii) The height of the basement does not result in the building having a bulk and scale which dominates the streetscape; and</p> <p>iii) The main pedestrian entry to the building is identifiable and readily accessible from the street frontage.</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>The extent of the basement compromises the ability to provide a 6m wide deep soil to the rear and opportunity for boundary landscaping.</p> <p>Part of the basement extends greater than 1.2m above natural ground as shown below.</p>  <p>Satisfactory</p>

Objectives/controls	Comment
<p>d) The following setbacks from front, side and rear boundaries apply to basement podiums:</p> <p>i) Where the height of the basement podium (measured to the top of any solid wall located on the podium) is less than 1.2m above natural or finished ground level (whichever distance is greater), the basement podium may extend to the property boundary. A minimum 1.5m wide landscaped planter must be provided on the perimeter of any section of the basement podium which is located on a side or rear property boundary. Such planter must prevent direct access to the outer edge of the podium, to minimise direct overlooking of adjacent dwellings and open space areas.</p> <p>ii) Any portion of the basement which exceeds 1.2m above natural or finished ground level (whichever distance is greater) must be setback from the property boundaries by a ratio 1:1 (height: setback). A minimum setback of 1.5m applies in this instance, with this area to be landscaped. For the purpose of determining the height of the basement, any solid walls located on the podium shall be included in the overall height calculation.</p> <p>e) Where parking is provided in a basement, ventilation structures for the basement parking and air conditioning units must be orientated away from windows of habitable rooms and private open space areas. Ventilation grills must be integrated into the design of the façade of the building to minimise their visual impact</p> <p>f) The visual impact of all basement walls must be minimised through the use of various design techniques including well proportioned ground level articulation and relief, mixed finishes and materials, terracing and/or dense landscaping.</p> <p>g) Basements must be protected from inundation from 100-year ARI flood levels (or greater).</p>	<p>Part of the basement extends greater than 1.2m above ground on the eastern side as shown below and is not set back from the boundary.</p> <p>The red shaded area being basement wall exceeding 1.2m above natural ground built to boundary, the purple area being part of the basement open and exposed which is unlikely to be supported and if enclosed would also represent non-compliance</p>  <p>Satisfactory</p> <p>See above</p> <p>Further detail is required as to how the basement is protected from ingress of water from the street.</p>
<p><u>6.7 Communal open space</u></p> <p>a) Developments with more than 10 dwellings must incorporate communal open space. The minimum size of this open space is to be calculated at 5m² per dwelling. Any area to be included in the communal open space calculations must have a minimum dimension of 5m.</p> <p>b) The communal open space must be easily accessible and within a reasonable distance from apartments, be integrated with site landscaping, allow for casual social interaction and be capable of accommodating recreational activities.</p> <p>c) Where a minimum of 15% of the site is provided as a deep soil zone, combined use of part of the deep soil zone as communal open space may occur. The combined communal open space/deep soil area may be grassed but must not contain significant shade trees. A maximum of 1/3 of the required communal open space area may be combined with the deep soil zone.</p> <p>d) Areas of the communal open space which are to be paved or which will contain shade structures, swimming pools or the like cannot be located within the deep soil zone.</p> <p>e) The communal open space area must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.</p>	<p>10 x 5 = 50m²; ~120m² proposed</p> <p>The rear COS area is only accessible for people that have mobility impairment via a platform lift. This is not considered ideal or equitable given that area is best situated to take advantage of northerly aspect.</p> <p>Satisfactory</p> <p>Satisfactory</p> <p>The primary accessible COS area would not receive 3 hours of direct sunlight between 9.00am and 3.00pm on June 21.</p>

Objectives/controls	Comment
<p><u>6.8 Private open space</u></p> <p>i) Avoid locating the primary balconies where they address side setbacks.</p> <p>ii) The balcony must have a minimum area of 12m² open space a minimum depth of 2.4 metres.</p> <p>iii) The primary balcony of at least 70% of the dwellings within a multi dwelling housing development shall receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm on June 21.</p> <p>iv) Balconies must be designed and positioned to ensure sufficient light can penetrate into the building at lower levels.</p> <p>v) Individual balcony enclosures are not supported. Balcony enclosures must form part of an overall building façade design treatment and should not compromise the functionality of a balcony as a private open space area.</p>	<p>Satisfactory</p>
<p><u>6.9 Overshadowing</u></p> <p>a) The design of the development must have regard to the existing and proposed level of sunlight which is received by living areas and private open space areas of adjacent dwellings. Sensitive design must aim to retain the maximum amount of sunlight for adjacent residents. Council will place greatest emphasis on the retention of sunlight within the lower density residential areas.</p> <p>b) Adjacent residential buildings and their public spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.</p> <p>c) In determining access to sunlight, overshadowing by fences, roof overhangs and changes in level must be taken into consideration. Overshadowing by vegetation should also be considered, where dense vegetation appears as a solid fence. Refer to Land and Environment Court Planning Principles – Parsonage vs Ku-Rin-Gai Council (2004).</p> <p>d) In areas undergoing change, the impact of overshadowing on development likely to be built on adjoining sites must be considered, in addition to the impacts on existing development.</p>	<p>Satisfactory</p>

Objectives/controls	Comment
<p><u>6.10 Solar access</u></p> <p>a) Residential apartment buildings must aim to maximise their level of northern exposure to optimise the number of dwellings having a northern aspect. Where a northern aspect is available, the living spaces and balconies of such apartments must typically be orientated towards the north.</p> <p>b) The development must maximise the number of apartments with a dual orientation. Single aspect, single storey apartments should preferably have a northerly or easterly aspect and a reduced depth to allow for access of natural light to all habitable spaces.</p> <p>c) Shading devices should be utilised where necessary, particularly where windows of habitable rooms are located on the western elevation.</p> <p>d) The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm.</p> <p>e) The number of single aspect apartments with a southerly aspect (south-westerly to south-easterly) is limited to a maximum of 10% of the total number of apartments proposed.</p> <p>f) Provide vertical shading to eastern and western windows. Shading can take the form of eaves, awnings, colonnades, balconies, pergolas, external louvres and planting.</p>	<p>Satisfactory</p>
<p><u>6.11 Natural ventilation</u></p> <p>a) Provide residential apartment buildings with a building depth of between 10 and 18m. The depth is measured across the shortest dimension of the building. Dwellings should be a maximum depth of 21m measured from the outside of the balcony.</p> <p>b) Variation to this standard will only be considered where it can be demonstrated that apartments will achieve the minimum requirements with regard to natural ventilation. This may be achieved where apartments have a wider frontage, or increased ceiling and window height to allow for greater penetration of natural light. The building depth is measured across the shortest access, excluding the depth of any unenclosed balconies.</p> <p>c) A minimum of sixty percent (60%) of all residential apartments shall be naturally cross ventilated</p> <p>d) Twenty five percent (25%) of kitchens within a development must have access to natural ventilation. Where kitchens do not have direct access to a window, the back of the kitchen must be no more than 8m from a window.</p> <p>e) Single aspect apartments must be limited in depth to 8m from a window.</p>	<p>Satisfactory</p>

Objectives/controls	Comment
<p><u>6.12 Visual privacy</u></p> <p>1. New buildings should be sited and oriented to maximise visual privacy between buildings through compliance with minimum front, side and rear setback / building separation requirements</p> <p>2. The internal layout of buildings should be designed to minimise any direct overlooking impacts occurring upon habitable rooms and private balcony / open space courtyards, wherever possible by separating communal open space and public domain areas from windows of rooms, particularly sleeping room and living room areas.</p> <p>3. Buildings are to be designed to increase privacy without compromising access to sunlight and natural ventilation through the following measures:</p> <p>(a) Off-setting of windows in new buildings from windows in existing adjoining building(s).</p> <p>(b) Recessed balconies and / or vertical fin elements between adjoining balconies to improve visual privacy.</p> <p>(c) Provision of solid, semi-solid or dark tinted glazed balustrading to balconies.</p> <p>(d) Provision of louvers or screen panels to windows and / or balconies.</p> <p>(e) Provision of perimeter landscaped screen / deep soil planting.</p> <p>(f) Incorporating planter boxes onto apartment balconies to improve visual separation between apartments within the development and adjoining buildings.</p> <p>(g) Provision of pergolas or shading devices to limit overlooking of lower apartments or private open space courtyards / balconies</p>	<p>Satisfactory</p>
<p><u>6.13 Acoustic Privacy</u></p> <p>1. Residential apartments should be arranged in a mixed use building, to minimise noise transition between apartments by:</p> <p>(a) Locating busy, noisy areas next to each other and quieter areas, next to other quieter areas (eg living rooms with living rooms and bedrooms with bedrooms);</p> <p>(b) Using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas; and</p> <p>(c) Minimising the amount of party (shared) walls with other apartments.</p> <p>2. All residential apartments within a mixed use development should be designed and constructed with double-glazed windows and / or laminated windows, solid walls, sealing of air gaps around doors and windows as well as insulating building elements for doors, walls, roofs and ceilings etc; to provide satisfactory acoustic privacy and amenity levels for occupants within the residential and / or serviced apartment(s).</p> <p>3. Noise transmission from common corridors or outside the building is to be minimised by providing seals at entry doors.</p>	<p>Satisfactory</p>

Objectives/controls			Comment
6.14 Storage			Complies
Dwelling	Storage Area	Storage Volume	
One bedroom apartments	3m ²	3m ³	
Two bedroom apartments	4m ²	8m ³	
Three or more bedroom apartments	5m ²	10m ³	

7 Planning controls for special areas

The site is not located within a special area.

8 Works in the public domain

The proposal involves upgrade of the footpath for the frontage to the site and removal of the redundant vehicle crossover. No street trees are proposed or required in this instance given the existing large street tree adjacent the site.

CHAPTER E1: ACCESS FOR PEOPLE WITH A DISABILITY

The northern COS area does not provide equitable access.

CHAPTER E2: CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

No concerns are raised in regard to the principles of CPTED.

CHAPTER E3: CAR PARKING, ACCESS, SERVICING/LOADING FACILITIES AND TRAFFIC MANAGEMENT

6 Traffic impact assessment and public transport studies

6.1 Car Parking and Traffic Impact Assessment Study

A Traffic Statement was submitted with the proposal which parking, traffic generation and access for the proposal. This report has been reviewed by Council's Traffic Officer who has not raised any concerns subject to conditions of consent.

6.2 Preliminary Construction Traffic Management Plan

N/A

7 Parking demand and servicing requirements

7.1 Car Parking, Motor Cycle, Bicycle Requirements and Delivery / Servicing Vehicle Requirements

Parking requirements for the proposal are addressed below:

	Medium density residential (2-20 dwellings)	Required	DCP		Proposed
Residential car parking	1/unit	10	0.75<70m ²		
4 x three bedroom	1/2-3 bedroom unit	4	1 70-110		
6 x four bedroom	1/5 bed unit	0	1.25 >110	12.5	21*
14					
Visitor car parking	1/5 units	2			2
Motorbike parking	1/15 units	1			1

*The plans indicate only 20 car spaces however there is a double garage that is the accessible parking where an accessible parking space only needs to be 3.8m wide.

7.2 Disabled Access and Parking

An accessible car parking space is provided.

7.3 Bicycle Parking / Storage Facilities and Shower and Change Facilities

Suitable areas are provided for bicycle storage.

7.7 Car Parking Layout and Design

The layout and design of the basement parking area is satisfactory.

7.8 Basement Car Parking

- A minimum 2.4m headroom height is provided.
- A geotechnical report has not been provided however the proposal has been reviewed by Council's Geotechnical Officer who has recommended conditions of consent with regard to excavation.
- Flood-proofing of the vehicular access, fire escapes and ventilation are detailed on the plans.
- On site waste servicing is not proposed.
- Wheel stops are to be provided to all spaces.

8 Vehicular access

Driveway grades and sight distances comply.

9 Loading / unloading facilities and service vehicle manoeuvring

Waste servicing is proposed from the kerb. There are a small number of units and sufficient frontage within which this can occur without adversely impacting on the street.

10 Pedestrian access

The proposal is satisfactory with regard to pedestrian access into the site and along the frontage.

11 Safety & security (Crime Prevention through Environmental Design) measures for car parking areas

The proposal is satisfactory with regard to the principles of CPTED.

CHAPTER E6: LANDSCAPING

- A suitable site plan and a Landscape Concept Plan prepared by a suitably qualified person have been submitted.
- Significant trees are accurately plotted.
- The landscaping is of a character that suitably responds to the streetscape and adjoining development.
- The landscaped areas are situated to provide amenity to the occupants.
- This has been reviewed as satisfactory by Council's Landscape Officer.

The Arborist Report does not accurately show the extent of encroachment of the basement into the TPZ as illustrated in red below.

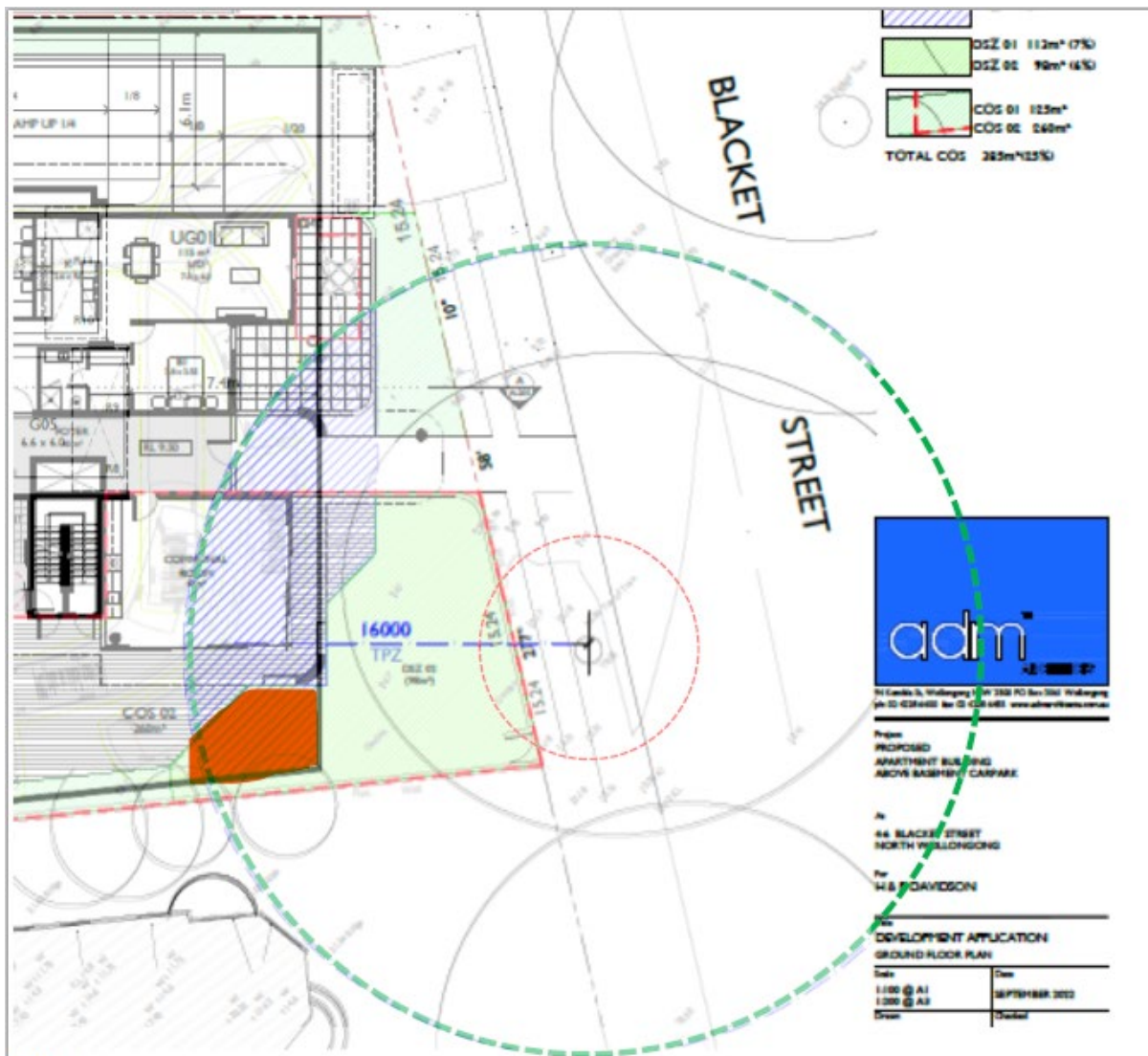


Fig 2:

Tree 1

TPZ- Tree Protection Zone = 16.0 metres

SRZ- Structural Root Zone= 3.4 metres

TPZ Encroachment 80m²: < 10%

CHAPTER E7: WASTE MANAGEMENT

A Site Waste Minimisation and Management Plan has not been provided.

The proposal involves demolition of two dwellings and a demolition plan has accordingly been provided.

The proposal provides for general, recyclable and FOGO waste separation and a suitable waste storage area is provided within the basement.

Waste collection is to occur from the kerbside. This arrangement is satisfactory given the small number of units and adequate frontage to accommodate bins.

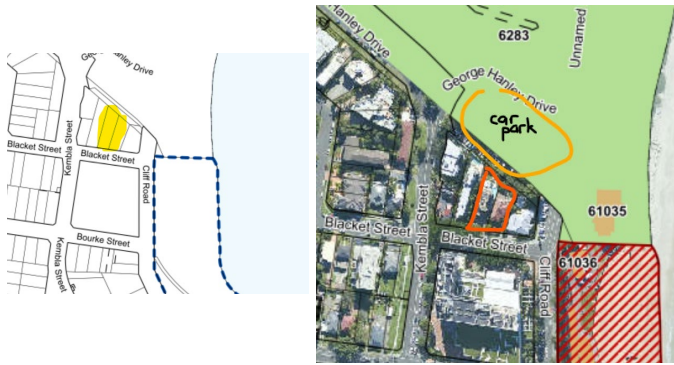
CHAPTER E10 ABORIGINAL HERITAGE

The site is not identified being of Aboriginal heritage significance.

CHAPTER E11 HERITAGE CONSERVATION

To the east of the site is the State Heritage listed North Beach Precinct which includes a range of local heritage listings including the Bathers Pavilion, The Kiosk and the SLSC. The development is also in the vicinity

curtilage for the landscape listing relating to the significant plantings in Stuart Park to the north. This is illustrated below.



No formal heritage assessment has been provided.

It is noted that the site is separated from items of significance, either by the car park to the north or future development on the land immediately to the east (for which approval has been granted to a four storey serviced apartment development).

CHAPTER E12 GEOTECHNICAL ASSESSMENT

The application has been reviewed by Council's Geotechnical Engineer in relation to excavation and conditions have been recommended.

CHAPTER E13 FLOODPLAIN MANAGEMENT

Although flood coded, the proposed development within the subject site is not considered to be subject to conditions relating to this chapter as the results of Council's adopted flood model are not considered to constitute mainstream flooding or flooding due to overland flow.

The flood mapping does indicate overland flow located within the frontage of the development within Blacket Street, with depths of up to 0.15m. In this regard, it will need to be demonstrated that the development complies with Section 6.5.3(d), requiring the basement carpark to be protected from inundation from the 1%AEP flood + 0.2m.

CHAPTER E14 STORMWATER MANAGEMENT

The existing site falls to the rear by approximately 2 metres. To the North-east (rear) of the site is Lot 7, DP 235364 a Council owned lot, then Lot 12, DP 865220 owned by Crown Lands, then Lot 3, DP 1136814 owned by the State of NSW.

Council's Property Services section has previously advised (letter dated 20/12/2022 provided by Jones Nicholson Engineers) a drainage easement through the rear Council land would not be supported.

An alternative would be to obtain an easement through adjacent Lot 4, DP 1259855 (east of the site). There is however an approved development application for a serviced apartment development with basement parking located up to the northern boundary of this site, which would prevent this occurring.

The Jones Nicholson Drainage plan indicates drainage to an underground rainwater tank then to the existing Council pit in Blacket St. Per Section 9.3.6, sites that fall away from the road reserve require an easement obtained through downstream or adjacent properties, and in all cases it must be clearly demonstrated that the post development flow rates are no greater than the pre development condition. As there is no pre development flow to Blacket St, post development flow to Blacket St is required to be zero. As this will be unachievable, it will be required to demonstrate no adverse runoff impacts as a result of the development on the Council drainage system. The objectives of the WDCP – Chapter E14, are also required to be demonstrated.

From previous request for information, the applicant has provided a DRAINS file for the proposed development. However, no reference plan or survey has been provided, so am unable to assess further. If proposing to drain to Blacket St, further detailed information is required.

Section 9.3.9 and Section 9.3.12 allow the use of level spreaders/transpiration trench, where a development drains to a Public Reserve. As the narrow piece of land to the rear is classified community land, the applicant could propose a level spreader in this instance. That would likely have to go for the full width of the site and would encroach into the deep soil planting area.

CHAPTER E15 WATER SENSITIVE URBAN DESIGN

Not applicable

CHAPTER E17 PRESERVATION AND MANAGEMENT OF TREES AND VEGETATION

Matters relating to the street tree are dealt with elsewhere in this report.

CHAPTER E19 EARTHWORKS (LAND RESHAPING WORKS)

Two objectives of this chapter of relevance to the proposal which are not adhered to are as follows:

- h) Minimise amenity impacts upon surrounding neighbourhoods;*
- j) Ensure that buildings are designed to fit the lot and ensure that the nature, extent and depth of land reshaping works are kept to appropriate levels;*

The proposal does not minimise impacts associated with excavation and construction by being excessive in size in consideration of the needs to service the building.

CHAPTER E20 CONTAMINATED LAND MANAGEMENT

See discussion at SEPP Resilience and Hazards.

CHAPTER E21 DEMOLITION AND HAZARDOUS BUILDING MATERIALS MANAGEMENT

Conditions of consent would apply with regard to demolition.

CHAPTER E22 SOIL EROSION AND SEDIMENT CONTROL

Conditions of consent would apply in regard to appropriate sediment and erosion control measures to be in place during works.

ATTACHMENT 7

ADM Projects Aust T/A ADM Architects
94 Kembla Street
Wollongong NSW 2500

APPLICATION	DA-2023/50
Determination	Refusal
Determining Authority	Wollongong Local Planning Panel
Date	XXX 2023

Dear Sir/Madam

NOTICE OF DETERMINATION OF DEVELOPMENT APPLICATION

Issued under Section 4.16 of the Environmental Planning and Assessment Act 1979

The development application described below has been determined:

Development Proposal	Residential - demolition of existing structures, tree removal and construction of a residential flat building including ten (10) units and associated basement parking
Location	Lot 2 DP 18332, Lot 3 DP 18332 4-6 Blacket Street NORTH WOLLONGONG NSW 2500

The application has been determined by **refusing of consent**.

The reasons for the refusal of the proposed development are:

1. The proposal does not demonstrate design excellence as required under Clause 7.18 of Wollongong Local Environmental Plan 2009.
2. The proposal is inconsistent with the design quality principles of State Environmental Planning Policy 65 – Design Quality of Residential Apartment Development with respect to:
 - Principle 2 Built form and scale
 - Principle 3 Density
 - Principle 4: Sustainability
 - Principle 5: Landscape
 - Principle 8: Housing diversity and social interaction
3. The proposal does not adequately address the Apartment Design Guide with regard to the following:
 - 3D Communal and public open space
 - 4K Apartment mix
 - 4Q Universal design
4. The proposal does not comply with Wollongong Local Environmental Plan 2009 with regard to the following:

- The proposal involves surplus car parking areas which are to be included as gross floor area. This results in the overall FSR exceeding the maximum under Clause 4.4A of the LEP. No clause 4.6 has been provided nor are the circumstances considered to warrant a variation.
 - The proposal does not demonstrate design excellence under clause 7.18.
5. The proposal does not comply with Wollongong Development Control Plan 2009 with regard to the following:
- Chapter D13 Wollongong City Centre
 - § 2.4 Building depth and bulk
 - § 2.5 Side and rear building setbacks and building separation
 - § 2.7 deep soil zone
 - § 4.4 On-site car parking
 - § 6.2 Housing choice and mix
 - § 6.6 Basement car parks
 - § 6.7 Communal open space
 - Chapter E1: Access for People with a Disability: Equitable access is not provided to the rear communal open space area.
 - Chapter E3: Car Parking, Access, Servicing/Loading Facilities and Traffic Management: The proposal exceeds the car parking requirements of the DCP.
 - Chapter E6: Landscaping: The arborist report does not accurately show the extent of basement excavation encroaching into the tree protection zone of a large street tree.
 - Chapter E7: Waste Management: A Site Waste Minimisation and Management Plan has not been provided.
 - Chapter E13 Floodplain Management: It has not been demonstrated how the basement carpark is to be protected from inundation from stormwater flows along the street.
 - Chapter E14 Stormwater Management: The proposal does not satisfy the requirements of the DCP with respect to stormwater disposal.
 - Chapter E19 Earthworks (Land Reshaping Works): The proposal does not minimise impacts associated with excavation and construction by being excessive in size in consideration of the needs to service the building.
6. Excessive excavation has additional environmental impacts (sustainability, noise and disruption during excavation, truck movements) and encroaches into tree protection zone to the south, reduces opportunity for boundary landscaping.

Notes

1. Section 8.7 of the Environmental Planning and Assessment Act 1979 confers on an applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within six (6) months from the date this notice was uploaded to the NSW Planning Portal.
2. Section 8.3 of the Environmental Planning and Assessment Act 1979 confers on an applicant who is dissatisfied with the determination of a consent authority a right to request the consent authority to review the determination. The request for review of the determination must be made within six (6) months from the date of receipt of this notice. In the absence of a pending appeal before the Land and Environment Court, the request for review, and the review by Council, must all be completed within the abovementioned six (6) month time period. Accordingly, applicants are advised to provide Council with sufficient time to complete the review within this period, failing which the determination cannot be reviewed. The request must be accompanied by the fees set

by the Environmental Planning and Assessment Regulation. A right of review of determination does not exist for a determination made in respect of a Designated Development.

This letter is authorised by

Nigel Lamb
Senior Development Project Officer
Wollongong City Council
Telephone (02) 4227 7111