

WOLLONGONG LOCAL PLANNING PANEL ADDENDUM REPORT | 23 February 2024

DA No.	DA-2023/358
Proposal	Residential - demolition of existing dwellings and associated outbuildings, remove six (6) trees, construction of multi-dwelling housing - six (6) units and Subdivision - Strata title - six (6) lots
Property	11 and 13 St Johns Avenue MANGERTON
Applicant	Infinite Designs
Responsible Team	City Centre Major Development Team
Development cost	\$2,000,000
Lodgement date	3 May 2023
Prior WLPP meeting	5 December 2023

Assessment Report and Recommendation

Reason for consideration by Local Planning Panel

Determination of the application is required pursuant to clause 2.19(1)(a) of the Environmental Planning and Assessment Act 1979. The application has received greater than 10 submissions and is required to be determined by the Panel under Schedule 2(2b) of the Local Planning Panels Direction.

The application was considered by the LPP at the meeting of the 5 December 2023 where the Panel resolved to defer determination subject to a variety of changes being addressed. The Panel resolved that following receipt of amended plans/details, the application be determined by the Panel by electronic determination.

This report should be read in conjunction with the report provided to the Panel by Council on 5 December 2023.

Reasons for deferral

The reasons for the decision of the Panel were:

- The Panel noted that the site is constrained by the steep slope of the land and the proximity of adjoining dwellings and associated private open space. It was also noted that this is the first multi-dwelling housing development in the immediate locality. The Panel considers that these factors require a careful, well resolved and compliant design along with detailed plans which clearly demonstrate that the relationship to adjoining properties is acceptable in terms of privacy and amenity.
- The particular aspects of the development which require further consideration by the applicant and design amendments are listed below:
 1. Setbacks to side boundaries should comply for all units;
 2. The size and position of private open space areas should be revisited to ensure compliance with the DCP (particularly in relation to access from living areas for units 3 and 4) and to minimise impact in regard to visual and acoustic privacy to adjoining properties; and
 3. Consider the need for privacy screens to private open space rather than low balustrades to improve privacy impact.
- Additional plans are to be submitted which provide the following details:

1. Cross-sections across side boundaries showing the relationship between the levels of private open space on the subject land and the levels of private open space areas/decks on adjoining property;
2. Details of materials, finishes and height of any balustrades and privacy screens;
3. Dimensions of all POS areas and decks; and
4. Side boundary setback dimensions for ground and first floor of all units to demonstrate compliance.

Amendments in response to deferral reasons

1. Setbacks to side boundaries should comply for all units;

Response: The setbacks for units now comply with the DCP controls as highlighted in red below and on plans A09b and A09c.

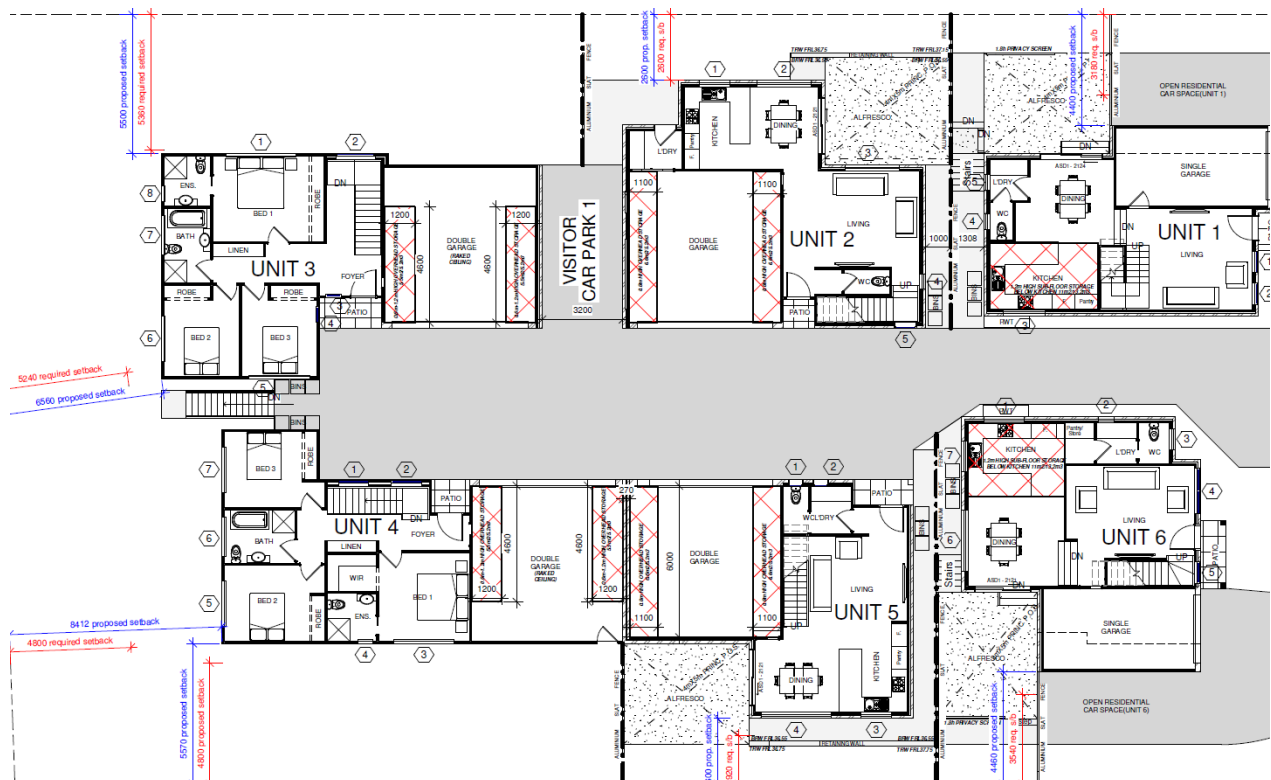


Figure 1: Ground floor

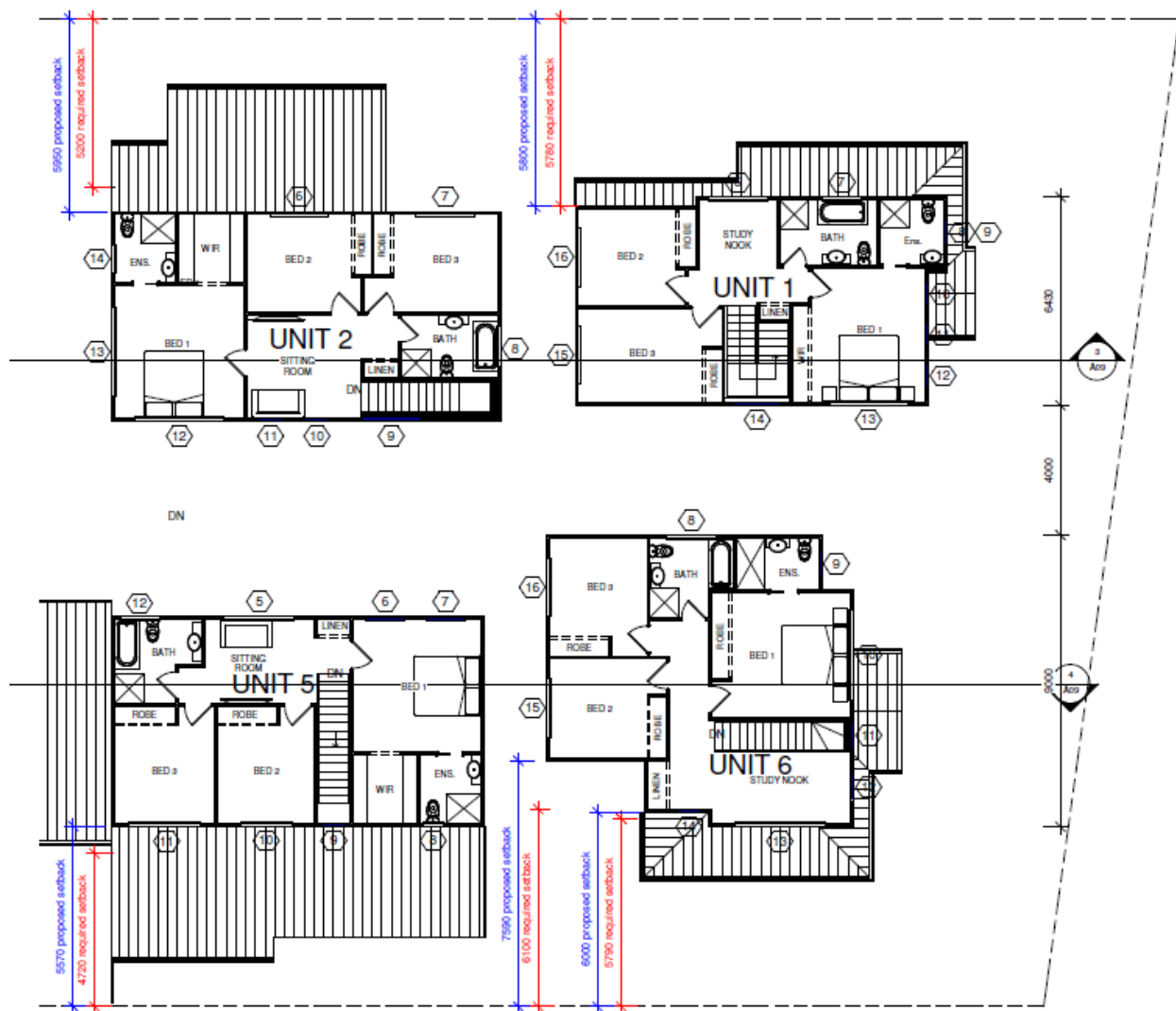


Figure 2: First floor

Calculations of setbacks under the DCP for highest point adjacent to boundaries are as follows:

Location	Required (0.8 x ceiling height)	Proposed
Western elevation (first floor)		
Unit 1	$7.2\text{m} \times 0.8 = 5.8\text{m}$	5.8m
Unit 2	$6.4\text{m} \times 0.8 = 5.1\text{m}$	6m
Unit 3	$6.7\text{m} \times 0.8 = 5.4\text{m}$	5.5m
Eastern elevation (first floor)		
Unit 4	$5.8\text{m} \times 0.8 = 4.6\text{m}$	5.7m
Unit 5	$6\text{m} \times 0.8 = 4.8\text{m}$	5.57m
Unit 6	$6.7\text{m} \times 0.8 = 5.36$	6m

2. The size and position of private open space areas should be revisited to ensure compliance with the DCP (particularly in relation to access from living areas for units 3 and 4) and to minimise impact in regard to visual and acoustic privacy to adjoining properties;

The layout of units 3 and 4 have been reversed so that living and private open spaces are now on the ground level and bedrooms are now on the first floor level (see plan references A04 and A05). This allows for private open space areas to be directly connected to the living areas and not elevated where privacy to adjoining properties becomes a concern.

It is also noted that private open space areas do not have a roof and where they were previously identified as not complying, they now meet the controls.

3. Consider the need for privacy screens to private open space rather than low balustrades to improve privacy impact.

Where private open space areas sit above natural ground level, they are provided with privacy screens as illustrated on plans A07 (Units 1 and 3) and A08 (Units 4 and 6).

The interface of POS areas with adjoining development is illustrated below.



Additional plans are to be submitted which provide the following details:

1. Cross-sections across side boundaries showing the relationship between the levels of private open space on the subject land and the levels of private open space areas/decks on adjoining property

Response: See plan A09a

2. Details of materials, finishes and height of any balustrades and privacy screens

Response: Balustrades are nominated to be powder coated aluminium (Plan reference A09a) and heights are stipulated on elevations (plan reference A07).

3. Dimensions of all POS areas and decks

4m x 5m POS areas are provided for each unit and dimensions shown on the amended plans.

4. Side boundary setback dimensions for ground and first floor of all units to demonstrate compliance.

See marked up plans indicating proposed and required setbacks for units on Plans A09b and A09c.

CONCLUSION

The changes made to the plans are considered to address the concerns raised by the Panel in the deferral. The changes are relatively minor and do not introduce other concerns not evident in the original submission and the proposal is now fully compliant with the DCP.

It is noted that at the time of writing this report, the finalised landscape and stormwater plans were not yet available. Notwithstanding, the changes to the plans do not alter the arrangement for landscaping and stormwater infrastructure and the amended architectural layout can readily accommodate those items without further change.

It is considered that sufficient detail is provided for the Panel to be satisfied the deferral reasons have been addressed.

RECOMMENDATION

It is recommended the Panel delegate the final determination of the application to Council subject to the receipt of the final landscape and stormwater plans.

Draft consent conditions are contained at **Attachment 1**. Conditions that will require updating to include specific reference to the final landscape and stormwater plans are A.(i), 20 and 25. Plan references at condition 1 have been updated to reflect the changes.

ATTACHMENT 1 – Draft conditions

A. The Development Consent shall not operate until Council has been satisfied as to the following matters:

(i) Drainage works within Council land

A detailed design for the proposed drainage works within Council's Land, including pit and pipeline connecting the drainage system to Council's existing underground drainage system in **Lot 7 DP 227950**, shall be prepared by a suitably qualified civil engineer in accordance with the relevant Council engineering standards. The design plans shall be generally in accordance with the Concept Stormwater Plan (**Drainage Plan & Details C2-E dated 1 November 2023 prepared by Nastasi & Associates**) and shall include the following:

- a) Levels and details of all existing and proposed infrastructure/services such as pits, public utilities, poles, fencing, stormwater drainage, shall extend a minimum of 5 metres beyond the limit of works.
- b) Engineering details of the proposed pit and pipe stormwater drainage system within Council's land, including a hydraulic grade line analysis and longitudinal section of the proposed system showing calculated flows, velocity, pits, pipe size/class, grade, inverts and ground levels. Each proposed pit must be constructed generally in accordance with Wollongong City Council's Engineering Standard Drawings.
- c) All new drainage pits shall be in accordance with the current version of Wollongong City Council's Engineering Standard Drawings. The proposed pit in Council's road reserve must not conflict with any existing or proposed vehicular accessway.
- d) Where any adjustments to public utilities are proposed the applicant shall submit documentary evidence that they have the consent of the owner of the public utility authority.
- e) All construction must be in accordance with the requirements of Council's Subdivision Code.
- f) Evidence that the above requirements have been met must be detailed on the engineering drawings. The detailed design and supporting documentation shall be submitted to and approved by Wollongong City Council's Development Engineering Manager.

(ii) The applicant must apply in writing to Council's Statutory Property team requesting the grant of an easement for the above drainage. The following will apply:

- a) The applicant must obtain a drainage easement over Lot 7 DP **227950**. The easement will be subject to a formal Council resolution.
- b) The easement must be compliant with Section 46 (1) (a1) of the Local Government Act 1993 (NSW).
- c) The applicant must write to Council's Statutory Property team to commence the easement process following approval of the DA. There is an application fee payable in accordance with Council's Fees and Charges.
- d) The applicant must pay compensation to Council for the grant of the easement, as determined by a formal valuation.

- e) The applicant is responsible for all costs in the creation of the easement including valuation, survey, plan lodgement and legal costs, and any other costs incurred in relation to the easement.
- B. The developer must satisfy Council, within 24 months of the date shown on the top of this consent, that the matters specified at **A** have been complied with. Failure to satisfy Council within that time period will lapse this development consent.
- C. If compliance with the matters contained in condition number **A** results in a substantial variation to the development approved deferred commencement, a new development application must be submitted.

Once Council is satisfied that the matters contained in condition number (A) have been complied with and the developer has been notified in writing of such compliance, the following conditions shall apply in respect of the approved development:

1. Approved Plans and Supporting Documentation

Development must be carried out in accordance with the following approved plans and supporting documentation (stamped by Council), except where the conditions of this consent expressly require otherwise.

Plan No	Revision No	Plan Title	Drawn By	Dated
A01	C	Stage 1 – Demolition Plan & Draft Torrens Title Subdivision	Infinite Designs	21 February 2024
A02	C	Site Plan	Infinite Designs	21 February 2024
A03	C	Site-Waste Management Plan	Infinite Designs	21 February 2024
A04	C	U1-U6 Ground Floor Plans	Infinite Designs	21 February 2024
A05	C	U1/2/5/6 Upper Floor & U3/4 Lower Floor Plans	Infinite Designs	21 February 2024
A07	C	Elevations 1	Infinite Designs	21 February 2024
A08	C	Elevations 2	Infinite Designs	21 February 2024
A09	C	Elevations 3, Sections	Infinite Designs	21 February 2024
A09a	C	Private Open Space Sections	Infinite Designs	21 February 2024
A10	C	Roof Plans	Infinite Designs	21 February 2024
A12	C	Concept Strata Subdivision Plan	Infinite Designs	21 February 2024

Document Title	Prepared By	Dated
Arboricultural Impact Assessment	Mark Spence	November 2023

In the event of any inconsistency between the approved plans and the supporting documentation, the approved plans prevail. In the event of any inconsistency between the approved plans and a condition of this consent, the condition prevails.

Note: an inconsistency occurs between an approved plan and supporting documentation or between an approved plan and a condition when it is not possible to comply with both at the relevant time.

General Conditions

2. Construction Certificate

A Construction Certificate must be obtained from Council or a Registered Certifier prior to work commencing.

A Construction Certificate certifies that the provisions of Part 3 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 have been satisfied, including compliance with all relevant conditions of Development Consent and the Building Code of Australia.

Note: The Certifier must cause notice of its determination to be given to the consent authority, and to the Council, by forwarding to it, within two (2) days after the date of the determination, the plans and documentation referred to in Section 13 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.

Reason:

To satisfy the requirements of the legislation.

3. Compliance with the Building Code of Australia (BCA)

Building work must be carried out in accordance with the requirements of the BCA.

Reason:

To ensure the development is built in accordance with the Building Code of Australia.

4. Occupation Certificate

An Occupation Certificate must be issued by the Principal Certifier prior to occupation or use of the development. In issuing an Occupation Certificate, the Principal Certifier must be satisfied that the requirements of Section 6.9 of the Environmental Planning and Assessment Act 1979, have been complied with as well as all of the conditions of the Development Consent.

Reason:

To satisfy the requirements of the legislation.

5. Tree Retention/Removal

The developer shall retain the existing trees indicated on the Arboricultural Impact Assessment (Mark Spence dated November 2023) consisting of trees numbered 1, 5, 6, 7, 8, 8a, 10, 11, 12, 13, 14, 15, 16, 18, 19, 21.

Any branch pruning, which has been given approval, must be carried out by a qualified arborist in accordance with Australian Standard AS 4373:2007.

All tree protection measures are to be installed in accordance with Australian standard AS 4970:2009 Protection of Trees on development sites.

All recommendations in the Arboricultural Impact Assessment are to be implemented including and not restricted to: remedial tree pruning, dead wood removal, fencing and signage, sediment buffer, stem protection, establishing tree protection zones and watering and root hormone application if required.

This consent permits the removal of trees numbered 2, 3, 4, 9, 17, 20. No other trees shall be removed without prior written approval of Council.

Reason:

To protect the amenity of the environment and the neighbourhood.

6. Development Contributions

In accordance with Section 4.17(1)(h) of the Environmental Planning and Assessment Act 1979 and the Wollongong City Wide Development Contributions Plan (2022), a monetary contribution of \$20,000.00 (subject to indexation) must be paid to Council towards the provision of public amenities and services, prior to the release of any associated Construction Certificate.

This amount has been calculated based on the proposed cost of development and the applicable percentage levy rate.

The contribution amount will be indexed quarterly until the date of payment using Consumer Price Index; All Groups, Sydney (CPI) based on the formula show in the Contributions Plan.

To request an invoice to pay the contribution amount go www.wollongong.nsw.gov/contributions and submit a contributions enquiry. The following will be required:

- Application number and property address.
- Name and address of who the invoice and receipt should be issue to.
- Email address where the invoice should be sent.

A copy of the Contributions Plan and accompanying information is available on Council's website www.wollongong.gov.au.

Before the Issue of a Construction Certificate

7. Car Parking and Access

The development shall make provision for a total of 13 car parking spaces (including 1 visitor parking space) and a minimum of 2 secure (Security Class B) residential bicycle spaces. This requirement shall be reflected on the Construction Certificate plans. Any change in above parking numbers shown on the approved DA plans shall be dealt with via a section 4.55 modification to the development. The approved car parking spaces shall be maintained to the satisfaction of Council, at all times.

Reason:

To comply with Council's Development Control Plan.

8. Parking Dimensions

The parking dimensions, internal circulation, aisle widths, kerb splay corners, head clearance heights, ramp widths and grades of the car parking areas are to be in conformity with the current relevant Australian Standard AS 2890.1, except where amended by other conditions of this consent. Details of such compliance are to be reflected on the Construction Certificate plans.

Reason:

To ensure compliance with Australian Standards.

9. Redundant Crossings

All redundant vehicular crossings and laybacks rendered unnecessary by this development must be reconstructed to normal kerb and gutter or existing edge of carriageway treatment to match the existing. The verge from the back of kerb to the boundary must be restored and the area appropriately graded, topsoiled and turfed in a manner that conforms with adjoining road reserve. The area forward of the front boundary must be kept smooth, even and free from any trip hazards. All alterations of public infrastructure where necessary are at the developer's expense.

All new driveway laybacks and driveway crossings must be designed in accordance with Wollongong City Council Standards. Any redundant line-marking such as 'marked parking bays' are adjusted/removed at the developer's expense by a Council recognised contractor with the relevant insurances. Details and locations are to be shown on the Construction Certificate Plans.

Reason:

To comply with Council's Development Control Plan.

10. Structures Adjacent to Driveway

Any proposed structures adjacent to the driveway shall comply with the requirements of the current relevant Australian Standard AS 2890.1 (figure 3.2 and 3.3) to provide for adequate pedestrian and vehicle sight distance. This includes, but is not limited to, structures such as signs, letterboxes, retaining walls, dense planting etc. This requirement shall be reflected on the Construction Certificate plans.

Reason:

To ensure compliance with Australian Standards.

11. Present Plans to Sydney Water

Approved plans must be submitted online using Sydney Water Tap In, available through www.sydneywater.com.au to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

The Principal Certifier must ensure that Sydney Water has issued an approval receipt prior to the issue of a Construction Certificate.

Visit www.sydneywater.com.au or telephone 13 20 92 for further information.

Reason:

To satisfy the requirements of the legislation.

12. Final Landscape Plan Requirements

The submission of a final Landscape Plan to the Principal Certifier is required, prior to the issue of the Construction Certificate. The final Landscape Plan shall be in accordance with the approved Landscape Concept Plan and address the following requirements:

- a. planting of indigenous plant species native to the Illawarra Region such as: *Syzygium smithii* (syn *Acmena smithii*) Lilly pilly, *Archontophoenix cunninghamiana* Bangalow palm, *Backhousia myrtifolia* Grey myrtle, *Elaeocarpus reticulatus* Blueberry ash, *Glochidion ferdinandii* Cheese tree, *Livistona australis* Cabbage palm tree, *Syzygium paniculatum* Brush cherry. A further list of suitable suggested species may be found in Wollongong Development Control Plan 2009 – Chapter E6: Landscaping;
- b. a schedule of proposed planting, including botanic name, common name, expected mature height and staking requirements as well as number of plants and pot sizes;
- c. the location of all proposed and existing overhead and underground service lines. The location of such service lines shall be clear of the dripline of existing and proposed trees; and
- d. any proposed hard surface under the canopy of existing trees shall be permeable and must be laid such that the finished surface levels match the existing level. Permeable paving is to be installed in accordance with the manufacturer's recommendations.

The completion of the landscaping works as per the final approved Landscape Plan is required, prior to the issue of an Occupation Certificate.

Reason:

To comply with Council's Development Control Plan.

13. Certification for Landscape and Drainage

The submission of certification from a suitably qualified and experienced landscape designer and drainage consultant to the Principal Certifier prior to the issue of the Construction Certificate, confirming that the landscape plan and the drainage plan are compatible.

Reason:

To ensure development does not impact services.

14. Landscape Maintenance Plan

The implementation of a landscape maintenance program in accordance with the approved Landscape Plan for a minimum period of 12 months to ensure that all landscape work becomes well established by regular maintenance. Details of the program must be submitted with the Landscape Plan to the Principal Certifier prior to issue of the Construction Certificate..

Reason:

To comply with Council's Development Control Plan.

15. Street Trees

The developer must address the street frontage by installing street tree planting as follows:

- a. Two street trees as shown on the approved Landscape Concept Plan
- b. 200 litre container size, in accordance with AS 2303:2018 Tree stock for landscape use.
- c. To be installed in accordance with Wollongong Development Control Plan 2009 – Chapter E6: Landscaping.
- d. 'Before You Dig Australia' must be consulted prior to any excavation on site.
- e. Pot holing must be carried out to determine service location.
- f. Tree pits must be adequately mulched, plants installed and staking installed to the satisfaction of Wollongong City Council. Staking is to consist of minimum 3 x 2400 x 50 x 50mm hardwood stakes driven minimum 600mm into firm ground. Hessian webbing is to be utilised to secure plant stock to industry standard.

These requirements shall be reflected on the Construction Certificate plans and any supporting documentation.

Reason:

To comply with Council's Development Control Plan.

16. Site Management, Pedestrian and Traffic Management Plan (Where Works are Proposed in a Public Road Reserve)

The submission of a Site Management, Pedestrian and Traffic Management Plan to the Principal Certifier and Council (in the event that Council is not the Principal Certifier) for approval of both the Principal Certifier and Council is required, prior to the issue of the Construction Certificate. This plan shall address what measures will be implemented for the protection of adjoining properties, pedestrian safety and traffic management and shall be in compliance with the requirements of the latest versions of Australian Standard AS 1742: Traffic Control Devices for Works on Roads and the TfNSW Traffic Control at Worksites Manual.

This plan is required to maintain public safety, minimise disruption to pedestrian and vehicular traffic within this locality and to protect services, during demolition, excavation and construction phases of the development. This plan shall include the following aspects:

- a. Proposed ingress and egress points for vehicles to/from the construction site;
- b. proposed protection of pedestrians, adjacent to the construction site;
- c. proposed pedestrian management whilst vehicles are entering/exiting the construction site;
- d. proposed measures to be implemented for the protection of all roads and footpath areas surrounding the construction site from building activities, crossings by heavy equipment, plant and materials delivery and static load from cranes, concrete pumps and the like;

- e. proposed method of loading and unloading excavation machines, building materials formwork and the erection of any part of the structure within the site;
- f. proposed areas within the site to be used for the storage of excavated material, construction materials and waste containers during the construction period;
- g. proposed traffic control measures such as advanced warning signs, barricades, warning lights, after hours contact numbers etc are required to be displayed where works are in progress in any road reserve and shall be in accordance the latest versions of the TfNSW Specification - "Traffic Control at Work Sites Manual" and the Australian Standard AS 1742: "Manual of Uniform Traffic Control Devices" and accompanying field handbooks (SAA HB81);
- h. proposed method of support of any excavation, adjacent to adjoining buildings or the road reserve. The proposed method of support is to be certified by a Registered Certifier in Civil Engineering; and
- i. proposed measures to be implemented, in order to ensure that no soil/excavated material is transported on wheels or tracks of vehicles or plant and deposited on the roadway.

The traffic control plan endorsed by Council shall be implemented, prior to the commencement of any works upon the construction site.

Note: Any proposed works or placement of plant and equipment and/or materials within any road reserve will require the separate approval of Council, prior to the commencement of such works, pursuant to the provisions of the Roads Act 1993.

Reason:

To ensure compliance with Australian Standards.

17. Details of Proposed Pit and Pipeline

Details of the proposed connecting pipeline to the Council pit, within the existing drainage system shall be provided in conjunction with the detailed drainage design for the site. Connection is to be made in accordance with Wollongong City Council Standard Drawings. This requirement shall be reflected on the Construction Certificate plans and supporting documentation.

Reason:

To ensure development does not impact services.

18. Engineering Plans and Specifications - Retaining Wall Structures Greater than One (1) Metre

The submission of engineering plans and supporting documentation of all proposed retaining walls greater than one (1) metre to the Principal Certifier for approval prior to the issue of the Construction Certificate. The retaining walls shall be designed by a suitably qualified and experienced civil and/or structural engineer. The required engineering plans and supporting documentation shall include the following:

- a. a plan of the wall showing location and proximity to property boundaries;
- b. an elevation of the wall showing ground levels, maximum height of the wall, materials to be used and details of the footing design and longitudinal steps that may be required along the length of the wall;
- c. details of fencing or handrails to be erected on top of the wall;
- d. sections of the wall showing wall and footing design, property boundaries, subsoil drainage and backfill material. Sections shall be provided at sufficient intervals to determine the impact of the wall on existing ground levels. The developer shall note that the retaining wall, subsoil drainage and footing structure must be contained wholly within the subject property;

- e. the proposed method of subsurface and surface drainage, including water disposal. This is to include subsoil drainage connections to an inter-allotment drainage line or junction pit that discharges to the appropriate receiving system;
- f. the assumed loading used by the engineer for the wall design; and
- g. flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels.

Reason:

To comply with Council's Development Control Plan.

19. Sizing of Drainage

All roof gutters, downpipes, pits, and pipelines draining roof areas and other impervious surfaces with no deliberate overflow path to the on-site stormwater detention (OSD) facility, shall be designed to cater for a 1% AEP storm event in accordance with AS 3500.3: Plumbing and Drainage (Stormwater Drainage). Details of gutter/downpipe/pipeline sizes and locations shall be reflected on the Construction Certificate plans.

Reason:

To comply with Council's Development Control Plan.

20. Stormwater Drainage Design

A detailed drainage design for the development must be submitted to and approved by the Principal Certifier prior to the release of the Construction Certificate. The detailed drainage design must satisfy the following requirements:

- a. Be prepared by a suitably qualified Civil Engineer in accordance with Chapter E14 of Wollongong City Council's Development Control Plan 2009, Subdivision Policy, conditions listed under this consent, and generally in accordance with the concept plan/s lodged for development approval, prepared by **Nastasi and Associates, Reference No. 32377 C2 revision E, dated 01.11.2023.**
- b. Include details of the method of stormwater disposal. Stormwater from the development must be piped to Council's existing stormwater drainage system.
- c. Engineering plans and supporting calculations for the stormwater drainage system are to be prepared by a suitably qualified engineer and be designed to ensure that stormwater runoff from upstream properties is conveyed through the site without adverse impact on the development or adjoining properties. The plan must indicate the method of disposal of all stormwater and must include rainwater tanks, existing ground levels, finished surface levels on all paved areas, estimated flow rates, invert levels and sizes of all pipelines.
- d. Overflow paths shall be provided to allow for flows of water in excess of the capacity of the pipe/drainage system draining the land, as well as from any detention storage on the land. Blocked pipe situations with 1% AEP events shall be incorporated in the design. Overflow paths shall also be provided in low points and depressions. Each overflow path shall be designed to ensure no entry of surface water flows into any building and no concentration of surface water flows onto any adjoining property. Details of each overflow path shall be shown on the detailed drainage design.

Reason:

To comply with Council's Development Control Plan.

21. Flood Level Requirements

The following requirements shall be reflected on the Construction Certificate plans, prior to the release of the Construction Certificate:

- a. Habitable floor levels must be constructed no lower than as shown on the approved architectural plans.
- b. Garage floor levels must be constructed no lower than as shown on the approved architectural plans.
- c. Any portion of the building or structure below the finished floor level should be built from flood compatible materials. Where materials are proposed and not listed in Appendix B of Chapter E13 of the Wollongong DCP 2009, relevant documentation from the manufacturer shall be provided demonstrating that the materials satisfy the definition of 'flood compatible materials' as stated in Chapter E13 of the Wollongong DCP 2009.
- d. The proposed building shall be designed to withstand the forces of floodwater, debris and buoyancy up to and including the finished floor level.

Reason:

To comply with Council's Development Control Plan.

22. On-Site Stormwater Detention (OSD) Design

The developer must provide OSD storage for stormwater runoff from the development. The design and details of the OSD system must be provided in conjunction with the detailed drainage design and approved by the Principal Certifier prior to the release of the Construction Certificate. The OSD design and details must satisfy the following requirements:

- a. Must be prepared by a suitable qualified engineer in accordance with Chapter E14 of the Wollongong DCP 2009.
- b. Must include details of the Site Storage Requirement (SSR) and Permissible Site Discharge (PSD) values for the site in accordance with Section 10.2.4 of Chapter E14 of the Wollongong DCP 2009.
- c. The OSD facility must be designed to withstand the maximum loadings occurring from any combination of traffic (with consideration to residential and heavy vehicles), hydrostatic, earth, and buoyancy forces. Details must be provided demonstrating these requirements have been achieved.
- d. The OSD facility shall incorporate a minimum 900mm x 900mm square lockable grate for access and maintenance purposes, provision for safety, debris control screen, and a suitably graded invert to the outlet to prevent ponding.
- e. Must include discharge control calculations (i.e. orifice/weir calculations) generally in accordance with Section 10.2.6 and 10.4.4 of Chapter E14 of the Wollongong DCP 2009.
- f. Details of the orifice plate including diameter of orifice and method of fixing shall be provided.
- g. Must include details of a corrosion resistant identification plaque for location on or close to the OSD facility. The plaque shall include the following information and shall be installed prior to the issue of the Occupation/Subdivision Certificate:
 - i. The structure is an OSD facility, being part of the stormwater drainage network, and is not to be tampered with.
 - ii. Identification number DA-2023/358.
 - iii. Any specialist maintenance requirements.
- h. Must include a maintenance schedule for the OSD system, generally in accordance with Chapter E14 of the Wollongong DCP 2009.

Reason:

To comply with Council's Development Control Plan.

23. Site Filling

Filling on the site being within the floodplain shall be restricted to within the proposed building footprint and ramped areas immediately adjacent to the garage only. No wholesale filling of the site within the floodplain is permitted. This requirement shall be reflected on the Construction Certificate plans.

Reason:

To comply with Council's Development Control Plan.

24. No Adverse Runoff Impacts on Adjoining Properties

The design of the development shall ensure there are no adverse effects to adjoining properties or upon the land as a result of flood or stormwater runoff.

Reason:

To protect neighbourhood amenity.

25. Drainage Works within Council Land

A detailed design for the proposed drainage works within Council's Land, including pit and pipeline connecting the drainage system to Council's existing underground drainage system in lot C DP 36592, shall be prepared by a suitably qualified civil engineer in accordance with the relevant Council engineering standards. The design plans shall be generally in accordance with the **Concept Stormwater Plan prepared by Nastasi and Associates, Reference No. 32377 C2 revision E, dated 01.11.2023.**

- a Levels and details of all existing and proposed infrastructure/services such as pits, public utilities, poles, fencing, stormwater drainage, shall extend a minimum of 5 metres beyond the limit of works.
- b Engineering details of the proposed pit and pipe stormwater drainage system within Council's land, including a hydraulic grade line analysis and longitudinal section of the proposed system showing calculated flows, velocity, pits, pipe size/class, grade, inverts and ground levels. Each proposed pit must be constructed generally in accordance with Wollongong City Council's Engineering Standard Drawings.
- c All new drainage pits shall be in accordance with the current version of Wollongong City Council's Engineering Standard Drawings. The proposed pit in Council's reserve must not conflict with any existing or proposed utilities.
- d Where any adjustments to public utilities are proposed the applicant shall submit documentary evidence that they have the consent of the owner of the public utility authority.

All construction must be in accordance with the requirements of Council's Subdivision Code.

Evidence that the above requirements have been met must be detailed on the engineering drawings. The detailed design and supporting documentation shall be submitted to and approved by Wollongong City Council's Development Engineering Manager prior to the issue of the Construction Certificate.

26. Flows from Adjoining Properties

Flows from adjoining properties shall be accepted and catered for within the site. Finished ground and top of retaining wall levels on the boundary shall be no higher than the existing upslope adjacent ground levels. The above requirements must be clearly shown on construction certificate plans prior to the release of the construction certificate.

Before the Commencement of Building Work

27. Works in Road Reserve - Minor Works

Approval, under Section 138 of the Roads Act must be obtained from Wollongong City Council's Development Engineering Team prior to any works commencing or any proposed interruption to pedestrian and/or vehicular traffic within the road reserve caused by the construction of this development.

The application form for Works within the Road Reserve – Section 138 Roads Act can be found on Council's website. The form outlines the requirements to be submitted with the application, to give approval to commence works under the Roads Act. It is advised that all applications are submitted and fees paid, five (5) days prior to the works within the road reserve are intended to commence. The Applicant is responsible for the restoration of all Council assets within the road reserve which are impacted by the works/occupation. Restoration must be in accordance with the following requirements:

- a. All restorations are at the cost of the Applicant and must be undertaken in accordance with Council's standard document, "Specification for work within Council's road reserve".
- b. Any existing damage within the immediate work area or caused as a result of the work/occupation, must also be restored with the final works.

Reason:

To satisfy the requirements of the legislation.

28. Signs On Site

A sign must be erected in a prominent position on any site on which building work or demolition work is being carried out:

- a. showing the name, address and telephone number of the Principal Certifier for the work, and
- b. showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
- c. stating that unauthorised entry to the worksite is prohibited.

Any such sign is to be maintained while the building work or demolition work is being carried out but must be removed when the work has been completed.

Note: This does not apply in relation to building work or demolition work that is carried out inside an existing building that does not affect the external walls of the building.

Reason:

To satisfy the requirements of the legislation.

29. Enclosure of the Site

The site must be enclosed with a suitable security fence to prohibit unauthorised access, to be approved by the Principal Certifier. No building work is to commence until the fence is erected.

Reason:

To ensure safety.

30. Demolition Works

The demolition of the existing structures shall be carried out in accordance with Australian Standard AS 2601:2001: The Demolition of Structures or any other subsequent relevant Australian Standard and the requirements of SafeWork NSW.

No demolition materials shall be burnt or buried on-site. The person responsible for the demolition works shall ensure that all vehicles leaving the site carrying demolition materials have their loads covered and do not track soil or waste materials onto the road. Any unforeseen

hazardous and/or intractable wastes shall be disposed of to the satisfaction of the Principal Certifier. In the event that the demolition works may involve the obstruction of any road reserve/footpath or other Council owned land, a separate application shall be made to Council to enclose the public place with a hoarding or fence over the footpath or other Council owned land.

Reason:

To satisfy the requirements of the legislation and Australian Standards.

31. Demolition Notification to Surrounding Residents

Demolition must not commence unless at least two (2) days written notice has been given to adjoining residents of the date on which demolition works will commence.

Reason:

To advise neighbourhood.

32. Consultation with SafeWork NSW - Prior to Asbestos Removal

A licensed asbestos removalist must give written notice to SafeWork NSW at least five (5) days before licensed asbestos removal work is commenced.

Reason:

To satisfy the requirements of the legislation.

33. Tree Protection

Prior to commencement of any work on the site, including any demolition, all trees not approved for removal as part of this consent that may be subjected to impacts of this approved development must be protected in accordance with Section 4 of the Australian Standard Protection of Trees on Development Sites (AS 4970:2009).

Tree Protection Zones must be established prior to the commencement of any work associated with this approved development.

No excavation, construction activity, grade changes, storage of materials stockpiling, siting of works sheds, preparation of mixes or cleaning of tools is permitted within Tree Protection Zones.

Reason:

To ensure all parties are aware of the approved plans and supporting documentation.

34. Appointment of Principal Certifier

Prior to commencement of work, the person having the benefit of the Development Consent and a Construction Certificate must:

- a. appoint a Principal Certifier and notify Council in writing of the appointment irrespective of whether Council or a Registered Certifier is appointed; and
- b. notify Council in writing of their intention to commence work (at least two [2] days' notice is required).

The Principal Certifier must determine when inspections and compliance certificates are required.

Reason:

To satisfy the requirements of the legislation.

35. Temporary Toilet/Closet Facilities

Toilet facilities are to be provided at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided must be:

- a. a standard flushing toilet, and

- b. connected to either:
 - i. the Sydney Water Corporation Ltd sewerage system or
 - ii. an accredited sewage management facility or
 - iii. an approved chemical closet.

The toilet facilities shall be provided on-site, prior to the commencement of any works.

Reason:

To satisfy the requirements of the legislation.

36. Temporary Sediment Fences

Temporary sediment fences (e.g. haybales or geotextile fabric) must be installed on the site, prior to the commencement of any excavation, demolition or construction works in accordance with Council's guidelines. Upon completion of the development, sediment fencing is to remain until the site is grassed or alternatively, a two (2) metre strip of turf is provided along the perimeter of the site, particularly lower boundary areas.

Reason:

To protect neighbourhood amenity.

37. Supervising Arborist - Tree Inspection and Installation of Tree Protection Measures

Prior to the commencement of any demolition, excavation or construction works, the supervising Arborist must certify in writing that tree protection measures have been inspected and installed in accordance with the Arborist's recommendations and relevant conditions of this consent.

Reason:

To ensure all parties are aware of the approved plans and supporting documentation.

While Building Work is Being Carried Out

38. Hours of Work

The Principal Certifier must ensure that building work, demolition or vegetation removal is only carried out between:

- 7:00am to 5:00pm on Monday to Saturday

The Principal Certifier must ensure building work, demolition or vegetation removal is not carried out on Sundays and public holidays, except where there is an emergency.

Unless otherwise approved within a construction site management plan, construction vehicles, machinery, goods or materials must not be delivered to the site outside the approved hours of site works.

Any variation to the hours of work requires Council's approval.

Any request to vary the approved hours shall be submitted to the Council in writing detailing:

- a. The variation in hours required (length of duration);
- b. the reason for that variation (scope of works);
- c. the type of work and machinery to be used;
- d. method of neighbour notification;
- e. supervisor contact number; and
- f. any proposed measures required to mitigate the impacts of the works.

Note: The developer is advised that other legislation, such as Noise Guidelines for Local Government January 2023, may control the activities for which Council has granted consent, including but not limited to, the *Protection of the Environment Operations Act 1997*.

Reason:

To protect the amenity of the surrounding area.

39. Consultation with SafeWork NSW – Asbestos removal

A licensed asbestos removalist must give written notice to SafeWork NSW at least five (5) days before licensed asbestos removal work is commenced.

Reason:

To satisfy the requirements of the legislation.

40. Asbestos Waste Collection, Transportation and Disposal

Asbestos waste must be prepared, contained, transported and disposed of in accordance with SafeWork NSW and NSW Environment Protection Authority requirements. Asbestos waste must only be disposed of at a landfill site that can lawfully receive this type of waste. A receipt must be retained and submitted to the Principal Certifier, and a copy submitted to Council (in the event that Council is not the Principal Certifier), prior to commencement of the construction works.

Reason:

To satisfy the requirements of the legislation.

41. Provision of Waste Receptacle

The developer must provide an adequate receptacle to store all waste generated by the development, pending disposal. The receptacle must be regularly emptied and waste must not be allowed to lie or accumulate on the property other than in the receptacle. Consideration should be given to the source separation of recyclable and re-usable materials.

Reason:

To comply with Council's Development Control Plan.

42. Excavation/Filling/Retaining Wall Structures

Any proposed filling on the site must not:

- a. Encroach onto the adjoining properties, and
- b. adversely affect the adjoining properties with surface run-off.

Reason:

To ensure ongoing protection of the environment and neighbourhood amenity.

43. Cut and Fill Retained

All proposed cut and filling works must be adequately retained with all battered slopes being no steeper than 2H:1V.

Reason:

To ensure ongoing protection of the environment and neighbourhood amenity.

44. Implementation of BASIX commitments

While building work is being carried out, the applicant must undertake the development strictly in accordance with the commitments listed in the BASIX certificate(s) approved by this consent, for the development to which the consent applies.

Reason:

To satisfy the requirements of the legislation.

45. Where Polystyrene Waffle Pods Are Used During Construction

Management of waffle pods at the site must comply with the Industry Code of Practice - Waffle Pods (2023/2024)

https://epsa.org.au/wp-content/uploads/2023/07/Pod-Code-of-Practice-EPSA_2023.pdf

- Pods must be secured using the approved tie down method at time of delivery, immediately upon completion of installation and any other time not in use.
- Scrap pods, offcuts and beads must be collected immediately after installation and placed in approved bags provided by the supplier.
- Waffle pods, waffle pod offcuts or waffle pod fragments must not be permitted to lie or accumulate on the property.

Reason:

To ensure protection of the environment.

46. Copy of Consent in the Possession of Person carrying out Tree Removal

The Developer/Applicant must ensure that any person carrying out tree removal is in possession of this development consent and/or the approved landscape plan, in respect to the tree(s) which has/have been given approval to be removed in accordance with this consent.

Reason:

To ensure all parties are aware of the approved plans and supporting documentation.

47. Provision of Taps/Irrigation System

The provision of common taps and/or an irrigation system is required to guarantee that all landscape works are adequately watered. The location of common taps and/or irrigation system must be implemented in accordance with the approved Landscape Plan.

Reason:

To comply with Council's Development Control Plan.

48. Screen Planting

To mitigate impact to adjoining dwelling a continuous hedge is to be established along the eastern and western boundaries for the length of property boundary.

Recommended species:

- Murraya paniculata*, *Photinia* "Red Robin",
- Viburnum tinus*, *Syzygium australe* "Aussie Southern",
- Syzygium australe* "Aussie Compact",
- Syzygium luehmannii* x *S.wilsonii* "Cascade",
- Westringia fruticosa*.

Minimum spacing 900mm.

Minimum pot size 5 lt.

A further list of suitable suggested species may be found in Wollongong Development Control Plan 2009 – Chapter E6: Landscaping.

Reason:

To comply with Council's Development Control Plan.

49. Survey Report for Floor Levels

A Survey Report must be submitted to the Principal Certifier verifying that each floor level accords with the floor levels as per the approved plans under this consent. The survey shall be undertaken after the formwork has been completed and prior to the pouring of concrete for each respective level of the building (if the building involves more than one level). All levels shall relate to Australian Height Datum.

Reason:

To ensure all parties are aware of the approved plans and supporting documentation.

50. Piping of Stormwater to Existing Stormwater Drainage System

Stormwater for the land must be piped to Council's existing stormwater drainage system.

Reason:

To ensure all parties are aware of the approved plans and supporting documentation.

51. No Adverse Run-off Impacts on Adjoining Properties

The design and construction of the development shall ensure there are no adverse effects to adjoining properties, as a result of flood or stormwater run-off. Attention must be paid to ensure adequate protection for buildings against the ingress of surface run-off.

Allowance must be made for surface run-off from adjoining properties. Any redirection or treatment of that run-off must not adversely affect any other property.

Reason:

To comply with Council's Development Control Plan.

52. Fences

Any new fences constructed on the site and located in the flood plain shall be of a type that will not obstruct the free flow of floodwaters and not cause damage to surrounding land in the event of a flood.

Reason:

To comply with Council's Development Control Plan.

Before the Issue of an Occupation Certificate

53. BASIX

An Occupation Certificate must not be issued unless accompanied by the BASIX Certificate applicable to the development. The Principal Certifier must not issue the Occupation Certificate unless satisfied that selected commitments have been complied with as specified in the relevant BASIX Certificate.

NOTE: Clause 44 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 provides for independent verification of compliance in relation to certain BASIX commitments.

Reason:

To satisfy the requirements of the legislation.

54. Completion of landscape and tree works

Before the issue of an Occupation Certificate, the Principal Certifier must be satisfied that all landscape and tree works, including pruning in accordance with *AS 4373-2007 Pruning of amenity trees* and the removal of all noxious weed species, have been completed in accordance with the approved plans and any relevant conditions of this consent.

Reason:

To ensure the approved landscaping works have been completed in accordance with the approved landscaping plan(s).

55. Arborist Verification – Street Tree Installation

Prior to the issue of Occupation Certificate, the developer must supply certification in the form of a report, including photographic evidence, from an AQF Level 5 Arborist to the Principal Certifier and Wollongong City Council to verify:

- a. The tree stock complies with AS 2203:2018 Tree Stock for Landscape Use.
- b. The tree pits have been constructed and the trees installed in accordance with the requirements of the Wollongong City Council City Centre Public Domain Technical Manual and arboricultural best practice.

Reason:

To comply with the Australian Standards.

56. Drainage

The developer must obtain a certificate of Hydraulic Compliance (using Council's M19 form) from a suitably qualified civil engineer, to confirm that all stormwater drainage and on-site detention works have been constructed in accordance with the approved plans. In addition, full works-as-executed plans, prepared and signed by a Registered Surveyor must be submitted. These plans and certification must satisfy all the stormwater requirements stated in Chapter E14 of the Wollongong DCP 2009. This information must be submitted to the Principal Certifier prior to the issue of the final Occupation Certificate.

Reason:

To comply with Council's Development Control Plan.

57. Restriction on Use - On-Site Detention System (OSD)

The applicant must create a restriction on use under the Conveyancing Act 1919 over the OSD system. The following terms must be included in an appropriate instrument created under the Conveyancing Act 1919 for approval of Council:

"The registered proprietor of the lot burdened must not make or permit or suffer the making of any alterations to any on-site detention system on the lot(s) burdened without the prior consent in writing of the authority benefited. The expression 'on-site detention system' shall include all ancillary gutters, pipes, drains, walls, kerbs, pits, grates, tanks, chambers, basins and surfaces designed to temporarily detain stormwater as well as all surfaces graded to direct stormwater to those structures.

Name of the authority having the power to release, vary or modify the restriction referred to is Wollongong City Council."

The instrument, showing the restriction, must be submitted to the Principal Certifier for endorsement prior to the issue of the Occupation Certificate and the use of the development.

Reason:

To comply with Council's Development Control Plan.

58. Retaining Wall Certification

The submission of a certificate from a suitably qualified and experienced structural engineer or civil engineer to the Principal Certifier is required, prior to the issue of the Occupation Certificate or commencement of the use. This certification is required to verify the structural adequacy of the retaining walls and that the retaining walls have been constructed in accordance with plans approved by the Principal Certifier.

Reason:

To comply with the relevant Standards.

59. Positive Covenant - On-Site Detention Maintenance Schedule

A positive covenant shall be created under the Conveyancing Act 1919, requiring the property owner(s) to undertake maintenance in accordance with the Construction Certificate approved On-Site Detention System and Maintenance Schedule DA-2023/358.

The instrument, showing the positive covenant must be submitted to the Principal Certifier for endorsement prior to the issue of the Occupation Certificate and the use of the development.

Reason:

To comply with Council's Development Control Plan.

60. On-Site Detention - Structural Certification

The submission of a certificate from a suitably qualified practising civil and/or structural engineer to the Principal Certifier is required prior to the issue of the Occupation Certificate. This

certification is required to verify the structural adequacy of the on-site detention facility and that the facility has been constructed in accordance with the approved Construction Certificate plans.

Reason:

To comply with Council's Development Control Plan.

61. Structural Soundness Certification

The submission of a report from a suitably qualified and experienced structural engineer to the Principal Certifier is required, prior to the issue of the Occupation Certificate and commencement of use. This report is required to verify that the development can withstand the forces of floodwater, debris and buoyancy up to and including the finished floor level.

Reason:

To comply with Council's Development Control Plan.

Occupation and Ongoing Use

62. Loading/Unloading Operations/Activities

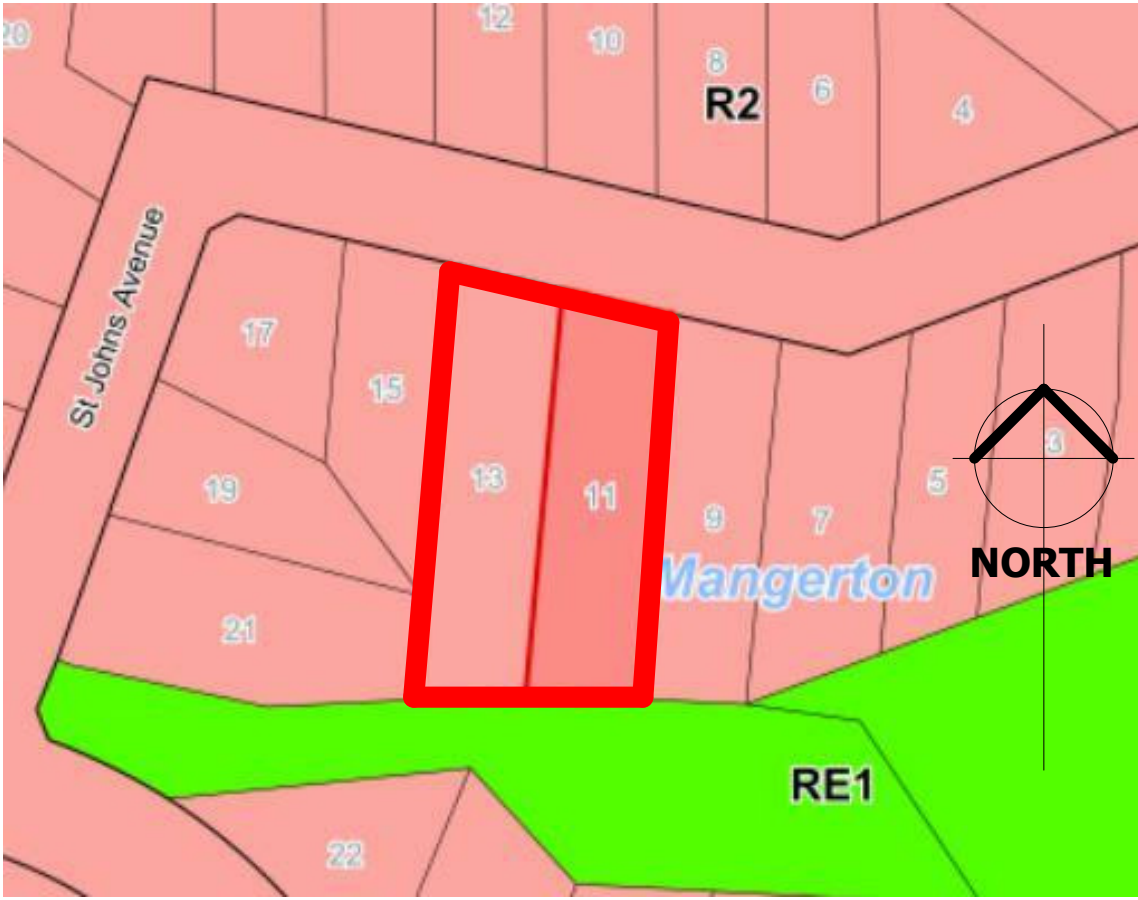
All loading/unloading operations are to take place at all times wholly within the confines of the site or within the road reserve under an approved traffic control plan.

Reason:

To comply with legislation and Australian Standards.

STAGE 1: Demoliton of existings dwellings and structures
and torrens title consolidation of Lots 18 & 19 of DP 220627
STAGE 2: Proposed six(6) unit townhouse development and strata subdivision
Development Address - Lot 19 DP 220627, No. 11 ST JOHNS AVENUE, MANGERTON
Lot 18 DP 220627, No. 13 ST JOHNS AVENUE, MANGERTON

Sheet List	
Sheet Number	Sheet Name
A00	COVER SHEET
A01	STAGE 1 - DEMOLITION PLAN & DRAFT TORRENS TITLE SUB-DIVISION
A02	SITE PLAN
A03	SITE-WASTE MANAGEMENT PLAN
A04	U1-U6 GROUND FLOOR PLANS
A05	U1/2/5/6 UPPER FLOOR & U3/4 LOWER FLOOR PLANS
A06	STREETSCAPE PHOTOMONTAGE
A07	ELEVATIONS 1
A08	ELEVATIONS 2
A09	ELEVATIONS 3, SECTIONS
A09a	PRIVATE OPEN SPACE SECTIONS
A09b	SETBACK PLAN - U1-U6 GROUND FLOOR
A09c	SETBACK PLAN - U1/2/5/6 UPPER FLOOR
A10	ROOF PLANS
A11	BASIX REQUIREMENTS
A12	CONCEPT STRATA SUBDIVISION PLAN



N.T.S. -ZONE MAP -
R2 LOW DENSITY RESIDENTIAL

LEP COMPLIANCE	
F.S.R CALCULATIONS	
SITE AREA	
Lot 18 & 19 (combined)	
1706m2(0.5 = 853m2)	
GROSS FLOOR AREA	
U1	113.9m2
U2	122.5m2
U3-4	134.7m2(each)
U5	115.7m2
U6	126.2m2
TOTAL GFA 747.7m2	
Prop. F.S.R.	0.4382:1

(areas **exclude** patio, alfresco, balcony, voids
ext. walls, garage, upper floor stair f/print)
(areas **include** party walls, internal living
space lower floor stair footprint)

DCP COMPLIANCE	
CARPARKING CALCULATIONS	
Required Number of Car Park Spaces	
2 x RESIDENTIAL PER UNIT = 12 SPACES	
VISTOR - 0.2 PER UNIT = 1.2 SPACES	
Total No. of Spaces Req 13.2 spaces	
Proposed Number of Car Park Spaces	
ENCLOSED RESIDENTIAL SPACES = 10 SPACES	
OPEN RESIDENTIAL SPACES = 2 SPACES	
VISTOR OPEN = 3 SPACES	
Total No. of Proposed 15 spaces	
LANDSCAPE CALCULATIONS	
LANDSCAPED AREA = 569.8m2	
(33.3% of total site area)	
DEEP SOIL PLANTING = >6m wide strip at rear	



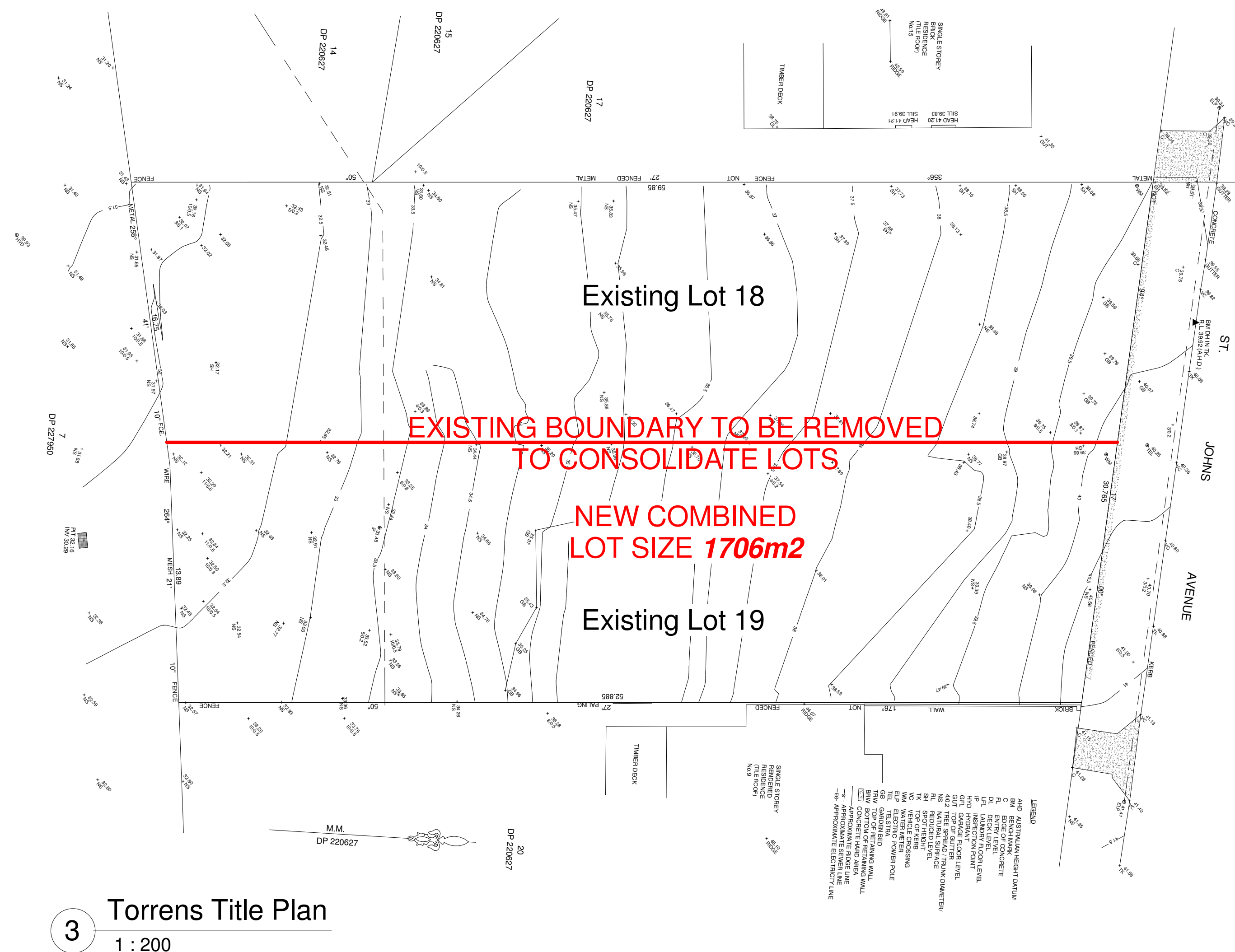
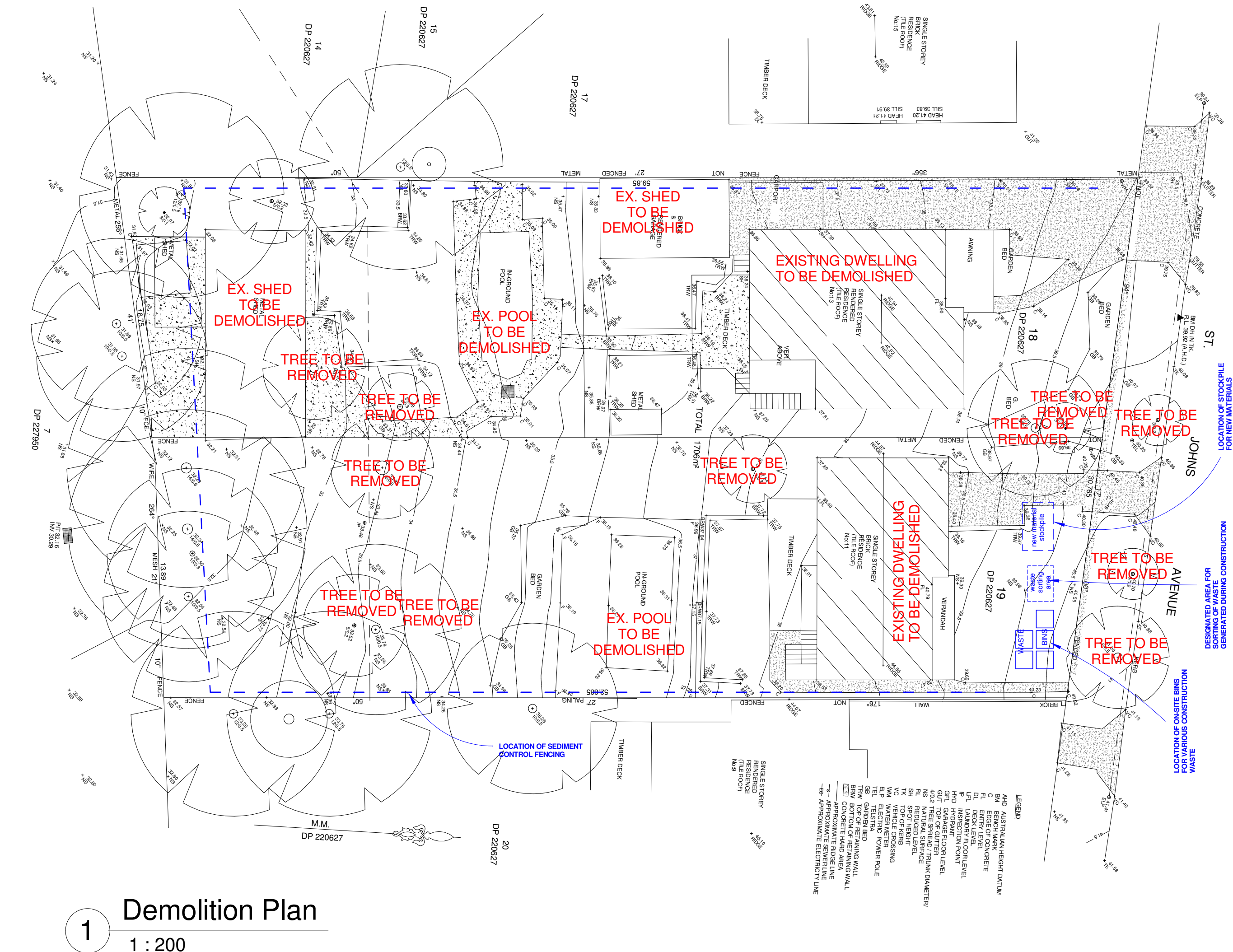
PHOTOMONTAGE OF PROPOSAL FROM STREET VIEW
(PREPARED BY ***EVES VISUALIZATION***)

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

COVER SHEET

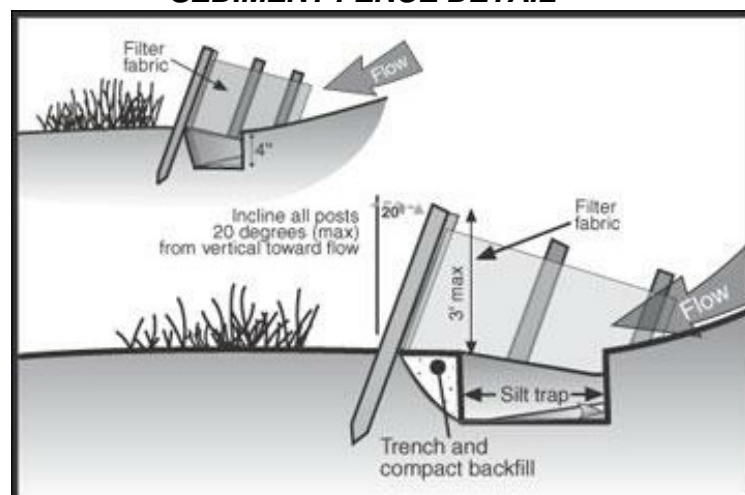
A00

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	



*FINAL SUBDIVISION PLAN TO COMPLETED
BY REGISTERED SURVEYOR

SEDIMENT FENCE DETAIL



PROVIDE SEDIMENT BARRIER ALONG CHAIN WIRE FENCING	STORM WATER DISPOSAL TO LOCAL COUNCIL REQUIREMENT.
ALL RETAINING WALLS BY OWNER UNLESS OTHERWISE SPECIFIED.	SEWERAGE CONNECTION TO THE REQUIREMENT OF LOCAL AUTHORITY.
CUT-FILL RL'S TO BE CONFIRMED BY ENGINEER PRIOR TO CONSTRUCTION	PROVIDE TEMPORARY CHAIN WIRE FENCE TO ALL NON FENCED BOUNDARIES

phone: 0410 496 640
email: info@infinite.com
post: PO Box 48 Lake Heights NSW 2502



STAGE 1: Demolition of existing structures, Torrens title subdivision
STAGE 2: Proposed Six(6) Unit Development & Strata Subdivision

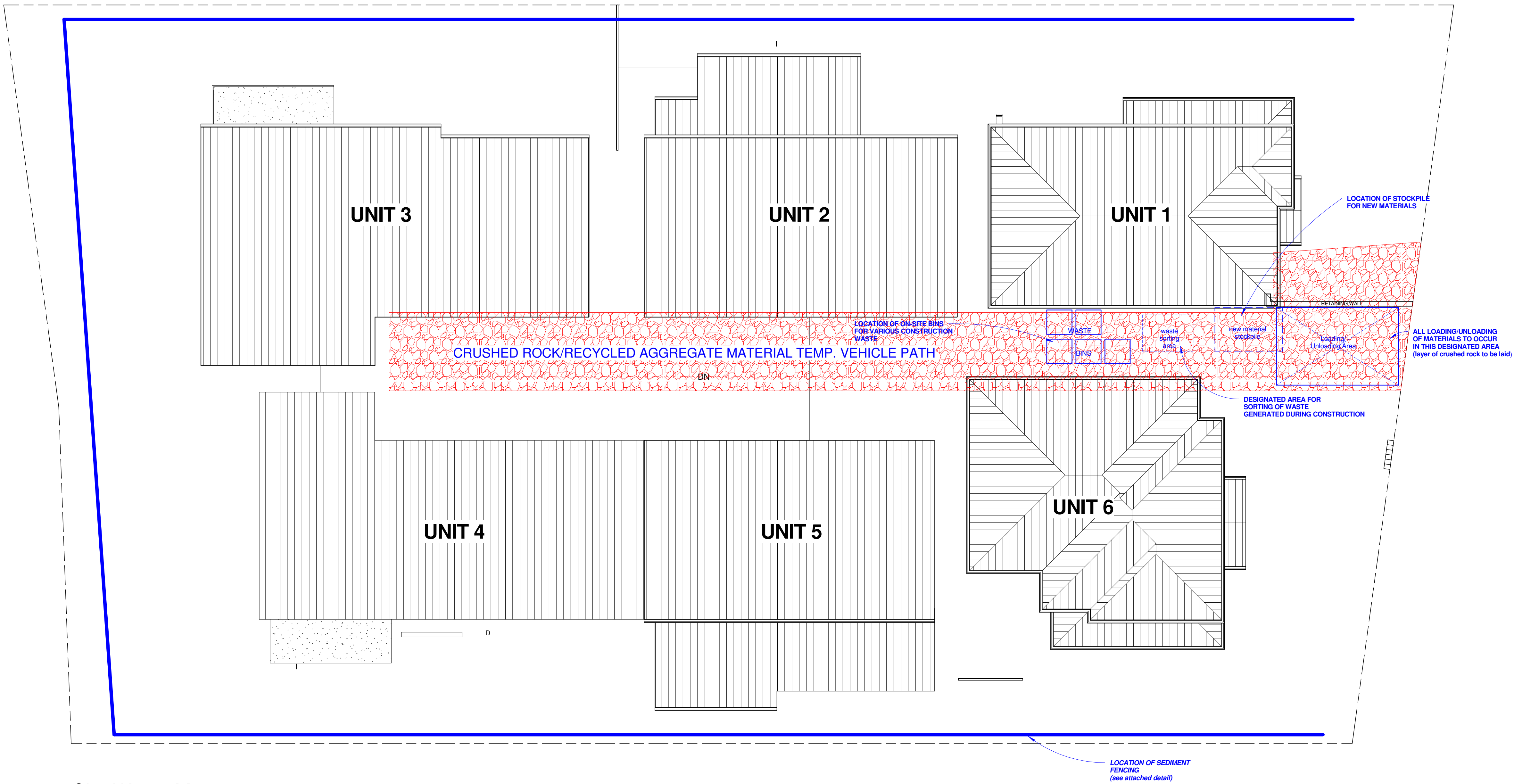
Development Address:- LOT 18 & LOT 19 DP 220627 No.11 & 13 ST JOHNS AVENUE, MANGERTON

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

STAGE 1 -
DEMOLITION PLAN &
DRAFT TORRENS
TITLE SUB-DIVISION

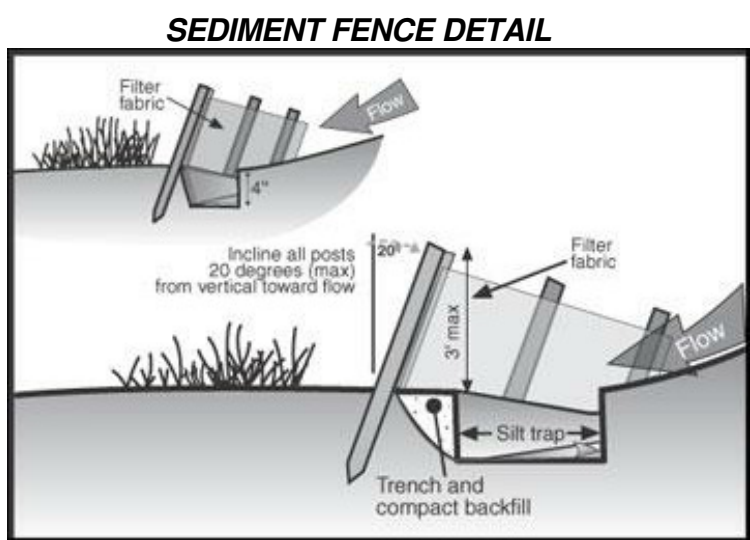
A01

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	As indicated



1 Site-Waste Management Plan
1:100

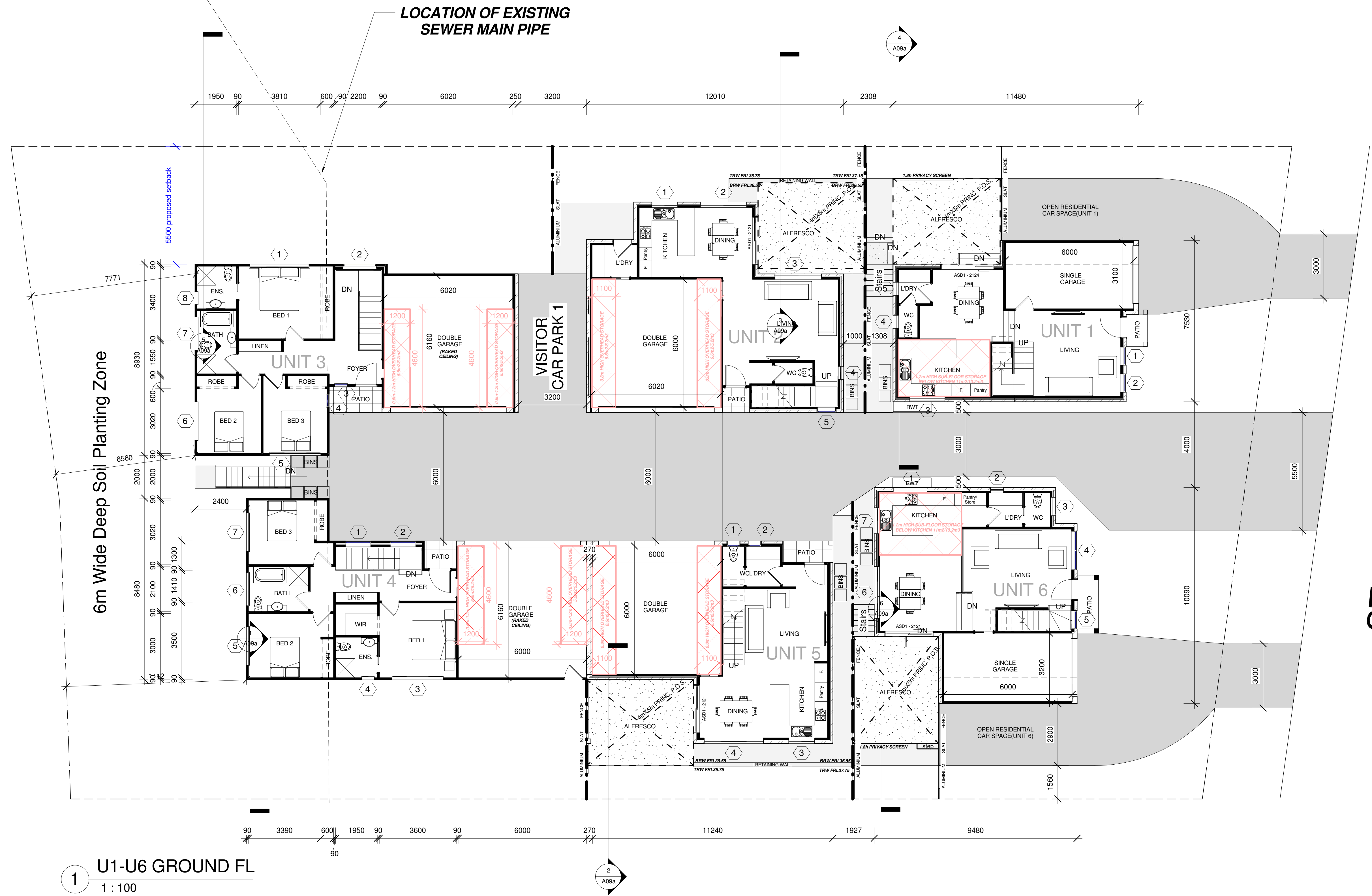
PROVIDE SEDIMENT BARRIER ALONG CHAIN WIRE FENCING	STORM WATER DISPOSAL TO LOCAL COUNCIL REQUIREMENT.
ALL RETAINING WALLS BY OWNER UNLESS OTHERWISE SPECIFIED.	SEWERAGE CONNECTION TO THE REQUIREMENT OF LOCAL AUTHORITY.
CUT-FILL R/L'S TO BE CONFIRMED BY ENGINEER PRIOR TO CONSTRUCTION	PROVIDE TEMPORARY CHAIN WIRE FENCE TO ALL NON FENCED BOUNDARIES



No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

SITE-WASTE MANAGEMENT PLAN	
A03	
Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	As indicated

Ceiling Height: Means the vertical distance from the ceiling level at the outside wall to natural ground level or finished ground level whichever is lower. For a 'cathedral', raked or curved ceiling, or where the roof structure of the building serves the same purpose as the ceiling of a conventional building, the ceiling height is measured as the vertical distance from the pitching point at the outside wall to natural ground level or finished ground level, whichever is lower.



ST JOHNS AVENUE

Window Schedule			
Location	Mark	Height	Width
U1	22	1030	610
U1	1	1800	850
U1	2	1800	850
U1	3	600	1570
U1	4	600	610
U1	5	940	610
U1	6	600	1810
U1	7	940	1210
U1	8	610	900
U1	9	610	900
U1	10	1030	850
U1	11	1030	850
U1	12	1030	850
U1	13	600	2410
U1	14	1800	1570
U1	15	1030	1810
U1	16	1030	1810
U2	1	1030	1210
U2	2	1030	2170
U2	3	1030	2170
U2	4	940	610
U2	5	610	900
U2	6	1030	1810
U2	7	1030	1810
U2	8	940	1210
U2	9	1800	1810
U2	10	1030	850
U2	11	1030	850
U2	12	600	2770
U2	13	1030	2770
U2	14	940	850
U3	1	940	2770
U3	2	1530	1570
U3	3	1800	610
U3	4	1800	610
U3	5	600	2410
U3	6	1030	1810
U3	7	940	1570
U3	8	940	610
U3	10	1800	1810
U3	12	1800	610
U3	18	1800	610
U4	1	1800	1200
U4	2	1800	1200
U4	3	1030	2410
U4	4	940	610
U4	5	1030	1810
U4	6	940	1570
U4	7	1030	1810
U4	8	1030	2770
U4	9	610	2170
U4	10	940	850
U5	1	930	610
U5	2	930	610
U5	3	1030	1210
U5	4	1030	2770
U5	5	940	2170
U5	6	1800	1200
U5	7	1800	1200
U5	8	940	610
U5	9	1500	850
U5	10	1200	1570
U5	11	1030	2170
U5	12	940	1210
U6	1	600	1570
U6	2	940	610
U6	3	930	850
U6	4	1800	1810
U6	5	1800	850
U6	6	600	2410
U6	7	1030	1210
U6	8	940	1570
U6	9	930	850
U6	10	940	2770
U6	11	1800	850
U6	12	1800	850
U6	13	600	2770
U6	14	1030	850
U6	15	1030	1810
U6	16	1030	1810

phone: 0410 496 640
email: info@infinite.com
post: PO Box 48 Lake Heights NSW 2502



STAGE 1: Demolition of existing structures, Torrens title subdivision
STAGE 2: Proposed Six(6) Unit Development & Strata Subdivision

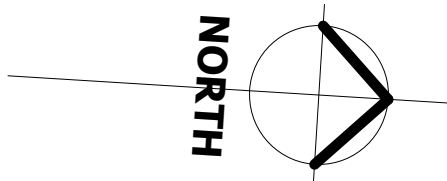
Development Address:- LOT 18 & LOT 19 DP 220627 No.11 & 13
ST JOHNS AVENUE, MANGERTON

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

U1-U6 GROUND FLOOR PLANS

A04

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	1 : 100



Window Schedule			
Location	Mark	Height	Width
U1	22	1030	610
U1	1	1800	850
U1	2	1800	850
U1	3	600	1570
U1	4	600	610
U1	5	940	610
U1	6	600	1810
U1	7	940	1210
U1	8	610	900
U1	9	610	900
U1	10	1030	850
U1	11	1030	850
U1	12	1030	850
U1	13	600	2410
U1	14	1800	1570
U1	15	1030	1810
U1	16	1030	1810
U2	1	1030	1210
U2	2	1030	2170
U2	3	1030	2170
U2	4	940	610
U2	5	610	900
U2	6	1030	1810
U2	7	1030	1810
U2	8	940	1210
U2	9	1800	1810
U2	10	1030	850
U2	11	1030	850
U2	12	600	2770
U2	13	1030	2770
U2	14	940	850
U3	1	940	2770
U3	2	1530	1570
U3	3	1800	610
U3	4	1800	610
U3	5	600	2410
U3	6	1030	1810
U3	7	940	1570
U3	8	940	610
U3	10	1800	1810
U3	12	1800	610
U3	18	1800	610
U4	1	1800	1200
U4	2	1800	1200
U4	3	1030	2410
U4	4	940	610
U4	5	1030	1810
U4	6	940	1570
U4	7	1030	1810
U4	8	1030	2770
U4	9	610	2170
U4	10	940	850
U5	1	930	610
U5	2	930	610
U5	3	1030	1210
U5	4	1030	2770
U5	5	940	2170
U5	6	1800	1200
U5	7	1800	1200
U5	8	940	610
U5	9	1500	850
U5	10	1200	1570
U5	11	1030	2170
U5	12	940	1210
U6	1	600	1570
U6	2	940	610
U6	3	930	850
U6	4	1800	1810
U6	5	1800	850
U6	6	600	2410
U6	7	1030	1210
U6	8	940	1570
U6	9	930	850
U6	10	940	2770
U6	11	1800	850
U6	12	1800	850
U6	13	600	2770
U6	14	1030	850
U6	15	1030	1810
U6	16	1030	1810

2

U3,U4 Lower Floor
1 : 100

1

U1,U2,U5,U6 Upper Floor
1 : 100

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	



PHOTOMONTAGE OF PROPOSAL FROM STREET VIEW
(PREPARED BY ***EVES VISUALIZATION***)

phone: 0410 496 640
email: info@live.com
post: PO Box 448 Lake Heights
NSW 2502



STAGE 1: Demolition of existing structures, Torrens title subdivision
STAGE 2: Proposed Six(6) Unit Development & Strata Subdivision

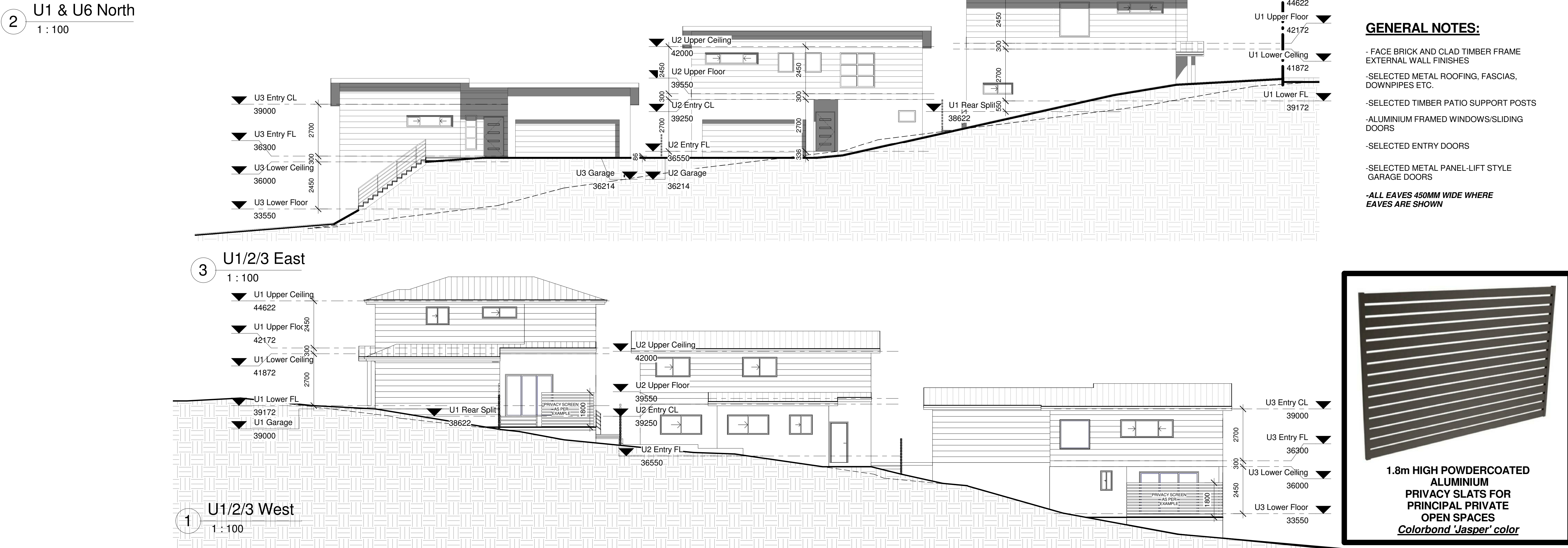
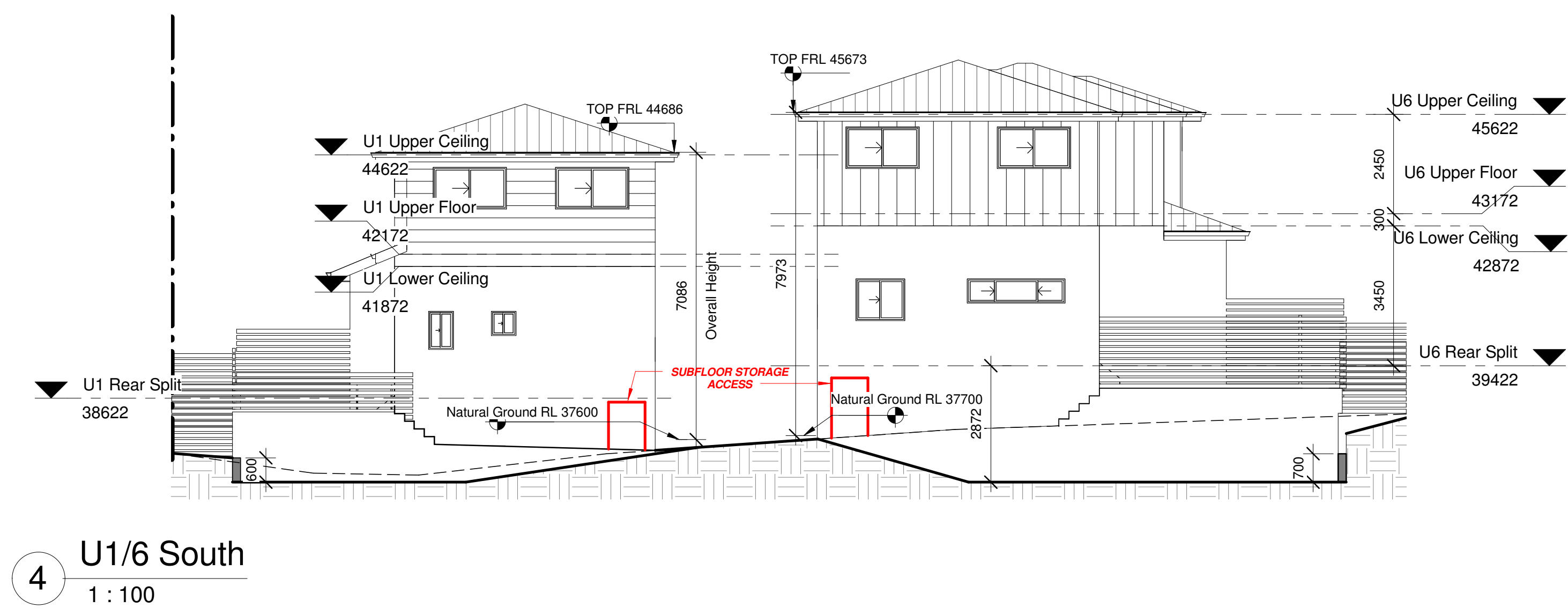
Development Address:- LOT 18 & LOT 19 DP 220627 No.11 & 13
ST JOHNS AVENUE, MANGERTON

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

STREETSCAPE
PHOTOMONTAGE

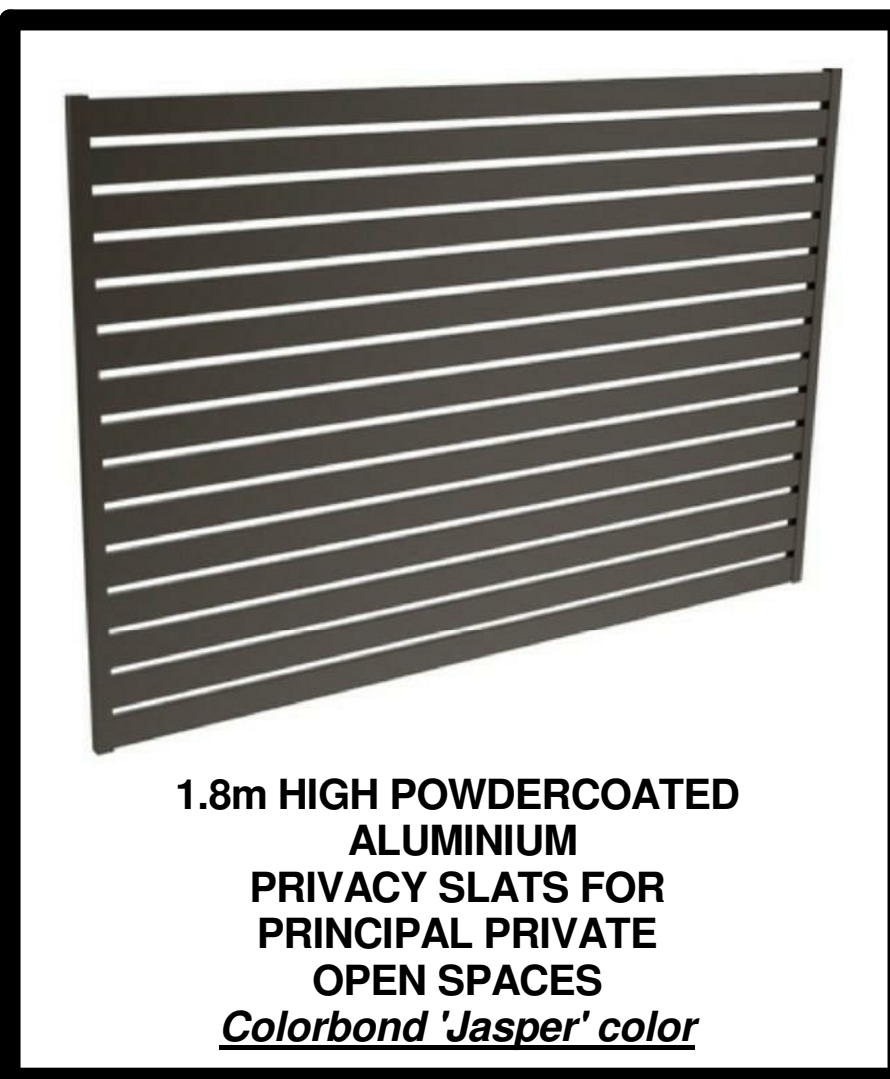
A06

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	



GENERAL NOTES:

- FACE BRICK AND CLAD TIMBER FRAME EXTERNAL WALL FINISHES
- SELECTED METAL ROOFING, FASCIAS, DOWNPIPES ETC.
- SELECTED TIMBER PATIO SUPPORT POSTS
- ALUMINIUM FRAMED WINDOWS/SLIDING DOORS
- SELECTED ENTRY DOORS
- SELECTED METAL PANEL-LIFT STYLE GARAGE DOORS
- ALL EAVES 450MM WIDE WHERE EAVES ARE SHOWN



STAGE 1: Demolition of existing structures, Torrens title subdivision
STAGE 2: Proposed Six(6) Unit Development & Strata Subdivision

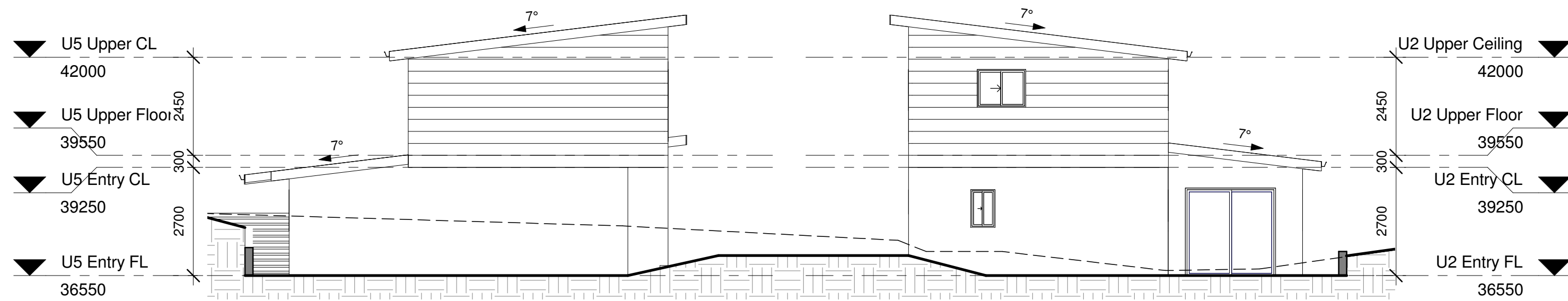
Development Address:- LOT 18 & LOT 19 DP 220627 No.11 & 13
ST JOHNS AVENUE, MANGERTON

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

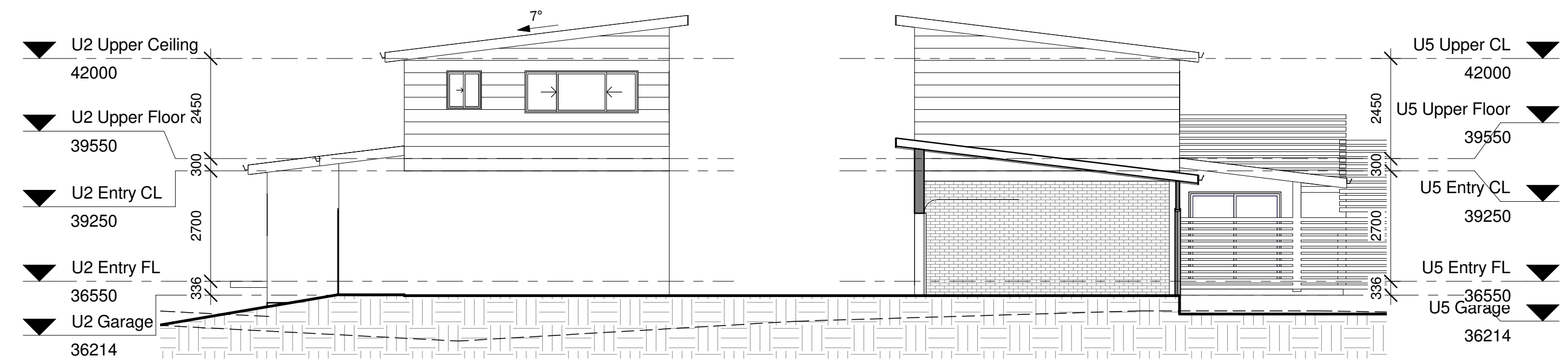
ELEVATIONS 1

A07

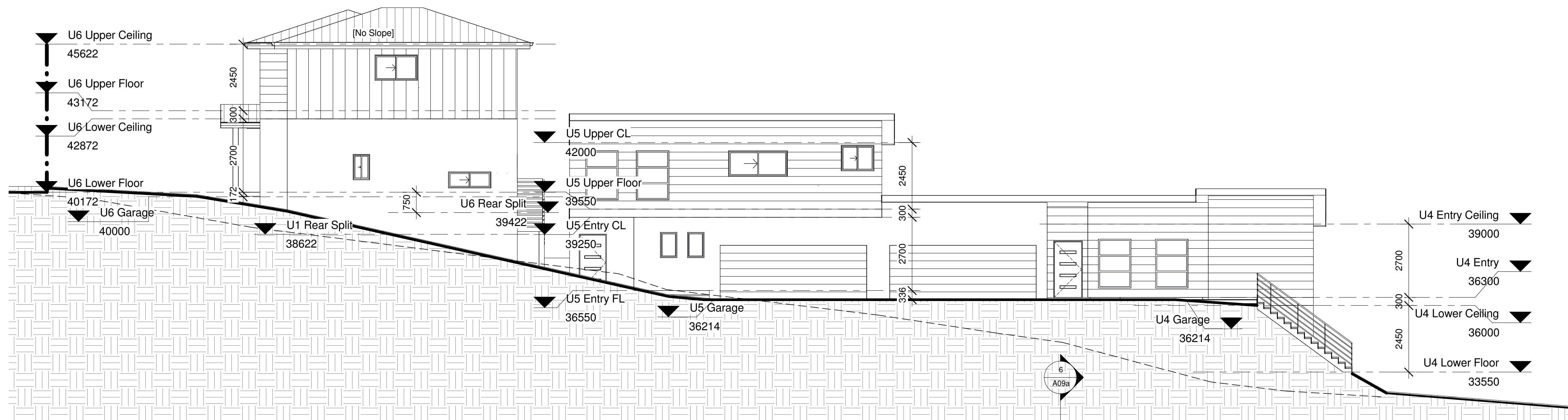
Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	1 : 100



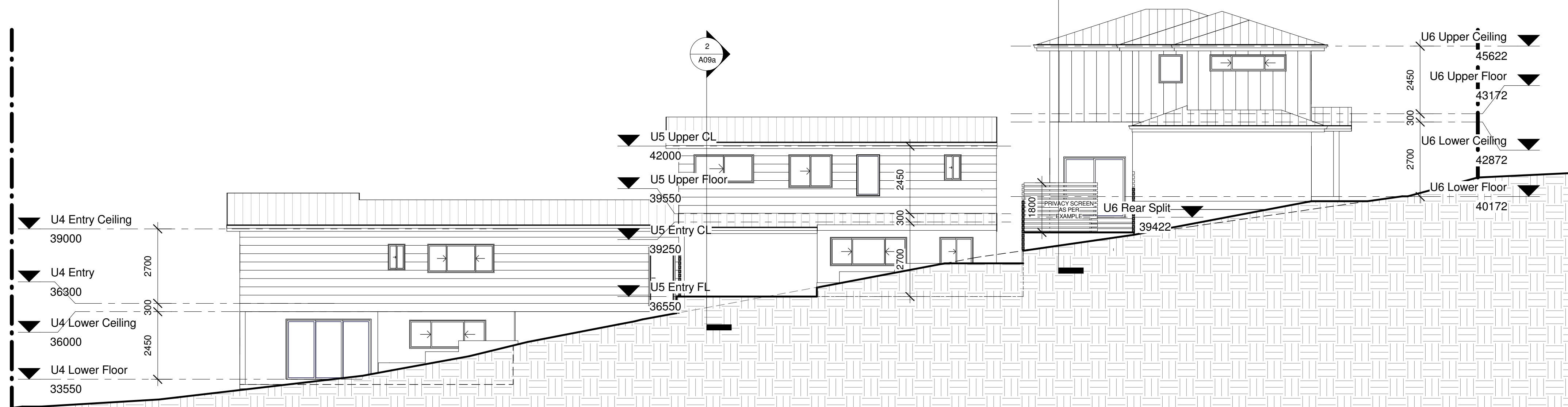
3 U2/5 North
1 : 100



5 U2/5 South
1 : 100



6 U4/5/6 West
1 : 100



4 U4/5/6 East
1 : 100

GENERAL NOTES:

- FACE BRICK AND CLAD TIMBER FRAME EXTERNAL WALL FINISHES
- SELECTED METAL ROOFING, FASCIAS, DOWNPIPES ETC.
- SELECTED TIMBER PATIO SUPPORT POSTS
- ALUMINIUM FRAMED WINDOWS/SLIDING DOORS
- SELECTED ENTRY DOORS
- SELECTED METAL PANEL-LIFT STYLE GARAGE DOORS
- ALL EAVES 450MM WIDE WHERE EAVES ARE SHOWN**



1.8m HIGH POWDERCOATED ALUMINIUM PRIVACY SLATS FOR PRINCIPAL PRIVATE OPEN SPACES
Colorbond 'Jasper' color

STAGE 1: Demolition of existing structures, Torrens title subdivision
STAGE 2: Proposed Six(6) Unit Development & Strata Subdivision

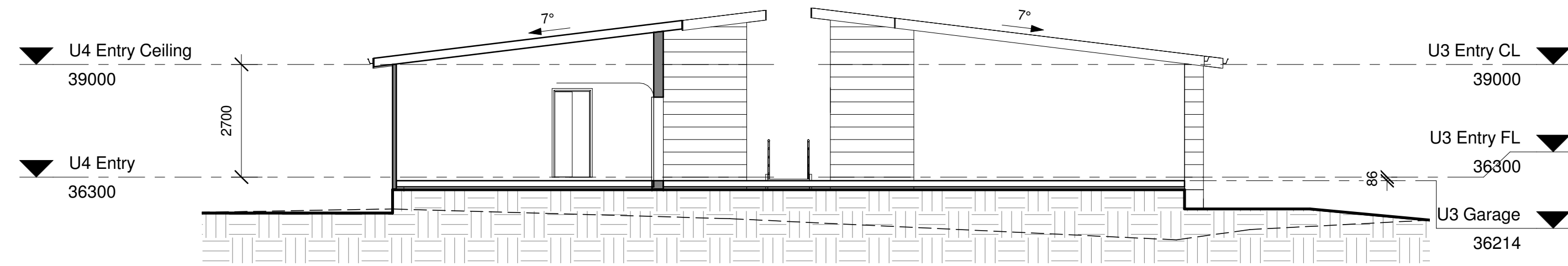
Development Address:- LOT 18 & LOT 19 DP 220627 No.11 & 13
ST JOHNS AVENUE, MANGERTON

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

ELEVATIONS 2

A08

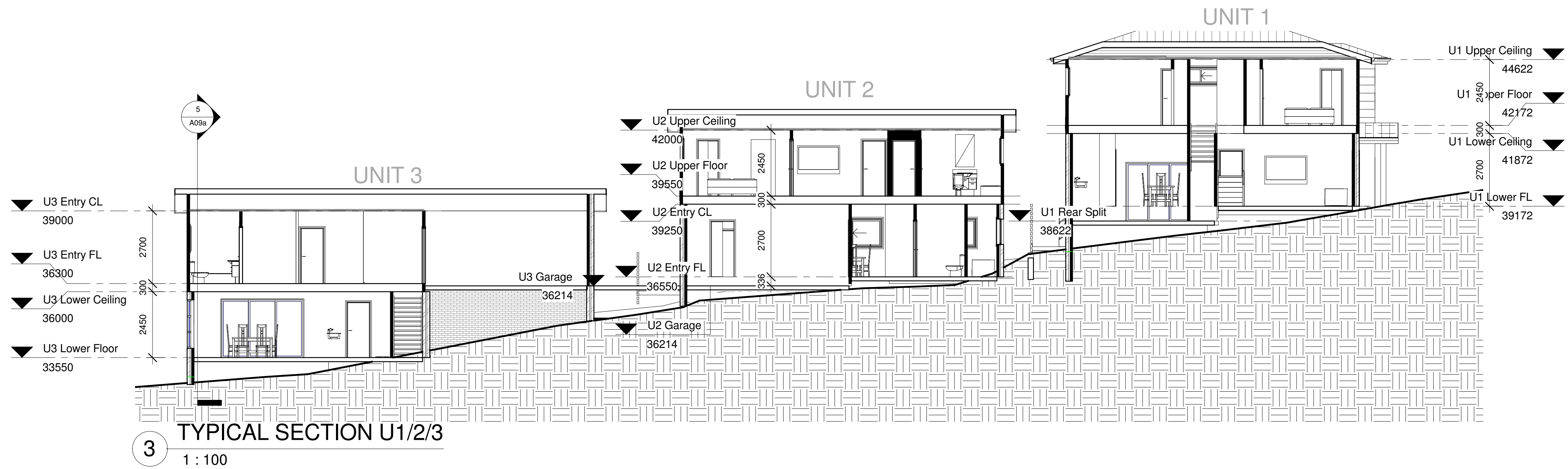
Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	1 : 100



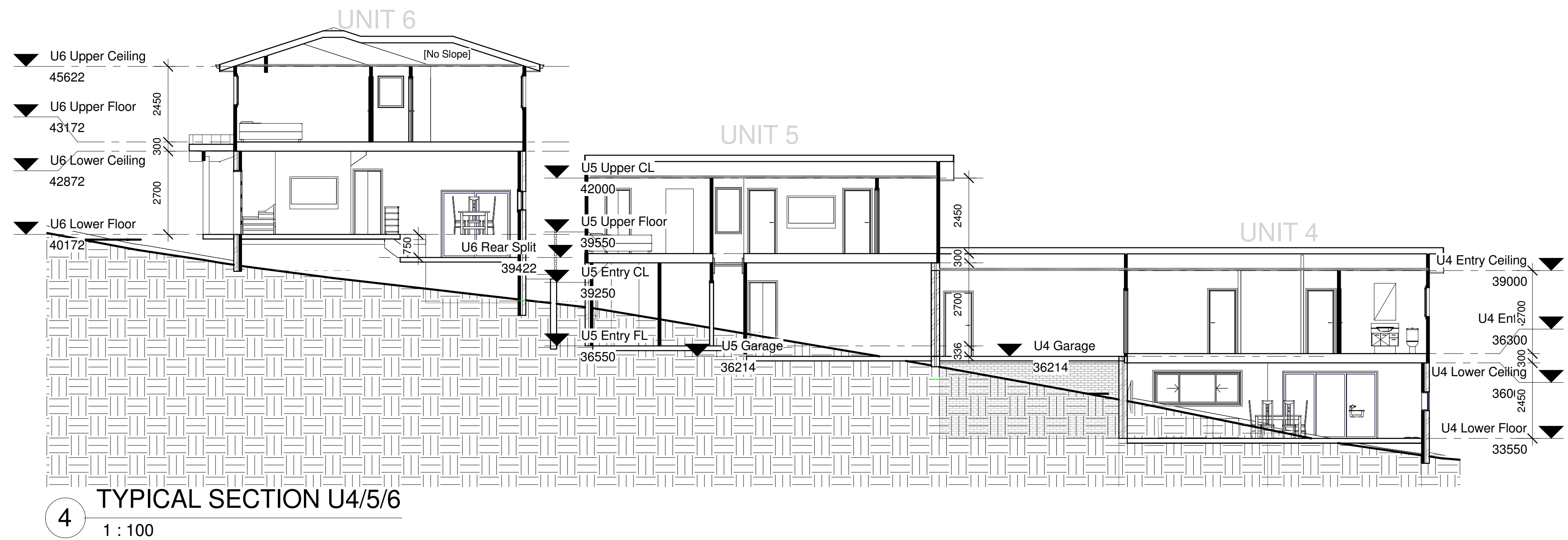
1 U3/4 North
1 : 100



2 U3/4 South
1 : 100



3 TYPICAL SECTION U1/2/3
1 : 100



4 TYPICAL SECTION U4/5/6
1 : 100

GENERAL NOTES:

- FACE BRICK AND CLAD TIMBER FRAME EXTERNAL WALL FINISHES
- SELECTED METAL ROOFING, FASCIAS, DOWNPIPES ETC.
- TIMBER ROOF FRAMING TO BUILDER'S DETAILS
- INSULATION AS PER BASIX REQUIREMENTS
- CLADDED TIMBER FRAME CONSTRUCTION
- SUSPENDED TIMBER FLOOR FRAMING TO BUILDER'S DETAILS
- CONCRETE SLABS & FOOTINGS/PIES TO ROCK AND TO FUTURE ENGINEER'S DETAILS
- ALL EAVES 450MM WIDE WHERE EAVES ARE SHOWN



1.8m HIGH POWDERCOATED ALUMINIUM PRIVACY SLATS FOR PRINCIPAL PRIVATE OPEN SPACES
Colorbond 'Jasper' color

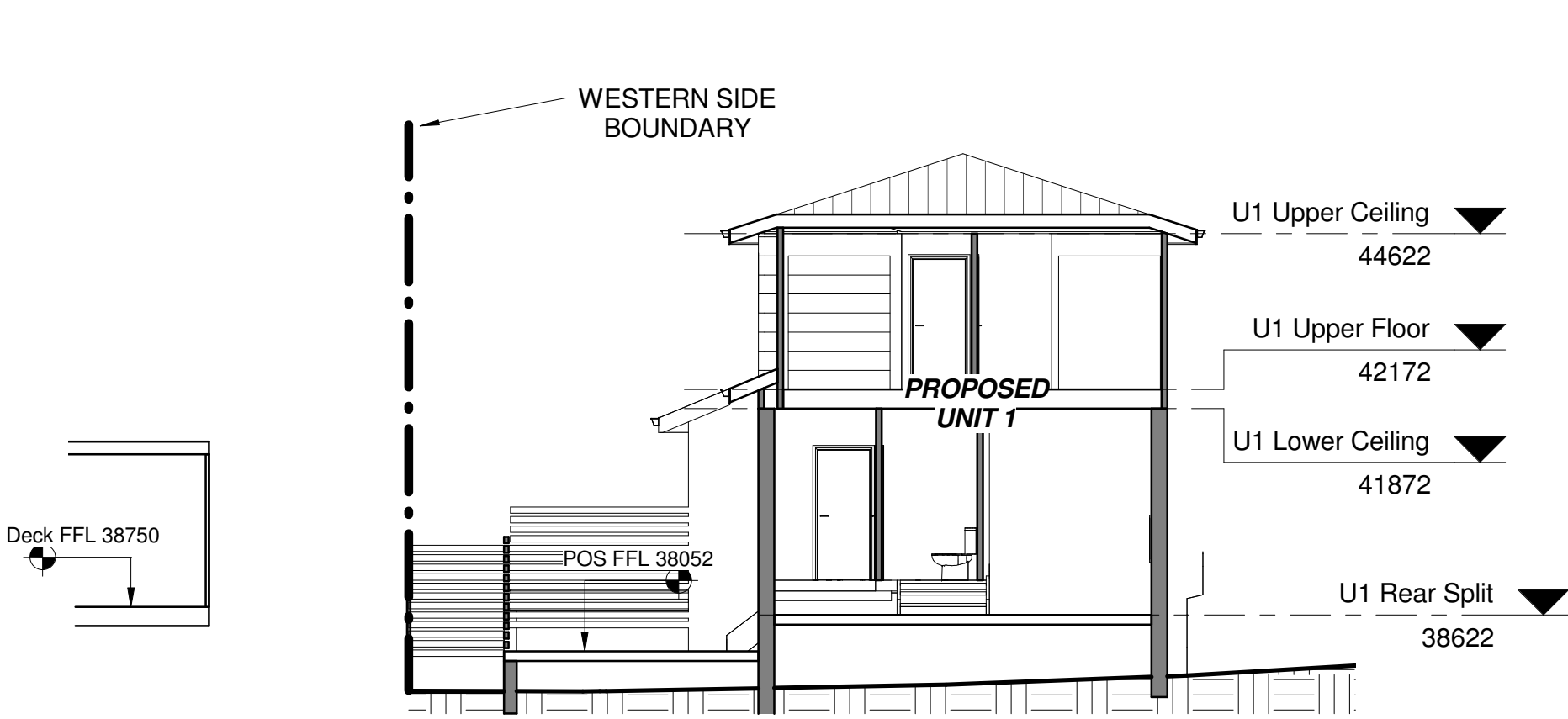
No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

ELEVATIONS 3, SECTIONS

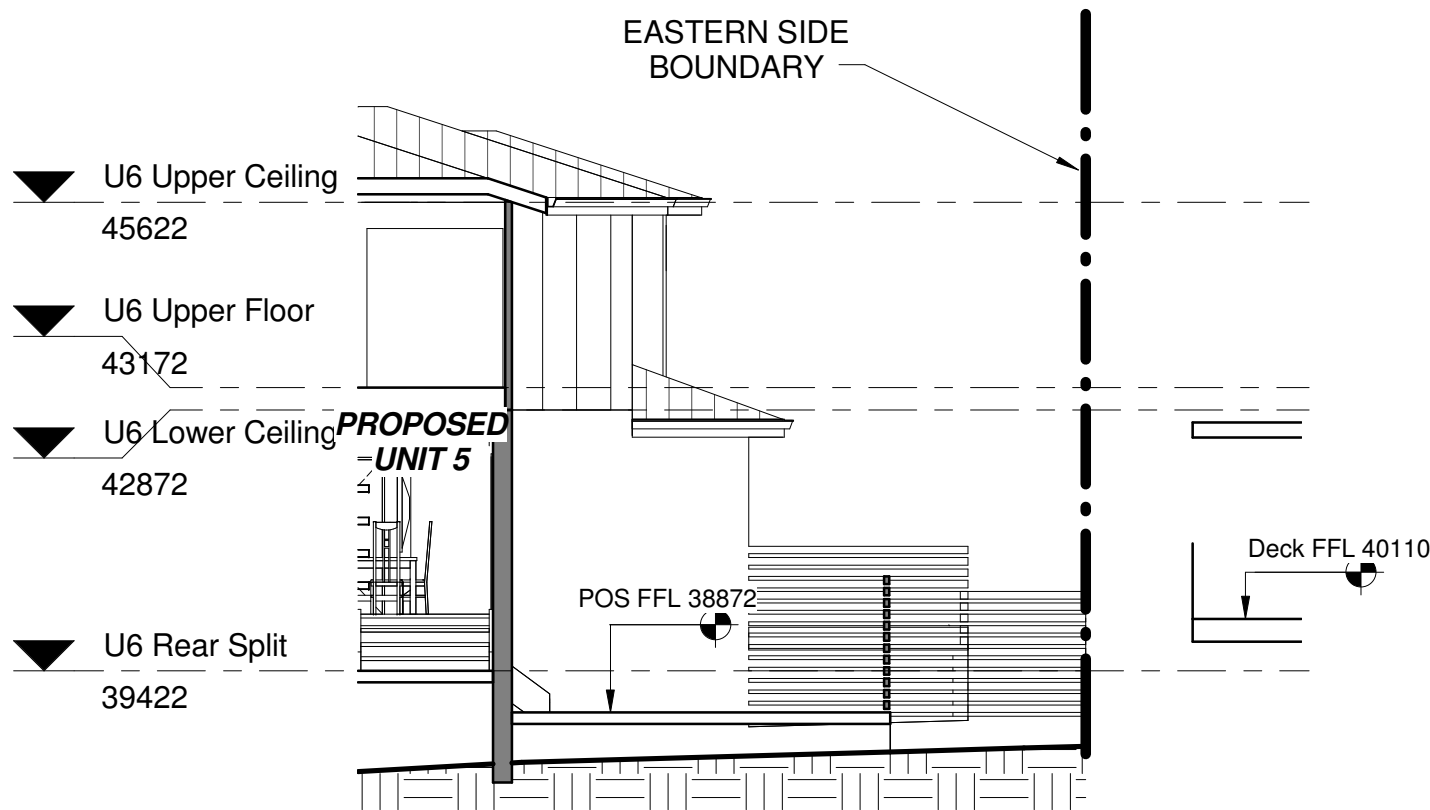
A09

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	1 : 100

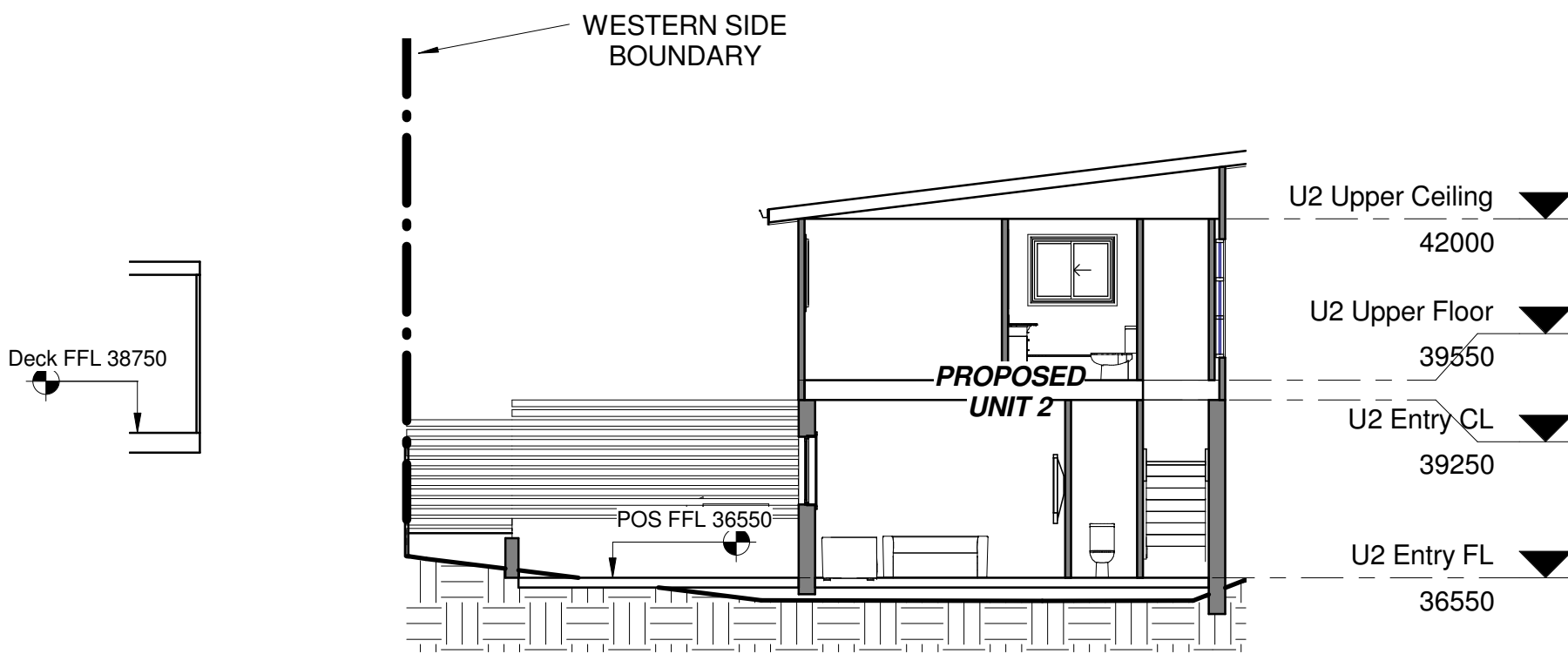
*NOTE: Not all proposed principal private open spaces are directly adjacent to neighbouring residences' private open spaces. See site plan for location of proposed POS's relative to neighbouring POS's



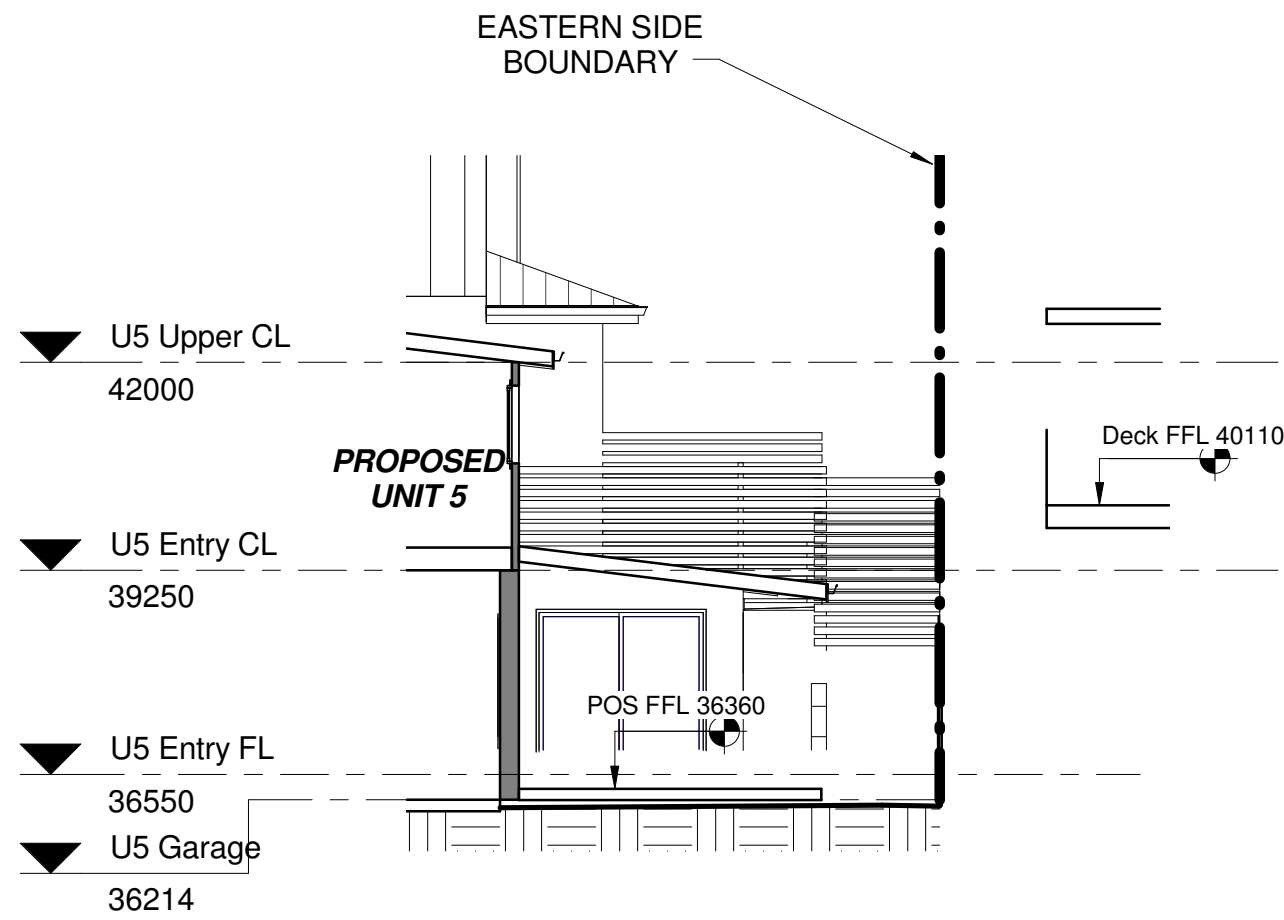
UNIT 1 - POS/Boundary
4 Section
1 : 100



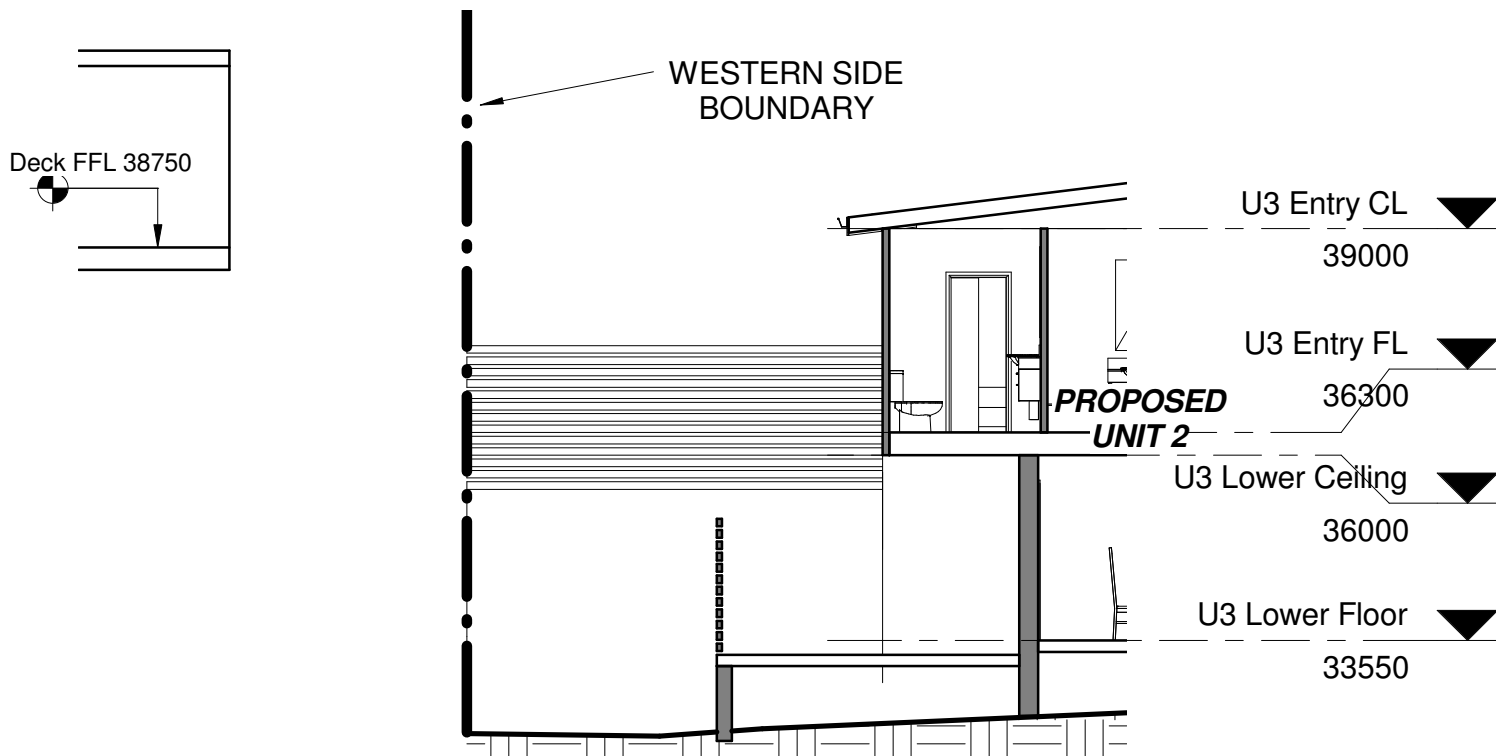
Unit 6 - POS/Boundary
6 Section
1 : 100



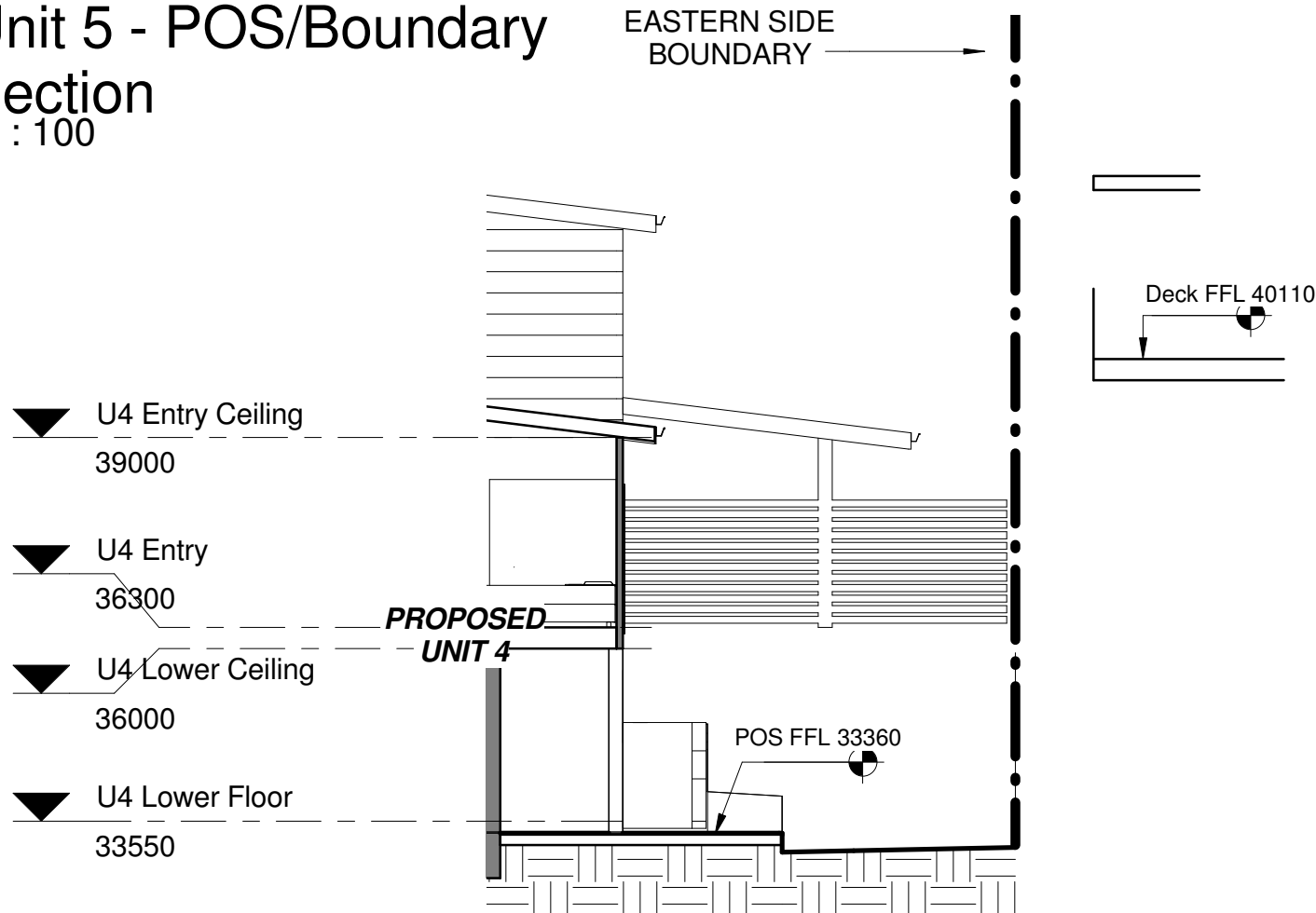
Unit 2 - POS/Boundary
3 Section
1 : 100



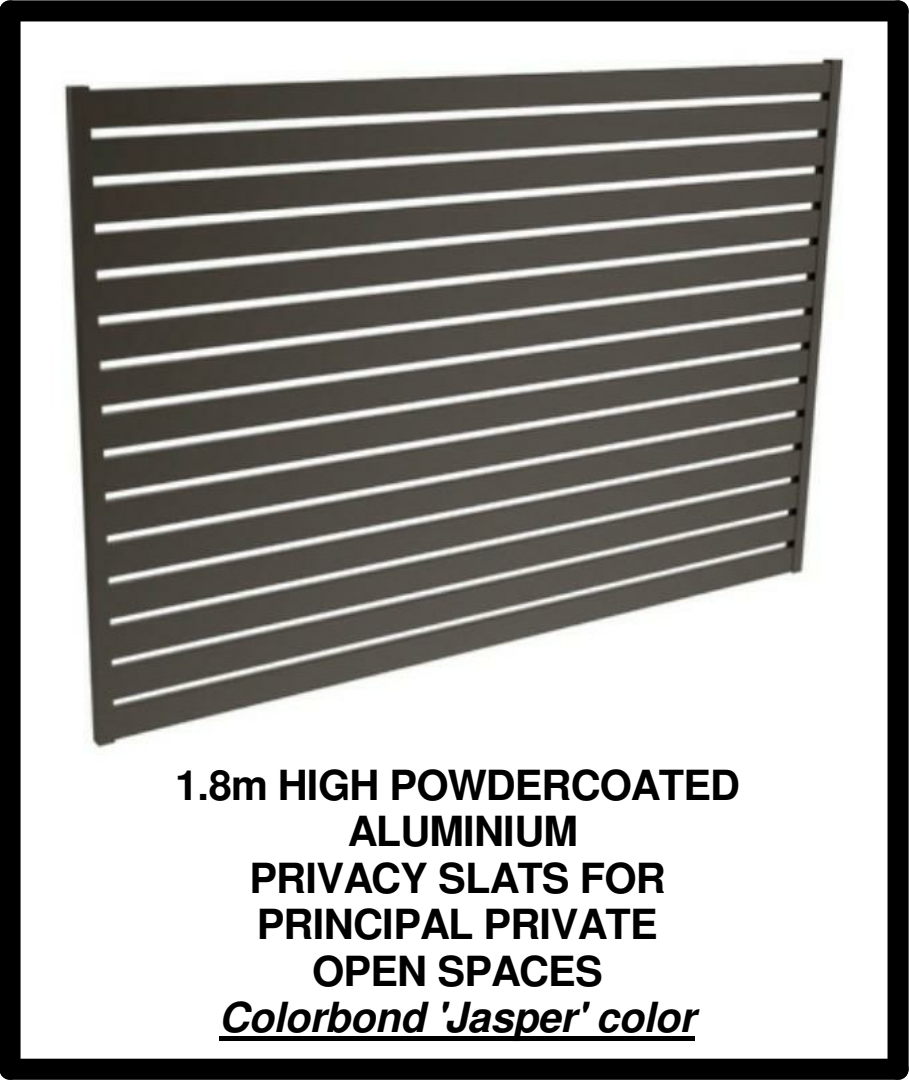
Unit 5 - POS/Boundary
2 Section
1 : 100



Unit 3 - POS/Boundary
5 Section
1 : 100



Unit 4 - POS/Boundary
1 Section
1 : 100

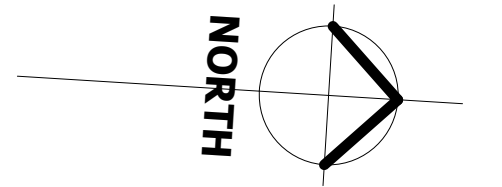


No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

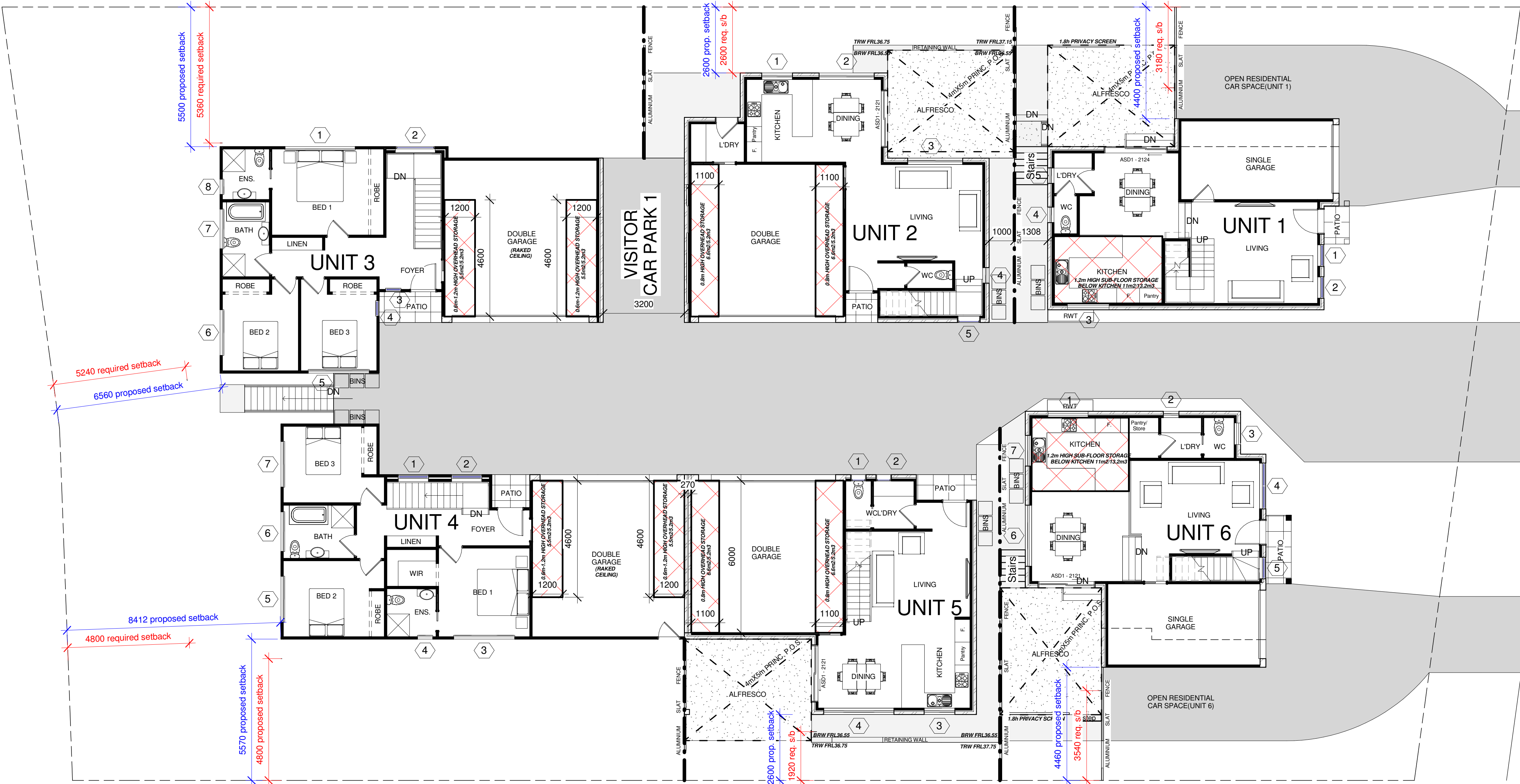
PRIVATE OPEN SPACE SECTIONS

A09a

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	1 : 100

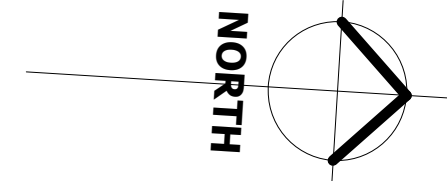


ST JOHNS AVENUE



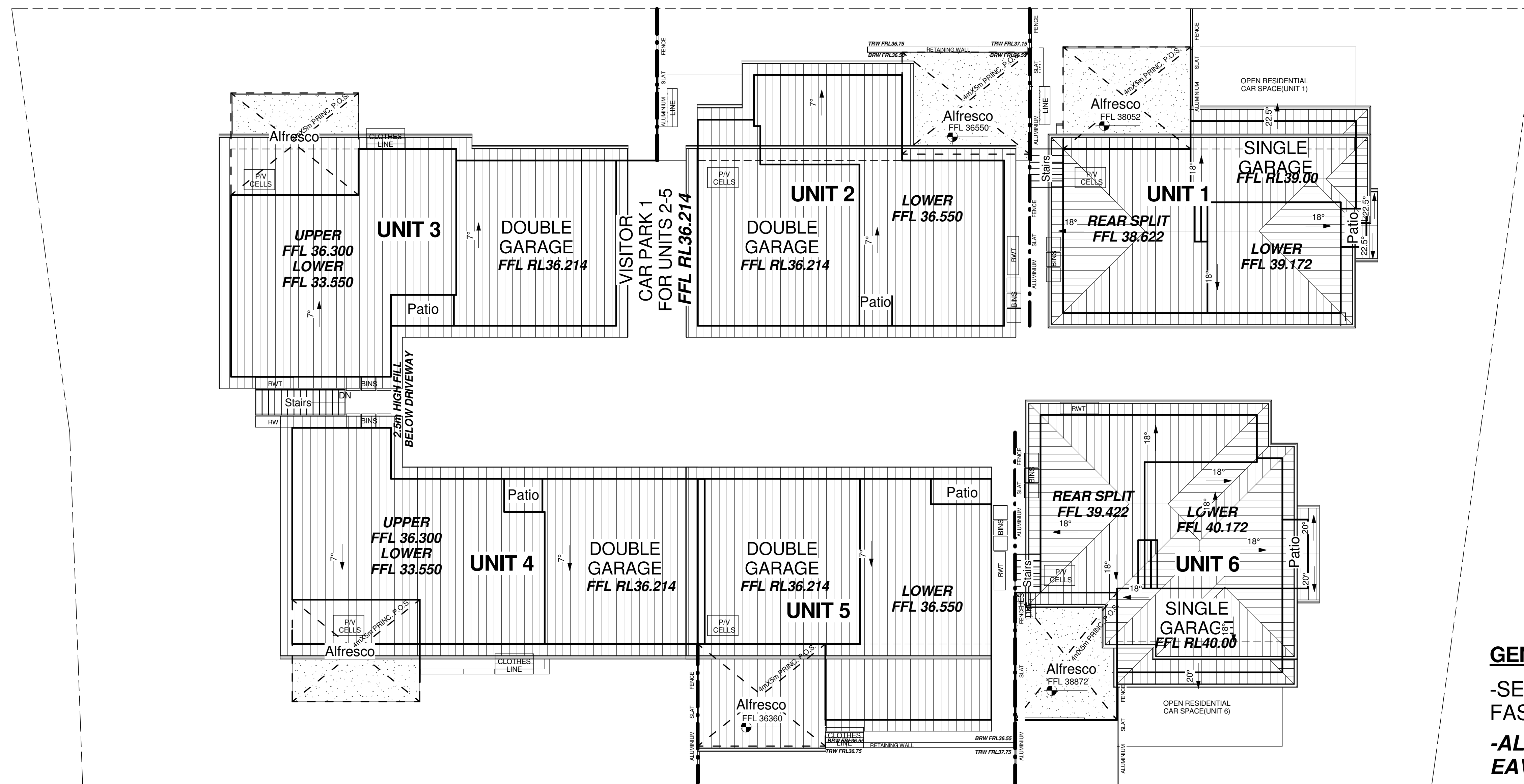
1 U1-U6 GROUND FL -
Setback Plan
1 : 100

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	



1 U1,U2,U5,U6 Upper Floor -
Setback Plan
1 : 100

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	



GENERAL NOTES:
-SELECTED METAL ROOFING, FASCIAS, DOWNPIPES ETC.
-ALL EAVES 450MM WIDE WHERE EAVES ARE SHOWN

1 Roof Plan
1 : 100

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

ROOF PLANS

A10

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	1 : 100

BASIX REQUIREMENTS AS PER BASIX CERT.

UNITS 1-3
SCHEDULE FOR BASIX REQUIREMENTS
Unit 1-3, 11 & 13 St Johns Ave Mangerton

ITEM	REQUIREMENT UNDER BASIX	REQUIREMENT UNDER BASIX	REQUIREMENT UNDER BASIX
	Unit 1	Unit 2	Unit 3
FIXTURES			
Shower Heads	4 star >=6 but <=7.3 L/min	4 star >=6 but <=7.3 L/min	4 star >=6 but <=7.3 L/min
Toilet Flushing System	4 Star	4 Star	4 Star
Kitchen Taps	4 Star	4 Star	4 Star
Bathroom Taps	4 Star	4 Star	4 Star
RAINWATER TANK			
Rainwater Tank	Capturing 43m2 1500L Plumbed to landscape, laundry and toilets	Capturing 43m2 1500L Plumbed to landscape, laundry and toilets	Capturing 38m2 1500L Plumbed to landscape, laundry and toilets
THERMAL COMFORT	5.3 Stars	5.2 Stars	5.4 Stars
Insulation Requirements	As per NETHERS Certificate	As per NETHERS Certificate	As per NETHERS Certificate
External Walls	Single skin brick walls: (DEFAULT Colour: Medium): NIL Brick veneer walls: (DEFAULT Colour: Medium): R2.3 Selected Clad walls: (DEFAULT Colour: Medium): R2.3	Single skin brick walls: (DEFAULT Colour: Medium): NIL Brick veneer walls: (DEFAULT Colour: Medium): R2.3 Selected Clad walls: (DEFAULT Colour: Medium): R2.3	Single skin brick walls: (DEFAULT Colour: Medium): NIL Cavity brick walls: (DEFAULT Colour: Medium): NIL Brick veneer walls: (DEFAULT Colour: Medium): R2.7 Selected Clad walls: (DEFAULT Colour: Medium): R2.7
Internal Walls	All internal walls: NIL	Garage, laundry, wc & bath walls only: R2.0 All remaining internal walls: NIL	Garage, laundry, wc & bath walls only: R2.3 All remaining internal walls: NIL
Ceilings	All ceilings below roof: R2.3 Exhaust fans to kitchen (sealed), ensuite & bath	Garage ceiling below roof: R2.3 All remaining ceiling below roof: R4.0 Exhaust fans to kitchen (sealed), ensuite & bath	Garage ceiling below roof: R2.3 All remaining ceiling below roof: R4.0 Exhaust fans to kitchen (sealed), ensuite & bath
Roofs	Metal Roof (DEFAULT Colour: Light) R1.3 Anticon Blanket 7 Deg pitch	Metal Roof (DEFAULT Colour: Light) R1.3 Anticon Blanket 7 Deg pitch	Metal Roof (DEFAULT Colour: Light) R1.3 Anticon Blanket 7 Deg pitch
Floors	Concrete slab on ground: NIL Suspended timber floor: NIL	Concrete slab on ground: NIL Suspended timber floor: NIL	Concrete slab on ground: NIL Suspended timber floor: NIL
Glazing Requirements			
Glazing	Windows 1, 2, 3, 6, 14 and SD1: (DEFAULT) U Value 4.90 (equal to or lower than) SHGC 0.33 (±10%) All remaining fixed or sliding windows: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.70 (±10%) All remaining awning windows: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.37 (±10%) *All windows are to comply with AS 2047 and bedroom windows where the lowest openable portion of the window is within 1.7 of FFL and the FFL is 2m or more above NGL, require a permanently fixed device restricting any openings of the window or screen so that a 125mm sphere cannot pass through, and resisting outwards horizontal of 250N against the window. All windows are to match the software ratings.	Window 3: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.37 (±10%) Windows 4, 8, 13 & 14: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.70 (±10%) SD1: (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.39 (±10%) All remaining windows: (DEFAULT) U Value 4.90 (equal to or lower than) SHGC 0.33 (±10%) *All windows are to comply with AS 2047 and bedroom windows where the lowest openable portion of the window is within 1.7 of FFL and the FFL is 2m or more above NGL, require a permanently fixed device restricting any openings of the window or screen so that a 125mm sphere cannot pass through, and resisting outwards horizontal of 250N against the window. All windows are to match the software ratings.	Windows 9 & 11: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.70 (±10%) Windows 12 & 13: (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.31 (±10%) Window 10: (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.39 (±10%) Windows 2, 3 & 8: (DEFAULT) U Value 3.10 (equal to or lower than) SHGC 0.49 (±10%) All remaining windows: (DEFAULT) U Value 3.10 (equal to or lower than) SHGC 0.49 (±10%) *All windows are to comply with AS 2047 and bedroom windows where the lowest openable portion of the window is within 1.7 of FFL and the FFL is 2m or more above NGL, require a permanently fixed device restricting any openings of the window or screen so that a 125mm sphere cannot pass through, and resisting outwards horizontal of 250N against the window. All windows are to match the software ratings.
ENERGY COMMITMENTS			
Hot Water	Gas instantaneous 6 Star	Gas instantaneous 6 Star	Gas instantaneous 6 Star
Cooling System	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)
Heating System	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)
Bathroom Ventilation	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch
Kitchen Ventilation	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch
Laundry Ventilation	Natural ventilation, or no laundry	Natural ventilation, or no laundry	Natural ventilation, or no laundry
LED Lighting	ALL lighting to be dedicated LED or fluorescent	ALL lighting to be dedicated LED or fluorescent	ALL lighting to be dedicated LED or fluorescent
Photovoltaic System	0.5kW	0.5kW	0.5kW
Fridge Space	n/a	n/a	n/a
Kitchen Appliances	Gas cooktop, Electric oven	Gas cooktop, Electric oven	Gas cooktop, Electric oven
Washing Line	Outdoor Washing Line	Outdoor Washing Line	Outdoor Washing Line

UNITS 4-6
SCHEDULE FOR BASIX REQUIREMENTS
Unit 4-6, 11 & 13 St Johns Ave Mangerton

ITEM	REQUIREMENT UNDER BASIX	REQUIREMENT UNDER BASIX	REQUIREMENT UNDER BASIX
	Unit 4	Unit 5	Unit 6
FIXTURES			
Shower Heads	4 star >=6 but <=7.3 L/min	4 star >=6 but <=7.3 L/min	4 star >=6 but <=7.3 L/min
Toilet Flushing System	4 Star	4 Star	4 Star
Kitchen Taps	4 Star	4 Star	4 Star
Bathroom Taps	4 Star	4 Star	4 Star
RAINWATER TANK			
Rainwater Tank	Capturing 38m2 1500L Plumbed to landscape, laundry and toilets	Capturing 43m2 1500L Plumbed to landscape, laundry and toilets	Capturing 43m2 1500L Plumbed to landscape, laundry and toilets
THERMAL COMFORT	5.3 Stars	5.4 Stars	5.8 Stars
Insulation Requirements	As per NETHERS Certificate	As per NETHERS Certificate	As per NETHERS Certificate
External Walls	Single skin brick walls: (DEFAULT Colour: Medium): NIL Cavity brick walls: (DEFAULT Colour: Medium): NIL Brick veneer walls: (DEFAULT Colour: Medium): R2.7 Selected Clad walls: (DEFAULT Colour: Medium): R2.7	Single skin brick walls: (DEFAULT Colour: Medium): NIL Brick veneer walls: (DEFAULT Colour: Medium): R2.3 Selected Clad walls: (DEFAULT Colour: Medium): R2.3	Single skin brick walls: (DEFAULT Colour: Medium): NIL Brick veneer walls: (DEFAULT Colour: Medium): R2.3 Selected Clad walls: (DEFAULT Colour: Medium): R2.3
Internal Walls	Garage, laundry, wc & bath walls only: R2.3 All remaining internal walls: NIL	Garage, laundry, wc & bath walls only: R2.0 All remaining internal walls: NIL	All internal walls: NIL
Ceilings	Garage ceiling below roof: R2.3 All remaining ceiling below roof: R4.0 Exhaust fans to kitchen (sealed), ensuite & bath	All ceilings below roof: R4.0 Exhaust fans to kitchen (sealed), ensuite & bath	Garage ceiling below roof: R2.3 All remaining ceiling below roof: R4.0 Exhaust fans to kitchen (sealed), ensuite & bath
Roofs	Metal Roof (DEFAULT Colour: Light) R1.3 Anticon Blanket 7 Deg pitch	Metal Roof (DEFAULT Colour: Light) R1.3 Anticon Blanket 7 Deg pitch	Metal Roof (DEFAULT Colour: Light) R1.3 Anticon Blanket 7 Deg pitch
Floors	Concrete slab on ground: NIL Suspended timber floor: NIL	Concrete slab on ground: NIL Suspended timber floor: NIL	Concrete slab on ground: NIL Suspended timber floor: NIL
Glazing Requirements			
Glazing	Windows 9 & 11: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.70 (±10%) Windows 8, 12 & 13: (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.31 (±10%) Window 6, 7 & 10: (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.39 (±10%) Windows 2, 3 & 8: (DEFAULT) U Value 3.10 (equal to or lower than) SHGC 0.49 (±10%) All remaining windows: (DEFAULT) U Value 3.10 (equal to or lower than) SHGC 0.49 (±10%) *All windows are to comply with AS 2047 and bedroom windows where the lowest openable portion of the window is within 1.7 of FFL and the FFL is 2m or more above NGL, require a permanently fixed device restricting any openings of the window or screen so that a 125mm sphere cannot pass through, and resisting outwards horizontal of 250N against the window. All windows are to match the software ratings.	Windows 1 & 2: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.37 (±10%) Windows 8, 11 & 12: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.70 (±10%) SD1: (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.39 (±10%) All remaining windows: (DEFAULT) U Value 4.90 (equal to or lower than) SHGC 0.33 (±10%) *All windows are to comply with AS 2047 and bedroom windows where the lowest openable portion of the window is within 1.7 of FFL and the FFL is 2m or more above NGL, require a permanently fixed device restricting any openings of the window or screen so that a 125mm sphere cannot pass through, and resisting outwards horizontal of 250N against the window. All windows are to match the software ratings.	Windows 1, 3, 6 & 7 (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.39 (±10%) Window 4: (DEFAULT) U Value 4.80 (equal to or lower than) SHGC 0.31 (±10%) All remaining awning windows: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.37 (±10%) All remaining windows: (DEFAULT) U Value 6.70 (equal to or lower than) SHGC 0.70 (±10%) *All windows are to comply with AS 2047 and bedroom windows where the lowest openable portion of the window is within 1.7 of FFL and the FFL is 2m or more above NGL, require a permanently fixed device restricting any openings of the window or screen so that a 125mm sphere cannot pass through, and resisting outwards horizontal of 250N against the window. All windows are to match the software ratings.
ENERGY COMMITMENTS			
Hot Water	Gas instantaneous 6 Star	Gas instantaneous 6 Star	Gas instantaneous 6 Star
Cooling System	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)
Heating System	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)	1 Phase airconditioning, 4 star (old label)
Bathroom Ventilation	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch
Kitchen Ventilation	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch	Individual fan ducted to façade or roof. Manual on/off switch
Laundry Ventilation	Natural ventilation, or no laundry	Natural ventilation, or no laundry	Natural ventilation, or no laundry
LED Lighting	ALL lighting to be dedicated LED or fluorescent	ALL lighting to be dedicated LED or fluorescent	ALL lighting to be dedicated LED or fluorescent
Photovoltaic System	0.5kW	0.5kW	0.5kW
Fridge Space	n/a	n/a	n/a
Kitchen Appliances	Gas cooktop, Electric oven	Gas cooktop, Electric oven	Gas cooktop, Electric oven
Washing Line	Outdoor Washing Line	Outdoor Washing Line	Outdoor Washing Line

STAGE 1: Demolition of existing structures, Torrens title subdivision
STAGE 2: Proposed Six(6) Unit Development & Strata Subdivision

Development Address:- LOT 18 & LOT 19 DP 220627 No.11 & 13 ST JOHNS AVENUE, MANGERTON

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	

BASIX
REQUIREMENTS

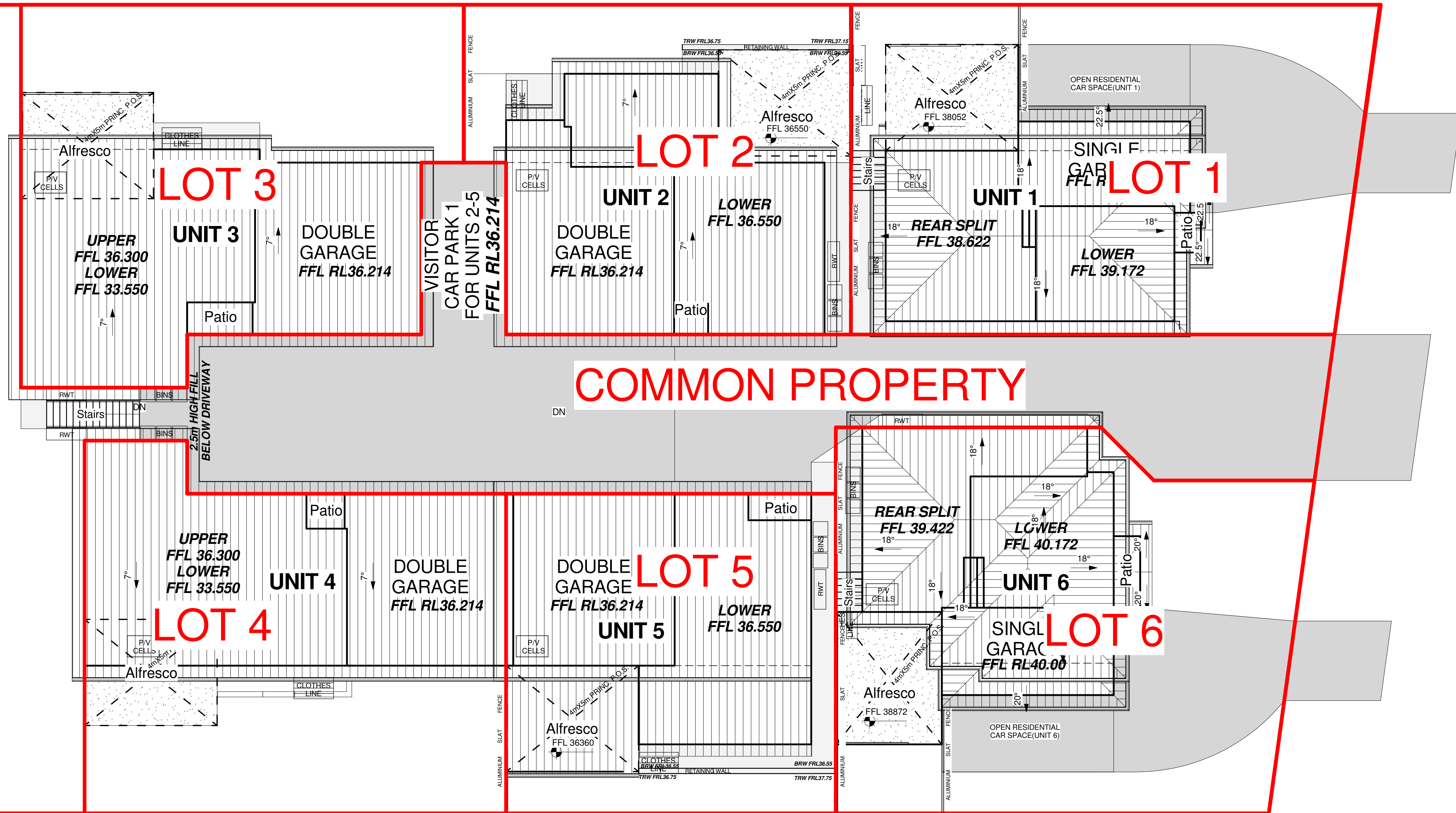
A11

Project number	21060
Date	21.02.24
Drawn by	Author
Checked by	Checker
Scale	

phone: 0410 496 640
email: info@idc.com.au
post: PO Box 46 Lake Heights NSW 2502



COMMON PROPERTY



*FINAL SUBDIVISION PLAN TO COMPLETED
BY REGISTERED SURVEYOR

1 Concept Strata Plan
1 : 100

No.	Description	Date
A	DEVELOPMENT APP.	
B	ADD INFO D/A	
C	ADD INFO D/A	