

PPSSSH-3 - 5 Preston Avenue, Engadine

DA19/0472

ASSESSMENT REPORT APPENDICES

Appendix	A	Draft Conditions of Consent
	B	Pre-Application Discussion dated 13 December 2018
	C	Submissions
	D	State Environmental Planning Policy No65 – Design Quality of Residential Apartment Development
	E	Apartment Design Guide Compliance Table
	F	Sutherland Shire Development Control Plan 2015 Compliance Table
	G	Clause 4.6 Submission
	H	View Loss Photos
	I	Architectural Plans

DRAFT CONDITIONS OF CONSENT
Development Application No. 19/0472

1. Approved Plans and Documents

The development must be undertaken substantially in accordance with the BASIX certificate, details and specifications set out on the following approved plans:

Plan number	Reference	Prepared by	Date
A102-D	Site Plan	Mijollo International	27 Apr 20
A201-D	Level B3 - Plan	Mijollo International	27 Apr 20
A202-D	Level B2 - Plan	Mijollo International	27 Apr 20
A203-D	Level B1 - Plan	Mijollo International	27 Apr 20
A204-D	Level G - Plan	Mijollo International	27 Apr 20
A205-D	Level 1 - Plan	Mijollo International	27 Apr 20
A206-D	Level 2 - Plan	Mijollo International	27 Apr 20
A207-D	Level 3 - Plan	Mijollo International	27 Apr 20
A208-D	Level 4 - Plan	Mijollo International	27 Apr 20
A209-D	Level 5 - Plan	Mijollo International	27 Apr 20
A210-D	Level Roof - Plan	Mijollo International	27 Apr 20
A301-D	Elevations West & North	Mijollo International	27 Apr 20
A302-D	Elevations East & South	Mijollo International	27 Apr 20
A303-D	Elevations West - Building B	Mijollo International	27 Apr 20
A401-D	Sections A-A	Mijollo International	27 Apr 20
A402-D	Sections B-B D-D	Mijollo International	27 Apr 20
A403-D	Sections C-C	Mijollo International	27 Apr 20
A601-D	Adaptable Unit Layouts-01	Mijollo International	27 Apr 20
A602-D	Adaptable Unit Layouts-02	Mijollo International	27 Apr 20
L02-F	Landscape Concept Plan - Ground Level	Habit8	06.05.2020
L03-F	Landscape Concept Plan - Ground Level	Habit8	06.05.2020
L04-F	Landscape Planting Plan	Habit8	06.05.2020

L05-F	Landscape Sections	Habit8	06.05.2020
L06-F	Landscape Elevation - North	Habit8	06.05.2020
L07-F	Landscape Elevation - South	Habit8	06.05.2020
L08-F	Planting Palette	Habit8	06.05.2020
L09-F	Landscape Details (Typical)	Habit8	06.05.2020
L10-F	Landscape Specification Notes & Maintenance Program	Habit8	06.05.2020
DA-C210 - A	Erosion and Sediment Control	Van Der Meer Consulting	13.03.19
DA-C401 - B	Drainage Layout Plan	Van Der Meer Consulting	15.03.19
DA-C402 - A	Stormwater Detail	Van Der Meer Consulting	13.03.19

and any details on the application form and on any supporting information received with the application except as amended by the following conditions.

Note: The following must be submitted to Sutherland Shire Council prior to the commencement of any building work.

- i) A Construction Certificate.
- ii) Notification of the appointment of a Principal Certifying Authority and a letter of acceptance from that Principal Certifying Authority.
- iii) Notification of the commencement of building works with a minimum of 2 days' notice of such commencement.

2. Design Changes Required

A. Before Design and Construction

The following design changes must be implemented:

- i) In order to provide landscaping as proposed along Geebung Lane, the stormwater pipeline from the stormwater treatment device must be laid as close as practicable to the northern side of Building 'B' before discharging across Geebung Lane to the existing pit; OR discharge from the stormwater treatment device across Geebung Lane to a new pit and extend the pipeline approximately 22m west from existing stormwater infrastructure in the lane. This amendments is to be shown on an amended Stormwater Plan.

- ii) The clerestory window provided to unit 5.04 is to have the capability of being opened to aid cross-ventilation.
- iii) A gate is required to be provided between G.09's courtyard and the south-western communal path to provide entry into this unit.
- iv) Car space 1 on basement level 1 adjacent to the fire stairs is to be deleted as it is insufficient in width and restricts access to the door at the rear of the fire stairs.
- v) A 13th unit is to be nominated and constructed as Adaptable Housing in accordance with the requirements of AS4299-Adaptable Housing.

Details of these design changes must be included in documentation submitted with the application for a Construction Certificate.

3. Integrated Development Approval - Requirements of Water NSW

A. General Terms of Approval from Water NSW

The development must be undertaken in accordance with all General Terms of Approval (GTA) from Water NSW issued under Section 4.46 of the Environmental Planning and Assessment Act 1979.

A copy of the GTA and any further requirements are attached to this development consent. These requirements must be incorporated in the application for a Construction Certificate and where required by the GTAs, relevant approvals must be obtained prior to the release of the Construction Certificate.

4. Land Swap Requirements

A. Prior to issue of any Construction Certificate

The boundary adjustment to facilitate the land swap required by DA19/0638 is to be registered with NSW Land Registry Services.

5. Public Place Environmental, Damage & Performance Security Bond

A. Before Issuing of any Construction Certificate

Prior to the issue of a Construction Certificate or the commencement of any works on site, whichever occurs first, the person acting on this consent must provide security to Sutherland Shire Council against damage that may be caused to any Council property and/or the environment as a consequence of the implementation of this consent. The security may be provided by way of a deposit with Council or a bank guarantee. A non-refundable inspection/administration fee is included in the bond value.

It is the responsibility of the person acting on this consent to notify Sutherland Shire Council of any existing damage to public areas in the vicinity of the development site by the submission of a current dilapidation report supported by photographs. This information must be submitted to Council at least 2 days prior to the commencement of works.

In the event that the dilapidation report is not submitted 2 days prior to commencement and the public area sustains damage the person acting on this consent may be held liable.

Should any public property and/or the environment sustain damage as a result of the works associated with this consent, or if the works put Council's assets or the environment at risk, Council may carry out any works necessary to repair the damage and/or remove the risk. The costs incurred must be deducted from the bond.

The value of the bond is \$100,000.

Note: Bond amount includes a non-refundable administration fee, specified in Council's Schedule of Fees and Charges, which must be paid separately if security is provided by way of a deposit with Council or a bank guarantee.

Use of Bank Guarantee: As bond releases may occur under different timeframes only one bond amount/bond purpose is permitted on a Bank Guarantee. Multiple bonds will require multiple bank guarantees to be lodged.

The Bank Guarantee must also:

- Note Council as the interested party
- Have NO expiry date
- Describe the type of development using the description on the consent
- Include both the address of the development site and the application number
- NOT include the non-refundable administration fee; this must be paid separately.

B. After Occupation

A request for release of the bond may be made to Sutherland Shire Council after all works relating to this consent have been completed. Such a request must be submitted to Council on the 'Bond Release Request Form' signed by the owner or any person entitled to act on the consent and must be accompanied by a current dilapidation report including photographs.

6. Section 7.11 Contributions - Section 7.11 Development Contribution Plan 2016 - Engadine Centre Precinct

A. Before Construction

Pursuant to Section 7.11 of the Environmental Planning and Assessment Act 1979 and Sutherland Shire Council Section 7.11 Development Contribution Plan 2016, a total monetary contribution of \$1,280,000.00 must be paid to Sutherland Shire Council toward the cost of regional and local public domain works contained in the Works Programme of the Development Contribution Plan.

This contribution has been assessed and calculated in accordance with the Development Contribution Plan on the basis of 64 proposed Residential Flat Units, Apartments etc, with a concession for .

Infrastructure & Facilities	Contribution Required
Local open space and public domain works	\$930,960.00
Regional open space	\$349,040.00
Boarding House Rooms	\$0

The contribution will be indexed on 1 July in each year in accordance with the Consumer Price Index (All Groups Index) for Sydney.

The formula to index a contribution rate is:

$$\text{New Contribution Rate} = \text{Current Contribution Rate} \times \frac{\text{Current CPI}}{\text{Previous year's CPI}}$$

Payment must be made prior to the issue of the Construction Certificate.

7. Approvals Required under Roads Act or Local Government Act

A. Before Construction

No occupation or works are to be carried out on public land (including a road or footpath) or access provided over a public reserve adjacent to the development site without approval being obtained from Sutherland Shire Council and the necessary fee paid under the Roads Act 1993 and/or the Local Government Act 1993. These approvals must be to the satisfaction of Council for the required development works and may include but are not limited to the following:

- Frontage works including construction of a driveway, footpath, etc.
- Road openings and restoration to provide services to the development.
- Work Zones and hoardings.
- Skip bins.
- Shoring / anchoring.
- Standing of cranes, concrete pumps, etc.

Note: All Plans and Permits are required to be on site, at all times and may be requested by Council officers at any time.

Note: Approval under the Roads Act or Local Government Act cannot be granted by a Principal Certifying Authority or by a Private Certifier. Failure to obtain approval may result in fines or prosecution.

B. During Works

There must be no occupation or works on public land (including a road or footpath) or access provided over a public reserve adjacent to the development site without approval being obtained from Sutherland Shire Council. Any work on public land must be undertaken strictly in accordance with the relevant approval issued under the Roads Act 1993 and/or the Local Government Act 1993 by Sutherland Shire Council.

8. Design and Construction of Works in Road Reserve (Council Design)

A. Design

Council has determined that the proposed development generates a need for the following works to be undertaken by the applicant in the road reserve. To this end a Detailed Frontage Works application under the Roads Act 1993 must be submitted to Sutherland Shire Council, prior to the release of the Construction Certificate. The form is available on Council's website. A fee applies for the relevant inspections, assessment, coordination, creation of design brief and the issue of permits providing consent to undertake frontage works. The design will be quoted separately by Council's Design Services unit.

This design will generally comply with the approved architectural design drawings and the current website version of Council's Public Domain Design Manual (PDDM) and Public Domain Technical Manual (PDTM) except where modified by/or addressing the following:

- i) Property alignment/ boundary levels - establish the property alignment/ boundary levels and crossing profiles.
- ii) Grades - regrade footpath verge on Preston Avenue to final design levels including topsoil, turf and all associated soft landscaping. Regrade Geebung Lane as required to facilitate the "Shared Zone".
- iii) Vehicle Crossings - construct a vehicle crossing to Geebung Lane servicing the basement carpark and loading dock.
- iv) Redundant Laybacks and Crossings - remove redundant laybacks and vehicle crossings and replace with kerb and gutter (including associated road reconstruction works).
- v) Stormwater Connection - construct new stormwater infrastructure as required to facilitate drainage for the proposed development. This includes a connection to and the extension of Council's piped system as required as well as the construction of any required pits.
- vi) Footpath - install new footpath pavement along full frontage of Preston Avenue.
- vii) Shared Zone - reconstruct Geebung Lane from the western boundary of 42-50 Station Street to Preston Avenue to accommodate a "Shared Zone". This includes a raised threshold and appropriate treatment to the satisfaction of Council. Construct any required drainage to facilitate the construction of the raised threshold.
- viii) Infrastructure Transitions - ensure there are adequate transitions between newly constructed and existing infrastructure as required.

- ix) Road Pavement - reconstruct road pavement as required.
- xi) Kerb and Gutter - construct / reconstruct /realign kerb and gutter as required including associated road reconstruction.
- xii) Street Signage - alter existing and/or install new street signage as required.
- xiii) Trees - remove and replace street trees as required by Council.
- xiv) Undergrounding - provide replacement of existing local distribution power lines and other overhead utilities with subsurface utilities.
- xv) Street Lighting - install new street lighting as required.
- xvi) Utility Services - adjust public services infrastructure as required.
- xvii) NBN - the Australian Government has issued a new policy on the provision of telecommunication infrastructure in new developments. The policy is effective from 1 March 2015. Developers are responsible for providing telecommunications infrastructure in their developments. To provide this infrastructure, developers need to contract a carrier to install and operate a telecommunications network.

NBN is the IPOLR (infrastructure provider of last resort) in developments of 100 lots or more within its fixed-line footprint and in new development where its fixed-line network is available, or the NBN rollout has been announced (www.nbnco.com.au/learn-about-the-nbn/rollout-map.html).

If you use NBN, you will need to provide six months' notice before your network needs to be available.

Evidence of the lodgement of this application must be provided to the PCA prior to the release of the Construction Certificate

B. Before Construction

Prior to the release of the Construction Certificate property alignment levels and crossing profiles must be obtained from Sutherland Shire Council.

C. Before Occupation

Prior to the occupation of the building or the issue of an Occupation/Subdivision Certificate the following certification must be provided to Sutherland Shire Council:

- i) The supervising engineer must certify that the road frontage works were constructed in accordance with the development consent and associated approval under the Roads Act 1993 including the approved drawings and specification.

9. Site Management Plan

A. Before Commencement of Works including Demolition

An Environmental Site Management Plan must accompany the Construction Certificate. If demolition is to commence prior to the issue of a Construction Certificate the applicant must submit to Sutherland Shire Council a separate Demolition Site Management Plan. These plans must satisfy the Objectives and Controls of Sutherland Shire Development Control Plan 2015 relating to environmental site management and must incorporate the following throughout demolition and construction:

- i) Safe access to and from the site during construction and demolition.
- ii) Safety and security of the site, road and footpath area including details of proposed fencing, hoarding and lighting.
- iii) Method of loading and unloading excavation machines, building materials.
- iv) How and where, construction materials, excavated and waste materials will be stored.
- v) Methods to prevent material being tracked off the site onto surrounding roadways.
- vi) Erosion and sediment control measures.
- vii) All trees and their protection zones on and around the site identified for retention are to be protected according to Australian Standard AS 4970 - 2009 Protection of Trees on Development Sites using the methods outlined in that Standard.

B. During Works

The site management measures set out in the above plan must remain in place and be maintained throughout the period of works and until the site has been stabilised and landscaped.

C. Before Occupation

Before the issue of any Occupation Certificate, all foundations / materials associated with construction works (that do not form part of the approved works) must be removed. This includes but is not limited to foundations for tower cranes, vehicle access ways, stockpiles, building waste etc.

10. Pre-commencement Inspection

A. Before Works

A Pre-commencement Inspection/meeting is to be convened by the Applicant on-site a minimum 5 days prior to any demolition and/or construction activity and between the hours of 8.00 am and 4.30 pm Monday to Friday. The meeting must be attended by a representative of Council's Public Domain Assets Branch, the Principal Certifying Authority, the builder/site manager of the building/civil construction company and where necessary the supervising engineer. The attendance of the owner is required when it is intended to use more than one builder/principal contractor throughout the course of construction.

The purpose of the meeting is to:

- i) Ensure safe passage for pedestrians, Work and Hoarded Zones are maintained in accordance with Council requirements.
- ii) Check the installation and adequacy of all traffic management devices.
- iii) Confirm that the supervising engineer has a copy of Council's Specification for Civil Works Associated with Subdivisions and Developments.

Note: An inspection fee must be paid to Council prior to the lodgement of the Notice of Commencement. Please refer to Sutherland Shire Council's Adopted Schedule of Fees and Charges.

11. Supervising Engineer

A. Before Construction

The applicant must engage an Accredited Certifier in civil engineering works or a Chartered Civil Engineer to supervise construction of any:

- i) Road frontage works.
- ii) Construction / installation of stormwater drainage.
- iii) Rainwater harvesting and reuse.
- iv) All other works that form part of a subdivision.

The PCA must be informed of the supervising engineer's name and contact details, in writing, prior to the commencement of any construction works.

B. During Construction

The engineer must supervise the works as listed above to ensure compliance with:

- i) All relevant conditions of development consent.
- ii) Any Consent issued under the Roads Act for this development.

C. Before Occupation

The supervising engineer must certify the works required in A. above were undertaken and completed in accordance with the requirements of this Development Consent and to their satisfaction.

12. Works Required in the Road Reserve

A. Design

A Driveway Application must be made to Council to obtain footpath crossing and boundary alignment levels before commencing the final design of internal driveways, paths and car park area. The proposal must comply with the levels issued by Council and a copy of the issued levels must accompany the Construction Certificate. The design of works within the road reserve must include the following:

- i) The crossing must be 12.5m wide.
- ii) All redundant crossings and associated laybacks must be removed and replaced with an integral kerb and gutter.

B. Construction

All works within the Road Reserve must be undertaken in accordance with the requirements of the Roads Act approval issued by Council.

C. Prior to Occupation

Prior to the occupation of the development or the issue of any Occupation Certificate the works required by the Roads Act approval must be completed to the satisfaction of Council or the supervising engineer (where one is required to be appointed by a condition of this development consent).

13. Internal Driveway, Parking and Manoeuvring

A. Design

The internal driveway profile, parking and manoeuvring areas must be designed in accordance with the approved architectural plans except where modified by the following:

- i) Align with Access and Alignment levels issued by Council's Public Domain Unit.
- ii) The proposed loading and delivery area must be clearly defined with suitable signposting and pavement markings.
- iii) The car park must be line marked to accommodate 149 vehicles. 69 spaces for the Tavern and 80 for residents.
- iv) Provide adequate sight distance for the safety of pedestrians using the footpath area.
- v) Provide a maximum grade of 5% for the first 3 metres inside the property boundary.
- vi) Comply with AS2890.1(2004), in relation to the design of vehicular access, parking and general manoeuvring for the B85 vehicle.
- vii) The maximum longitudinal grade of the driveway must not exceed 25%.

B. Construction

Certification from an appropriately qualified engineer to the effect that the design requirements of A. above have been met must accompany the Construction Certificate.

C. Occupation

Prior to the occupation of the development or the issue of any occupation certificate a suitably qualified engineer must certify that the works required in A. above were undertaken and completed to their satisfaction and in accordance with the requirements of this Development Consent. This certification must be provided to the PCA and a copy also provided to Council.

D. On-going

The approved parking must be used exclusively for car parking as approved for the life of the development.

14. Basement Car Park Design and Construction

A. Design

The basement car park must be designed in accordance with the approved architectural drawings, subject to the following modifications:

- i) A minimum headroom of 2.2m measured from the parking floor to the underside of any beam, ventilation duct or service conduit, or to the underside of any door including a security door and fittings when those doors are in an open position in accordance with clause 5.3 of AS2890.1.
- ii) Parking bays must not be enclosed, caged or a door provided.
- iii) All parking bays must provide a minimum clear parking envelope in accordance with figure 5.2 of AS2890.1.
- iv) A parking bay within each adaptable garage must have a clear width of 3.8m, a clear length of 5.4m and a head height clearance of 2.5m, except where this space is occupied by a remote controlled roller door.
- vii) Parking bays provided for adaptable units must have the minimum clear dimensions of 3.8m wide by 5.4m long or comply with AS2890.6.
- viii) The security door fitted to the car parking area entrance must be independently mounted on rubber pads to prevent vibration noise transmission through the concrete walls and / or columns.

B. Prior to Construction

Certification from a Chartered Civil Engineer or a Registered Surveyor, to the effect that the car park layout and vehicle access-way design has been prepared in accordance with A above must accompany the Construction Certificate.

C. Occupation

Prior to the occupation of the development or the issue of any Occupation Certificate a Chartered Civil Engineer or a Registered Surveyor must certify that the works required in “A” above have been completed to their satisfaction and in accordance with the requirements of this Development Consent. This certification must be provided to the PCA and a copy provided to Council.

D. On-going

The approved parking must be used exclusively for car parking for the life of the development.

15. Stormwater Drainage

A. Design

The stormwater drainage system must be designed in accordance with the approved stormwater drainage design drawing; Australian Standard AS3500.3:2015; the BASIX Certificate issued for this development; Sutherland Shire Environmental Specification - Stormwater Management. Except where modified by the following:

- i) A longitudinal section of the pipeline within the road reserve including existing natural surface levels, design surface levels, design invert levels of the proposed pipeline and the location, size and reduced level of all services to AHD where those services cross the proposed drainage line.
- ii) The rate of discharge of stormwater from the site to a drainage system under Council's control must be controlled so that it does not exceed the pre-development rate of discharge. Any required on-site detention facility must be designed to cater for all storm events up to the Recurrence Interval of 1 in 100 years.
- iii) The rainwater tank must have a minimum capacity of 3m³.
- iv) Harvested rainwater must be used for irrigation.
- v) The pipeline within the Laneway must be reinforced concrete.
- vi) Where pipelines are located within the “tree protection zone” of significant vegetation to be retained, the lines shall be excavated by hand or by directional underboring techniques to reduce any adverse impact on the root zone of the trees.
- vii) In order to provide landscaping as proposed along Geebung Lane, the stormwater pipeline from the stormwater treatment device must be laid as close as practicable to the northern side of the dwelling before discharging across Geebung Lane to the existing pit; OR discharge from the stormwater treatment device across Geebung Lane to a new pit and extend the pipeline approximately 22m west from existing stormwater infrastructure in the lane.

B. Before Construction

- i) Certification from an Accredited Certifier in Civil Engineering or a Chartered Civil Engineer, to the effect that the drainage design is to their satisfaction and satisfies the design requirements in A. above must accompany the application for a Construction Certificate.

C. Before Occupation

Prior to the issue of an Occupation Certificate:

- i) A Works-As-Executed drawing (WAED) of the stormwater drainage system must be prepared by a Registered Surveyor. This drawing must detail the alignment of pipelines, pits, the rainwater tanks and the detention facilities. An original or a colour copy must be submitted to Sutherland Shire Council.
- ii) The supervising engineer must certify the WAED of the stormwater drainage system that the stormwater drainage works, stormwater treatment, rainwater harvesting facility and rainwater reuse systems were constructed to their satisfaction and in accordance with the Development Consent, and Public Domain Technical Manual. Prior to the occupation or use of the building the Applicant / Owner must submit to Council a copy of the aforementioned letter of certification.

D. Ongoing

- i) The operation of all devices or appliances installed within the development approved by this consent as required by conditions pertinent to rainwater harvesting and rainwater reuse must be maintained in good operating order at all times.
- ii) The stormwater detention / treatment facility must be:
 - Kept clean and free from silt, rubbish and debris.
 - Be maintained so that it functions in a safe and efficient manner.
 - Not be altered without prior consent in writing of the Council.

Note 1: Upon submission of the Works-As-Executed drawing for the stormwater drainage system a notation will be added to the Section 10.7 certificate advising future owners that their property is burdened by a stormwater detention facility.

Note 2: Upon submission of the Certified Works-As-Executed drawing for the stormwater drainage system a notation will be added to the Section 10.7 certificate advising future owners that their property is burdened by a stormwater treatment device that must be maintained, serviced and cleaned.

16. Stormwater Treatment

A. Before Construction

Appropriate stormwater treatment measures, selected and designed in accordance with Engineers Australia (2006) Australian Runoff Quality - A guide to Water Sensitive Urban Design, Argue J R (2013) WSUD: Basic Procedures for 'Source Control' of Stormwater - A Handbook for Australian practice, or other relevant industry design guidelines, must be provided as part of the permanent site stormwater quality management system. Details of the design, construction and maintenance must accompany the Construction Certificate.

B. Before Occupation

The work required by A. above must be completed to the satisfaction of the supervising engineer before occupation of the site or the issue of any Occupation Certificate.

C. Ongoing

The stormwater treatment measure must be maintained in accordance with the manufacturers' or designer's specification for the life of the development.

Note: Upon approval of the stormwater management designs a notation will be added to the Section 10.7 certificate in relation to any required stormwater treatment device.

17. Waste Collection

A. Design

The waste collection point must be designed in accordance with the following requirements:

- i) A loading bay to accommodate Councils waste collection vehicle (HRV- 10.24m length) must be provided in accordance with AS2890.2 within the subject property for waste collection use.
- ii) The maximum long and cross section grade of the loading bay and temporary bin holding area must be $\pm 5\%$.
- iii) Clear and direct access must be provided from the bin holding areas to the loading bay.
- iv) The permanent communal garbage and/or recycling storage area must have a smooth impervious floor that is graded to a floor waste. A tap and hose must be provided to facilitate regular cleaning of the bins and all waste water must be discharged to the sewer in accordance with the requirements of Sydney Water. Garbage bins must be designed to prevent the escape of any liquid leachate and must be fitted with a lid to prevent the entry of vermin.
- v) The chute discharge outlet and compaction system must have restricted access to prevent damage to equipment or injuries to residents.

B. Before Construction

Prior to the issue of any Construction Certificate a suitable qualified civil engineer must certify that the waste collection point has been design in accordance with part A. above. A copy of this certification must accompany the Construction Certificate.

C. Before Occupation

Prior to the occupation of the site or the issue of any Occupation Certificate a suitable qualified civil engineer must certify that the waste collection point has been constructed to their satisfaction and in accordance with part A. above. A copy of this certification must accompany the Occupation Certificate.

D. On-going

- i) All ongoing management, maintenance and cleaning of all waste and recycling management facilities, including suitable collection arrangements and how bins are to be moved from waste storage area/s to collection area/s are to be carried out in accordance with the approved Waste Management Plan for the development.
- ii) All waste and recycling bins must be stored wholly within the approved permanent communal garbage and/or recycling storage area. The bins must only be placed in the temporary bin holding area in the evening prior to collection and returned to the permanent communal garbage and/or recycling storage area as soon as possible after pick-up.

18. Damage to Adjoining Properties

A. Before Works

To minimise vibration damage and loss of support to buildings / structures and properties in close proximity to the development site, a Geotechnical Engineer's Report must be prepared detailing constraints to be placed on earth moving and building plant and equipment and the method of excavation, shoring, underpinning and support. This report must be provided to the person undertaking the excavation and the Principal Certifying Authority.

B. During Works

The constraints and recommendations of the Geotechnical Engineers Report must be implemented.

19. Public Utilities

This condition is imposed to facilitate the provision of services to the development and reduce conflicts between services and lot boundaries, buildings or associated facilities.

A. Before Construction

Suitable arrangements must be made with all relevant utility service providers to ensure the development is appropriately serviced by electricity, gas, telecommunications (including NBN) and the like, and any necessary underground conduits are provided. The Australian Government has issued a new policy on the provision of telecommunications infrastructure in new development. This policy is effective from 1 March 2015. Developers are responsible for providing telecommunications infrastructure in their developments. To provide this infrastructure, developers need to contract a carrier to install and operate a telecommunications network. NBN is the IPOLR (infrastructure provider of last resort). NBN require 6 months' notice in order to make the network available.

A copy of the agreements/contracts with the utility providers must form part of the supporting construction certificate documentation.

B. Before Occupation/Subdivision

Prior to issue of any Occupation/Subdivision certificate, certification must be provided from each utility service provider/approved agent to the effect that each lot has been serviced to their satisfaction.

Prior to the issue of any Occupation/Subdivision certificate, evidence satisfactory to the Certifying Authority that arrangements have been made for:

- i) The installation of fibre-ready facilities (conduits and pits) to all individual lots and/or premises/dwelling to enable fibre to be readily connected to any premises that is being or may be constructed on those lots. Certification from each carrier/provider must be provided to the PCA that they are satisfied that the fibre ready facilities are fit for purpose.
- ii) The provision of fixed-line telecommunications infrastructure (cables) in the fibre-ready facilities to all individual lots and/or premises/dwellings must be installed and certification from the carrier/provider must be provided to the PCA stating that the infrastructure has been provided and to their satisfaction.
- iii) Installation of gas and/or electricity must be constructed/installed by the utility service provider/approved agent to each allotment. Certification must be provided from each provider/agent stating that all allotments have been serviced to their satisfaction.
- iv) WAE drawings must to be prepared by a registered surveyor detailing location and depth of conduits/pits and connection points/ties within allotments. A copy of the WAE drawings must form part of any Occupation/Subdivision certificate documentation.

Note: Should these requirements result in any significant change to the approved design an application must be made to modify the consent under s.4.55 of the Environmental Planning and Assessment Act.

20. Easements and Covenants

Prior to the issue of an Occupation Certificate, appropriate easements and covenants required on the subject property are to be created to facilitate access and parking:

- i) An easement for manoeuvring for the loading dock over 42-50 Station Street Engadine as detailed in the Traffic Report dated May 2019 (prepared by Traffix) - drawing TX.02 Rev B, benefitting the subject site.
- ii) A Positive Covenant created on the title to maintain 69 designated parking spaces for the unrestricted use of Tavern staff and patrons (No. 42-50 Station St).

21. Car parking Areas

A. Ongoing

To ensure that the car parking area satisfies the demands of the development:

- i) both the residential parking and commercial parking (associated with Engadine Tavern at 42-50 Station St) must be made available on an unrestricted basis and free of charge at all times for residents and visitors' vehicles
- ii) any parking nominated as visitor parking or common property must be continually available as common property.

22. Landscaping Works

A. Design

The landscaping works must be designed in accordance with the approved Landscape Plan except where modified by the following:

- i) Plant an *Angophora costata* - Smooth Barked Apple in the boundary garden on the south eastern corner of the eastern residential tower (Building 'B') between 5 and 7 Preston Avenue.
- ii) Randomly replace three of the line of *Eleaocarpus reticulatus* trees on the south side of the eastern tower (Building 'B') with *Syncarpia glomulifera* - turpentine.
- iii) The turfed common area is to have 450mm of soil over the basement slab to support growth through dry periods.
- iv) The mounding for the feature planting of kentia palms is to be a minimum height of 750mm above the finished soil levels of the turfed common area.
- v) The access footpath indicated to link the east-west internal pathway with the exit onto Geebung Lane shall be located on the eastern side of the feature mounding.
- vi) The east west pathway to Preston Avenue shall be gated to minimise non-residents from entering and using the site's facilities.

- vii) To provide greater biodiversity and visual interest, the tree planting to the Geebung Lane frontage shall include an additional seven (7x) specimens chosen from the following species; *Corymbia gummifera*, *Eucalyptus squamosa* and *Eucalyptus capitalata*. These trees are to be interplanted with the nominated species and placed in informal clumps rather than a straight planted row.
- viii) The planter bed to the Preston Avenue frontage shall be widened to 3mts to provide privacy to the Private Open Spaces of these two ground floor units. The wider beds are to be planted with a mixture of endemic shrub species to provide ground covers, mid sized shrubs and some taller shrubs to 3m in height.
- ix) For safer pedestrian and vehicle movement conditions, the boundary fence shared with No. 7 Preston Avenue should not exceed 1.2m in height for the first 2m of the site (measured from Preston Avenue) as well as limited planting adjacent to the driveway of No. 7 Preston Avenue. The first 3m of the boundary planting are to be limited to ground covers and tree species only.
- x) Amend the landscape plan in accordance with the approved architectural plans.
- xi) Clearly show on plan existing trees to be removed /retained including tree numbering in accordance with the arborist report OR provide a separate existing tree plan and schedule.
- xii) Tree Protection Zones (TPZ) / the location of tree protective fencing must be shown on plan for all existing trees and/or natural site features to be retained and protected.
- xiii) Provide minimum soil depths in planter boxes as follows:
 - 1200mm for large trees.
 - 900mm for small trees and tall shrubs.
 - 600mm low shrubs.
 - 450mm grass and ground covers.
- xiv) In the Communal Open Space (COS) provide an all-weather cover over the BBQ with basic kitchen facilities as well as some fixed bench seats and table.
- xv) All landscape retaining walls and planter boxes must be constructed in masonry, stone or gabions. Timber is not acceptable.
- xvi) Each ground floor unit must be provided with a clothes line easily accessible from the laundry. Each unit above the ground floor must be provided with a clothes line on a balcony located below balustrade height, with the balustrade treated so that clothes are not readily visible from the street.

- xvii) All fencing within the front setback must be a maximum height of 1.5m and either all open form or a combination of open form above a solid base to a maximum height of 700mm. Provide screen planting to achieve privacy where Private Open Space is required within the front setback.
- xviii) The communal open space areas/ all landscaped areas and all planter boxes on slab must be provided with a water-efficient irrigation system and taps at 25m centres, connected to a pump and the rainwater tank, to enable effective landscape maintenance.
- xix) The private open space of each ground floor dwelling must be provided with a tap connected to mains water.
- xx) To improve coverage and reduce weeds and maintenance, planting densities in all planting areas including planter boxes must achieve a minimum of 4 plants per square metre.
- xxi) To reduce long term maintenance of planting beds turf species must be native grass such as *Zoysia macrantha* 'Nara' or Buffalo grass varieties.

The applicant must engage a suitably qualified Landscape Designer or Landscape Architect to oversee any design changes to the approved Landscape Plan and amendments required above. Details of these design changes must be included in the documentation submitted with the application for a Construction Certificate.

Notes:

A Landscape Designer is a person eligible for membership of the Australian Landscape Designers and Managers and a Landscape Architect is a person eligible for membership of the Australian Institute of Landscape Architects as a Registered Landscape Architect.

If demolition works are to occur prior to the Construction Certificate being issued, tree protection measures must be installed prior to commencement of demolition.

B. Prior to Occupation/Occupation Certificate

The landscape works must be completed in accordance with the approved Landscape Plan and amendments required by 'A' above by persons with a minimum AQF Level III certification in Horticulture or Landscape Construction.

A Final Landscape Inspection must be carried out and a certificate issued by Council's landscape officer prior to occupation or the issue of an Occupation Certificate. This certificate is required to ensure that all tree protection measures, landscaping works, replacement tree planting and the deep soil percentage requirements have been carried out in accordance with 'A' above and other conditions within this consent, that all new indigenous plants on the site and within the road reserve are the

correct species and that all trees planted within the road reserve are in accordance with the detailed road frontage design where it forms part of the Roads Act Consent.

To arrange a Final Landscape Inspection please phone 9710-0333 a minimum of 48 hours prior to the required inspection date. An inspection fee will be charged in accordance with the current schedule of rates listed on Council's website. Any secondary inspections will incur a reinspection fee.

C. Ongoing

All landscaping works required by 'A' above must be maintained for 12 months following the final landscape inspection date. Trees required by this condition must be maintained and protected until they are covered by Council's Controls for Preservation of Trees and Bushland Vegetation (SSCDP 2015 Chapter 39).

Any plants found faulty, damaged, diseased or dead shall be replaced with the same species in the same sized container within one month with all costs borne by the owner.

Note: If difficulty is experienced sourcing suitable indigenous plants from other suppliers, plants grown from locally provenance seed may be available from:

Sutherland Shire Council Nursery
345 The Boulevard, Gympie
Ph: 02 9524 5672

23. Tree Retention and Protection

The following condition applies to all trees on the subject site, trees on the adjoining sites (which are potentially affected by the development works), as well as trees on the adjoining Council land that are not approved for removal.

A. Before Works

Prior to the commencement of any demolition, excavation or construction works on site, the following tree protection measures must be put in place and maintained during the course of construction to prevent damage to trees.

- i) Protective fencing constructed of 1.8m high chain wire mesh supported by robust posts must be installed at the distance required by Australian Standards AS4970- Protection of Trees on Development Sites. Signage must be erected on the fence with the following words clearly displayed "TREE PROTECTION ZONE, DO NOT ENTER".
- ii) The tree protection zone within the protective fencing must be mulched with a maximum depth 75mm of suitable organic mulch (woodchips or composted leaf chip mulch) and kept regularly watered for the duration of the works subject to this consent.

- iii) No development or associated activity is permitted within the fenced tree protection zone for the duration of works subject to this consent. This includes vehicular or pedestrian access, sheds, washout areas, excavations, backfilling, installation of services (including stormwater), removal of top soil, stockpiling of soil or building materials.
- iv) Where site access/egress is required over the roots of trees identified for retention and protection, provide hardwood rumble boards over a 200mm thick layer of wood chip.

B. During Construction

- i) The tree protection measures detailed in 'A' above must be maintained during construction.
- ii) A supervising Arborist must be present during any approved hand excavation or under boring works within the Tree Protection Zone (TPZ) of any tree identified for retention and protection and have the authority to direct works to ensure the trees long term preservation;
- iii) A supervising Arborist must strictly supervise that there is no disturbance or severing of roots greater than 30mm diameter and to cleanly cut those roots between 10-30mm in diameter.
- iv) If the tree/s identified for retention in 'A' above are damaged or destabilised during construction then works must cease and Council's Tree Assessment Officer (ph. 9710 0333) must be contacted to assess the tree/s and recommend action to be taken.

24. Car Wash Bay

To prevent contamination of the stormwater drainage system a car-wash bay must be provided on site:

A. Design

The wash-bay must be graded to an internal drainage point and connected to the sewer.

B. Before Construction

Details of the design satisfying 'A' above must accompany the application for a Construction Certificate.

C. Before Occupation

The Principal Certifying Authority must be satisfied that:

- i) 'A' above has been complied with; and
- ii) any discharge to the sewer from the premises is in accordance with the requirements of Sydney Water.

D. Ongoing

All car-wash, engine degreasing and steam cleaning must be conducted in the wash-bay detailed in 'A' above. Wastewater must be treated in accordance with the requirements of Sydney Water.

25. Garbage, Recycling and Waste Storage Area

To ensure the proper storage of waste from the premises:

A. Design

The garbage and recycling storage area must have:

- i) A smooth impervious floor that is graded to a floor waste. All waste water must be discharged to the sewer in accordance with the requirements of Sydney Water.
- ii) A tap and hose to facilitate the regular cleaning of the bins

All Garbage bins must be designed to prevent the escape of any liquid leachate and must be fitted with a lid to prevent the entry of vermin.

B. Before Construction

Details of compliance with 'A' above must form part of the documentation accompanying the applications for a Construction Certificate.

C. Before Occupation

The works must be completed prior to the issue of any Occupation Certificate.

D. Ongoing

All waste and recycling bins must be stored wholly within the approved waste storage area. The bins must only be put out for collection in the evening prior to pick-up and returned to the storage area as soon as possible after pick-up.

26. External Lighting - (Amenity)

To ensure that any lighting on the site does not cause a nuisance to neighbours or motorists on nearby roads:

A. Design

All lighting must be designed in accordance with Australian Standard AS4282 - Control of the Obtrusive Effects of Outdoor Lighting.

An external lighting system is to be provided for pedestrian access. Lighting must be fitted with a timer to allow control of the hours lighting is on.

B. Ongoing

All lighting must be operated and maintained in accordance with the Standard above.

27. Noise Control - Residential Air Conditioning Unit / Heat Pump Water Heater / Any other Pump

To minimise the noise impact on the surrounding environment:

A. Design

The equipment must be located, designed and/or acoustically attenuated so that noise emitted does not exceed a sound pressure level of 5dB LAeq (15 minute) above the ambient background level when measured on or within any other residential property boundary.

B. Before Occupation

The equipment must be installed in accordance with the manufacturer's specification and all required noise attenuation measures implemented to ensure that the equipment complies with "A" above.

C. Ongoing

- i) All equipment must be operated in accordance with 'A' above.
- ii) For air conditioning units / heat pump water heaters:
Between the hours of 10.00pm and 8.00am on weekends and public holidays and 10.00pm and 7.00am any other day, noise emitted must not be heard within any residence with its windows and/or doors open or closed.
- iii) For any other pump:
Between the hours of 8.00pm and 8.00am on weekends and public holidays and 8.00pm and 7.00am any other day, noise emitted must not be heard within any residence with its windows and/or doors open or closed.
- iv) Receipt of a noise complaint from the operation of this equipment will result in the requirement for certification from an acoustic engineer that the equipment is operating in accordance with the requirements of this condition. If the acoustic assessment reveals that the equipment is not operating in accordance with the consent it must make recommendations on what remediation measures are required to bring the equipment into compliance.

NB. Any other pump includes a swimming pool pump, a spa pump, a sump pump, a water cooler that uses a pump any other apparatus or machine for raising, driving, exhausting or compressing fluid by means of a piston, plunger or rotating vanes.

28. Noise Control - Design and Operation (General Use)

To minimise the impact of noise from the development, the use of the premises and all sound producing plant, equipment, machinery, mechanical ventilation system or refrigeration systems:

A. Design

The use of the premises and all plant and equipment must be designed and / or located so that the noise emitted does not exceed an LAeq sound pressure level of 5dB above the ambient background level when measured at the most affected point on or within any residential property boundary.

Note: The method of measurement of sound must be carried out in accordance with Australian Standard 1055.1.

B. Before Occupation

Prior to the occupation of the development or the issue of any Occupation Certificate certification must be provided by a qualified acoustic engineer that all work associated with the installation of the acoustic measures has been carried out in accordance with 'A' above.

C. Ongoing

All plant and equipment must be operated and maintained in accordance with 'A' above.

29. Noise from Road and / or Rail

To minimise the impact of noise from the adjoining major road and / or rail corridor on the occupants:

A. Design

The building design must be in accordance with the recommendations of the acoustic report by Acouras Consultancy dated 26/03/2019 approved as part of this application.

B. Before Construction

Details of the acoustic attenuation treatment to satisfy "A" above must accompany the documentation forming part of the Construction Certificate.

C. Before Occupation

Prior to the occupation of the building or the issue of any Occupation Certificate certification demonstrating compliance with the requirements of the acoustic report detailed in "A" above must be provided to the Principal Certifier. This must include all post construction validation test results.

30. Noise and Vibration Control - Residential Car Park

To minimise noise and vibration from use of the security door in the car park:

A. Design

The proposed security door fitted to the car parking area entrance must be independently mounted on rubber pads or otherwise installed to prevent vibration noise transmission through the concrete walls and / or columns.

B. Before Occupation

The Principal Certifier must be satisfied that 'A' above has been complied with.

31. Car Park Ventilation

To ensure adequate ventilation for the car park:

A. Design

The car-park must be either mechanically ventilated by a system complying with AS1668.2 -2012 or alternatively, the natural ventilation system must be certified by a qualified mechanical ventilation engineer to the effect that the system is adequate. The certification shall confirm that the system will protect the health of occupants of the car park at any time it is used and satisfies the atmospheric contaminate exposure rates specified in the Worksafe Australia document: Workplace Exposure Standards for Airborne Contaminants.

B. Before Construction

Details of compliance with 'A' above must form part of the application for a Construction Certificate.

C. Before Occupation

Prior to the occupation of the building or the issue of any Occupation Certificate certification must be provided by a qualified mechanical ventilation engineer that the installation of the ventilation system has been carried out in accordance with 'A' above.

D. Ongoing

The ventilation system must be operated and maintained in accordance with 'A' above.

32. Demolition Work

To ensure that demolition of structures is carried out in an environmentally acceptable and safe manner:

A. Before Commencement

If works involve the removal of more than 10 square metres of asbestos material, a bonded asbestos licence is required. A friable asbestos licence is required to remove, repair or disturb any amount of friable asbestos. For further information contact SafeWork NSW.

B. During Works

- i) The demolition of the existing building must be carried out strictly in accordance with Australian Standard 2601 - The Demolition of Structures.
- ii) The applicant must ensure that the demolition contractor has a current public risk insurance coverage for a minimum of \$5 million. A copy of the Policy must be submitted to the Council prior to demolition.

To ensure that the removal and transportation of any asbestos material, regardless of the quantity, is carried out in an environmentally acceptable and safe manner, all work must comply with the following:

- a) Work Health and Safety Act 2011;
- b) Work Health and Safety Regulation 2017;
- c) Safe Work Australia Code of Practice - How to Manage and Control Asbestos in the Workplace;
- d) Safe Work Australia Code of Practice - How to Safely Remove Asbestos;
- e) Protection of the Environment Operations Act 1997; and
- f) Protection of the Environment Operations (Waste) Regulation 2014.

Asbestos waste in any form must be disposed of at a waste facility licensed by the NSW EPA to accept asbestos waste. Any asbestos waste load over 100kg (including asbestos contaminated soil) or 10m² or more of asbestos sheeting must be registered with the EPA on-line reporting tool WasteLocate. More information can be found at <https://wastelocate.epa.nsw.gov.au>.

33. Dilapidation Report - Adjoining Properties

To assist in the resolution of any future disputes about damage to properties adjoining the development site.

A. Before Works

Prior to commencement of any work on site the Applicant or principal contractor must provide dilapidation reports on the adjacent properties at No's. 7 Preston Avenue, 9-11 Preston Avenue, 1064-1070 Old Princes Highway, 1058-1062 Old Princes Highway, 1 Preston Avenue, and 42-50 Station Street including any basements and ancillary structures. The reports must be provided to the Principal Certifier and to the owners of the properties that are the subject of the report.

The reports must be prepared by a suitably qualified and experienced person, such as a structural engineer.

34. Design Requirements for Adaptable Housing

A. Design

The development must provide Units G.05, 1.01, 1.05, 2.01, 2.05, 3.01, 3.05, 4.01, 4.07, 5.01, 5.02, 5.06 as Adaptable Housing. A 13th unit is also to be nominated and constructed as Adaptable Housing.

A report prepared by a suitably qualified Adaptable Housing Specialist must be submitted with the Construction Certificate, demonstrating that the development complies with the requirements of AS4299 - Adaptable Housing. The report must contain a completed checklist (Appendix A - AS4299) demonstrating compliance with the requirements of a Class C Adaptable House.

B. Before Occupation

Prior to the occupation of the development, or this issue of any Occupation Certificate, a suitably qualified Adaptable Housing Specialist must certify that the development has been constructed in accordance with the requirements of "A" above. A copy of this certification must accompany the Occupation Certificate.

35. Design Requirements for Livable Housing

A. Design

The development must provide Units G.01, G.02, 1.02, 2.02, 3.02 and 4.02 as Livable Housing. These units must be designed to the 'Silver Standard' as outlined in the *Livable Housing Design Guidelines* (prepared by Livable Housing Australia).

Details must be included in documentation submitted with the application for a Construction Certificate.

B. Before Occupation

Prior to the occupation of the development, or this issue of any Occupation Certificate, a suitably qualified Livable Housing Specialist must certify that the development has been constructed in accordance with the requirements of "A" above. A copy of this certification must accompany the Occupation Certificate.

36. Verification of Design for Construction - SEPP 65

A. Design

Design verification must be provided by a registered Architect in accordance with the requirements of SEPP 65 stating that the design intent approved by the Development Consent has been maintained in the building / architectural plans submitted with the Construction Certificate. This design verification must accompany the application for a Construction Certificate.

B. Before Occupation

Prior to the issue of any Occupation Certificate design verification must be provided by a registered Architect in detailing that the development has been completed in accordance with SEPP 65.

37. External Walls and Cladding Flammability

A. Design

The external walls of the building, including attachments, must comply with the relevant requirements of the *National Construction Code (NCC)*. This includes the products and systems proposed for use or used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels

B. Before Construction

Details of compliance with “A” above must form part of the application for a Construction Certificate.

C. Before Occupation

Prior to the occupation of the development, or the issue of any Occupation Certificate, certification, including an appropriate level of detail to demonstrate compliance with the NCC as built, must be provided to the PC by an appropriately accredited professional that external finishes of the building complies with “A” above.

38. Certification Requirement of Levels

A. During Construction

At the following stages of construction:

- i) Prior to the pouring of each floor or roof slab,
- ii) Upon completion of the roof frame.

A registered surveyor must provide the Principal Certifying Authority with Certification that the stage of structure complies with the development consent in respect of levels.

B. Before Occupation

The certification referred to above must form part of the application for an Occupation Certificate.

39. Sydney Water Requirements & Section 73 Compliance Certificate

A. Before Any Works

Prior to the commencement of any works on site, including demolition or excavation, the plans approved as part of the Construction Certificate must also be approved by Sydney Water. This allows Sydney Water to determine if sewer, water or stormwater mains or easements will be affected by any part of your development. Customers will receive an approval receipt which must be included in the Construction Certificate documentation.

Please refer to the web site www.sydneywater.com.au.

B. Before Occupation / Subdivision Certificate

Prior to the issue of an Occupation Certificate or a Subdivision Certificate a Compliance Certificate under Section 73 of the Sydney Water Act, 1994, must be submitted to Council by the Principal Certifying Authority. Sydney Water may require the construction of works and/or the payment of developer charges. This assessment will determine the availability of water and sewer services, which may require extension, adjustment or connection to the mains.

Sydney Water Advice on Compliance Certificates:

Sydney Water will assess the development and if required will issue a Notice of Requirements letter detailing all requirements that must be met. Applications can be made either directly to Sydney Water or through a Sydney Water accredited Water Servicing Coordinator. Please make early contact with the Coordinator, since building of water / sewer extensions can be time-consuming and may impact on other services as well as building, driveway or landscaping design.

Go to www.sydneywater.com.au/section73 or call 1300 082 746 to learn more about applying through an authorised WSC or Sydney Water.

40. Dial Before You Dig

A. Before Construction

Underground assets may exist in the area that is subject to your application. In the interests of health and safety and in order to protect damage to third party assets please contact Dial Before You Dig at www.1100.com.au or telephone on 1100 before excavating or erecting structures (this is the law in NSW).

It is the individual's responsibility to anticipate and request the nominal location of plant or assets on the relevant property via contacting the Dial before you dig service in advance of any construction or planning activities.

41. Noise Control and Permitted Hours for Building and Demolition Work

A. During Works

To minimise the noise impact on the surrounding environment:

- i) The LAeq sound pressure level measured over a period of 15 minutes when the construction or demolition site is in operation, must not exceed the ambient background level (LA90 15min) by more than 10dB(A) when measured at the nearest affected premises.
- ii) All building and demolition work must be carried out only between the hours of 7.00am and 6.00pm Monday to Friday inclusive, 8.00am and 3.00pm Saturdays. No work must be carried out on Sundays and Public Holidays.

42. Toilet Facilities

A. During Works

Toilet facilities must be available or provided at the work site at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site before works begin and must be maintained until the works are completed.

Each toilet must:

- i) be a standard flushing toilet connected to a public sewer, or
- ii) have an on-site effluent disposal system approved under the Local Government Act 1993, or
- iii) be a temporary chemical closet approved under the Local Government Act 1993.

43. Street Numbering and Provision of Letter Box Facilities

A. Before Occupation

- i) Street / unit numbers must be clearly displayed.
- ii) Suitable letterbox facilities must be provided in accordance with Australia Post specifications and AS4253.
- iii) The dwellings must have the following street address format:
 - Building A
G01-G06 / 6 Geebung Lane Engadine
101-109 / 6 Geebung Lane Engadine
201-209 / 6 Geebung Lane Engadine
301-309 / 6 Geebung Lane Engadine
401-407 / 6 Geebung Lane Engadine
501-506 / 6 Geebung Lane Engadine
 - Building B
G01-G04 / 5 Preston Avenue Engadine

101-104 / 5 Preston Avenue Engadine
201-204 / 5 Preston Avenue Engadine
301-304 / 5 Preston Avenue Engadine
401-402 / 5 Preston Avenue Engadine

44. Car Parking Allocation

A. Before Future Strata Subdivision

Car parking must be allocated to individual strata lots as part of their unit entitlement.

The car wash bay and turning bays must be designated as common property on any future strata plan.

Parking must be allocated on the following basis:

- Residential dwellings: 80 spaces
- Car wash bay: 1 space
- Turning Bays: 3 spaces
- Tavern: 69 spaces
- Motorcycle: 8 spaces
- Bicycle: 21 spaces
- Loading/servicing: 1 space

B. Ongoing

The car-parking provided must only be used in conjunction with the dwellings and/or tenancies contained within the development and not for any other purpose.

45. Loading and Unloading

To preserve the amenity and ensure the safety of the public:

A. Ongoing

All loading and unloading of vehicles must be carried out within the site and not from the public roadway. All service/delivery vehicles must leave the site in a forward direction.

46. Graffiti

All surfaces on the street level that are not glass should use graffiti resitant paints and / or other surfaces that discourage graffiti.

47. Closed Circuit Television (CCTV)

To increase resident safety and security, a CCTV system must be installed to monitor all common areas (including letter boxes), the access / exit driveway and all basement car park levels including lift areas.

Digital technology will be required to be used to record images from the camera and this is to be located in a secure location. The surveillance equipment will need to be able to zoom in and out on a person without losing focus. It must be maintained in working order at all times and installed by a qualified and reputable company. All security devices must be installed by a licenced security professional and must meet Australian Standard 4806.

48. Storage

A. Prior to Occupation Certificate

Where access to a storage cage within the basement is gained through a car space, this storage cage is to be allocated to the same unit in which the car space is allocated.

END OF CONDITIONS

Lauren Franks - 9710 0617
File Ref: PAD18/0091

13 December 2018

White and Partners (Sydney Investments) Pty Ltd
GPO Box 5200
SYDNEY NSW 2000

Dear Sir/Madam

Pre-Application Discussion No. PAD18/0091

Proposal: Construction of a six storey residential flat building containing 61 dwellings, 81 residential parking spaces and 73 parking spaces for the tavern in a 3 level basement

Property: 5 Preston Avenue, Engadine

Council is committed to achieving quality built outcomes for the benefit of residents and the broader community. The Pre-Application (PAD) process is intended to assist in this goal and I appreciate you taking the time to attend.

The PAD held on 8 November 2018 regarding the above development proposal was attended by Carine Elias (Team Leader), Lauren Franks (Development Assessment Officer), Slavco Bujaroski (Architect), Elizabeth Tahiri (Community Engagement Advisor) who attended the meeting on behalf of Council and Sam Vincent (Project Director), Tom Goode (Consultant Planner) and Matthew Cumming (Consultant Architect) on behalf of the applicant.

The purpose of this letter is to provide a summary of the issues discussed at the meeting and provide information that will assist you complete a development application (DA). Council cannot provide you with certainty on the determination of the proposal until a DA has been lodged and assessed.

Your DA will need to be supported by a Statement of Environmental Effects addressing all relevant Environmental Planning Instruments, and the detailed planning controls contained in Council's Development Control Plan.

The Site and Proposal:

The site is located on the south-western edge of the Engadine Town Centre on a corner allotment fronting Preston Avenue and Geebung Lane. The site is an irregular shaped lot that slopes moderately to the eastern corner of the site. In its current form, the site has an area of 2,182m² and does not contain any natural features due to its present use as a carpark which is completely covered with bitumen.

The proposal is to develop the site with a residential flat building containing 61 units comprising 20 x 1 bedroom units, 29 x 2 bedroom units and 12 x 3 bedroom units with 81 residential car spaces and 72 tavern car spaces provided across 3 basement levels.

The property is within Zone B3 Commercial Core under the provisions of Sutherland Shire Local Environmental Plan 2015 (SSLEP 2015). The proposed residential flat building is a permissible form of development within this zone.

Comments on the Proposal:

The following comments are provided in respect to the concept plans presented for consideration at the meeting.

1. Planning Matters

Permissibility

The B3 Commercial Core permits development for a residential flat building however, multi dwelling housing is prohibited. The 'townhouse' style component should ensure that it adheres to the definition of residential flat building and is well-integrated into the residential flat building so that it doesn't read as a separate component of the development to the extent that it is defined as multi dwelling housing. In its current form, this is questionable. Council's decision to zone the land B3 Commercial Core and afford the site a substantial uplift in building height and FSR development standards has occurred with an expectation that commercial development is provided at the ground floor, distributing a larger amount of gross floor area across the ground floor plate due to reduced setbacks. This would reduce the level of bulk distributed to upper levels. To incorporate a commercial aspect to this development would not only assist in the development's interface and connection with the adjoining park but would improve the development's ability to meet the objectives of the zone. These objectives notably centre on benefits associated with the commercial component of a development. In its current form, provision of a residential flat building on the site struggles to meet the objectives of the zone.

Site Isolation

The proposal will result in the isolation of No. 7 Preston Avenue which has a lot width of 17.06m, significantly less than the minimum recommended width of 26m for the construction of a residential flat building (RFB) should it be redeveloped as this land use. No. 7 Preston Avenue is landlocked between the subject site (this proposal) and No. 9-11 Preston Avenue, which is an allotment containing a well-established residential flat building unlikely to be redeveloped into the future. Subsequently, Council has considered this DA in light of the site isolation planning principles in *Cornerstone Property Group Pty Ltd v Warringah Council [2004] NSWLEC 189*. As a result, Council has determined that the current proposal will "prejudice reasonable development" of No. 7 Preston Avenue. In particular, No. 7 Preston Avenue will be unable to meet the maximum FSR permitted on the site whilst adhering to minimum Apartment Design Guide (ADG) building separation requirements.

The principles to be considered when a development will result in the isolation of land through redevelopment were set out by Brown C in *Melissa Grech v Auburn Council [2004] NSWLEC 40*. In this regard, details of the negotiations between adjacent properties must be submitted to Council and include evidence of a reasonable offer being made for the site in accordance with independent property valuation reports. That case law also states that the level of negotiation and any offers made for the isolated site are matters that can be given weight in the consideration of a DA. These details will need to be provided to Council for assessment if amalgamation does not occur.

Land Swap

The proposal entails a land swap of approximately 143.5m² section of Geebung Lane owned by Council in return for approximately 165.1m² of the subject site adjacent to the Engadine Town Park. This land swap has been subject of a Council resolution that entails the embellishment of the park and form part of the anticipated Voluntary Planning Agreement (VPA). Please note that whilst the resolution does not detail the small triangular shaped portion of land corner in the south-western corner of the site, this small portion of land is captured within this resolution.

The design of the embellished park should not be completed until consultation with the community is conducted by Council, with feedback reviewed and recommendations put forward to you once finalised. This consultation will commence simultaneously with neighbour notification immediately following lodgement of the DA to prevent delays in the progress of any future DA. This consultation is necessary to ensure the community's needs are met with the park embellishment with the feedback provided to you early on in your DA's assessment process so that aspects of the design can be detailed in your Voluntary Planning Agreement (VPA).

The Council resolution enabling the land swap to occur requires a planning proposal in accordance with point 5 of the resolution. This is currently being prepared by Council's Strategic Planners and will not prevent progression of a future DA once lodged.

Voluntary Planning Agreement (VPA)

Preparation of a VPA should commence as soon as possible and be submitted to Council as early as possible as this process can take some time as it requires a 28 day public exhibition period and authorisation through a Council resolution. An example VPA accompanies this letter to assist in preparation of this document.

Pedestrian Tunnel

The acoustic benefits of the pedestrian tunnel are not discounted however, NSW Police have raised significant safety concerns. These concerns are echoed by Council. Any future DA seeking to incorporate the pedestrian tunnel will need to include a Crime Prevention Through Environmental Design (CPTED) assessment that details who will take responsibility for the monitoring and upkeep of any CCTV system and explain how the tunnel design will prevent natural hiding places for criminals. Should a pedestrian tunnel be supported, this land would be leased from Council.

Floor Space Ratio (FSR)

A maximum FSR of 2:1 applies to the site pursuant to Clause 4.4 of the Sutherland Shire Local Environmental Plan 2015 (SSLEP 2015). Documentation submitted with the plans identifies that site as having an area of 2,692m², considerably more than the 2,182m² area appearing on the Deposited Plan (noting a slight adjustment will be needed through the land swap process). This vast difference in area calculation will have substantial ramifications on the maximum FSR capable of being achieved on the site.

Please note that FSR calculations include the common walkway on each floor and stairs which are internal to individual units as these do not meet the definition of common vertical circulation as they are not 'common' to the development. Further, any bathroom provided within communal open space or within the basement to adhere to BCA requirements and waste rooms provided at ground floor level are areas considered gross floor area.

Building Height

A maximum building height of 20m applies to the site pursuant to Clause 4.3 of SSLEP 2015. The proposal exceeds this maximum building height by approximately 0.3m and whilst this should be avoided, a variation can be considered if accompanied by a written request in accordance with Clause 4.6 of SSLEP 2015. Where breaches of the maximum building height are accepted, these must apply to very minor building elements such as lift overruns or mechanical plants and services if they are centrally located and not visible from a standing position on surrounding roads or public spaces.

The Apartment Design Guide (ADG) prescribes a floor to floor separation of 3.1m to allow for 0.4m to be provided for structure, services, set downs and finishes. The 3.04m floor to floor separation is particularly challenging to achieve at construction stage with concern that approval of a DA incorporating a distance less than 3.1m then resulting in subsequent Section 4.55 applications that may cause significant breaches of the maximum 20m building height limit.

Built Form

The distribution of building mass across the site is driven by alleviating any adverse impacts to the adjoining property at No. 7 Preston Avenue. However, in doing so, the bulk situated on the north-western side of the site is substantial. Ideally, amalgamation of the site with No. 7 Preston Avenue is preferred but should Council accept that reasonable efforts have been made to acquire this adjoining property, then shifting some of the bulk with the following measures taken is recommended:

- Preston Avenue is heavily aligned with 3 storey residential flat buildings and interspersed with 4 storey residential flat buildings. Extending the 2 storey built form to 3 storeys with a rooftop communal open space on the fourth storey is a design response that should be explored. However, care should be taken with regard to shadow impacts on No. 7 Preston Avenue. Should units be provided above the defined 2 storey base, these can be re-configured so that the north-eastern edge appears 'lighter', for example, a continuous balcony framing the edge of the building with the units sitting further back.
- The design has a continuous unarticulated south-western elevation that is 5.647m from the south-western boundary however this distance widens to 9m as it nears the adjoining property at No. 7 Preston Avenue. There may be scope to extend the built form closer to this boundary whilst still maintaining ADG setback distances required in accordance with Section 3F within this pocket as it adjoins No. 9-11 Preston Avenue for up a few storeys if designed sensitively. This would reduce the size of communal open space in this area however a smaller and usable space at the rear of the residential lobby can still be achieved and if executed well, could create a pleasant space for residents and visitors.
- The sharp scale of the building 3m from Geebung Lane should be softened through increasing the setback to this lane at upper levels. Currently, no meaningful articulation is provided to offset its bulk.

Amenity

Access to vehicles provided to the townhouse style dwellings is unresolved and requires residents to walk outside onto the Council verge before needing to enter the residential entry. This is not an ideal outcome.

Further, the following opportunities exist to improve unit's design and provide equitable distribution of solar access:

- Flip units 4.01 and 5.01 so that the bedroom and bathroom adjoin the walkway;
- The third (western) bedroom within units G.04 - 5.04 should be space given to units G.03 - 5.03 and utilised as living area to improve solar access to these units;
- Fixed angle privacy screens extending from windows situated along the north-eastern elevation (internal corner) unacceptably obstruct the outlook and solar access to their respective units. The recessed balcony applied to units 1.07 – 5.07 could be removed if the unit extended further along the north-western elevation; and
- The dwelling adjoining the carpark entry does not need to have a window facing it as the outlook from the dwelling is poor.

Residential storage is required at a rate of 6m³ for 1 bedroom, 8m³ for 2 bedroom and 10m³ for 3 or more bedroom units, in accordance with the ADG and SSDCP 2015. These areas are to be identified (along with their cubic metre volume) on plans submitted with the DA. A maximum 50% of storage can be provided within the basement with their allocation to each unit demonstrated.

A total of 6 livable and 12 adaptable units are to be provided within the development pursuant SSDCP 2015. These units and their car spaces are to be identified on plans. Post-adaptation plans need to be shown, and should involve minimal changes to walls and plumbing for affordability. With an ageing population, this form of housing is necessary to ensure occupants can remain in their home as they age without the need to modify their home in the future.

Sustainability

The number of units achieving the minimum 70% solar access requirements in accordance with the ADG appears achievable however, counting units which rely on skylights for adequate solar access will not be included in Council's calculation. Further, of equal importance is to ensure than no more than 15% of units receive no solar access. Similarly to solar access, Council's calculation of units achieving an adequate level of cross-ventilation to meet ADG requirements will not include units relying on openable skylights.

2. Architectural Matters

Urban Design

It is strongly advised that you attend Council's Design Review Forum (DRF) prior to finalising your design and proceeding to lodgement of a DA. This Forum will provide an added layer of feedback on the design provided in accordance with quality principles of the Statement Environmental Planning Policy 65 – Design Quality of Residential Apartment Development.

The repetitive windows across the façade give solidity to the building emphasising its bulk and resulting in monotony in its expression. There is an opportunity to 'open' up the balcony elements so that they can punctuate and provide some rhythm to the façade and therefore read as separate elements in the façade. There is no need to treat the external face of balconies in the same way as internal spaces.

The building's presentation to Preston Avenue requires further consideration and in its current form is treated as a defensive side of the building as opposed to an active and inviting street frontage. Given the depth of the site when measured from Preston Avenue, it is recommended that a second resident entry be provided from Preston Avenue. This would allow for the building to be potentially split into two cores, improving the development's ability to have an improved connection with the existing ground level and relationship with the surrounding streetscape.

Further work is required to remove the reliance on a platform lift within the residential lobby. The development's size will attract a high volume of residents and visitors, among them people with disabilities may very well form part of this consort. To introduce a platform lift within the residential foyer is a poor amenity outcome with effort to ensure an integrated ramp is applied in its replacement highly necessary.

The 2 storey 'townhouse' section, while questionable from a planning perspective, incorporates a rhythm of vertical and horizontal building elements which provide interest at ground level. This pattern stops abruptly against the monolithic presentation of the north-western part of the building resulting in a confused building typology. A continuation of this rhythm along the full street frontage can provide an opportunity to frame the main entrance into the development as well as provide a solid base to the building upon which lighter elements can sit.

Basement access from each townhouse style dwelling remains unresolved and requires residents to walk outside onto the Council verge before re-entering the building to access the basement. This is not an ideal outcome and requires further development to improve the functionality of the townhouse style dwellings.

Limited articulation is employed to each façade with a reliance on articulation through levels provided. This alone has not relieved the building's bulk and it is recommended that further articulation is applied to the design to ensure the development achieves the intent of the SSDCP 2015.

3. Landscape Architectural Matters

Planting

A 3m basement setback adjoining Geebung Lane is required to improve opportunities for much needed privacy into the townhouse style dwellings 1-6. The Sutherland Shire Development Control Plan 2015 (SSDCP 2015) requires a minimum 6m front landscaped setback. Whilst it is taken that this relates to Preston Avenue, given the development does not comprise commercial development at the ground floor as was intended through zoning the site B3 Commercial Core, an appropriate landscaped setting along Geebung Lane is expected.

The interface between the pedestrian entry path along the south-western boundary and neighbouring property is poorly resolved and uninviting. A different solution should be sought though the use of high quality materials and climbing vegetation.

Maintenance of the larger planter boxes situated levels 4 and 5 appears difficult and it is questionable if the upkeep of these spaces would occur by private owners.

Communal Open Space

Adequately sized communal open space are proposed at both ground and rooftop level, compensating for the lack of private open spaces to the townhouse style dwellings 1-6. To improve upon these spaces, universal toilets to the rooftop communal open space

should be provided and an improved visual connection to the residential lobby from the ground floor communal open space is needed. A direct connection to the adjoining park is also advised.

Landscape Strategy

As outlined in the SSDCP 2015, the intended landscape strategy is to build on the legacy of remnant trees and extend local habitat whilst creating a unique sense of place for Engadine. Appropriate local species should be applied to the design including:

Woronora Sandstone Exposed Bloodwood – West

Syncarpia glomulifera (Turpentine)

Eucalyptus pilularis (Blackbutt)

Angophora costata (Smooth Bark Apple)

Corymbia gummifera (Red Bloodwood)

Banksia serrata (Old Man Banksia)

4. Traffic Engineering Matters

Change in Road Direction

To convert Geebung Lane from a two-way road to a one-way road, a Traffic Report will be required which needs to discuss traffic generation. In addition, a Contingency Plan for emergency vehicles in and around the area is also needed.

Mr. Mario Sherrie, Manager Traffic & Public Domain Services (ph. 9710 0503) can provide assistance in facilitating this process as this conversion requires endorsement by Roads and Maritime Services (RMS) and Council's Traffic Committee. Notification of the proposed change in traffic conditions with surrounding and affected property owners will also be undertaken by Council's Traffic and Public Domain Department and given this process can take time, early contact with Mr. Sherrie is recommended.

Parking

The SSDCP 2015 requires a minimum 1 parking space per unit with a maximum 2 spaces to be provided per unit. No visitor parking is required. Parking provided above these rates is counted towards the calculation of gross floor area. When applying the definition of gross floor area under SSLEP 2015, parking spaces provided for use by the Tavern will be counted towards the calculation of gross floor area as they are spaces not required by SSDCP 2015. However, given the existing carpark is calculated to accommodate approximately 70 cars, the decision to incorporate 72 parking spaces for the exclusive use by the Tavern is supported but must be detailed within a written request to vary the Floor Space Ratio development standard in accordance with Clause 4.6 of SSLEP 2015.

Where car spaces are shown in tight locations, swept path diagrams are to be provided in accordance with AS2890.1 for a B85 vehicle. Car space dimensions are to comply with AS2890.1 user class 3.

5. Engineering Matters within Public Domain

No objection is raised to the proposed basement access location, or the pedestrian access from the units to Geebung Lane however it should be noted that there is currently no pedestrian access along the laneway except via the roadway.

The proposal identifies a footpath pavement across this frontage however due to the width of the lane, this may need to be located within the property boundary. A shared zone opportunity has been identified for Geebung Lane and will need to be activated in conjunction with this development. Consideration should be taken as to whether the

proposed footpath within the property boundary is an acceptable outcome, or if some form of dedication is required in addition to the shared zone. A raised threshold may also be required to facilitate pedestrian access from the new basement car park to the existing tavern and vice versa.

Upgrades of the Public Domain shall be in accordance with the Public Domain Design Manual which can be included as conditions of consent where required. This includes the removal of overhead cables on Preston Avenue.

The stormwater connection will need to be facilitated by a piped connection to Council's existing stormwater system. Existing assets are available within Geebung Lane which can be upgraded / connected to as required.

With respect to the land swap, it should be noted that there is an existing footpath pavement across the Geebung Lane frontage of the park that is situated at 1058-1062 Old Princes Highway. Transitions from this footpath will be required as part of the frontage works within the Road Reserve and can be dealt with via a condition of consent should a DA be approved.

6. Development Engineering Matters

Design

The Tavern lift lobby should be relocated so that it is opposite the Tavern entry for No. 45-50 Station Street. This will alter the location of the basement ramp entry which should be in front of the Tavern loading dock as it will improve the turning path of a HRV.

Stormwater

A stormwater management plan is to be provided by a suitably qualified civil engineer in accordance with SSDCP 2015, inclusive of water treatment.

7. Building Surveying Matters

The following information is required to accompany any future DA:

- A Building Code of Australia compliance report from an accredited certifier who is accredited with the class and size of the building. The report should address all sections of the Building Code of Australia.
- A report from a registered disability consultant addressing the requirements of AS1428.1 in relation to disabled access and facilities for the promises.
- An acoustic report addressing the requirements for sound transmission throughout the building.
- A BASIX and Part J report for the energy efficiency requirements of the building.
- Provide a report from a Mechanical Engineer for the required mechanical ventilation that is required throughout the basements and the residential areas of the building.
- A Hydraulic Consultant's report showing where all the water based fire services throughout the building will be positioned.
- A Site Plan indicating the location of the fire hydrant booster assembly and sprinkler booster assembly.

8. Waste Matters

The following rate of waste generation rate is to be applied to the development:

- Garbage 120L/week/dwelling
- Recycling 120L/week/dwelling

Council is able to provide weekly collection of garbage or recycling as part of its 'shared service' domestic waste management charge adopted by Council in the 'Schedule of Fees and Charges' for multi-occupancy residential flat buildings. There must be sufficient bins to accommodate the above noted waste generation.

Collection by private contractor is permissible, however future residents are still required to pay a service availability charge to council as stipulated under section 146 of the Local Government Act 1993, in addition to the contractor's fee. This arrangement must be adopted as a By-Law in any future Strata Plan.

Bin Storage

There must be sufficient room to store, access and manoeuvre garbage bins within the bin storage rooms.

Waste Collection

Waste collection will need to occur wholly within the site via a Heavy Rigid Vehicle (HRV). Swept path diagrams will be required with any future DA demonstrating that a HRV can safely access and manoeuvre within the site. Collection from Geebung Lane is not supported as it poses a conflict with increased vehicle movements and pedestrian access. If transfer of bins is required, it should be no more than 3m at a maximum surface gradient of 1:30. Please see Council's specification "*Waste Collection For New Multi-Unit Dwellings and Residential Flat Buildings*" for further information.

Bulky Household Waste

A minimum 25m² bulky waste area is required and can be achieved across multiple bulky storage areas subject to Council approval.

Council's pre-booked clean up service will need to be collected on-site. It is the responsibility of the Owners Corporation/Strata Manager to transfer stored bulky waste to the approved collection point for Council's pre-booked clean-up service. The collection point for bulky waste should also be designated in the waste management plan.

Waste Management Plan

A detailed Waste Management Plan is required with any future DA. It must include the following details:

- Waste generation, including type and volume
- Reuse and recycling potential
- Waste systems, such as provision for waste separation and details of any garbage chute or compactors
- Bin quantity, size and type/colour
- Proposed bin storage and collection areas, including how bins are to be moved from waste storage area/s to collection area/s
- Bulky waste storage area and onsite collection point
- Collection frequency
- Collection location

- Scaled waste management drawings
- Waste vehicle access (swept path analysis)
- Detail of the ongoing management, maintenance and cleaning of all waste and recycling management facilities

The following publications must be used to inform the design of the development:

- *Waste Collection For New Multi-Unit Dwellings and Residential Flat Buildings* 2017 Sutherland Shire Council Environmental Specification.
- *Better Practice Guide for Waste Management in Multi-Unit Dwellings* 2008, Department of Environment and Climate Change NSW.

Utilities and Infrastructure

You are advised to make enquiry early with the various infrastructure and utility providers to ensure relevant considerations for the provision of services have been taken into account early in the building design. Urban infrastructure and utilities are reaching, or have reached maximum capacity in some localities. Electricity substations are required on occasion to ensure sufficient power to buildings and NSW Fire have required substantial water tanks in some instances to meet flow requirements for sprinkler systems.

Infrastructure to support these requirements in the front boundary setback at the expense of landscaping or parking requirements is not likely to be acceptable. So you are encouraged to make enquiries and plan in advance.

Conclusion

Council supports quality, well considered development and the comments provided are intended to help you work toward this outcome. As presented, the proposal would unlikely be supported due to the permissibility of the townhouse component being questionable, the isolation of No. 7 Preston Avenue being unresolved, unsatisfactory distribution of building mass and inconsistency with the SSLEP 2015, SSDCP 2015 and ADG on varying degrees. In addition, comments provided by Council's Design Review Forum (DRF) will form part of the assessment of any future DA and need to be taken into consideration when amending the proposal. It is strongly advised that you present your proposal to DRF prior to finalisation of the design and lodgement of the DA.

It is important to note that the information provided in this letter is based on the planning instruments applicable at the time of writing. You should make yourself aware of any subsequent changes to legislation or local planning controls before lodging your development application.

Council strongly recommends that you distribute this letter to all professionals within your design team including architects, landscape architects and engineers.

For detailed information about how to prepare and lodge a development application, please refer to the "Development" section of Council's website (www.sutherlandshire.nsw.gov.au). A "DA Guide" is available and an online tool called "Development Enquirer", which searches the applicable planning instruments for the planning controls relevant to your site and development.

To make sure lodgement of your application is quick and easy, make an appointment with Council's Development Enquiry Officers on 9710 0520 when you are ready to lodge. Requests for appointments can also be made via Council's website.

Please contact Council if you believe any of the above information to be incorrect or if you need clarification of the advice provided. Your initial point of contact should be Lauren Franks (9710 0617) as this is Council's development assessment officer who will most likely be responsible for the assessment of your DA.

Yours faithfully

Mark Adamson
Manager – Projects and Development Assessment

Appendix C – Submissions

Submissions received during the first notification period:

Address	Date of Letter/s	Issues
11/9-11 Preston Avenue	8 August 2019	Overshadowing, privacy, view loss, property value, traffic and parking, safety, sewerage, property damage
5/9-11 Preston Avenue x 2	8 & 9 August 2019	Sewerage, pedestrian safety, emergency vehicle accessibility, privacy, noise, overshadowing, floor space ratio, bulk and scale, building separation / setbacks
4/1064 Old Princes Highway	9 August 2019	Overshadowing, property damage, traffic and parking, construction phase
7 Preston Avenue x 2	29 June & 9 August 2019	Site isolation, property damage, overshadowing, privacy
Body Corporate of 9-11 Preston Avenue	5 August 2019	View loss (unit's 2, 4, 6, 7, 10, 12), building height, building separation / setbacks, bulk and scale, overshadowing, privacy, floor space ratio, traffic and parking, landscaping, Inadequate width of Geebung Lane

Submissions received during the second notification period:

Address	Date of Letter/s	Issues
7/9-11 Preston Avenue	29 April 2020	Traffic and parking, construction phase, impact on water table, floor space ratio, building separation / setbacks, pedestrian safety, replacement of boundary fencing
7 Preston Avenue	29 April 2020	Site isolation, privacy, vehicle sightlines, property value
4/1064 Old Princes Highway	8 May 2020	Traffic and parking, property damage, overshadowing, construction phase, bulk and scale, noise
5/9-11 Preston Avenue	8 May 2020	Building height, view loss, overshadowing, privacy, bulk and scale, traffic and parking, inadequate width of Geebung Lane, pedestrian safety, construction phase

Body Corporate of 9-11 Preston Avenue	12 May 2020	Non-compliant with SEPP 65, ADG, SSLEP 2015 & SSDCP 2015, overshadowing, privacy, view loss, bulk and scale, traffic and parking, construction phase, replacement of boundary fencing, property damage,
--	-------------	--

Appendix D - State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development

Design Quality Principles	Assessment
Principle 1: Context and neighbourhood character	<p>The site is zoned B3 Commercial Core under SSLEP 2015. The proposal has undergone considerable amendment to ensure the development's distribution of bulk across the site is relieving to surrounding development as much as possible.</p> <p>No. 7 Preston Avenue adjoins the site, is under developed and due to an established residential flat building on No. 9-11 Preston Avenue, consolidation with adjoining properties is restricted to the subject site as it wraps around the north-eastern side and north-western rear boundary. Prior to lodgement of the DA, the applicant tried to acquire No. 7 Preston Avenue. Throughout assessment of the DA, the applicant obtained three property valuation reports to demonstrate an offer had been made that was consistent with current market value. Whilst this was not accepted, the applicant prepared a schematic drawing showing how redevelopment of No. 7 Preston Avenue could be developed in isolation. This ensured that the context in which the subject site sits will not be adversely impacted by the proposal.</p> <p>The development is consistent with the desired future character of the B3 Commercial Core zone as envisaged by SSLEP 2015 and SSDCP 2015 and has appropriately applied an additional 3m setback to standard setback controls as required by the ADG to ensure a transition between the subject site's B3 Commercial Core zone and R4 High Density Residential zone.</p>
Principle 2: Built form and scale	<p>The built form and scale is acceptable in the context of the area, given that the area has been upzoned to allow for greater height and density under SSLEP 2015. Whilst development to the south of the site (excluding No. 7 Preston Avenue represents land of a reduced allowance for FSR (1.2:1) and building height (16m), this has been considered in the proposal as an additional 3m setback has been applied to the design where it adjoins No. 9-11 Preston Avenue due to this being a sensitive interface. This is consistent with the ADG in dealing with transitions between zones.</p> <p>The scale is compatible with emerging development within the Engadine Town Centre, particularly upon surrounding properties situated along the eastern side of Old Princes Highway. With properties to the north of the site on the opposite side of Geebung Lane underdeveloped and benefiting from the same building height (20m) and FSR (2:1) development standards, development of larger bulk and scale will likely follow in the near future.</p>

	<p>The development's building height is compliant with the controls applicable and through amendments to the design, the building is adequately articulated and the setbacks provided minimise the bulk of the building when viewed from the street and adjoining properties.</p>
Principle 3: Density	<p>The density for the development is permitted under the SSLEP 2015 and is generous with a maximum FSR of 2:1. Whilst the proposal exceeds this FSR, this is due to provision of additional parking within the basement and is discussed at length within the assessment section of the report and is considered acceptable.</p> <p>With the exception of No. 7 Preston Avenue (which contains a single storey building), it is acknowledged that existing development to the south-west of the site are three storey residential flat buildings. The uplift in density of the subject site since the construction of these adjoining properties is reflected in the site benefiting from a maximum height and FSR of 20m and 2:1. This uplift is in line with ensuring provision of densities that are consistent with the area's projected population and takes advantage of the site's close proximity to Engadine Train Station and fringe position of the Engadine Town Centre.</p>
Principle 4: Sustainability	<p>The development incorporates BASIX requirements and sustainability measures into its overall design to enhance water and energy efficiency and to provide suitable amenity to the building's future occupants.</p>
Principle 5: Landscape	<p>The SSLEP 2015 does not require provision of any deep soil landscaping however the ADG's minimum 7% landscaping requirement has been achieved. The proposal successfully employs a basement design that is offset from all boundaries which has enabled a landscape setting to be provided around the perimeter of the site, softening the visual bulk of the development and be consistent with the character of the locality.</p> <p>The provision of communal open space between Building 'A' and Building 'B' at the ground level allows for equitable access for occupants of each building. The design incorporates appropriate taller plant species to accentuate the separation between buildings on the site. The communal open space's unobstructed northern side allows for appropriate solar access to be gained, making it more appealing.</p>
Principle 6: Amenity	<p>The proposal generally satisfies the provisions of the ADG with respect to appropriate floor plan layouts, solar access and visual/acoustic privacy. Whilst the number of units that do not receive any solar access midwinter is non-compliant, it is considered acceptable and very close to achieving compliance.</p>
Principle 7: Safety	<p>The proposed development incorporates suitable Crime Prevention Through Environmental Design (CPTED) Principles in the design.</p>

Principle 8: Housing diversity and social interaction	The proposal provides a mix of apartment types ranging from studio to 3 bedroom units, which encourages diversity including adaptable and livable housing. Communal open space is provided at ground level between Building 'A' and Building 'B' with facilities that encourage social interaction amongst residents, including a BBQ.
Principle 9: Aesthetics	An appropriate composition of building elements, textures, materials and colours within the development has been generally achieved.

Appendix E – Apartment Design Guide Compliance Table

Apartment Design Guide (ADG) – Key Controls			
Objective	Design Criteria	Proposal	Complies (% variation)
2C Building Height	Floor to floor height – 3.1m	3.1m	Yes
2F Building Separation	<p><i>Up to 4 storeys:</i> 12m habitable rooms / balconies 9m habitable and non-habitable 6m non-habitable</p> <p><i>5-8 storeys:</i> 18m habitable rooms / balconies 12m habitable and non-habitable 9m non-habitable</p> <p>*Increase building setback above rates identified above by 3m where it transitions to a lower density area.</p>	<p><u>Between Building 'A' & 'B'</u> – 12m (Building 'B' is 4 storeys) & 14.4m at 5th storey</p> <p><u>South</u> - (No. 7 Preston – single storey – 3.5m setback to dwelling or 1m to garage to northern boundary) Building 'B' - Ground floor: 4m Building 'A' – Ground floor (Courtyard): 6.7m</p> <p><u>South</u> - (No. 9-11 Preston – 3 storeys – 9m setback & 15m separation (all 3 levels)</p> <p><u>South</u> - (No. 1064-1070 Old Princes Hwy) 4 storeys (including parking partially within a basement): Approx. 16m (point encroachment)</p> <p><u>North</u> – (all buildings single storey & commercial) No. 1 Preston Ave – 10m (blank wall facing Geebung Ln) & 14m to Tavern Entry (42-50 Station St)</p> <p><u>East</u> – 24m to No. 2 Preston Ave (single storey)</p>	<p>No – Refer Section 8.3 of report.</p> <p>Yes (No. 7 Preston has same B3 zone)</p> <p>Yes – Refer Section 8.3 of report as concern raised by objector.</p> <p>No – RE1 zone with no buildings.</p> <p>Yes (properties have same B3 zone)</p> <p>Yes</p>
3D Communal Open Space	50% to receive for 2 hours min between 9am and 3pm on 21 June (mid-winter)	>50% will receive in excess of 2 hours (9-11am will be best experience highest levels of sunlight).	Yes
3E Deep Soil Zones	Min. 6m dimension & 7% (117.6m ²) deep soil area	25.8% (695.7m ²). Generally 3-6m in width.	Yes
3F Visual Privacy	Up to 12m high (4 storeys) Habitable/balconies: 6m Non-habitable: 3m	<p>Ground Floor: Measurements to wall 7 Preston (B3 zone)- 4m along northern boundary 7 Preston - 6m along western boundary</p> <p>9-11 Preston (R4 zone) – 9m 1058-1062 Old Princes Hwy</p>	<p>No – due to conversion of garage to serviced apartment. Refer Section 8.1 of report.</p> <p>Yes</p>

	<p>12m - 25m high (5-8 storeys) Habitable: 9m Non habitable: 4.5m</p> <p>*Increase building setback above rates identified above by 3m where it transitions to a lower density area.</p>	<p>(RE1 zone) – 5.647m</p> <p>Measurements to courtyards 7 Preston (B3 zone)- 4m along northern boundary 7 Preston - 5m along western boundary 9-11 Preston (R4 zone) – 7.5m 1058-1062 Old Princes Hwy (RE1 zone) – Nil</p> <p>Level 1-3 Floor: Measurements to habitable wall/balcony 7 Preston (B3 zone) – 6m along north-eastern side 7 Preston - 6m along west 9-11 Preston (R4 zone) – 9m 1058-1062 Old Princes Hwy (RE1 zone) – 5.647m</p> <p>Level 4-5 Floor: Measurements to habitable wall/balcony 7 Preston (B3 zone)- 4.27m along north of Building 'B' 7 Preston - 9m along west of Building 'A' 9-11 Preston (R4 zone) – 12m to planter adjacent to balcony 1058-1062 Old Princes Hwy (RE1 zone) – 5.647m</p>	<p>No – Refer Section 8.3 of report.</p> <p>No – Refer Section 8.3 of report.</p> <p>Yes – discussed in Section 8.3 of report.</p>
4A Solar and Daylight Access	<p>Living rooms and POS for 70% (45) of the units are to receive 2hrs direct sunlight between 9am and 3pm.</p> <p>Maximum 15% (10) of units received no sunlight to habitable rooms.</p>	<p>45 units (70.3%) – relies on unit 5.04 gaining sunlight via clerestory window between 11am and 1pm as per plan D616-D.</p> <p>11 units (17.1%).</p>	<p>Yes</p> <p>No – Refer Section 8.6 of report.</p>
4B Natural Ventilation	60% of apartments to be cross ventilated (38)	43 units (67.1%)	Yes
4C Ceiling Heights	2.7m	2.7m	Yes
	3.1m floor to floor	3.1m	Yes
4D Apartment Size & Layout	<p>Studio - 35m² 1br bedroom – 50m² 2br Bedroom – 70m² 3br Bedroom - 90m²</p> <p>*Add 5m² to units with an additional bathroom.</p> <p>Every habitable room to have a windows in an external wall with a total min. glass area of >10m² of the floor area of the</p>	<p>Studio – Min. 36m² 1br bedroom – Min. 50m² 2br Bedroom – Min. 70m² 3br Bedroom – Min. 104m²</p> <p>With additional bathroom, units still comply with min. size requirements.</p> <p>Each habitable room with an external wall provided with a window.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>

	<p>room. Daylight and air may not be borrowed from other rooms.</p> <p>Min. width of living / dining rooms 3.6m for 1 br units and 4m for 2 and 3 br units.</p> <p>Open plan layouts (where living, dining and kitchen combined), the max. habitable room depth is 8m from window.</p>	<p>Min. 3.65m width for 1 br units and min. 4m width for 2 br & 3 br units achieved.</p> <p>8m when measured to glass within a balcony.</p>	<p>Yes</p> <p>Yes</p>
4E Private Open Space	<p>Primary balconies 1br = 8m² / depth 2m 2br = 10m² / depth 2m 3br = 12m² / depth 2.4m</p> <p>Ground level apartments (or on podium) 15m² with min 3m depth</p>	<p>8m² / depth 1-2m 10m² / depth 1-2m 12m² / depth 2.4m</p> <p>G.07 is 10m². All other ground floor units >15m²</p>	<p>Yes</p> <p>No, however min. 10m² complies with balcony size requirements of ADG.</p>
4F Common Circulation & Spaces	<p>Max. number of apartments off a circulation core on a single level is 8.</p>	<p>9 units off levels L1-L3. A 2nd lift is not provided. Building 'A' has 46 units.</p>	<p>No – Refer Section 8.3 of report.</p>
4G Residential Storage	<p>1br apartment = 6m³ 2br apartment = 8m³ 3br apartment = 10m³ At least 50% of storage to be located within the apartments.</p>	<p>Min. storage achieved.</p>	<p>Yes</p>

Appendix F – Sutherland Shire Development Control Plan 2015 Compliance Table

Sutherland Shire Development Control Plan 2015			
Chapter 20: B3 Commercial Core - Engadine			
Category	Required	Proposed	Complies (% variation)
3. Landscape Strategy	Indigenous trees are to be planted to shade and enhance surface car parking and screen blank elevations or service areas.	Parking within the basement. Planting within common open space.	Yes
	Indigenous trees should be planted to minimize bulk and improve transition between the centre and residential / adjacent uses.	Council's Landscape Architect supportive of species and has imposed conditions where required to replace proposed species.	Yes
	Landscaping should be used to enhance the extent of any remnant trees and the indigenous canopies in the locality.	Landscaping surrounds each building.	Yes
	Landscaping in the vicinity of a driveway entrance should not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.	Council's Landscape Architect has imposed conditions to ensure adequate sightlines from No. 7 Preston Ave when exiting the development is achieved.	Yes
	Planting on a basement is to contain planter boxes with a minimum soil depth of 450mm for grass and ground covers, 600mm for shrubs, 900mm for small trees and 1200mm for large trees. Must be accessible for maintenance.	Landscape Plans have been amended to provide sections of landscape areas. Conditions imposed to ensure planter depths compliant.	Yes
	Trees in planter boxes are to have a minimum 3m x 3m per tree (set down into the slab to reduce surface height to 450mm).	Council's Landscape Architect is supportive of planter box sizes and imposed conditions where appropriate.	Yes
	Appropriate paving must be provided to driveways, walkways, entries, fire egress points etc.	Amendments to Landscape Plan have introduced further details. Conditions are also imposed regarding materials.	Yes
4. Streetscape and Built Form	Development must be designed and sited so that it addresses the street and must have a clearly identifiable entry.	Entries are identifiable.	Yes
	Development should acknowledge the established rhythm and scale of existing shopfronts / small lot subdivisions in vertical façade proportions.	Development's scale responsive to future character of the precinct and compliant with height control.	Yes

	<p>The building form must be articulated to avoid large expanses of unbroken wall, and to visually reduce bulk.</p> <p>Vehicular access shall be from the lowest order road (rear lane where such is provided).</p> <p>Where a basement car park extends above the NGL, it must not dominate the overall design of the building or streetscape.</p> <p>Where a development has a blank end wall, it is to have a high quality finish that makes a positive contribution to the appearance of the centre, should it potentially remain exposed in the long term.</p>	<p>Amendments have introduced further articulation, creating visual interest and softening visual bulk.</p> <p>Vehicular access from Geebung Lane.</p> <p>Basement will not dominate building or streetscape.</p> <p>Wall finishes improved via amendments to provide a more residential appearance and reduce visual bulk.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
5. Street Setbacks	To be in accordance with Engadine 'Specific Site' guidelines.	Proposal considers controls for 'Area 3'	Yes
6. Active Street Frontage	Active frontages are to be provided in accordance with <i>Map 2: Engadine Centre Active Street Fronts</i> .	Site is not identified as having an 'active street frontage'.	N/A
7. Side and Rear Setbacks	<p>Unless specifically identified in the Engadine Potential Built Form Plan, Engadine 'Specific Site' guidelines, or a clause, a nil setback to side and rear boundaries is permitted. However, where new development adjoins or is across the road from a residential zone, open space or school where it is likely to remain as a standalone building, side and rear setbacks will be assessed on merit, having regard to the impacts on residential amenity of both the neighbouring buildings and the future residents of the proposed building, and the design quality of the building.</p> <p>Building separation for residential uses should be in accordance with SEPP 65 and the ADG 2015.</p>	<p>The site is identified as an Engadine 'Specific Site' guideline. Site adjoins land zoned R4 High Density Residential and has considered setbacks and transition to adjoining residential properties.</p> <p>Proposal has been assessed against SEPP 65 and ADG requirements as detailed throughout this report.</p>	<p>Yes</p> <p>Yes</p>
8. Design Guidelines for Specific Locations	<p>Area 3: 5 Preston Ave, Engadine Provide a transition in building form between the mixed use and active frontage of Engadine's main shopping streets and the adjacent areas zoned for medium density.</p> <p>Provide a min. 6m front landscaped setback, with opportunities for large tree planting.</p>	<p>Site is not identified as having an 'active' frontage. Geebung Lane is treated more as a 'back of house'. Transition to adjoining residential properties considered through unit design, window size and balustrade style, break in buildings and landscaping.</p> <p>6m landscaped setback to Building 'B', with amendments that introduce further planting.</p>	<p>Yes – Further discussion in Section 8.3 of report.</p> <p>Yes</p>

	<p>Ensure adequate solar access is maintained to adjoining public domain and adjacent developments.</p> <p>Building separation for residential uses should be in accordance with SEPP 65 and the ADG.</p> <p>While amalgamation of 5 and 7 Preston Ave is not required, it is desirable to rationalize the site by providing greater street frontage onto Preston Ave and to prevent the isolation of 7 Preston Ave.</p>	<p>Acceptable overshadowing to public domain, which is primarily Preston Avenue and mildly to Council land (1058-1062 Old Princes Hwy). Overshadowing to adjoining residential properties will result but will maintain 2hrs solar access in accordance with ADG.</p> <p>Proposal has been assessed against SEPP 65 and ADG requirements as detailed throughout this report.</p> <p>Site isolation has been addressed and is discussed at length in Section 8.1 of report.</p>	<p>No – non-compliance with ADG discussed in Section 8.4 of report.</p> <p>Yes</p> <p>Yes</p>
9. Amalgamation Requirements	<p>Lots must be of sufficient width to accommodate development. A site width of 20m is appropriate for larger scale centre dev't. Where dev't of a narrower site is proposed, the dev't must provide for required parking on the site, that allows for vehicles to leave in a forward direction, provide appropriate access and servicing facilities, loading, storage and waste management areas and respond to the local context.</p> <p>Where a proposal would result in an isolated site with a min. street frontage of <20m, the applicant must submit justification to vary the amalgamation pattern requirements to Council.</p> <p>Dev't must be carried out in an orderly manner. Where a differing amalgamation pattern can be achieved, a schematic design must show that development of land under an alternative amalgamation pattern complies with SEPP 65 and ADG. The assessment of any proposal to vary the amalgamation pattern will include consideration of the impact of the proposed development on the future capacity of lots left isolated.</p>	<p>Site exceeds 20m in width.</p> <p>Proposal will result in No. 7 Preston Ave remaining with a 15m wide lot. Site isolation has been addressed with submission of a scheme for how this site can be redeveloped in isolation, letter of offer made to No. 7 Preston Ave and preparation of 3 independent property valuation reports to base offer</p> <p>Site is not identified as an 'amalgamated' site. Scheme provided for how No. 7 Preston Ave will be redeveloped in isolation.</p>	<p>Yes</p> <p>Yes – Refer Section 8.1 of report.</p> <p>Yes</p>
10. Building and Site Layout	<p>New dev't shall incorporate passive solar building design, including the optimization of sunlight access.</p>	<p>Proposal is unable to comply with solar access requirements stated within ADG.</p>	<p>No – Refer Section 8.6.</p>

	<p>All loading, unloading and manoeuvring of vehicles shall take place within the curtilage of the site, and vehicles are to enter and exit the site from a rear laneway where possible and in a forward direction. Variations may be acceptable where there is a low intensity of commercial use and the proposed arrangement maintains a safe and convenient pedestrian and traffic environment.</p> <p>Loading areas shall be located so as to avoid on-street loading and be freely available for use at all times.</p> <p>Non-residential and residential land uses in the same dev't shall be sited and design to not adversely affect the residential amenity of building occupants.</p>	<p>Design of loading and unloading area acceptable. Geebung Lane access. All loading, unloading and manoeuvring will occur within the curtilage of the site. Aside from the HRV, all cars will be able to enter and exit in a forward direction.</p> <p>Loading area provided.</p> <p>Existing exit to Tavern onto Geebung Lane will remain. Existing parking provided to Tavern will be re-located within basement. Separate stairs and lift access for visitors within development to ensure they don't need access to Building 'A's foyer.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
11. Shop Top Housing & Residential Flat Buildings	<p>RFB should achieve the design quality principles of SEPP 65 and ADG.</p> <p>Facades of upper storey residential accommodation with no windows or balconies / openings may have a nil boundary side setback.</p> <p>The side and rear setbacks must result in a development that:</p> <ul style="list-style-type: none"> - provides adequate resident amenity inc. privacy, solar access and ventilation - responds to the local context and streetscape, providing adequate separation from existing and future adjoining dev't - does not prevent a neighbouring site from achieving its full dev't potential and optimal orientation - has architectural merit. <p>A variety of dwelling types between 1, 2 and 3 plus bedroom dwellings should be provided.</p> <p>A new residential flat building, without an active street frontage must be set back 4m from the street to provide appropriate residential amenity. Changes in level, landscaping and building design should be employed to facilitate privacy for occupants.</p>	<p>Design quality principles achieved as discussed throughout this report.</p> <p>Min. 3 setbacks provided to RFB's to accord with ADG & ensure redevelopment of No. 7 Preston Ave can be achieved.</p> <p>Setbacks to No. 7 Preston and 9-11 Preston have been increased at all levels to successfully respond to the local context and provide appropriate resident amenity.</p> <p>Variety of studio, 1, 2 and 3 bedroom dwellings.</p> <p>3m achieved to Building 'A' and 4m to Building 'B'.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No – Refer Section 8.3 of report.</p>

	<p>Dwelling entries shall be distinguished from commercial premises entries.</p> <p>Balcony design is to be integrated into the architectural form and detail of the buildings.</p> <p>Balcony balustrades should respond to the location, being designed to allow views and passive surveillance of the street while maintaining visual privacy and allowing for a range of uses on the balcony.</p> <p>Where RFB has a FSR 2:1 or more, COS is to equal 25% of the site. Where an RFB has a FSR <2:1, communal open space is to achieve 100m².</p>	<p>Dwelling entries separate from Tavern parking entry.</p> <p>Balcony design integrated into the architectural form.</p> <p>Balustrades have been amended to improve privacy to adjoining residential properties.</p> <p>FSR of 2.78:1. 673m² required. 316m² provided at ground level. COS between buildings and to the SW of Building 'A' – equates to 11.7%.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No – Refer Section 8.2 of report.</p>
12. Adaptable and Livable Housing	<p>All new shop top housing dev'ts must provide dwellings designed in accordance with AS4299 to Class C Certification. 20% of dwellings are to be adaptable.</p> <p>10% of dwellings are to be livable.</p>	<p>13 units required. 12 proposed.</p> <p>6 units required. 6 proposed.</p>	<p>No – Refer Section 8.10 of report.</p> <p>Yes</p>
13. Visual and Acoustic Privacy	<p>Locate, orientate and design new dev't to ensure adequate visual privacy between buildings, and between buildings and adjacent POS.</p> <p>Use building design to increase privacy without compromising access to light and air.</p> <p>All noise generating equipment such as A/C etc must be designed to protect the acoustic privacy of residents and neighbours. All such noise generating equipment must be acoustically screened. The noise level generated by any equipment must not exceed an LAeq (15min) of 5dB(A) above background noise at the property boundary.</p> <p>Residential dev't adjacent to rail corridor or a busy road as identified on the Road and Rail Noise Buffer Map should be sites and design to include noise and vibration attenuation measures to minimum noise and vibration impacts. Refer to SEPP (Infrastructure) 2007 and the NSW Dep't of Planning's Dev't new rail</p>	<p>Amendments have occurred to improve visual privacy, increase setbacks. Satisfactorily achieved.</p> <p>Proposed units which do not receive any solar access exceed number 15% requirement. No. 7 adjoining properties will experience a reduction in solar access and No. 6/9-11 Preston Ave will marginally comply with ADG's 2 hour requirement (exc. shading from vegetation).</p> <p>Addressed via condition.</p> <p>Acoustic assessment has been completed, considering the SEPP. A condition has been imposed requiring its recommendations to be applied to the design.</p>	<p>Yes</p> <p>No – Refer Section 8.6 of report.</p> <p>Yes</p> <p>Yes</p>

	corridors and busy roads – interim guidelines.		
14. Safety and Security	Any design must demonstrate compliance with CPTED.	CPTED principles demonstrated.	Yes
15. Parking	<p>Min. 1 sp. and max. 2 sp. per dwelling for RFB. No visitor parking.</p> <p>Motorcycle parking shall be provided at a rate of 1 motorcycle sp. per 25 spaces or part thereof.</p> <p>Bicycle sp. must be provided at a rate of 1 sp. per 10 car sp. for the 1st 200 car spaces, then 1 sp. per 20 parking spaces thereafter.</p>	<p>80 residential sp. for 64 units. No visitor parking. 69 Tavern sp.</p> <p>Calculation based on RFB only. 3 required for residential sp. and 2 provided.</p> <p>Calculation based on RFB only. 7 required. 13 provided.</p>	<p>Yes</p> <p>No – Refer Section 8.11 of report.</p> <p>Yes</p>
17. Waste Management Requirements	RFB to adhere to Council's "Waste Collection Policy for Multi-Unit Dwellings and RFB's".	Council's Waste Officer and Dev. Eng. satisfied that proposal is consistent with Policy.	Yes

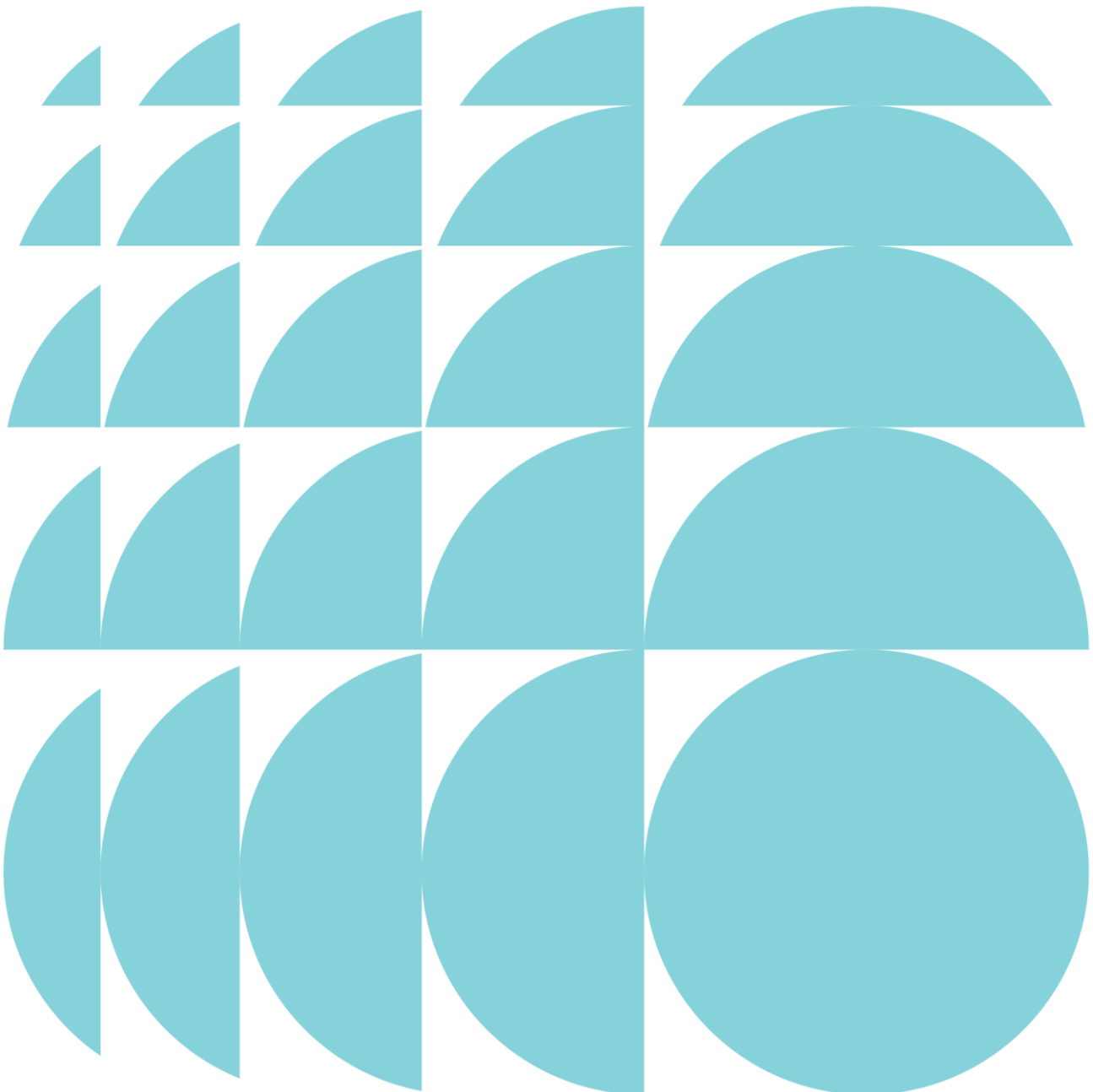
ETHOS URBAN

Clause 4.6 Variation – Addendum

5 Preston Avenue, Engadine
Residential Flat Building

Submitted to Sutherland Shire Council
On behalf of White and Partners

4 May 2020 | 218564



CONTACT

Tom Goode	Director	tgoode@ethosurban.com	(02) 9409 4920
-----------	----------	-----------------------	----------------

Reproduction of this document or any part thereof is not permitted without prior written permission of Ethos Urban Pty Ltd.

This document has been prepared by:

This document has been reviewed by:



Tom Goode

1 May 2020

Reproduction of this document or any part thereof is not permitted without written permission of Ethos Urban Pty Ltd. Ethos Urban operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed, it is a preliminary draft.

VERSION NO.	DATE OF ISSUE	REVISION BY	APPROVED BY
-------------	---------------	-------------	-------------

Ethos Urban Pty Ltd ABN 13 615 087 931. www.ethosurban.com 173 Sussex Street, Sydney NSW 2000 t 61 2 9956 6952
--

Contents

1.0	Introduction	2
2.0	Development Standard to be Varied	3
2.1	Is the Planning Control in Question a Development Standard	3
2.2	Relevant Development Standard	3
2.3	Variation Sought	4
3.0	Justification for Contravention of the Development Standard	5
3.1	Clause 4.6(3)(a): Compliance with the development standard is unreasonable or unnecessary in the circumstances of the case	5
3.2	Clause 4.6(3)(b): Sufficient environmental planning grounds to justify contravening the development standard	7
3.3	Clause 4.6(4)(a)(i): The applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3)	7
3.4	Clause 4.6(4)(a)(ii): The proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out	7
3.5	Secretary's Concurrence	8
4.0	Conclusion	9

Figures

Figure 1	Floor Space Ratio Map	3
Figure 2	Basement GFA Diagrams	4

Attachments

GFA diagrams

1.0 Introduction

This Clause 4.6 Variation Request Addendum Report has been prepared by Ethos Urban on behalf of White and Partners to support an amendment to the submitted scheme which reduces the total GFA sought in the application. It is submitted to Sutherland Shire Council (the Council), seeking to justify the contravention of the floor-space ratio (FSR) provision in Clause 4.4 of *Sutherland Shire Local Environmental Plan 2015* (SLEP) relating to a Development Application (DA) for a Residential Flat Building development at 5 Preston Avenue, Engadine. The site is currently used for the provision of car parking for the adjoining Engadine Tavern.

This report should be read in conjunction with the originally submitted cl4.6 modification request dated 11 June 2019.

Clause 4.6 of the SLEP 2015, enables the consent authority to grant development consent for development, even though it contravenes a development standard, provided the matters set out in Clause 4.6 are satisfied. The clause aims to provide flexibility in applying certain development standards to particular development and to achieve better outcomes for and from development, by allowing flexibility in particular circumstances.

This Clause 4.6 addendum report request demonstrates that:

- The variation still relates to the provision of car parking for the adjacent Engadine Tavern, which is currently provided on the Subject Site. In this way, it simply seeks to replace a quantum of car parking that already exists on site however it is technically considered as GFA as defined by the Sutherland LEP;
- The objectives of the FSR development standard are still achieved notwithstanding the non-compliance, as the proposal is compliant with the bulk, scale and density envisaged above-ground on the site.
- There remains sufficient environmental planning grounds to justify contravening the development standard, namely:
 - The car parking for Engadine Tavern, is being constructed for the benefit of the adjoining site and, as such, it is unreasonable to only take the Subject Site area into consideration;
 - The FSR exceedance will have no environmental impact beyond what would be considered acceptable in a broadly compliant scheme;
 - In terms of the land use, the site has previously been used as a private car park and this proposal seeks to continue that land use within the basement of the proposed building; and
 - The revitalisation of this underutilised site, combined with the replacement of private parking for the Engadine Tavern, is considered to be in the public interest as it ensures the ongoing renewal of Engadine Town Centre, whilst reducing the demand for on-street parking.

The concurrence of the Secretary of the Department of Planning and Environment (DPE) is also required before the consent authority can grant development consent: cl 4.6(4)(b). The Secretary's concurrence can be assumed.

2.0 Development Standard to be Varied

2.1 Is the Planning Control in Question a Development Standard

The floor space ratio standard in Clause 4.4 of Sutherland Shire LEP, 2015 is a development standard, meaning it is a provision of an environmental planning instrument in relation to the carrying out of development.

2.2 Relevant Development Standard

The maximum floor-space ratio permitted for the site, is split between 2:1 for the main part of the site and no development standard as shown in **Figure 1** below. The proposed building, the subject of this application, sits predominantly within the 2:1 portion of the site, with only a small portion extending into the Council-owned road entry point that is governed by no development standards.

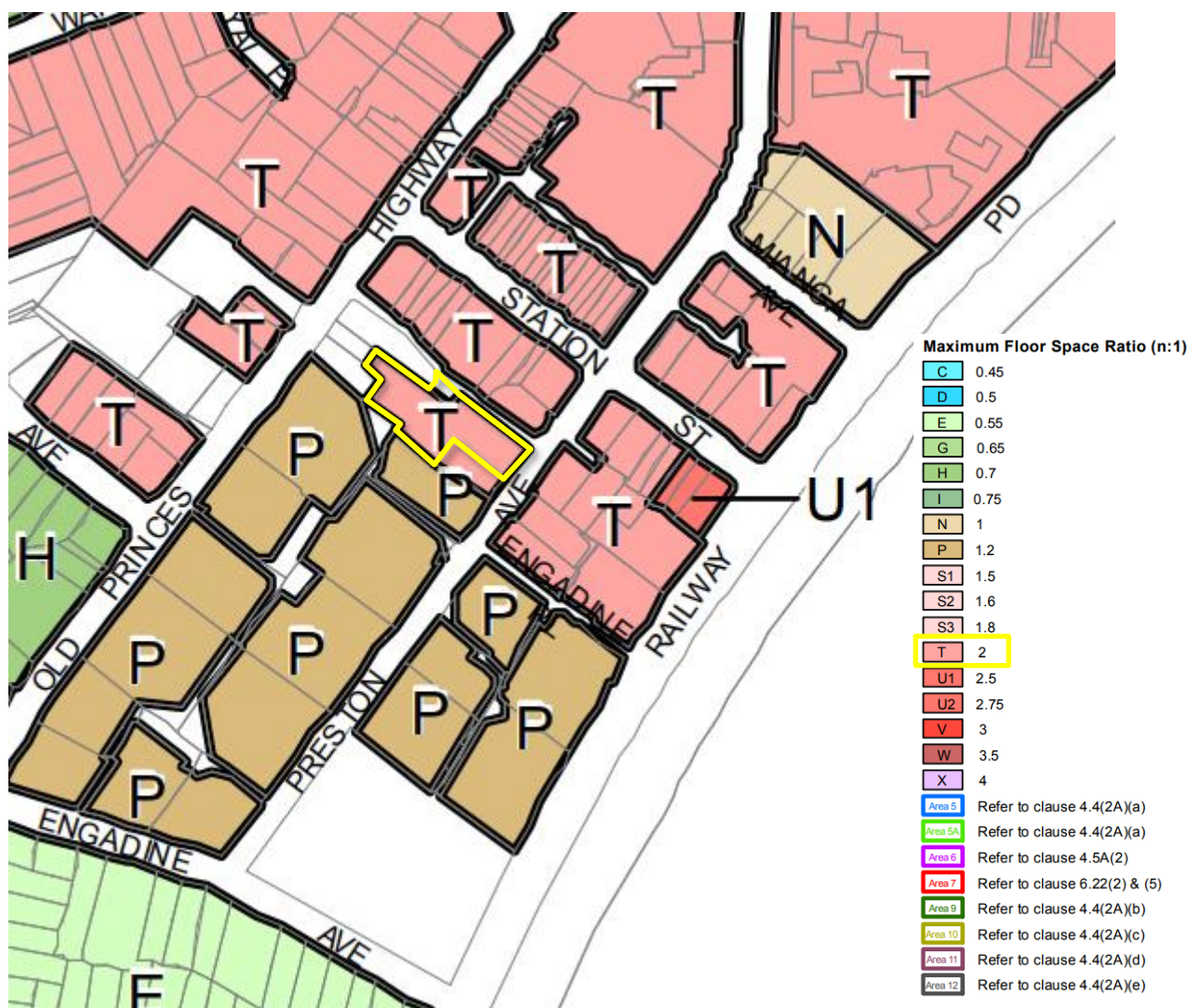


Figure 1 Floor Space Ratio Map

Source: Sutherland Shire LEP 2015

2.3 Variation Sought

The variation sought, is related entirely to the provision of car parking for Engadine Tavern. This car parking is considered to be in excess of the residential car parking required by the Sutherland Shire Development Control Plan 2015 (Sutherland Shire DCP) and therefore, by definition, counts towards the total Gross Floor Area (GFA) for the development.

The area of the subject site is 2,692.2 m², with a total GFA proposed of 7,559 m² resulting in an FSR of 2.78:1 (including the additional parking).

The 70 car parking spaces that are being replaced on the site for the adjoining tavern result in additional GFA of 2,227.8 m² (refer to GFA diagrams in **Figure 2** below) and results in a total variation of 2,100.8 m² to the GFA.

Excluding the Tavern car parking, GFA from the overall GFA calculations, would result in a total GFA of 5,271.2 m² and an FSR of 2.78:1.

In this way, the provision of car parking for the Engadine Tavern forms the entire variation to the FSR development standard and as such the residential flat building is compliant with the maximum 2:1 FSR permitted for the site.

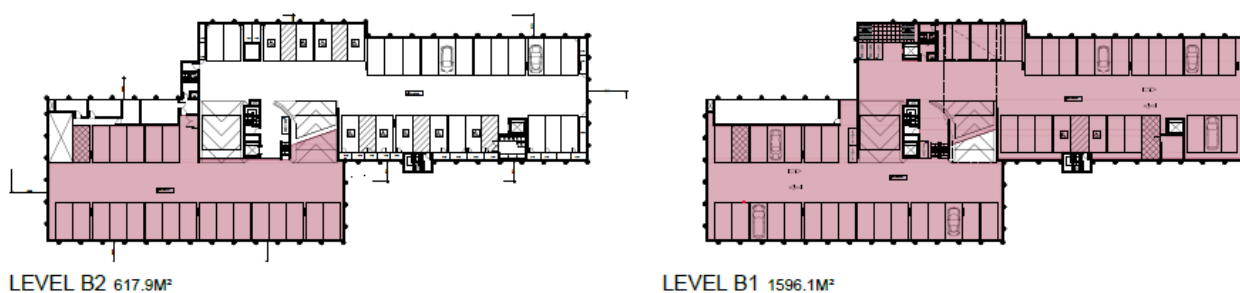


Figure 2 Basement GFA Diagrams

Source: Mijollo International

3.0 Justification for Contravention of the Development Standard

In justifying a contravention of the development standards for this DA, Clause 4.6(3) of the Sutherland Shire LEP 2015 provides that:

4.6 Exceptions to development standards

- (3) *Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*
- (a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
 - (b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*

Further, Clause 4.6(4)(a) of the Sutherland Shire LEP 2015 provides that:

- (4) *Development consent must not be granted for development that contravenes a development standard unless:*
- (a) *the consent authority is satisfied that:*
 - (i) *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
 - (ii) *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
 - (b) *the concurrence of the Secretary has been obtained.*

Assistance on the approach justifying a contravention of a development standard is to be taken from the decisions of the NSW Land and Environment Court in:

1. *Wehbe v Pittwater Council* (2007) 156 LGERA 446;
2. *Four2Five Pty Ltd v Ashfield Council* [2015] NSWLEC 1009;
3. *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118; and
4. *Turland v Wingecarribee Shire Council* [2018] NSWLEC 1511.

The relevant matters contained in Clause 4.6 of the Sutherland Shire LEP 2015, with respect to the floor space ratio development standard, are each addressed below, including with regard to these decisions.

3.1 Clause 4.6(3)(a): Compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

3.1.1 First Way: The objectives of the standard are achieved notwithstanding non-compliance with the standard

The proposed development addresses the objectives of Clause 4.4 Floor Space Ratio as discussed below.

Objective (a): To ensure that development is in keeping with the characteristics of the site and the local area

The amendments have not affected the scheme's alignment with this objective as per the original cl4.6 modification report of June 2019.

Objective (b): To ensure that the bulk and scale of new buildings is compatible with the context of the locality

The amendments have reduced the overall GFA of the scheme and as such, the bulk and scale of the building is reduced from that proposed in June 2019.

The revised scheme is compatible with its context.

Objective (c): To control development density and intensity of land use, taking into account:

(i) The environmental constraints and values of the site, and

The subject site is not identified as having any environmental significance given its current use as an open-air car park.

(ii) The amenity of adjoining land and the public domain, and

The revised scheme has been reduced in GFA from that originally proposed as a result of, primarily, increased setbacks to the site's neighbours. As a result respecting the amenity of adjoining lands.

(iii) the availability of infrastructure to service the site, and

No change.

(iv) The capacity of the road network to accommodate the vehicular and pedestrian traffic the development will generate, and

No change.

(v) The desirability of retaining the scenic, visual, and landscape qualities of the area.

No change.

3.1.2 Second Way: The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary

As established within **Section 2.3**, the variation relates entirely to basement car parking for Engadine Tavern and are located below ground and will not be visible whilst replacing the same quantum of car parking that exists on site currently, in addition to the residential flat building and associated car parking.

As a result, the key objectives of the floor space ratio development standard, which seek to minimise bulk, scale and density, are not relevant to the extent of the development that forms the variation to the development standard. The objective regarding infrastructure is not affected and the objective regarding road capacity have been addressed in the supporting traffic report with the original DA.

3.1.3 Conclusions on Clause 4.6(4)(a)

In summary, compliance with floor-space ratio development standard is unreasonable or unnecessary in this case, because the objectives of the standard are achieved by the proposed development notwithstanding the non-compliance with Clause 4.4 of the Sutherland Shire LEP 2015. Additionally, the underlying objective or purpose of the floor-space ratio standard, is not relevant to the proposed development of the basement car parking, in that it does not impact on the bulk, scale or density of the proposal above ground beyond what would be considered a compliant development, nor would it result in any unreasonable traffic impacts.

In summary, the proposed floor space ratio exceedance is contained within the basement and does not result in any additional impacts associated with bulk, scale or density that are otherwise sought to be minimised by Clause 4.4 of the Sutherland Shire LEP 2015.

3.2 **Clause 4.6(3)(b): Sufficient environmental planning grounds to justify contravening the development standard**

Clause 4.6(3)(b) of the Sutherland Shire LEP 2015 requires the contravention of the development standard to be justified by demonstrating that there are sufficient environmental planning grounds to justify contravening the development standard. The focus is on the aspect of the development that contravenes the development standard, not the development as a whole. Therefore, the environmental planning grounds advanced in the written request must justify the contravention of the development standard and not simply promote the benefits of carrying out the development as a whole (*Initial Action v Woollahra Municipal Council* [24] and *Turland v Wingecarribee Shire Council* [42]).

In *Four2Five*, the Court found that the environmental planning grounds advanced by the applicant in a Clause 4.6 variation request must be particular to the circumstances of the proposed development on that site.

There are sufficient environmental planning grounds to justify contravention of the FSR development standard in this specific instance. In this regard, the proposed variation is particular to the circumstances of the proposed development on the site for the same reasons as the cl4.6 submitted in June 2019.

Therefore, the development is considered to have sufficient environmental planning grounds to justify contravening the floor space ratio development standard.

3.3 **Clause 4.6(4)(a)(i): The applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3)**

Subclause (3) has been adequately addressed at **Section 4.1** and **4.2** above.

3.4 **Clause 4.6(4)(a)(ii): The proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out**

In *Initial Action v Woollahra Municipal Council* [27], it was held that it is the proposed development's consistency with the objectives of the development standard and the objectives of the zone that make the proposed development in the public interest. The proposal is in the public interest because it is consistent with the objectives of the development standard and the objectives of the zone.

3.4.1 **Consistency with objectives of the development standard**

The proposed development is consistent with the objectives of the floor space ratio development standard (as outlined in **Section 3.1.1**).

The proposal meets the objectives of the development standard as per the cl4.6 report of June 2019.

3.4.2 **Consistency with objectives of the zone**

The proposed development is consistent with the objectives of the B3 Commercial Core zone, as demonstrated as follows:

Objective (a): To provide a wide range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local and wider community

There is no change from the assessment within the June 2019 report.

Objective (b): To encourage appropriate employment opportunities in accessible locations

There is no change from the assessment within the June 2019 report.

Objective (c): To maximise public transport patronage and encourage walking and cycling

There is no change from the assessment within the June 2019 report.

Objective (d): To strengthen the viability of existing commercial centres through increased economic activity, employment and resident population

There is no change from the assessment within the June 2019 report.

Objective (e): To create an attractive, vibrant and safe public domain with a high standard of urban design and public amenity

There is no change from the assessment within the June 2019 report.

Objective (f): To enhance commercial centres by encouraging incidental public domain areas that have a community focus and facilitate interaction, outdoor eating or landscaping

There is no change from the assessment within the June 2019 report.

Objective (g): To provide for pedestrian-friendly and safe shopping designed to cater for the needs of all ages and abilities

There is no change from the assessment within the June 2019 report.

3.5 Secretary's Concurrence

Under Clause 4.6(5) of the Sutherland Shire LEP 2015, the Secretary's concurrence is required prior to any variation being granted. Under Clause 64 of the *Environmental Planning and Assessment Regulation 2000*, the Secretary has given written notice dated 21 February 2018 to each consent authority, that it may assume the Secretary's concurrence for exceptions to development standards in respect of applications made under Clause 4.6, subject to the conditions in the table in the notice. We note that none of the conditions in the table apply to the proposed development, therefore the Secretary's concurrence is assumed.

Nevertheless, the following section provides a response to those matters set out in Clause 4.6(5) of the Sutherland LEP 2015 which must be considered by the Secretary.

- (5) In deciding whether to grant concurrence, the Secretary must consider:
- (a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and
 - (b) the public benefit of maintaining the development standard, and
 - (c) any other matters required to be taken into consideration by the Secretary before granting concurrence.

These matters are addressed in detail below.

3.5.1 Clause 4.6(5)(a): Whether contravention of the development standard raises any matter of significance for State or regional environmental planning

The variation of the maximum FSR development standard does not raise any matter of significance for State or regional planning. The proposal is consistent with the *Greater Sydney Region Plan* and *South District Plan*.

The numeric non-compliance with clause 4.4 of SLEP 2015 does not raise any matter of significance for State and Regional Planning nor does it conflict with any State Planning Policies or Ministerial Directions.

3.5.2 Clause 4.6(5)(b): The public benefit of maintaining the development standard

As discussed above the FSR simply seeks to replace the same quantum of car parking for the Engadine Tavern as currently provided on site. Strict compliance with the development standard would otherwise result in a reduction in car parking for a commercial business within Engadine Town Centre and increased pressure for on-street car parking. This would not be in the public benefit.

The proposed development will result in public amenity and public domain improvements in the town centre through the land swap arrangement.

The safety of the car park will be improved through a secure and contemporary underground car park, which is accessible to all through new lifts to all levels.

The proposed development is in the public interest because, as discussed in **Section 3.4** above, it is consistent with the objectives of the floor space ratio development standard and the objectives for development within the B3 Commercial Core zone.

3.5.3 Clause 4.6(5)(c): Any other matters required to be taken into consideration by the Secretary before granting concurrence.

None.

4.0 Conclusion

The assessment above addresses and demonstrates that compliance of the reduced GFA with the maximum FSR development standard contained in Clause 4.4 of the Sutherland Shire LEP 2015, is unreasonable and unnecessary in the circumstances of this specific case and that there are sufficient environmental planning grounds to justify the contravention.

The revised (smaller) floor space ratio variation allows for the orderly and economic use of the land in a similar manner to that envisaged under the Sutherland Shire LEP 2015 and Sutherland Shire DCP 2015, whilst permitting the replacement of existing at-grade car parking.

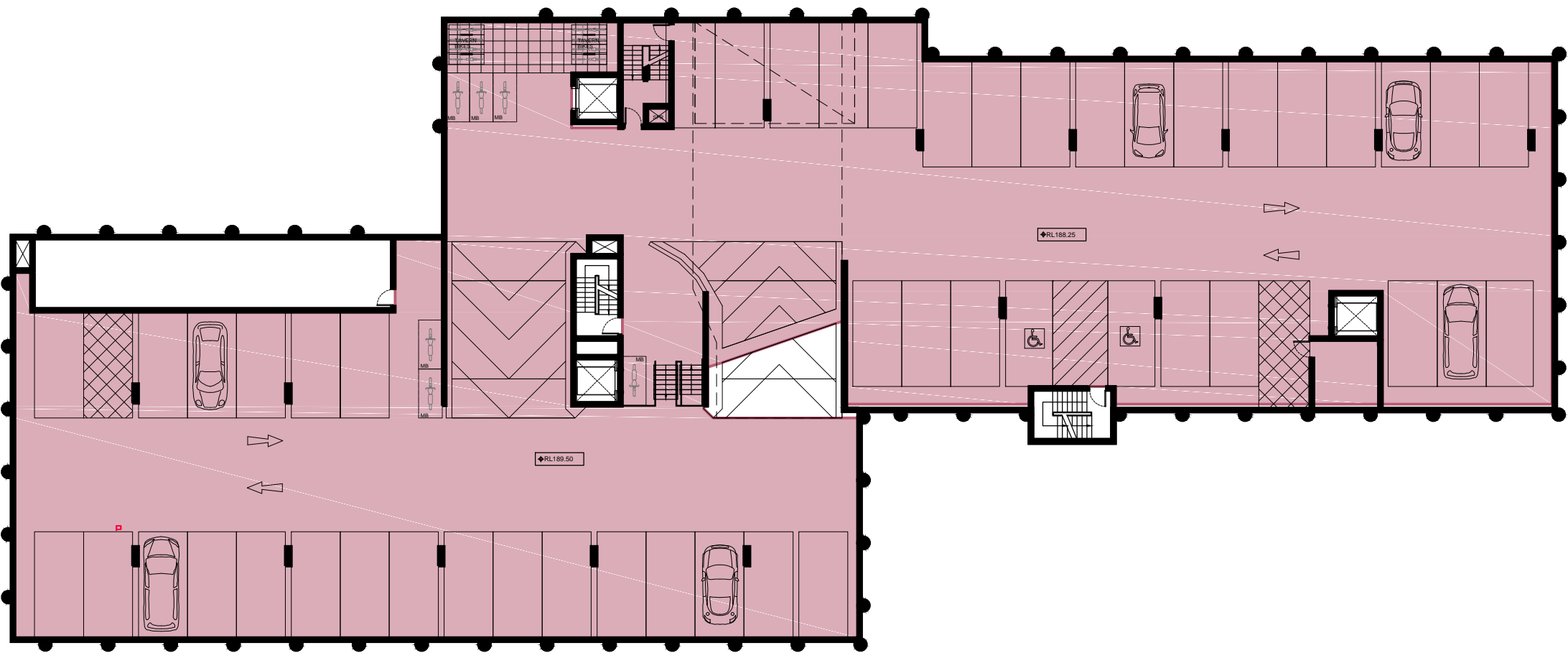
This Clause 4.6 variation request addresses the matters in Clause 4.6 (3) of the Sutherland Shire LEP 2015, which demonstrates that notwithstanding the non-compliance with the development standard for the proposed development, it remains acceptable as per the June 2019 cl4.6 modification request.

Overall, the proposal results in an opportunity to maintain the Engadine Tavern car parking on-site within a development that facilitates the renewal of otherwise underutilised land. The provision of this car parking will not result in an increase to the perceptible bulk, scale or density of the development, nor does it contravene LEP height of building controls or DCP setbacks. As such, strict compliance with the development standard would otherwise result in a reduction in car parking for a commercial business within Engadine Town Centre and increased pressure for on-street car parking.

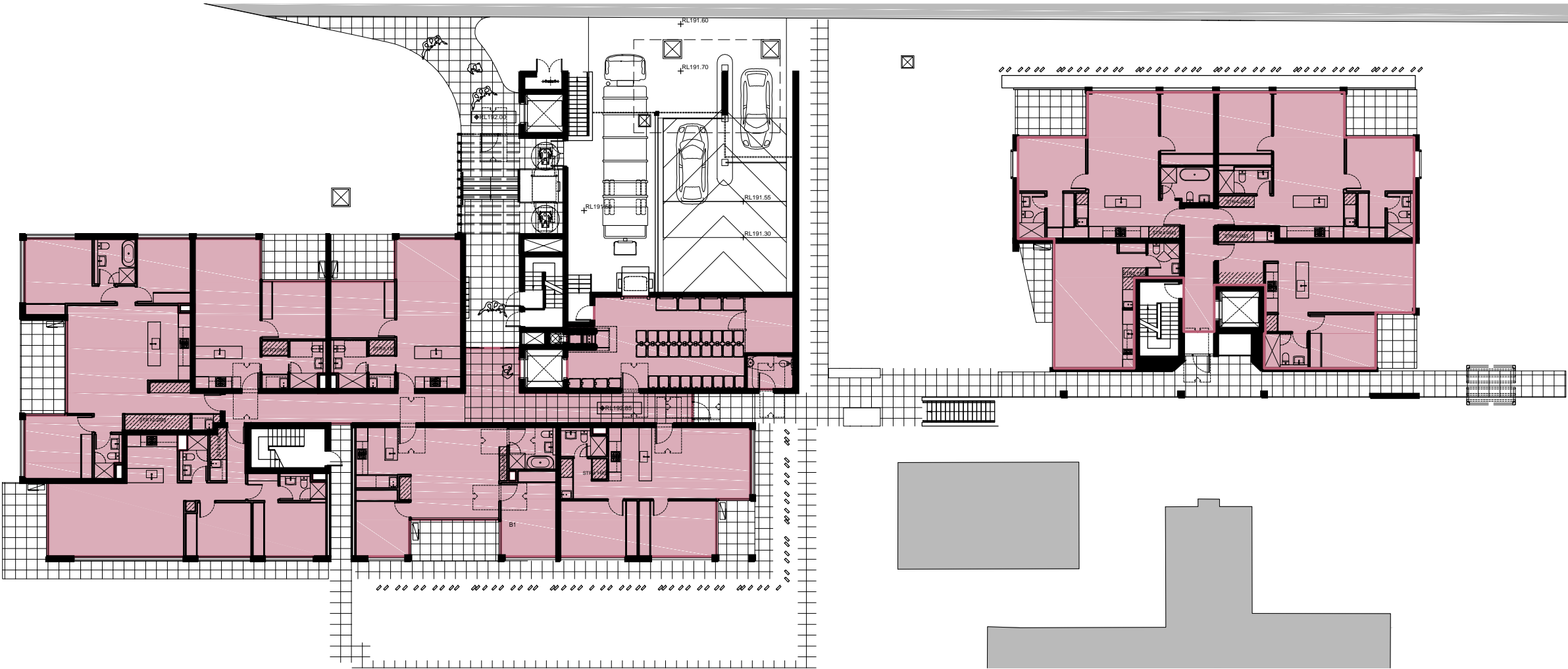
Therefore, the consent authority can be satisfied that there is sufficient justification for the floor-space ratio variation as proposed, in accordance with the flexibility allowed under Clause 4.6 of the Sutherland Shire LEP 2015.



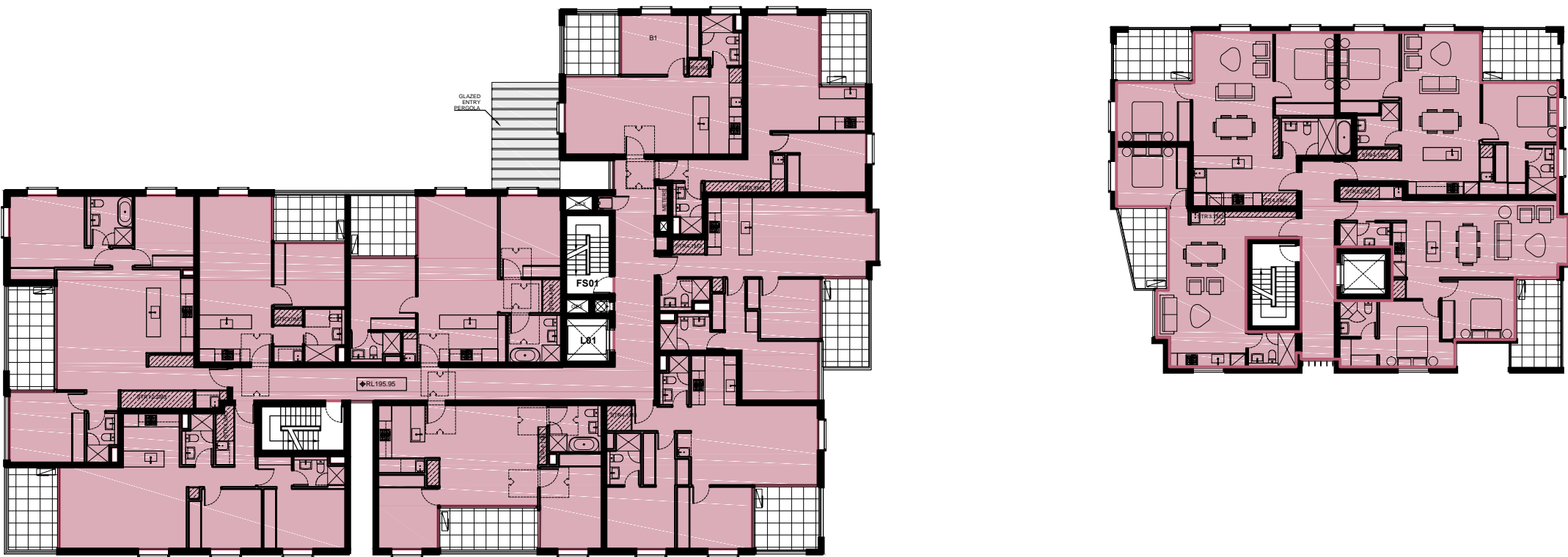
LEVEL B2 617.9M²



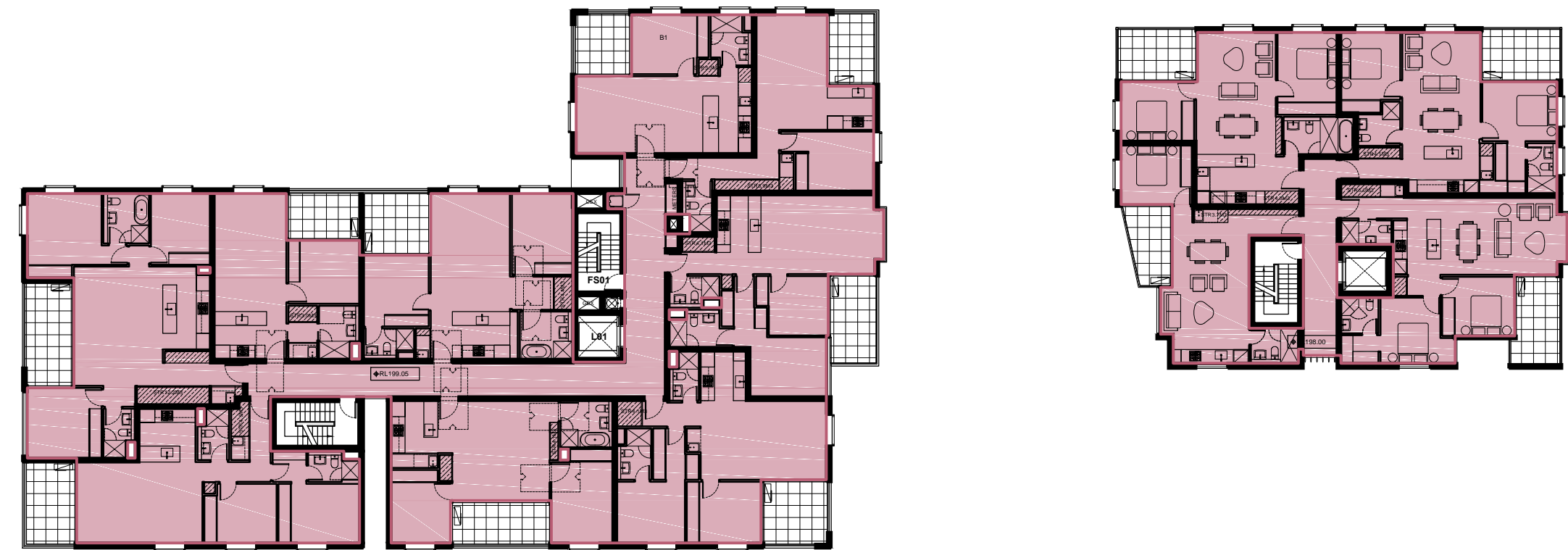
LEVEL B1 1596.1M²



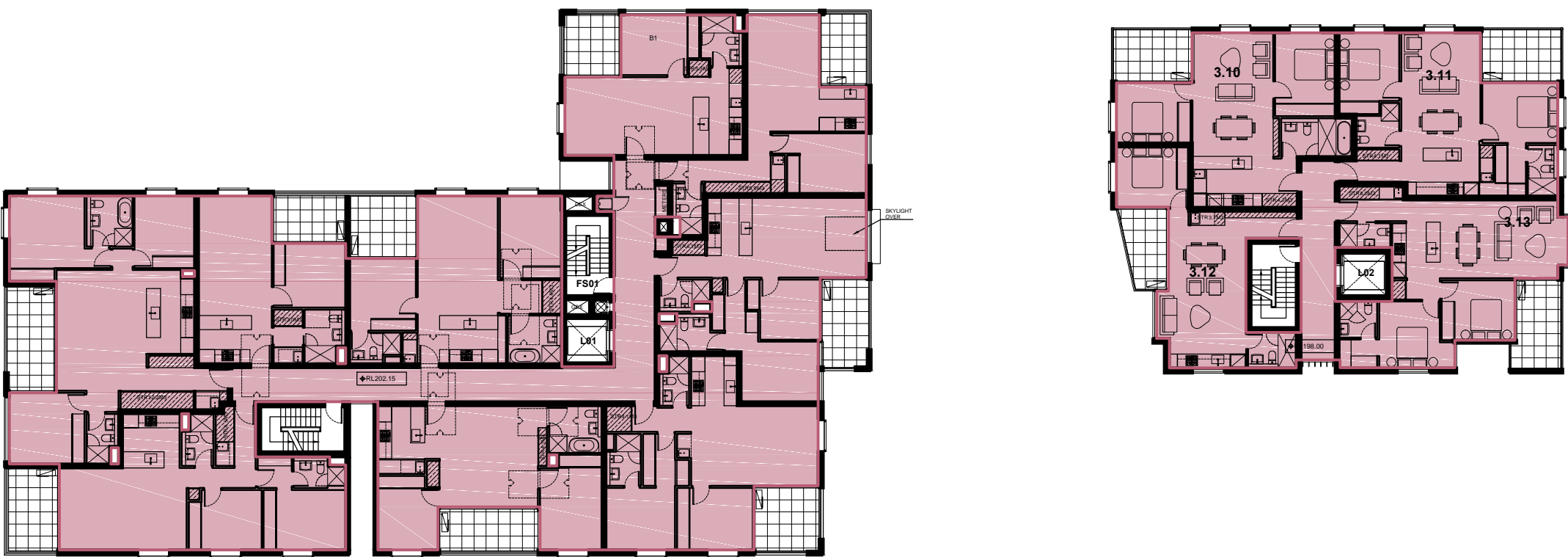
LEVEL G 828.2M²



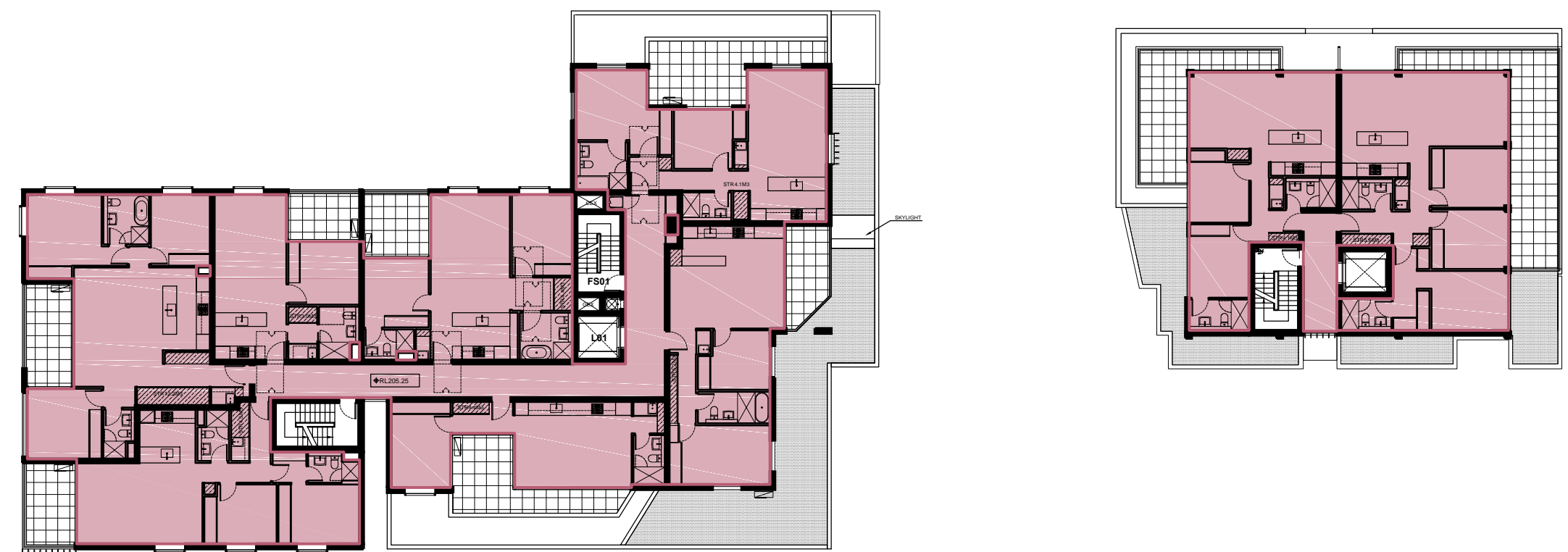
LEVEL 1 1040.5M²



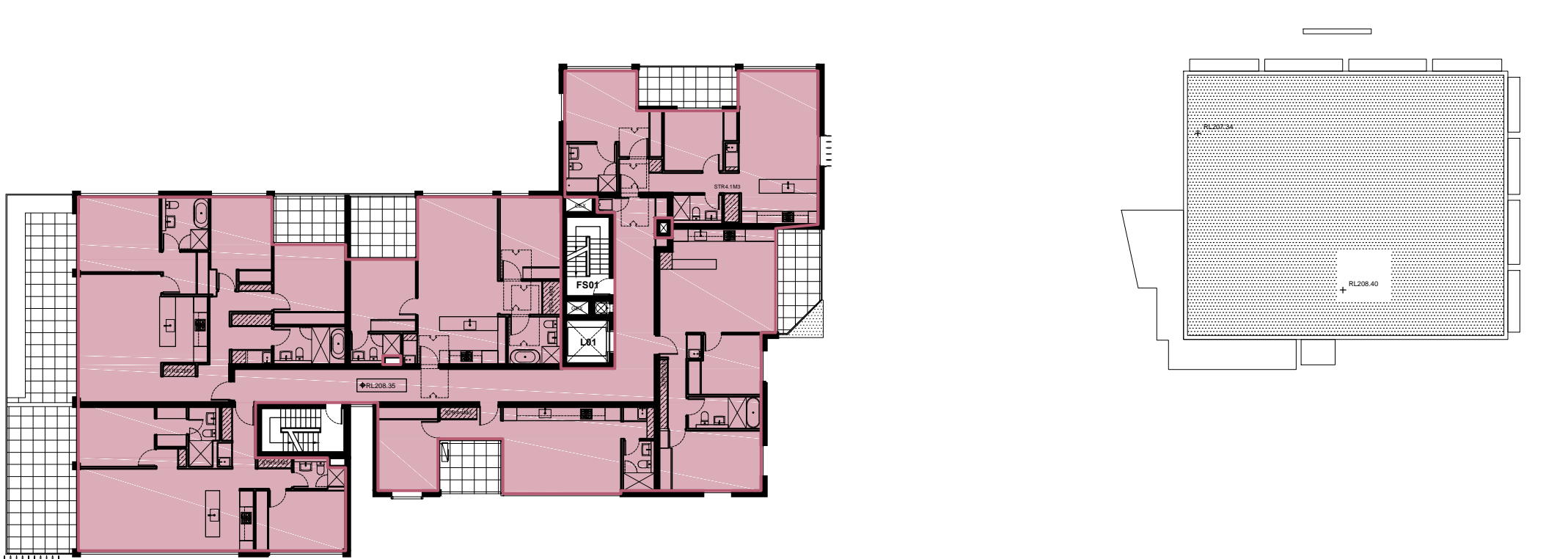
LEVEL 2 1040.5M²



LEVEL 3 1039.2M²



LEVEL 4 775.9M²



LEVEL 5 546.9M²

LEVEL	AREA(M²)
B2	617.9
B1	1596.1
LG	828.2
L1	1040.5
L2	1040.5
L3	1039.2
L4	775.9
L5	546.9
TOTAL	7485.2

TAVERN PARKING
TAVERN PARKING


SITE AREA: 2692.2M²

MAX GFA: 5384.4M²

TOTAL GFA:7485.2M²

FSR: 2.78:1

NOTE:
GFA WITHOUT TAVERN PARKING = 5271.2M2
FSR: 1.95:1

REVISIONS R DATE DESCRIPTION	A 29APR19 DA SUBMISSION B 16DEC19 RESPONSE TO COUNCIL C 11MAR20 BUILDING B REVISED D 27APR20 BUILDING A CNR REVISED		THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MIJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.		<div>mijollo</div> <div>INTERNATIONAL</div>		CLIENT <div> White & Partners</div>		PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE		
									DRAWING		
									GFA DIAGRAMS		
									1805	A104-D	NTS
									DA		MC

Appendix H - View Loss Photos**Unit 2:**

Unit 2 is situated on the first floor, in the front eastern corner of the residential flat building at No. 9-11 Preston Avenue.



View looking north-east from bedroom



View looking east from balcony



View looking north-east from balcony



View looking north-east from living room

Unit 4:

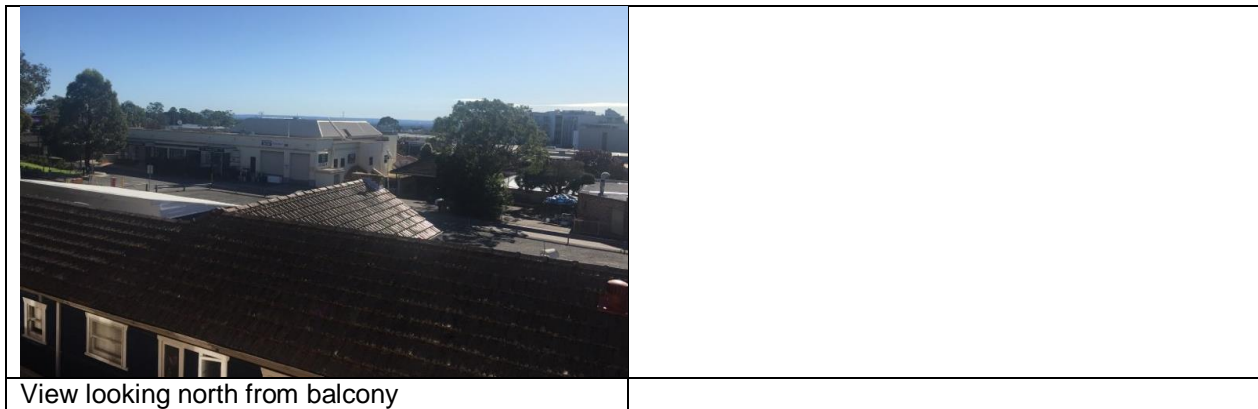
Unit 4 is situated on the second floor (being the third storey), in the front eastern corner of the residential flat building at No. 9-11 Preston Avenue.



View looking north-east from balcony



View looking north from living room



Unit 6:

Unit 6 is situated on the ground floor, in the rear northern corner of the residential flat building at No. 9-11 Preston Avenue.

The photos below demonstrate the outlook gained from the open space area adjacent to this unit's north-eastern façade. This open space is not the private ownership of Unit 6. Unit 6's private open space is in the form of a balcony at the rear of the building orientated towards north-west towards No. 1058-1062 Old Princes Highway.



It was evident during a site inspection that this dwelling gains an uninterrupted view of the sky, however no views of the city, water or iconic views are gained.

Unit 7:

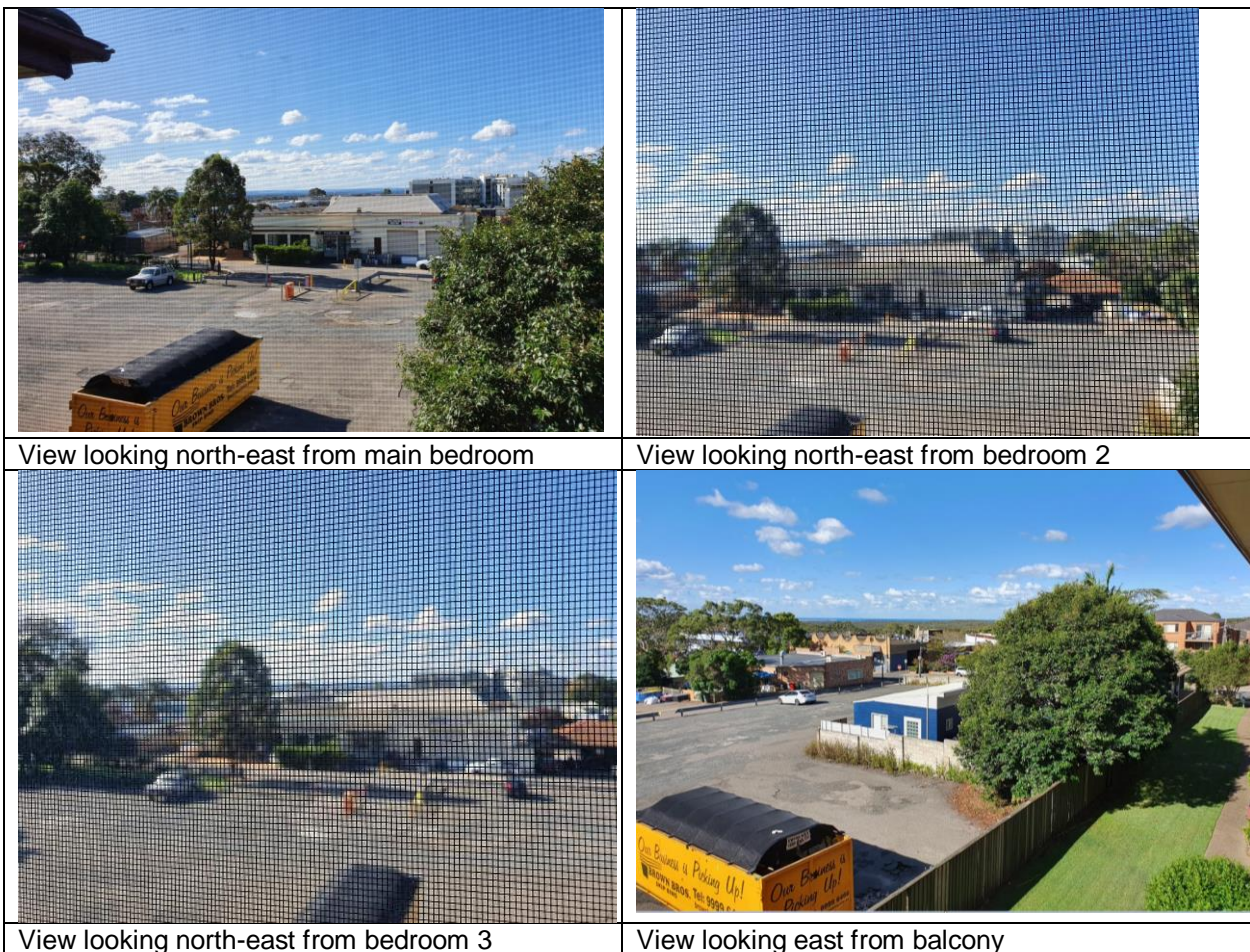
Unit 7 is situated on the first floor, in the rear northern corner of the residential flat building at No. 9-11 Preston Avenue.



Unit 10:

Unit 10 is situated on the second floor (third storey), situated in the northern corner of the residential flat building at No. 9-11 Preston Avenue.

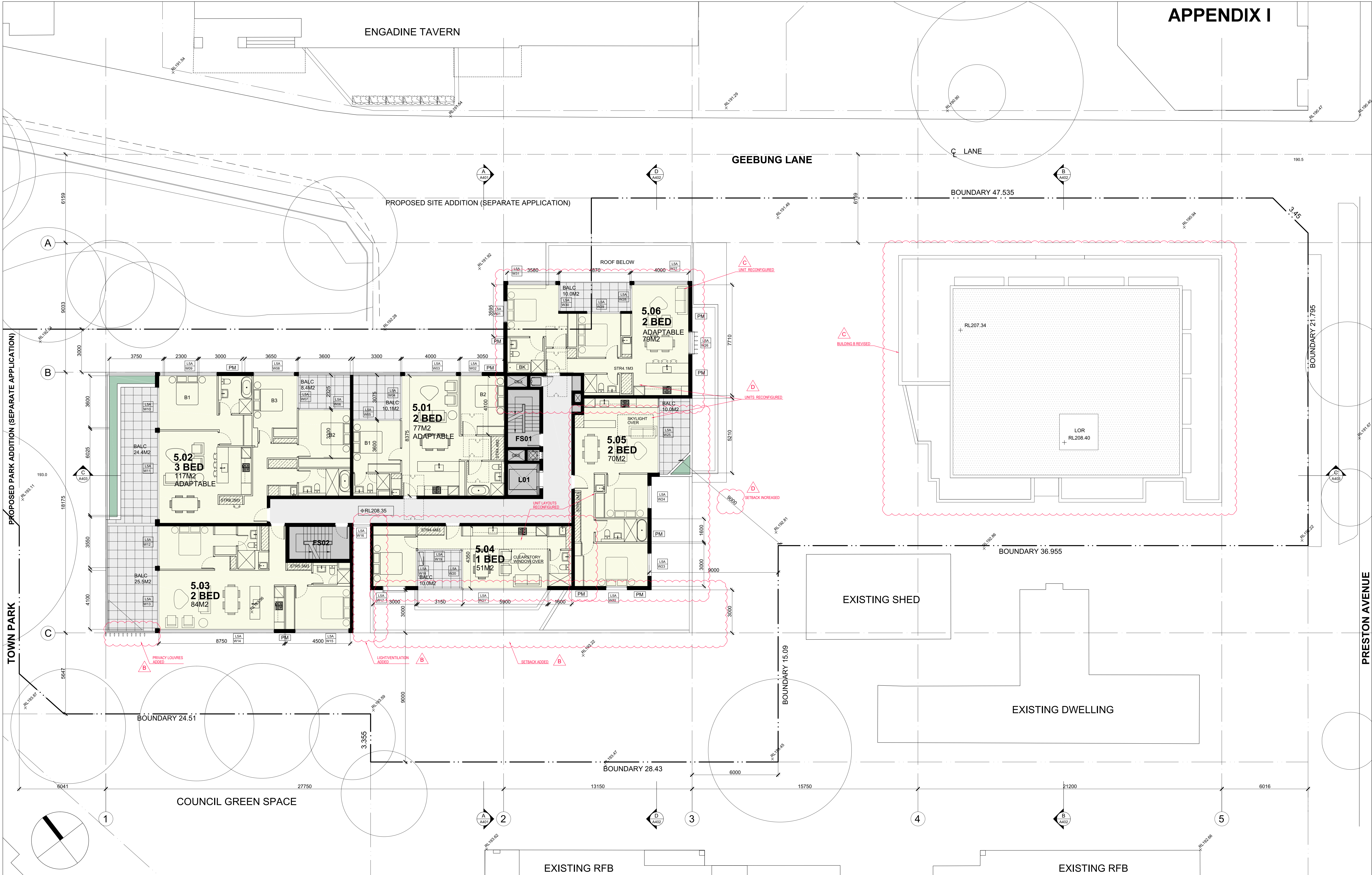




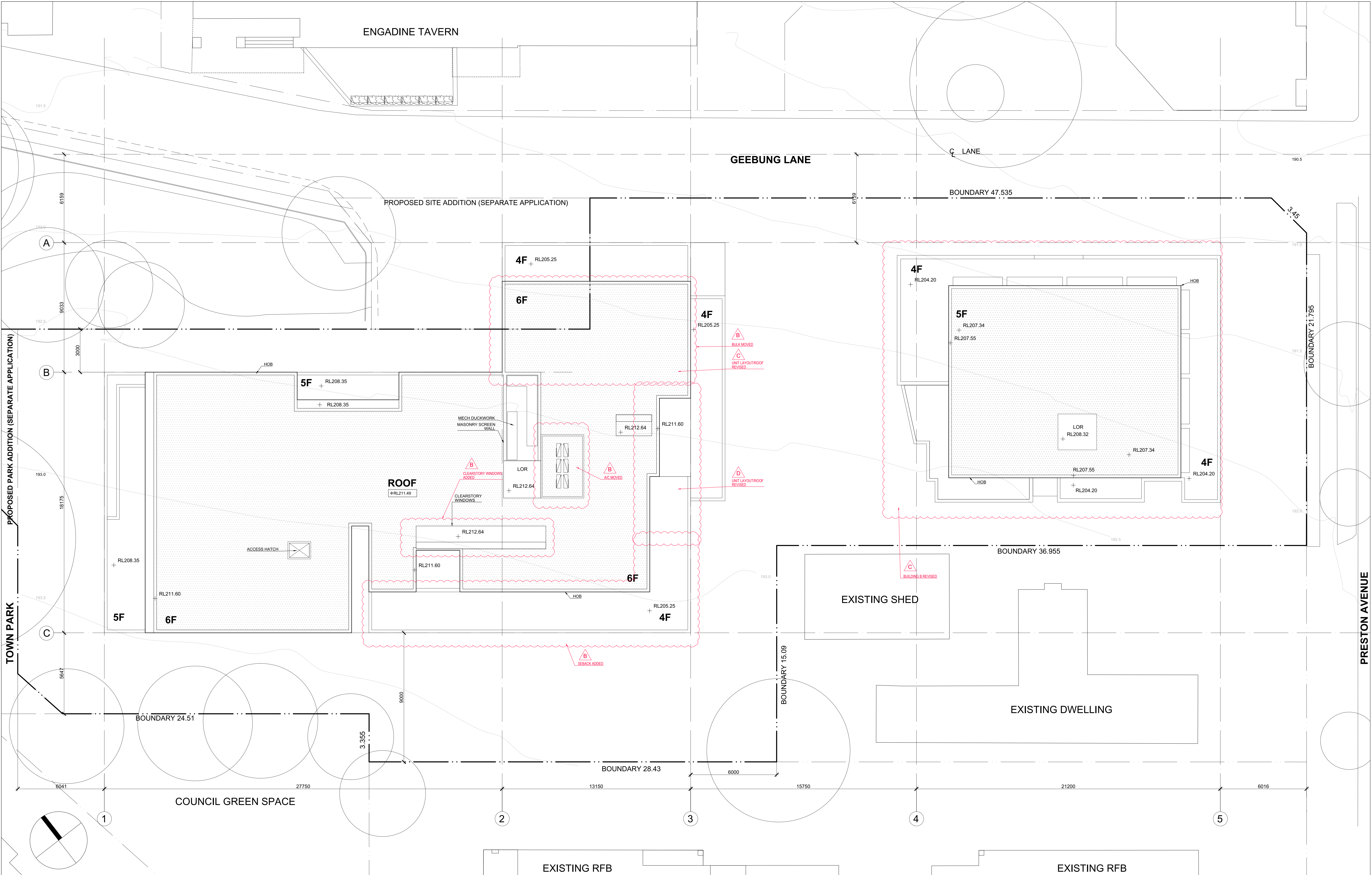
Unit 12:

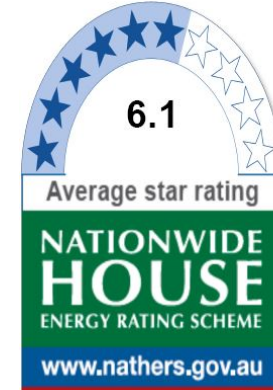



Unit 12 is situated on the second floor (third storey), centrally positioned within the residential flat building at No. 9-11 Preston Avenue.





REVISIONS R DATE DESCRIPTION	A 29APR19 DA SUBMISSION B 16DEC19 RESPONSE TO COUNCIL C 11MAR20 BUILDING B REVISED D 27APR20 BUILDING A,CNR REVISED										<div><div><div><div><div>6.1</div><div>Average star rating</div></div><div><div>NATIONWIDE HOUSE</div><div>ENERGY RATING SCHEME</div><div>www.nathers.gov.au</div></div></div><div>Certificate no.: 0004805460 Assessor Name: Dimitrios Harakidas Accreditation no.: HERA10042 Certificate date: 04 May 2020 Dwelling Address: 5 Preston Avenue Engadine, NSW 2233</div><div></div></div><div><div><div>0</div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div>10</div></div><div>BASIX NOTES: ALL HABITABLE FLOORS - CARPET ALL KITCHENS/BATH FLOORS - TILED B1 HAS ENSUITE ALL INTERNAL WALL - STEEL STUD + PLASTERB'D ALL CORE WALLS - CONCRETE ALL PARTY/CORRIDOR WALLS - HEBEL [BK] BRICK VENEER [FC] CFC PANEL</div></div><div><div><div>THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MUJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1566 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.</div><div></div></div><div><div><div>CLIENT</div><div> White & Partners</div></div><div><div>PROJECT</div><div>RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE</div></div></div><div><div>DRAWING</div><div>LEVEL 5 - PLAN</div></div><div><div><div>1805</div><div>DA</div></div><div><div>A209-D</div><div>1:100@B1</div><div>MC</div></div></div></div></div>									
---------------------------------	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--



REVISIONS R DATE DESCRIPTION	A 29APR19 DA SUBMISSION B 16DEC19 RESPONSE TO COUNCIL C 11MAR20 BUILDING B REVISED D 27APR20 BUILDING A CNR REVISED			 Average star rating 6.1 www.nathers.gov.au	Certificate no.: 0004805460 Assessor Name: Dimitrios Harakidas Accreditation no.: HERA10042 Certificate date: 04 May 2020 Dwelling Address: 5 Preston Avenue Engadine, NSW 2233 www.nathers.gov.au		<div><div>01234510</div></div>	THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MIJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9322 1939 F 9322 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.		CLIENT 	PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE	
								DRAWING LEVEL ROOF - PLAN		1805	A210-D	1:100@B1
								DA		MC		
								PRELIMINARY NOT FOR CONSTRUCTION				



A WEST ELEVATION - TOWN PARK



B NORTH ELEVATION - GEEBUNG LANE

REVISIONS
R DATE DESCRIPTION

A 29APR19 DA SUBMISSION
B 16DEC19 REVISION TO
C 11MAR20 BUILDING B REVISED
D 27APR20 BUILDING A CNR REVISED



Certificate no.:
Assessor Name:
Accreditation no.:
Certificate date:
Dwelling Address:
5 Preston Avenue
Engadine, NSW
2233
www.nathers.gov.au

0004805460
Dimitrios Harakidas
HERA10042
04 May 2020



0 1 2 3 4 5 10

THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF:
MIJOLLO INTERNATIONAL PTY. LTD.
ABN 50 145 079 090
Nominated Architects ARB 7960 + 8927
PO BOX 235 MILSONS POINT NSW 1565
T 9922 1939 F 9922 7522 E office@mijollo.com
ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.

mijollo
INTERNATIONAL

CLIENT
White & Partners

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT
**RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE ENGADINE**

DRAWING
**ELEVATIONS
WEST & NORTH**

1805
DA

A301-D

1 : 100@A1
MC







A EAST ELEVATION - INTERNAL COURTYARD
1:100



B EAST ELEVATION - PRESTON AVENUE
1:100



C SOUTH ELEVATION
1:100

REVISIONS R DATE DESCRIPTION	A 29APR19 DA SUBMISSION		 <p>Certificate no.: 0004805460 Assessor Name: Dimitrios Harakidas Accreditation no.: HERA10042 Certificate date: 04 May 2020 Dwelling Address: 5 Preston Avenue Engadine, NSW 2233 www.nathers.gov.au</p>		THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 235 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.		CLIENT 	PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE					
	B 16DEC19 DESIGN TO												
	C 11MAR20 BUILDING B REVISED												
	D 27APR20 BUILDING A CNR REVISED												
DRAWING ELEVATIONS EAST & SOUTH							PRELIMINARY NOT FOR CONSTRUCTION	1805 DA	A302-D 1:100@A1 MC				

0 1 2 3 4 5 10



Certificate no.: 0004805460
Assessor Name: Dimitrios Harakidas
Accreditation no: HERA10042
Certificate date: 04 May 2020
Address: 5 Preston Avenue
Engadine, NSW
2233
www.nathers.gov.au



0 1 2 3 4 5 10

THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF:
MJOLLO INTERNATIONAL PTY. LTD.
ABN 50 145 079 090
Nominated Architects ARB 7960 + 8927
PO BOX 295 MILSONS POINT NSW 1565
T 9922 1939 F 9922 7522 E office@mijollo.com
ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.



CLIENT
White & Partners

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT
RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE ENGADINE

DRAWING
ELEVATIONS
WEST-BUILDING B


1805
DA

A303-D

1 : 100@A1
MC



A WEST ELEVATION - BUILDING B
1:100

Project Specification		Form # AE0.5		Australian Energy Efficiency Consulting E:info@aenec.com.au		P:0416 316 204	
Project Address: 5 Preston Avenue, Engadine							
BASIX CERTIFICATION NUMBER: 1012443m_02							
This Project Specification outlines ONLY some of the NatHERS commitments. For the full list, you must refer to NatHERS document.							
External Walls Specification:							
Type	Material	Added Insulation	Colour	Detail			
Masonry	Brick Veneer	R2.0	As per drawings	As per drawings			
Framed	Framed	R2.70	As per drawings	As per drawings			
Internal Walls specification:							
Type	Material	Added Insulation	Colour	Detail			
Framed	Plasterboard	Nil	-	As per drawings			
Other	200mm Hebel wall	Nil	-	Partition walls only			
Masonry	200mm Concrete wall	Nil	-	Lift wells and stair case walls only			
Roof Specification:							
Type	Material	Added Insulation	Colour	Detail			
Masonry	200mm Concrete	R4.0 + plasterboard	Medium	As per drawings			
Floors/Ceilings Specification:							
Type	Material	Added Insulation	Covering	Detail			
Masonry	200mm Concrete	R2.0	As per drawings	Above carpark, Building 2 Level 1 & exposed slabs			
Masonry	200mm Concrete	Nil	As per drawings	Above/below dwellings			
Window Specification:							
Frame material	Glazing	U Value	SHGC	Detail			
Aluminium	-	-	-	Refer to NatHERS			

CAUTION – ALL OF THE ITEMS BELOW MUST BE ADHERED TO FOR NATHERS TO BE VALID

- NOTES:
- ALL DOWNLIGHTS TO BE:
 - APPROVED NON-VENTILATED
 - WITH FIRE-RATED COVER/SHIELD TO ALLOW CONTINUOUS INSULATION LED TYPE. IF HALOGEN LIGHT ARE TO BE INSTALLED THIS CERTIFICATION IS NOT VALID
 - ALL VENTS AND WALL OPENINGS INSTALLED TO BE "THE SEALED" TYPE
 - ALL INSULATION IS TO BE INSTALLED IN ACCORDANCE NCC PART 3.12.1.1
 - CREATION OF CONTINUOUS THERMAL BARRIER
 - COMPLIANCE WITH AS4859
 - MAINTAINING THICKNESS OF BULK INSULATION AND AIR GAPS FOR REFLECTIVE INSULATION
 - BUILDING SEALING AS PER NCC PART 3.12.3
 - WEATHER SEALS AND DRAFT EXCLUDERS
 - DRAFT STOPPER CAPS
 - SERVICES AS PER NCC PART 3.12.5
 - INSULATION OF SERVICES, PIPING AND DUCTWORK

BASIX COMMITMENTS SUMMARY											
Common areas of unit building - Building A											
Common area		Floor area (m²)		Common area		Floor area (m²)		Common area		Floor area (m²)	
Lift car (No. 1)		-		Lift car (No. 3)		-		Ground floor lobby type (B-A)		88.2	
Hallway/lobby type (LEV. 1)		56.2		Hallway/lobby type (LEV. 2)		56.2		Hallway/lobby type (LEV. 3)		96.2	
Hallway/lobby type (LEV. 4)		52.5		Hallway/lobby type (LEV. 5)		52.5		FSS		5.8	
FSS		9.44									
Common areas of unit building - Building B											
Common area		Floor area (m²)		Common area		Floor area (m²)		Common area		Floor area (m²)	
Lift car (No. 2)		27.7		Ground floor lobby type (B-B)		24.4		Hallway/lobby type (LEV. 2)		27.7	
Hallway/lobby type (LEV. 3)		27.7		FSS		7.2		FSS		1735.0	
Common areas of the development (non-building specific)											
Common area		Floor area (m²)		Common area		Floor area (m²)		Common area		Floor area (m²)	
Car park area (B1)		1665.0		Car park area (B2)		1675.0		Car park area (B3)		1735.0	
Electrical switch		15.4		Garage room		17.2		Plant or service rooms Lev B2		84.9	
Hydrant Plant		68.2		Bulk Storage		17.0		FSS		10.0	
FSS		11.1		FSS		11.1		FSS		11.0	
Alternative water source											
Dwelling no.	Alternative water supply system	Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
None											
Common area											
Common area		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Artificial lighting											
Dwelling no.	Living areas	Bedroom areas	Living areas	Bedroom areas	No. of bedrooms	No. of living rooms	Each bathroom	Each kitchen	Each laundry	Each hallway	No. of bedrooms
None											
Common area											
Common area		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Control energy systems											
Control energy systems		Type	Specification	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 5)		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
FSS		-	-	-	-	-	-	-	-	-	-
Central systems											
Central systems		Size	Configuration	Landscaping connection	Toilet connection (lit)	Laundry connection	Pool connection	Spa connection	Spa connection	Spa connection	Spa connection
Lift car (No. 1)		-	-	-	-	-	-	-	-	-	-
Lift car (No. 3)		-	-	-	-	-	-	-	-	-	-
Ground floor lobby type (B-A)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 1)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 2)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 3)		-	-	-	-	-	-	-	-	-	-
Hallway/lobby type (LEV. 4)		-	-	-	-	-	-				



SECTION A-A
1:100

REVISIONS
R DATE DESCRIPTION

A 29APR19 DA SUBMISSION
B 16DEC19 RESPONSE TO
C 11MAR20 BUILDING B REVISED
D 27APR20 BUILDING A CNR REVISED



Certificate no.: 0004805460
Assessor Name: Dimitrios Harakidas
Accreditation no.: HERA10042
Certificate date: 04 May 2020
Dwelling Address: 5 Preston Avenue
Engadine, NSW 2233
www.nathers.gov.au



0 1 2 3 4 5 10

THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF:
MJOLLO INTERNATIONAL PTY. LTD.
ABN 50 145 079 090
Nominated Architects ARB 7960 + 8927
PO BOX 295 MILSONS POINT NSW 1565
T 9922 1939 F 9922 7522 E office@mijollo.com
ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.

mijollo
INTERNATIONAL

CLIENT
 White & Partners

PRELIMINARY
NOT FOR CONSTRUCTION

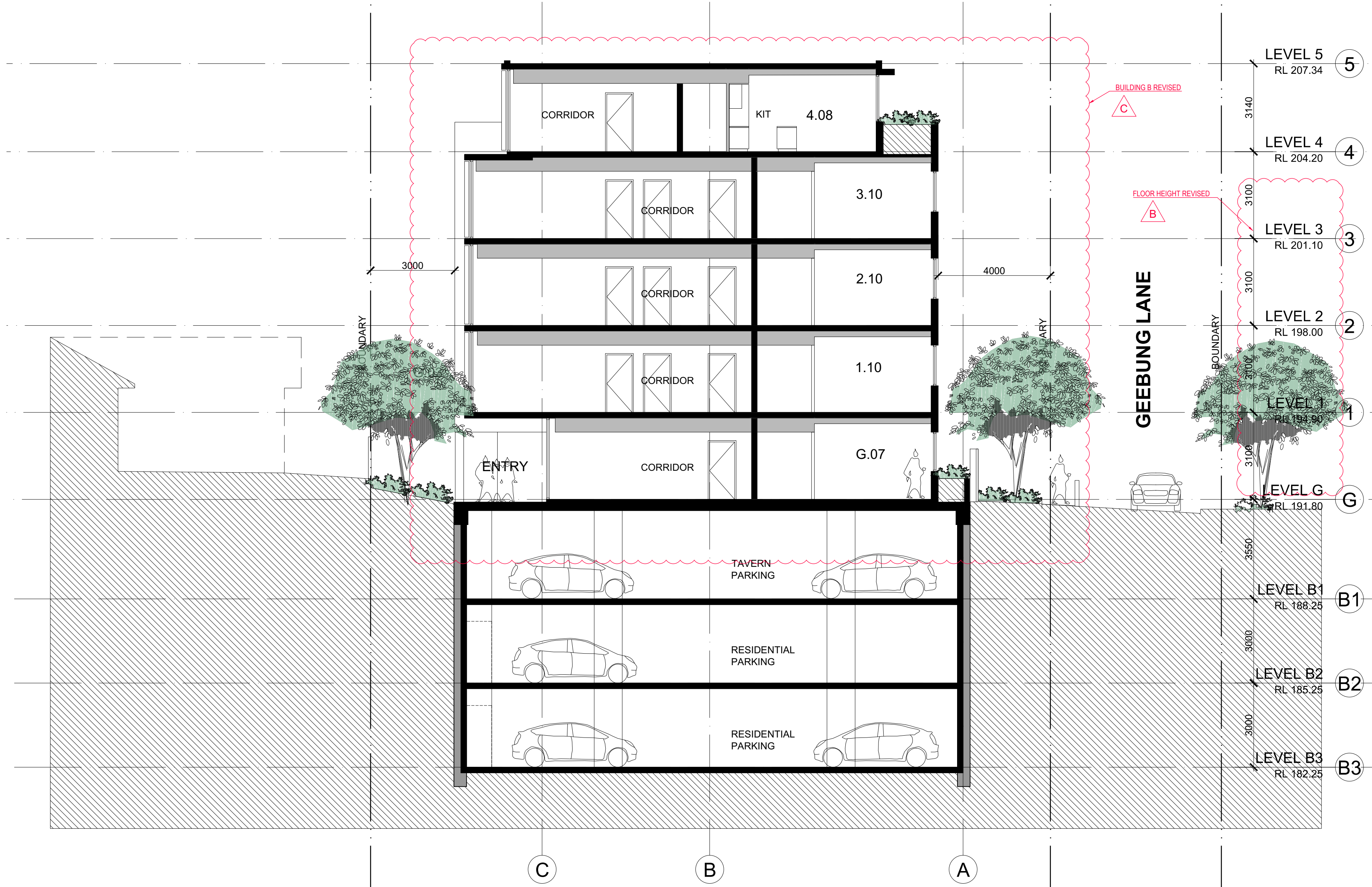
PROJECT
RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE ENGADINE

DRAWING
SECTIONS
A-A

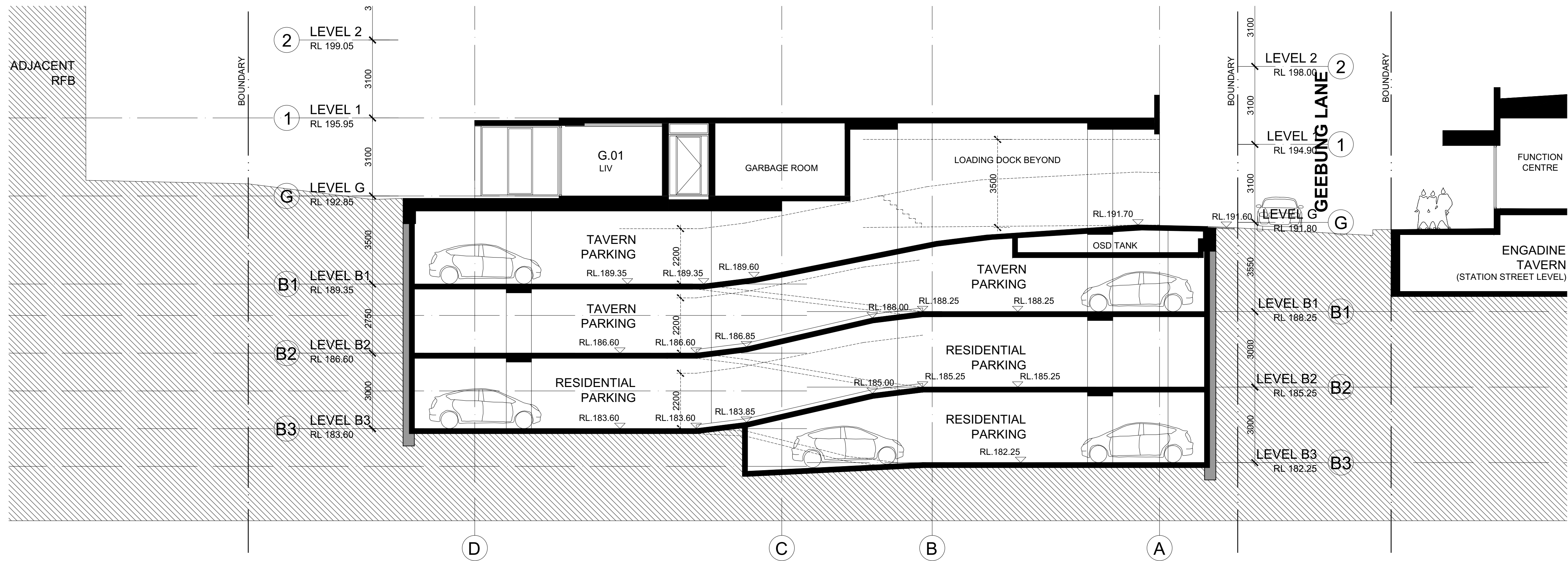
1805
DA

A401-D

1:100@A1
MC



SECTION B-B
1:100



SECTION D-D
1:100

REVISIONS

R DATE DESCRIPTION

A 29APR19 DA SUBMISSION

B 16DEC19 RESPONSE TO COUNCIL

C 11MAR20 BUILDING B REVISED

D 27APR20 BUILDING A CNR REVISED

6.1

Average star rating

NATIONWIDE HOUSE

ENERGY RATING SCHEME

www.natherns.gov.au

Certificate no.: 0004805460

Assessor Name: Dimitrios Harakidas

Accreditation no.: HERA10042

Certificate date: 04 May 2020

Dwelling Address: 5 Preston Avenue Engadine, NSW 2233

www.natherns.gov.au

01023456

THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF:

MIJOLLO INTERNATIONAL PTY. LTD.

ABN 50 145 079 090

Nominated Architects ARB 7960 + 8927

PO BOX 295 MILSONS POINT NSW 1565

T 9922 1939 F 9922 7522 E office@mijollo.com

ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.

mijollo

INTERNATIONAL

CLIENT

White & Partners

PROJECT

RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE ENGADINE

DRAWING

SECTIONS
B-B D-D

1805

DA

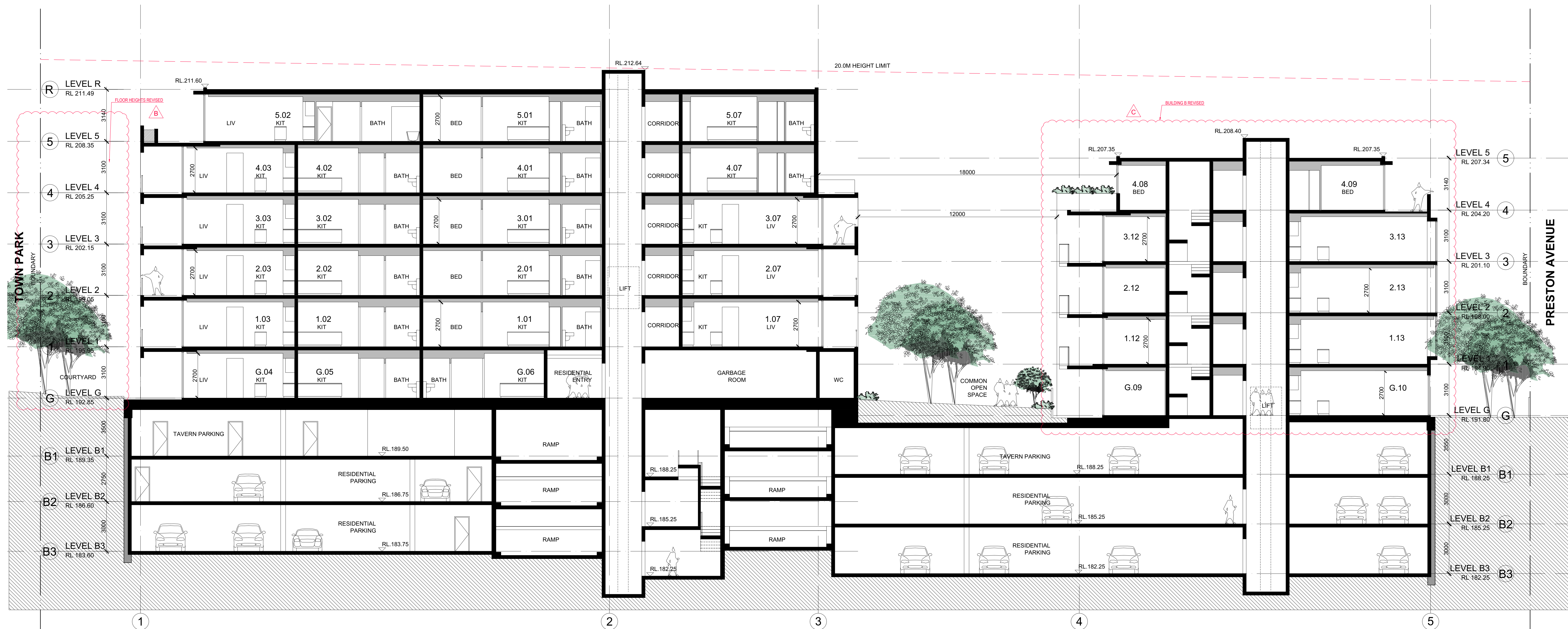
A402-D

MC

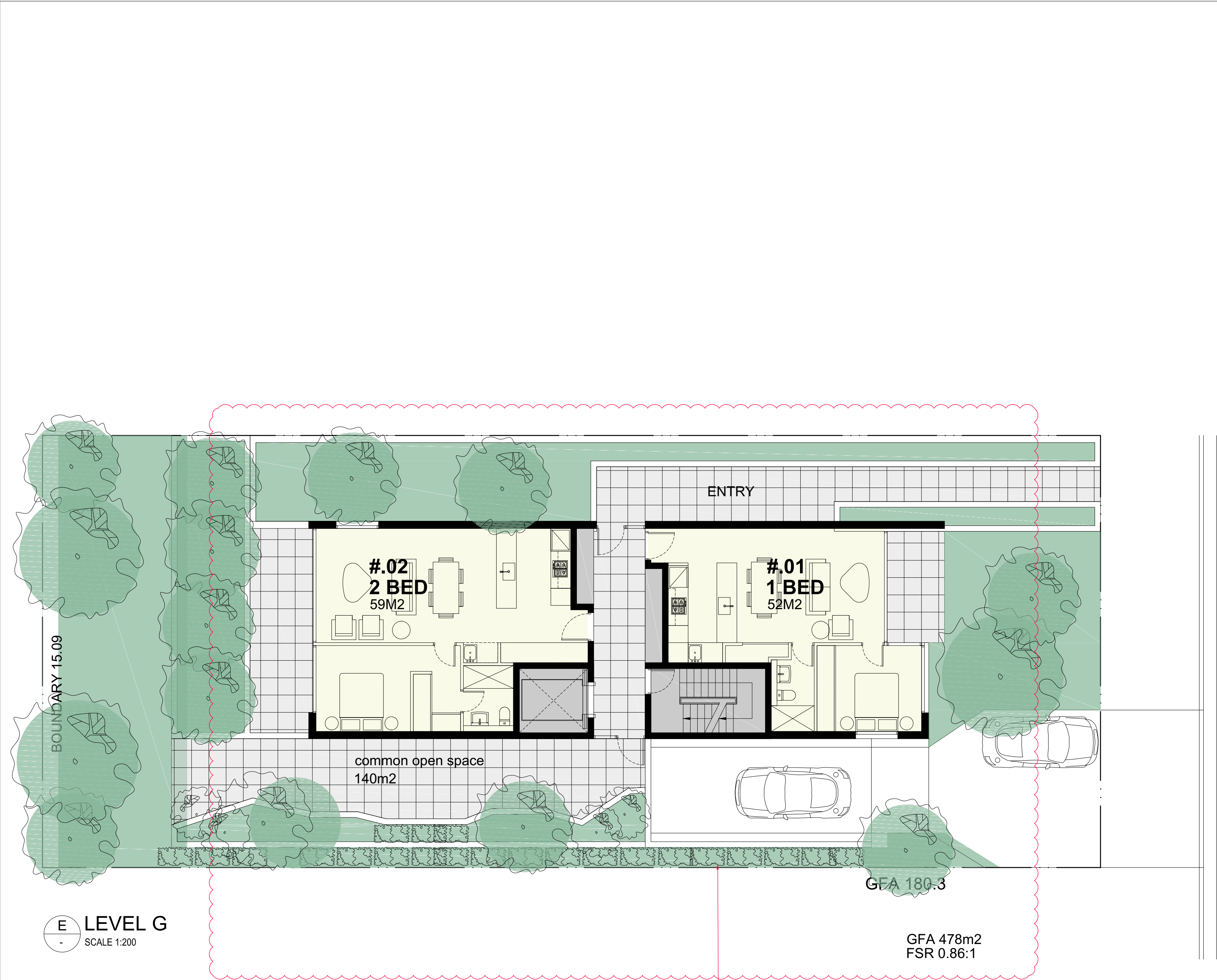
1: 100@A1

PRELIMINARY

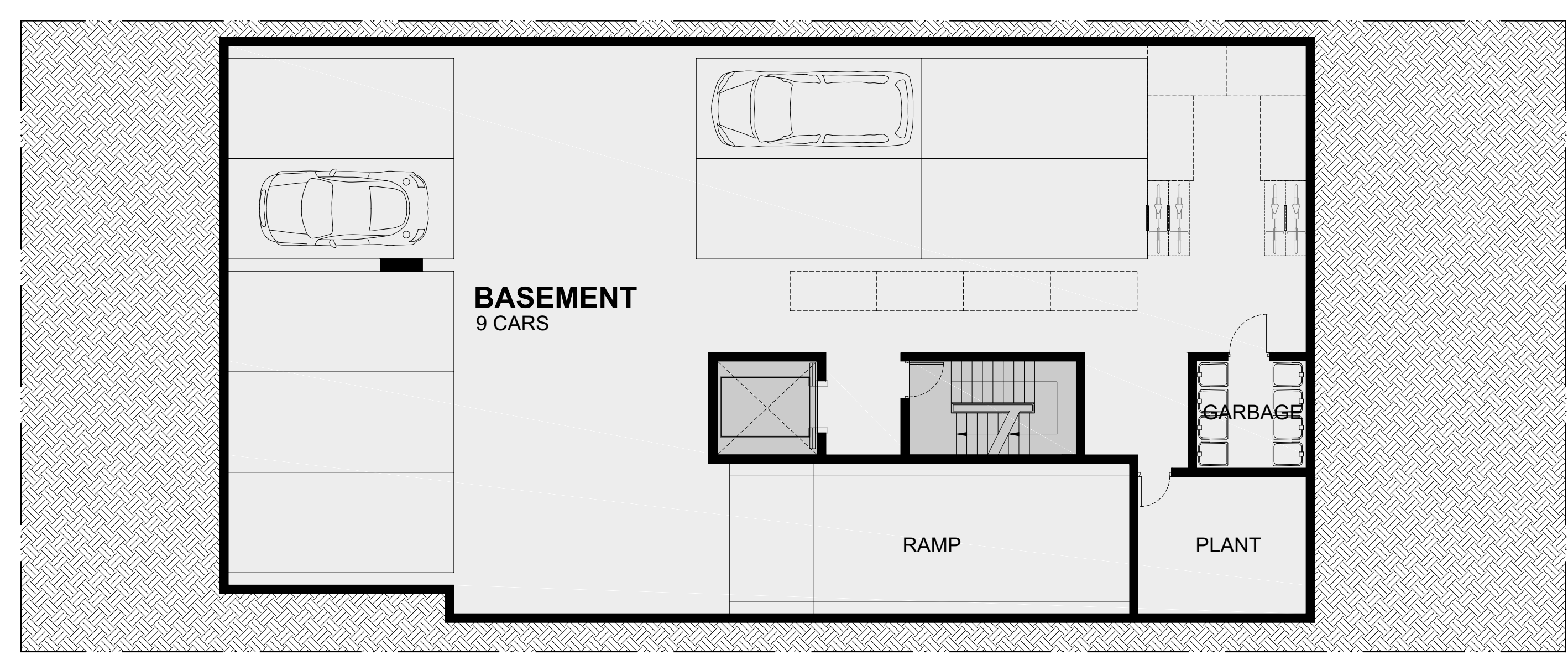
NOT FOR CONSTRUCTION



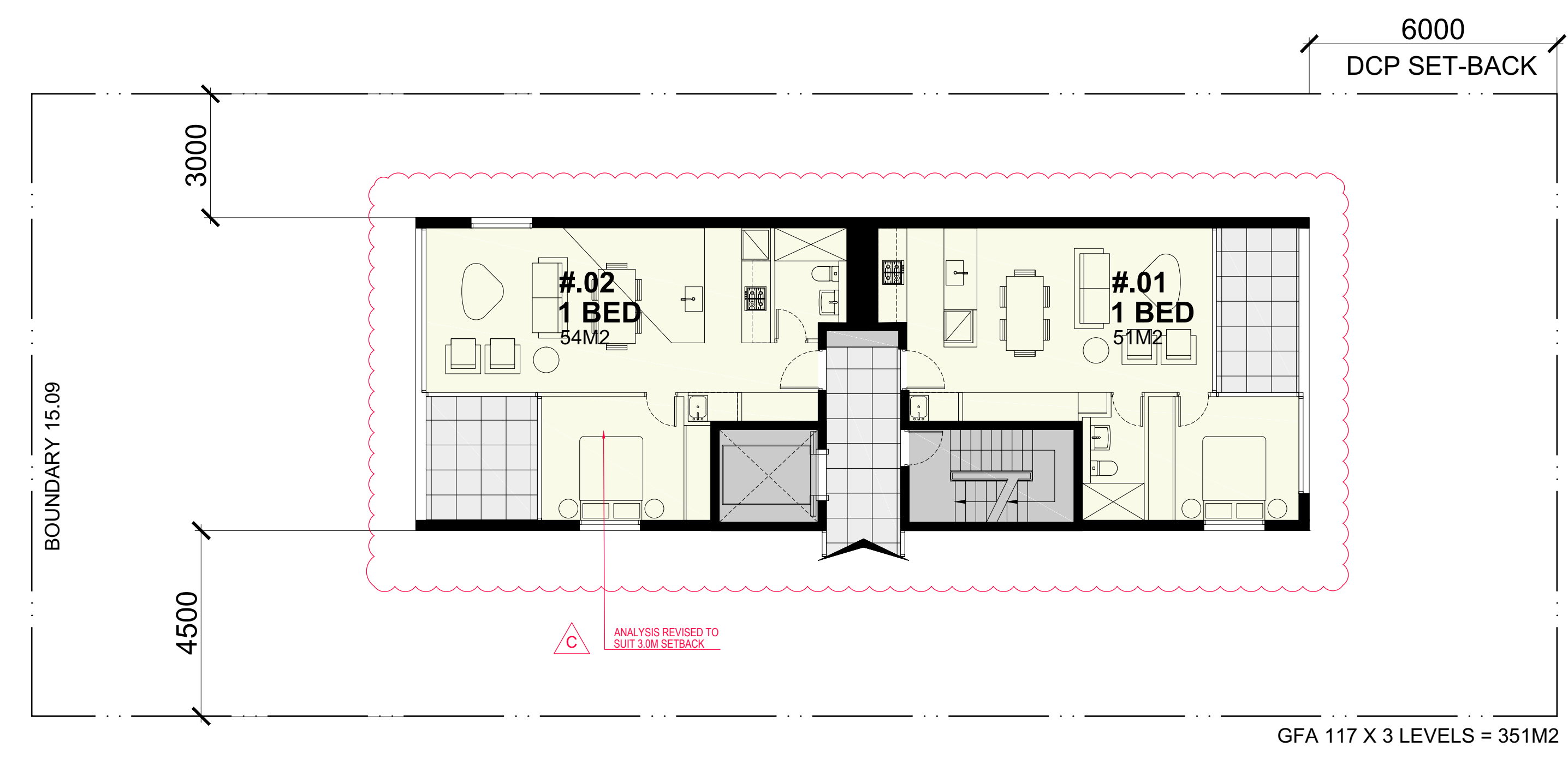
<div> <div>REVISIONS</div> <div>R DATE DESCRIPTION</div> </div> <div> <div>A:20APR18 DA SUBMISSION</div> <div>B:05DEC18 DA REVISION TO COUNCIL</div> <div>C:11MAR20 BUILDING B REVISED</div> <div>D:27APR20 BUILDING A CNR REVISED</div> </div>	<div> <div> </div> <div> <div>Certificate no.: 0004805460</div> <div>Assessor Name: Dimitrios Harakidas</div> <div>Accreditation no.: HERA10042</div> <div>Certificate date: 04 May 2020</div> <div>Dwelling Address: 5 Preston Avenue Engadine, NSW 2233</div> <div>www.nathers.gov.au</div> </div> </div>	<div> <div> </div> <div> <div>0 1 2 3 4 5 10</div> </div> </div>	<div> <div>THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF:</div> <div>MIJOLLO INTERNATIONAL PTY. LTD.</div> <div>ABN 50 145 979 890</div> <div>Nominated Architects ARB 7960 + 8927</div> <div>PO BOX 295 MILSONS POINT NSW 1565</div> <div>T 9922 1939 F 9922 7622 E office@mijollo.com</div> <div>ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.</div> </div>	<div> <div>CLIENT</div> <div> </div> </div>	<div> <div>PROJECT</div> <div>RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE</div> </div>
	<div> <div> </div> <div> <div>PRELIMINARY</div> <div>NOT FOR CONSTRUCTION</div> </div> </div>	<div> <div>DRAWING SECTIONS</div> <div>C-C</div> </div>	<div> <div>1805</div> <div>DA</div> </div>	<div> <div>A403-D</div> </div>	<div> <div>1 : 100@A1</div> <div>MC</div> </div>





G STREET SCAPE ELEVATION(PROPOSED)
SCALE 1:200
NOTE:
REFER A617 FOR SOLAR ACCESS ANALYSIS TO FUTURE
DEVELOPMENT



E LEVEL B
SCALE 1:200

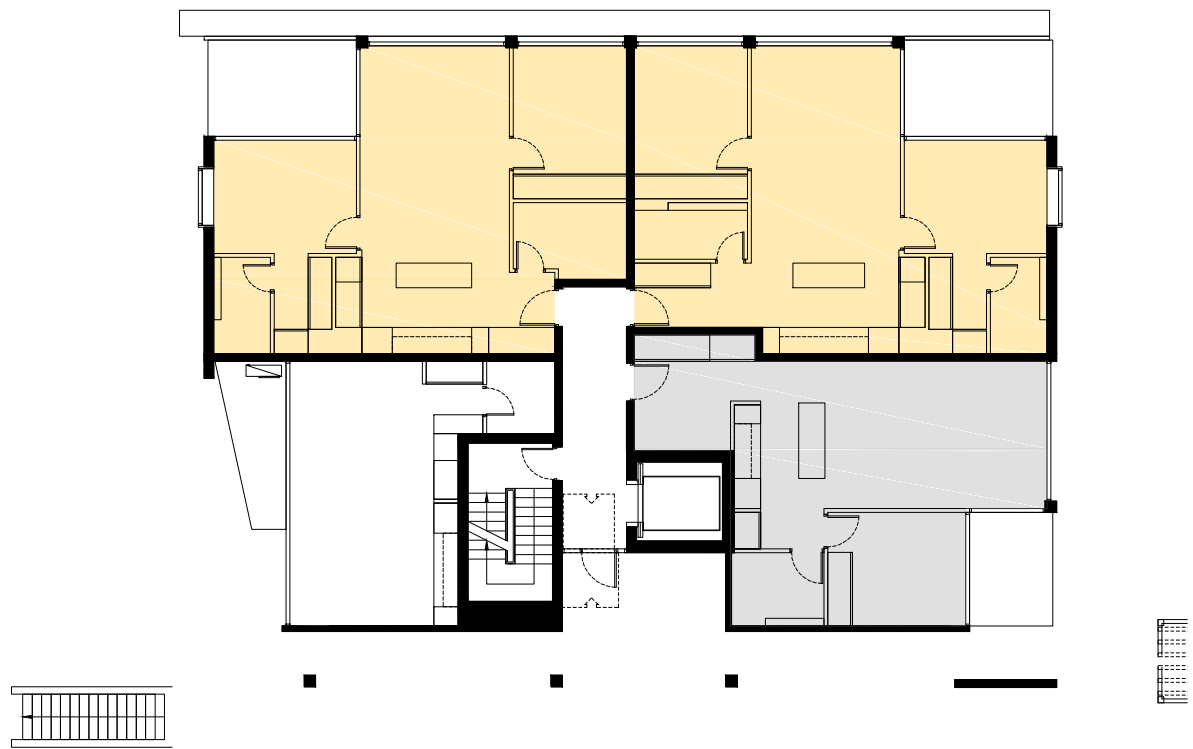


E LEVEL 1 - 3 PLAN
SCALE 1:200
(ALTERNATIVE 3 BED @110M2)

REVISIONS R DATE DESCRIPTION	DA SUBMISSION B 16DEC19 C 11MAR20 BUILDING B REVISED		THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF MJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.				CLIENT  White & Partners		PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE		
							PRELIMINARY NOT FOR CONSTRUCTION		DRAWING ANALYSIS No.7 PRESTON STREET		
									1805	A701-C	1:100@B1
									DA		MC



LEVEL G



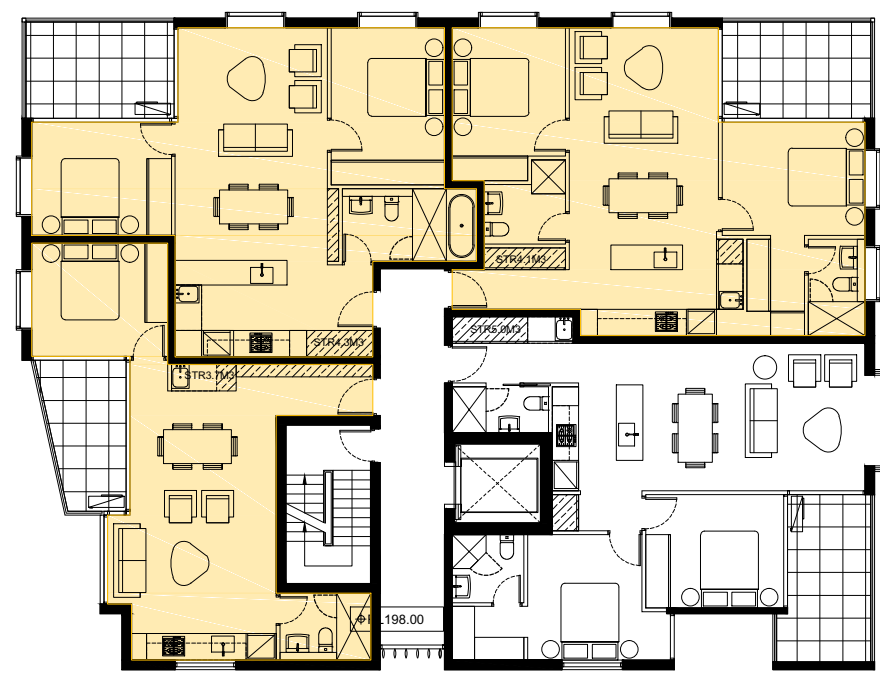
LEVEL 1



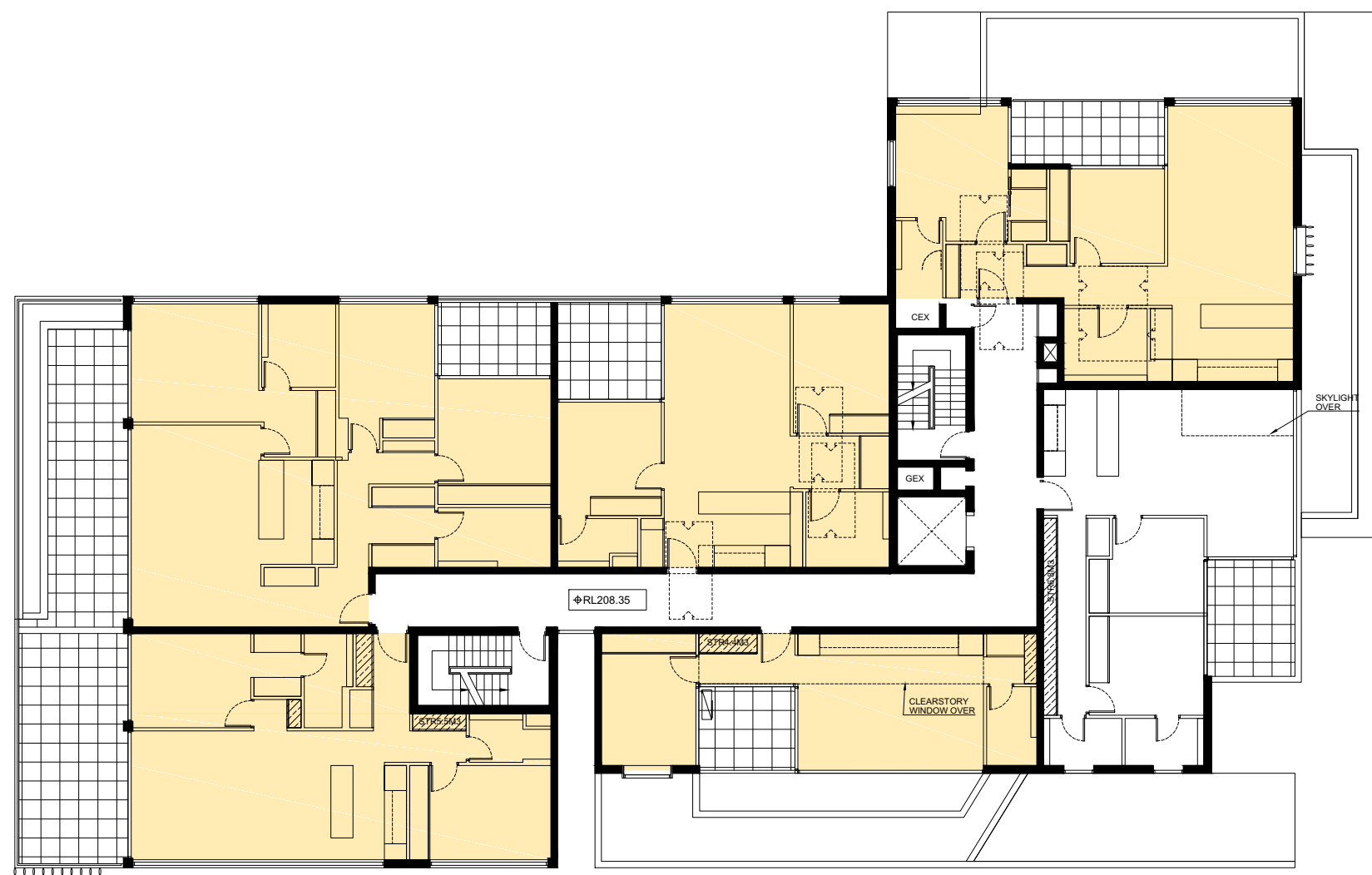
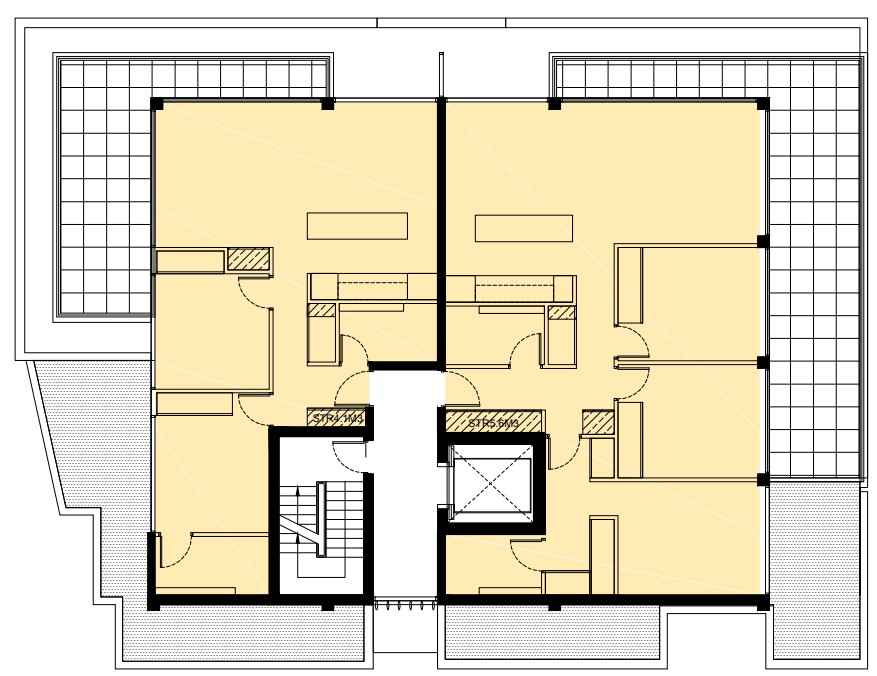
LEVEL 2



LEVEL 3



LEVEL 4



LEVEL 5

LEGEND - SOLAR ACCESS(2H)



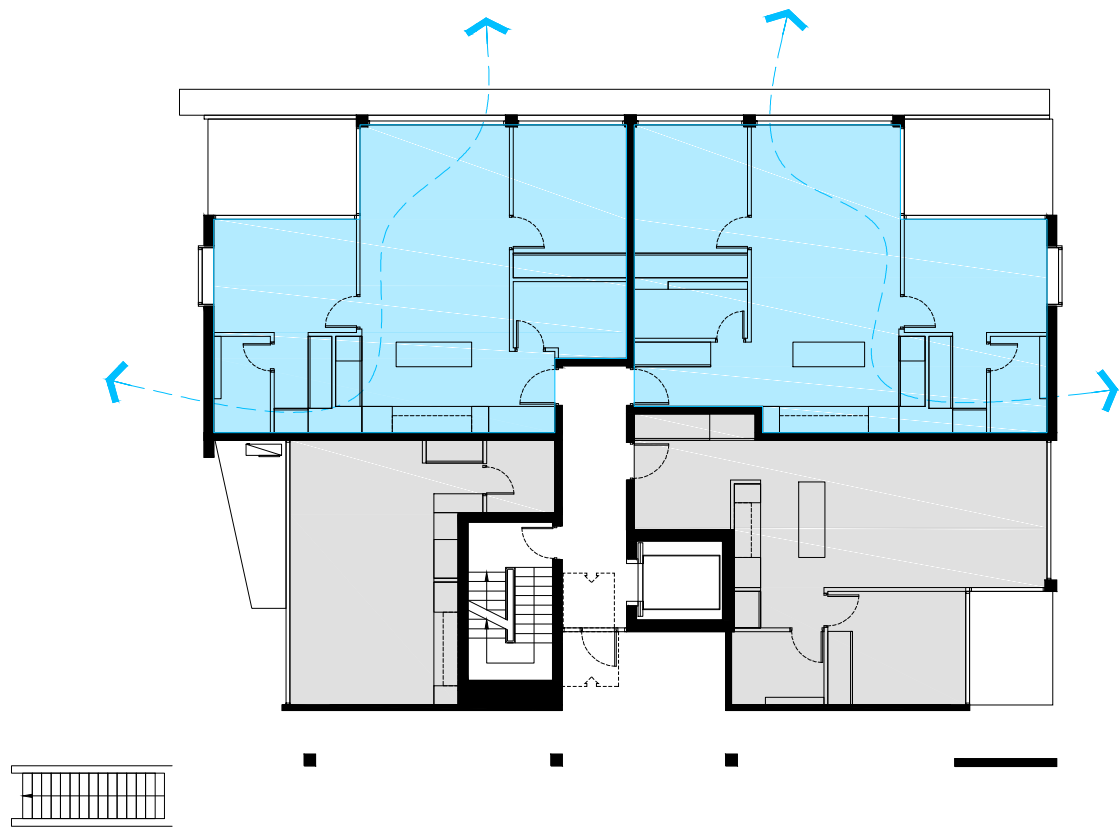
SOLAR TABLE

	SOLAR ACCESS UNITS (2HRS)	UNITS PER LEVEL
LEVEL G	6	10
LEVEL 1	9	13
LEVEL 2	9	13
LEVEL 3	9	13
LEVEL 4	7	9
LEVEL 5	5	6
TOTAL	45	64
	70%	

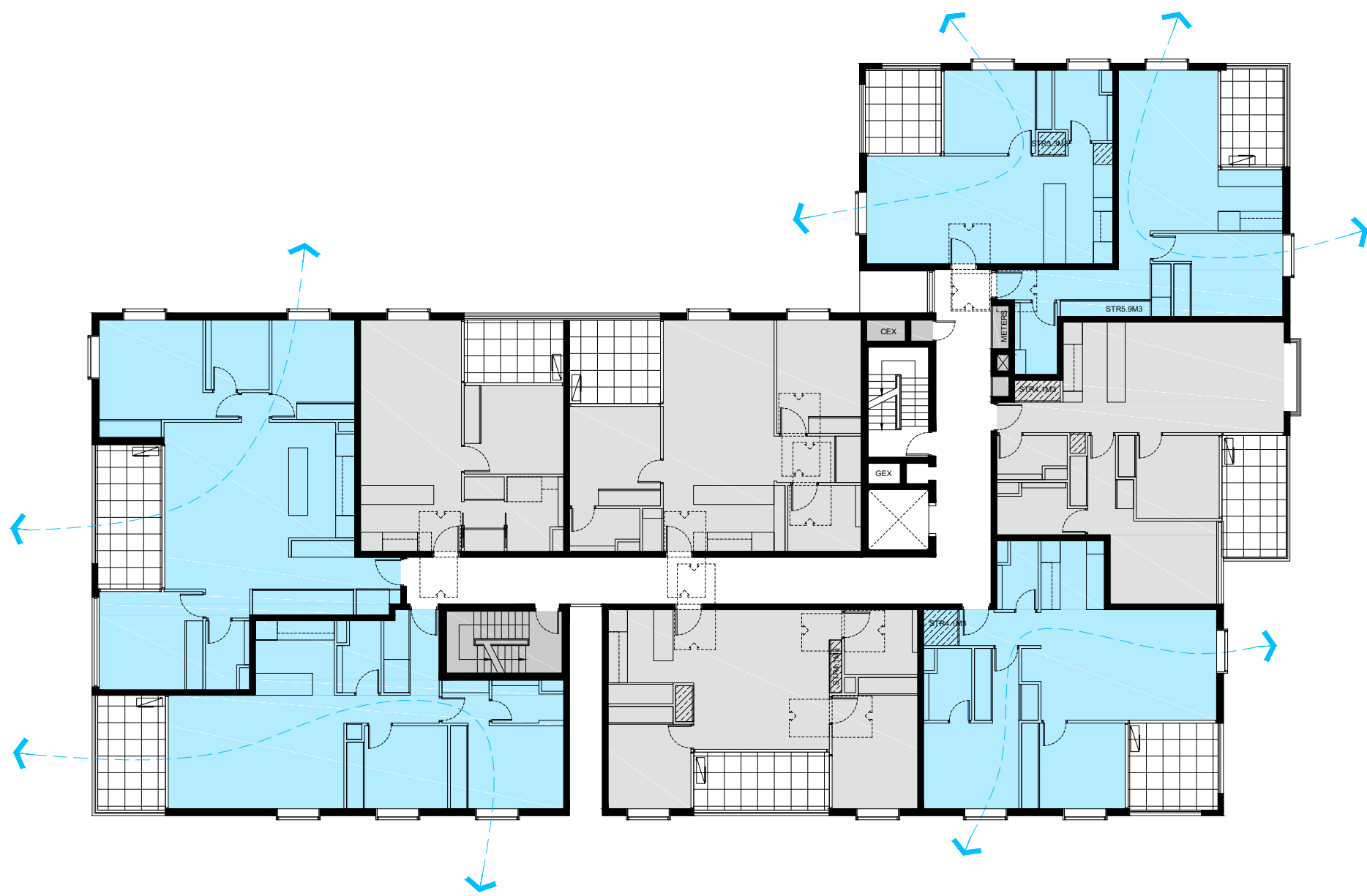
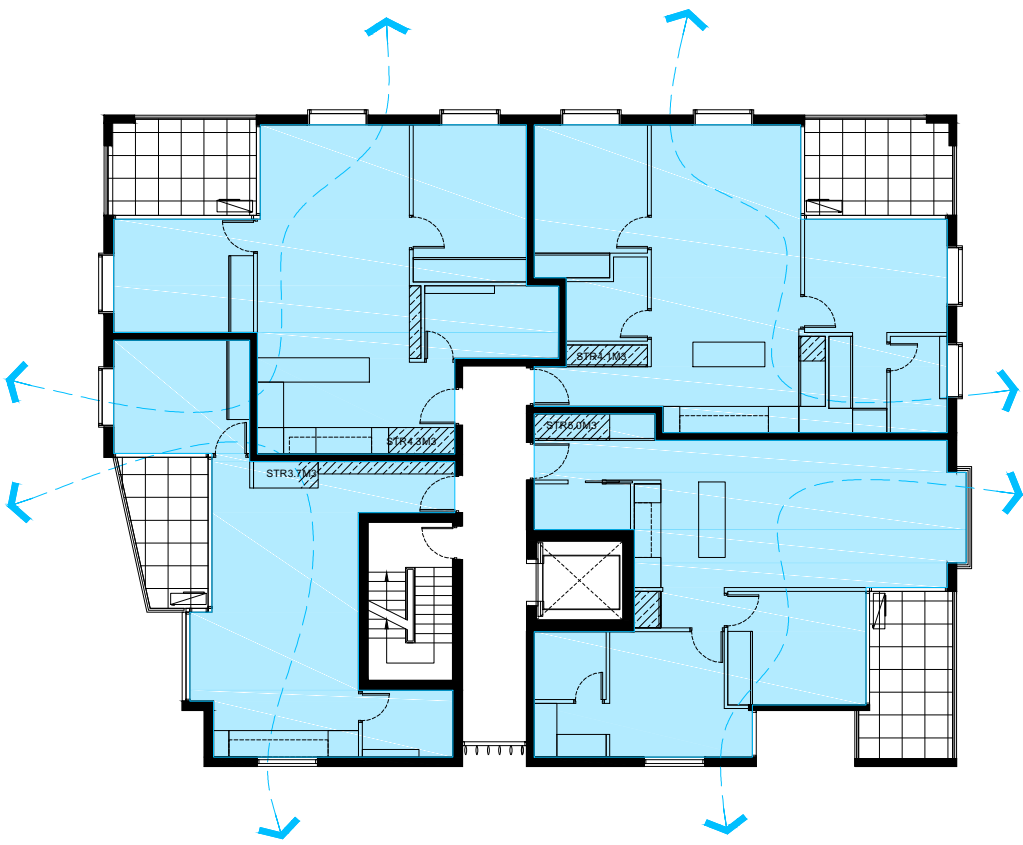
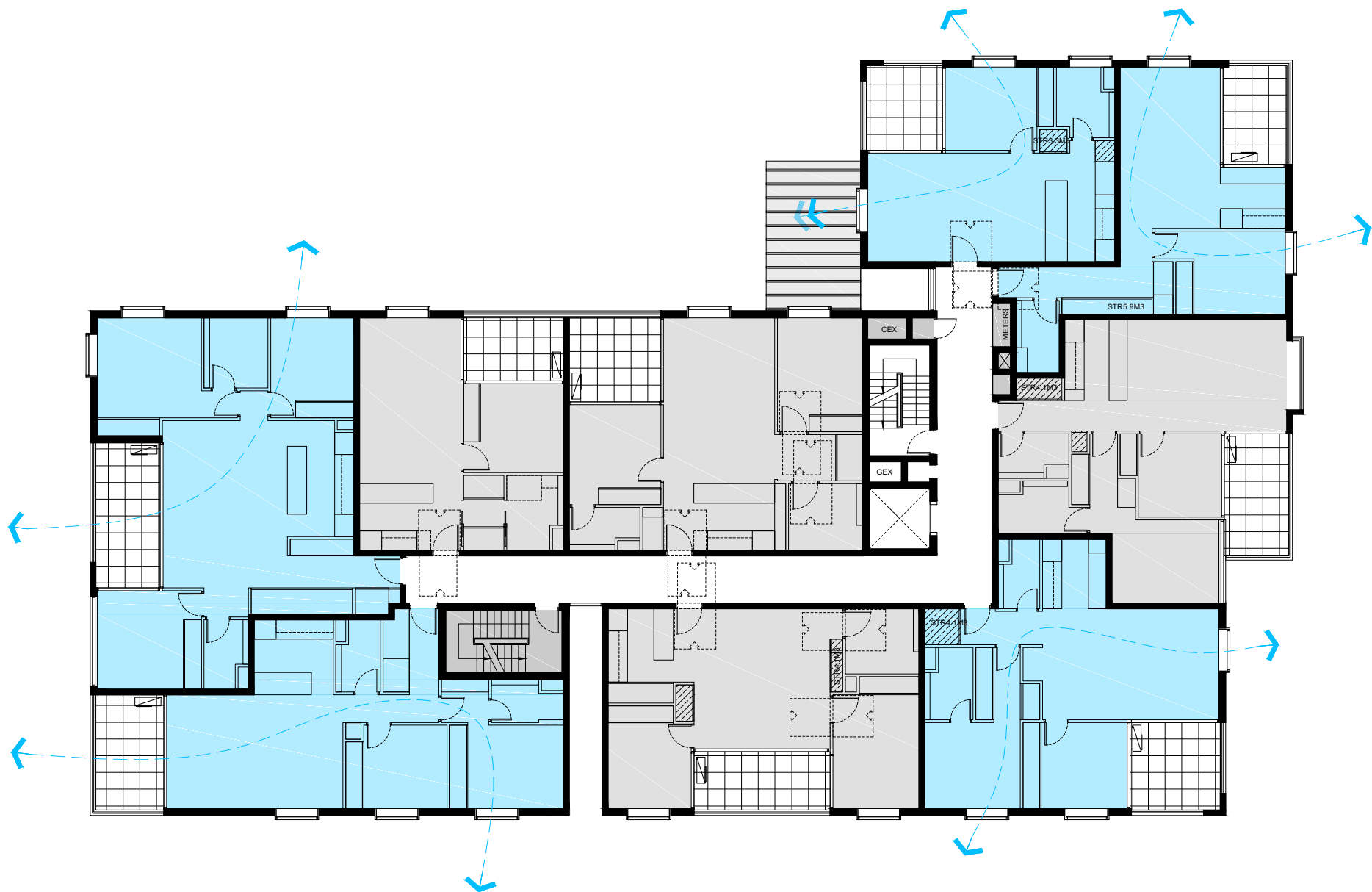
9 UNITS (14%)RECEIVE NO DIRECT SUNLIGHT BETWEEN 9AM AND 3PM AT MID WINTER



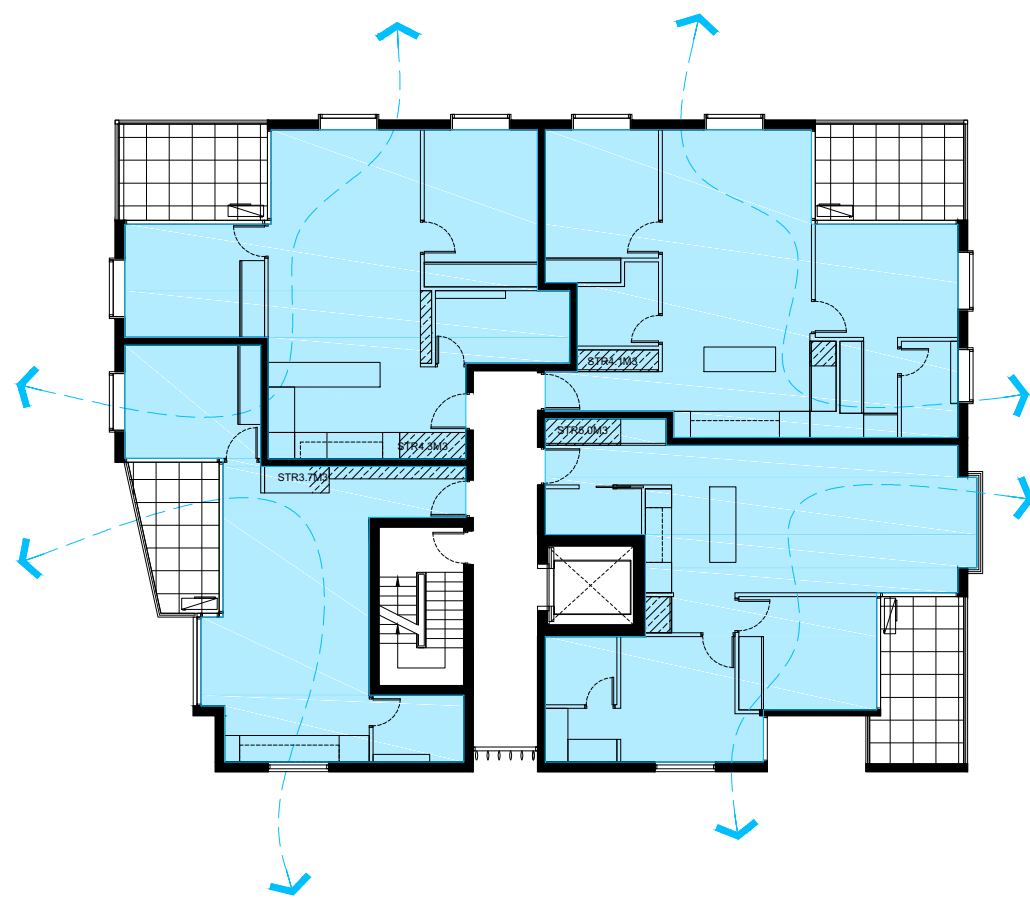
LEVEL G



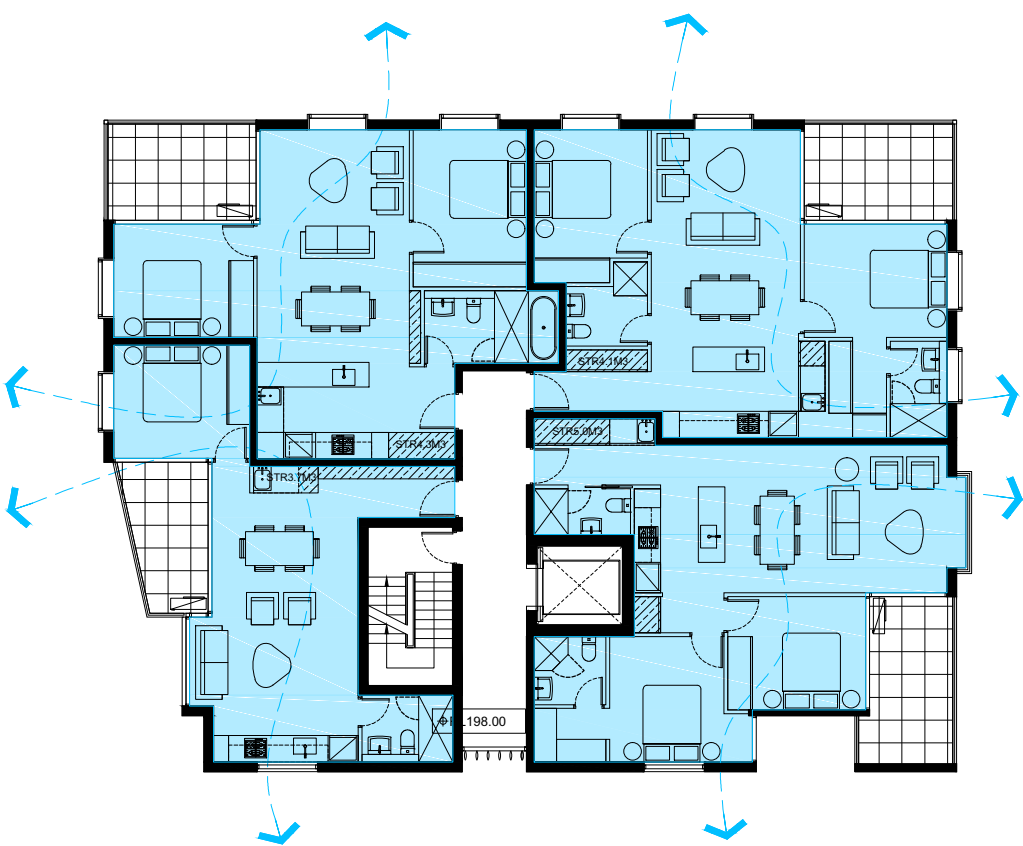
LEVEL 1



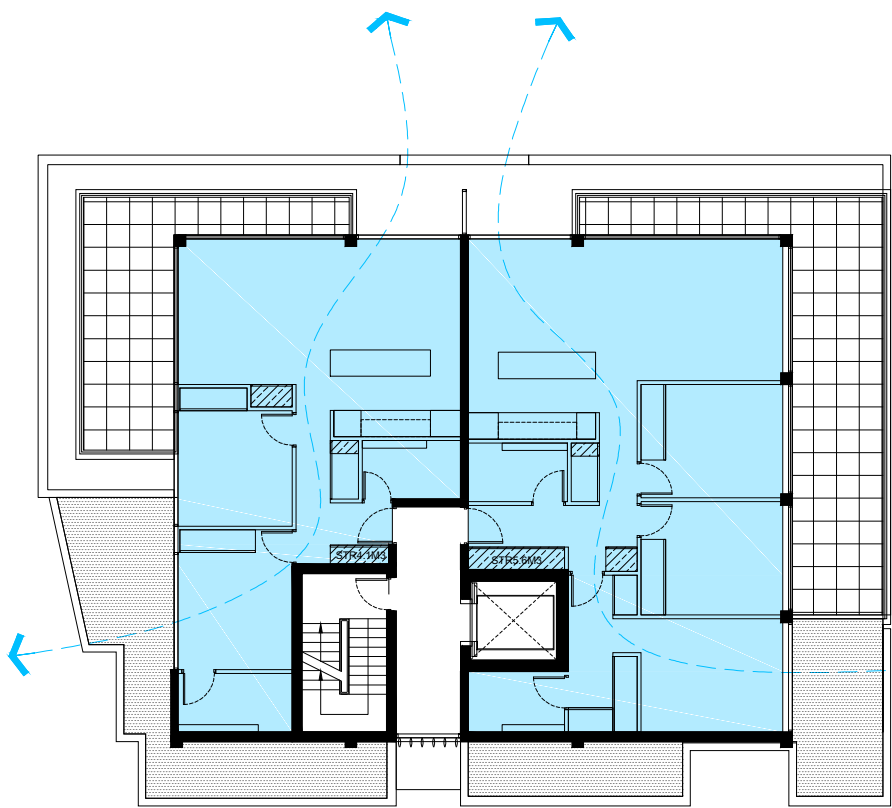
LEVEL 2



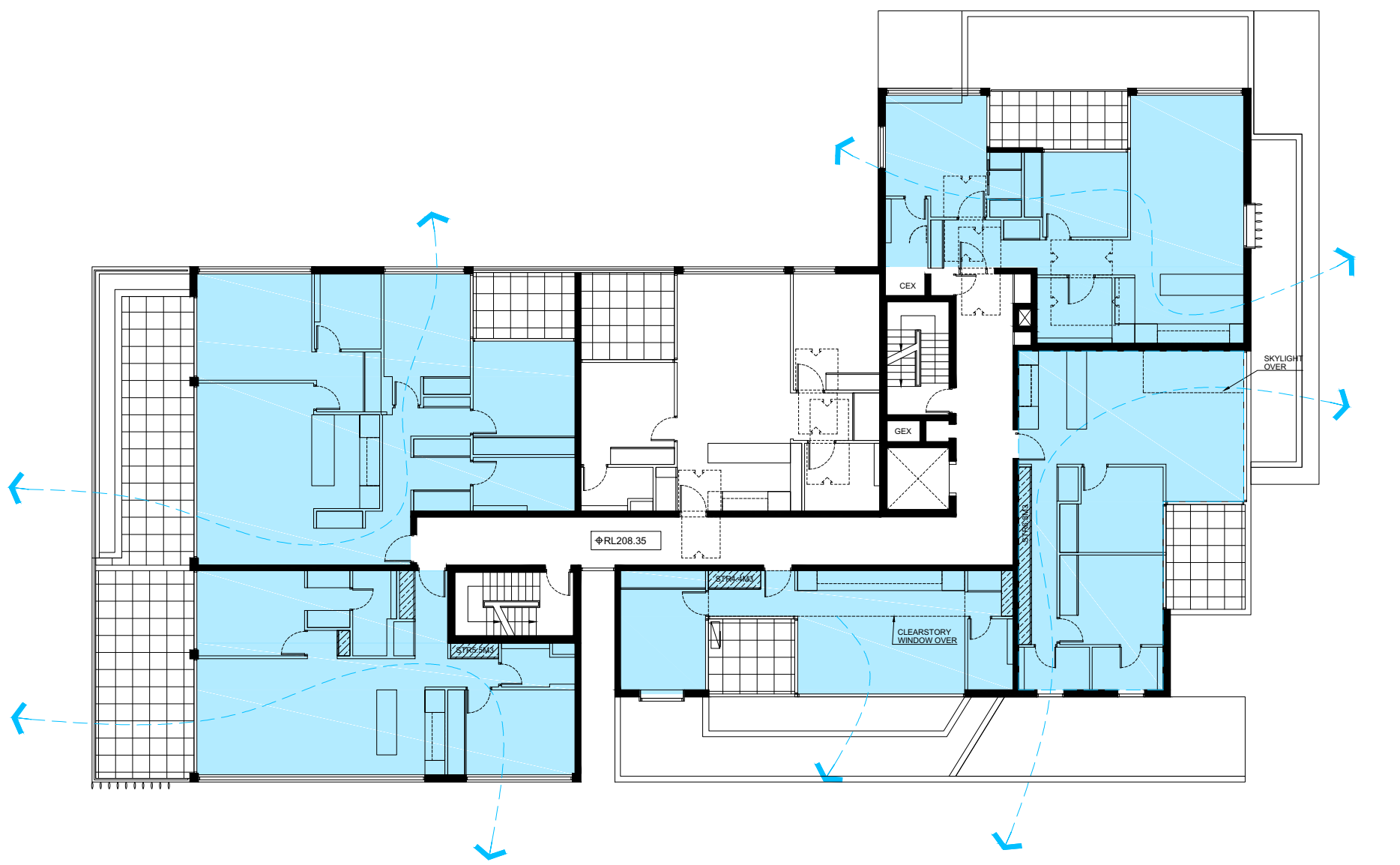
LEVEL 3



LEVEL 4



LEVEL 5



LEGEND - CROSS VENTILATION



VENTILATION TABLE

	CROSS VENTILATED UNITS	UNITS PER LEVEL
LEVEL G	5	10
LEVEL 1	9	13
LEVEL 2	9	13
LEVEL 3	9	13
LEVEL 4	6	9
LEVEL 5	5	6
TOTAL	43	64
	67%	

REVISIONS

R	DATE	DESCRIPTION
A	29APR19	DA SUBMISSION
B	16DEC19	REVISIONS TO CONCLUDE TO
C	11MAR20	BUILDING B REVISED

THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF:
MIJOLLO INTERNATIONAL PTY. LTD.
ABN 50 145 079 090
Nominated Architects ARB 7960 + 8927
PO BOX 295 MILSONS POINT NSW 1565
T 9922 1939 F 9922 7522 E office@mijollo.com
ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.

mijollo
INTERNATIONAL

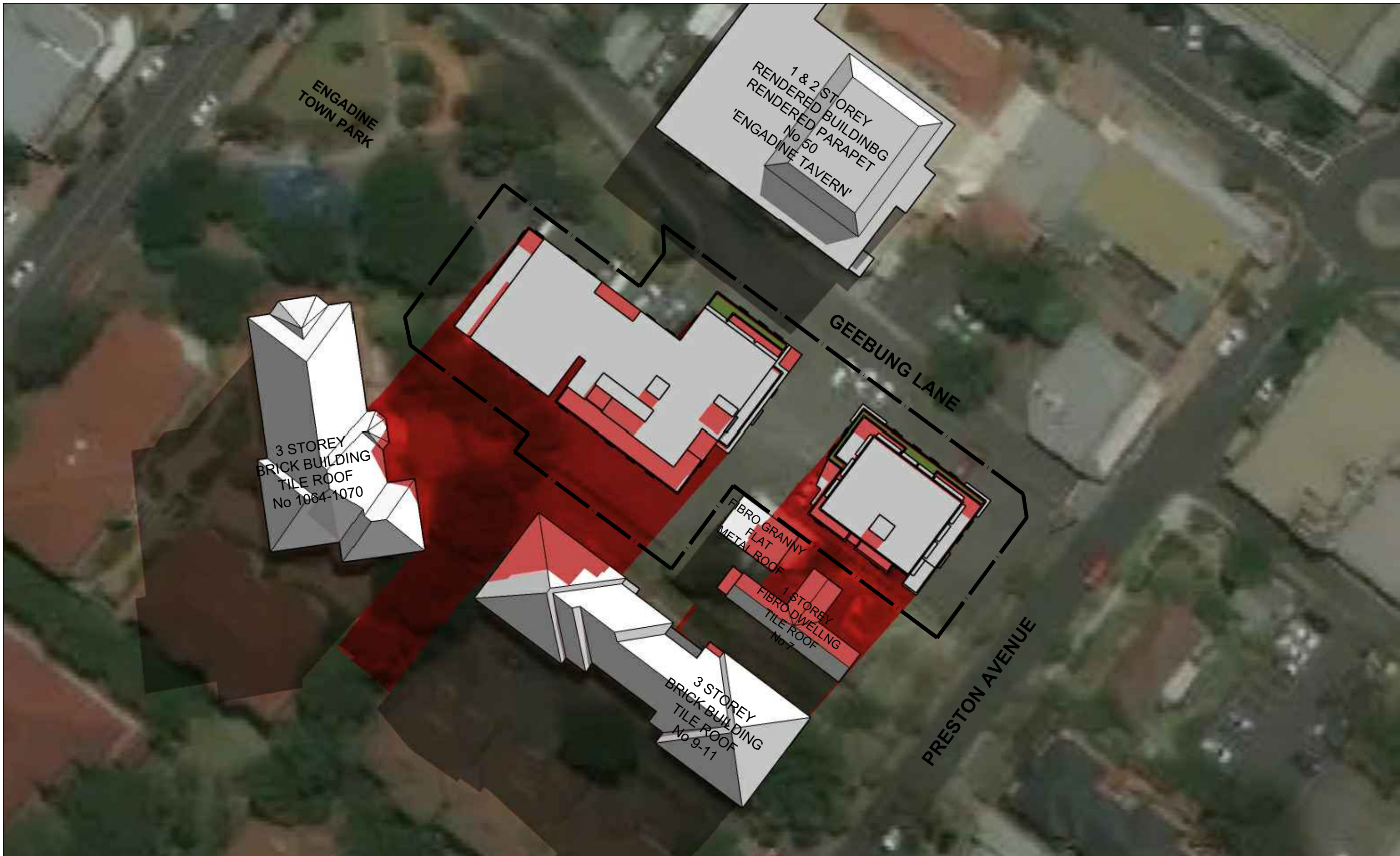
CLIENT
 White & Partners

PRELIMINARY
NOT FOR CONSTRUCTION

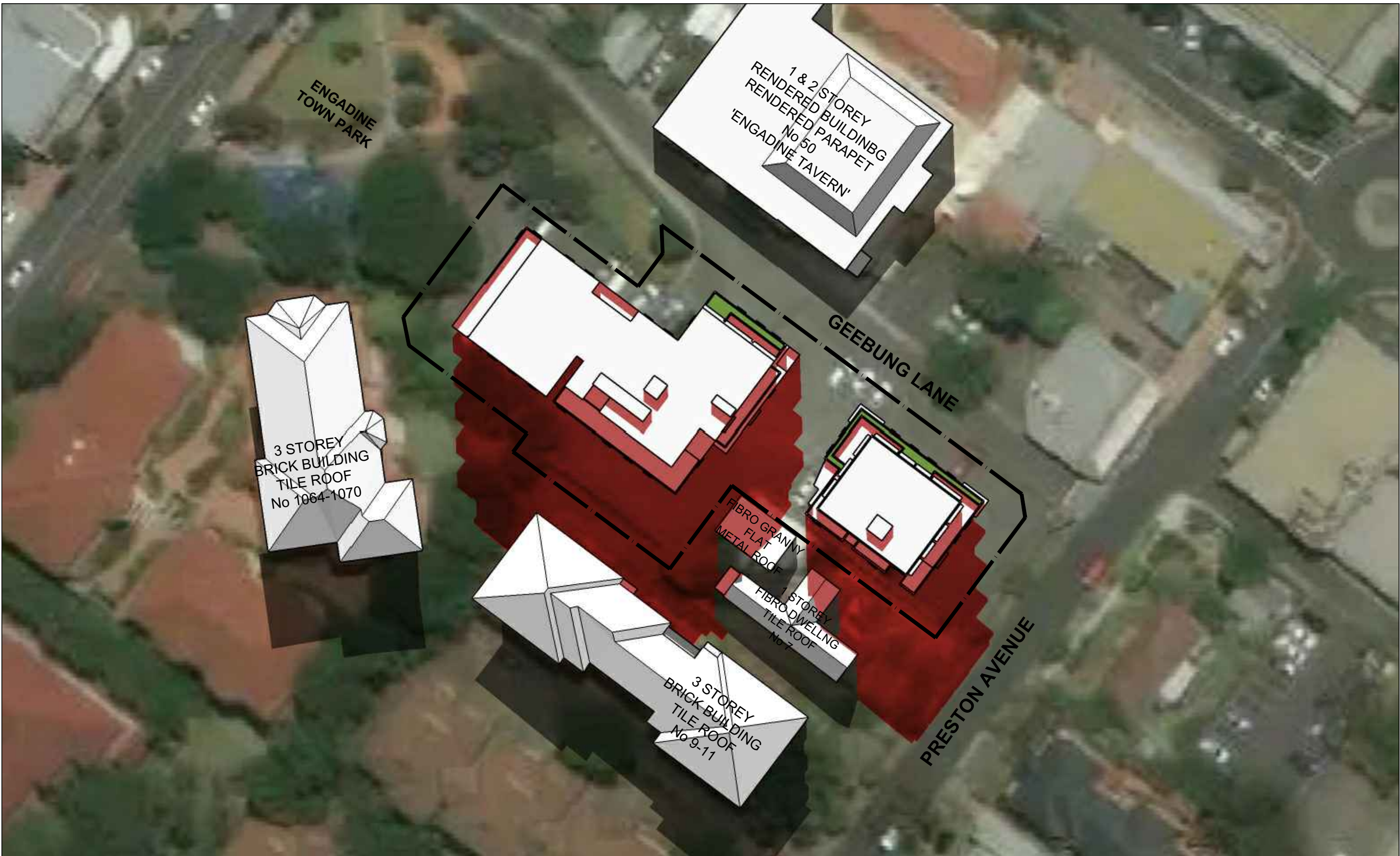
PROJECT
RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE ENGADINE

DRAWING
VENTILATION ANALYSIS

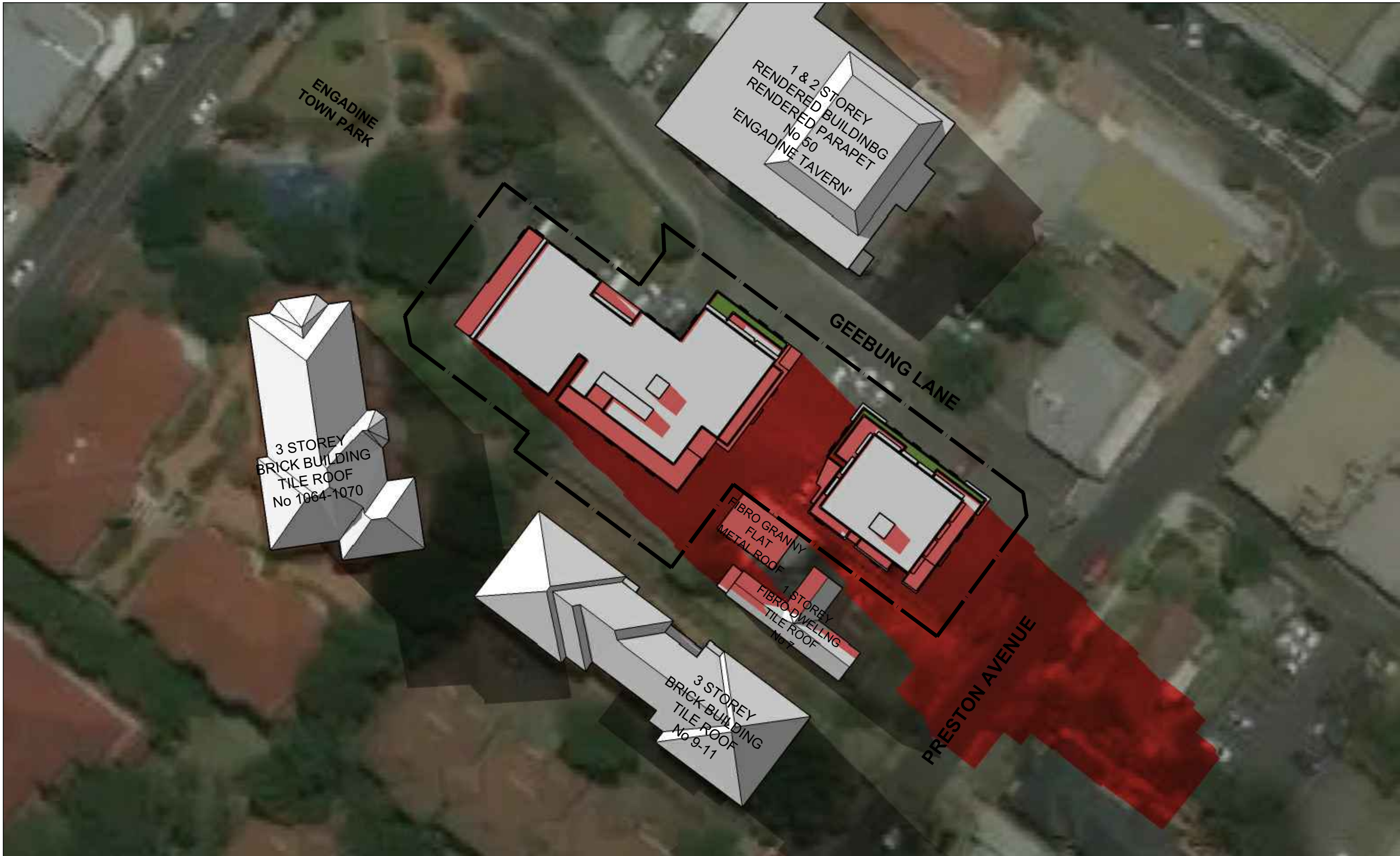
1805	A526-C	1:200@B1
DA		MC



21ST JUNE - 0900

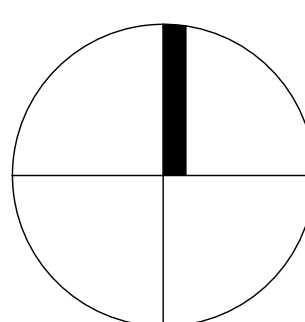




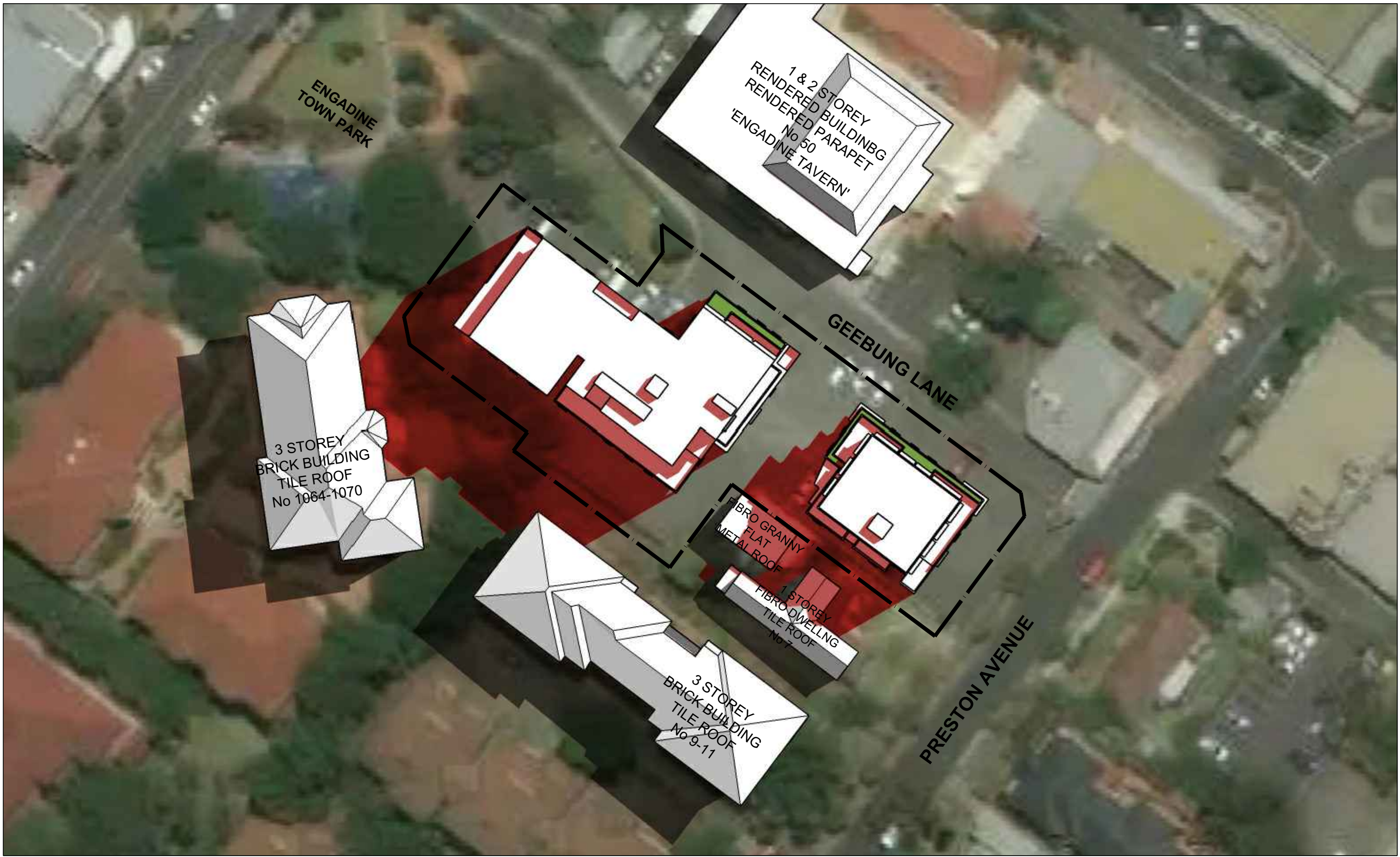
21ST JUNE - 1200



21ST JUNE - 1500

-  SITE BOUNDARY
-  ADDITIONAL SHADOW FROM PROPOSED DEVELOPMENT

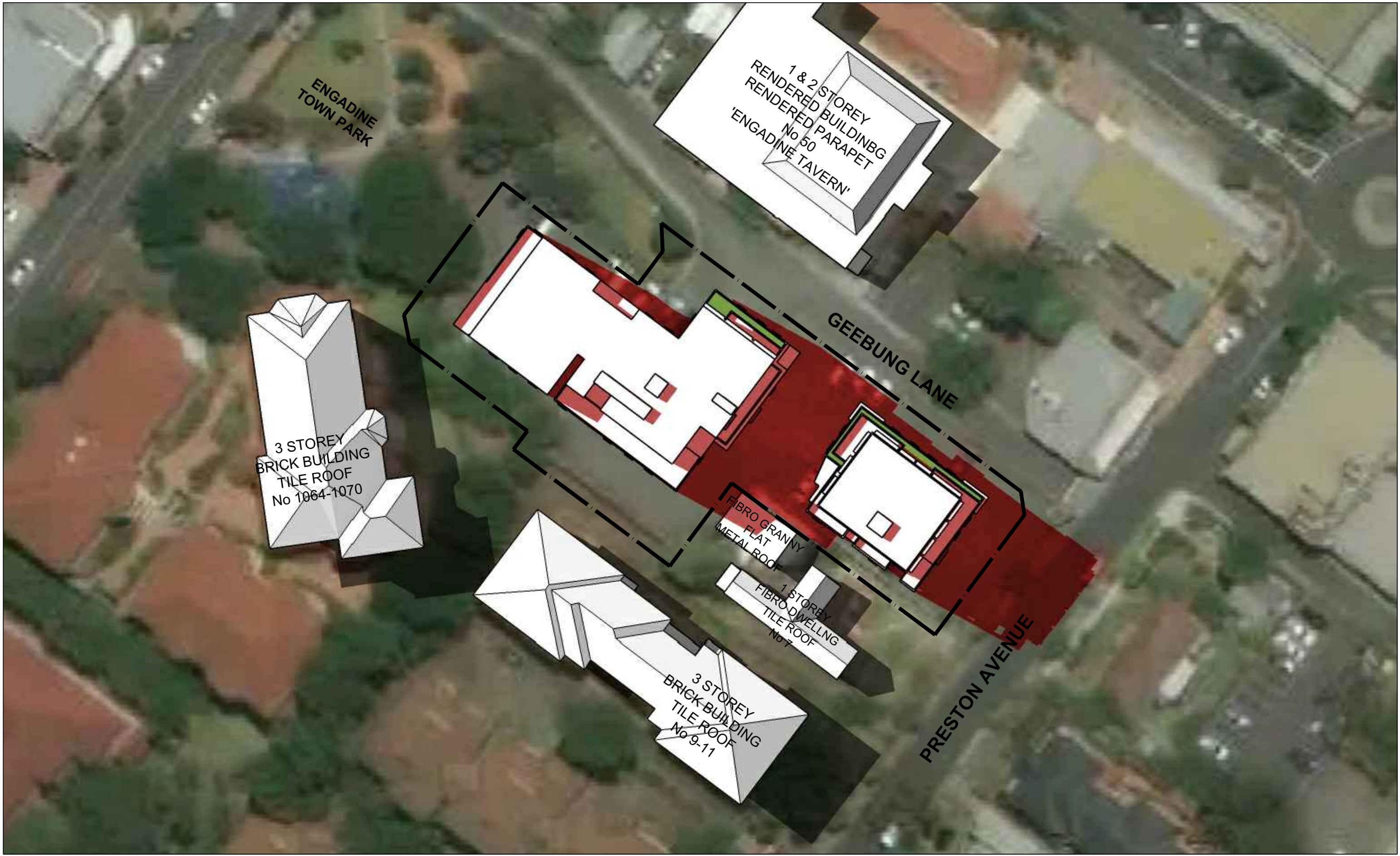
REVISIONS R DATE DESCRIPTION	DA SUBMISSION B 16DEC19 C 11MAR20 BUILDING B REVISED		 0 5 10 15 20 25 40	THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MIJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.		CLIENT  White & Partners		PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE				
	PRELIMINARY NOT FOR CONSTRUCTION					DRAWING SHADOW ANALYSIS-1						
	1805					A610-C	1:500@B1	MC				
	DA											



21ST MARCH - 0900
21ST SEPTEMBER - 0900

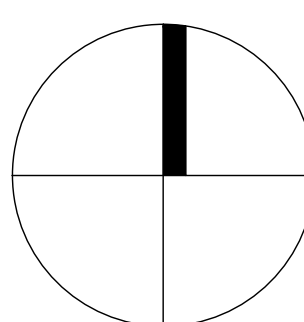




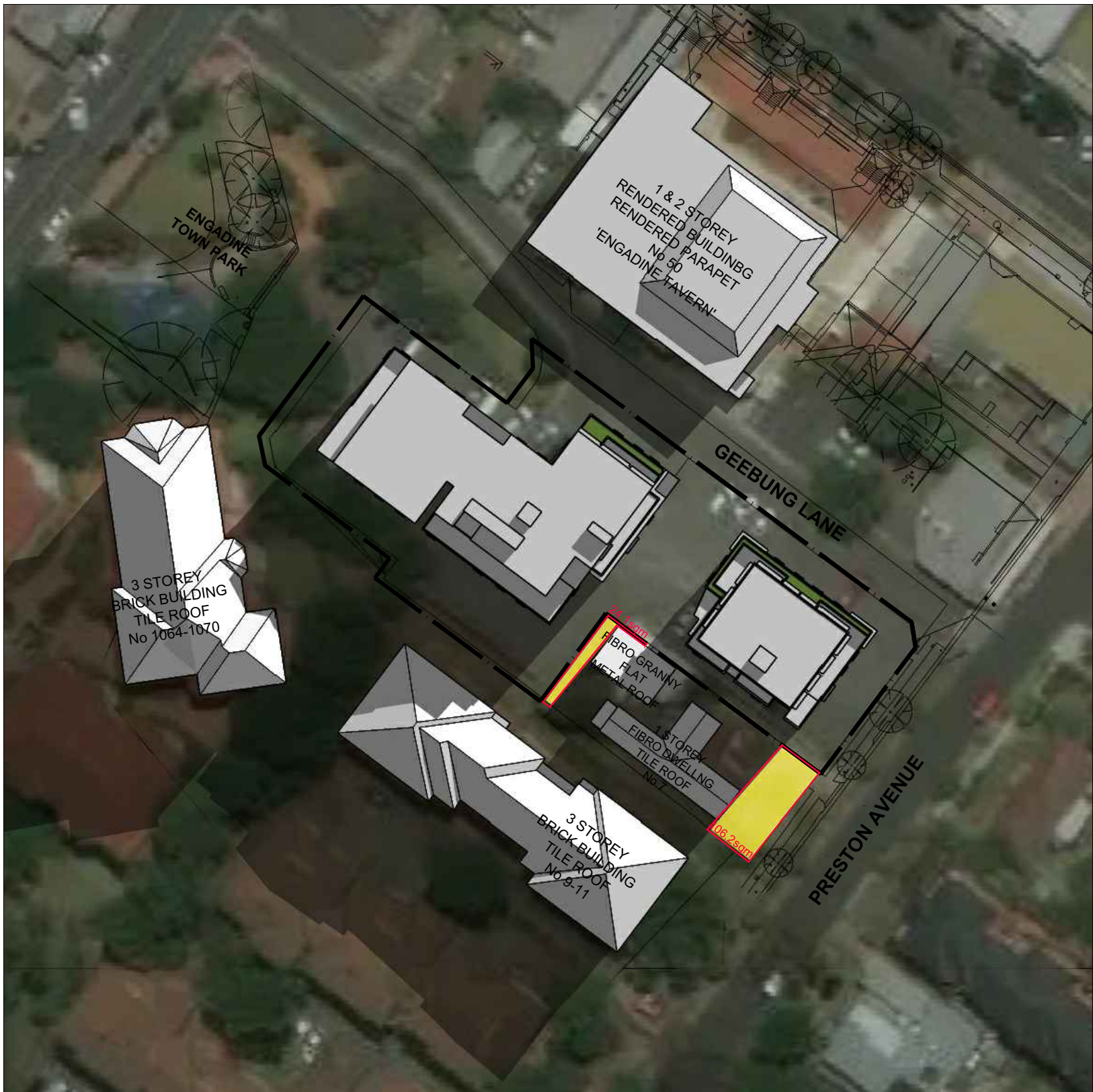
21ST MARCH - 1200
21ST SEPTEMBER - 1200



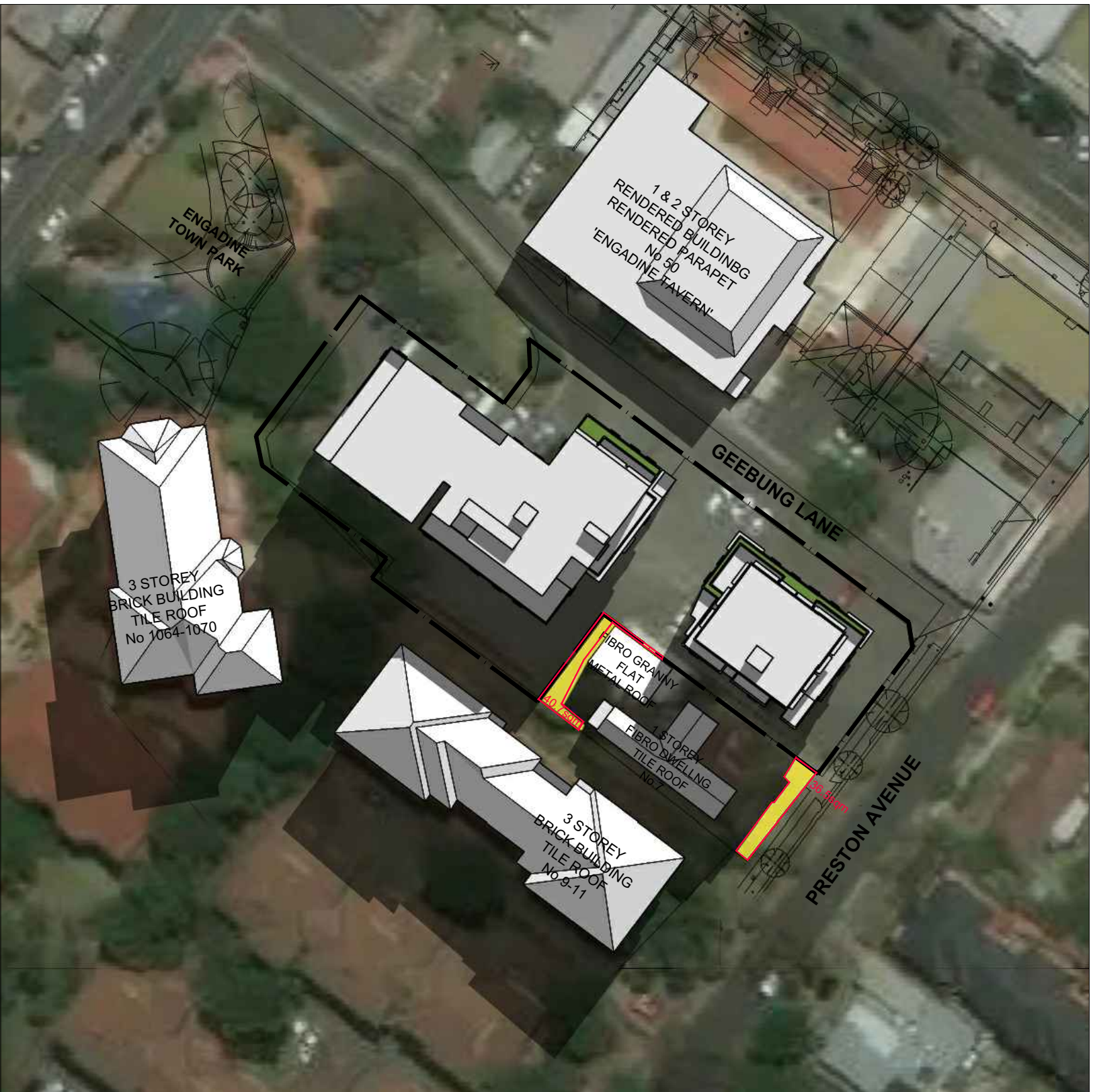
21ST MARCH - 1500
21ST SEPTEMBER - 1500

 SITE BOUNDARY
 ADDITIONAL SHADOW FROM PROPOSED DEVELOPMENT

REVISIONS R DATE DESCRIPTION	DA SUBMISSION B 16DEC19 C 11MAR20		 0 5 10 15 20 25 40	THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MIJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.		CLIENT  White & Partners	PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE						
	BUILDING B REVISED						DRAWING SHADOW ANALYSIS-2						
							1805	A611-C	1:500@B1				
							DA		MC				



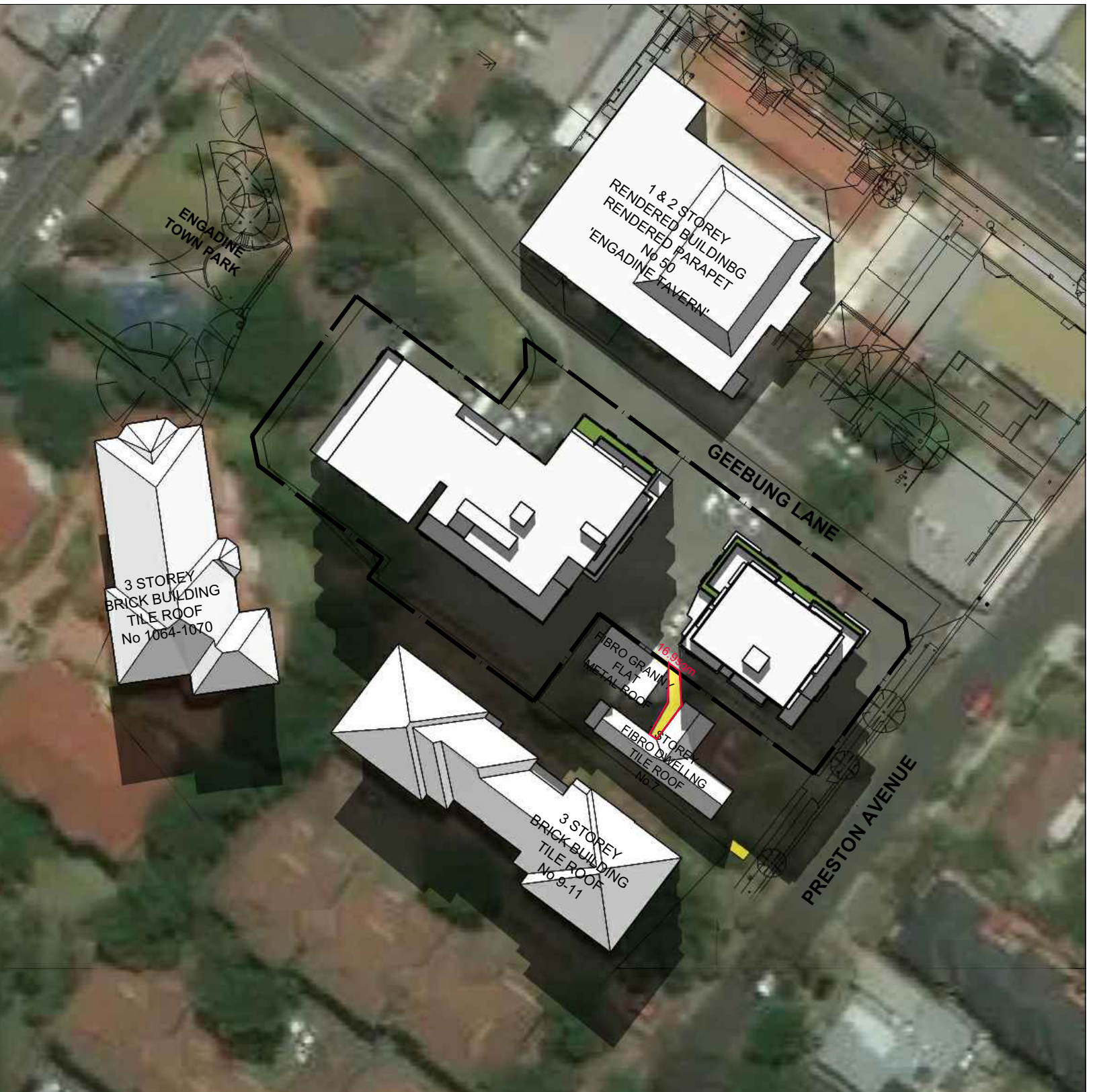
21ST JUNE - 0900



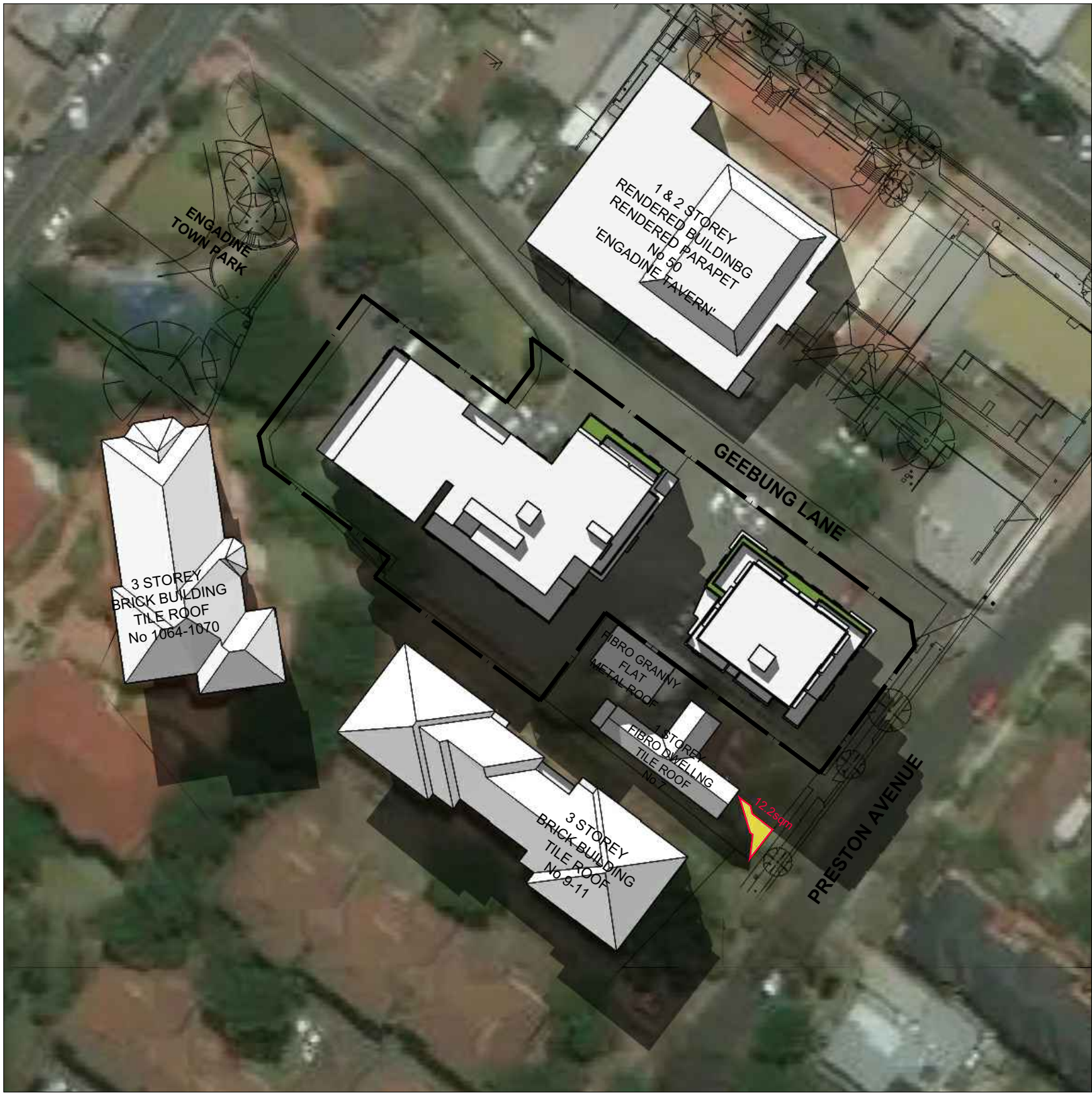
21ST JUNE - 1000



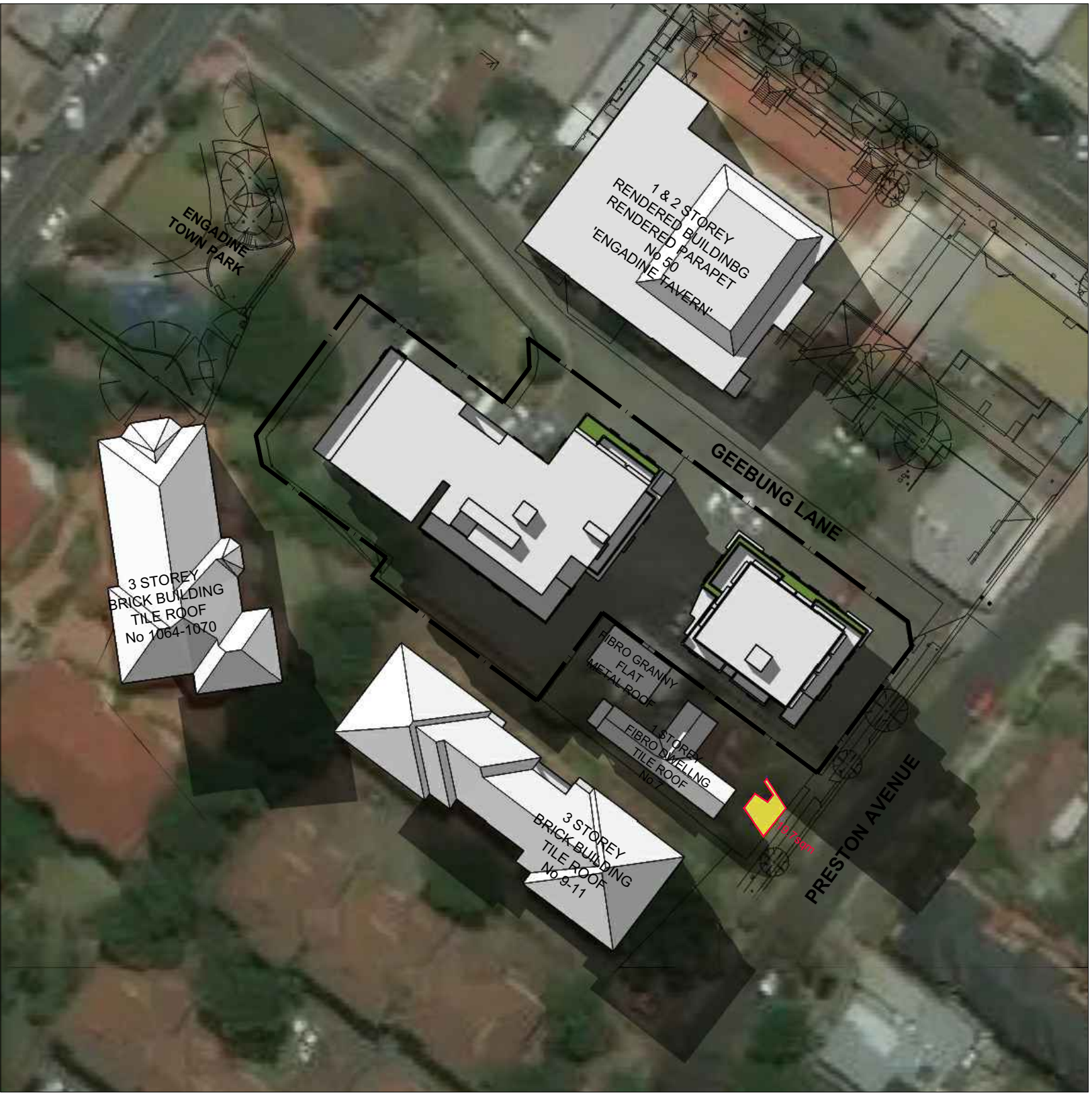
21ST JUNE - 1100



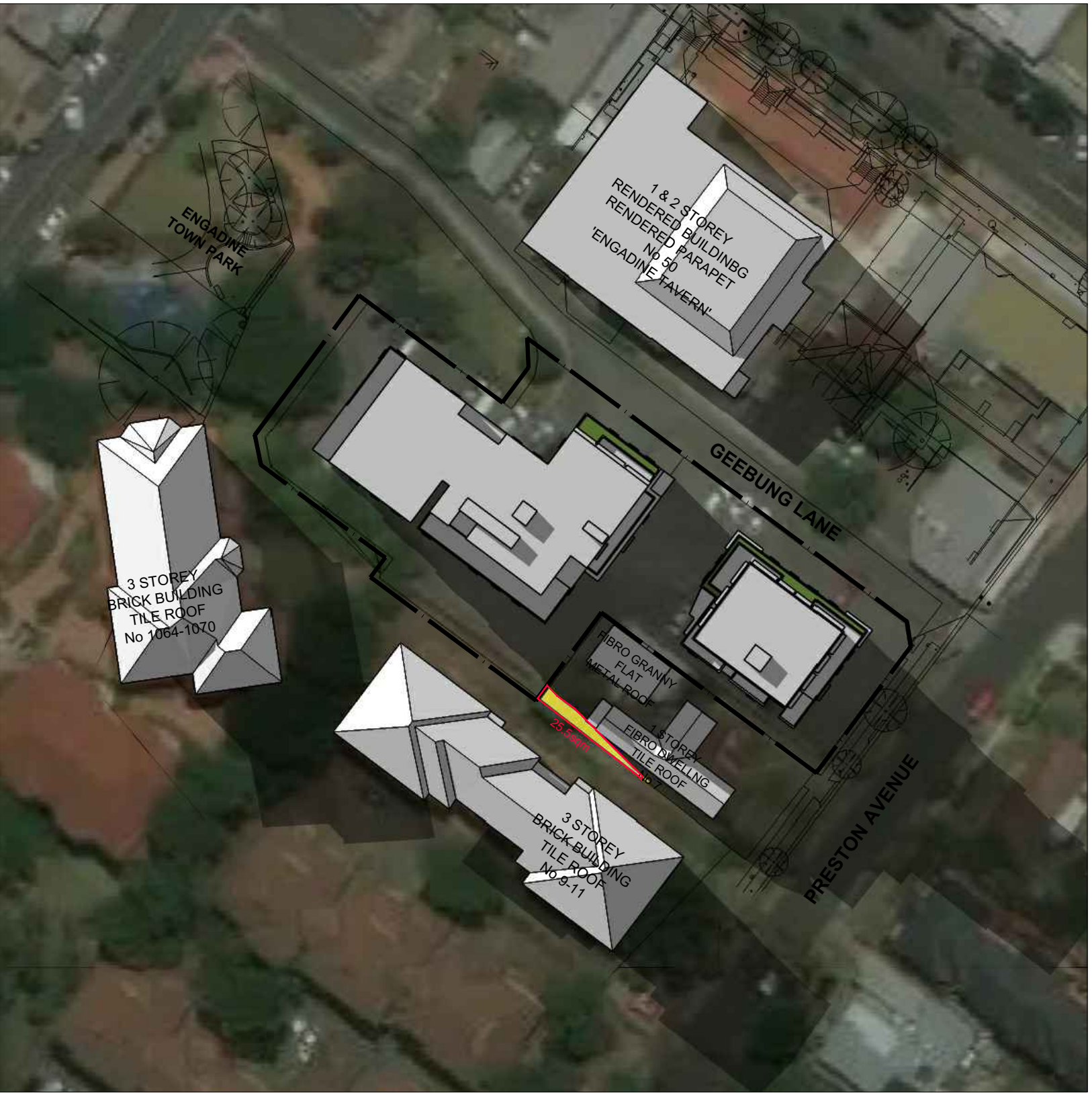
21ST JUNE - 1200



21ST JUNE - 1300

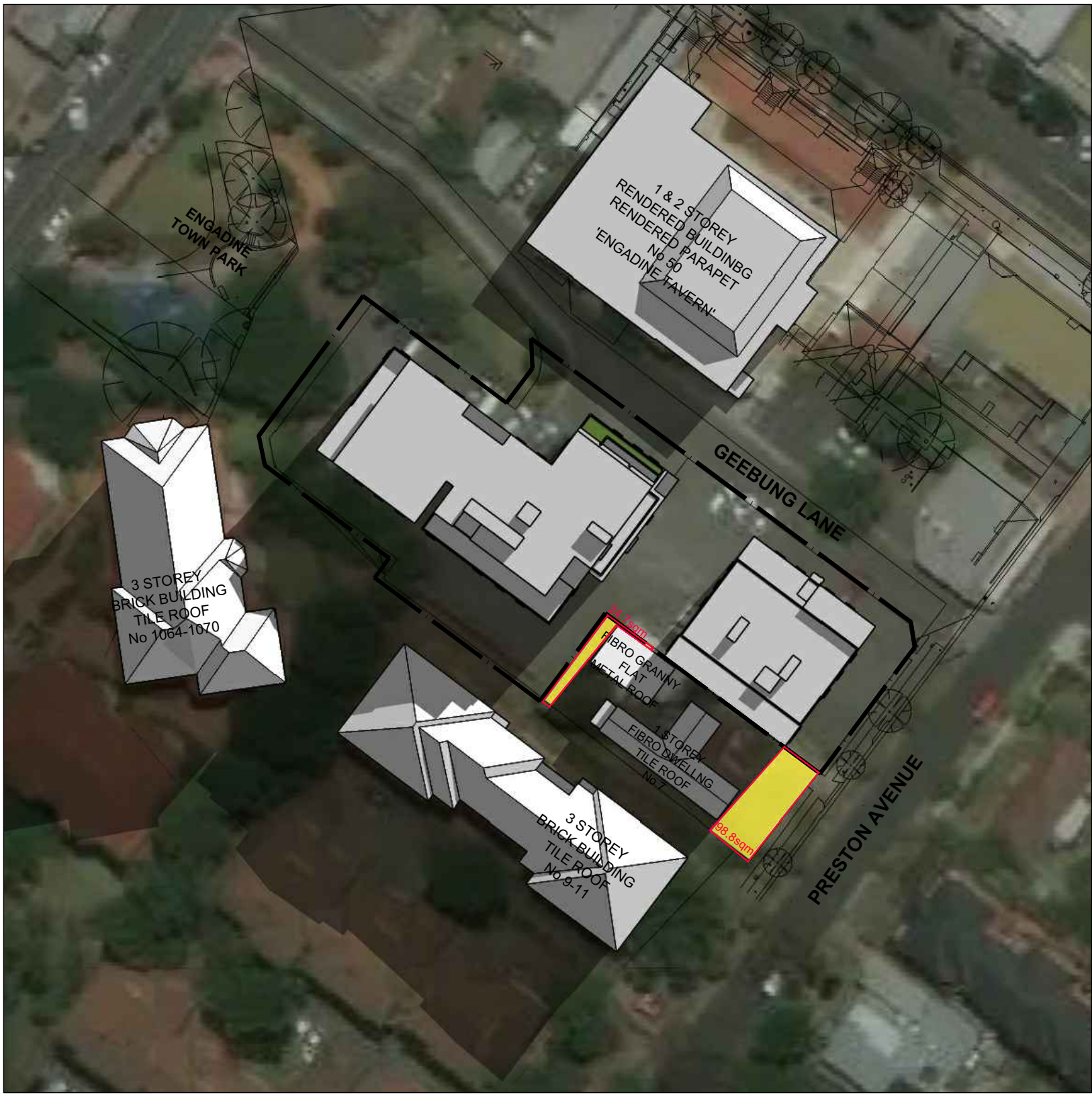


21ST JUNE - 1400



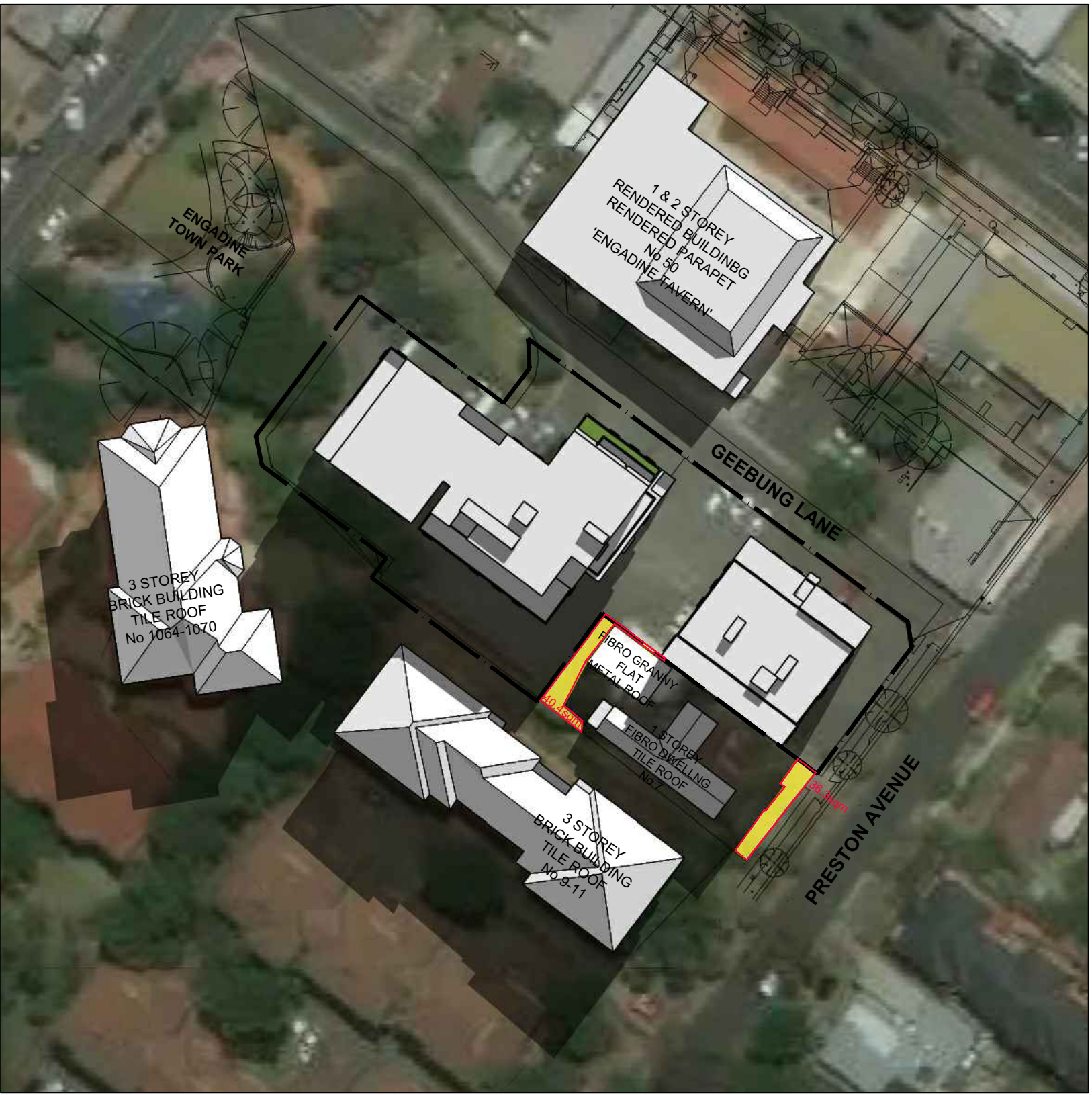
21ST JUNE - 1500

- SITE BOUNDARY
■ SUNSHINE IN THE NO.7 COURTYARD



21ST JUNE - 0900

TOTAL 123.5M²



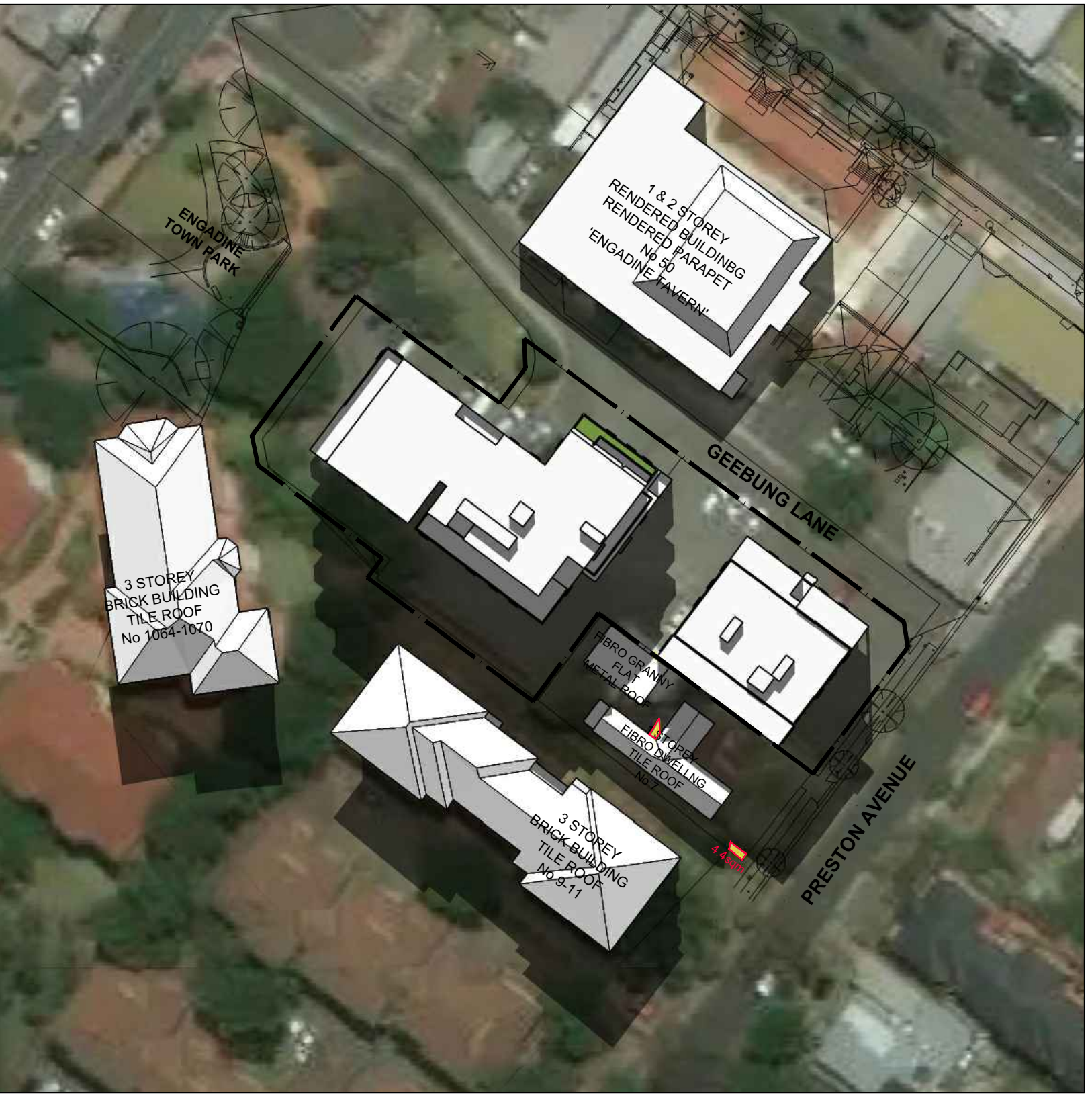
21ST JUNE - 1000

TOTAL 76.7M²



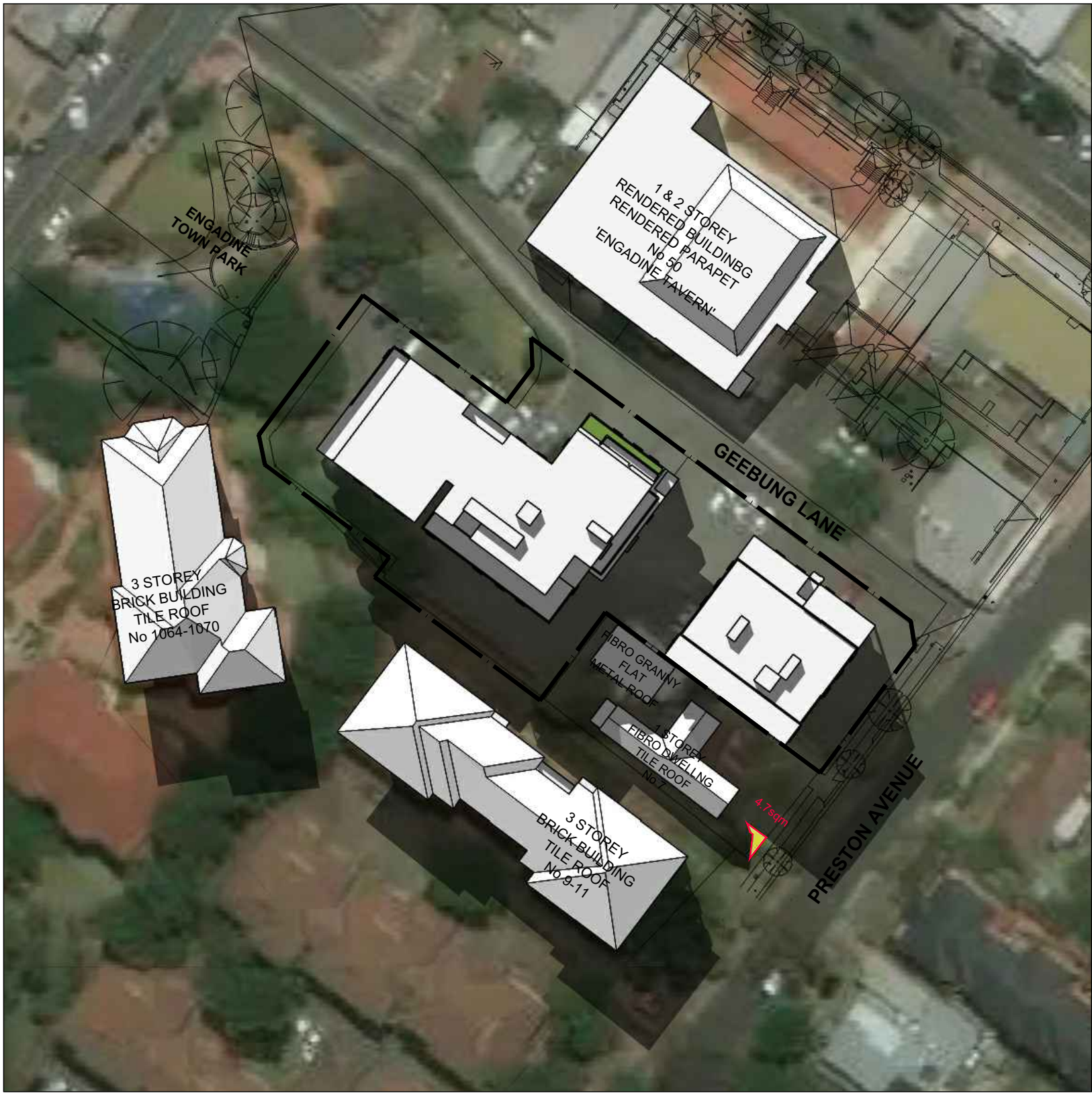
21ST JUNE - 1100

TOTAL 6.2M²



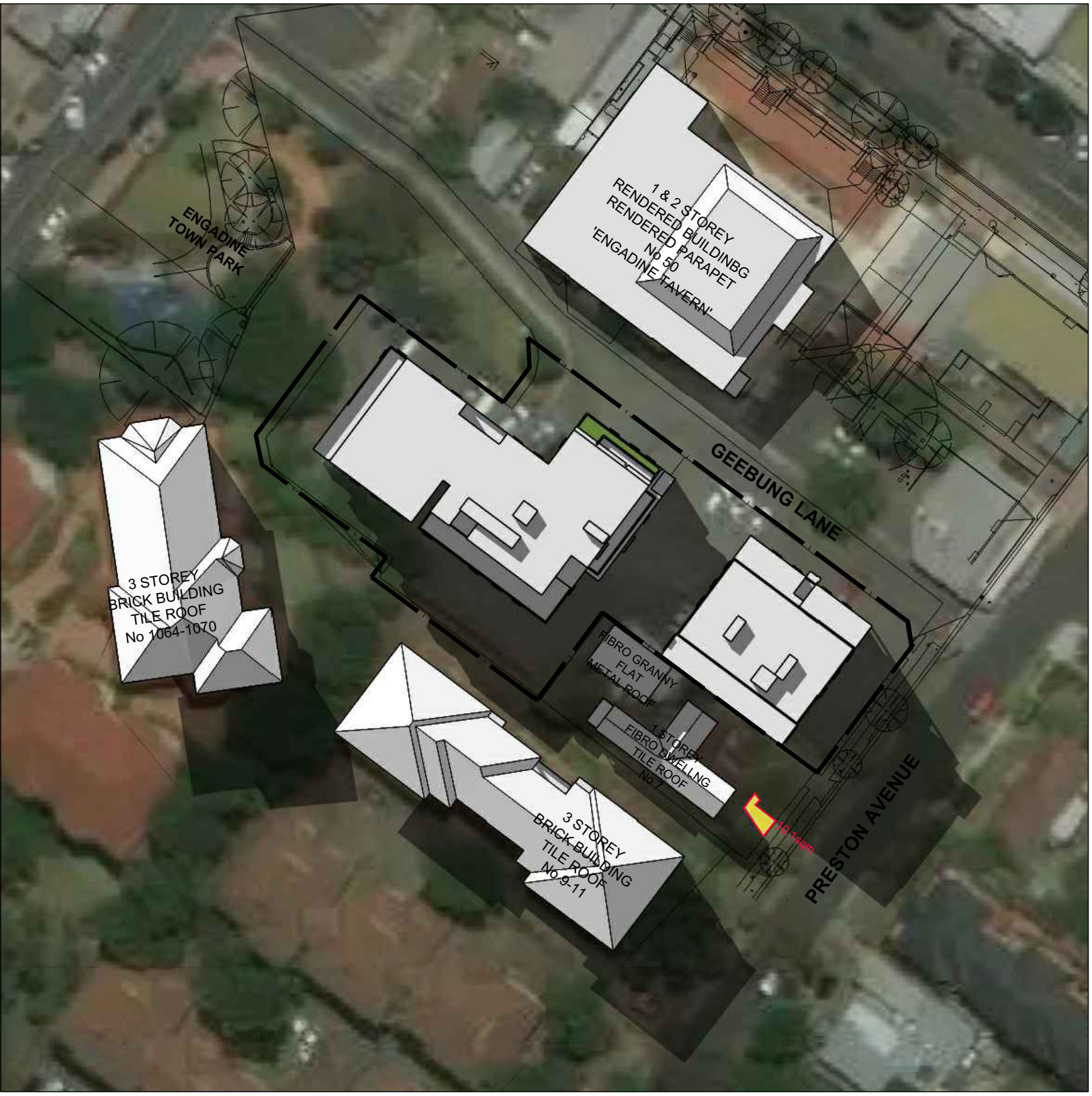
21ST JUNE - 1200

TOTAL 4.4M²



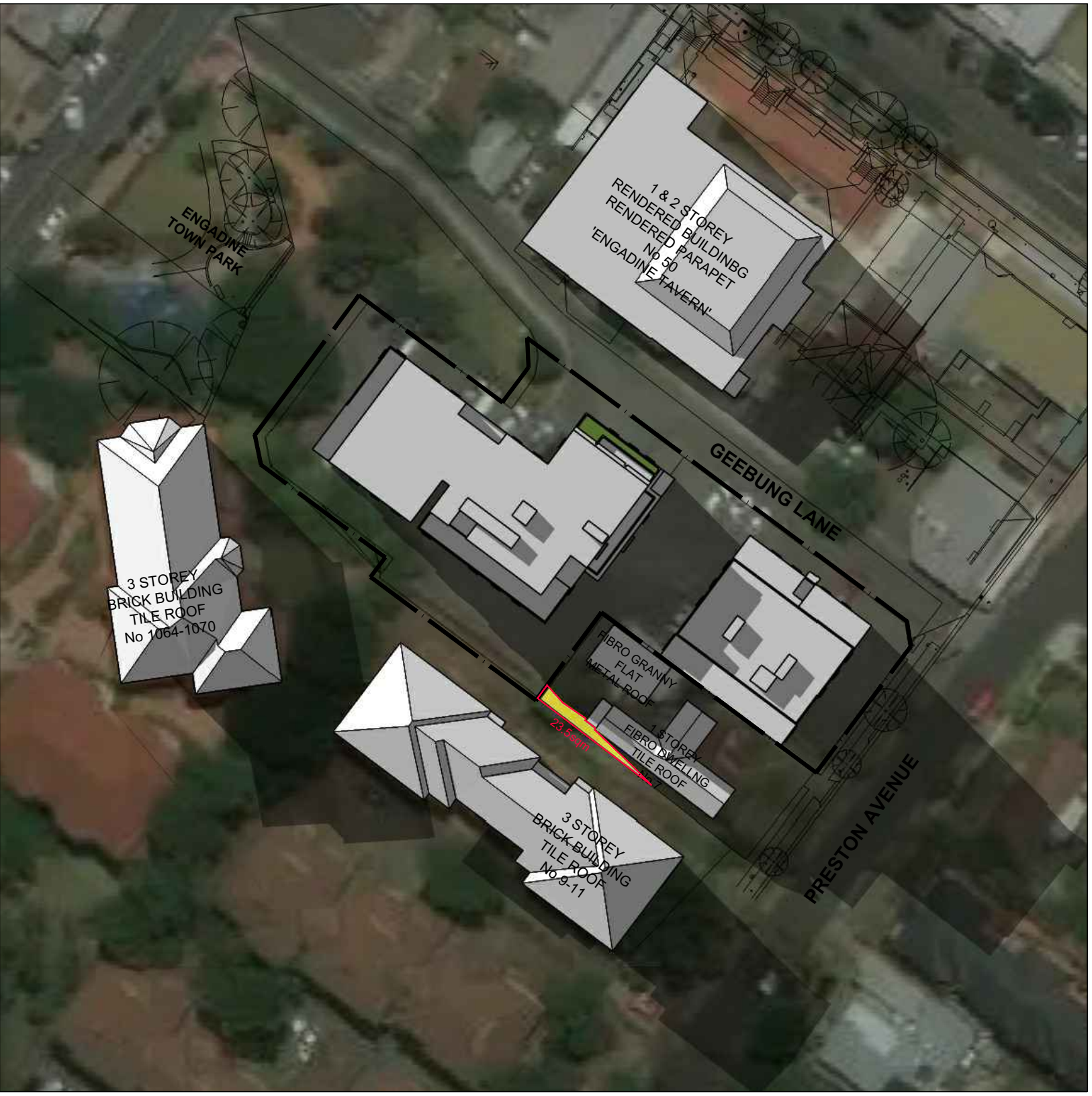
21ST JUNE - 1300

TOTAL 4.7M²



21ST JUNE - 1400

TOTAL 10.1M²






21ST JUNE - 1500

TOTAL 23.5M²

- SITE BOUNDARY
- SUNSHINE IN THE NO.7 COURTYARD

NOTE: ORIGINAL 4 STOREY BUILDING B SHADOW ANALYSIS

REVISIONS R DATE DESCRIPTION	DA SUBMISSION B 16DEC19 C 11MAR20 COUNCIL BUILDING B REVISED				<p>THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MIJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.</p>		CLIENT 		PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE					
							DRAWING SHADOW ANALYSIS-4							
							PRELIMINARY NOT FOR CONSTRUCTION		1805 DA	A613-C MC	1:700@B1			



21ST JUNE - 0900



21ST JUNE - 1000



21ST JUNE - 1100



21ST JUNE - 1200




21ST JUNE - 1300



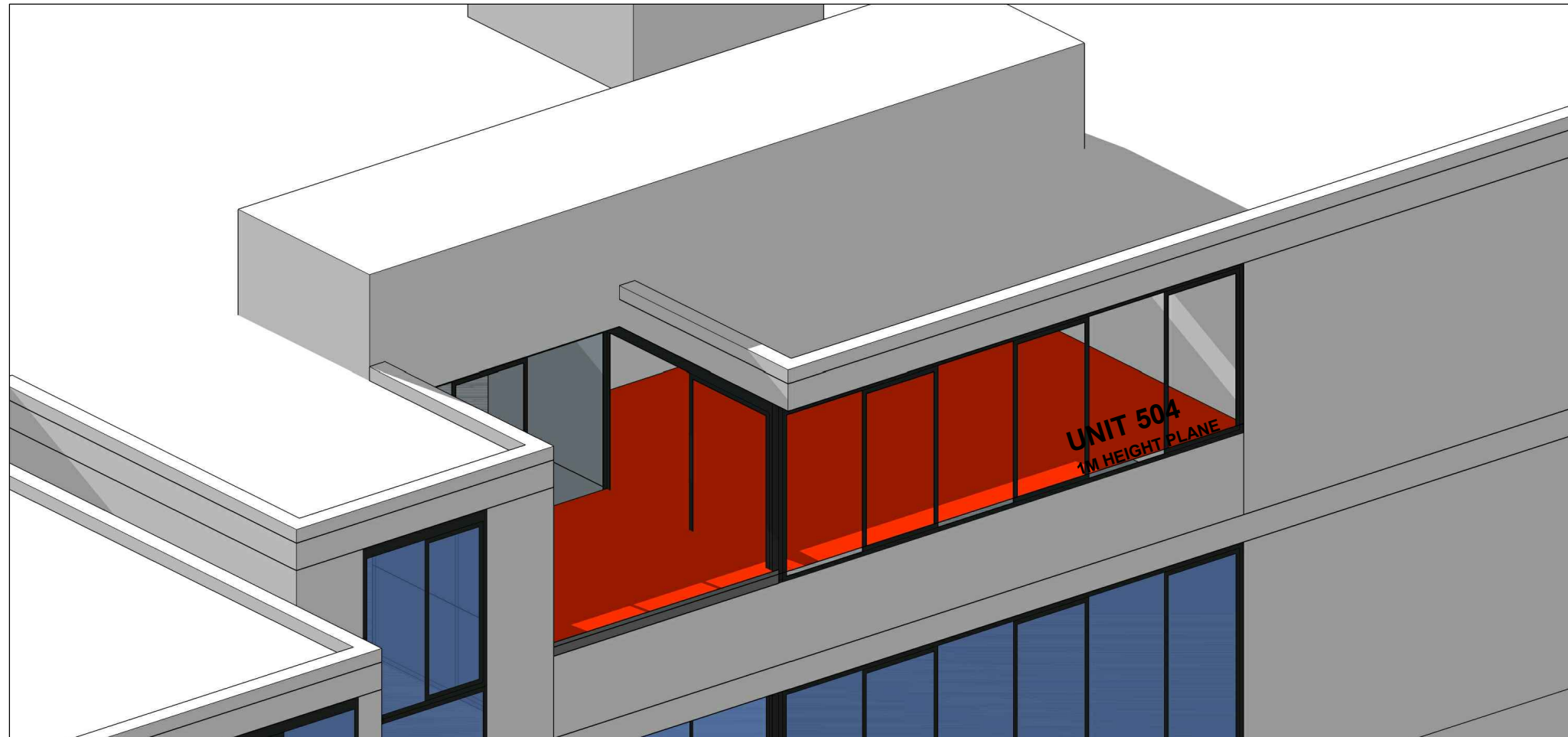
21ST JUNE - 1400



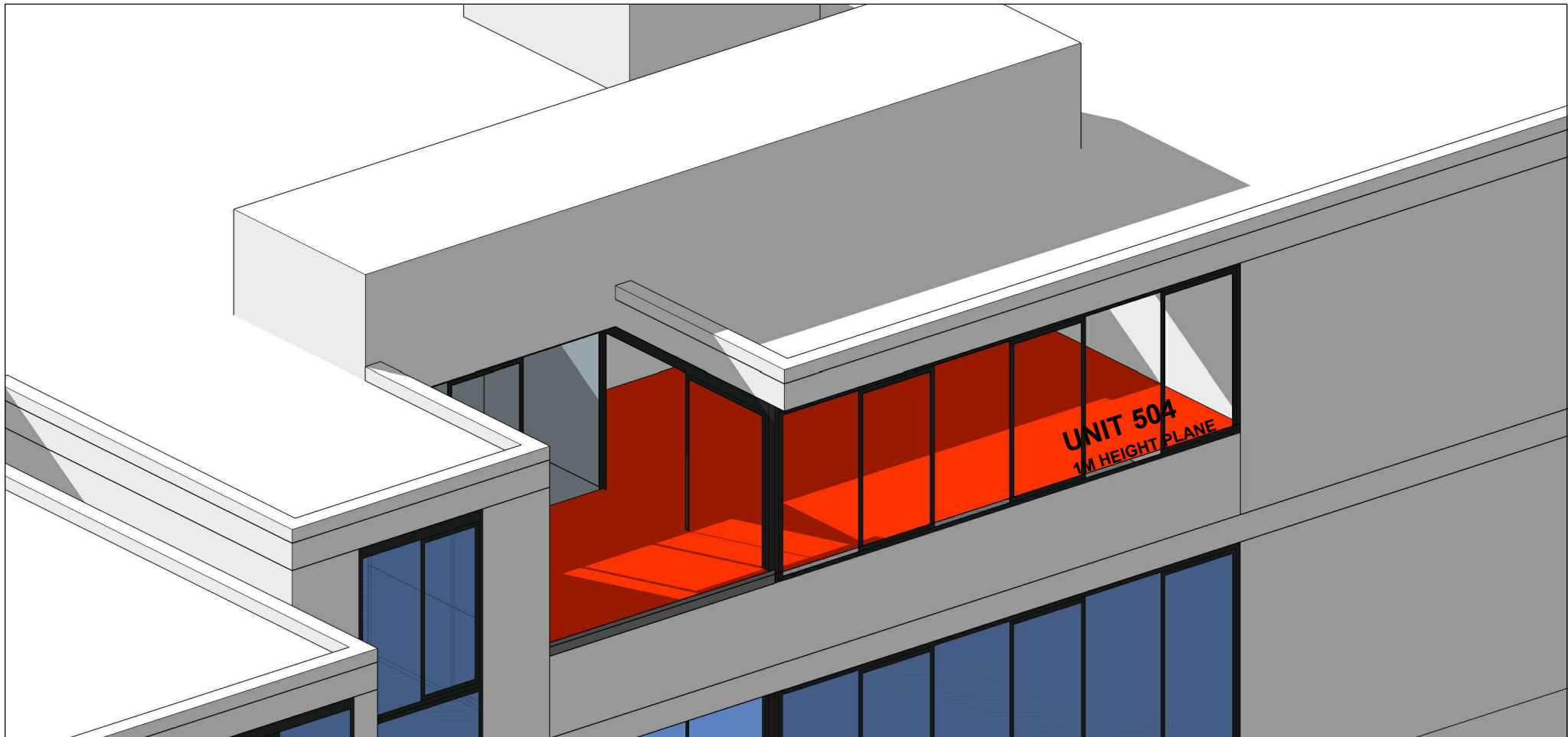
21ST JUNE - 1500

 SUNSHINE IN THE NO.7 COURTYARD
VIEW FROM THE SUN IN PARALLEL PROJECTION

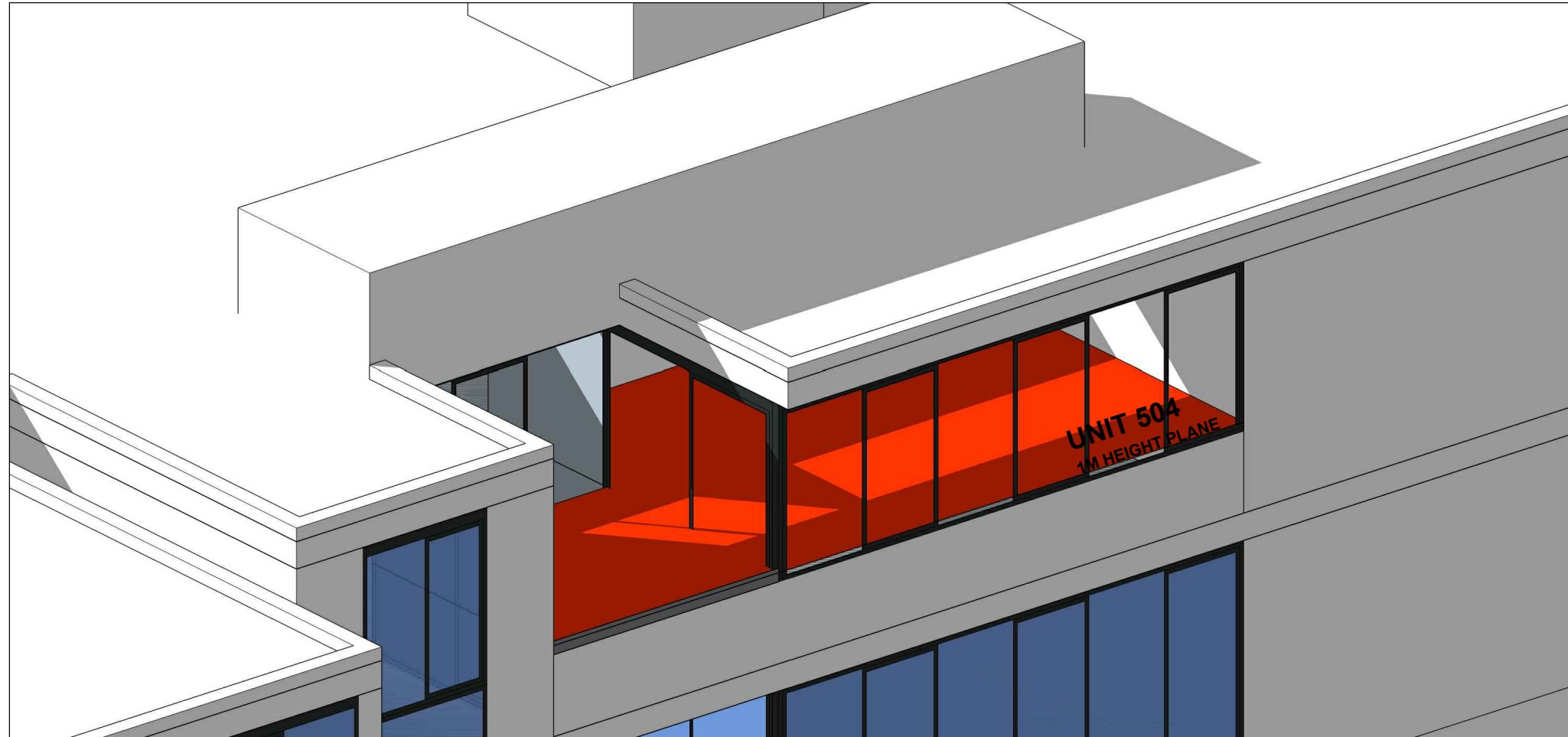
UNIT 504



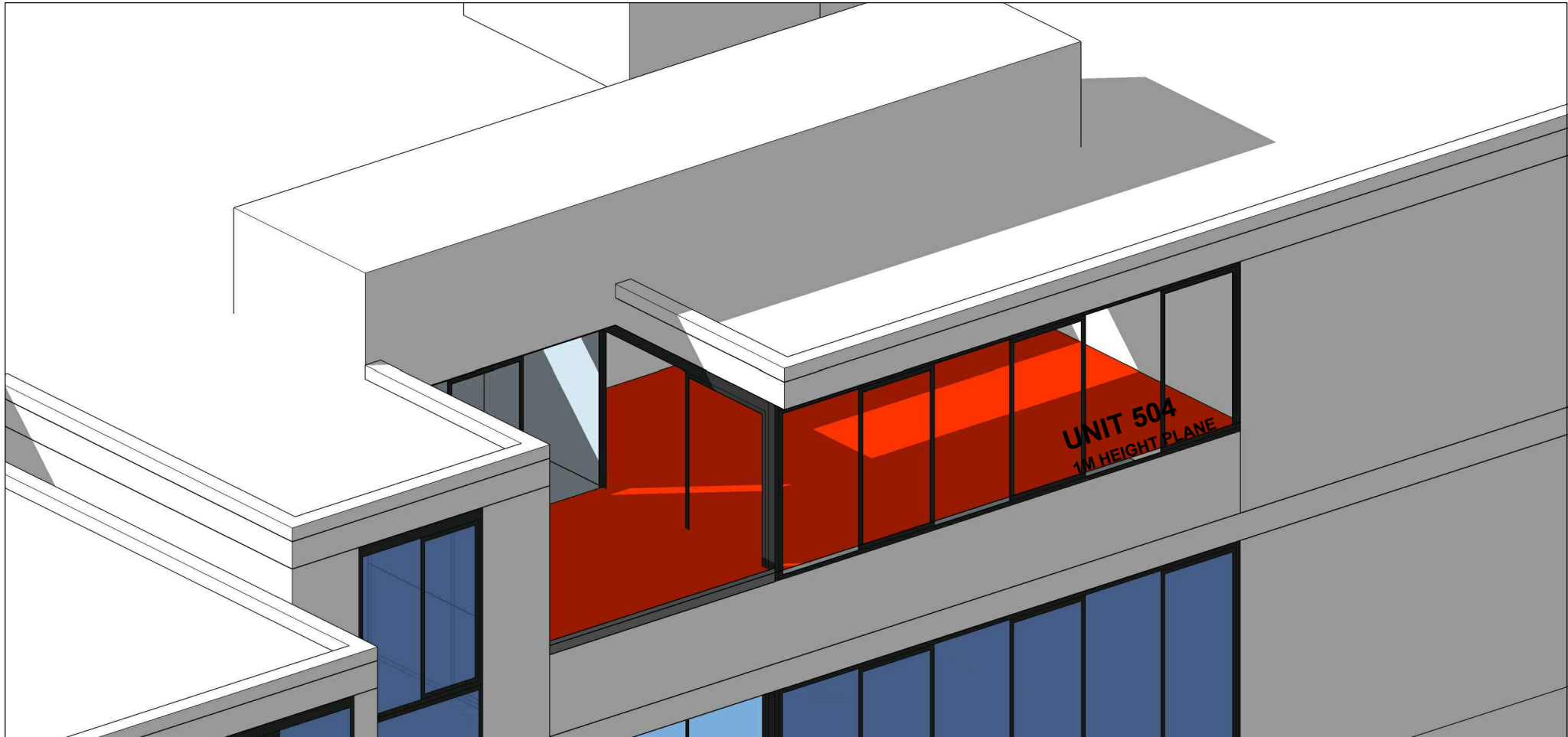
21ST JUNE - 1000



21ST JUNE - 1100



21ST JUNE - 1200




21ST JUNE - 1300

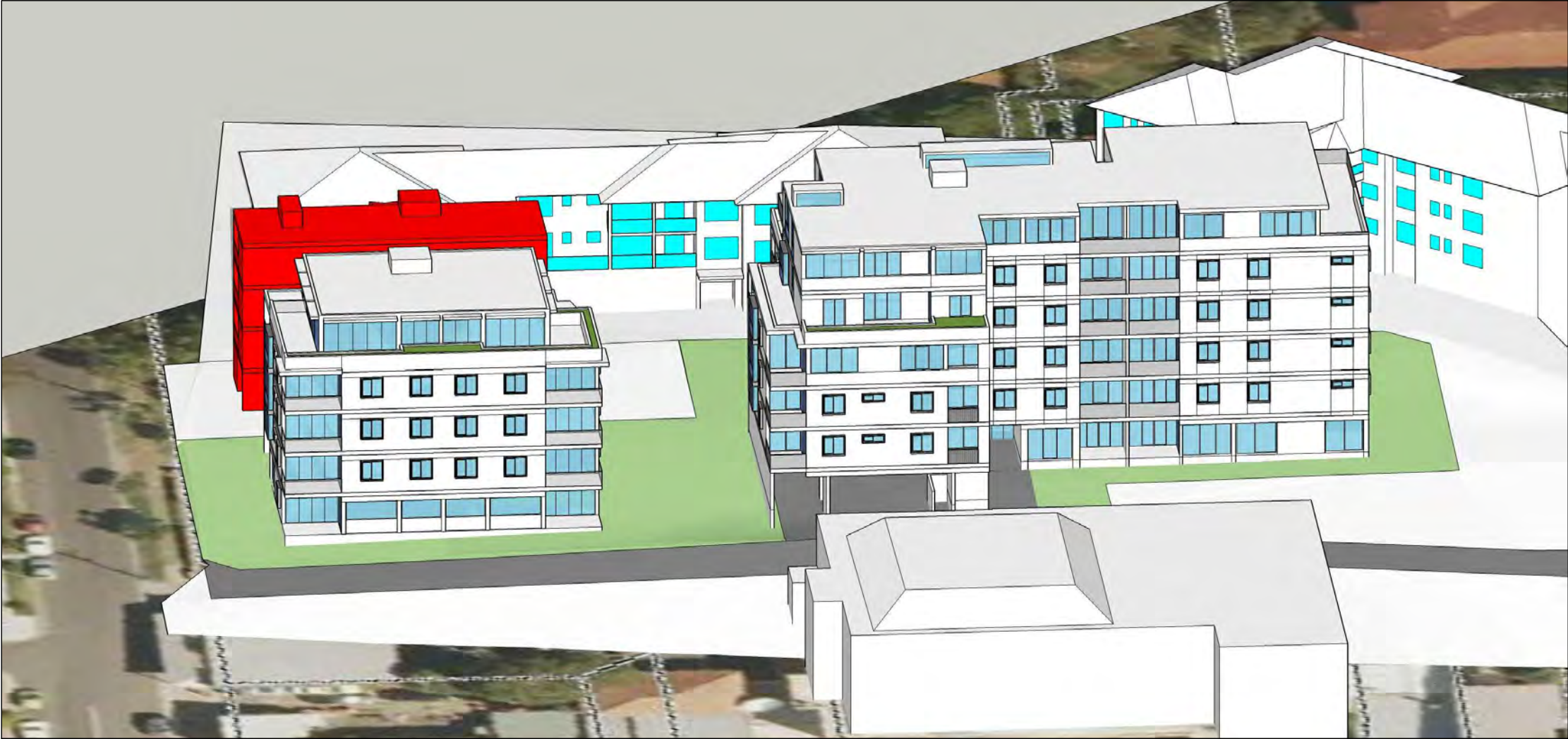


21ST JUNE - 1400



21ST JUNE - 1500

REVISIONS R DATE DESCRIPTION	DA SUBMISSION RESPONSE TO COUNCIL BUILDING B REVISED			<div><div>THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MIJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.</div><div><div>mijollo</div><div>INTERNATIONAL</div></div></div>	<div><div>CLIENT</div><div><div>White & Partners</div></div></div> <div><div>PROJECT</div><div>RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE</div></div>	
	PRELIMINARY NOT FOR CONSTRUCTION					<div>DRAWING</div> <div>SOLAR ANALYSIS-2</div>
	1805	A616-C	NTS			
	DA		MC			



21ST JUNE - 0900



21ST JUNE - 1000



21ST JUNE - 1100



21ST JUNE - 1200




21ST JUNE - 1300


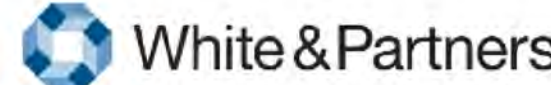


21ST JUNE - 1400



21ST JUNE - 1500

 POTENTIAL FUTURE DEVELOPMENT
VIEW FROM THE SUN IN PARALLEL PROJECTION

REVISIONS R DATE DESCRIPTION	DA SUBMISSION B 16DEC19 C 11MAR20 BUILDING B REVISED		<p>THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF THE AUTHOR. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE EXPRESS AUTHORITY OF: MIJOLLO INTERNATIONAL PTY. LTD. ABN 50 145 079 090 Nominated Architects ARB 7960 + 8927 PO BOX 295 MILSONS POINT NSW 1565 T 9922 1939 F 9922 7522 E office@mijollo.com</p> <p>ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. LARGER SCALE DRAWINGS AND WRITTEN DIMENSIONS TAKE PREFERENCE.</p>		CLIENT 		PROJECT RESIDENTIAL FLAT BUILDING 5 PRESTON AVENUE ENGADINE		
					DRAWING SOLAR ANALYSIS-3				
					PRELIMINARY NOT FOR CONSTRUCTION		1805 DA	A617-C	NTS MC



Proposed Apartment Building 5 Preston Avenue, Engadine NSW

Development Application
06.05.2020
ISSUE F

DRAWING LIST:

- L-01 Coversheet
- L-02 Landscape Concept Plan - Ground Level
- L-03 Landscape Concept Plan - Ground Level
- L-04 Landscape Planting Plan - Ground Level
- L-05 Landscape Sections
- L-06 Landscape Elevation - North
- L-07 Landscape Elevation - South
- L-08 Planting Palette
- L-09 Landscape Details (Typical)
- L-10 Specification and Maintenance Notes (Typical)

CLIENT:



LANDSCAPE ARCHITECT:

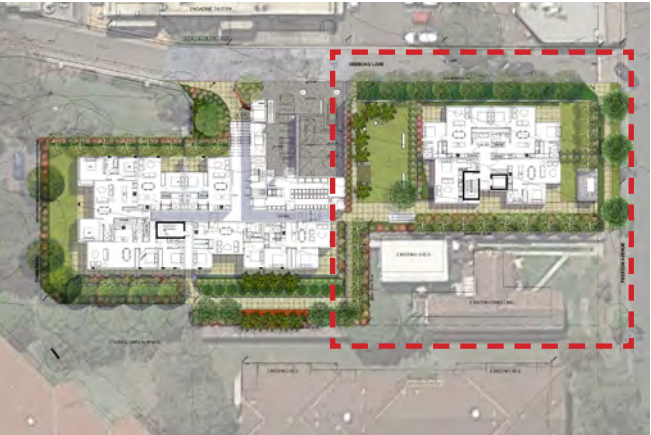


1. Land Swap: embellishment funded by Applicant to be undertaken by Council. (Refer to planning report prepared by Ethos Urban)
2. Landscape design prepared in accordance with:
 - a. DCP Chapter 20: B3 Commercial Core – Engadine with particular reference to chapter 3 (Landscape)
 - b. NSW Apartment Design Guidelines (ADG) with particular reference to chapters 3C, 3D, 3E, 4O and 4P.



1	Loading Area (Concrete)	—	—	—	Site Boundary
2	Residential Entry (Paved)	—	—	—	Basement Below
3	Feature Palm Planting				
4	Small Pleached Trees				
5	Geebung Lane Retained				
6	Adjoining Council Park				
7	Large Canopy Trees (10-15m Ht)				
8	Small Canopy Trees (5m Ht)				
9	Screening Hedge (3m Ht)				
10	Turf Over Natural Ground				
11	Private Courtyard (Paved)				
12	Palm Grove (Eg. <i>Howea fosteriana</i>)				
13	Egress Path				
14	Summer communal open space area (Paving with Bench Seat)				
15	Seats				
16	Feature Flowering Tree (Eg. <i>Magnolia</i> sp.)				
17	500 x 500mm Sandstone Cube Seats				
18	500 x 500 x 1000mm Sandstone Log Seats				
19	Activity Lawn				
20	Large Native Trees (Eg. <i>Eucalyptus</i> sp.)				
21	Street Trees to Council's specification				
22	Footpath to Council's specification				
23	Substation location with screening fence / walls				
24	Adjoining property				
25	BBQ Pit				
26	Pergola				
27	Egress Path				
28	Stairs from basement carpark below				
29	Large Trees in Adjoining Park (Existing)				
30	Entry Planter with Feature Tree and Seat				
31	Surface Treatment to laneway to mark building and carpark entries				

LANDSCAPE CONCEPT PLAN - GROUND LEVEL



Key Plan

- Key Legend
- | | |
|---|--|
| 1 Loading Area | 32 Extent of Basement Below |
| 2 Residential Entry | 33 Batter Landscape from Wall to Laneway (1:4) |
| 3 Feature Palm Planting | 34 Streetscape Paving to Council's Specification |
| 4 Small Pleached Trees | 35 1800mm HT Fence on Retaining Wall |
| 5 Geebung Lane | 36 400mm HT Grass Mound |
| 6 Adjoining Council Park | |
| 7 Large Canopy Trees (10-15m Ht) | |
| 8 Small Canopy Trees (5m Ht) | |
| 9 Screening Hedge (3m Ht) | |
| 10 Turf Over Natural Ground | |
| 11 Private Courtyard (Paved) | |
| 12 Palm Grove (Eg. Howea fosteriana) on mound | |
| 13 Egress Path | |
| 14 Summer communal open space area (Paving with 1.5 x 1.5 timber square table seats | |
| 15 Seats | |
| 16 Feature Flowering Tree (Eg. Magnolia sp.) | |
| 17 500 x 500mm Sandstone Cube Seats | |
| 18 500 x 500 x 1200mm Sandstone Log Seats | |
| 19 Communal Space (Turf over slab) | |
| 20 Large Native Trees (Eg. Eucalyptus sp.) | |
| 21 Street Trees to Council's specification | |
| 22 Footpath to Council's specification | |
| 23 Substation location with screening fence / walls | |
| 24 Adjoining property | |
| 25 BBQ | |
| 26 Pergola | |
| 27 Egress Path | |
| 28 Stairs from basement carpark below | |
| 29 Large Trees in Adjoining Park | |
| 30 Entry Planter with Feature Tree and Seat | |
| 31 Surface Treatment to laneway to mark building and carpark entries | |


DESIGN CLARIFICATIONS:

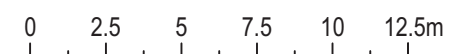
1. Land Swap: embellishment funded by Applicant to be undertaken by Council. (Refer to planning report prepared by Ethos Urban)
2. Landscape design prepared in accordance with:
- a. DCP Chapter 20: B3 Commercial Core – Engadine with particular reference to chapter 3 (Landscape)
- b. NSW Apartment Design Guidelines (ADG) with particular reference to chapters 3C, 3D, 3E, 4O and 4P.



LANDSCAPE PLANTING PLAN



PROJECT	CLIENT	PROJECT NO.	PURPOSE	SCALE	REVISION	DATE	DRAWN	CHECKED	PAGE
PROPOSED APARTMENT BUILDING P4 Sydney South Report Appendix (PPSSSH-3) - 15 July 2020 5 PRESTON AVENUE, ENGADINE NSW	 White & Partners	H8-18034	DA SUBMISSION	1:250 @ A3	F	06.05.2020	KM	DV	L04



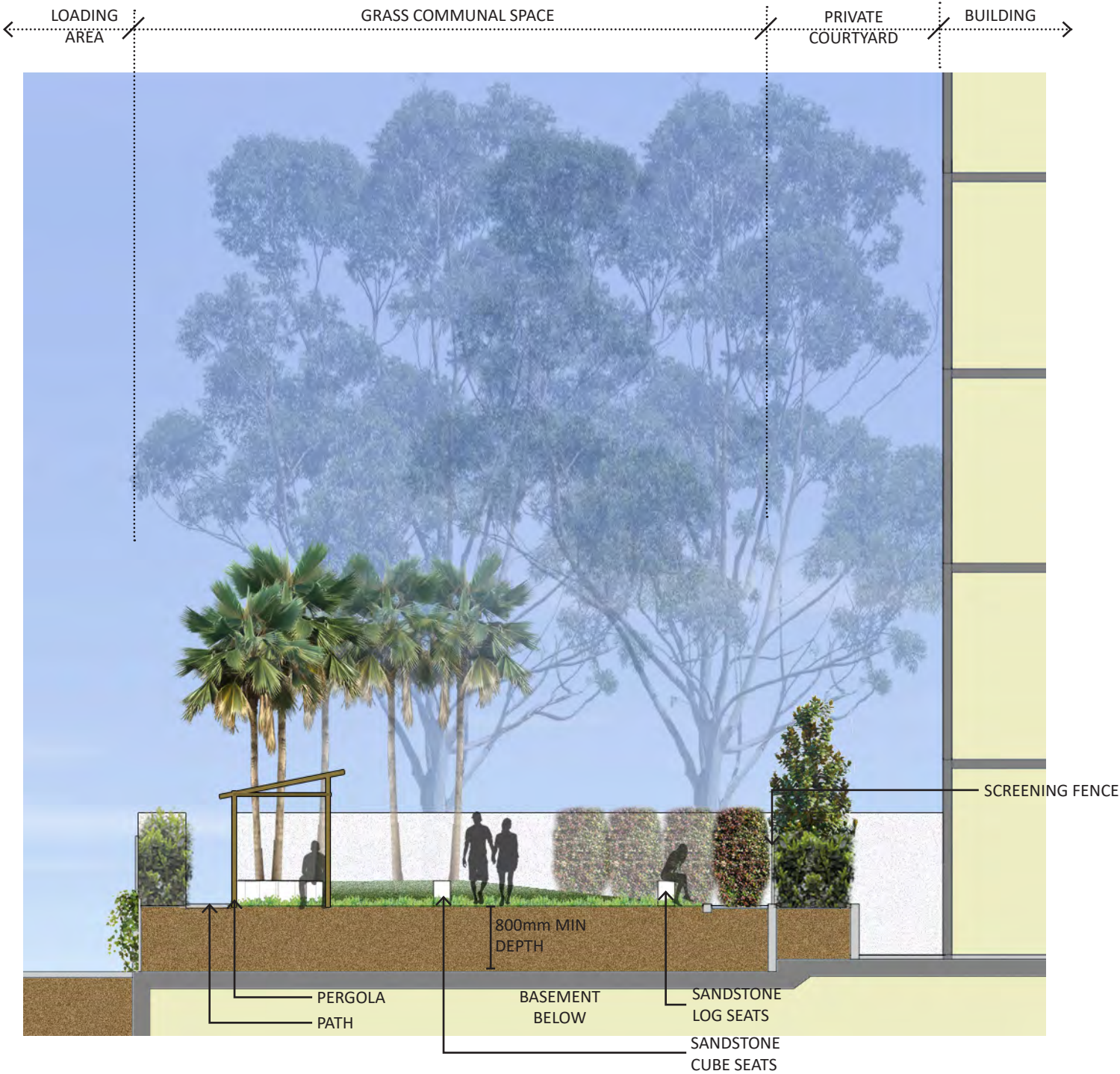
SCALE 1:250 AT A3

HABIT8

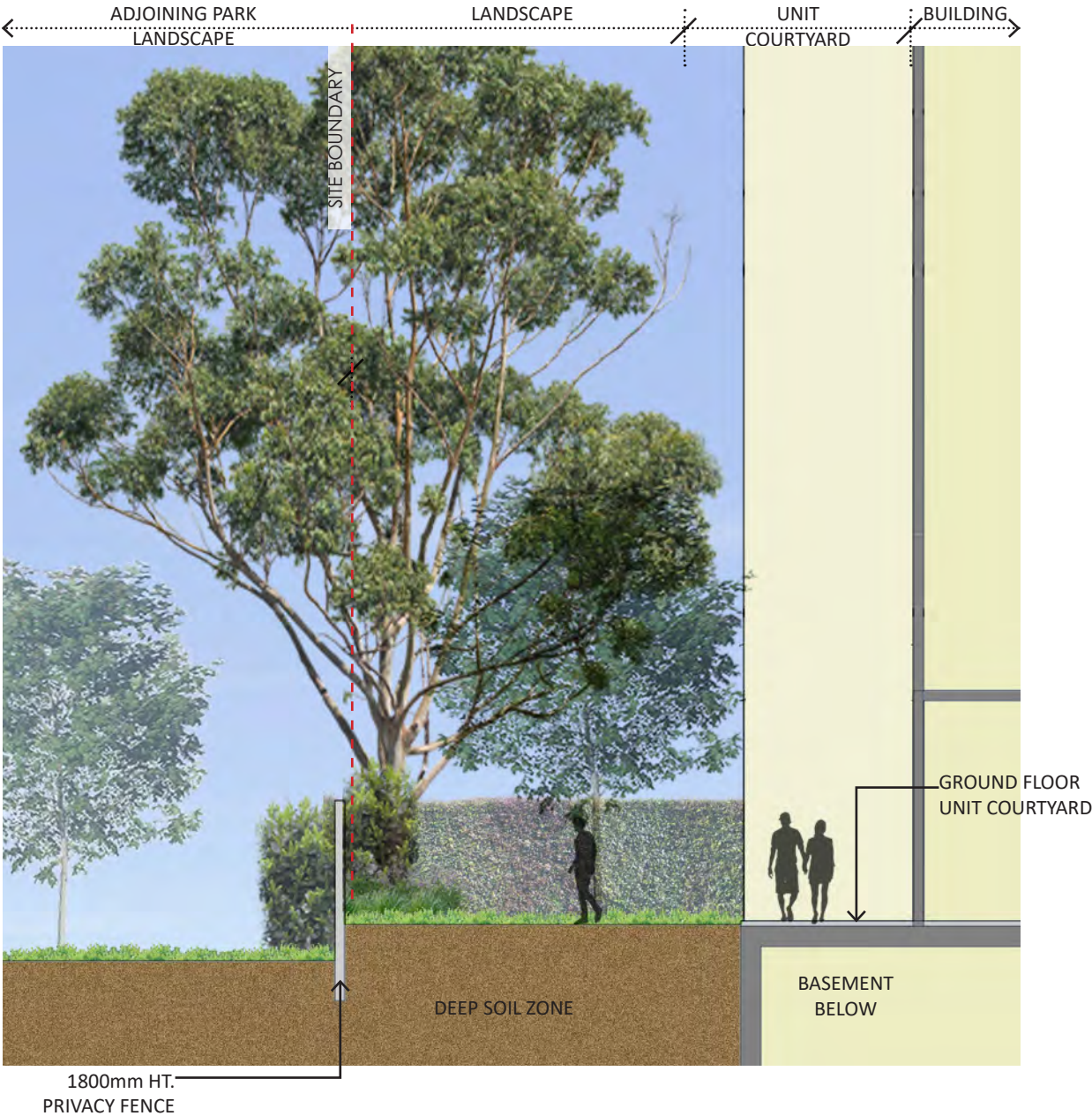
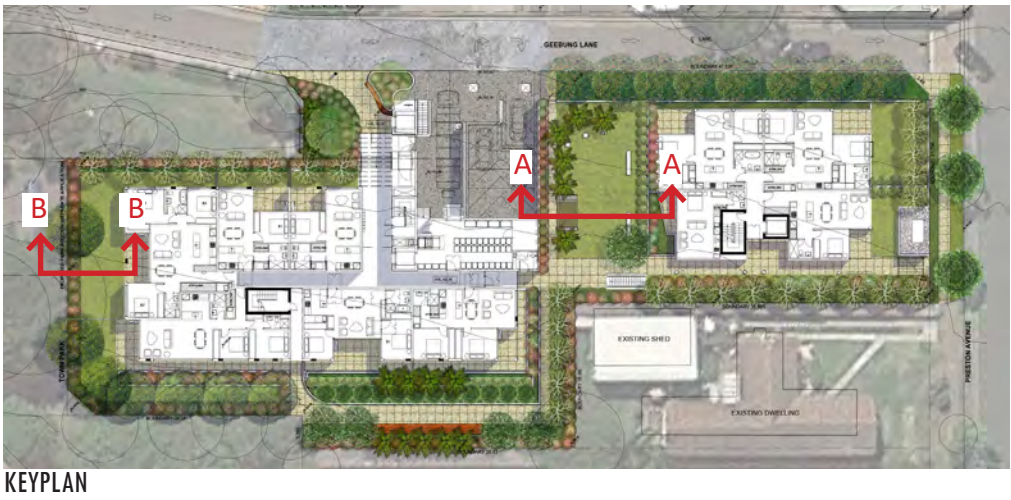
Landscape Architecture & Urbanism

Mail: PO Box 1717 Strawberry Hills NSW 2010
Offices: Sydney Byron Bay Queensland Asia
Head Office: 02 9360 7771
www.habit8.com.au

LANDSCAPE SECTIONS



SECTION A-A
SCALE: 1:100 @ A3



SECTION B-B
SCALE 1:100 @ A3

LANDSCAPE ELEVATIONS



 NORTH ELEVATION
SCALE 1:250 @ A3

LANDSCAPE ELEVATION



 SOUTH ELEVATION
SCALE 1:250 @ A3

PLANTING PALETTE

PLANT SCHEDULE

TREES + PALMS (100L POT SIZE - MIN)

LA	Livistona australis	Cabbage-tree palm
CO	Cyathea cooperi	Tree fern
CA	Cupaniopsis anacardioides	Tuckeroo
MEX	Magnolia 'Exmouth'	Magnolia
WFL	Waterhousea floribunda	Weeping lily pily
PL	Plumeria rubra	Frangipani
HF	Howea forsteriana	Kentia Palm
EH	Eucalyptus haemastoma	Scribbly Gum
AC	Angophora costata	Smooth-barked Apple
BS	Banksia serrata	Old Man Banksia
ER	Elaeocarpus reticulatus	Blueberry Ash

SHRUBS (1/m2 - 200mm POT SIZE)

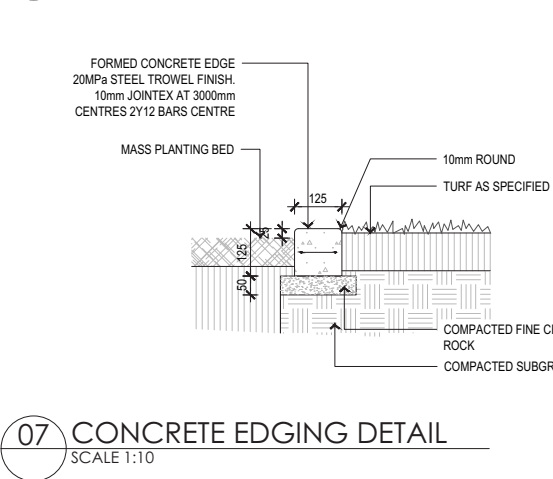
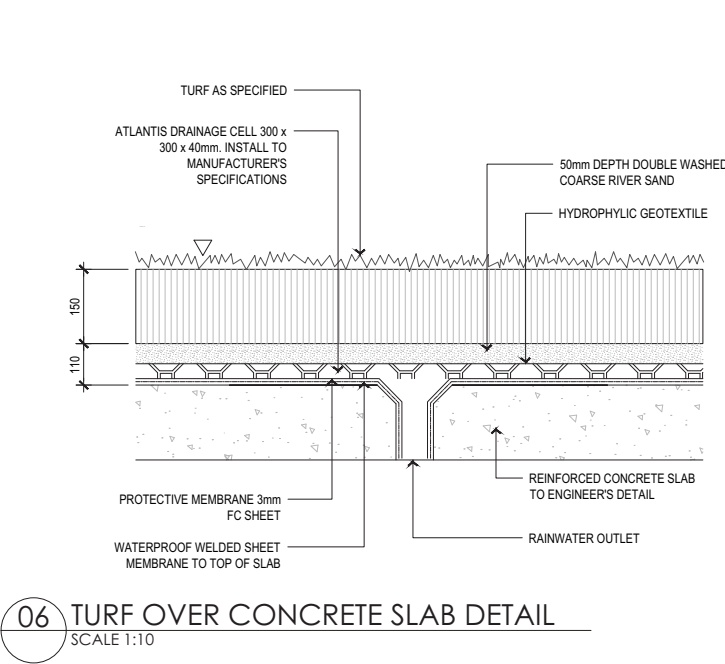
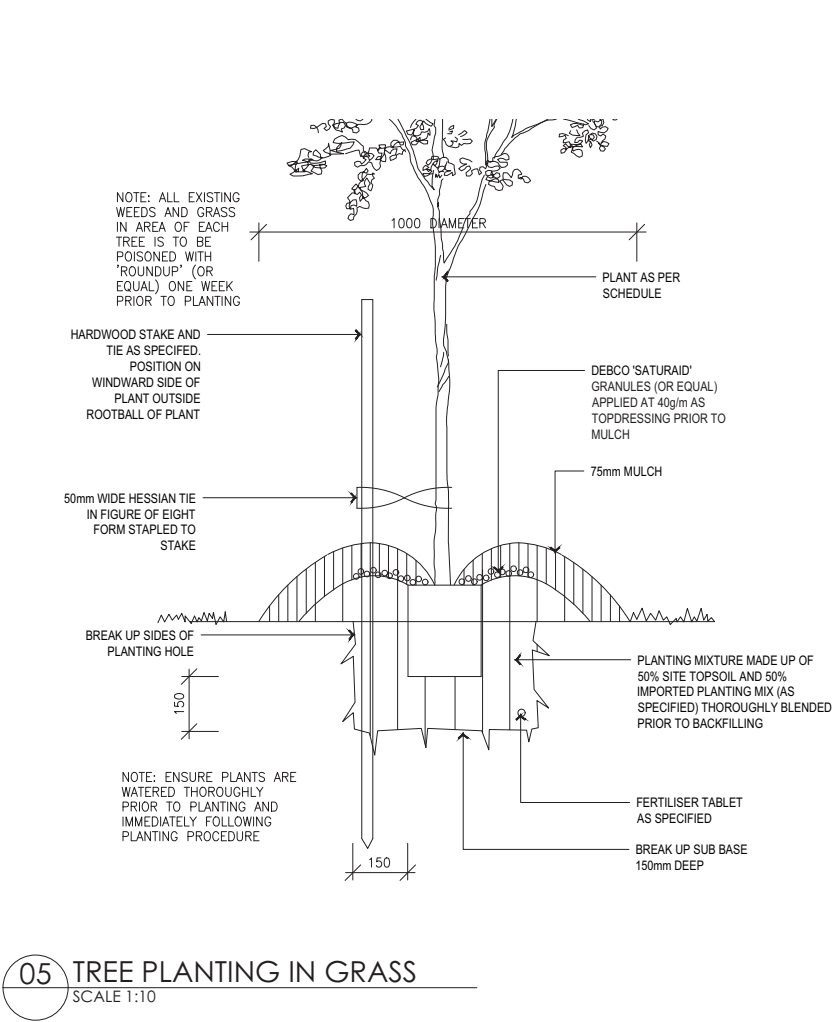
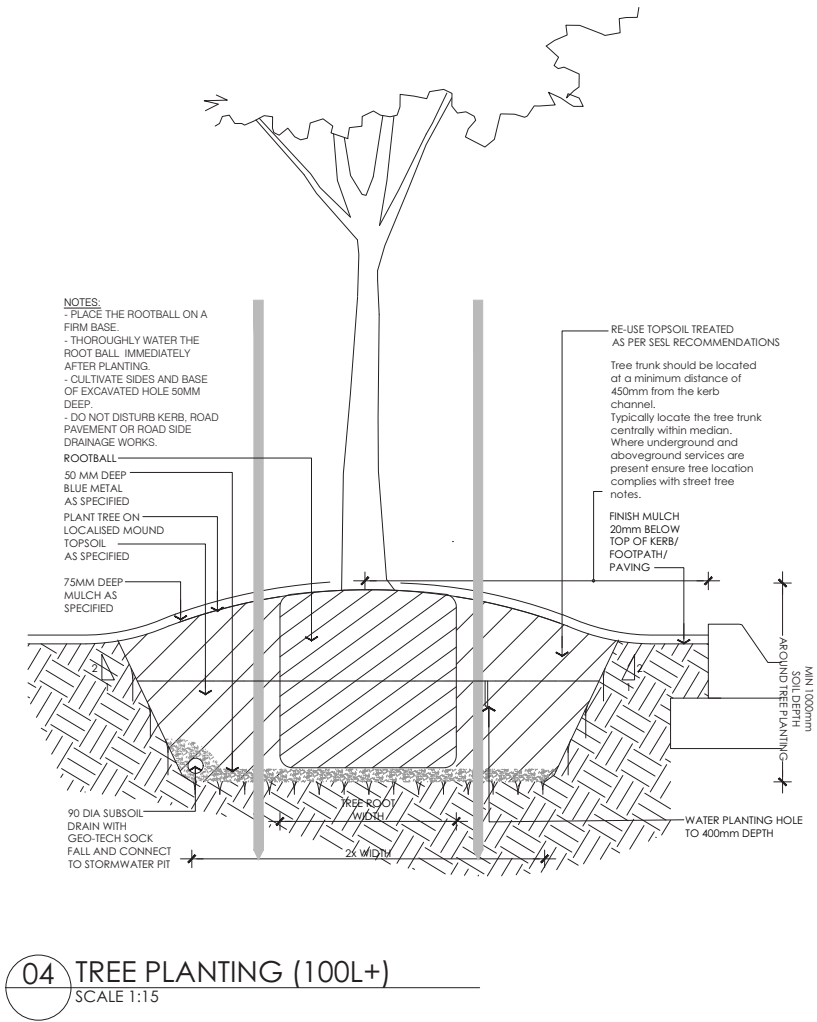
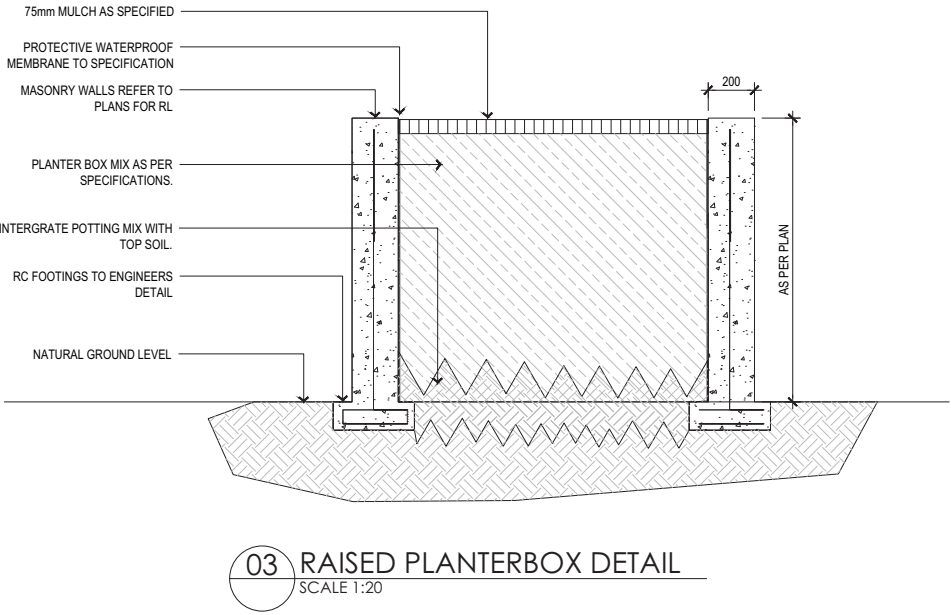
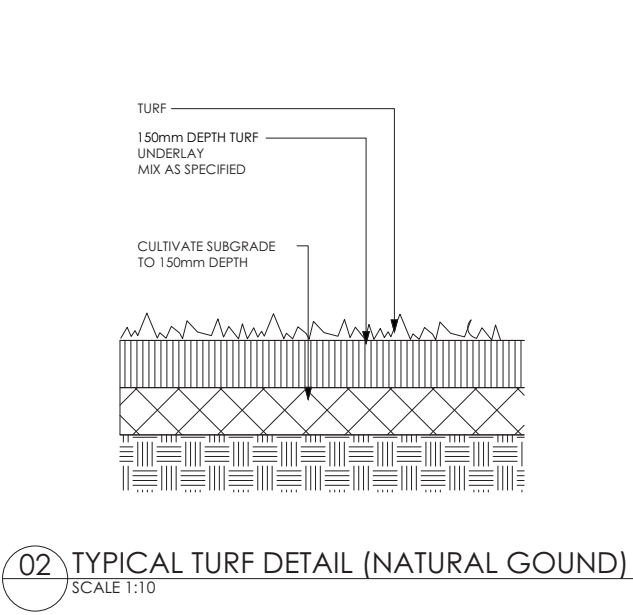
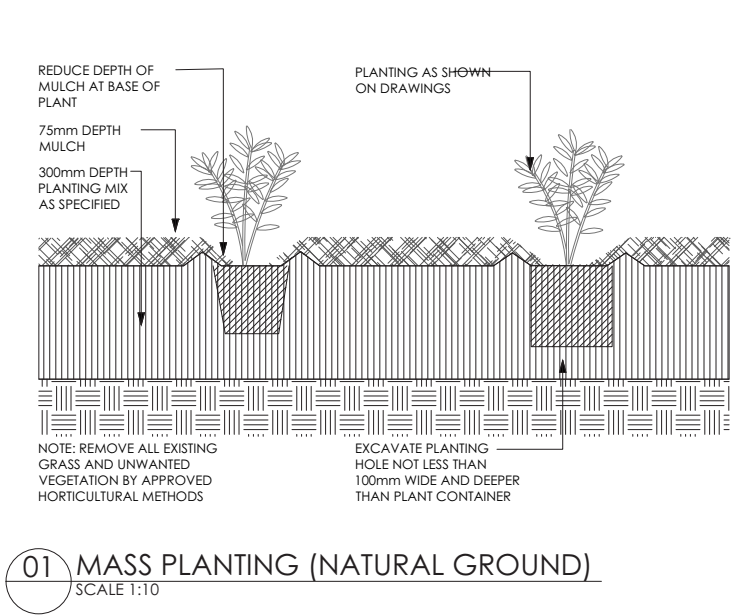
ASM	Acmena smithii minor	Dwarf lily pily
PX	Philodendron xanadu	Dwarf philodendron
CF	Cordyline fruticosa rubra	Red cordyline
AA	Agave attenuata	Agave
VO	Viburnum odoratissimum	Sweet viburnum
MFF	Metrosideros fiji fire	Dwarf NZ xmas bush
GRG	Grevillea robyn gordon	Grevillea
CWA	Callistemon white anzac	Dwarf bottle brush
SAS	Syzygium australe southern form	Dwarf brush cherry
DEX	Doryanthes excelsa	Gymea Lily
BY	Beschorneria yuccoides	Mexican lily
BR	Bromeliad spp	Bromeliad
CG	Ceratopetalum gummiferum	NSW Xmas Bush
XRE	Xanthorrhoea resinosa	Grass Tree

GROUND COVERS (4/m2 - 150mm POT SIZE)

LEG	Liriope evergreen giant	Giant liriope
CM	Clivia miniata	Kaffir lily
CGL	Carpobrotus glaucescens	Pigface
VH	Viola hederacea	Native violet
DSF	Dichondra silver falls	Silver falls
LT	Lomandra tanika	Tanika
HV	Hardenbergia violacea	False sarsaparilla, Purple coral pea
MP	Myoporum parvifolium	Creeping myoporum
GRM	Grevillea royal mantle	Grevillea royal mantle
DRE	Dianella revoluta	Flax lily



LANDSCAPE DETAILS (TYPICAL)



SPECIFICATION NOTES (TYPICAL)

SERVICES
Before landscape work is commenced the Landscape Contractor is to establish the position of all service lines and ensure tree planting is carried out at least 3 metres away from these services. Service lids, vents and hydrants shall be left exposed and not covered by any landscape finishes (turfing, paving, garden beds etc.) Finish adjoining surfaces flush with pit lids.

TURF UNDERLAY:
Turf Underlay Mix - Supplier SoilCo. or equal
150mm depth for turf areas.

GARDEN MIX:
Premium Garden Mix - Supplier SoilCo. or equal (300mm depth)

MULCH (BASE OF STREET TREES)
APPLICATION: Place mulch to the required depth, (refer to drawings) clear of plant stems, and rake to an even surface finishing 25mm below adjoining levels. Ensure mulch is watered in and tamped down during installation.
MULCH TYPE:
Type 1 (Mass planting):Hort Bark by ANL
Pine bark: From mature trees, graded in size from 15mm to 30mm, free from wood slivers. Dark brown in colour and texture.
Type 2 (Feature Areas):
200mm Nepean River Pebble (Lucky Stones). Sample to be approved by Landscape Architect prior to installation.

COMPOST
Shall be “GO Compost” as available from Soilco or approved equal.

ROOT BARRIER (IF REQUIRED)
600mm deep root barrier installed to manufacturer’s specification. To extend along path and back of kerb for 3m with side of trunk.

PLANT MATERIAL
All plants supplied are to conform with those species listed in the Plant Schedule on the drawings. Generally plants shall be vigorous, well established, hardened off, of good form consistent with species or variety, not soft or forced, free from disease or insect pests with large healthy root systems and no evidence of having been restricted or damaged. Trees shall have a leading shoot. Immediately reject dried out, damaged or unhealthy plant material before planting. All stock is to be container grown for a minimum of six (6) months prior to delivery to site.

FERTILISER
TURF: Shall be Shirleys No. 17 or approved equal thoroughly mixed into the topsoil prior to placing turf.
TREES IN GRASS AND SUPER ADVANCED TREES: Pellets shall be in the form intended to uniformly release plant food elements for a period of approximately nine months equal to Shirleys Kokei pellets, analysis 6.3:1.8:2.9. Kokei pellets shall be placed at the time of planting to the base of the plant, 50mm minimum from the root ball at a rate of two pellets per 300mm of top growth to a maximum of 8 pellets per tree.

STAKING AND TYING
Stakes shall be straight hardwood, free from knots and twists, pointed at one end and sized according to size of plants to be staked.
a. 5-15 litre size plant 1x(1200x25x25mm)
b. 35-75 litre size plant 2x(1500x38x38mm)
c. 100-greater than 200litre 3x(1800x50x50mm)
Ties shall be 50mm wide hessian webbing or approved equivalent nailed or stapled to stake. Drive stakes a minimum one third of their length, avoiding damage to the root system, on the windward side of the plant.

TURF
Obtain turf from a specialist grower of cultivated turf. turf shall be of even thickness, free from weeds and other foreign matter; lay in stretcher pattern with joints staggered and close butted, perpendicular to gradient of FSL. Water immediately after laying. Landscape contractor to determine & implement stabilisation strategies for turf located on batters greater than 1:4 and in swales/overland flow channels.
TURF TYPE: Greenlees Park Couch

LANDSCAPE MAINTENANCE PROGRAM (TYPICAL)

Maintenance shall mean the care and maintenance of the landscape works by accepted horticultural practice as rectifying any defects that become apparent in the landscape works under normal use. This shall include, but shall not be limited to, watering, mowing, fertilising, re-seeding, returfing, weeding, pest and disease control, staking and tying, replanting, cultivation, pruning, aerating, renovating, top dressing, maintaining the site in a neat and tidy condition as follows:-

GENERAL
The landscape contractor shall maintain the landscape works for the term of the maintenance (or Plant establishment) period to the satisfaction of the council. The landscape contractor shall attend to the site on a weekly basis. The maintenance period shall commence at practical completion and continue for a period of fifty two (52) weeks.

WATERING
Grass, trees and garden areas shall be watered regularly so as to ensure continuous healthy growth.

RUBBISH REMOVAL
During the term of the maintenance period the landscape contractor shall remove rubbish that may occur and reoccur throughout the maintenance period. This work shall be carried out regularly so that at weekly intervals the area may be observed in a completely clean and tidy condition.

REPLACEMENTS
The landscape contractor shall replace all plants that are missing, unhealthy or dead at the Landscape Contractor’s cost. Replacements shall be of the same size, quality and species as the plant that has failed unless otherwise directed by the Landscape Architect. Replacements shall be made on a continuing basis not exceeding two (2) weeks after the plant has died or is seen to be missing.

STAKES AND TIES
The landscape contractor shall replace or adjust plant stakes, and tree guards as necessary or as directed by the Landscape Architect. Remove stakes and ties at the end of the maintenance period if so directed.

PRUNING
General: Prune to reflect the natural growth flowering and regrowth habit of the individual species. Shrubs: Prune after flowering - Spring and Summer and on a spot basis as required.
Hedge trimming: Schedule trimming at times which will maintain the character and design of hedges. Allow up to three times per season.
Tip pruning: To encourage development of new shoots during the active growing season. Do not remove buds before the flowering season in those plants that have terminal flowers.
Radical pruning: To maintain a hedge or formal shape or when a particular problem, growth habit, damage, or disease requires branch removal.
Trees: Prune to eliminate diseased or damaged growth, avoid inter-branch contact and thin out crowns in a natural manner, maintain sight lines to signs and lights, or maintain visibility for personal security. Tree branch removal to AS 4373. Give notice and engage a suitably qualified ‘arborist’.

MULCHED SURFACES
All mulched surfaces shall be maintained in a clean and tidy condition and be reinstated if necessary to ensure that a depth of 75mm is maintained. Ensure mulch is kept clear of plant stems at all times. Remove all mulching materials off lawn or paved areas and maintain a clean and tidy appearance when viewed on a weekly basis.

PEST AND DISEASE CONTROL
The landscape contractor shall spray against insect and fungus infestation with all spraying to be carried out in accordance with the manufacturer’s directions. Report all instances of pests and diseases (immediately that they are detected) to the Landscape Architect.

GRASS AND TURF AREAS
The landscape contractor shall maintain all grass and turf areas by watering, weeding, re-seeding, rolling, mowing, trimming or other operations as necessary. Seed and turf species shall be the same as the original specified mixture. Grass and turf areas shall be sprayed with approved selective herbicide against broad leafed weeds as required by the Landscape Architect and in accordance with the manufacturer’s directions. Grass and turf areas shall be fertilised once a year in autumn with “Dynamic Lifter” for lawns at a rate of 20kg per 100m2. Fertiliser shall be watered in immediately after application. Irregularities in the grass and turf shall be watered in immediately after application.
Grass and turf areas shall be kept mown to maintain a healthy and vigorous sward. Mowing height: 30-50mm.

WEED ERADICATION
Eradicate weeds by environmentally acceptable methods using a non-residual glyphosate herbicide (eg. ‘Roundup’) in any of its registered formulae, at the recommended maximum rate. Regularly remove by hand, weed growth that may occur or recur throughout grassed, planted and mulched areas. Remove weed growth from an area 750mm diameter around the base of trees in grassed areas. Continue eradication throughout the course of the works and during the maintenance period.

SOIL SUBSIDENCE
Any soil subsidence or erosion which may occur after the soil filling and preparation operations shall be made good by the landscape contractor at no cost to the client.

MAINTENANCE PERIOD
The maintenance will be implemented for 6 months (26 weeks)

IRRIGATION NOTES (TYPICAL)

IRRIGATION OVERVIEW - Confirm with irrigation contractor at tender stage

EXTENT
All mass planting landscape areas and trees are to have full coverage by a fully automatic irrigation system. The design, materials and installation are to be in accordance with Sydney Water Codes and all relevant Australian Standards.

1. An automatic irrigation system is to be installed to all turf and garden bed areas.
2. The irrigation system shall be designed and installed by a licensed contractor to relevant Australian standards and Sydney water guidelines.
3. The irrigation system shall be connected into the rainwater tank system and pump

DRIPLINE
Provide 13mm dripline to all garden bed areas with appropriate 13mm joiners. Dripline to be Toro drip or similar with 400mm centre drippers. Install line at 500mm spacings with the first line to be 150mm in from edge.
Install dripline after planting and prior to mulching to allow for an adequate mulch cover. Anchor at 1.5m maximum intervals with u-shaped stakes. Dripline pattern to suit planting.

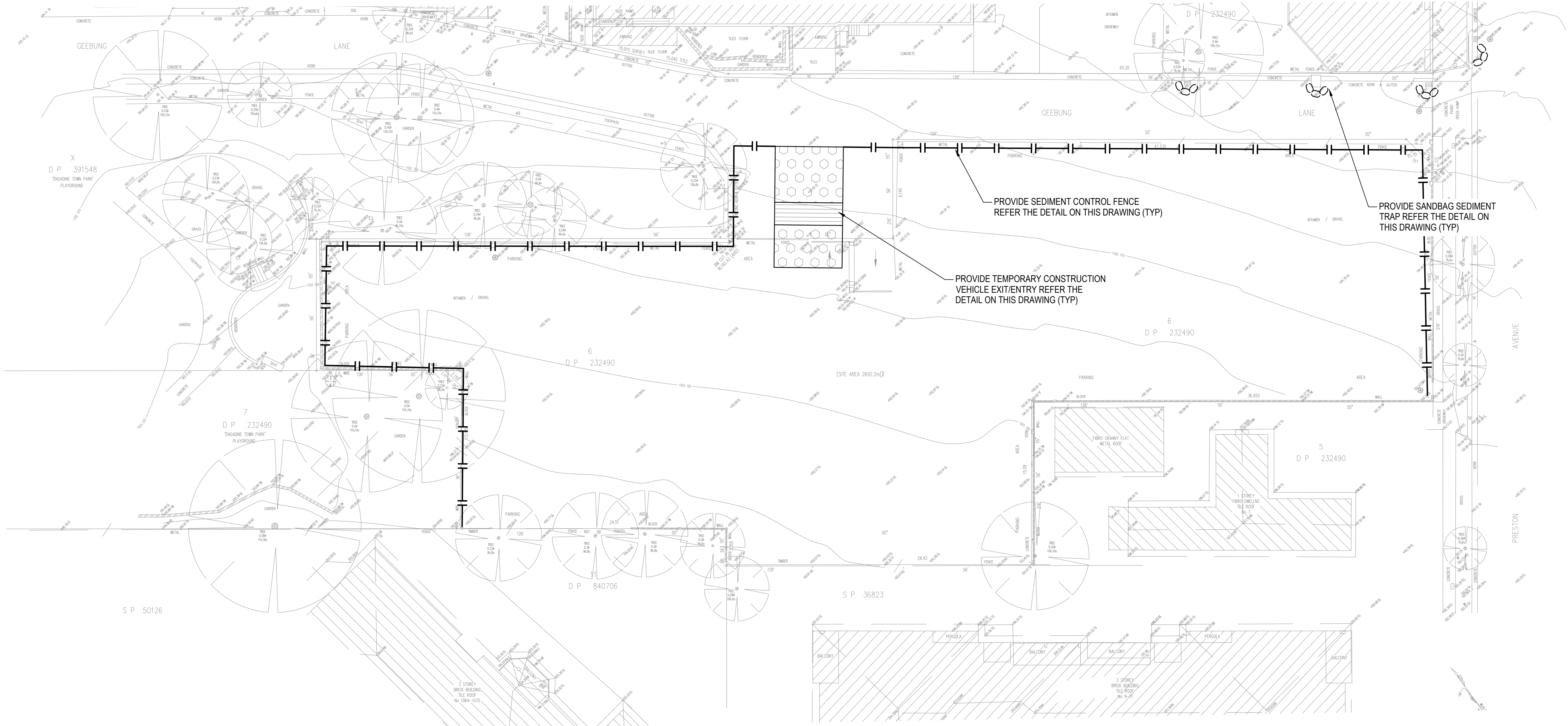
CONTROL VALVES
24v solenoid actuated hydraulic valve with flow control. Control valves to be Toro ezflow series solenoids 25mm or approved equal. Provide a gate valve of the same size immediately upstream of each valve. House both valves in a high impact plastic valve box with a high impact plastic cover at finished ground level. Support the box with bricks on each side.
Controller to be Toro greenkeeper or approved equal with a rain switch.
Install a master valve/pressure regulating valve equal to Toro p220 with exreg pressure regulation valve. Filter to be installed equal to Toro y filter 75mm screen filter.

CONTROL WIRES
Connect the control valves and soil moisture sensor to the controller with double insulated underground cables laid alongside piping where possible. Lay intertwined for their full length without joints except at the valves and branches off common wires. Provide waterproof connectors.

Provide a backflow prevention device to Sydney water standards AS 3500.

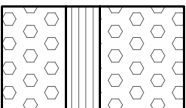
EROSION AND SEDIMENT NOTES

- B1. THIS PLAN IS TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS AS SHOWN
- B2. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND TO THE SATISFACTION OF COUNCIL PRIOR TO THE COMMENCEMENT OF AND DURING CONSTRUCTION. NO DISTURBANCE TO THE SITE SHALL BE PERMITTED OTHER THAN IN THE IMMEDIATE AREA OF THE WORKS AND NO MATERIAL SHALL BE REMOVED FROM THE SITE WITHOUT COUNCIL'S APPROVAL. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STANDARDS OUTLINED IN NSW DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTIONS".
- B3. TOPSOIL SHALL BE STRIPPED AND STOCKPILED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE LINES. THIS TOPSOIL IS TO BE RESPREAD LATER ON AREAS TO BE REVEGETATED AND STABILISED ONLY, (I.E. ALL FOOTPATHS, BATTERS, SITE REGARDING AREAS, BASINS AND CATCHDRAINS). TOPSOIL SHALL NOT BE RESPREAD ON ANY OTHER AREAS UNLESS SPECIFICALLY INSTRUCTED BY THE SUPERINTENDENT. IF THEY ARE TO REMAIN FOR LONGER THAN ONE MONTH STOCKPILES SHALL BE PROTECTED FROM EROSION BY COVERING THEM WITH A MULCH AND HYDROSEEDING AND, IF NECESSARY, BY LOCATING BANKS OR DRAINS DOWNSTREAM OF A STOCKPILE TO RETARD SILT LADEN RUNOFF.
- B4. THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM DEVICES SUCH THAT NO MORE THAN 60% OF THEIR CAPACITY IS LOST. ALL THE SILT IS TO BE PLACED OUTSIDE THE LIMIT OF WORKS. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED OR AS DIRECTED BY THE SUPERINTENDENT OR COUNCIL.
- B5. VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION CONFINING ACCESS WHERE POSSIBLE TO NOMINATED STABILISED ACCESS POINTS.
- B6. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL BY REGULAR WETTING DOWN (BUT NOT SATURATING) DISTURBED AREA.
- B7. PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENTS ARE REVEGETATED OR PAVED.
- B8. REVEGETATE ALL TRENCHES IMMEDIATELY UPON COMPLETION OF BACKFILLING.
- B9. ALL DRAINAGE PIPE INLETS TO BE CAPPED UNTIL :
A) DOWNPIPES CONNECTED
B) PITS CONSTRUCTED AND PROTECTED WITH SILT BARRIER
- B10. SILT FENCE MAINTENANCE INSPECTION TO BE CARRIED OUT EVERY 3 MONTHS AND AFTER EACH RAINFALL EVENT.
- B11. EROSION & SEDIMENT CONTROL SIGNAGE AVAILABLE FROM COUNCIL MUST BE ATTACHED TO THE MOST PROMINENT AVAILABLE STRUCTURE AND BE VISIBLE AT ALL TIMES WHEN ENTERING THE SITE FOR THE DURATION OF CONSTRUCTION.



PLAN
SCALE 1:250

LEGEND



TEMPORARY CONSTRUCTION VEHICLE EXIT

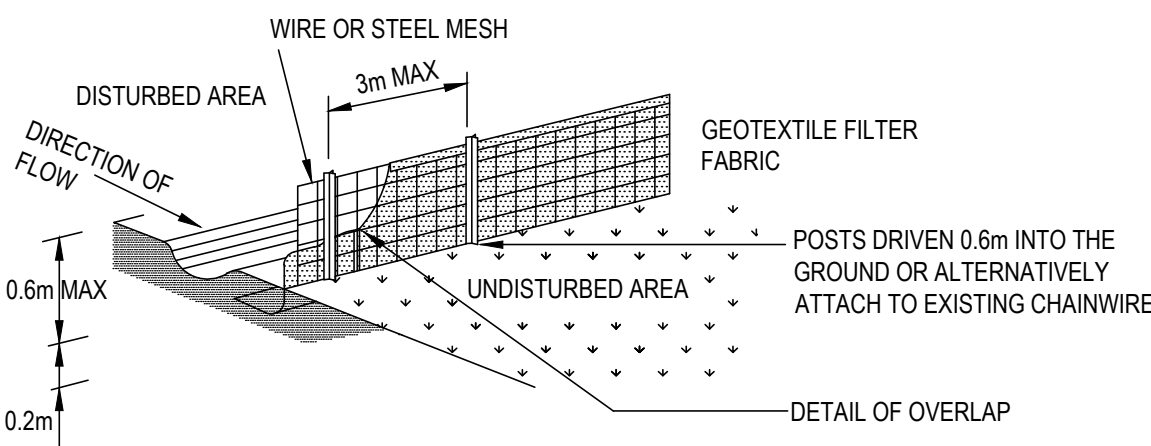


SEDIMENT CONTROL FENCE

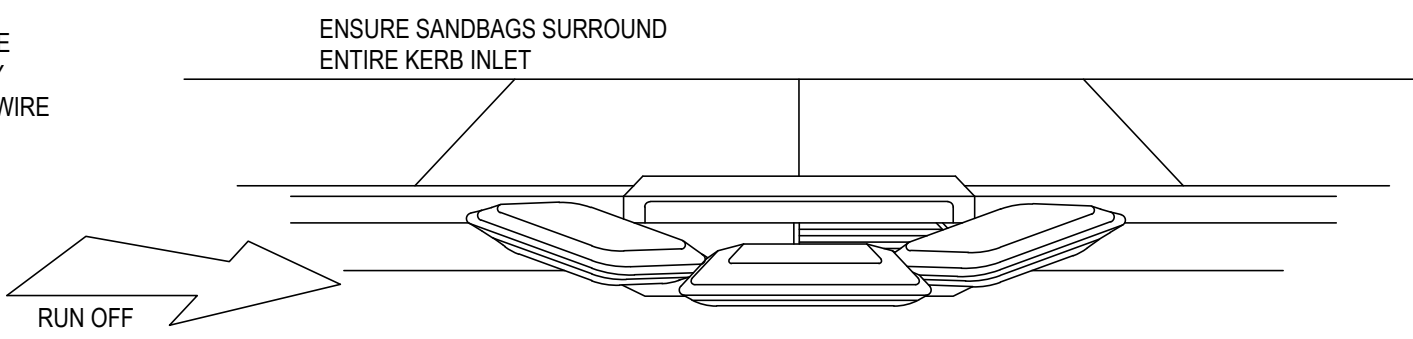


SANDBAG SEDIMENT TRAP

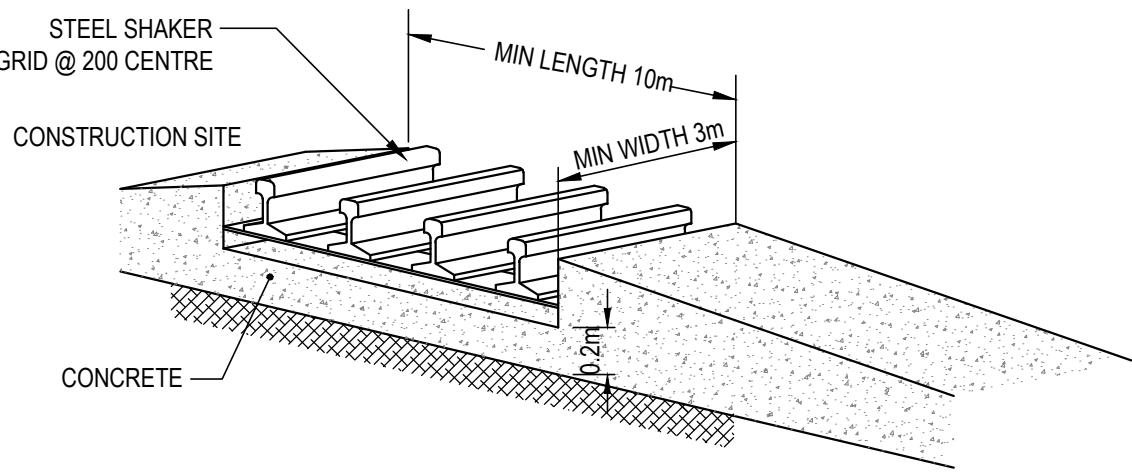
DRAINAGE AREA 0.6 ha. MAX. SLOPE GRADIENT 1:2 MAX.
SLOPE LENGTH 60 m MAX.



SEDIMENT CONTROL FENCE
N.T.S.



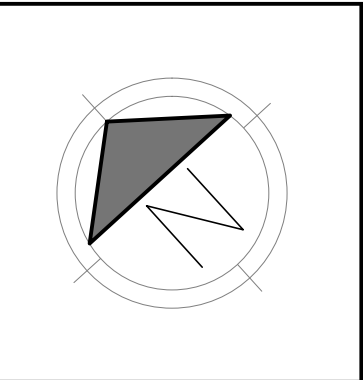
SANDBAG KERB INLET SEDIMENT TRAP
NTS



TEMPORARY CONSTRUCTION
VEHICLE EXIT
NTS

REVISIONS:			
No.	REVISION DESCRIPTION	DRAWN	DATE
A	FOR APPROVAL	RG	13.03.19

SCALE BAR 0 10 20 30 40 50m SCALE 1:500	
COPYRIGHT © THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF VAN DER MEER (NSW) PTY LTD. IT MUST NOT BE REPRODUCED, COPIED OR USED WITHOUT THE AUTHORITY OF VAN DER MEER (NSW) PTY LTD. DISCLAIMER THIS DRAWING AND ITS CONTENTS ARE ELECTRONICALLY GENERATED. ARE CONFIDENTIAL AND MAY ONLY BE USED FOR THE PURPOSE FOR WHICH THEY WERE INTENDED. VAN DER MEER (NSW) PTY LTD. WILL NOT ACCEPT RESPONSIBILITY FOR ANY CONSEQUENCES ARISING FROM THE USE OF THE DRAWING FOR OTHER THAN ITS INTENDED PURPOSE OR WHERE THE DRAWING HAS BEEN ALTERED, AMENDED OR CHANGED EITHER MANUALLY OR ELECTRONICALLY BY ANY THIRD PARTY. NOTE THIS IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION PURPOSES ONLY. UNLESS SIGNED, FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALES. DO NOT SCALE REDUCED SIZE DRAWINGS. VERIFY DIMENSIONS PRIOR TO COMMENCING ANY ON SITE OR OFF-SITE WORKS OR FABRICATION. IF IN DOUBT - ASK.	





van der Meer Consulting

LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370

www.vandermeer.com.au
van der Meer (NSW) Pty Ltd
A.B.N. 56 158 266 301

CLIENT



ARCHITECT



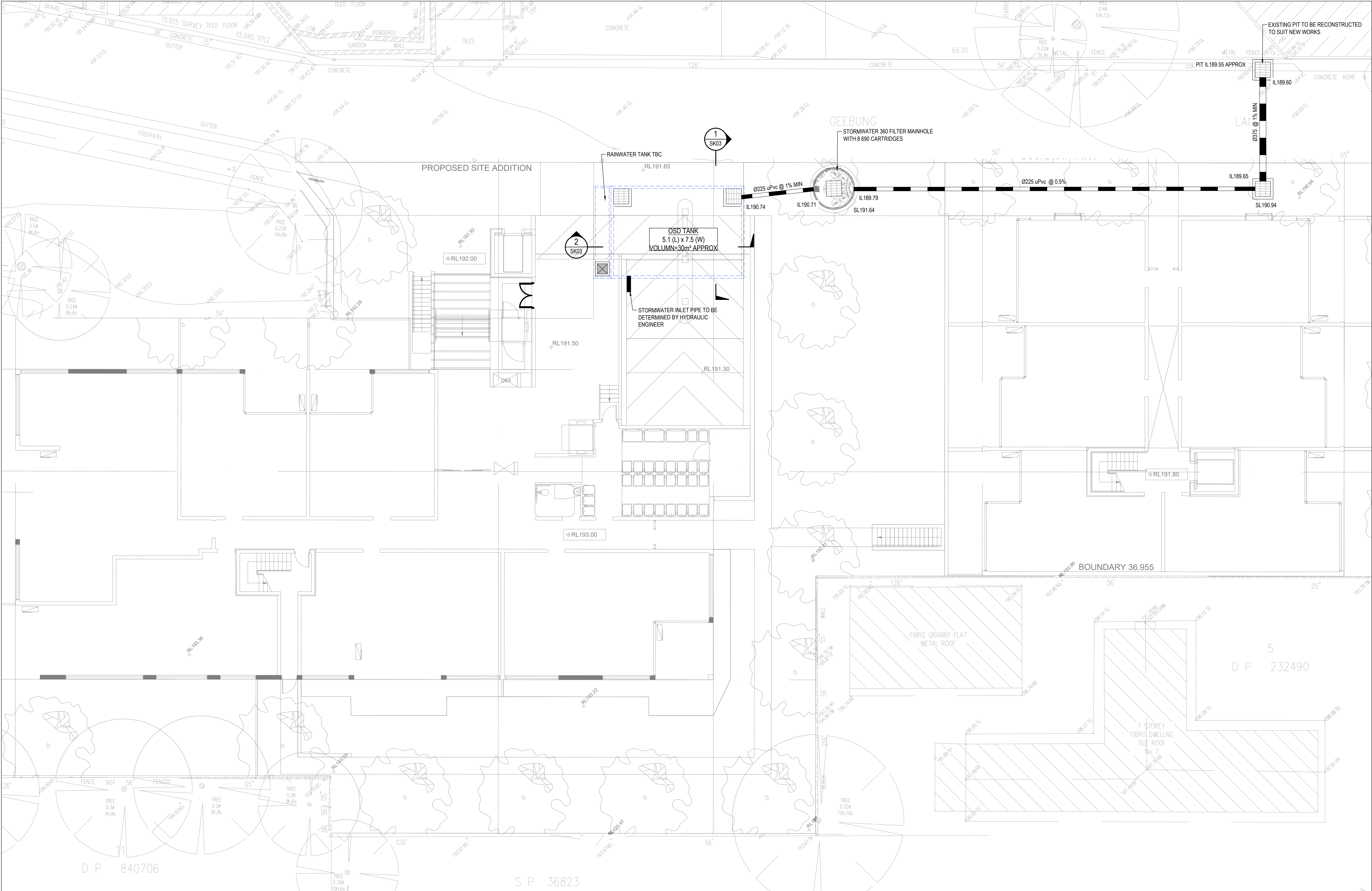
PROJECT TITLE

RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE, ENGADINE

DRAWING TITLE

EROSION AND SEDIMENT CONTROL

DRAWING STATUS			
APPROVAL ISSUE NOT TO BE USED FOR CONSTRUCTION			
PROJECT LEADER RJB	DESIGNER AH	SIGNATURE	
DRAFTSPERSON RG	SCALE AS SHOWN	DATE MAR. 2019	SHEET SIZE A1
JOB No. SY182133	DRAWING No. DA-C210	REVISION A	



REVISIONS:			
B	FOR APPROVAL	RG	15.03.19
A	FOR APPROVAL	RG	13.03.19
No.	REVISION DESCRIPTION	DRAWN	DATE

SCALE BAR

0

10

20

30

40

50m

SCALE 1:500

Copyright ©

THIS DRAWING IS COPYRIGHT AND THE PROPERTY OF VAN DER MEER (NSW) PTY LTD. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF VAN DER MEER (NSW) PTY LTD.

DISCLAIMER

THIS DRAWING AND ITS CONTENTS ARE ELECTRONICALLY GENERATED, ARE CONFIDENTIAL AND MAY ONLY BE USED FOR THE PURPOSE FOR WHICH THEY WERE INTENDED. VAN DER MEER (NSW) PTY LTD. WILL NOT ACCEPT RESPONSIBILITY FOR ANY CONSEQUENCES ARISING FROM THE USE OF THE DRAWING FOR OTHER THAN ITS INTENDED PURPOSE OR

WHERE THE DRAWING HAS BEEN ALTERED, AMENDED OR CHANGED EITHER MANUALLY OR ELECTRONICALLY BY ANY THIRD PARTY.

NOTE

THIS IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION PURPOSES ONLY. UNLESS SIGNED, FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALES. DO NOT SCALE REVISED SIZE DRAWINGS. VERIFY DIMENSIONS PRIOR TO COMMENCING ANY ON-SITE OR OFF-SITE WORKS OR FABRICATION.

IF IN DOUBT - ASK.

van der Meer Consulting

van der meer

LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370

www.vandermeer.com.au

van der Meer (NSW) Pty Ltd

A.B.N. 56 158 266 301

CLIENT

duffy|kennedy

constructions

ARCHITECT

mijollo

INTERNATIONAL

PROJECT TITLE

RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE, ENGADINE

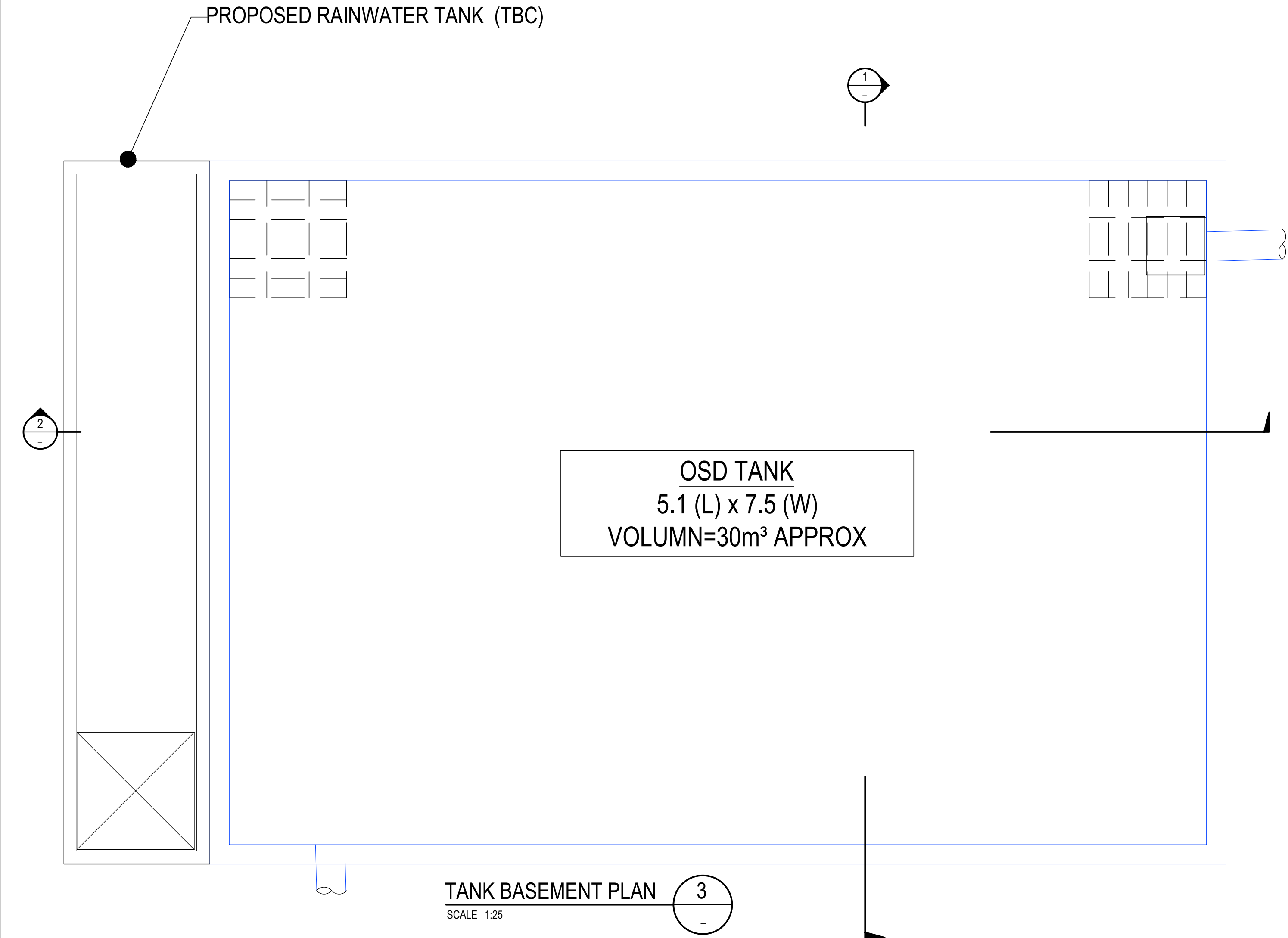
DRAWING TITLE

DRAINAGE LAYOUT PLAN

DRAWING STATUS			
APPROVAL ISSUE NOT TO BE USED FOR CONSTRUCTION			
PROJECT LEADER	DESIGNER	SIGNATURE	
RJB	AH		
DRAFTSPERSON	SCALE	DATE	SHEET SIZE
RG	1:100	MAR. 2019	A1
JOB No.	DRAWING No.	REVISION	
SY182133	DA-C401	B	

GSPP (Sydney South) Report Appendices (PPSSSH-3) - 15 July 2020

Page 104 of 105



NOTE:
THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH COUNCILS DOCUMENTS 'Sutherland Shire Specification Stormwater Management, 2009' AND 'DCP Charter 37: Stormwater and Groundwater Management,2015'

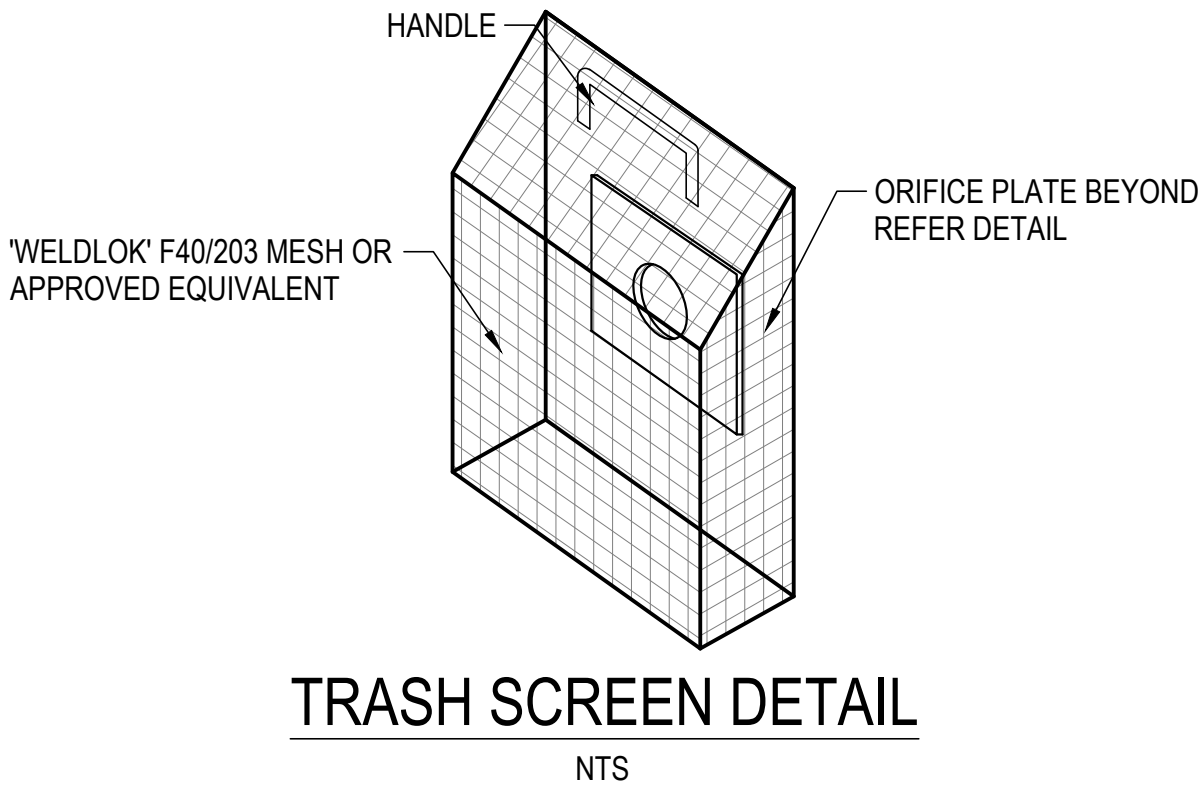
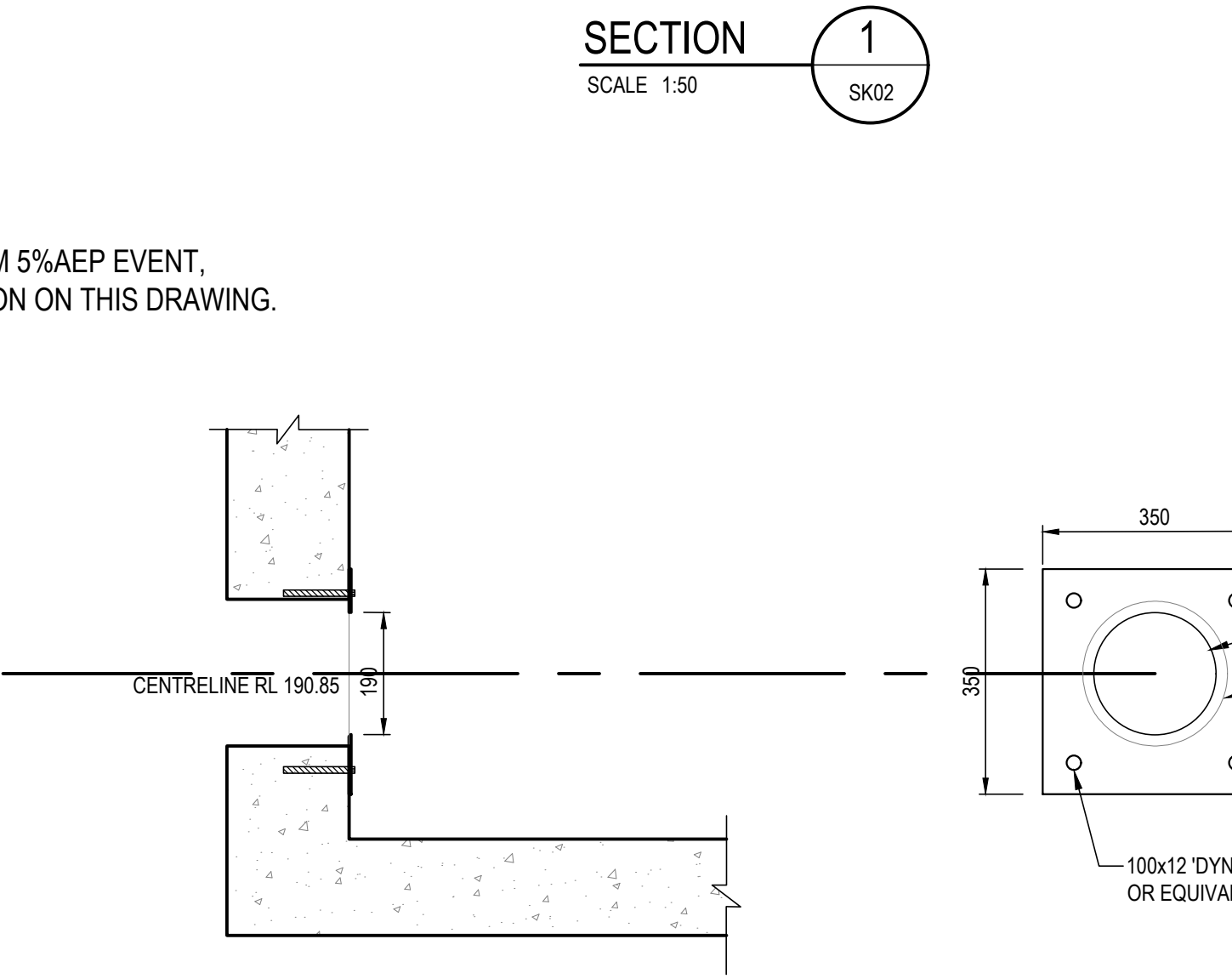
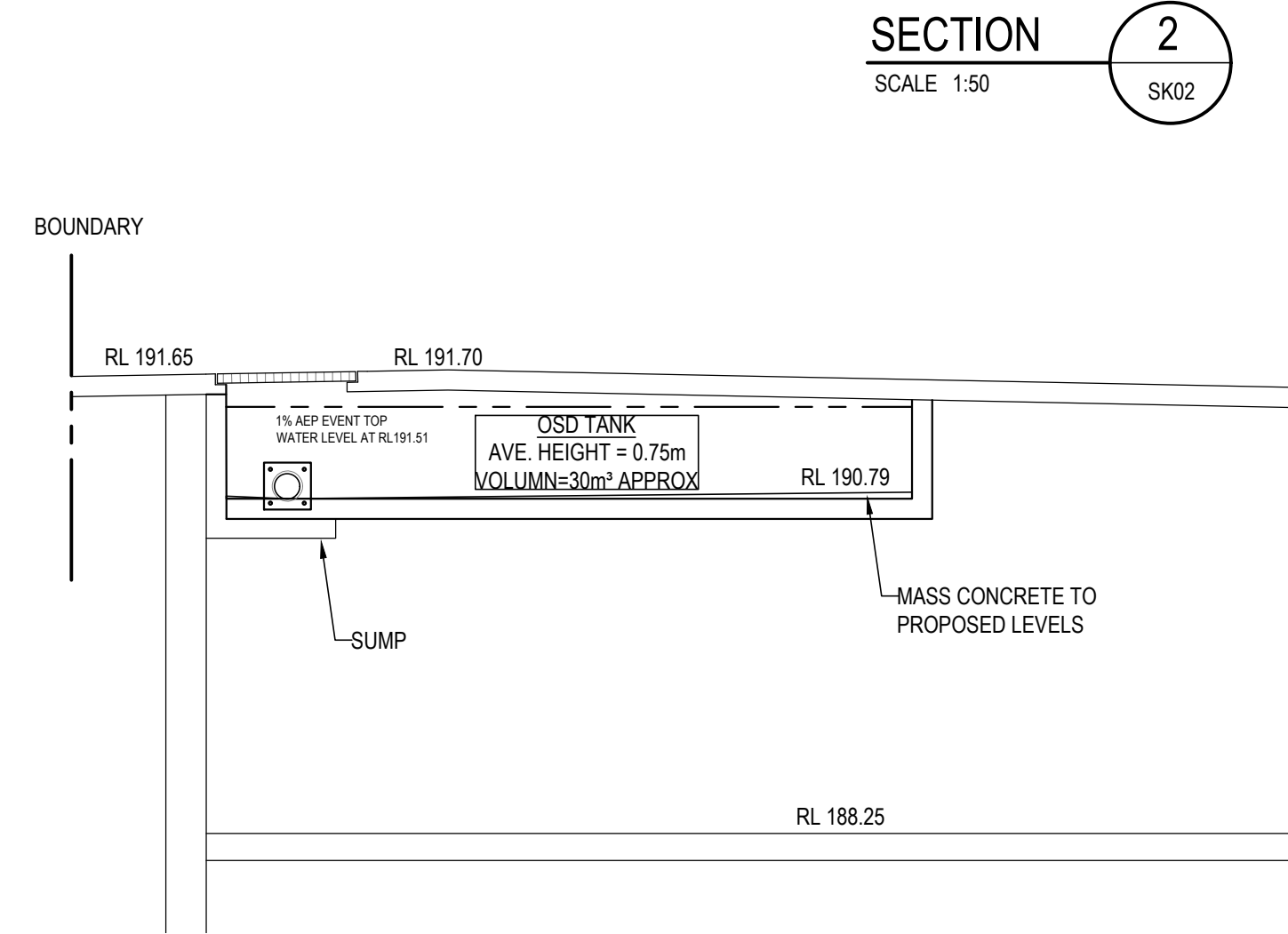
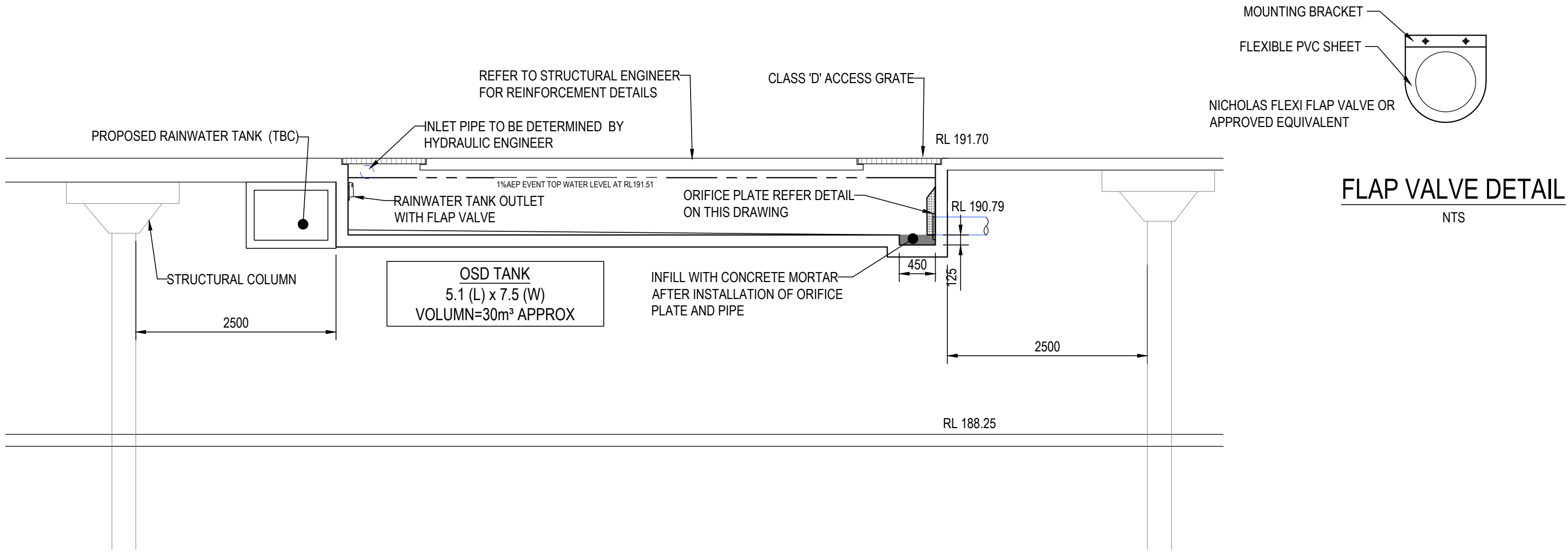
SITE PARAMETERS :
TOTAL AREA 2800m²
IMPERVIOUS AREA: PRE-DEVELOPMENT=2800m² (100%), POST-DEVELOPMENT=1680m²(60%).
PERVIOUS AREA: PRE-DEVELOPMENT=0m², POST-DEVELOPMENT=1113m²(40%).
NO INFILTRATION SYSTEM NEED TO BE APPLIED ON THIS SITE.

OSD TANK STORAGE:
THE PURPOSE OF PROVIDING AN OSD TANK IS TO MAKE SURE THE POST-DEVELOPMENT STORMWATER RUNOFF FROM SITE NOT EXCEED RATE OF STROMWATER RUNOFF FROM SITE PRIOR TO COMMENCEMENT OF DEVELOPMENT.
AS PER COUNCIL'S DCP:
• VOLUME OF STORMWATER RUNOFF IN A 5% AEP EVENT FROM POST-DEVELOPMENT SITE= 62 m³
• LESS AN EXCEPTION OF STORMWATER RUNOFF GENERATED BY MINIMUM 65% LANDSCAPED AREA
POST-DEVELOPMENT MINIMUM 65% LANDSCAPED AREA STORWATER RUNOFF = 42 m³

THEREFORE,VOLUME OF STORMWATER TO BE DETAINED ON-SITE= 20 m³

OSD TANK OUTLET FLOW RATE
OSD TANK IS PROVIDED TO ENSURE PEAK RATE OF STORMWATER FLOW IS LESS THAN THE FLOW GENERATED BY THE SITE WITH A MAXIMUM IMPERVIOUS AREA OF 75% FOR ALL STORM EVENTS UP TO AND INCLUDING THE 1% AEP EVENT.

DESIGN STORM	DISCHARGE 75% IMPERVIOUS	POST-DEVELOPMENT DISCHARGE
1%	128 L/s	70 L/s
2%	114 L/s	65 L/s
5%	97 L/s	58 L/s
10%	84 L/s	52 L/s
20%	69 L/s	45 L/s



MESH TYPE	MESH SCREEN AREA
LYSAGHT RH3030 FOR ORIFICE 150Ø OR LESS	>50x ORIFICE DIA
'WELDLOK' F40/203 FOR ORIFICE GREATER THAN 150Ø	>20x ORIFICE DIA

NOTE: SCREEN AREA INCLUDES SIDES WHERE APPLICABLE

ORIFICE PLATE DETAIL
SCALE 1:10

TYPICAL INLET PIT & JUNCTION PIT
SCALE 1:25

REVISIONS:

No.	REVISION DESCRIPTION	DRAWN	DATE
A	FOR APPROVAL	RG	13.03.19

SCALE BAR

0 1 2 3 4 5 1m 1.5 2m

SCALE 1:20

van der Meer Consulting

van der meer

LEVEL 6, 39 CHANDOS STREET
ST LEONARDS NSW 2065
Telephone 61-2-9436 0433 Fax 61-2-9436 1370

www.vandermeer.com.au
van der Meer (NSW) Pty Ltd
A.B.N. 56 158 266 301

CLIENT

duffy|kennedy constructions

ARCHITECT

mijollo INTERNATIONAL

PROJECT TITLE

RESIDENTIAL FLAT BUILDING
5 PRESTON AVENUE, ENGADINE

DRAWING TITLE

STORMWATER DETAIL

DRAWING STATUS

APPROVAL ISSUE
NOT TO BE USED FOR CONSTRUCTION

PROJECT LEADER	DESIGNER	SIGNATURE	
RJB	AH		
DRAFTSPERSON	SCALE	DATE	SHEET SIZE
RG	AS SHOWN	MAR. 2019	A1
JOB No.	DRAWING No.	REVISION	
SY182133	DA-C402		A

SSPP (Sydney South) Report Appendices (PPSSSH-3) - 15 July 2020

Page 105 of 105