

Agenda

Planning Decisions Committee Meeting

6:30 pm, Tuesday 22 July 2025

Fitzroy Town Hall

www.yarracity.vic.gov.au

Planning Decisions Committee

The Planning Decisions Committee is a delegated committee of Council with full authority to make decisions in relation to planning applications and certain heritage referrals.

Addressing the Committee

Planning Decisions Committee meetings are decision making forums and only Councillors have a formal role. However, Council is committed to ensuring that any person whose rights will be directly affected by a decision of Council is entitled to communicate their views and have their interests considered before the decision is made.

There is an opportunity for both applicants and objectors to make a submission to Council in relation to each matter presented for consideration at the meeting.

Before each item is considered, the meeting chair will ask people who have registered to address the committee, to come forward to the lectern, state your name clearly for the record and:

- Speak for a maximum of five minutes;
- Direct your submission to the chair;
- Confine your submission to the planning permit under consideration;
- If possible, explain your preferred decision in relation to a permit application (refusing, granting or granting with conditions) and set out any requested permit conditions and avoid repeating previous submitters;
- Refrain from asking questions or seeking comments from the Councillors, applicants or other submitters;
- If speaking on behalf of a group, explain the nature of the group and how you are able to speak on their behalf.

Once you have made your submission, please remain silent unless called upon by the chair to make further comment or to clarify any aspects.

Councillors will then have an opportunity to ask questions of submitters. Submitters may determine whether or not they wish to take these questions.

Once all submissions have been received, the formal debate may commence. Once the debate has commenced, no further submissions, questions or comments from submitters can be received.

Arrangements to ensure our meetings are accessible to the public

Access to the building is available either by stairs or lift. Seating is provided to watch the meeting, and the room is wheelchair accessible. Accessible toilet facilities are available. Speakers at the meeting are invited to be seated at the table to address the Council, and all participants are amplified via an audio system. Meetings are conducted in English.

If you are unable to participate in this environment, we can make arrangements to accommodate you if sufficient notice is given. Some examples of adjustments are:

- a translator in your language;
- the presence of an Auslan interpreter;
- loan of a portable hearing loop; and
- reconfiguring the room to facilitate access.

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1. Acknowledgement of Country

"Yarra City Council acknowledges the Wurundjeri Woi Wurrung people as the Traditional Owners and true sovereigns of the land now known as Yarra.

We acknowledge their creator spirit Bunjil, their ancestors and their Elders.

We acknowledge the strength and resilience of the Wurundjeri Woi Wurrung, who have never ceded sovereignty and retain their strong connections to family, clan and country despite the impacts of European invasion.

We also acknowledge the significant contributions made by other Aboriginal and Torres Strait Islander people to life in Yarra.

We pay our respects to Elders from all nations here today—and to their Elders past, present and future."

2. Attendance, apologies and requests for leave of absence

Attendance

Councillors:

- Cr Stephen Jolly — Mayor
- Cr Sarah McKenzie — Deputy Mayor
- Cr Evangeline Aston
- Cr Andrew Davies
- Cr Kenneth Gomez
- Cr Sharron Harrison
- Cr Meca Ho
- Cr Sophie Wade

Absent

- Cr Edward Crossland — Parental Leave

Council staff:

- Mary Osman — General Manager City Sustainability and Strategy
- Danielle Connell — Manager Statutory Planning (Acting)
- Paul Iacuone — Statutory Planning Coordinator
- Erryn Megennis — Principal Statutory Planner

Governance

- Phil De Losa — Manager Governance and Integrity
- Mel Nikou — Governance Officer
- Milica Latu — Senior Administration and Projects Officer

3. Declarations of Conflict of Interest

Any Councillor who has a conflict of interest in a matter being considered at this meeting is required to disclose that interest either by explaining the nature of the conflict of interest to those present or advising that they have disclosed the nature of the interest in writing to the Chief Executive Officer before the meeting commenced.

4. Confirmation of Minutes

RECOMMENDATION

That the minutes of the Planning Decisions Committee held on Tuesday 24 June 2025 be confirmed.

5. Planning Committee Reports

5.1. – PLN25/0129 - 53-57 Cambridge Street, Collingwood

Author	Erryn Megennis – Senior Statutory Planner
Authoriser	General Manager City Sustainability and Strategy

Executive Summary

Property	53-57 Cambridge St Collingwood
Ward	Hoddle
Application number	PLN25/0129
Proposal	Construction of a 9 storey mixed use building (including basement and roof terrace) comprising a Shop, Food and Drink Premises and Dwellings (planning permit not required for Food and Drink and Dwelling uses), reduction in the car parking requirements of the Yarra Planning Scheme.
Zoning & Overlay/s	• Mixed Use Zone • Design and Development Overlay – Schedule 23 • Environmental Audit Overlay • Development Contributions Plan Overlay – Schedule 1
Strategic setting	• High Change Area • Smith Street Major Activity Centre
Submissions	17 objections & 1 letter of support
Key reasons for support	• There is strong strategic support for this type of development in this area of Collingwood; • Based on amended plans and recommended permit conditions, the proposal generally complies with the built form requirements of the Zone, Overlays, Particular Provisions and local policies and would make a positive contribution to the area; • The car parking reduction is acceptable; • The dwellings will receive a good level of internal amenity; and • The proposal will not result in unreasonable adverse amenity impacts to surrounding properties.

Recommendation	That Council advises the Victorian Civil and Administrative Tribunal (VCAT) and all parties that the proposed development is supported, subject to conditions.
Contact Officer	Erryn Megennis, Principal Planner

Officer Recommendation

That having considered all objections and relevant planning policies, the Committee resolves to advise the Victorian Civil and Administrative Tribunal and all parties that had Council been in a position to determine the application, it would have issued a Notice of Decision to Grant Planning Permit PLN25/0129 at 53-57 Cambridge Street, Collingwood for:

Control	Clause	Matter for which the permit has been granted
Mixed Use Zone	Clause 32.04-2	To use the land for a Shop
Mixed Use Zone	Clause 32.04-7	To construct two or more dwellings on a lot
Design and Development Overlay	Clause 43.02-2	To construct a building and carry out works
Car Parking	Clause 52.06-3	A reduction in the car parking requirements for the Dwelling, Shop and Food and Drinks Premises uses
Bicycle Facilities	Clause 52.34-2	A reduction in the visitor bicycle parking requirements

And subject to the following conditions:

Amended Plans

1. Before the use and development commences, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of this permit. The plans must be drawn to scale with dimensions, and must be generally in accordance with the decision plans prepared by Warren and Mahoney and dated 28 March 2025, Revision B but modified to show:

    (a) An amended ground floor layout in accordance with the Sketch Plan prepared by Warren and Mahoney and dated 19 June 2025, Revision B but further modified to show:

        (i) Footpath awnings to maintain an appropriate clearance above the footpath and provide adequate weather protection, to the satisfaction of Council;

        (ii) Mailboxes relocated to the Langridge Street residential entrance;

        (iii) Provision of lighting to both residential entries from Langridge and Derby Streets;

        (iv) The north-east and south-east corners to retain a 1m by 1m corner splay;

(v) Notes relating to the bicycle parking allocation, access arrangements and charging infrastructure reinstated;

(vi) Further design details to demonstrate sense of address to both residential entrances, having regard to the objectives of Clause 58.05-2 (Building Entry and Circulation);

(b) The following changes to comply with Standard D18 (Accessibility):

(i) All Type A bathrooms to show a toilet located in the corner of the room or otherwise provided with a nib wall adjacent to the toilet with a minimum length of 700m;

(ii) All Type B bathrooms to show the toilet located closest to the door;

(iii) The dwelling entry and main bedroom entry widths of Apt 1.05 shown with minimum 850mm opening; and

(iv) Apt 7.02 adaptable bathroom door to open outwards, be sliding or have readily removable hinges.

(c) The following changes to comply with Standard D26 (Functional Layout):

(i) Apt 1.04 main bedroom to have a minimum width of 3m;

(ii) Apt 4.03 second bedroom to be 3m wide and 3m long; and

(iii) All living rooms to have a minimum dimension of 3.6m.

(d) The Level 8 balcony set back a minimum 3m from the western boundary. The western wall of the apartment may be set back further if required to accommodate this change, with no alterations to the remaining setbacks;

(e) Standard D27 compliance claim removed from Apt 1.05 in Clause 58 summary table;

(f) Notations to confirm all service cupboard doors will open a maximum of 180 degrees and will be latched to the building when open;

(g) Apartment numbers nominated for the basement storage cages;

(h) Notation to confirm provision of mechanical ventilation to the common corridors at Levels 1 – 7;

(i) The materials and percentage transparency of the privacy screens between the Level 4 balconies notated and included in the materials schedule;

(j) The material of the horizontal privacy / sunshade notated and included in the materials schedule, consistent with the objectives of Clause 58.04-2;

(k) Provision of external lighting to all building entrances along Cambridge, Langridge and Derby Streets;

(l) The vertically mounted bicycle parking spaces to have a minimum width of 700mm unless a vertical offset of at least 300mm is specified;

(m) A notation confirming the roof terrace will be accessible to residents only;

(n) The roof plant screen to be an acoustic screen;

(o) Provision of a convex mirror at the development entrance for exiting motorists to view the Derby Street footpath (towards the east);

(p) Provision of a maximum transverse grade of 1 in 40 for the accessible space and shared area or alternatively relocate this parking space to a more suitable location;

(q) Depict the columns in the basement car parks, dimensioning the column offset from the aisles and the depths of the columns. The positions of the columns must not encroach the parking space envelopes required in Diagram 1 Clearance to Car Parking Spaces in Clause 52.06-9;

(r) Notation to confirm the existing Derby Street crossover will be demolished and reconstructed in accordance with Council's Standard Drawings;

(s) Any changes as a result of the Façade Strategy (Condition 6);

(t) Any changes as a result of the Public Realm Functional Layout Plan (Condition 7);

(u) Any changes as a result of the amended Sustainability Management Plan (Condition 10);

(v) Any changes as a result of the amended Landscape Plan (Condition 13);

(w) Any changes as a result of the amended Wind Report (Condition 15); and

(x) Any changes as a result of the Amended Acoustic Report (Condition 17).

Development Conditions

2. The use and development as shown on the endorsed plans must not be altered (unless the Yarra Planning Scheme specifies that a permit is not required) without the prior written consent of the Responsible Authority.

3. Prior to the commencement of the development, the Development Infrastructure Levy must be paid to Yarra City Council in accordance with the approved Development Contributions Plan.

4. Prior to the commencement of the development, the Community Infrastructure Levy must be paid to Yarra City Council in accordance with the approved Development Contributions Plan.

5. As part of the ongoing consultant team, Warren and Mahoney Architects, or an architectural firm to the satisfaction of the Responsible Authority, must be engaged to:

   (a) Oversee design and construction of the development; and

   (b) Ensure the design quality and appearance of the development is realised as shown in the endorsed plans or otherwise to the satisfaction of the Responsible Authority.

Façade Strategy

6. Concurrent with the submission of Condition 1 Plans, a Façade Strategy and Materials and Finishes Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the Façade Strategy and Materials and Finishes Plan will be endorsed and will then form part of this permit. This must detail:

   (a) Elevation drawings at a scale of 1:20 illustrating typical podium details, entries and doors, and utilities and typical tower facade details;

   (b) Section drawings to demonstrate façade systems, including fixing details and joints between materials or changes in form;

   (c) Information about how the façade will be maintained, including any vegetation; and

(d) Sample images or coloured drawings outlining colours, materials and finishes.

Public Realm Functional Layout Plan

7. Concurrent with the submission of Condition 1 plans, or by such later date as approved in writing by the Responsible Authority, a Public Realm Plan of all public realm improvements associated with the development must be prepared, submitted and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The Public Realm Plan should include (but not be limited to) the following to the satisfaction of the Responsible Authority, including Civil Engineering and Urban Design:

   (a) Reinstatement of footpaths, kerbs and channels to all site frontages, except where the vehicle accessway is proposed. The materials are to include asphalt footpaths and bluestone kerb and channel, consistent with recent streetscape upgrades on adjacent sites;

   (b) Upgraded pedestrian crossing points to align with the existing crossing point locations on Cambridge, Langridge and Derby Streets;

   (c) A new kerb outstand on the south-west corner of Cambridge Street to mirror the existing outstand on the south-east corner of the street. The new kerb outstand should include provision for landscaping and/or tree planting;

   (d) A new kerb outstand on Derby Street, accommodating a garden bed that integrates with the existing tree pit as well as a bike hoop, where feasible;

   (e) Upgrade the existing garden bed on Langridge Street, retaining the alignment of the existing kerb and channel for drainage, if feasible;

   (f) Upgrade kerb radius at intersections of Cambridge and Langridge Streets and Cambridge and Derby Streets, if feasible;

   (g) A notation to show future removal or relocation of sewer vent pole, subject to further feasibility and coordination with the relevant authorities;

   (h) Extend tree cut-outs to existing street trees on Derby Street;

   (i) Provision of a bench seat on the Langridge Street frontage, where feasible;

   (j) Provision of on-street bike hoops on Cambridge and Langridge Streets, where feasible;

   (k) All garden beds to have a minimum area of 5sqm or to the satisfaction of Urban Design;

   (l) All footpaths adjacent to the development must have DDA compliant grades with a maximum cross fall steepness of 1 in 33 (3%) from the property boundary;

   (m) Re-sheeting of half the road pavement along the site's Cambridge Street and Derby Street frontages;

   (n) Any adjustments to existing civil and drainage works required as a result of these upgrades; and

   (o) Plans to include general dimensions, locations of features and details of materials and surface finishes.

Public Realm Detailed Design Plan

8. Before the development commences (excluding site preparations, demolition and bulk excavation), or by such later date as approved in writing by the Responsible Authority, detailed design drawings of the works approved under the Public Realm Plan (as required by Condition 7) addressing all road infrastructure works (including soft/hard landscaping), must be submitted to and approved by Council's Civil Engineering Department. Once approved, the detailed design drawings will be endorsed and will then form part of the permit.

9. Before the building is occupied, all associated works shown on the endorsed detailed design plans for the public realm (as required by Condition 8) must be fully constructed and completed to the satisfaction of the Council's Civil Engineering Department and at no cost to the Responsible Authority.

Sustainability Management Plan

10. Concurrent with the submission of Condition 1 Plans, an amended Sustainable Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended Sustainable Management Plan will be endorsed and will form part of this permit. The amended Sustainable Management Plan must be generally in accordance with the Sustainable Management Plan prepared by GIW Environmental Solutions and dated 21 February 2025 but modified to include:

    (a) Consistency with the Condition 1 Plans;

    (b) Apts. 101, 103, 105, 201, 203, 205, 301, 303, 305, 401 & 404 provided with heat recovery ventilation with balanced air supply and extraction;

    (c) Low VOC strategy applied to residential areas;

    (d) Specify which products will meet the 'sustainable' criteria or otherwise remove ambiguous language such as "where deemed appropriate" from the SMP;

    (e) Plans updated with an accurate depiction of a 5kW solar PV array.

11. Prior to the occupation of the development approved under this permit, a report from the author of the sustainable management plan, approved pursuant to this permit, or similarly qualified person or company, must be submitted to the Responsible Authority. The report must be to the satisfaction of the Responsible Authority and must confirm that all measures specified in the sustainable management plan have been implemented in accordance with the approved plan.

12. The provisions, recommendations and requirements of the endorsed Sustainable Management Plan must be implemented and complied with to the satisfaction of the Responsible Authority.

Landscape Plan

13. Concurrent with the submission of Condition 1 Plans, an amended Landscape Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended Landscape Plan will be endorsed and will form part of this permit. The amended Landscape Plan must be generally in accordance with the Landscape Plan prepared by John Patrick Landscape Architects and dated 21 February 2025, but modified to include (or show):

    (a) Consistency with the Condition 1 Plans;

(b) Confirmation the species selection has had consideration to the surrounding environment, including impacts of passers-by, light conditions, wind conditions and direct sunlight;

(c) Additional planting at the communal terrace that incorporates herbs and dwarf varieties of citrus species or similar for the enjoyment of residents;

(d) Provision of an outdoor tap for residents' use, in close proximity to the barbecue;

(e) Dimensions of the planter boxes; and

(f) Planter box detail to include depth of soil dimension.

14. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the landscaping works shown on the endorsed Landscape Plan must be carried out and completed to the satisfaction of the Responsible Authority. The landscaping shown on the endorsed Landscape Plan must be maintained by:

(a) implementing and complying with the provisions, recommendations and requirements of the endorsed Landscape Plan;

(b) not using the areas set aside on the endorsed Landscape Plan for landscaping for any other purpose; and

(c) replacing any dead, diseased, dying or damaged plants,

To the satisfaction of the Responsible Authority.

Wind Report

15. Concurrent with the submission of Condition 1 Plans an amended Wind Assessment Report to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended Wind Assessment Report will be endorsed and will form part of this permit. The amended Wind Assessment Report must be generally in accordance with the Wind Assessment Report prepared by MEL Consultants and dated 14 February 2025, but modified to include (or show):

(a) Consistency with the Condition 1 Plans;

(b) Standing comfort criterion achieved for all private balconies;

(c) A minimum 10sqm seated area on the communal roof terrace achieving sitting comfort criterion; and

(d) The wind conditions for private balconies and the communal roof terrace confirmed via a wind tunnel test.

16. The provisions, recommendations and requirements of the endorsed Wind Assessment Report must be implemented and complied with to the satisfaction of the Responsible Authority.

Acoustic Reports

17. Concurrent with the submission of Condition 1 Plans an amended Acoustic Report to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended Acoustic Report will be endorsed and will form part of this permit. The amended Acoustic Report must be generally in accordance with the Acoustic Report prepared by Enfield Acoustics and dated 1 April 2025, but modified to include (or show, or address):

(a) Location of nearby sensitive receivers shown on a map mark-up;

(b) Present EPA Publication 1826 Part 1 noise limits at the most affected sensitive receiver; and

(c) All acoustic report recommendations summarised in the “Recommendations and Conclusion” section.

18. Before the building is occupied, an Acoustic Report to the satisfaction of the Responsible Authority must be prepared by a suitably qualified acoustic engineer and must be submitted to and approved by the Responsible Authority. The Acoustic Report must demonstrate compliance of the rooftop plant and services as well as vehicle access gate with Environment Protection Regulations under the Environment Protection Act 2017 and the incorporated Noise Protocol (Publication 1826.4, Environment Protection Authority, May 2021) or any other requirement to the satisfaction of the Responsible Authority, as may be amended from time to time.

19. The provisions, recommendations and requirements of the endorsed Acoustic Report must be implemented and complied with to the satisfaction of the Responsible Authority.

20. The use/development must at all times comply with the noise limits specified in the Environment Protection Regulations under the Environment Protection Act 2017 and the incorporated Noise Protocol (Publication 1826.4, Environment Protection Authority, May 2021), as may be amended from time to time.

Green Travel Plan

21. Before the development commences, a Green Travel Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the Green Travel plan will be endorsed and will form part of this permit. The Green Travel Plan must include, but not be limited to, the following:

(a) A description of the location in the context of alternative modes of transport;

(b) Employee and resident welcome packs (e.g. provision of myki/transport ticketing);

(c) Sustainable transport goals linked to measurable targets, performance indicators and monitoring timeframes;

(d) A designated ‘manager’ or ‘champion’ responsible for coordination and implementation;

(e) Details of bicycle parking and bicycle routes;

(f) Details of GTP funding and management responsibilities;

(g) The specific design of bicycle storage devices proposed to be used for employees and residents;

(h) Spaces, including demonstration of their suitability for parking cargo bikes, electric bikes and recumbent bikes;

(i) The types of lockers proposed within the change-room facilities, with at least 50% of lockers providing hanging storage space;

(j) Security arrangements to access the employee and resident bicycle storage spaces;

(k) Signage and wayfinding information for bicycle facilities and pedestrians pursuant to Australian Standard AS2890.3;

(l) Reference to a minimum 40A single phase electrical sub circuit should be installed to the car park areas for 'EV readiness'; and

(m) Provisions for the Green Travel Plan to be updated not less than every 5 years.

22. The provisions, recommendations and requirements of the endorsed Green Travel Plan must be implemented and complied with to the satisfaction of the Responsible Authority.

Waste Management Plan

23. The provisions, recommendations and requirements of the endorsed Waste Management Plan must be implemented and complied with to the satisfaction of the Responsible Authority.

24. The collection of waste from the site must be by private collection, unless with the prior written consent of the Responsible Authority.

Street Trees

25. Before the development commences, the permit holder must provide an Asset Protection Bond of $30,000 (ex GST) for the retained street trees within the Cambridge Street, Langridge Street and Derby Street frontages of the development to the Responsible Authority. The security bond:

(a) Must be provided in a manner, and on terms, to the satisfaction of the Responsible Authority;

(b) May be held by the Responsible Authority until the works are completed to the satisfaction of the Responsible Authority; and

(c) In accordance with the requirements of this permit; or

(d) Otherwise to the satisfaction of the Responsible Authority.

26. Before the development commences (including demolition and excavation) a Tree Management Plan to the satisfaction of the Responsible Authority must be prepared by a suitably qualified Arborist and must be submitted to and approved by the Responsible Authority. When approved the Tree Management Plan will be endorsed and will form part of this permit. The Tree Management Plan must make recommendations for:

(a) The Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) for Trees 1-10 calculated in accordance with AS4970-2009 *Protection of Trees on Development Sites;*

(b) The development layout, all built features including pavement, retaining walls, utilities and drainage infrastructure;

(c) A Tree Protection Plan (scaled drawing) showing tree protection requirements for retained trees in accordance with AS4970-2009 *Protection of Trees on Development Sites* including:

(i) Tree protection fence alignments and dimensions for various stages of development;

(ii) Areas of ground protection if required, i.e. where fencing cannot adequately afford tree protection or access across the TPZ is required;

(iii) Location of TPZ signage;

(iv) A notation to refer to the TMP for additional detail;

(v) Any exclusions or limitations to the Tree Protection Plan, including a list of any plans not assessed;

(d) A timeline of when the Project Arborist will be on site during demolition, construction and regular, planned visits to ensure compliance with the TMP; and

(e) Any pruning or canopy protection measures required to Trees 6, 7, 8 & 10 for installation of scaffolding, awnings or walls. This must include marked up photos of canopy proposed to be pruned.

27. The provisions, recommendations and requirements of the endorsed Tree Management Plan must be complied with and implemented to the satisfaction of the Responsible Authority.

28. Within 2 months of the completion of the development, a final Tree Certification Report must be prepared by the project arborist and submitted by the applicant to the satisfaction of the Responsible Authority for all retained trees. The report must include:

(a) Tree condition (Trees 1-10) at the conclusion of the development and a statement that the trees will remain viable;

(b) All involvement by the project arborist including dates of when the project arborist was on-site;

(c) A statement that the approved tree management plan was implemented or detail any changes that were made during the construction; and

(d) Details of any remedial measures that are required to improve tree health.

Use Conditions

29. Except with the prior written consent of the Responsible Authority, the Shop use as authorised by this permit may only operate between the hours of 8am and 8pm, Monday to Sunday.

30. Delivery and collection of goods to and from the land may only occur between 7am and 10pm Monday to Saturday, or after 9am on a Sunday or public holiday except for those allowed under any relevant local law.

31. The amenity of the area must not be detrimentally affected by the use or development, including through:

(a) The transport of materials, goods or commodities to or from land;

(b) The appearance of any buildings, works or materials;

(c) The emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, or

(d) The presence of vermin,

To the satisfaction of the Responsible Authority

Engineering and Infrastructure

32. Concurrent with the submission of Condition 1 plans or by such later date as approved in writing by the Responsible Authority, a vehicle crossing design and ground clearance check must be submitted to Council's Civil Engineering Department for approval. The submitted design must demonstrate compliance with City of Yarra's, *Vehicle Crossing Information Sheet*. The vehicle crossing diagram must ensure that a B99 design vehicle

can enter and exit the property via Derby Street without scraping or bottoming out. Refer to Notes (below) for lodgement details.

33. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the areas set aside on the endorsed plans for the car parking spaces, access lanes, driveways and associated works must be:

    (a) Constructed and available for use in accordance with the endorsed plans;

    (b) Formed to such levels and drained so that they can be used in accordance with the endorsed plans;

    (c) Treated with an all-weather seal or some other durable surface; and

    (d) Line-marked or provided with some adequate means of showing the car parking spaces,

    To the satisfaction of the Responsible Authority.

34. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, a notice showing the location of car parking must be placed in a clearly visible position near the entry to the land. The notice must be maintained thereafter to the satisfaction of the Responsible Authority.

35. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, at least 2 bike racks must be installed:

    (a) At the permit holder's cost; and

    (b) In a location and manner,

    To the satisfaction of the Responsible Authority.

36. Before the building is occupied or by such later date as approved in writing by the Responsible Authority, any new vehicle crossing must be constructed:

    (a) At the permit holder's cost;

    (b) In accordance with any requirements or conditions imposed by Council; and

    (c) To the satisfaction of the Responsible Authority.

37. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, any redundant vehicular crossing must be demolished and re-instated as footpath, verge (if applicable), and kerb and channel:

    (a) At the permit holder's cost; and

    (b) To the satisfaction of the Responsible Authority.

38. Except with the prior written consent of the Responsible Authority, Council assets must not be altered in any way.

39. Within 2 months of the completion of the development or by such later date as approved in writing by the Responsible Authority, any damage to Council infrastructure resulting from the development must be reinstated:

    (a) At the permit holder's cost; and

    (b) To the satisfaction of the Responsible Authority.

40. All pipes, fixtures, fittings and vents servicing any building on the land must be concealed in service ducts or otherwise hidden from view to the satisfaction of the Responsible Authority.

41. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the kerb and channel along the property's Langridge Street, Cambridge Street and Derby Street frontages must be reconstructed:

    (a) At the permit holder's cost; and

    (b) To the satisfaction of the Responsible Authority(s).

42. Before the building is occupied or by such later date as approved in writing by the Responsible Authority, the footpath along the property's Langridge Street, Cambridge Street and Derby Street frontages must be reconstructed in asphalt:

    (a) At the permit holder's cost; and

    (b) To the satisfaction of the Responsible Authority(s).

43. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, half the road pavement along the property's Cambridge St and Derby St frontages must be re-sheeted:

    (a) At the permit holder's cost; and

    (b) To the satisfaction of the Responsible Authority.

Construction Management Plan

44. Before the development commences, a Construction Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will form part of this permit. The plan must provide for:

    (a) A pre-conditions survey (dilapidation report) of the land and all adjacent Council roads frontages and nearby road infrastructure;

    (b) Works necessary to protect road and other infrastructure;

    (c) Remediation of any damage to road and other infrastructure;

    (d) Containment of dust, dirt and mud within the land and method and frequency of clean up procedures to prevent the accumulation of dust, dirt and mud outside the land;

    (e) Facilities for vehicle washing, which must be located on the land;

    (f) The location of loading zones, site sheds, materials, cranes and crane/hoisting zones, gantries and any other construction related items or equipment to be located in any street;

    (g) Site security;

    (h) Management of any environmental hazards including, but not limited to,:

        (i) Contaminated soil;

        (ii) Materials and waste;

        (iii) Dust;

        (iv) Stormwater contamination from run-off and wash-waters;

(v) Sediment from the land on roads;

(vi) Washing of concrete trucks and other vehicles and machinery; and

(vii) Spillage from refuelling cranes and other vehicles and machinery;

(i) The construction program;

(j) Preferred arrangements for trucks delivering to the land, including delivery and unloading points and expected duration and frequency;

(k) Parking facilities for construction workers;

(l) Measures to ensure that all work on the land will be carried out in accordance with the Construction Management Plan;

(m) An outline of requests to occupy public footpaths or roads, or anticipated disruptions to local services;

(n) An emergency contact that is available for 24 hours per day for residents and the Responsible Authority in the event of relevant queries or problems experienced;

(o) The provision of a traffic management plan to comply with provisions of AS 1742.3-2002 Manual of uniform traffic control devices - Part 3: Traffic control devices for works on roads;

(p) A Noise and Vibration Management Plan showing methods to minimise noise and vibration impacts on nearby properties and to demonstrate compliance with Noise Control Guideline 12 for Construction (Publication 1254) as issued by the Environment Protection Authority in October 2008. The Noise and Vibration Management Plan must be prepared to the satisfaction of the Responsible Authority. In preparing the Noise and Vibration Management Plan, consideration must be given to:

(i) Using lower noise work practice and equipment;

(ii) The suitability of the land for the use of an electric crane;

(iii) Silencing all mechanical plant by the best practical means using current technology;

(iv) Fitting pneumatic tools with an effective silencer;

(v) Other relevant considerations; and

(q) Any site-specific requirements.

During the construction:

(r) Any stormwater discharged into the stormwater drainage system must be in compliance with Environment Protection Authority guidelines;

(s) Stormwater drainage system protection measures must be installed as required to ensure that no solid waste, sediment, sand, soil, clay or stones from the land enters the stormwater drainage system;

(t) Vehicle borne material must not accumulate on the roads abutting the land;

(u) The cleaning of machinery and equipment must take place on the land and not on adjacent footpaths or roads; and

(v) All litter (including items such as cement bags, food packaging and plastic strapping) must be disposed of responsibly.

If required, the Construction Management Plan may be approved in stages. Construction of each stage must not commence until a Construction Management Plan has been endorsed for that stage, to the satisfaction of the Responsible Authority.

45. The provisions, recommendations and requirements of the endorsed Construction Management Plan must be implemented and complied with to the satisfaction of the Responsible Authority.

General Conditions

46. Finished floor levels shown on the endorsed plans must not be altered or modified without the prior written consent of the Responsible Authority.

47. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, all new on-boundary walls must be cleaned and finished to the satisfaction of the Responsible Authority.

48. Before the development is occupied, or by such later date as approved in writing by the Responsible Authority, all screening and other measures to prevent overlooking as shown on the endorsed plans must be installed to the satisfaction of the Responsible Authority. Once installed the screening and other measures must be maintained to the satisfaction of the Responsible Authority.

49. Any new apartment development allowed by this permit must not be connected to a reticulated gas service (within the meaning of Clause 53.03 of the relevant planning scheme). This condition continues to have force and effect after the development authorised by this permit has been completed.

50. Before the building is occupied, any wall located on a boundary facing public property must be treated with a graffiti proof finish to the satisfaction of the Responsible Authority.

51. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, external lighting capable of illuminating access to the basement car park, pedestrian walkway and dwelling entrances must be provided within the property boundary. Lighting must be:

    (a) Located;

    (b) Directed;

    (c) Shielded; and

    (d) Of limited intensity,

    To the satisfaction of the Responsible Authority.

52. Except with the prior written consent of the Responsible Authority, demolition or construction works must not be carried out:

    (a) Monday-Friday (excluding public holidays) before 7 am or after 6 pm,;

    (b) Saturdays and public holidays (other than ANZAC Day, Christmas Day and Good Friday) before 9 am or after 3 pm; or

    (c) Sundays, ANZAC Day, Christmas Day and Good Friday at any time.

53. This permit will expire if:

    (a) The development is not commenced within two years of the date of this permit; or

(b) The development is not completed within four years of the date of this permit;

(c) The use is not commenced within five years of the date of this permit.

The Responsible Authority may extend the periods referred to if a request is made in writing before the permit expires or within six months afterwards for commencement or within twelve months afterwards for completion.

General Notes

For the submission of plans pursuant to Condition 32, please submit these to info@yarracity.vic.gov.au marked attention to Engineering Services.

Provision must be made for drainage of the site to a legal point of discharge. Please contact Council's Building Services on 9205 5555 for further information.

A vehicle crossing permit is required for the construction of the vehicle crossing(s). Please contact Council's Construction Management Branch on 9205 5585 for further information.

The Food and Drinks Premises will be required to comply with the Food Act 1984. The use must not commence until registration, or other approval, has been granted by Council's Health Protection Unit.

A building permit may be required before development is commenced. Please contact Council's Building Services on 9205 5555 to confirm.

A local law permit (e.g. Asset Protection Permit, Road Occupation Permit) may be required before development is commenced. Please contact Council's Construction Management Branch on Ph. 9205 5555 to confirm.

The person in management or control of the site must also provide a copy of any Environmental Audit Statement to any person who proposes to become the person in management or control of the site, such as a potential purchaser.

A suitably qualified environmental consultant acceptable to the responsible authority may include an environmental auditor appointed under the Environment Protection Act 2017 or an environmental professional with qualifications and competence consistent with Schedule B9 of the National Environment Protection (Assessment of Site Contamination Measure 1999) (as amended 2013).

All property owners or occupiers and all future businesses (whether as owners, lessees/tenants, occupiers) within a development approved under this planning permit, will not be eligible for residential, business or visitor parking permits unless the development has heritage controls where parking would adversely affect the integrity of the heritage place, or if there's no increase in occupancies and the development does not reduce existing on-site parking. For more information refer to www.yarracity.vic.gov.au/residents/transport/parking/parking-permits.

Engineering Notes

The site stormwater must be directed to the nominated legal point of discharge (LPD) and shall be limited to equivalent pre-development levels or 70% impervious coverage, whichever is lowest, for a 20% AEP rainfall event.

The development must detain onsite, at a minimum, the 10% AEP storm event. For cases where a safe overland flow path cannot be provided or where flows exceeding pipe capacity may impact the development or adjacent, upstream, or downstream properties, the requirement will be to detain the 1% AEP storm event.

All redundant property drain outlets are to be demolished and reinstated to Council's satisfaction and at the Permit Holder's cost.

Any service poles, structures or pits located within the public realm areas that interfere with the proposal, must be adjusted accordingly:

(a) At the permit holder's cost; and

(b) To the satisfaction of the Responsible Authority.

Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, boundary traps, valves or meters on Council property will be accepted.

No parking restriction signs, or line-marked on-street parking bays are to be removed, adjusted, changed or relocated without approval or authorisation from Council's Parking Management unit and Construction Management branch.

Any on-street parking reinstated as a result of development works must be approved by Council's Parking Management unit.

The removal of any kerb-side parking sensors and any reinstatement of parking sensors will require the Permit Holder to pay Council the cost of each parking sensor taken out from the kerb/footpath/roadway. Any costs associated with the reinstatement of road infrastructure due to the removal of the parking sensors must also be borne by the Permit Holder.

History and Background

Appeal against Council's failure to determine the application in time

1. Planning application PLN25/0129 was submitted to Council on 21 February 2025. On 12 June 2025, Council was informed that the applicant had lodged a Section 79 "failure to determine within the prescribed timeframe" appeal with the Victorian Civil and Administrative Tribunal (VCAT) against planning application PLN25/0129. As such, Council cannot issue a decision on this application and instead can only form a position.
2. A compulsory conference is scheduled for 7 August 2025 and a Major Cases Hearing is scheduled over four days for 6, 7, 8 and 9 October 2025.
3. At the time of writing this report, no statements of grounds have been received.

Planning History

4. The site has the following planning history:
   (a) Planning permit PLN22/0100 was issued on 22 June 2022 for business identification signage.

Council's Updated Flood Mapping

5. Council's floor mapping has recently been updated. The flood mapping has no formal status and does not form part of the Yarra Planning Scheme. However, the information has been made public and Council officers are checking applications and advising potentially affected applicants. On review of the mapping area, it appears that the subject site is affected.

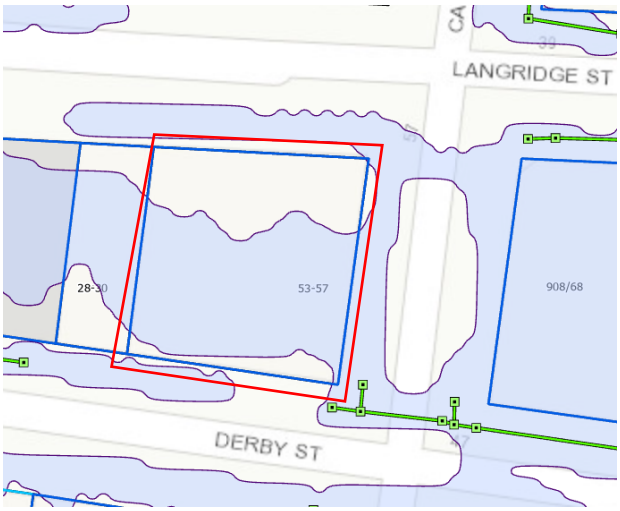


Figure 1 – Yarra Flood Maps showing subject site affected by 1:100 year flood event

6. The maximum 1 in 100 year flood level for the subject site is 25.8m to Australian Height Datum (AHD). This means that when the flood mapping has formal status, any new development must be built with floor levels 300mm above this. A review of the plans has revealed that the ground floor finished floor level does not meet the future requirements. The applicant was advised of this via email correspondence on 13 May 2025.

Sketch Plans

7. On 19 June 2025 the applicant submitted sketch plans in response to planning officer and referral department concerns regarding the layout of the ground floor and lack of activation with the street. A public realm response was also submitted. These sketch plans and public realm response are included as attachments to this report and will be discussed throughout the report where relevant.

Site Context

Subject Site

8. The subject site is located on the western side of Cambridge Street and has 3 street frontages; Cambridge Street to the east, Langridge Street to the north and Derby Street to the west, in Collingwood. The site has an overall area of 812sqm.

9. The site consists of a 2-3 storey brick warehouse building constructed to the full extent of the site. Due to the slope of the land (1.4m fall from west to east), the building presents as two storeys towards the western boundary and 3 storeys towards the eastern boundary. On-site, undercroft car parking is located along the eastern side of the site, accessed via a continuous crossover along Cambridge Street. A single crossover is located on Derby Street, within the southern interface.



Figure 2 – View of subject site looking south-west from Cambridge and Langridge Streets (Planning Officer, June 2025)

Title

10. The title submitted with this application is not affected by any covenants or easements. The land is subject to Caveat AY644965J which relates to a Purchaser's Contract.

Surrounds

11. The subject site is located in the Mixed Use Zone and as such, the surrounding area contains a diverse mix of land uses, including dwellings, offices, hotels, retail premises and food and drink premises, amongst others. The site is also located in the Smith Street Major Activity Centre (MAC) as identified at Clause 02.04 (Strategic Framework Plan) of the Yarra Planning Scheme (the Scheme) and is located within a High Change area pursuant to Clause 16.01-1L (Location of Residential Development) of the Scheme.



Figure 3 - Zoning map of subject site and surrounds (VicPlan, June 2025)

12. Cambridge Street, Langridge Street and Derby Street are all two-way streets with parallel car parking on both sides. There are two existing street trees adjacent to the site's Cambridge Street frontage, two street trees adjacent to the site's Derby Street frontage and 5 street trees adjacent to the site's Langridge Street frontage.

13. The site is in proximity to a number of public transport services including trams along Smith Street and Gertrude Street, buses along Hoddle Street and trams and buses along Victoria Parade.

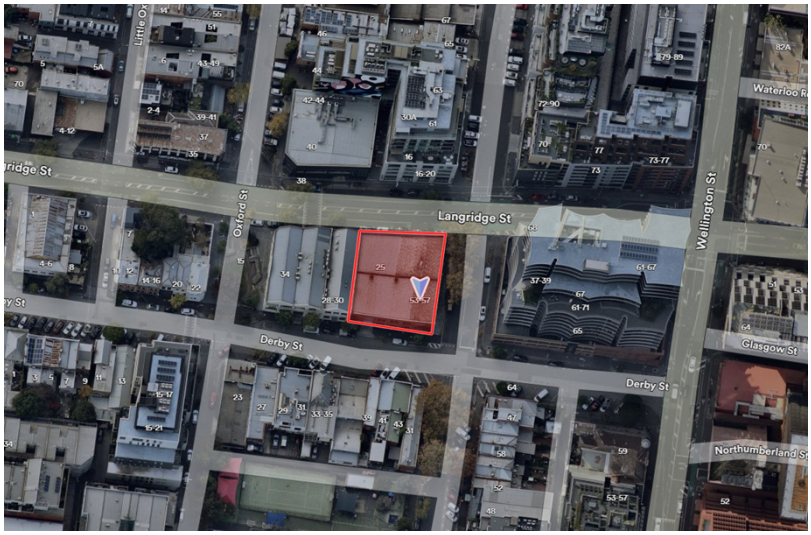


Figure 4 - Nearmap aerial imagery of subject site and surrounds (May 2025)

14. The built form character in the surrounding area is mixed, with examples of low rise, one and two storey Victorian-era dwellings and commercial buildings and two and three storey warehouses; a reflection of the area's industrial past. However, the area is undergoing significant changes in the built form scale owing to its current Mixed Use Zoning, location within the Smith Street MAC and the Collingwood South Design and Development Overlay (DDO23). Since these planning controls were implemented, there has been a period of transition from lower scale buildings to higher density development. There have been several recently completed developments within the pocket of land between Wellington Street to the east and Smith Street to the west, including:

    (a) PL10/0231 – 107 Cambridge St – 6 storey apartment building;

(b) PLN15/1083 - 72-94 Cambridge St – 10 storey apartment building (Figure 7);

(c) PLN15/0641 – 61-71 Wellington St, 37-39 Langridge St & 68 Cambridge St – 13 storey mixed use building (Figure 5);

(d) PLN15/1138 – 73-77 Wellington St – 10 storey mixed use building (Figure 8);

(e) PLN15/0640 – 23 Little Oxford St – 6 storey mixed use building;

(f) PLN16/0092 – 15-21 Derby St & 27 Oxford St – 7 storey mixed use building;

(g) PLN18/0497 – 42-44 Oxford St, 61-63 Cambridge St & 16-20 Langridge St – 10 storey mixed use building (Figure 6); and

(h) PLN18/0584 – 279-289 Wellington St – 9 storey residential hotel.

15. Taller development is typically concentrated along the Wellington Street corridor, with a transition down in scale westwards, towards Smith Street.



Figure 5 – No. 61-71 Wellington St, 37-39 Langridge St & 68 Cambridge St (Planning Officer, June 2025)



Figure 6 – No. 42-44 Oxford St, 61-63 Cambridge St & 16-20 Langridge St (Planning Officer, June 2025)



Figure 7 – No. 72-94 Cambridge St (Planning Officer, June 2025)



Figure 8 - No. 73-77 Wellington St, viewed from Langridge St (Planning Officer, June 2025)

16. The immediate interfaces are as follows:

North

17. To the north of the site is Langridge Street. On the opposite side of the street is a 10 storey mixed use building comprising food and drinks premises, a residential hotel and apartments (see Figure 6 above). This development consists of a 5 storey street wall to both Cambridge and Langridge Streets, constructed of masonry. The tower form appears lighter weight with glazing forming its principal construction.

East

18. To the east of the site on the opposite side of Cambridge Street is No. 61-71 Wellington St, 37-39 Langridge St & 68 Cambridge St, a 13 storey mixed use building comprising offices, food and drinks premises and apartments (see Figure 5 above). This development retains its original Art-Deco heritage façade resulting in a two storey street wall. Levels 1 to 7 are set back behind this heritage façade and Levels 8 and above are further setback, with the bulk of these upper levels located towards Wellington Street.

South

19. To the south of the site on the opposite side of Derby Street are 1 and 2 storey office buildings. These buildings are located in the Heritage Overlay – Schedule HO336 with contributory heritage gradings.



Figure 9 - Two storey buildings on south side of Derby St (Planning Officer, June 2025)

West

20. To the west and directly abutting the site is No. 28-30 Derby Street, a two storey building consisting of an art gallery and offices. This building is constructed with a hard edge to Oxford Street and Derby Street. Further to the west is the Oxford Street Reserve.



Figure 10 – No. 28-30 Derby St (Planning Officer, June 2025)

Proposal

21. The application is for the construction of a 9 storey mixed use building (including basement and roof terrace) comprising a Shop, Food and Drink Premises and Dwellings (planning permit not required for Food and Drink and Dwelling uses), reduction in the car parking requirements of the Yarra Planning Scheme. Further details of the proposal are as follows:

Use

22. The building will consist of:

    (a) Dwellings, Food and Drinks Premises (planning permit not required) and a Shop (planning permit required);

    (b) 28 dwellings are proposed, consisting of 8 x 2 bedroom apartments and 20 x 3 bedroom apartments (Levels 1-8);

    (c) The Shop will have a leasable floor area of 193sqm, and the Food and Drinks Premises will have a leasable floor area of 102sqm;

    (d) Vehicle access and the main pedestrian entry to the dwellings will be located on Derby Street; and

    (e) Provision of car parking in 3 levels of basement and bicycle parking at ground level.

Car Parking/Bicycle Parking

23. 49 car parking spaces are proposed within 3 levels of basement

    (a) 46 designated for residents;

    (b) 1 designated for the Shop and

    (c) 2 designated for the Food and Drinks Premises.

24. 33 bicycle parking spaces are proposed, located at ground level in a secure facility:

    (a) 28 residential spaces; and

    (b) 5 spaces for employees of the commercial tenancies.

Development

25. General:

    (a) Full demolition of all existing buildings on-site (planning permit not required);

    (b) Removal of the existing crossovers along the Cambridge Street frontage (planning permit not required);

    (c) The development will comprise a 4 storey street wall, and overall height of 9 storeys with a maximum building height of 31.8m (to the roof terrace parapet); and

    (d) The lift core will rise to a height of 34.2m above ground level (3.4m above the parapet).

26. Basement:

    (a) 3 levels of basement will be constructed to the full extent of the site; and

    (b) The basement will contain residential car parking, site services, waste storage, rainwater tanks and residential storage cages.

27. Ground floor:

(a) The ground floor will be constructed with a hard edge to all 3 frontages, except for the north-east and south-east corners of the site which provide corner setbacks for recessed building entries, and will extend for the full length along the western boundary;

(b) A food and drinks premises is proposed within the north-east corner of the site with site services located along the remainder of the Langridge Street frontage. The Shop will be located along the Cambridge Street and Derby Street frontages, in the site's south-east corner;

(c) The main vehicle and pedestrian entrance to the apartments will be via Derby Street;

(d) A secure bicycle storage room will be accessed via the main entrance; and

(e) Construction of awnings over the footpath along the Cambridge Street, Langridge Street and Derby Street frontages, projecting 1.15m from the building façade.

28. Podium levels:

(a) Levels 1-3 will be constructed with a hard edge to all boundaries with terraces abutting the north, east and south boundaries;

(b) Cambridge Street will have a street wall height of 14.62m;

(c) Langridge Street will have a street wall height of 13.04m at the western end, increasing to 14.58m at the eastern end;

(d) Derby Street will have a street wall height of 13.17m at the western end, increasing to 14.49m at the eastern end; and

(e) Level 4 will be constructed along the western boundary (21.4m) and will be set back:

(i) Between 2m to 3m from the northern boundary;

(ii) Between 2m to 3m from the eastern boundary;

(iii) 3m from the southern boundary; and

(iv) Terraces/planter boxes are proposed within these setbacks.

29. Upper levels:

(a) Levels 5-6 will mirror the setbacks of Level 4 with each apartment provided with inset balconies to the northern, eastern and southern boundaries;

(b) Level 7 will be set back:

(i) Between 2.17m to 3m from the northern boundary;

(ii) Between 4.65m up to 5.7m from the eastern boundary; and

(iii) 5.3m from the southern boundary;

(c) Level 8 will be set back:

(i) Between 5.2m to 5.35m from the northern boundary;

(ii) Between 6.25m to 7.25m from the eastern boundary;

(iii) 8.1m from the southern boundary; and

(iv) 2.05m from the western boundary (from the balcony edge) and 4.45m (from the western façade).

30. Roof:

(a) Provision of a 64sqm communal roof terrace on the northern side of the building, with landscaping;

(b) The roof terrace and plant screen will be set back:

(i) Between 4.8m to 5.35m from the northern boundary;

(ii) 8.2m from the eastern boundary;

(iii) Between 9.9m and 10.1m from the southern boundary; and

(iv) 4.45m from the western boundary; and

(c) The services area will be set back:

(i) Between 8.8m to 9.95m from the northern boundary;

(ii) 12.6m from the eastern boundary;

(iii) Between 12.1m to 12.3m from the southern boundary; and

(iv) 5.5m from the western boundary.

31. The development will include the following key Environmentally Sustainable Design (ESD) features:

(a) BESS score of 61% (exceeding 50% best practice);

(b) 7.5 star average NatHERS energy rating;

(c) 5kW solar array on the rooftop;

(d) Water and energy efficient appliances;

(e) Bicycle storage facilities; and

(f) 15,000L rainwater tank to capture runoff, achieving 100% STORM score.

32. Materials and Finishes:

(a) The primary material palette will comprise light beige brickwork, light bronze metal cladding, medium beige rendered concrete and clear glazing.

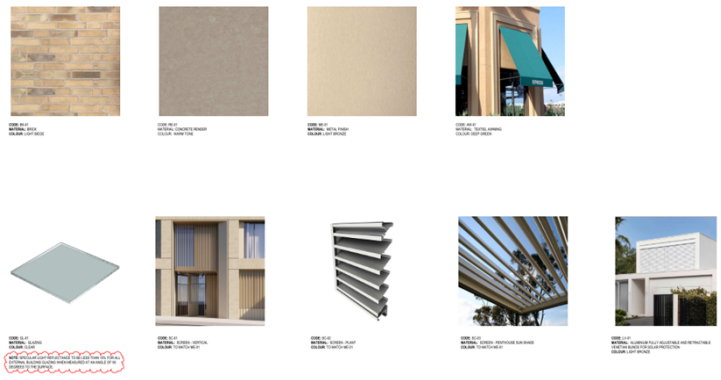


Figure 11 - Materials and finishes schedule



Figure 12 – Artist's impression of proposed development, looking north-west from corner of Cambridge and Derby Streets



Figure 13 - Artist's impression of proposed development, looking south-west from corner of Cambridge and Langridge Streets



Figure 14 - Artist's impression of proposed development, looking east from Langridge Street

Statutory controls

33. The table contained in the Officer Recommendation sets out why a planning permit is required for this matter.

34. The following Clauses of the Yarra Planning Scheme are also relevant to the proposal:

(a) Clause 32.04 – Mixed Use Zone (MUZ):

(i) Pursuant to Clause 32.04-2, a Dwelling use is an as-of-right use and does not require a planning permit;

(ii) Pursuant to the same clause, the Shop and Food and Drinks Premises uses are also as-of-right, provided their leasable floor area does not exceed 150sqm. The Food and Drinks Premises will be 102sqm and does not need a permit. The Shop will be 193sqm and therefore needs a permit; and

(iii) Pursuant to Clause 32.04-7, a planning permit is required to construct two or more dwellings on a lot. An apartment development of five or more storeys, excluding a basement, must meet the requirements of Clause 58;

(b) Clause 43.02 – Design and Development Overlay – Schedule 23 Collingwood South (DDO23):

(i) Pursuant to Clause 43.02-2, a planning permit is required to construct a building and carry out works; and

(ii) DDO23 applies the following discretionary built form controls which affect the subject site:

a. Preferred maximum street wall height of 14m to Cambridge Street, Langridge Street and Derby Street;

b. Preferred maximum building height of 27m; and

c. Preferred upper level setback of 3m to Cambridge, Langridge and Derby Streets.



Figure 15 - DDO23 area and preferred building heights (subject site in yellow star)

(c) Clause 45.03 - Environment Audit Overlay (EAO):

(i) Pursuant to Clause 45.03-1, *before a sensitive use (residential use, child care centre, kindergarten, pre-school centre, primary school, even if ancillary to another use), children's playground or secondary school commences or before the construction or carrying out of buildings and works in association with these uses commences:*

a. *A preliminary risk screen assessment statement in accordance with the* Environment Protection Act 2017 *must be issued stating that an environmental audit is not required for the use or the proposed use; or*

b. *An environmental audit statement under Part 8.3 of the* Environment Protection Act 2017 *must be issued stating that the land is suitable for the use or proposed use; or*

c. *A certificate of environmental audit must be issued for the land in accordance with Part IXD of the Environment Protection Act 1970; or*

d. *A statement of environmental audit must be issued for the land in accordance with Part IXD of the Environment Protection Act 1970 stating that the environmental conditions of the land are suitable for the use or proposed use.*

(ii) As the dwellings are a sensitive use, a note would be added to the permit, if one was to issue.

(d) Clause 45.06 – Development Contributions Plan Overlay – Schedule 1 – Yarra Development Contributions Plan (DCPO1):

(i) Schedule 1 of the Development Contributions Plan Overlay (DCPO1) applies to the proposal due to the proposed additional retail floor area and increase in the number of dwellings. The DCPO1 requires the developer to pay a cash contribution towards essential city infrastructure like roads and footpaths. Pursuant to Clause 45.06-1, a permit granted must:

a. *Be consistent with the provisions of the relevant development contributions plan; and*

b. *Include any conditions required to give effect to any contributions or levies imposed, conditions or requirements set out in the relevant schedule to his overlay;*

(ii) The subject site is located within Charge Area 6 (Collingwood). The development infrastructure levy is applicable to the dwellings and retail floor space and the community infrastructure levy is applicable to the dwelling use only. Council's standard condition will be included to ensure that the applicable Development and Community Infrastructure levies are paid, as required.

(e) Clause 52.06 – Car Parking:

(i) Before a new use commences the required car parking spaces must be provided on the land as set out at Clause 52.06-5. The following table outlines the car parking requirements associated with the application.

Use	Size / No.	Statutory parking rate*	No. spaces required	No. spaces allocated	Reduction sought
2 bedroom Dwelling	8	1 per dwelling	8	8	0
3 bedroom Dwelling	20	2 per dwelling	40	38	2
Shop	193m2	3.5 per 100sqm leasable floor area	6	1	2
Food & Drink Premises	102m2		3	2	4
Total			57	49	8

*Site is within Principal Public Transport Network – Column B parking rates apply

(ii) ii. Given the above, a planning permit is required to reduce the number of car parking spaces required of the Scheme by 8 spaces.

(f) Clause 52.34 – Bicycle Parking:

(i) Pursuant to Clause 52.34-1, a new use must not commence until the required bicycle facilities and associated signage are provided on the land;

(ii) The following table identifies the bicycle parking requirements under Clause 52.34-3 and the provision of bicycle parking on site:

Use	Size/No.	Statutory rate	No. spaces required	No. spaces allocated
Dwelling	28	In developments of 4+ storeys, 1 resident space to each 5 dwellings and 1 visitor space to each 10 dwellings	6 resident spaces 3 visitor spaces	28 resident spaces 0 visitor spaces
Shop	193sqm	1 employee space to each 600m2 if the leasable floor area exceeds 1000m2 1 visitor space to each 500m2 if the leasable floor area exceeds 1000m2	0 employee & visitor spaces	3 employee spaces 0 visitor spaces
Food & Drinks Premises (Retail)	102sqm	1 employee space to each 300sqm leasable floor area 1 visitor space to each 500sqm leasable floor area	0 employee and visitor spaces	2 employee spaces 0 visitor spaces
Total			**6 resident spaces** **0 employee spaces** **3 visitor spaces**	**28 resident spaces** **5 employee spaces** **0 visitor spaces**
Showers / Change Rooms		1 to the first 5 employee spaces and 1 to each additional 10 employee spaces	0 showers/change rooms	0 showers/change rooms

(iii) Given the above, the proposed development complies with the resident and employee bicycle parking requirements but requires a reduction in the visitor parking requirement for the Dwelling use.; and

(iv) It is noted that the strategic transport comments observe 3 visitor spaces have been provided. These relate to proposed on-street bicycle parking. However, as they are not located within the subject site, they cannot be counted towards the Clause 52.34 bicycle parking provision.

(g) Clause 53.03 – Residential Reticulated Gas Service Connection:

(i) A permit must not be granted for construction of a new dwelling or a new apartment development that is to be connected to a reticulated gas service. A

permit granted for buildings and works in relation to an application to which this clause applies must include the following mandatory conditions:

"Any new apartment development allowed by this permit must not be connected to a reticulated gas service (within the meaning of clause 53.03 of the relevant planning scheme). This condition continues to have force and effect after the development authorised by this permit has been completed."

(h) Clause 53.18 – Stormwater Management in Urban Development:

(i) This Clause applies to an application under a provision of a zone to construct a building or construct or carry out works. An application to construct a building or to construct or carry out works:

a. *Must meet all of the objectives of Clauses 53.18-5 and 53.18-6; and*

b. *Should meet all of the standards of Clauses 53.18-5 and 53.18-6; and*

(i) Clause 58 – Apartment Developments:

(i) This clause applies as the development is for the construction of an apartment development. A development should meet all the standards and must meet all the objectives.

Internal and External Consultation

Advertising

35. The application was advertised under the provisions of Section 52 of the *Planning and Environment Act* 1987 (the Act) by 555 letters sent to surrounding owners and occupiers and by three (3) signs displayed on the Cambridge Street, Langridge Street and Derby Street frontages.

36. The following components of the application are exempt from notice and review requirements:

(a) Reduction in the visitor bicycle parking requirement pursuant to Clause 52.34-3.

37. Council received 17 objections, on the following key grounds:

(a) Non-compliance with DDO23 objectives;

(b) Visibility and unsightly views of rooftop services;

(c) Amenity impacts including overlooking, loss of daylight to existing dwellings, wind impacts to private balconies;

(d) Lack of car parking, impact on street parking demand and traffic impacts;

(e) Lack of bicycle parking;

(f) Noise impacts from plant equipment, the commercial tenancies and from apartment balconies;

(g) Impacts to street trees;

(h) Wind impacts on proposed balconies;

(i) Overshadowing of public open space;

(j) On-street bicycle parking obstructing access;

(k) Small capacity of solar panel system;

(l) Trees proposed on roof terrace will exacerbate height issues;

(m) Lack of on-site loading bay;

(n) Impacts to surrounding area from construction of development;

(o) Pressure on existing infrastructure and services;

(p) Increased dog waste and use of private rubbish bins;

(q) Bicycles blocking footpaths; and

(r) Lack of landscaping and greenery at ground level.

38. 1 letter of support was received, on the following key ground:

(a) Complementary to existing urban fabric.

39. A planning consultation meeting was not held.

Internal and external referrals

40. The proposal was referred to the following external agencies and internal business units:

External consultant	**Comments**
Urban Design (Hansen)	Supportive of the proposed development, subject to changes to the ground floor layout, relocation of a Level 8 balcony and changes to the materials and finishes of the tower, including further articulation of blank walls
Acoustic (SLR)	Requested further information to be able to carry out a full assessment, including identification of nearest noise sensitive receivers, presentation of noise limits at the most affected receiver, an indicative assessment of air conditioning unit noise, an assessment of traffic noise and an assessment of noise impacts from the roof terrace if proposed to be used between 10pm and 7am.
Wind (VIPAC)	Supportive, subject to confirmation that the wind report remains consistent with the latest set of drawings. Also supportive of walking comfort criterion for private balconies but recommends a wind tunnel test if standing comfort criterion is to be achieved.
Landscape (Hansen)	Supportive, subject to provision of additional species, further refinement of suitability of plant species to local conditions, public realm landscape improvements and further details on planter boxes.
Internal business unit	**Comments**
Urban Design	Supportive, subject to changes to the ground floor layout, reduced shadows to kerb outstands and the developer undertaking public realm improvements.
Development Engineering	Supportive of the car parking reduction, supportive of car parking access arrangements subject to additional dimensions and notations being provided,

	recommended a Public Realm Functional Layout Plan be submitted prior to endorsement of Condition 1 Plans, detailing all public realm works. Standard engineering conditions also recommended.
ESD	Supportive, subject to the development addressing the identified deficiencies and outstanding information.
City Works – Waste Management	Fully supportive of waste management plan.
City Works – Open Space	Supportive, subject to an asset protection bond for the street trees and the submission of a Tree Management Plan prior to works commencing.
Strategic Transport	Supportive of resident bicycle parking spaces and proposed on-street visitor bicycle parking spaces. Recommends a minimum 7 visitor bicycle parking spaces on-site and additional dimensions to be shown for the resident bicycle parking.

41. The referral responses have been included as attachments to this report.

Policy Implications

Planning Policy Framework (PPF)

42. The following policies are of most relevance to this application:

- Clause 2 - Municipal Planning Strategic, including:
  - Clause 02.01 – Context:
    - Clause 02.01-1 – Location
    - Clause 02.01-6 – Built Environment and Heritage
    - Clause 02.01-9 – Transport
  - Clause 02.02 – Vision
  - Clause 02.03-1 – Settlement:
    - Clause 02.03-3 – Environmental Risks and Amenity
    - Clause 02.03-4 – Built Environment and Heritage
    - Clause 02.03-6 – Economic Development
    - Clause 02.03-7 – Transport
  - Clause 02.04 – Strategic Framework Plan
- Clause 11 – Settlement , including:
  - Clause 11.01-S – Settlement
  - Clause 11.02-1S – Supply of Urban Land
- Clause 13 – Environmental risks and amenity:
  - Clause 13.05-1S – Noise Management
  - Clause 13.06-1S – Air Quality Management
  - Clause 13.07-1S – Land Use Compatibility
  - Clause 13.07-1L – Interfaces and Amenity
- Clause 15 – Built environment and heritage:

    - Clause 15.01-1S – Urban Design
    - Clause 15.01-1L – Urban Design
    - Clause 15.01-2S – Building Design
    - Clause 15.01-2L – Building Design
    - Clause 15.01-2L-01 – Environmentally Sustainable Development
    - Clause 15.01-5S – Neighbourhood Character
- Clause 16 – Housing:
    - Clause 16-01-1S – Housing Supply
    - Clause 16.01-1R – Housing Supply
    - Clause 16.01-1L – Location of Residential Development
    - Clause 16.01-1L-01 – Housing Diversity
- Clause 17 - Economic Development:
    - Clause 17.01-1S – Diversified Economy
    - Clause 17.01-1L – Employment
    - Cause 17.02-1S – Business
    - Clause 17.02-1L – Retail
- Clause 18 – Transport:
    - Clause 18.01-1S – Land Use and Transport Integration
    - Clause 18.02-1S - Walking
    - Clause 18.02-2S – Cycling
    - Clause 18.02-2L – Cycling
    - Clause 18.02-3S – Public Transport
    - Clause 18.02-3R – Principal Public Transport Network
    - Clause 18.02-4S – Roads
    - Clause 18.02-4L – Road System
    - Clause 18.02-4L-01 – Car Parking
- Clause 19 – Development infrastructure:
    - Clause 19.03-3L – Water Sensitive Urban Design

Officer Assessment

43. The primary considerations for this application are as follows:

    (a) Policy and Strategic Context;

    (b) Use;

    (c) Buildings and Works (DDO23);

    (d) Off-Site Amenity;

    (e) On-Site Amenity (including Clause 58);

    (f) Car Parking, Traffic, Loading, Bicycle Parking; and

    (g) Objector Concerns.

Policy & Strategic Support

44. The proposed development has strong strategic support at the State and local level for the construction of a larger scale mixed use development. The site and adjoining land are located in the MUZ, which specifically encourages development to *provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality* and to *provide housing at higher densities.* These objectives indicate strong strategic support for the proposed uses and development as they align with the purposes of the MUZ.

45. With regard to the proposed development, State and local policies encourage the concentration of development in and around activity centres with more intense development on sites well-connected to public transport, thereby ensuring efficient use of existing infrastructure. The site is well connected to public transport opportunities, with trams along Smith Street (150m west), buses and trams along Victoria Parade (220m south) and buses along Hoddle Street (570m east). The proximity of the site to public transport will encourage the use of alternative modes of transport to and from the site and reduce reliance on motor vehicles as encouraged by clauses 15.01-2L-01 (Environmentally sustainable development), 17.01-1L (Employment) and 18.01-3S (Sustainable and safe transport).

46. Clause 02.04 (Strategic Framework Plan) and Clause 11.03-1L (Activity Centres) identifies the subject site within the Smith Street Major Activity Centre (MAC). Clause 11.03-1L supports high quality mid-rise buildings in major and neighbourhood activity centres, development that improves the public realm and positively contributes to the streetscape environment within activity centres, and development that is consistent with the capacity for each centre as identified in Clause 16.01-1L (Strategic Housing Framework Plan). Clause 16.01-1L identifies the subject site within a High Change Area. In this area, policy encourages *high density residential and mixed use development that establish a new character for the site or precinct. Apartment developments should be well designed and include:*

    (a) *A diverse range of housing types;*

    (b) *The provision of larger dwellings suitable for families and shared households particularly on the lower levels of the building and the ground floor, with good access to well-designed communal open space; and*

    (c) *External spaces and large common rooms that promote social interaction as well as shared break out spaces and quiet areas.*

47. How the development achieves these objectives will be discussed throughout this report.

48. The development also provides opportunities for new employment within the proposed Food and Drinks Premises and Shop at ground level, consistent with Clause 17.01-1S (Diversified Economy) and Clause 17.02-1S (Business). These provisions recognise and support land uses and development that contribute towards the increase in the number and diversity of local employment opportunities.

49. At a broader State level, the metropolitan planning strategy *Plan Melbourne* seeks to create 20-minute neighbourhoods, where people can access most of their everyday needs (including employment) within a 20-minute walk, cycle or public transport commute. These neighbourhoods must be safe, accessible and well connected for pedestrians and cyclists.

50. The site fulfils these criteria as it is within the Smith Street MAC which provides a wide range of retail, community and hospitality offerings with good public transport services.

51. Whilst the proposal for a medium density, mixed use development enjoys broad strategic and policy support, this must be balanced against site constraints, the proposed architectural response and amenity impacts to nearby sensitive uses. The site is located within Schedule 23 to the Design and Development Overlay (DDO23). DDO23 provides clear built form advice, and the proposed development demonstrates a positive response to the relevant objectives within this Overlay. As will be discussed in subsequent sections of this report, the proposed development will result in an acceptable built form response in relation to the site's context and it is for these reasons that Council planning officers recommend that the development be supported.

Use

52. The proposed dwellings and food and drinks premises do not require a planning permit under the MUZ, indicating strong strategic support. The use of the land for a Shop is also as-of-right under the MUZ provided that the leasable floor area of the premises does not exceed 150sqm. As the proposed Shop is 193sqm, a planning permit is required. However, there is otherwise strong strategic support for the Shop in this area given the site's location within a MAC and proximity to public transport.

53. Hours of operation have not been nominated for the Shop. Clause 13.07-1L-01 (Interfaces and Amenity) recommend non-residential uses in residential zones to operate between 8am and 8pm to ensure there are no unreasonable amenity impacts to nearby residents. Whilst this policy excludes the Mixed Use Zone, the applicant has not proposed alternative hours. Trading hours between 8am and 8pm are also generally aligned with other retail uses observed in the surrounding mixed use precinct. As such, these hours will be included as a condition should a permit issue.

54. Noise and other amenity impacts of the proposed uses will be considered under the Off-Site Amenity section later in the report. For the above reasons, the proposed Shop is supported, subject to the conditions outlined throughout this report.

Buildings and Works

Site Context

55. The primary built form considerations for the proposed development are the decision guidelines at Clause 32.04-15 (Mixed Use Zone) and policy at Clause 15.01-1L (Urban Design), Clause 15.01-2L (Building Design) and the Design and Development Overlay (Schedule 23). All of these provisions and guidelines support a development outcome that responds to the existing or preferred neighbourhood character and provides a contextual urban design response. Particular regard must be given to the acceptability of the design in terms of height and massing, street setbacks and relationship to adjoining buildings.

56. As specified previously within the report, the subject site is located in an area with a mix of commercial and residential uses. Built form varies from one and two storey Victorian-era buildings to more recent contemporary infill developments from 6 to 10 storeys.

57. Considering the recent constructions of larger scale developments (outlined in the Site Context section of this report), the development's location within the Smith Street MAC and proximity to various public transport links, as well as the objectives of the DDO23, it would be a reasonable expectation that this site would experience further intensification in use and development.

58. This area of Collingwood between Wellington Street and Smith Street is undergoing significant change with regards to building heights and forms, with an emergence of dense, mid-rise development. This is reflected in the preferred building heights of the DDO23, which in the immediately surrounding area envisages buildings from 27m to 40m high (where not encumbered by the Heritage Overlay). Images of existing built form constructed to this scale and within proximity to the site are provided below.



Figure 16 – No. 61-71 Wellington St, 37-39 Langridge St & 68 Cambridge St (Planning Officer, June 2025)



Figure 17 – No. 42-44 Oxford St, 61-63 Cambridge St & 16-20 Langridge St (Planning Officer, June 2025)



Figure 18 – No. 72-94 Cambridge St (Planning Officer, June 2025)



Figure 19 - No. 73-77 Wellington St, viewed from Langridge St (Planning Officer, June 2025)

59. Pursuant to Clause 16.01-1L (Location of Residential Development), the subject site is in an "High Change" area. The relevant strategies are to:

    (a) *Encourage high density residential and mixed use development that establish a new character for the site or precinct; and*

    (b) *Encourage lot consolidation to facilitate increased densities and efficient use of land, where appropriate.*

60. Based on the context outlined, a mid-scale development on the subject site is expected. However, a detailed assessment against the appropriateness of the height and massing are prudent in determining the acceptability of the proposal from a built form perspective. This will be discussed in the following sections of the report.

Height & Setbacks

61. The strategic planning context for the site has been established and is considered to support re-development of the site for a multi-storey, mixed use building. However, this must be balanced against achieving acceptable design outcomes for the site having regard to relevant built form policies outlined in Clause 15.01-2S (Building design) and DDO23.

62. Clause 15.01-2L encourages new buildings to respond to the adjoining development building heights and the physical and strategic context of the site. As outlined earlier in this report, the subject site is in an area where mid-rise development is encouraged.

63. The proposed development will have a 4 storey street wall and will consist of a total of 9 storeys. The main built form to the top of Level 8 will have a maximum height of 31.83m (34.2m inclusive of the lift overrun). The development has been assessed against the discretionary building height controls of the DDO23 in the table below. For the purposes of the DDO23, the height is associated with the top of the parapet at the roof terrace, excluding services above.

Building element	DDO23*	Proposal	Complies?
Maximum building height	27m	29.32m to 31.83m (varies)	No
Maximum street wall height	14m	12.9m – 14.62m (varies)	Partially, due to slope of site
Upper-level setbacks	3m	Levels 4-7: 2m-5.3m (varies) Level 8: 5.2m – 8.1m (varies)	Levels 4-7: Partially Level 8: Yes
Building Separation	Where buildings exceed 27 metres in height, the development above 27 metres be setback a minimum of 6 metres from the common boundary, whether or not windows are proposed on the subject site.	4.45m from western boundary at Level 8	No

*Preferred heights / setbacks

Building Height

64. The proposed development will exceed the preferred maximum building height (27m) by 4.83m (equivalent to approximately 1 storey). It is also observed that the subject site experiences a fall to the east of approximately 1.6m, resulting in a variation in building height from west to east. Council's Urban Design consultant (Hansen) provides a mark-up of the proposed development and its comparison with the DDO23 preferred building height (in blue) shown below:

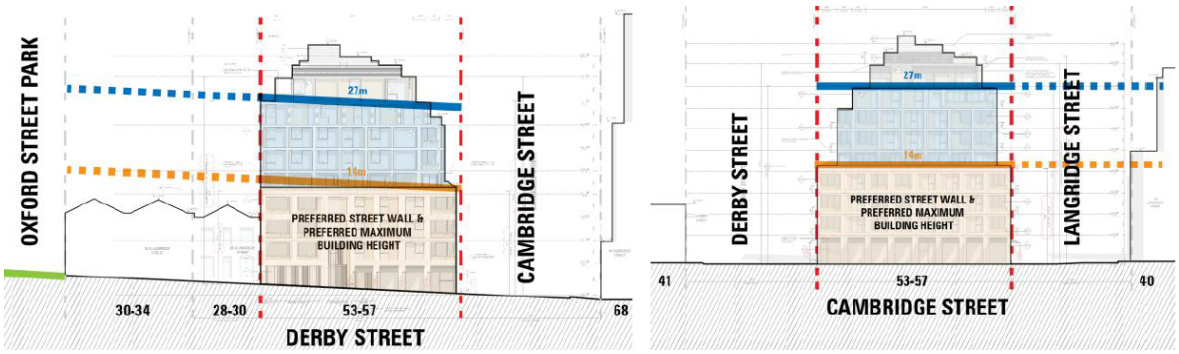


Figure 20 – Hansen mark-up of Derby St & Cambridge St elevations overlayed with DDO23 preferred building heights

65. Section 2.3 of DDO23 states that a permit should only be granted to construct a building which exceeds the preferred maximum building height where the following requirements are met to the satisfaction of the responsible authority:

    (a) *The built form outcome as a result of the proposed variation satisfies:*

        (i) The design objectives in Clause 1.0; and

        (ii) The overshadowing and solar access requirements in Clause 2.6; and

    (b) *The proposal achieves the following:*

        (i) Greater building separation than the minimum requirement in this schedule; and

        (ii) No additional overshadowing impacts to residentially zoned properties, beyond that which would be generated by a proposal that complies with the preferred building height.

66. These criteria have been considered throughout the body of the report and the proposed development is considered to demonstrate an appropriate response to each.

67. The overall height is considered to be responsive to the site and surrounding context. As discussed earlier in the report, taller built form in excess of 10 storeys is located further east along the Wellington Street corridor, including the 13 storey building immediately east of the subject site at Nos. 61-71 Wellington Street, 37-39 Langridge Street & 68 Cambridge Street (referred to as No. 68 Cambridge Street from hereon in and shown in Figure 22).



Figure 21 - Buildings exceeding 10 storeys on Wellington St (Planning Officer, June 2025)



Figure 22 - 13 storey development at Nos. 61-71 Wellington St, 37-39 Langridge St & 68 Cambridge St

68. This building demonstrates a significant increase in height from the subject site further to the east. To the west, the neighbouring site is subject to the same height controls as the subject site under DDO23 of 27m. However, this site abuts public open space and is consequently prescribed with an 11m street wall, as well as having limitations on the extent of additional overshadowing allowed to the public open space. Further west is a row of heritage dwellings with a mandatory maximum height of 11m. As such, the DDO23 clearly envisages a transition down in scale west of the subject site.

69. Hansen also observe these site conditions and submit that the site contributes to this transition. In entertaining a height that exceeds the preferred DDO height, the development will assist in reinforcing this transition. This is further illustrated in Hansen's mark-up of the south elevation showing the transition in height between the development at No. 68 Cambridge Street towards Oxford Reserve located further west of the site:

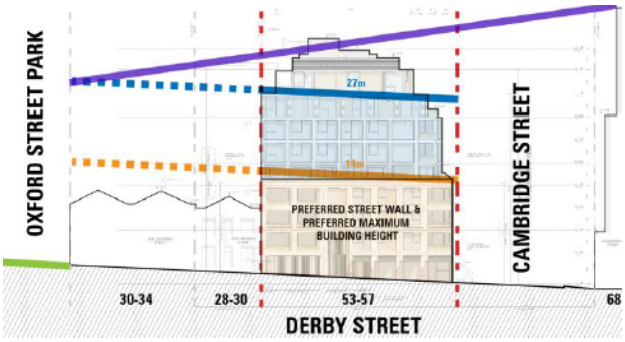


Figure 23 - Hansen mark-up of south elevation showing height transition in purple outline

70. Hansen are consequently supportive of the proposed building height, noting a design objective of DDO23 is to ensure buildings provide *'a suitable transition in height as the land slopes upwards...'* and further go on to observe:

> *"The site benefits from its location at the low point of the broader city block, 3.5m below the ground level at Oxford Street Reserve, with similar height expectations to the site immediately to the west. Consequently the transition from the higher building form at 68 Cambridge Street, will be countered by the natural fall across the site. We consider that a higher building form on the subject site will assist with this transition."*



Figure 24 – Applicant's sketch of Langridge St elevation illustrating transition in height towards Oxford St Reserve (an indicative development envelope at No. 28-30 Derby St & 34 Oxford St has also been included)

71. This transition is also mirrored to the north and south of the site. The development at No.42-44 Oxford St, 61-63 Cambridge Street and 16-20 Langridge Street exceeds the preferred building height by approximately 3m. On the southern side of Derby Street, DDO23 prescribes a preferred maximum building height of 14m. Consequently, the proposed development also provides an appropriate transition in scale between the taller built form north of Langridge Street towards the lower-scale area on the opposite side of Derby Street, to the south.

72. As can also be seen in Figure 22, the two upper-most levels (Levels 7 and 8) will be further set back from the levels below. These two upper levels will consequently be recessive to the principal building form which will reduce the visual impact of the upper-most levels of the building to the surrounding public realm.

Building Height – Roof Services

73. Section 2.3 of DDO23 provides the following preferred controls for roof services:

    (a) *Service equipment and/or structures including … plant rooms, lift overruns, stair wells … and other such equipment may exceed the mandatory or preferred maximum height provided that:*

        (i) The equipment/structures do not cause overshadowing of secluded private open space to residential land, opposite footpaths, kerb outstands or planting areas in the public realm;

        (ii) The equipment/structures are no higher than 2.6 metres above the proposed building height; and

        (iii) The equipment/structures occupy less than 50 per cent of the roof areas (solar panels and green roof excepted).

74. Rooftop services will include solar panels, the lift overrun, exhaust risers, heat pump system and air conditioning condensers. In this instance, all of the taller roof structures are located above the DDO23 preferred height of 27m and are more than 2.6m above the proposed building height. However, the lift core and rooftop services are substantially set back from all boundaries, including a minimum 8.8m from the northern boundary, 12.6m from the eastern boundary, 12.1m from the southern boundary and 6.8m from the western boundary. These setbacks will ensure the roof services will be appropriately recessed and will have limited visibility from the surrounding public realm. A screen is also proposed around the perimeter of these services, which will be constructed of a bronze-coloured metal that will integrate with the finishes of the principal building.

75. The rooftop services (excluding the solar panels) will occupy 130sqm of the overall roof area (258sqm), equivalent to 50%. Any shadows from these services would fall within, rather than be in addition to, the overall development's shadow footprint. As such, the height of the rooftop services is acceptable. Hansen is also supportive of the height of the roof services.

76. Whilst rooftop services would be visible from upper-level apartments on nearby buildings, these views are part and parcel of living in a built-up inner city location. The proposed screen will ensure that rooftop services are sufficiently concealed from surrounding viewpoints.

77. Clause 15.01-2L requires service equipment to be appropriately sited and incorporated into the design of new buildings, with limited visibility from the public realm. The majority of remaining services (substation, fire booster etc.) will be located at ground level and in

the basement. As will be discussed later in the report, there are concerns that the ground level services will dominate the Langridge Street frontage, resulting in a lack of activation with the public realm.

Street Wall Height

78. Clause 15.01-2L recommends that buildings should align with the street at ground level unless for the provision of public open space or landscaping. As outlined in the previous section of the report, DDO23 prefers a street wall height of 14m. Street walls of new development in the surrounding area are typically 4 storeys, as observed at No. 42-44 Oxford Street, 61-63 Cambridge Street and 16-20 Langridge Street, No. 70 Cambridge Street and No. 15-21 Derby Street and 27 Oxford Street.

79. The proposed development will have a 4 storey street wall. Due to the slope of the site, the western end of the street wall will be 12.9m, increasing to a maximum 14.62m at the eastern end of the site. The height of the street wall results in a 0.62m variation to the preferred street wall height. This variation is acceptable, considering the street wall is consistent with the scale of other street walls in the surrounding area and will not overwhelm the surrounding public realm. The proposed street wall will ensure the development contributes towards the local streetscape and character and provides a "human-scale" environment. This outcome is supported by Hansen, who note;

> *"We consider the proposed street wall heights consistent with the DDO23 and the adjoining sites. We note the variations to the street wall height encountered across new recent developments, and consider that this diversity is consistent with the character of the area and an acceptable feature".*

Setbacks

80. Clause 15.01-2L seeks for development to incorporate setbacks that:

    (a) *Reflect the general pattern of front, side and rear setbacks in the streetscape, particularly on the same side of the street;*

    (b) *Limit excessive tiered building profiles on street and laneway frontages and encourage use of contextual materials and finishes at upper levels; and*

    (c) *Provide space for soft landscaping including the planting of canopy trees, where appropriate.*

81. More specifically for the subject site, DDO23 prescribes a preferred upper-level setback above the street wall of 3m for all three street interfaces.

82. Levels 4 to 7 will have a varied setback of 2m (at east end) up to 3m (at west end) from the northern boundary, 2m (at the north end) up to 3m (at the south end) from the eastern boundary and a continuous, 3m setback from the southern boundary. These varied setbacks result in a trapezoid building footprint that allows for greater upper building prominence at the north-east corner of the site.

83. This encroachment into the DDO23 preferred upper-level setback towards the north-east corner is acceptable, as it allows the building to "hold the corner" at a prominent intersection within the DDO23 precinct. The variation to the setback requirement will still allow for the tower form to read as visually distinct from the podium below, consistent with the pattern of development in the surrounding area. Existing, mature street trees on Cambridge Street will also obscure views of this building corner and will soften the appearance of the development in the streetscape.

84. Hansen are generally supportive of the Level 4-7 upper-level setbacks. However, they have recommended the use of lighter weight materials for the tower to reduce its visual impact. Council planning officers disagree with this recommendation, noting that the upper-level materials maintain and reference the grid façade pattern used for the podium. The development incorporates other architectural treatments that give the tower a lighter weight appearance, including thinner columns for the grid structure as well as extensive glazing. The thicker columns at the podium level ensure this form reads more robustly in the streetscape.

85. Level 8 will have a varied setback of 5.2m up to 5.35m from the northern boundary, 6.5m to 7.25m from the eastern boundary, a continuous, 8.1m setback from the southern boundary and a 4.45m to 5.4m setback from the western boundary. The Level 8 terrace will be set back 2.05m from the western boundary.

86. The Level 8 setbacks as well as the setbacks of the roof terrace and services from the north, east and south boundaries exceed the minimum requirements of the DDO23 and are supported. The setbacks will “cap-off” the building and allow the upper-most levels of the buildings to read as recessive to the principal building below and also do not result in unreasonable overshadowing impacts to the public realm,

Overshadowing

87. Overshadowing and daylight impacts to existing secluded private open spaces and windows will be considered in the Off-site amenity section of this report. In relation to overshadowing of the public realm, Section 2.6 of DDO23 states that (as is relevant to the development):

    (a) *Development must not overshadow any part of the southern side footpath from property boundary to kerb of Peel, Langridge and Derby Streets between 10am and 2pm on 22 September;*

    (b) *For streets that extend in a north-south direction (except for Little Oxford Street), development must not overshadow any part of the opposite side footpath from property boundary to kerb between 10am and 2pm on 22 September; and*

    (c) *Development should not increase the amount of overshadowing as caused by existing conditions, measured between 10am and 2pm on 22 September for the Oxford Street Reserve and any kerb outstands, seating or planting areas on the opposite side of the street.*

88. The submitted shadow diagrams confirm the proposed development will not result in any additional overshadowing of Oxford Street Reserve, nor will there be any overshadowing of the southern footpath of Derby Street or eastern footpath of Cambridge Street between 10am and 2pm at the September Equinox.

89. The shadow diagrams show some additional overshadowing of the kerb outstand on the eastern side of Cambridge Street at 2pm. This extent of additional shadow is acceptable, considering the kerb outstand will not be impacted by shadows before 2pm, ensuring it will continue to receive good access to daylight in order to maintain plant growth.

Building Separation & Equitable Development

90. Regarding the Level 8 setback to the western boundary, for buildings that exceed 27m in height, development above 27m should be set back a minimum 6m from the common boundary, whether or not windows are proposed. The proposed western setbacks at

Level 8 fall short of this requirement by 0.6m – 1.55m. The proposed terrace further encroaches into this setback, and will be situated 2.05m from the western boundary.

91. The site to the west comprises a north-south oriented lot, suggesting that future development on this site would deliver north and south-facing apartments. Hansen suggest that the proposed Level 8 setbacks from the western boundary may compromise equitable development opportunities at No. 28-30 Derby Street & 34 Oxford Street, given DDO23 also identifies a preferred height of 27m for this site and, due to the sloped site, could result in a building being constructed at or above the height of proposed Level 8, which could compromise amenity to proposed private open space and habitable windows. Hansen recommend that Level 8 be extended out to the western boundary and a balcony instead provided to the north or south of the apartment. Alternatively, the 4.45m setback could be maintained from the western boundary, with the balcony relocated to the north or south (or both).

92. The applicant has undertaken a comprehensive equitable development study based on various factors including the preferred massing outcomes within DDO23, the overshadowing requirements to footpaths and public open space (noting this site directly abuts Oxford Street Reserve), building height and servicing requirements (such as fire safety) and the site area (744sqm). Based on these factors, the applicant submits that any future redevelopment of No. 28-30 Derby Street and 34 Oxford Street could realistically only achieve a height of 25m on the common boundary, which would reach the Level 7 parapet. This has been illustrated in the following image:

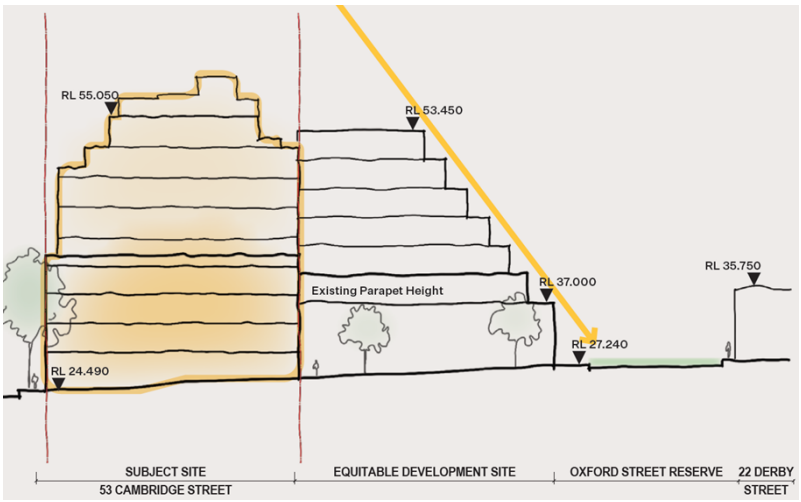


Figure 25 – Applicant's massing study of future development at No. 28-30 Derby St & 34 Oxford St

93. However, Council planning officers are unable to speculate on the future development outcomes of the western-abutting site. The height and setback requirements are discretionary only and as such, larger building envelopes could be contemplated which may have an adverse daylight and visual bulk impact to the Level 8 terrace. A condition will therefore require the Level 8 terrace to be set back a minimum of 3m from the western boundary. Whilst this setback would still fall short of the minimum 4.5m required of DDO23, 3m is considered to provide an appropriate buffer between the terrace and any future development on the adjoining site.

94. The increased setback would still allow the terrace to maintain a usable area for the enjoyment of future occupants. The terrace also benefits from northern and southern aspects and is not solely reliant on the western aspect for outlook and daylight. Whilst the minimum dimension is reduced to 1.4m, the main outdoor dining area would have a

minimum dimension of 2.4m, which would comply with the minimum requirement of Standard D20 (2.4m). However, if the applicant wishes to maintain the existing size of the terrace, the condition will also allow for additional setbacks of the western wall of the dwelling.

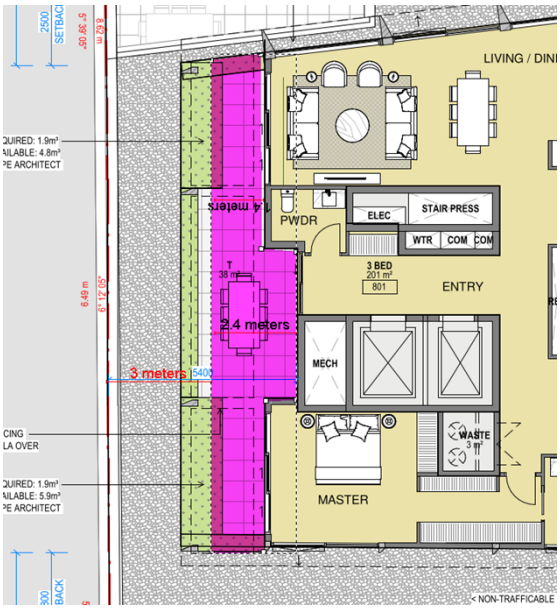


Figure 26 – Mark-up of Level 8 showing revised terrace envelope with a 3m setback from western boundary

Architectural Expression

95. Policy at Clause 15.01-2L encourages design developments to make a positive contribution to the streetscape through high quality architecture and urban design. This policy further supports mid-rise developments that contribute to high-quality built form. Section 2.8 of DDO23 also contains guidance on the design of facades, including that facades should:

(a) *Create an appropriate ratio of solid and void elements that resemble the industrial past of the area;*

(b) *Create visual interest through the arrangement of fenestration, balconies and the application of architectural features including external shading devices and windowsills;*

(c) *Maintaining an appropriate level of design simplicity by avoiding overly busy facades that rely on a multitude of materials and colours;*

(d) *Avoiding large expanses of glazing with a horizontal emphasis;*

(e) For upper levels:

(i) Be well-designed and articulated and where appropriate utilise design techniques such as architectural rebates of sufficient depth and/or a range of parapet heights to break up the building mass across wide frontages;

(ii) Distinguish between the lower and upper levels through materials and articulation, with visually lightweight materials and colours applied above the street wall; and

(iii) Be designed so that side walls are articulated and read as part of the overall building design and not detract from the streetscape when viewed from direct and oblique views along the streetscape.

(f) *Discourage blank walls visible to the public realm, including on side street frontages.*

96. The proposed development achieves a good level of architectural quality and appropriately responds to the character in this part of Collingwood. The material palette includes the primary use of beige coloured brickwork and rendered concrete, expressed in a grid pattern to both the podium and tower. This pattern is supported as it is a reflection of Collingwood's historic, industrial past where warehouses were the predominant buildings in the surrounding area. This can be observed at the subject site with the existing building, the retained heritage street wall at No. 68 Cambridge Street, the neighbouring buildings to the west at No. 34 Oxford St and No. 14 Langridge Street, as shown below:



Figure 27 – Examples of grid pattern observed on original warehouse buildings in Collingwood. Subject site top left. (Planning Officer, June 2025)

97. The combination of both horizontal and vertical patterns in the façade design reflects the fine grain character of Collingwood and is consistent with the architectural expression of the surrounding area.

98. As previously discussed, Council planning officers consider the use of masonry and rendered concrete to the upper levels to be an appropriate material treatment that still allows the tower form to appear light weight in comparison to the podium below. This has been achieved through the use of thinner masonry columns, as well as glazing, which, in combination with the setbacks proposed, allows the tower to be visually distinguishable from the podium. This is consistent with the pattern of new infill development in the surrounding area.

99. The proposed windows, inset balconies and upper-level setbacks also reduce building bulk along the site's frontages and break up the mass of the building.



Figure 28 - Artist's impression of upper level materiality and architectural expression

100. With the exception of their recommendation for lighter weight materials to the upper levels, Hansen are otherwise supportive of the architectural expression of the development's frontages.

101. The western boundary wall will also be constructed of pre-cast, beige-coloured brickwork. The grid relief pattern will provide visual interest and articulation to this otherwise blank wall and ensures the development will be expressed in the round.

102. Hansen have requested further details on the materials and their expression to this western boundary wall to ensure it achieves a high degree of visual interest. The following artist's impression of the development looking east from Langridge Street shows a section of this boundary wall. However, further details will be required via a condition for a Façade Strategy to ensure the materials are reviewed prior to construction with a higher degree of detail provided to ensure they are of a high architectural quality in accordance with the plans submitted to date.



Figure 29 – Extract of artist's impression showing western façade of upper levels

103. In relation to glare, extensive glazing is proposed across the development's north, east and south facades. The materials schedule confirms that glazing will have a specular light reflectance of less than 15% for all external building glazing when measured at an angle of 90 degrees to the surface. As the reflectance will not exceed 15%, a Reflected Glare Assessment is not considered necessary pursuant to Planning Practice Note 96.

Further mitigation of glare impacts has been achieved through the use of inset balconies, and the depth of the façade columns will also provide protection to glazing across the north and east frontages which will be most exposed to direct sunlight.

Public Realm

104. Clause 15.01-1L and Clause 15.01- 2L encourage the design of interfaces between buildings and public spaces to enhance the visual and social experience of the user. This can be achieved by designing developments to provide a high level of pedestrian amenity and visual interest, by incorporating well-defined entries at ground level and installing glazed areas which allow visual permeability into the interior space. In addition, Section 2.8 of DDO23 encourages development to:

    (a) *Achieve active, fine grain design to create a pedestrian-oriented environment and passive surveillance towards the public realm;*

    (b) *Include fine grain design that engages the pedestrian and provides detail, articulation, depth, materiality and rhythm that contributes to a high quality street interfaces and where appropriate integrates seating perches into street facades; and*

    (c) *Locate building service entries/access doors and cabinets away from the primary street frontage, or where not possible, they should be sensitively designed to integrate into the façade of the building and complement the street frontage and character.*

105. The development benefits from three street frontages, with the food and drinks premises and shop located at the north east and south east corners of the ground floor. These retail tenancies will occupy the full length of the Cambridge Street frontage. The remainder of the Langridge Street frontage will be occupied by substation and service cupboards. The remainder of the Derby Street frontage will be occupied by the vehicle entry, pedestrian entry to the apartment lobby and the fire booster cupboard.

106. Council's Urban Design unit are not supportive of the extensive use of the Langridge Street frontage for service cupboards, as it reduces opportunities for street level activation on what is a key thoroughfare through the Collingwood South precinct. In addition, there are safety concerns regarding the proximity of the pedestrian entrance to the vehicle entrance on Derby Street, which conflicts with DDO23 which encourages development to "*…ensure a high standard of pedestrian amenity and limit potential conflict between vehicle movements and pedestrian activity…*"

107. Both Hansen and Council's Urban Design unit have raised concerns about the north-east and south-east corner recess entries, submitting that they could act as "entrapment spaces" at night time but are also inconsistent with the prevailing architectural character where buildings form continuous, unbroken corners. Hansen recommend that the ground floor plate should be extended out to these corners, observing that "*the grounding of the building with corner masonry columns a good response to the local character, and consider terminating the building at this corner is a consistent treatment applied consistently at other prominent corners and reflects the local character.*"

108. However, internal Urban Design comments recommend that these undercroft areas instead be converted to open setbacks, or at least provide corner splays of 1m by 1m to provide more generous footpath space, as required by the DDO23. As such, a condition will require the north-east and south-east corners to retain a 1m by 1m corner splay, which will widen the footpath at these intersections and improve pedestrian sightlines.

109. In addition, whilst the proposed footpath awnings provide a sense of address as well as weather protection, their fragmented design undermines their capacity to provide this function. Urban Design also observe that they do not form part of the character of the area and recommend they be removed. The minimum clearance of the awnings above the footpath also does not satisfy Regulation 104 of the *Building Regulations* 2018, which prescribes a minimum 2.4m clearance. Whilst this is not a planning requirement, orderly planning is a key objective of the *Planning and Environment Act* (1987).

110. Urban Design have made a number of other recommendations to improve the development's public realm response, including:

    (a) Stall risers provided to ground level glazing to better complement the industrial character and meet Section 2.8 of DDO23 which seeks to create an appropriate ratio of solid to void and discourage floor to ceiling glass at ground level; and

    (b) Provision of openable windows for the food and drinks premises.

111. In response to the concerns outlined above, the applicant has submitted a sketch plan showing a revised ground floor layout, shown in the following image:

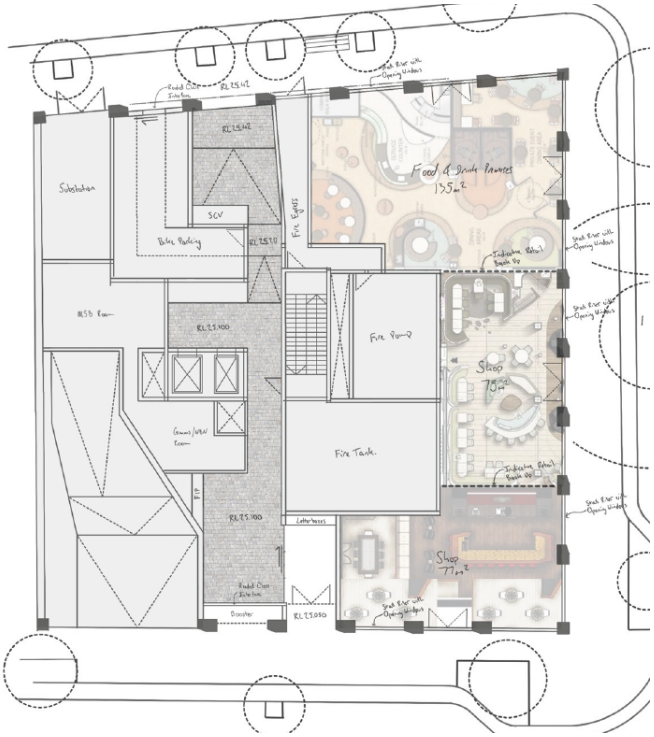


Figure 30 - Sketch plan showing revised ground floor layout

112. The revised layout results in the street frontages having continuous, unbroken edges as recommended in the Hansen advice. The extent of services along Langridge Street has also reduced and the primary residential entry has been relocated to this frontage, as well as the entrance to the bicycle parking. These changes are welcome, as they improve activation with Langridge Street. The revised bicycle store room location also complements Langridge Street's role as part of the principal bicycle network, as identified at Clause 02.04 (Strategic Framework Plan) of the Scheme.

113. A secondary residential entry has been retained along the Derby Street frontage. However, its location has been swapped with the fire booster cupboard which will now sit between the pedestrian entry and the vehicle entry, improving the separation between these spaces. Reeded glass is proposed above the fire booster cupboard to provide

daylight into the residential lobby. A notation also confirms that all entry thresholds are intended to be flush to ensure equitable access to internal spaces.

114. Although Urban Design have recommended the substation to be relocated underground, this will not be adopted as it would make access difficult for the authorities and is typically not allowed.

115. Notations on the Sketch Plan also show the provision of stall risers with opening windows to the glazing that forms the perimeters of the Shops and Food and Drinks Premises, consistent with the Urban Design recommendation.

116. The revised ground floor layout has resulted in changes to the floor areas of the commercial tenancies. There would now be two shop tenancies, with a combined floor area of 152sqm and the food and drinks premises will increase in floor area to 135sqm. These changes will be inconsequential having regard to permit triggers as the Food and Drinks Premises would remain under 150sqm and the application already includes the trigger for the Shop use.

117. To facilitate the above, a condition will require an amended ground floor layout in accordance with the Sketch Plan prepared by Warren and Mahoney, dated 19 June 2025. However, the awnings must also provide suitable weather protection and adequate clearance above the footpath to the satisfaction of the Responsible Authority.

118. The upper levels also provide a positive contribution to the public realm, including balconies and windows which overlook the street and provide passive surveillance.

119. Council's Urban Design Unit also recommended the developer undertake streetscape improvements and capital works to the site's frontages as per the mark-up included in the referral comments and reproduced below:

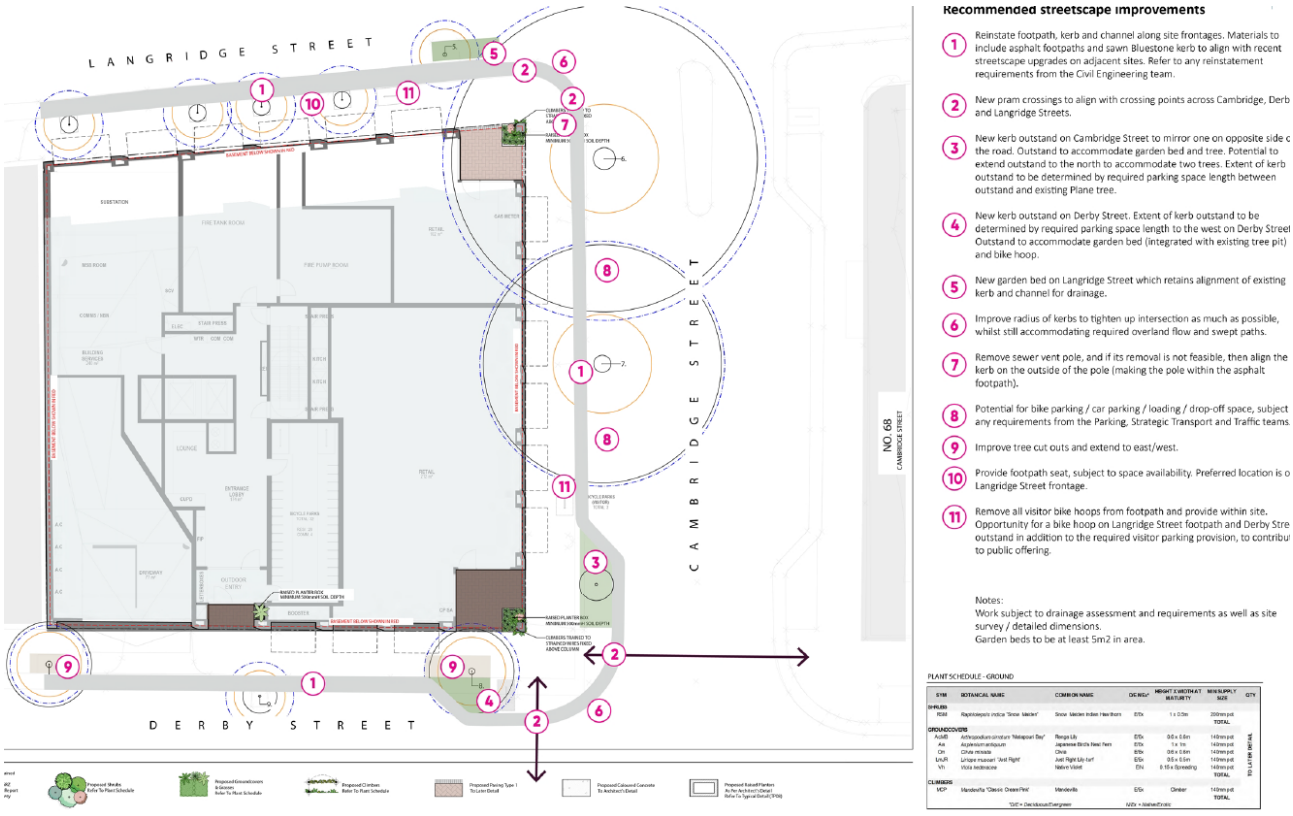


Figure 31 - Urban Design's Streetscape Improvements Plan

120. The applicant confirms the above streetscape improvements can be done, with the exception of:

    (a) Item 6: *Improve radius of kerbs to tighten up intersections as much as possible, whilst still accommodating the required overland flow and swept paths.*

    The applicant submits that this cannot be undertaken as an overland flow analysis is time consuming and the engagement of an external engineer could result in discrepancies in kerb levels compared to Council's engineering data. The applicant submits that Council's engineers should coordinate these upgrades, particularly given the updated flood mapping data. As such, a condition will require these works to be undertaken in consultation with Council's civil engineering team;

    (b) Item 7: Removal or relocation of sewer vent pole:

    The applicant submits that this cannot be undertaken without coordination from the relevant service provider. However, it is their intent to remove it in the future. Council planning officer's submit that a streetscape improvement plan instead include a notation "future removal or relocation of sewer vent pole subject to coordination with the relevant authorities"; and

    (c) Item 8: "Potential for bike parking/car parking/loading/drop-off space subject to any requirements from Parking, Strategic Planning and Traffic teams"

    This notation is included in the Cambridge Street road reserve. The applicant submits that this recommendation lacks specificity and requires further coordination from Council in terms of determining the best use of this area. Urban Design confirmed that this could be investigated at a later date, given any changes to on-street parking requires approval from other Council departments. As such, this recommendation will not be pursued.

121. Item 11 of Urban Design's public realm mark-up also includes a recommendation to only provide on-street bicycle hoops if they are in addition to the provision of visitor bicycle parking on-site. As will be discussed later in the report, a waiver of the visitor bicycle parking requirement is supported. However, the provision of on-street bicycle hoops will be a positive contribution to the public realm and should remain as part of a streetscape improvements plan.

122. In addition to the above, Council's Civil Engineering Unit have requested re-sheeting of half the road pavement along the site's Cambridge Street and Derby Street frontages. This recommendation will be adopted considering that the roads will be subject to damage from construction vehicles and machinery.

123. To facilitate the public realm and streetscape improvements discussed above, a condition will require the submission of a Public Realm Functional Layout Plan as well as a Public Realm detailed design plan to be submitted, before development commences.

Public Open Space

124. Oxford Street Reserve is located approximately 30m west of the subject site. DDO23 states that development interfacing with areas of public open space should:

    (a) *Provide a suitable transition in scale to the interface with the public open space;*

    (b) *Ensure that development does not visually dominate the public open space; and*

    (c) *Provide passive surveillance from lower and upper levels of the building.*

125. The applicant's Urban Context Report includes an artistic impression of how the development will appear when viewed from Oxford Street Reserve. As shown in the below image, only the top-most levels and the upper part of the western boundary wall will be visible from the reserve, with the neighbouring building at No. 30-34 Oxford concealing the majority of built form. As such, the proposed development will not have an unreasonable visual impact on this reserve



Figure 32 – Artist's impression of proposed development (outlined in red) when viewed from Oxford Street Reserve

Street trees

126. A number of street trees are located within the site's frontages. These trees are proposed for retention, which is supported as they will continue to provide a good level of amenity to the public realm. The applicant's arborist report includes an assessment of the development's impact on these trees, as well as recommendations for impact mitigation. These have been reviewed by Council's arborist who is generally supportive of these measures and recommends an asset protection bond for each of the street trees. Council's arborist also recommends the submission of a Tree Management Plan prior to works commencing and a Tree Certification Report once the development has been completed to confirm the tree conditions and a summary the implementation of the Tree Management Plan. These recommendations will form conditions should a permit issue.

Site Coverage

127. The level of site coverage in excess of 80% is acceptable. In accordance with policy at Clause 15.01-2L the pattern of site coverage in the immediate area is higher than 80%, with 100% site coverage typical for established and new commercial and residential buildings throughout Collingwood.

Landscaping

128. Clause 15.01-2L encourages trees and vegetation planting to increase their canopies and coverage to contribute to an urban forest. Landscaping is proposed throughout the development as follows:

    (a) Planter boxes within the two recessed entries and residential entry on Derby Street at ground level;

    (b) Planter boxes within the balustrades of private balconies; and

    (c) Planter boxes within the perimeter of the communal roof terrace balustrades, including provision of two trees including a Crepe Myrtle and Upright Olive.

129. The landscaping response was referred to Hansen for peer review who advised the landscape response is broadly supported, subject to the following recommendations:

    (a) Foyer entrance planters relocated further west to avoid shading by structural column;

    (b) Confirmation the species selection has had consideration to the surrounding environment, including impacts of passers-by, light conditions, wind conditions and direct sunlight;

    (c) Additional planting at the communal terrace that incorporates herbs and dwarf varieties of citrus species for the enjoyment of residents;

    (d) Provision of an outdoor tap for residents' use, in proximity to the barbecue;

    (e) Public realm improvements such as kerb outstands and additional street tree planting, public seating areas;

    (f) Dimensions of the planter boxes included on the landscape plan; and

    (g) Planter box detail to include depth of soil dimension.

130. Recommendation (a) will not be adopted, given the Sketch Plans will result in these recessed entries being built out and incorporated into the commercial tenancy floor spaces, as discussed in the Public Realm section above. Recommendations (b) – (d) and (f) - (g) will form conditions for an amended landscape plan should a permit issue. Recommendation (e) relates to public realm improvements. This has been discussed in the Public Realm assessment earlier in the report where conditions will require various streetscape improvements such as new kerb outstands, landscaping, etc. Based on these conditions, the proposed landscaping within the development is supported.

Summary

131. In summary and subject to the conditions discussed throughout the above assessment, the proposed development is consistent with the objectives of DDO23 and will result in a positive contribution to the Collingwood South precinct. As has been discussed throughout this assessment, the development is considered to satisfy the criteria to justify a height greater than that prescribed by DDO23. The development would exceed the preferred maximum building height by just one storey. This additional height does not result in unreasonable amenity impacts (discussed in the following sections of the report), nor will it result in unreasonable overshadowing of the public realm. The proposed setbacks also ensure the upper levels are recessive and the architectural expression including nominated material palette ensures that greater emphasis is placed on the podium, which focuses the development at the human scale. Overall, the additional height will not have an unreasonable visual or amenity impact on the surrounding area.

Off-Site Amenity

132. Clause 15.01-2L of the Scheme aims to provide building design that minimises the detrimental impact of development on neighbouring properties, the public realm and the natural environment, with potential impacts relating to overshadowing, loss of daylight to windows, visual bulk and overlooking of sensitive areas. The relevant policy framework for amenity considerations is contained within this clause, as well as Clause 13.07-1L-01 (Interface uses policy) and the decision guidelines of the MUZ.

133. The subject site and surrounds are located within the MUZ, with the nearest dwellings located immediately east of the site at No. 68 Cambridge Street (on the opposite side of

the street). These dwellings form part of a 13 storey building constructed to the full block that is bordered by Cambridge Street, Langridge Street, Wellington Street and Derby Street. The dwellings are located from Level 1 upwards. Habitable room windows and private balconies are constructed along this building's western elevation, with outlook towards the subject site. The balconies are constructed with 1.2m high metal picket balustrades and are set back a minimum 22m (approximately) from the subject site.

134. Apartments are also located to the north of the site on the opposite side of Langridge Street, including No. 42-44 Oxford Street, 61-63 Cambridge Street and 16-20 Langridge Street. Levels 1-4 of this building (where it fronts Cambridge and Langridge Streets) comprises hotel rooms, with Levels 5 – 9 comprising private apartments. These apartments are set back a minimum 22m (approximately) from the subject site.

135. Whilst dwellings are as-of-right in the MUZ, more intense, multi-storey development is encouraged in these areas, which is reflected in the MUZ objectives as well as the built form objectives of the DDO23, where buildings up 27m are envisaged for the subject site. As such, amenity expectations for existing dwellings in the MUZ must be tempered so as to not compromise the preferred built form character for the surrounding area.

Visual Bulk

136. The proposed development will not result in unreasonable visual bulk impacts to nearby existing dwellings. The development has 3 street frontages with the development set back at least 22m (approximately) from the nearest buildings on the opposite side of Cambridge and Langridge streets. These streets will consequently provide a substantial buffer between the subject site and any habitable room windows (HRWs) or secluded private open space (SPOS) with interfaces to the subject site. These buffers will ensure these sensitive interfaces continue to maintain outlook and views of the surrounding public realm.

Overlooking

137. Although not applicable in this instance (as it is not a consideration under Clause 58), the overlooking objective of Clause 55 (Standard B22) specifies that new development should be designed to avoid direct views into HRWs and SPOS of dwellings within a radius of 9 metres and 45 degree arc. Given this is a relevant benchmark, the development will be assessed against this Standard.

138. There are no existing HRWs or SPOS within a 9m radius of proposed HRWs and balconies, as well as the communal roof terrace. As such, any views from these vantage points would not be unreasonable and are considered part and parcel of living in a built up, inner city location.

Overshadowing

139. Clause 15.01-2L discourages impacts on existing adjoining development through unreasonable overshadowing of SPOS and loss of daylight to HRWs. Although not a consideration under Clause 58, Standard B21 at Clause 55 provides guidance on the assessment of overshadowing and notes:

> *Where sunlight to the secluded private open space of an existing dwelling is reduced, at least 75 per cent, or 40 square metres with minimum dimension of 3 metres, whichever is the lesser area, of the secluded private open space should receive a minimum of five hours of sunlight between 9 am and 3 pm on 22 September; and*

If existing sunlight to the secluded private open space of an existing dwelling is less than the requirements of this standard, the amount of sunlight should not be further reduced.

140. Given that taller, more intense development is envisaged for the surrounding area, additional overshadowing is expected. The test will be whether the additional overshadowing is unreasonable, having regard to the surrounding site context and preferred future context for the area.

141. The submitted shadow diagrams demonstrate that between 9am and 2pm at the September equinox, there would be no additional overshadowing to the west-facing balconies at No. 68 Cambridge Street. At 3pm, the shadow diagram shows some additional shadow falling over the lower levels of this building. However, sectional diagrams have not been provided to clearly illustrate the shadow impacts to these neighbouring balconies. Whilst there could be some overshadowing of these balconies, it would not be unreasonable considering the balconies would not be impacted in the morning and early afternoon. Again, this is a reasonable outcome considering the mid-rise character envisioned for this part of Collingwood.

142. There are no habitable room windows or SPOS to the south of the site and the shadow diagrams confirm that any additional overshadowing would fall within the road reserve.

Noise

143. Clause 13.05-1S states that community amenity should not be reduced by noise emissions. Similarly, local policy at Clause 13.07-1L-01 (Interfaces and Amenity) calls for development to consider noise attenuation in its design response, both in relation to ensuring the proposed uses and development do not result in adverse noise impacts on the surrounding environment and to ensure that future residents are reasonably protected from noise emissions from the existing environment.

144. Standard D16 (Noise Impact objectives) also provides detailed guidance on internal noise amenity for apartment dwellings. Council commissioned a peer review from SLR of the applicant's acoustic report.

Noise impacts from the proposed development

145. The Dwelling and Food and Drinks Premises uses are as-of-right and do not require a planning permit. As such, noise impacts from these uses are not a consideration. Further, noise from residential activities, including the use of private balconies and the communal roof terrace, is an expectation of living in a built up, inner city environment.

146. Whilst the Shop triggers a planning permit in this instance, if the conditions outlined in Clause 32.04-2 (MUZ) were met with regard to floor area, this use would have also been as-of-right (no permit required) and noise impacts would not have been a consideration. Notwithstanding, a condition will restrict the Shop hours of operation to between 8am and 8pm, which is considered acceptable having regard to the site's mixed use zoning, location within the Smith Street MAC and is within the operating hours of other retail premises in the surrounding MUZ area (which trade later into the evening). These hours are also consistent with policy at Clause 13.07-1L-01 for non-residential uses in residential zones and are outside the night-time hours as defined under the EPA (between 10pm and 7am). The nature of the use, being a shop, will also ensure that activities on the land do not generate unreasonable noise.

147. Entry to the car park will be via a mechanical door on Derby Street, which could be a potential noise source. Other potential noise sources from the development include the substation, located on the Langridge Street frontage, ventilation equipment, air conditioning units and rooftop plant equipment.

148. Noise impacts from service and equipment have not yet been determined as specific equipment selections are not finalised until much later in the detailed design phase of the development. The applicant's acoustic report recommends that quieter mechanical plant and equipment be selected, positioning equipment away from sensitive uses and an acoustic screen around the mechanical plant. The submitted plans show a screen around the rooftop plant equipment. A condition will require a notation to confirm this will be an acoustic screen. A further condition will require a separate acoustic report to demonstrate that the operation of this equipment complies with the applicable EPA noise limits, prior to the building being occupied.

149. This condition will also ensure that proposed dwellings will be reasonably protected from plant and services noise. The applicant's acoustic report observes that locating the plant equipment on the roof will ensure it is not located close to or within sight of proposed dwellings. Further, the lift core is not located directly adjacent to bedrooms, and building regulations will require that lift-to-apartment walls are constructed to be 'discontinuous', mitigating vibration, structure and airborne noise.

150. Regarding noise intrusion from the ground level retail tenancies, the applicant's acoustic report confirms that these uses typically do not result in high levels of noise emission. However, the floor slab will be required to be constructed to the minimum sound insultation standards under the building regulations. These construction details will be determined during the design development phases of the project.

Noise impacts from existing uses

151. The subject site is located within the Smith Street MAC and as such, the existing noise environment is considered to be more elevated in comparison to a typical residential neighbourhood.

152. Standard D16 requires that new dwellings be designed and constructed to include acoustic attenuation measures to reduce noise levels from on and off-site noise sources and to ensure the layout of new dwellings and buildings minimises noise transmission within the site.

153. The applicant's acoustic report is satisfied that the development can achieve satisfactory internal noise levels with minimum and/or standard forms of glazing construction given the relatively low traffic noise levels measured. This will also ensure that dwellings are reasonably protected from other external noise intrusion, including from pedestrians passing by. It is also noted that the site is not within 50m of a live music or entertainment venue.

154. Council's acoustic consultant has also recommended the following additional information to be presented in the applicant's acoustic report:

    (a) Locations of nearby sensitive receivers shown on a map mark-up;

    (b) Present EPA Publication 1826 Part I noise limits at the most-affected sensitive receiver;

    (c) Provide an indicative assessment of noise from domestic air-conditioning units;

    (d) Traffic noise criteria be as per the City of Yarra guidelines;

(e) If the rooftop terrace is proposed to be used between 10pm and 7am, we recommend that noise impacts from the terrace be considered (a formal assessment of the noise levels may not be necessary, depending on the sensitive receiver locations); and

(f) All of the applicant's acoustic report recommendations be summarised in the "Recommendations and Conclusion" section.

155. Items (a), (b) and (f) will be addressed via a condition for an amended acoustic report. Item (c) will be addressed in a condition for a post-completion acoustic report as previously discussed. Regarding Item (d), traffic noise has been assessed in accordance with Standard D16 at Clause 58.04-3, which is the relevant test. An assessment against the City of Yarra Guidelines is not required. Further, the subject site is not located on a main road, with traffic volumes considered to be relatively low on the surrounding side streets. Item (e) will also not be adopted as the residential use is as-of-right. The permitted hours of roof terrace use will be determined by the future Owners Corporation. However, a condition will require a notation on the roof terrace plan confirming use by residents only.

Fumes, air emissions and light spillage

156. The majority of the building is enclosed and the uses will be conducted indoors (with the exception of the outdoor balconies associated with the individual dwellings at varying levels) and the roof terrace. The proposed uses will not result in unreasonable air emissions, with light spill from the building limited due to the nature of the uses (predominately dwellings). Further, the hours of operation for the Shop will be limited to 8am to 8pm, ensuring there is no unreasonable light spill during more sensitive, night-time hours. As the roof terrace is associated with the dwellings, which are as-of-right, Council is unable to regulate the use of the roof terrace, including light spill. However, a condition will require a notation confirming access will be limited to residents only.

157. Due to the nature of the proposed uses, the proposed development is not anticipated to result in unreasonable air emissions.

158. In relation to impacts to future occupants from existing street lighting, Council's engineering unit have recommended the submission of a Public Lighting Plan prior to the commencement of the development. However, the development does not propose new street lighting. Further, it is considered that future occupants would be capable of self-managing any light spill from existing streetlights, through the use of curtains and/or blinds. A condition will also require the provision of external lighting to all building entrances to enhance safety for building occupants during night-time hours. As such, this recommendation is not considered necessary in this instance.

On-Site Amenity

159. The application must be assessed against the requirements of Clause 58. A full assessment is contained in the Attachments.

160. The proposal generally complies with the requirements. Conditions are recommended to address some requirements, including in relation to street integration, sustainability, safety, landscaping, access, internal views, noise impacts, wind impacts, accessibility, building entry, site services, functional layout and room depth. Variations to some standards are considered acceptable, including room depth and communal open space. These non-compliances are discussed in the attached Clause 58 assessment.

Car Parking, Traffic, Loading, Bicycle Parking

Car Parking

161. Under Clause 52.06-3 of the Scheme, the applicant is seeking a parking reduction of 8 spaces in total. The parking provision for the 2 bedroom dwellings complies with Clause 52.06-5 of the Scheme, a reduction of 2 spaces is required for the 3 bedroom dwellings, as well as a reduction of 2 spaces for the Shop and a reduction of 4 spaces for the Food and Drinks Premises. It is noted that the revised ground floor layout proposed in the Sketch Plan will result in the total car parking requirement for the retail tenancies (9 spaces) being unchanged from the original proposal. Clause 52.06 does not require visitor car parking for the dwellings, as the site is within the Principal Public Transport Network.

162. All car parking will be provided within 3 levels of basement. Having regard to the decision guidelines of Clause 52.06-7 of the Scheme, a reduction of 8 spaces is supported, considering:

Parking demand

163. With regards to the car parking demand generated by the proposed uses it is acknowledged that the statutory car parking rates outlined in the Scheme are conservative when applied in this instance, given the inner-city location of the subject site and proximity to alternative transport means.

164. It is well documented though VCAT decisions that modal shifts to reduce the reliance on the use of private motor vehicles are not only welcomed, but required, to ensure that a holistic planning approach to precincts that are designated for greater change is applied.

165. In a local policy context, Clause 18.02-4L-01 (Car Parking) supports car parking reductions where alternative modes of transport are available, and the subject land is located within walking or cycling distance to shops, jobs and amenities. Council's engineering unit also considers the proposed car parking provision for each of the uses acceptable considering the location of the site and the sustainable transport options offered.

166. Furthermore, the provision of car parking at this lower rate would encourage a modal shift from private vehicle use to more sustainable travel. Specifically in relation to the particular benefits of the site location, the reduction being sought by the proposal is further supported by the following:

    (a) The site is well serviced by public transport, including the following as identified by Council's Engineering Unit:

        (i) Smith Street trams – 170 metre walk;

        (ii) Victoria Parade trams – 330 metre walk; and

        (iii) North Richmond railway station – 990 metre walk;

    (b) Customers of the retail tenancies could combine their visit by engaging in other activities or business whilst in the area. Customers would likely be aware of the car parking constraints in the area. Further, the time restrictions for surrounding on-street car parking would result in a regular turnover of car parking spaces;

(c) The time-restricted parking within the surrounding area would act as a disincentive for employees to travel to work by car. Occupant or visitor parking permits will not be issued for the development and building tenants would be entering leases aware of the on-site parking availability. Therefore, businesses with a high reliance on car parking are unlikely to take up a lease at the site;

(d) The surrounding area has a good bicycle network, with Wellington Street, Langridge Street and Victoria Parade identified as key cycle routes within Clause 02.04 (Strategic Framework Plan). The proposal includes employee and resident bicycle parking spaces in excess of the minimum requirements of Clause 52.34 as which will encourage staff to ride to work and residents to opt for non-motorised transportation; and

(e) Council's Engineering Unit are supportive of the application on the basis that it is in line with the objectives of Council's *Strategic Transport Statement* noting that the site is ideally located with regard to sustainable transport alternatives and the reduced provision of on-site parking would discourage private motor vehicle use.

Parking availability

167. It is understood that on-street parking demand is very high and close to saturation point, however, existing patterns of car parking usage is not useful given policy within Clause 52.06 encourages the use of other forms of transport. Council's Engineering Unit were supportive of the proposed reduction, stating the following:

> *"From a traffic engineering perspective, the waiver of parking associated with the various uses is considered appropriate in the context of the development and the surrounding area. The operation of the development should not adversely impact on the existing on-street parking conditions in the area. The Engineering Referral team has no objection to the reduction in the car parking requirement for this site"*

Traffic and Access

168. For the car parking spaces accommodated on-site, the applicant's traffic engineers and Council's engineering unit have quantified peak hour volumes of 0.5 trips per dwelling and 1 trip per parking space for the commercial tenancies. This equates to an average of 5 trips per dwelling and 2 trips per commercial space per day.

169. Council's Engineering Unit confirmed that the additional traffic volume is not unduly high and would not have a detrimental impact on the traffic operation of Derby Street or the surrounding road network.

170. Regarding access, DDO23 encourages vehicle access to be located on laneways or side streets (in that order of preference) and vehicle access from Langridge Street is discouraged. Consistent with this objective, vehicle access is proposed from Derby Street. Car parking will also be concealed from view as it will be located in a basement.

171. A number of crossovers are located along the Cambridge Street frontage which provide access to the current undercroft car parking. However, the applicant proposes to remove these crossovers and replace with footpath, kerb and channel. These works will be included in the condition for a public realm plan.

172. In addition, Council's engineering unit have reviewed the access arrangements and confirm satisfactory vehicle access, subject to the following changes:

(a) Provision of a convex mirror at the development entrance for exiting motorists to view the footpath;

(b) Provision of a maximum transverse grade of 1 in 40 for the accessible space and shared area or alternatively provide a revised location;

(c) Depict the columns in the basement car parks, dimensioning the column offset from the aisles and the depths of the columns. The positions of the columns must not encroach the parking space envelopes required in Diagram 1 Clearance to Car Parking Spaces in Clause 52.06-9;

(d) Demolition of the existing Derby Street vehicle crossing and construction of a new vehicle crossing in accordance with Council's Standard Drawings; and

(e) Provision of a vehicle crossing cross sectional drawing for the new vehicle crossing to ensure that a B99 design vehicle can enter and exit the property via Derby Street without scraping or bottoming out.

173. These requirements will be included as conditions should a permit issue, as well as other standard engineering conditions referenced in the referral comments.

Loading

174. Clause 15.01-2L (Building Design) includes several strategies for new development to achieve in relation to loading facilities. Relevantly, to minimise noise from deliveries through appropriate design, location and management of loading bays. Furthermore, Clause 65 (Decision Guidelines) also requires the consideration of loading and unloading facilities in relation to amenity, traffic flow and road safety.

175. Loading activities for the residential dwellings are considered to be relatively infrequent and as such, it is acceptable for delivery/removalist vehicles to utilise existing on-street parking in the surrounding area. Council's engineering unit are supportive of this arrangement.

176. Council's engineering unit are also supportive of the use of on-street parking for loading and deliveries of goods to the Shop and Food and Drinks Premises. Given their relatively small floor areas, it is not anticipated that these uses would require large delivery vehicles. Given the existing crossovers will be removed from the Cambridge Street frontage, there may be opportunity to explore an on-street loading bay on Cambridge Street. However, this would require approval and coordination from Council's Parking Management Unit.

177. Waste collection will take place in the basement. This has been discussed in the Clause 58 assessment attached to this report.

Bicycle Parking

178. Clause 18.02-2L (Cycling) includes the objective to improve cycling infrastructure and encourage cycling as an alternative mode of transport for people of all ages and abilities, to be achieved through the following strategies:

(a) Encourage the provision of secure bicycle parking (including cargo bicycles);

(b) Encourage separate entrances for bicycles and motorised vehicles in developments;

(c) Provide easily accessible visitor bicycle parking;

(d) Encourage publicly accessible and safe cycling links through large sites, where links connect with the existing cycling network; and

(e) Encourage the provision of electric bicycle infrastructure.

179. The above is particularly relevant to this application due to the car parking reduction of 8 spaces sought.

180. The proposal provides a total of 33 on-site bicycle parking spaces, including 28 for residents and 5 for employees of the commercial tenancies. The bicycle parking is located at ground level and accessed from Derby Street, with the updated floor plan in the sketch plan amending this entrance to Langridge Street. The number of bicycle parking spaces for both employees and residents exceeds the statutory rate outlined in Clause 52.34 (6 for residents and 0 for employees), as well as the BESS rate (provision of an additional 50% of the planning scheme rate), which equates to 9 residential spaces.

181. Council's Strategic Transport Unit are supportive of the residential and employee bicycle parking, subject to a notation confirming the vertically mounted bicycle spaces have a minimum width of 700mm, unless a vertical offset of at least 300mm is specified. This will be addressed via condition. The submitted Sketch Plan amends the location of the bicycle store room to the northern side of the site, accessed via Langridge Street. All existing notations relating to the bicycle parking allocation, access arrangements and charging infrastructure will be required to be included on the updated ground floor plan required via condition.

182. There are no visitor bicycle parking spaces proposed, with the applicant seeking a reduction of 3 spaces. However, the plans show a proposal for two on-street bicycle hoops which would accommodate up to 4 spaces. Council's Strategic Transport unit are supportive of these arrangements, but recommend an additional 3 spaces be provided so that the provision would satisfy the requirements under the Council Alliance for the Sustainable Built Environment (CASBE).

183. This recommendation will not be adopted in this instance, given Strategic Transport have confirmed they are satisfied with the use of Cambridge Street and Langridge Street to provide on-street visitor bicycle parking, which would exceed the minimum statutory requirement of 3 spaces. There are also a number of other on-street bicycle hoops in the immediately surrounding area that will be capable of accommodating visitor bicycle parking. The location of on-street bicycle parking will require further coordination with Council's Strategic Transport team. This will be included as a condition.

184. Clause 15.01-2L-01 (Environmentally Sustainable Development) requires developments of 10 or more dwellings to provide a Green Travel Plan. This has not been submitted but will be required via condition.

Objector Concerns

185. The following objections have been addressed in the body of the report:

    (a) Non-compliance with DDO23 objectives is discussed at paragraphs 55-130;

    (b) Visibility and unsightly views of rooftop services are discussed at paragraphs 73-76;

    (c) Amenity impacts including overlooking, loss of daylight to existing dwellings, wind impacts to private balconies are discussed at paragraphs 133-158. Wind impacts are discussed in the attached Clause 58 assessment;

    (d) Lack of car parking, impact on street parking demand and traffic impacts are discussed at paragraphs 161-172;

    (e) Lack of bicycle parking is discussed at paragraphs 178-184;

(f) Noise impacts from plant equipment, the commercial tenancies and from apartment balconies is discussed at paragraphs 151-155;

(g) Impacts to street trees are discussed at paragraph 126;

(h) Wind impacts on proposed balconies is discussed in the attached Clause 58 assessment;

(i) Overshadowing of public open space is discussed at paragraphs 124-125;

(j) Small capacity of solar panel system is discussed in the attached Clause 58 assessment;

(k) Lack of on-site loading bay is discussed at paragraphs 174-177;

(l) Pressure on existing infrastructure and services is discussed in the attached Clause 58 assessment; and

(m) Landscaping is discussed at paragraphs 129-131.

186. Outstanding objections are addressed as follows:

(a) *On-street bicycle parking obstructing access:*

The location of on-street bicycle parking will be coordinated with Council's Strategic Transport team, who will ensure their location does not obstruct pedestrian access;

(b) *Trees proposed on roof terrace will exacerbate height issues:*

The proposed trees on the roof terrace will not result in unreasonable visual bulk impacts. They do not form part of the principal building structure and landscaping is typically considered to soften built form. Given the setbacks of the roof terrace, views of these trees from the immediately surrounding public realm will be limited. The landscaping referral comments are also supportive of these trees, noting that roof terrace landscaping "*will contribute to the broader streetscape*";

(c) *Impacts to surrounding area from construction of development:*

The impacts of construction on the surrounding area are not a planning consideration. However, it is acknowledged that these concerns have been raised in the objections received. Some noise and other off-site impacts are inevitable when construction occurs. The developer will be required to meet relevant Local Laws and EPA regulations regarding construction to ensure these impacts are mitigated. A condition will require the submission of a construction management plan prior to works commencing;

(d) *Increased dog waste and use of private rubbish bins:*

This is not a planning consideration. There is no evidence to suggest that increased housing densities leads to an increase in dog waste and the use of private rubbish bins for disposal of dog waste.

Conclusion

187. The proposed development is considered to demonstrate a high level of compliance with the policy objectives contained within the Planning Policy Framework and Municipal Strategic Statement. Notably, the proposal achieves the State Government's urban consolidation and housing objectives.

188. The proposal, subject to the conditions recommended, is an acceptable planning outcome that demonstrates compliance with the relevant Council policies.

Legal and Legislative Obligations

Conflict of interest disclosure

189. Section 130 of the Local Government Act 2020 requires members of Council staff and persons engaged under contract to provide advice to Council to disclose any conflicts of interest in a matter to which the advice relates.

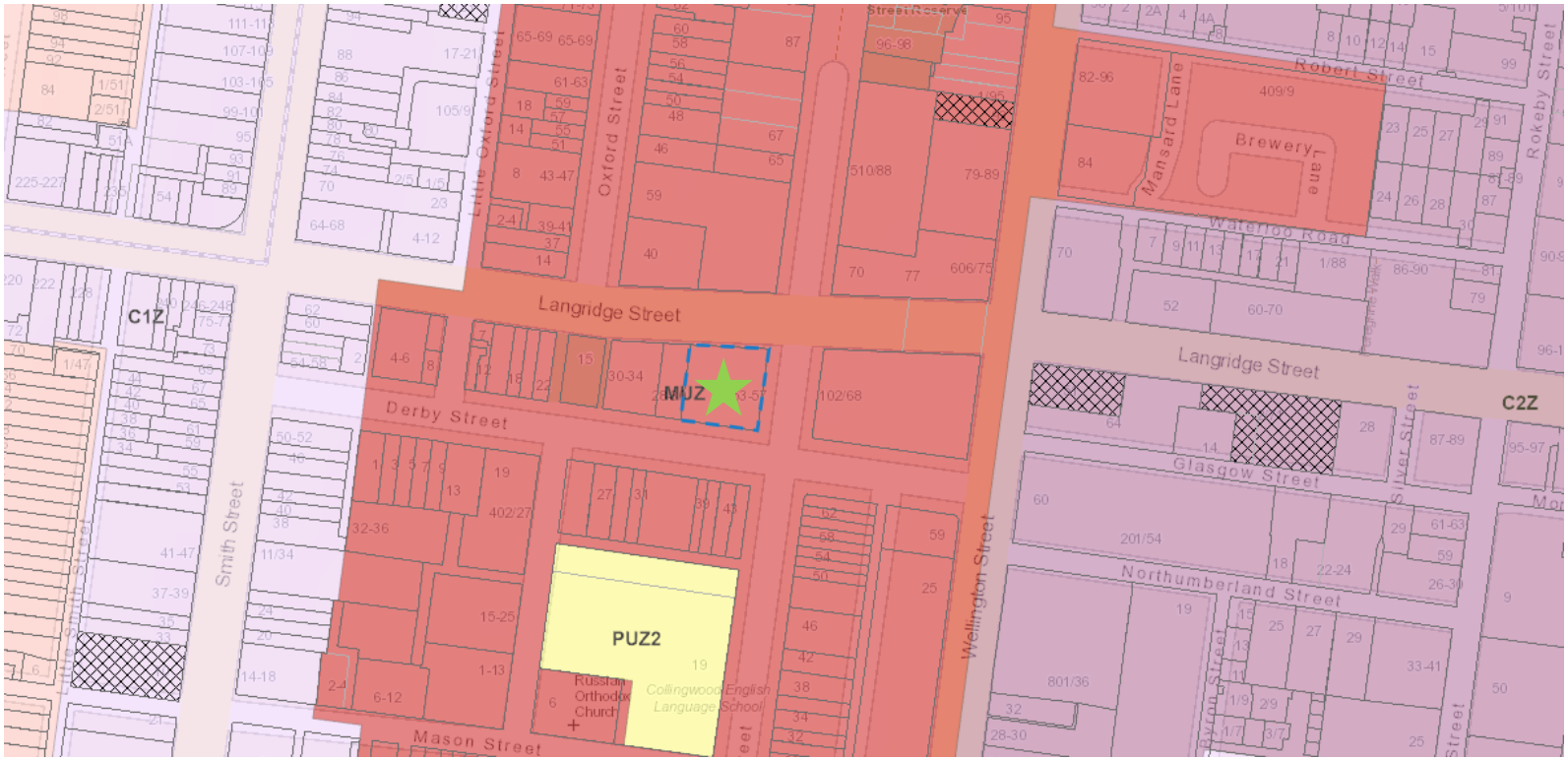
190. The Officer reviewing this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.

Report Attachments

1. 5.1.1 PLN25/0129 - 53-57 Cambridge St Collingwood - Site Context Plan
2. 5.1.2 PLN25/0129 - 53-57 Cambridge Street Collingwood - Decision Plans
3. 5.1.3 PLN25/0129 - 53-57 Cambridge Street Collingwood - Urban Context Report & Render
4. 5.1.4 PLN25/0129 - 53-57 Cambridge St Collingwood - Sketch Plans
5. 5.1.5 PLN25/0129 - 53-57 Cambridge St Collingwood - Clause 58 Assessment
6. 5.1.6 PLN25/0129 - 53-57 Cambridge St Collingwood - Referral Comments

PLN25/0129 – 53-57 Cambridge St Collingwood

Site Context Plan





TP DRAWING LIST

Sheet Number	Sheet Name	Revision
TP00.001	COVER SHEET	B
TP00.002	SURVEY PLAN	B
TP00.003	SITE PLAN - EXISTING CONDITION	B
TP00.004	SITE PLAN - PROPOSED	B
TP10.000	GENERAL ARRANGEMENT PLAN - BASEMENT 03	B
TP10.001	GENERAL ARRANGEMENT PLAN - BASEMENT 02	B
TP10.002	GENERAL ARRANGEMENT PLAN - BASEMENT 01	B
TP10.003	GENERAL ARRANGEMENT PLAN - GROUND FLOOR	B
TP10.004	GENERAL ARRANGEMENT PLAN - LEVEL 01	B
TP10.005	GENERAL ARRANGEMENT PLAN - LEVEL 02	B
TP10.006	GENERAL ARRANGEMENT PLAN - LEVEL 03	B
TP10.007	GENERAL ARRANGEMENT PLAN - LEVEL 04	B
TP10.008	GENERAL ARRANGEMENT PLAN - LEVEL 05	B
TP10.009	GENERAL ARRANGEMENT PLAN - LEVEL 06	B
TP10.010	GENERAL ARRANGEMENT PLAN - LEVEL 07	B
TP10.011	GENERAL ARRANGEMENT PLAN - LEVEL 08	B
TP10.012	GENERAL ARRANGEMENT PLAN - ROOF TERRACE	B
TP10.013	GENERAL ARRANGEMENT PLAN - ROOF PLAN	B
TP20.001	ELEVATION - NORTH	B
TP20.002	ELEVATION - SOUTH	B
TP20.003	ELEVATION - EAST	B
TP20.004	ELEVATION - WEST	B
TP30.001	BUILDING SECTION A-A	B
TP30.002	BUILDING SECTION B-B	B
TP30.003	BUILDING SECTION C-C	B
TP30.004	BUILDING SECTION D-D	B
TP50.001	SHADOW DIAGRAMS_09	A
TP50.002	SHADOW DIAGRAMS_10	B
TP50.003	SHADOW DIAGRAMS_11	B
TP50.004	SHADOW DIAGRAMS_12	B
TP50.005	SHADOW DIAGRAMS_13	B
TP50.006	SHADOW DIAGRAMS_14	B
TP50.007	SHADOW DIAGRAMS_15	A
TP60.001	TOWN PLANNING - MATERIAL SCHEDULE	B
TP60.002	TOWN PLANNING - ADG COMPLIANCE SCHEDULE	B
TP60.100	APARTMENT 01 LEVEL 1 - 3 (PODIUM)	B
TP60.101	APARTMENT 02 LEVEL 1 - 3 (PODIUM)	B
TP60.102	APARTMENT 03 LEVEL 1 - 3 (PODIUM)	B
TP60.103	APARTMENT 1.04 (PODIUM)	B
TP60.104	APARTMENT 1.05 (PODIUM)	B
TP60.105	APARTMENT 4.01 (TOP PODIUM)	B
TP60.106	APARTMENT 4.02 (TOP PODIUM)	B
TP60.107	APARTMENT 4.03 (TOP PODIUM)	B
TP60.108	APARTMENT 4.04 (TOP PODIUM)	B
TP60.109	APARTMENT 01 LEVEL 5 - 6 (TOWER)	B
TP60.110	APARTMENT 02 LEVEL 5 - 6 (TOWER)	B
TP60.111	APARTMENT 03 LEVEL 5 - 6 (TOWER)	B
TP60.112	APARTMENT 7.01 (SUB-PENTHOUSE)	B
TP60.113	APARTMENT 7.02 (SUB-PENTHOUSE)	B
TP60.114	APARTMENT 8.01 (PENTHOUSE)	B

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

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Mechanical Engineer

Fire Engineer

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53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

COVER SHEET

Drawing Status

TOWN PLANNING

Drawing Details

Scale	@ A1
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Job No	10547
Drawn	WM
Checked	WM

Drawing No TP00.001

Revision B

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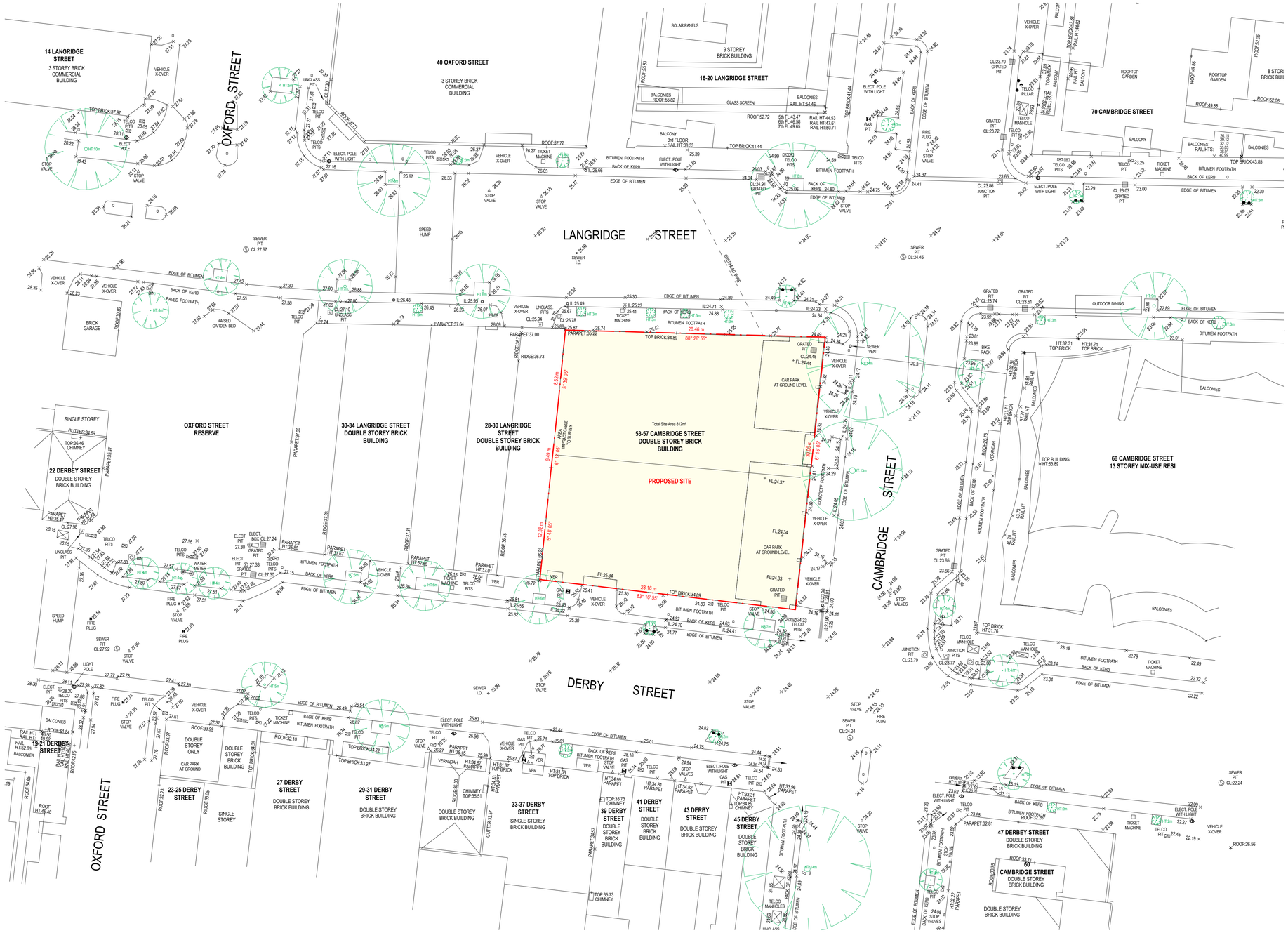

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Drawing Title

SURVEY PLAN

Drawing Status

TOWN PLANNING

Drawing Details

Scale	1 : 200@ A1
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Checked	WM

Drawing No TP00.002

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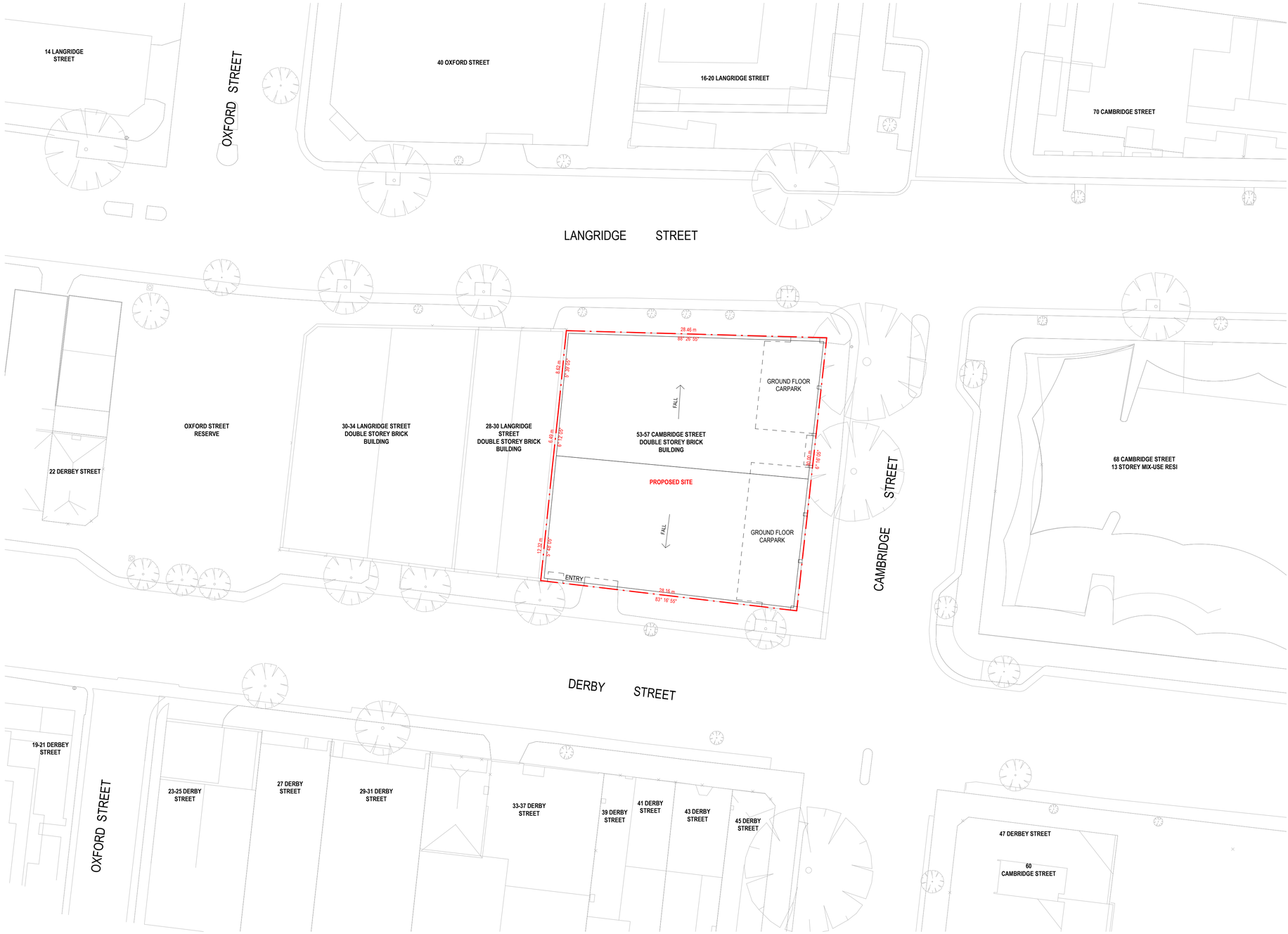

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SITE PLAN - EXISTING CONDITION

Drawing Status

TOWN PLANNING

Drawing Details

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Drawing No TP00.003 **Revision** B

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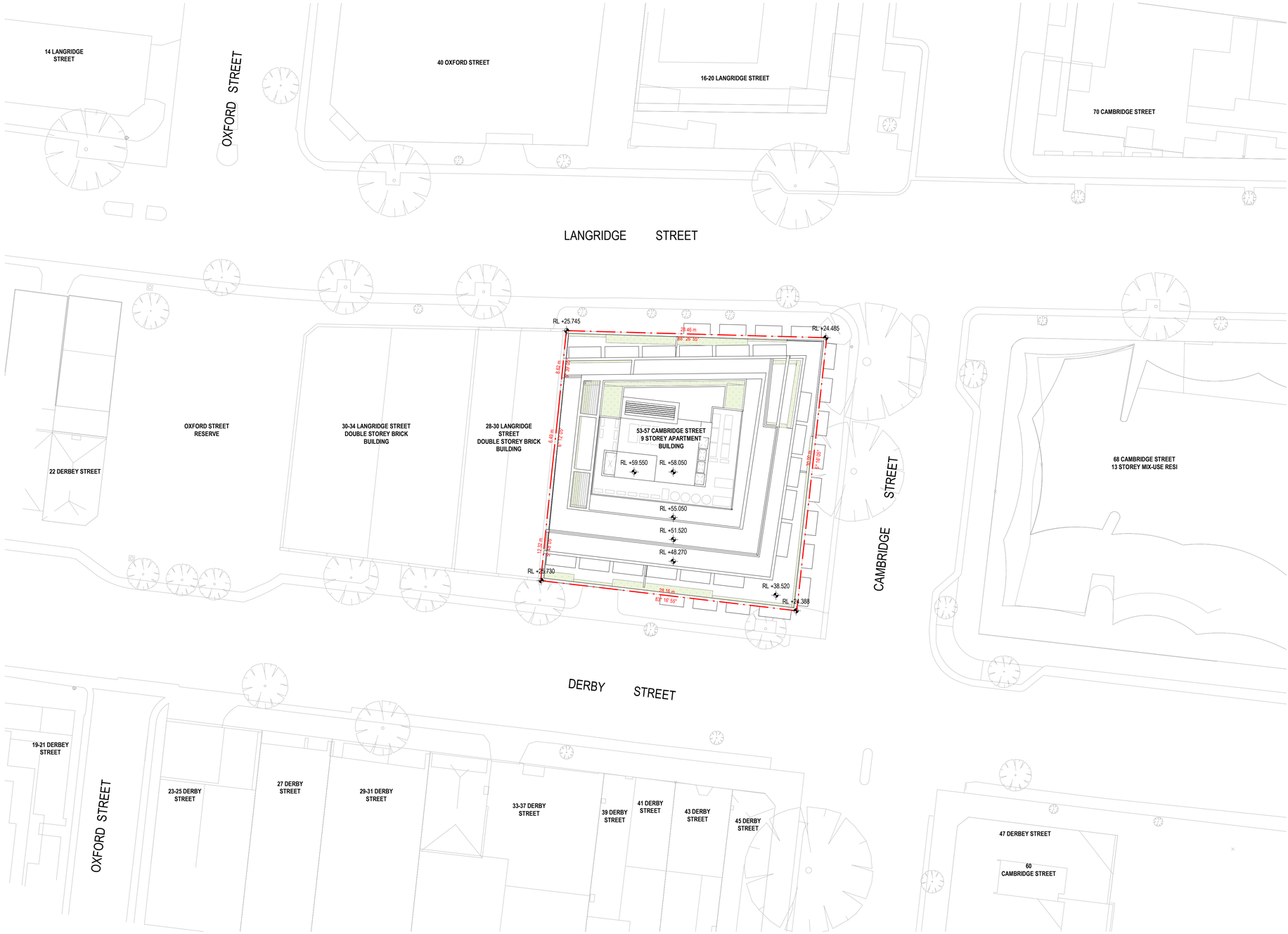

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SITE PLAN - PROPOSED

Drawing Status

TOWN PLANNING

Drawing Details

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Job No	10547
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GENERAL ARRANGEMENT PLAN - BASEMENT 03

Drawing Status

TOWN PLANNING

Drawing Details

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Job No	10547
Drawn	WM
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Drawing No TP10.000

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Drawing Title

GENERAL ARRANGEMENT PLAN - BASEMENT 02

Drawing Status

TOWN PLANNING

Drawing Details

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Job No	10547
Drawn	WM
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Drawing Title

GENERAL ARRANGEMENT PLAN - BASEMENT 01

Drawing Status

TOWN PLANNING

Drawing Details

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Drawing No TP10.002

Revision B

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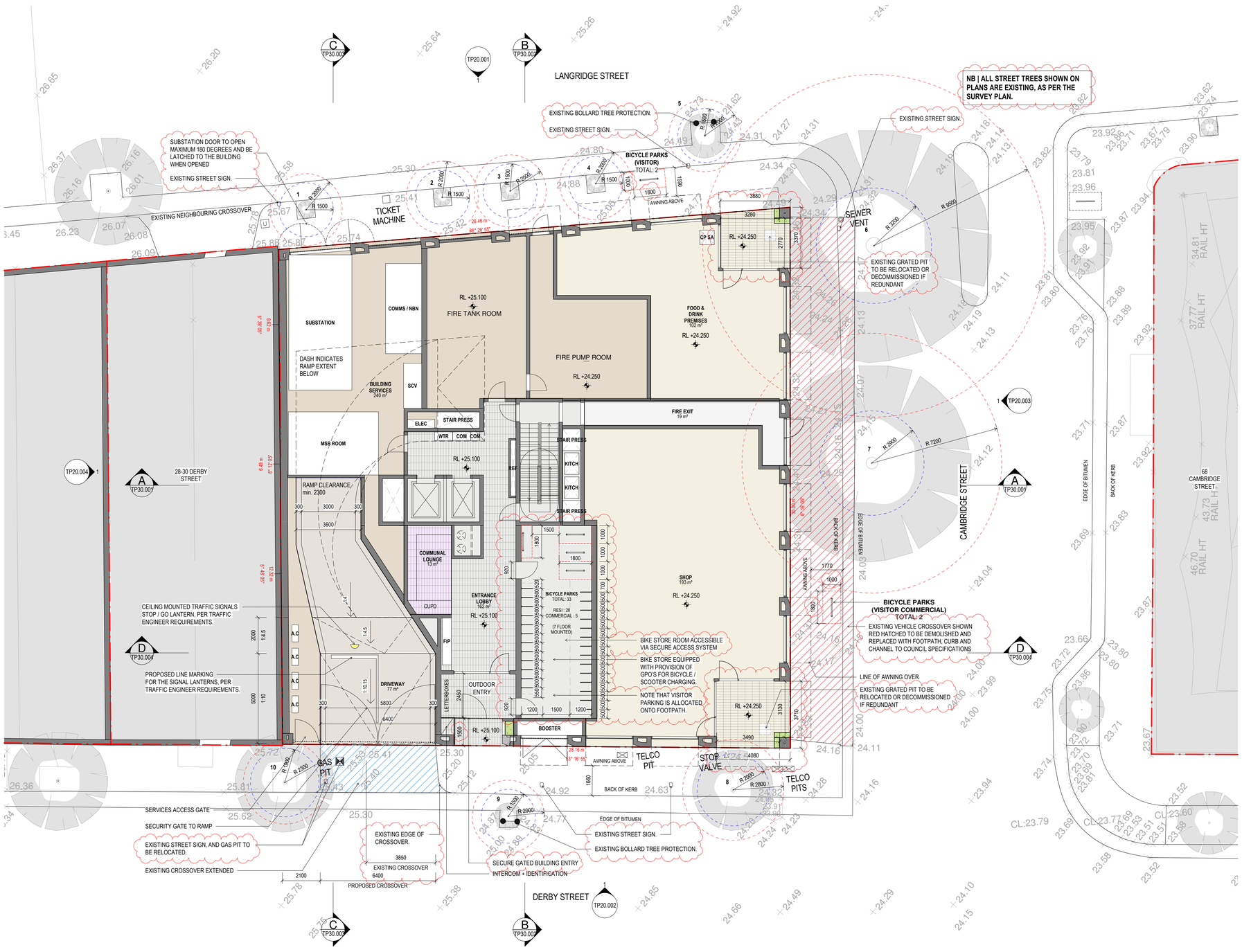

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53 Cambridge St, Collingwood

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Drawing Title

GENERAL ARRANGEMENT PLAN - GROUND FLOOR

Drawing Status

TOWN PLANNING

Drawing Details

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Checked	WM

Drawing No TP10.003

Revision B

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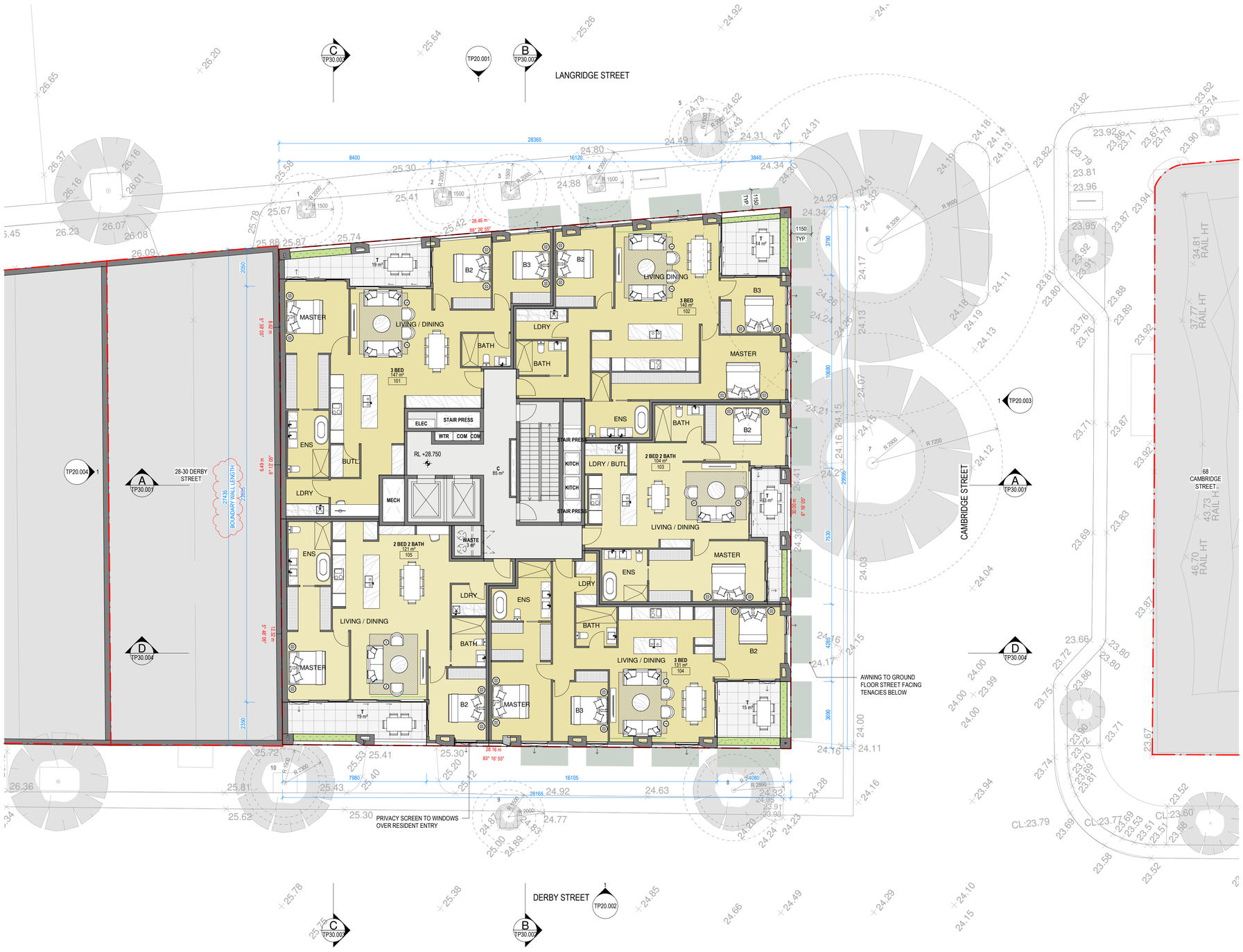

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PROJECT NORTH TRUE NORTH

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53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 01

Drawing Status

TOWN PLANNING

Drawing Details

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Checked	WM

Drawing No TP10.004 **Revision**

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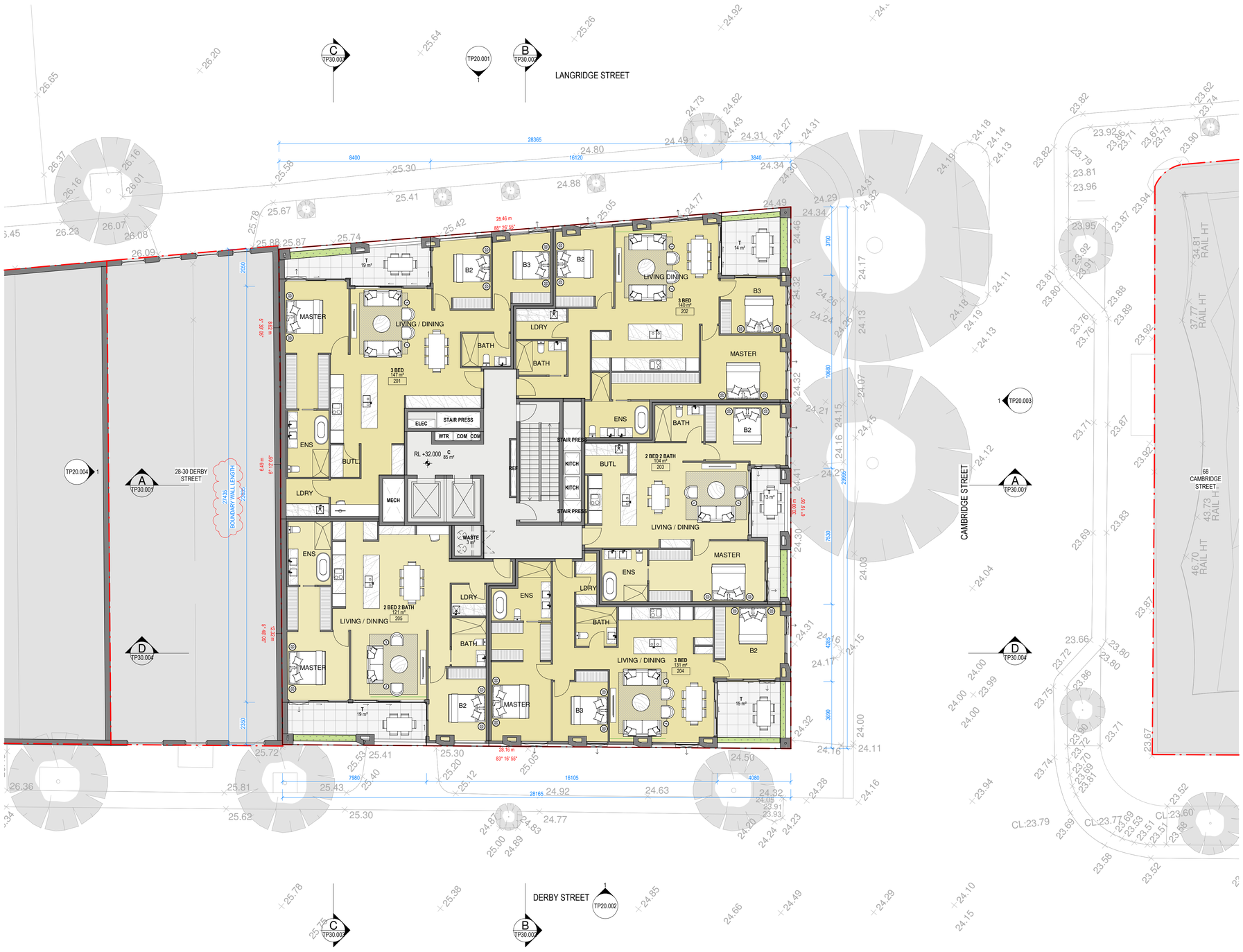

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Notes

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NOTE : ELECTRICITY AND COLD-WATER METERING IS TO BE PROVIDED TO EACH INDIVIDUAL APARTMENT, COMMERCIAL TENANCY AND COMMUNAL AREAS.

NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

PROJECT NORTH TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

Level 3, 380 Collins Street
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Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 02

Drawing Status

TOWN PLANNING

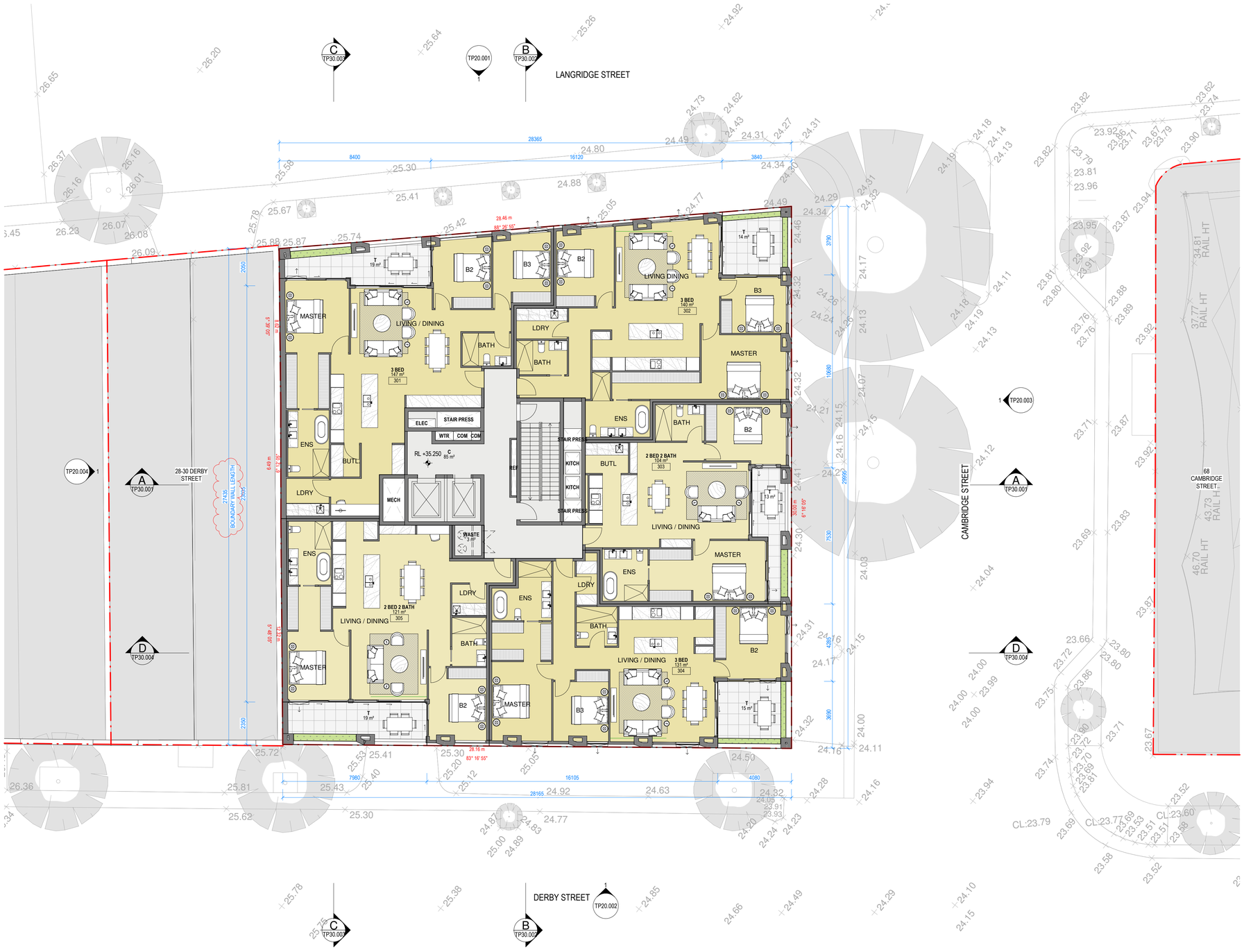
Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:42:54 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.005

Revision

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

NOTE : >80% OF FIRE TEST WATER IS TO BE REUSED ON SITE.

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NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

PROJECT NORTH TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 03

Drawing Status

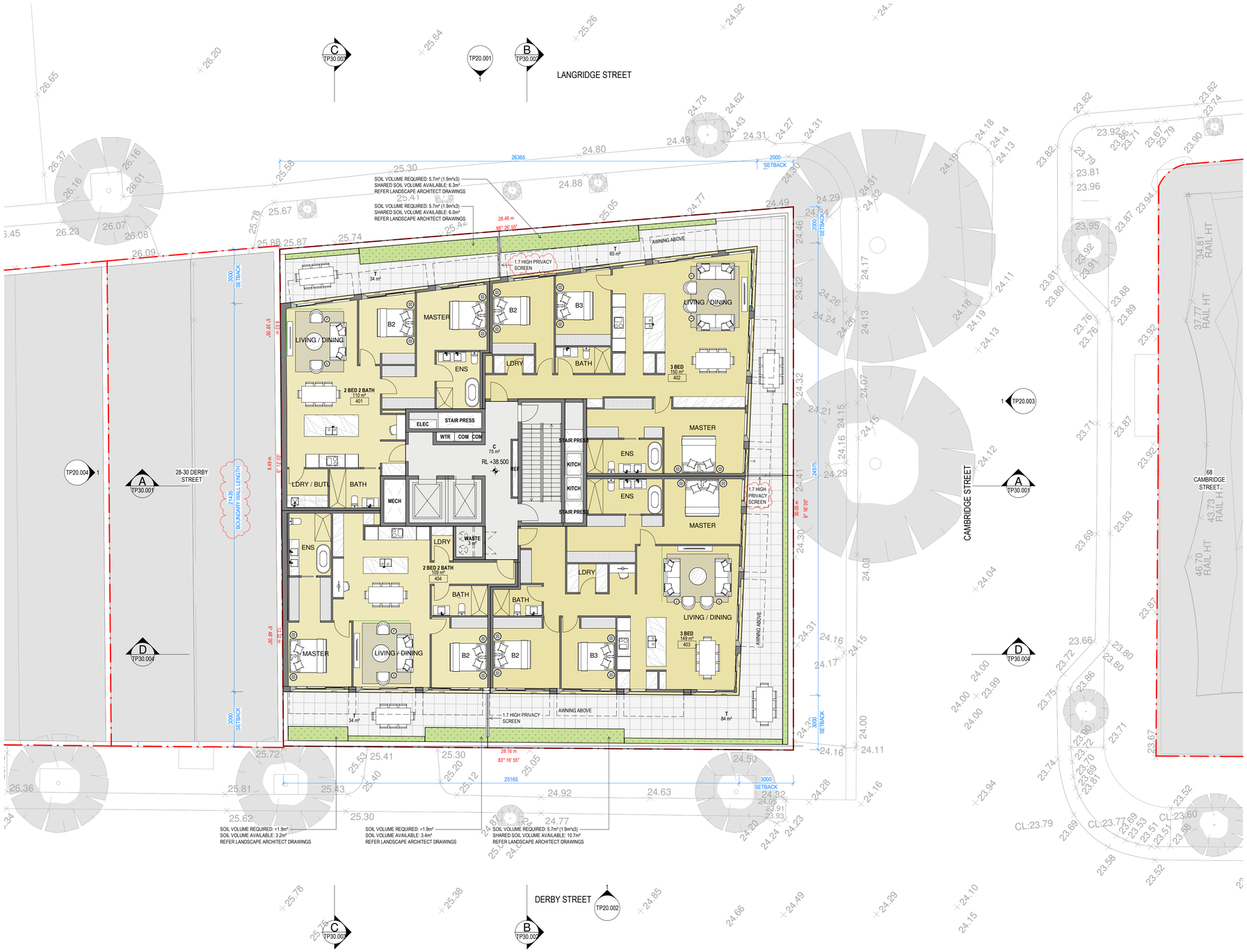
TOWN PLANNING

Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:00 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.006 **Revision** B

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

NOTE : >80% OF FIRE TEST WATER IS TO BE REUSED ON SITE.

NOTE : ELECTRICITY AND COLD-WATER METERING IS TO BE PROVIDED TO EACH INDIVIDUAL APARTMENT, COMMERCIAL TENANCY AND COMMUNAL AREAS.

NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 04

Drawing Status

TOWN PLANNING

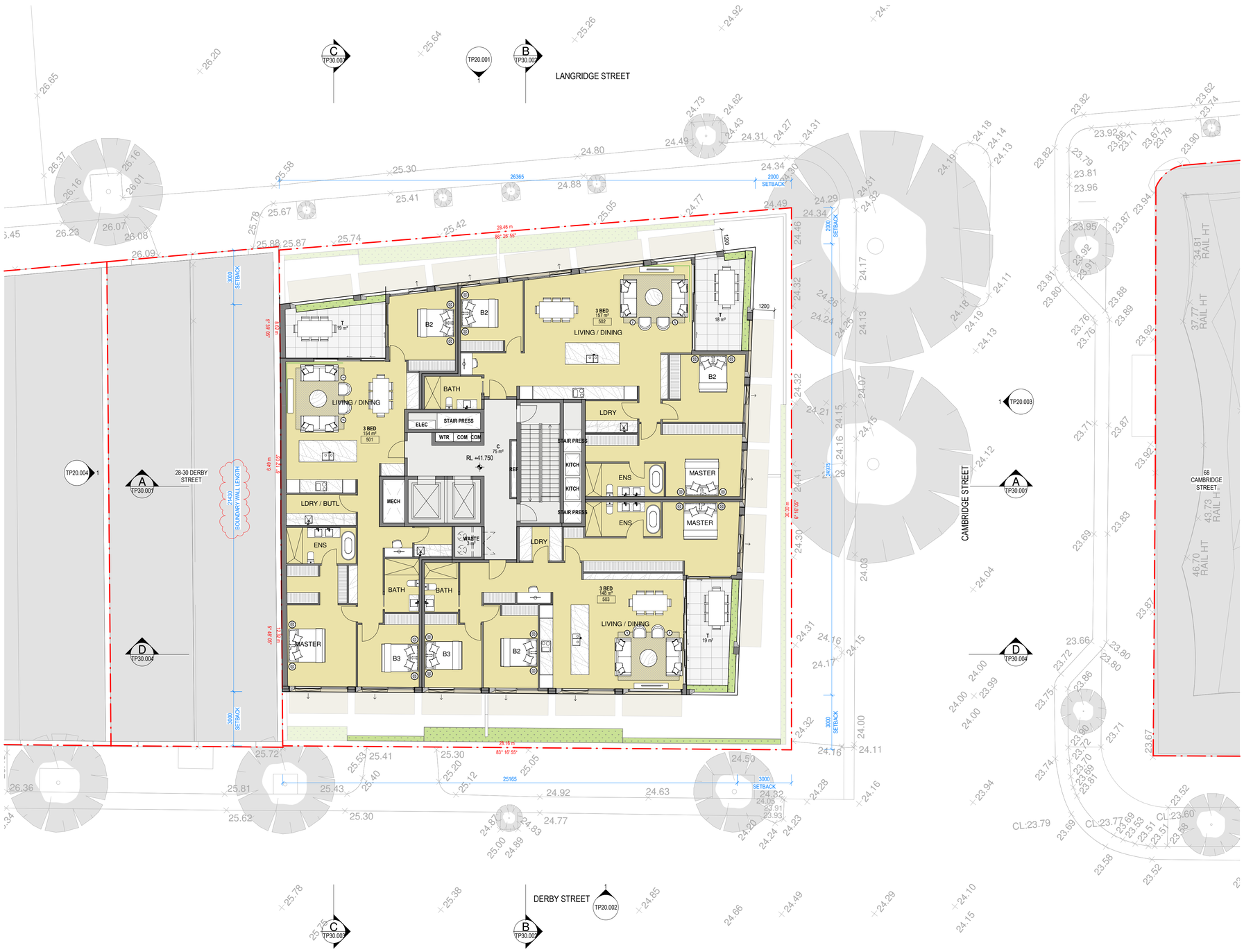
Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:05 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.007

Revision

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

NOTE : >80% OF FIRE TEST WATER IS TO BE REUSED ON SITE.

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NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Registered Architects and Designers
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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 05

Drawing Status

TOWN PLANNING

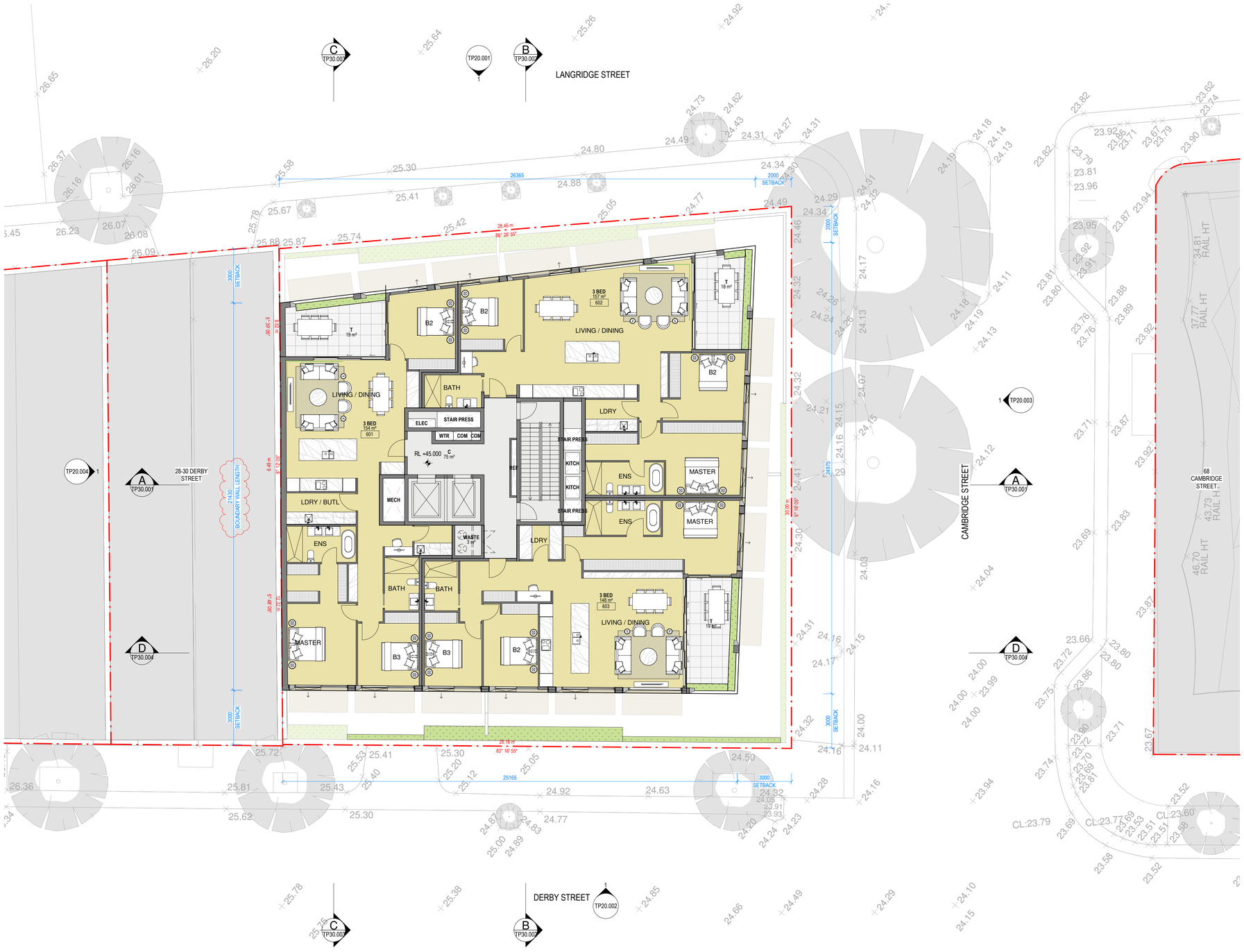
Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:10 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.008

Revision B

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 06

Drawing Status

TOWN PLANNING

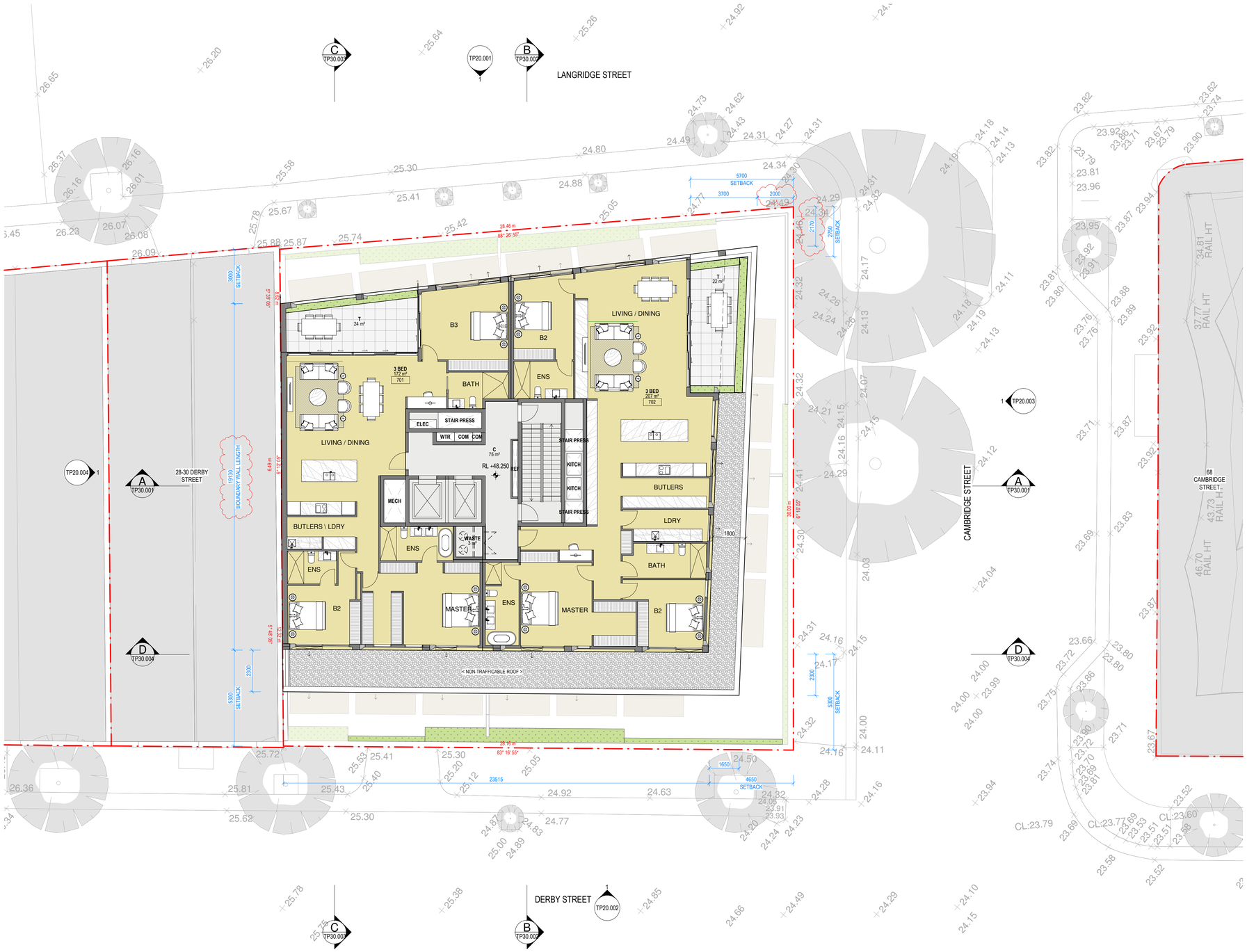
Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:15 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.009

Revision

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

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THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

PROJECT NORTH TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 07

Drawing Status

TOWN PLANNING

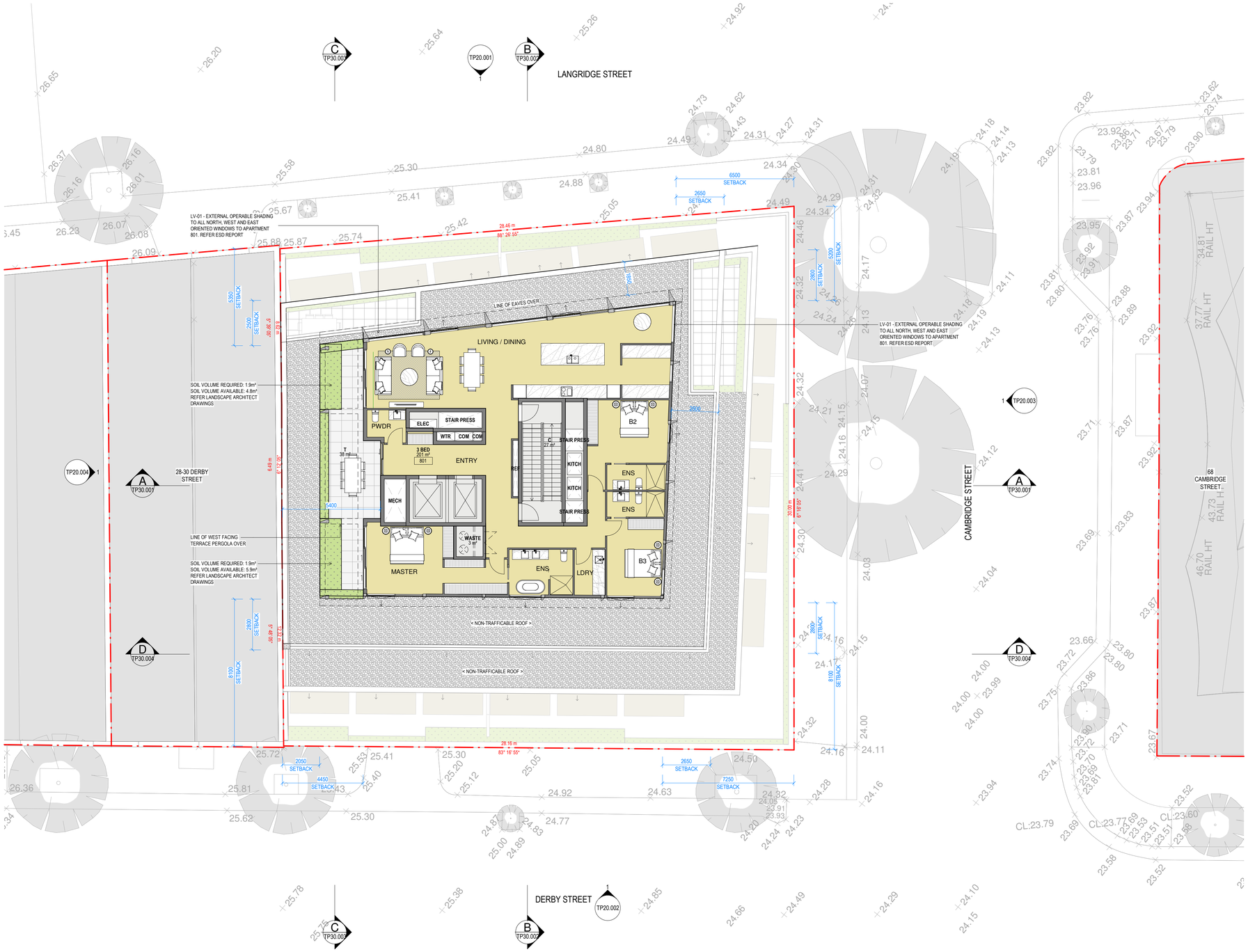
Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:21 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.010

Revision B

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

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THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - LEVEL 08

Drawing Status

TOWN PLANNING

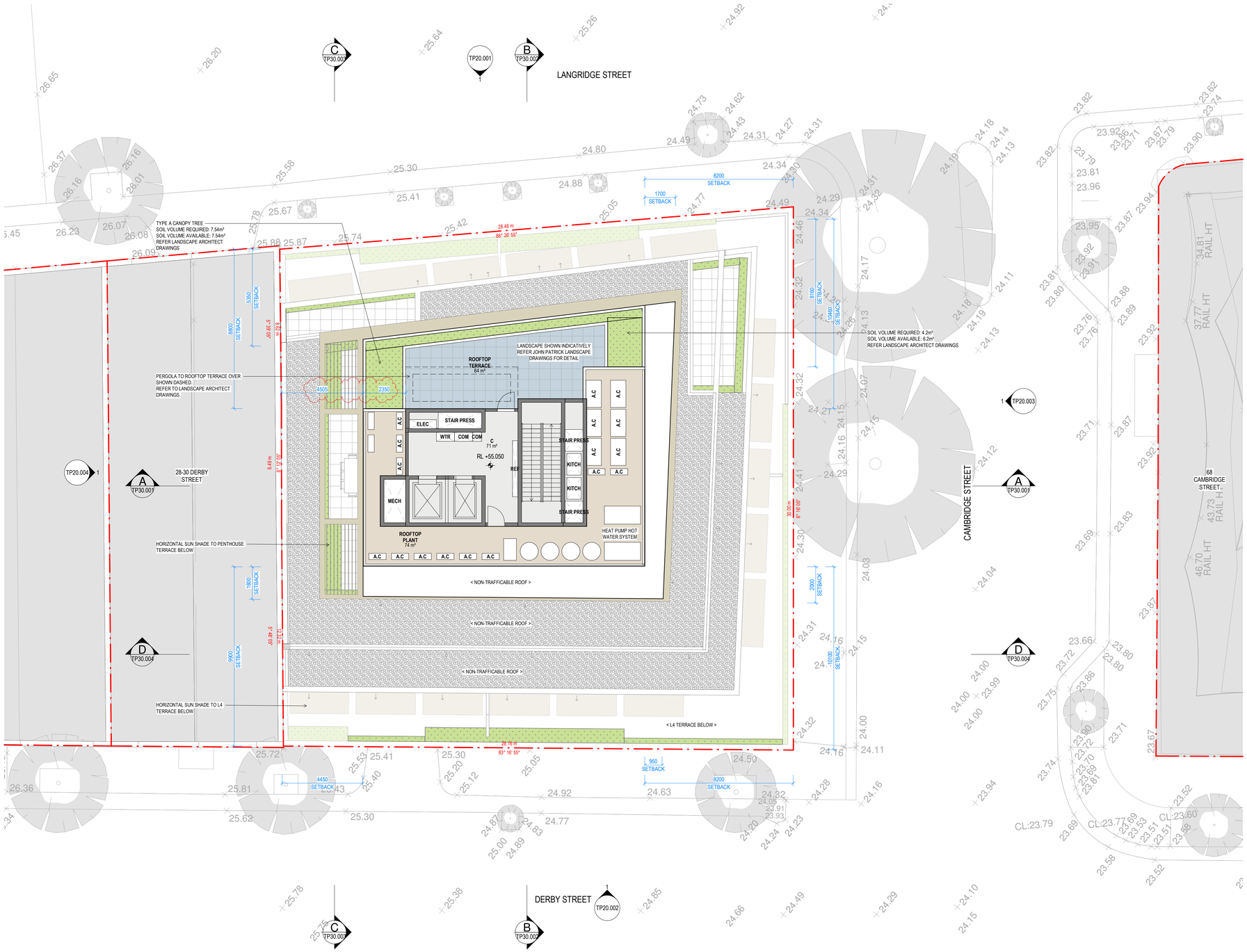
Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:27 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.011

Revision B

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

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THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - ROOF TERRACE

Drawing Status

TOWN PLANNING

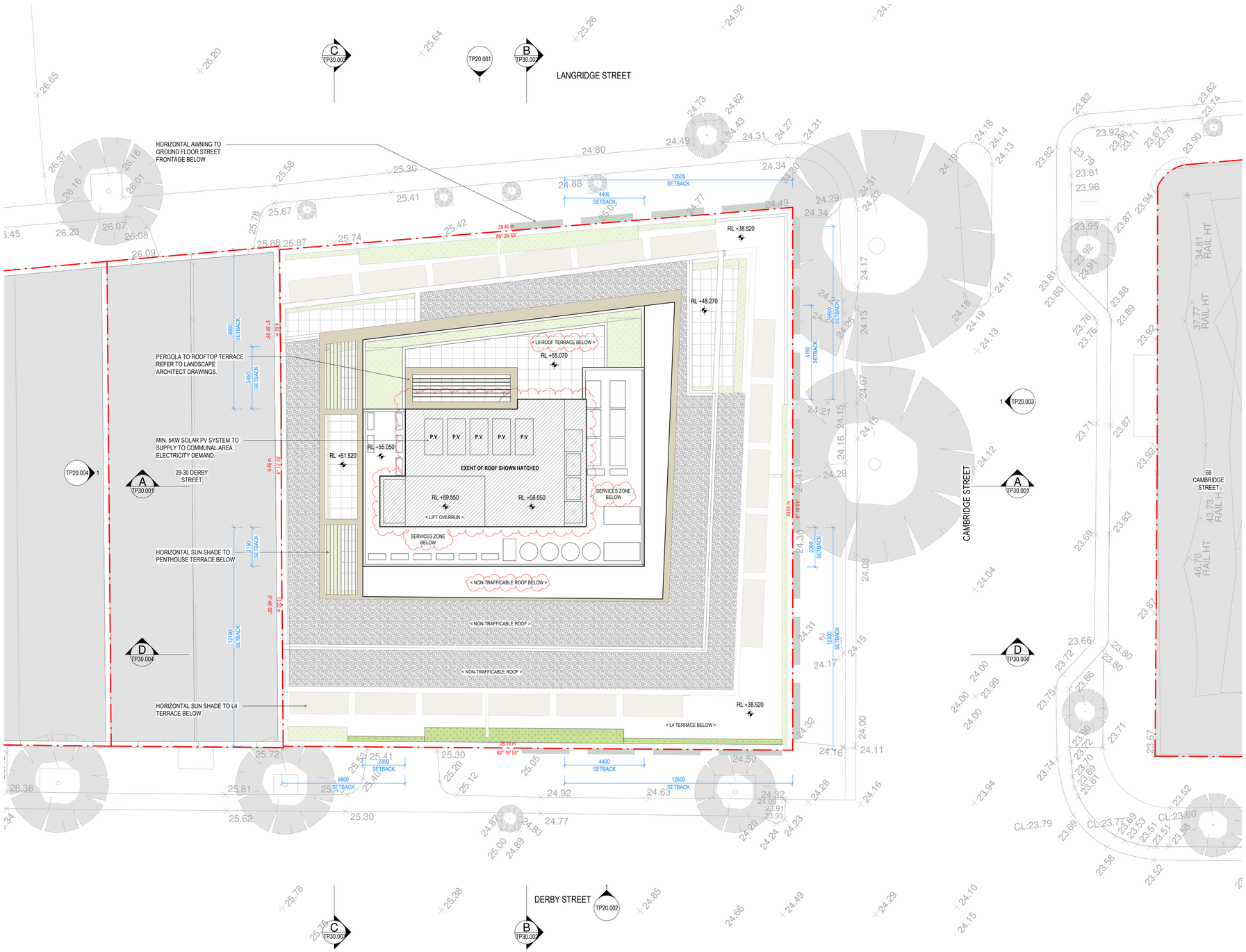
Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:32 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.012

Revision B

WARREN AND MAHONEY



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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

PROJECT NORTH TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

GENERAL ARRANGEMENT PLAN - ROOF PLAN

Drawing Status

TOWN PLANNING

Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:43:36 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP10.013

Revision B

WARREN AND MAHONEY



1 ELEVATION - NORTH
TP10.000
1 : 100

MATERIAL CODE KEY

CODE: BK-01
MATERIAL: BRICK
COLOUR: LIGHT BIEGE

CODE: ME-01
MATERIAL: METAL FINISH
COLOUR: LIGHT BRONZE

CODE: RE-01
MATERIAL: RENDER CONCRETE
COLOUR: MEDIUM BIEGE

CODE: GL-01
MATERIAL: GLAZING
COLOUR: CLEAR

CODE: AW-01
MATERIAL: TEXTILE AWNING

CODE: SC-01
MATERIAL: SCREEN - VERTICAL
COLOUR: TO MATCH ME-01

CODE: SC-02
MATERIAL: SCREEN - PLANT
COLOUR: TO MATCH ME-01

CODE: SC-03
MATERIAL: SCREEN - SUN SHADE
COLOUR: TO MATCH ME-01

CODE: LV-01
MATERIAL: ALUMINIUM FULLY ADJUSTABLE AND RETRACTABLE VENETIAN BLINDS FOR SOLAR PROTECTION
COLOUR: ME-01

REFER DRAWING TP60 - TOWN PLANNING - MATERIAL SHEDDULE FOR MATERIAL FINISHES AND DETAILS.

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

ELEVATION - NORTH

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	1/04/2025 12:18:01 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP20.001

Revision

WARREN AND MAHONEY



1 ELEVATION - SOUTH
TP10.000 1 : 100

MATERIAL CODE KEY

CODE: BK-01
MATERIAL: BRICK
COLOUR: LIGHT BIEGE

CODE: ME-01
MATERIAL: METAL FINISH
COLOUR: LIGHT BRONZE

CODE: RE-01
MATERIAL: RENDER CONCRETE
COLOUR: MEDIUM BIEGE

CODE: GL-01
MATERIAL: GLAZING
COLOUR: CLEAR

CODE: AW-01
MATERIAL: TEXTILE AWNING

CODE: SC-01
MATERIAL: SCREEN - VERTICAL
COLOUR: TO MATCH ME-01

CODE: SC-02
MATERIAL: SCREEN - PLANT
COLOUR: TO MATCH ME-01

CODE: SC-03
MATERIAL: SCREEN - SUN SHADE
COLOUR: TO MATCH ME-01

CODE: LV-01
MATERIAL: ALUMINIUM FULLY ADJUSTABLE AND RETRACTABLE VENETIAN BLINDS FOR SOLAR PROTECTION
COLOUR: ME-01

REFER DRAWING TP60 - TOWN PLANNING - MATERIAL SHCEDULE FOR MATERIAL FINISHES AND DETAILS.

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Registered Architects and Designers
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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

ELEVATION - SOUTH

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	1/04/2025 12:13:21 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP20.002 **Revision**

WARREN AND MAHONEY



1 TP10.000 ELEVATION - EAST
1 : 100

MATERIAL CODE KEY

CODE: BK-01
MATERIAL: BRICK
COLOUR: LIGHT BIEGE

CODE: ME-01
MATERIAL: METAL FINISH
COLOUR: LIGHT BRONZE

CODE: RE-01
MATERIAL: RENDER CONCRETE
COLOUR: MEDIUM BIEGE

CODE: GL-01
MATERIAL: GLAZING
COLOUR: CLEAR

CODE: AW-01
MATERIAL: TEXTILE AWNING

CODE: SC-01
MATERIAL: SCREEN - VERTICAL
COLOUR: TO MATCH ME-01

CODE: SC-02
MATERIAL: SCREEN - PLANT
COLOUR: TO MATCH ME-01

CODE: SC-03
MATERIAL: SCREEN - SUN SHADE
COLOUR: TO MATCH ME-01

CODE: LV-01
MATERIAL: ALUMINIUM FULLY ADJUSTABLE AND RETRACTABLE VENETIAN BLINDS FOR SOLAR PROTECTION
COLOUR: ME-01

REFER DRAWING TP60 - TOWN PLANNING - MATERIAL SHCEDULE FOR MATERIAL FINISHES AND DETAILS.

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client
CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

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Australia
Phone + 61 3 8547 6977

Registered Architects and Designers
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Project Title
53 Cambridge St, Collingwood
53 Cambridge St, Collingwood VIC 3066

Drawing Title
ELEVATION - EAST

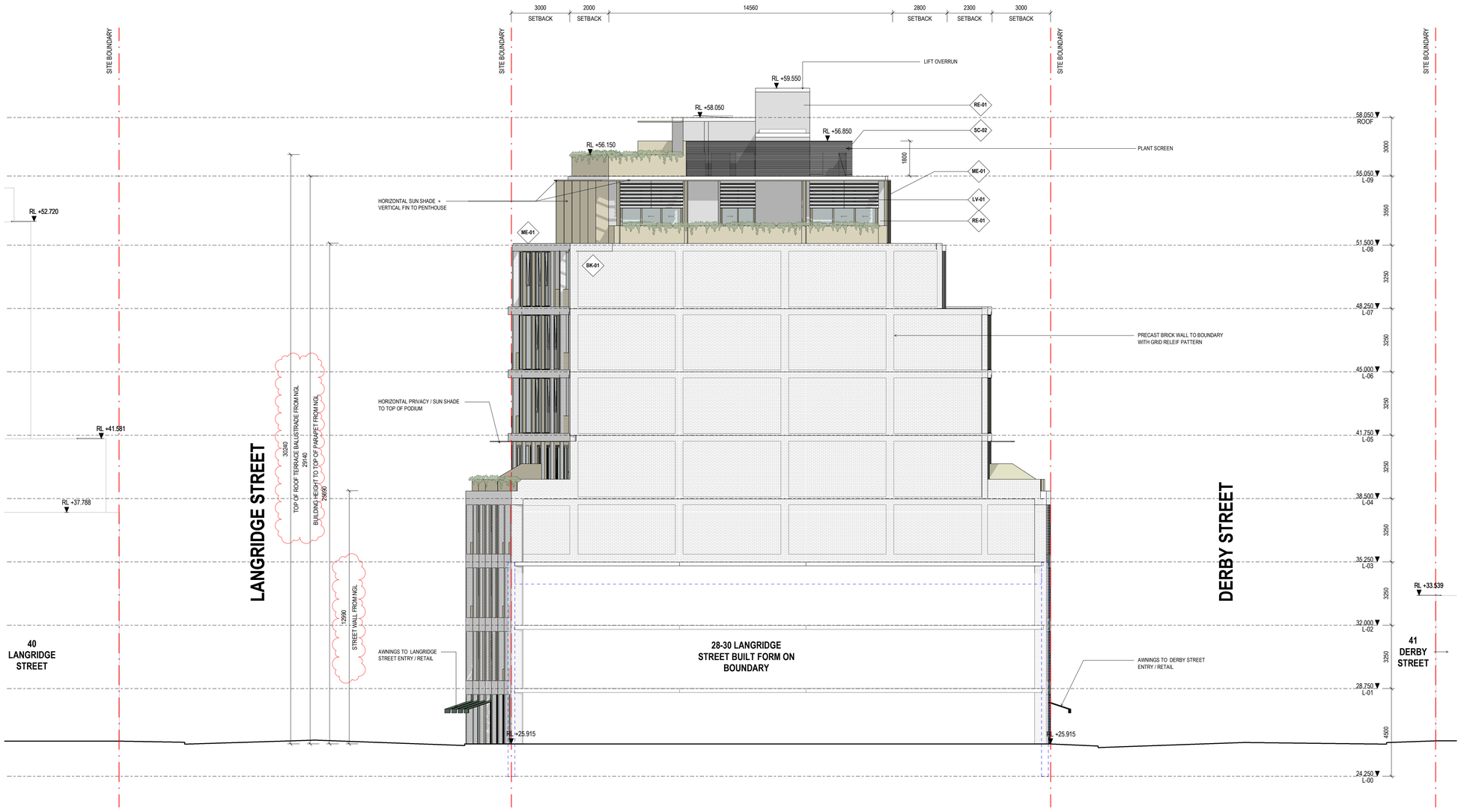
Drawing Status
TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	1/04/2025 12:13:41 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP20.003
Revision

WARREN AND MAHONEY



1 TP10.000 ELEVATION - WEST
1 : 100

MATERIAL CODE KEY

CODE: BK-01
MATERIAL: BRICK
COLOUR: LIGHT BIEGE

CODE: ME-01
MATERIAL: METAL FINISH
COLOUR: LIGHT BRONZE

CODE: RE-01
MATERIAL: RENDER CONCRETE
COLOUR: MEDIUM BIEGE

CODE: GL-01
MATERIAL: GLAZING
COLOUR: CLEAR

CODE: AW-01
MATERIAL: TEXTILE AWNING

CODE: SC-01
MATERIAL: SCREEN - VERTICAL
COLOUR: TO MATCH ME-01

CODE: SC-02
MATERIAL: SCREEN - PLANT
COLOUR: TO MATCH ME-01

CODE: SC-03
MATERIAL: SCREEN - SUN SHADE
COLOUR: TO MATCH ME-01

CODE: LV-01
MATERIAL: ALUMINIUM FULLY ADJUSTABLE AND RETRACTABLE VENETIAN BLINDS FOR SOLAR PROTECTION
COLOUR: ME-01

REFER DRAWING TP60 - TOWN PLANNING - MATERIAL SKEDDULE FOR MATERIAL FINISHES AND DETAILS.

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

ELEVATION - WEST

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	1/04/2025 12:13:59 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP20.004

Revision

WARREN AND MAHONEY



A TP10.000 SECTION A-A
1 : 100

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Australia
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Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

BUILDING SECTION A-A

Drawing Status

TOWN PLANNING

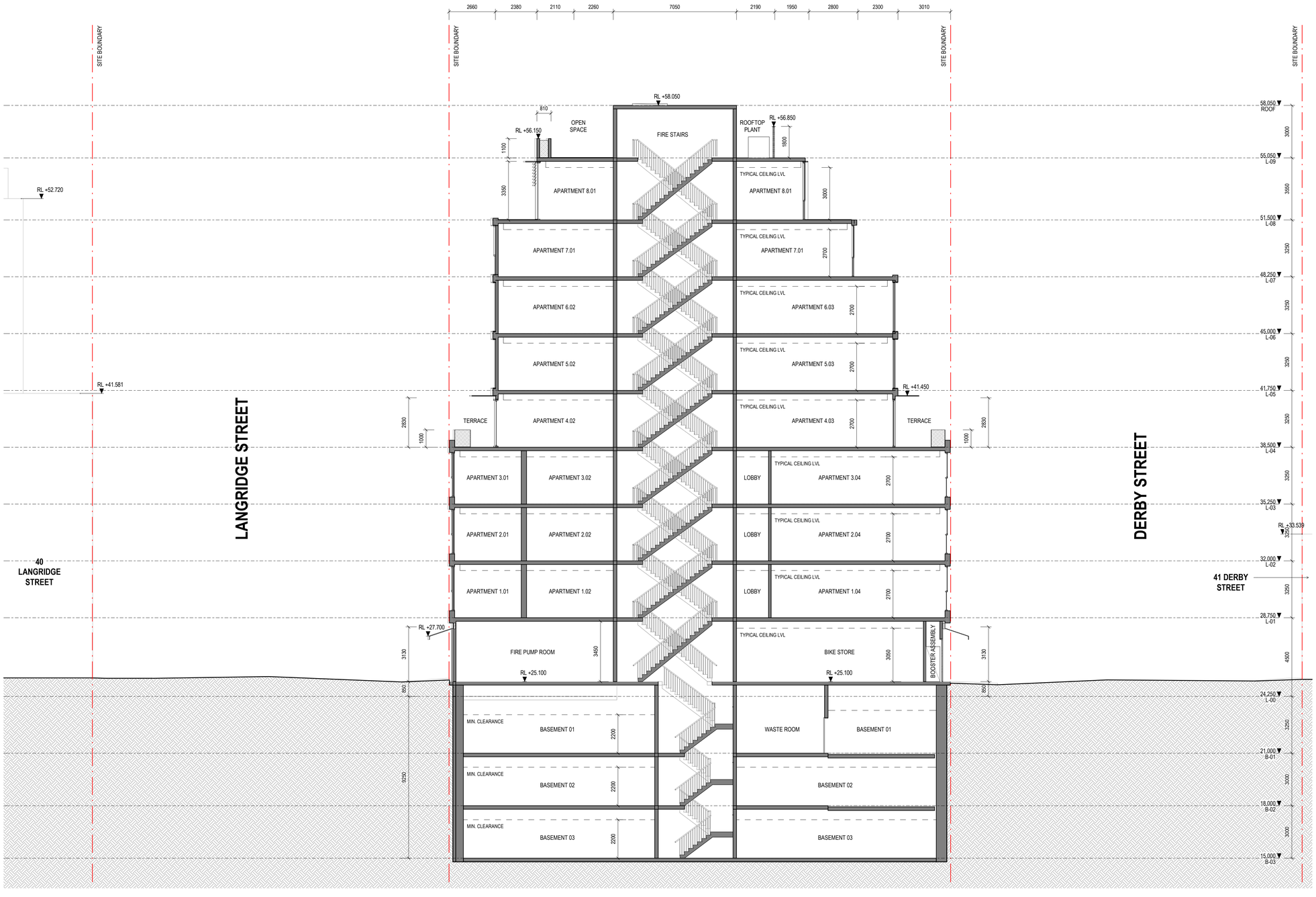
Drawing Details

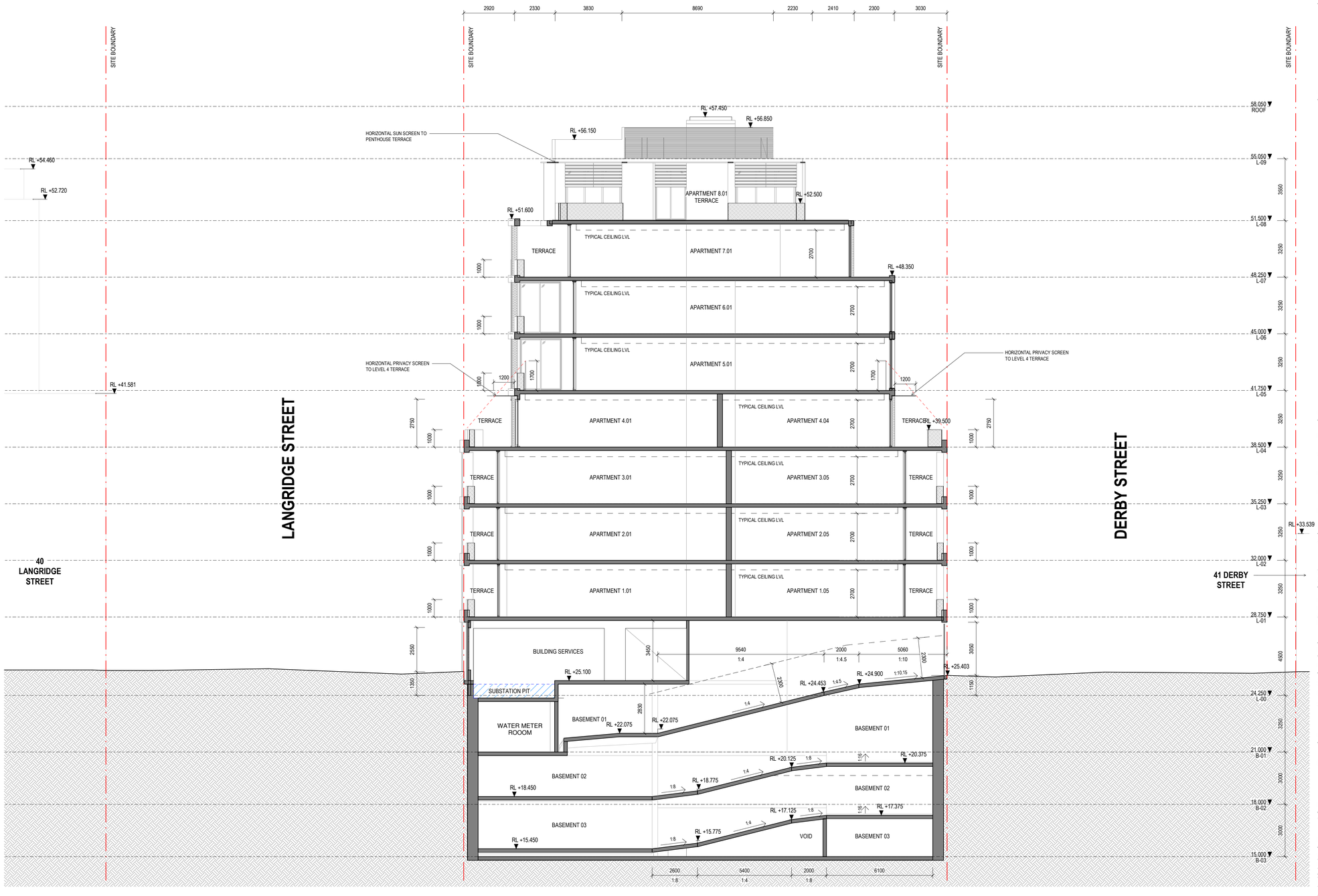
Scale	1 : 100@ A1
Date	28/03/2025 2:44:47 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP30.001

Revision B

WARREN AND MAHONEY


SITE BOUNDARY
SITE BOUNDARY
SITE BOUNDARY
2660
2380
2110
2260
7050
2190
1950
2800
2300
3010
RL +58.050
RL +56.150
RL +56.850
810
OPEN SPACE
FIRE STAIRS
ROOFTOP PLANT
1100
1600
3350
3000
2700
2700
2700



C TP10.000 SECTION C-C
1 : 100

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

Level 3, 380 Collins Street
Melbourne VIC 3000
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Phone + 61 3 8547 6977

Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

BUILDING SECTION C-C

Drawing Status

TOWN PLANNING

Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:44:57 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP30.003

Revision

WARREN AND MAHONEY



D
TP10.000
SECTION D-D
1 : 100

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

BUILDING SECTION D-D

Drawing Status

TOWN PLANNING

Drawing Details

Scale	1 : 100@ A1
Date	28/03/2025 2:45:02 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP30.004

Revision B

WARREN AND MAHONEY



9am 22 SEPTEMBER

1 : 200

SHADOW ANALYSIS LEGEND

PROPOSED BUILT FORM SHADOWS TO NEIGHBOURING PROPERTIES

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

N

TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

SHADOW DIAGRAMS_09

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:45:12 PM
Job No	10547
Drawn	Author
Checked	Checker

Drawing No TP50.001

Revision

WARREN AND MAHONEY



10am 22 SEPTEMBER

1 : 200

SHADOW ANALYSIS LEGEND

PROPOSED BUILT FORM SHADOWS TO NEIGHBOURING PROPERTIES

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

N

TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

SHADOW DIAGRAMS_10

Drawing Status

TOWN PLANNING

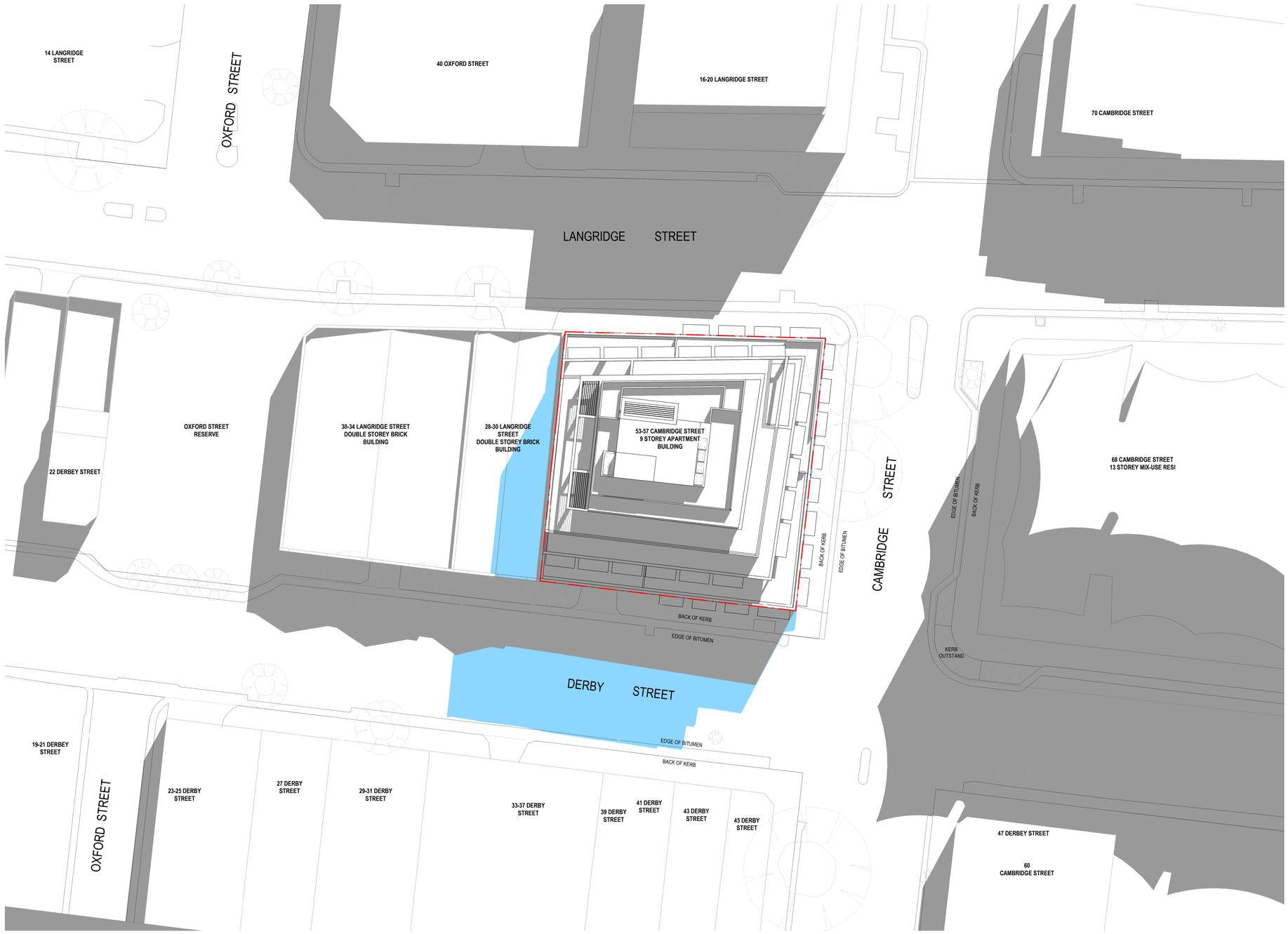
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:45:23 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP50.002

Revision B

WARREN AND MAHONEY



11am 22 SEPTEMBER

1 : 200

SHADOW ANALYSIS LEGEND

PROPOSED BUILT FORM SHADOWS TO NEIGHBOURING PROPERTIES

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

N

TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

SHADOW DIAGRAMS_11

Drawing Status

TOWN PLANNING

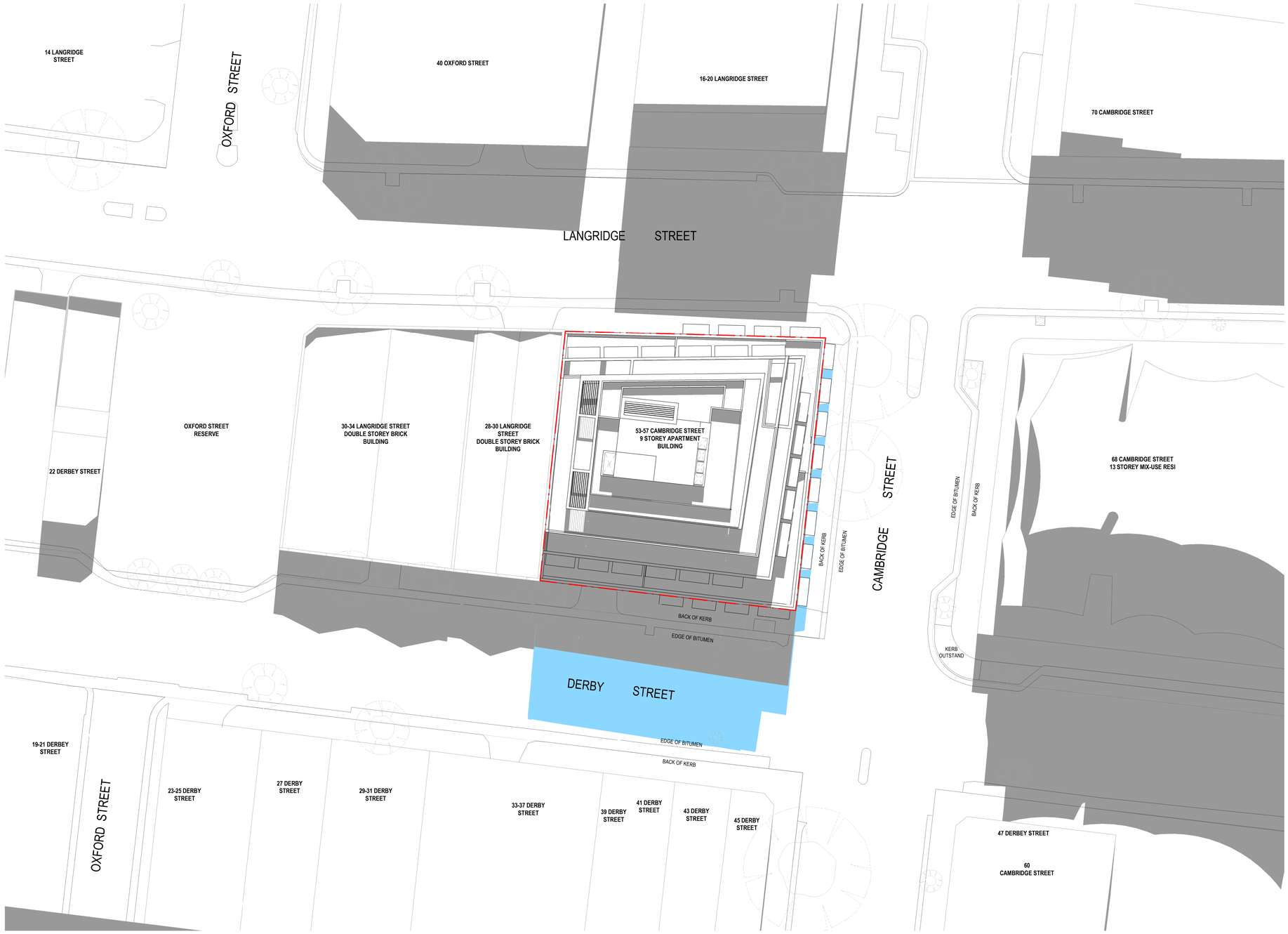
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:45:32 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP50.003

Revision B

WARREN AND MAHONEY



12pm 22 SEPTEMBER

1 : 200

SHADOW ANALYSIS LEGEND

PROPOSED BUILT FORM SHADOWS TO NEIGHBOURING PROPERTIES

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

N

TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

SHADOW DIAGRAMS_12

Drawing Status

TOWN PLANNING

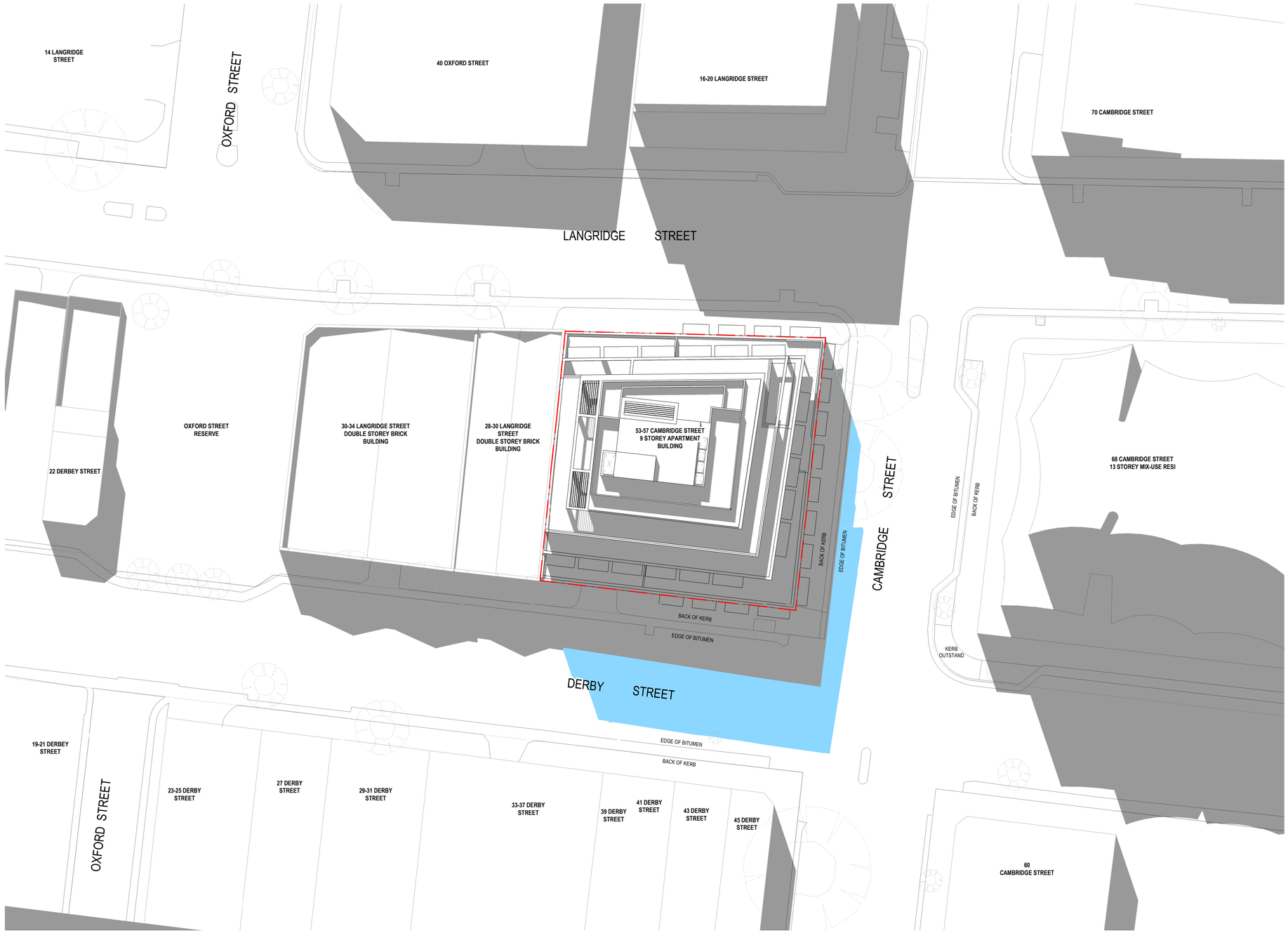
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:45:42 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No — TP50.004

Revision — B

WARREN AND MAHONEY



1pm 22 SEPTEMBER

1 : 200

SHADOW ANALYSIS LEGEND

PROPOSED BUILT FORM SHADOWS TO NEIGHBOURING PROPERTIES

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

N

TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

SHADOW DIAGRAMS_13

Drawing Status

TOWN PLANNING

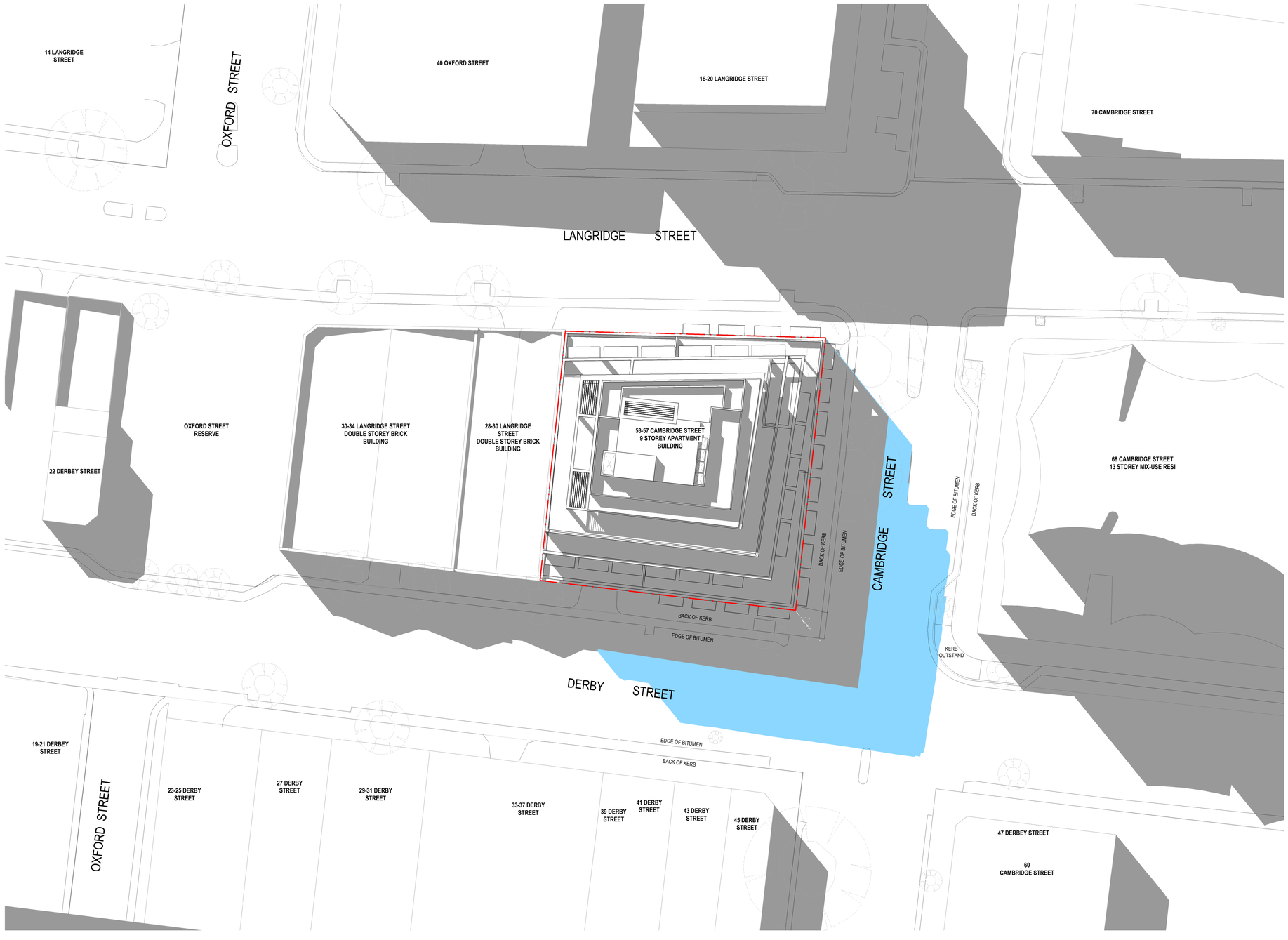
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:45:52 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP50.005

Revision

WARREN AND MAHONEY



2pm 22 SEPTEMBER

1 : 200

SHADOW ANALYSIS LEGEND

PROPOSED BUILT FORM SHADOWS TO NEIGHBOURING PROPERTIES

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

N

TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

SHADOW DIAGRAMS_14

Drawing Status

TOWN PLANNING

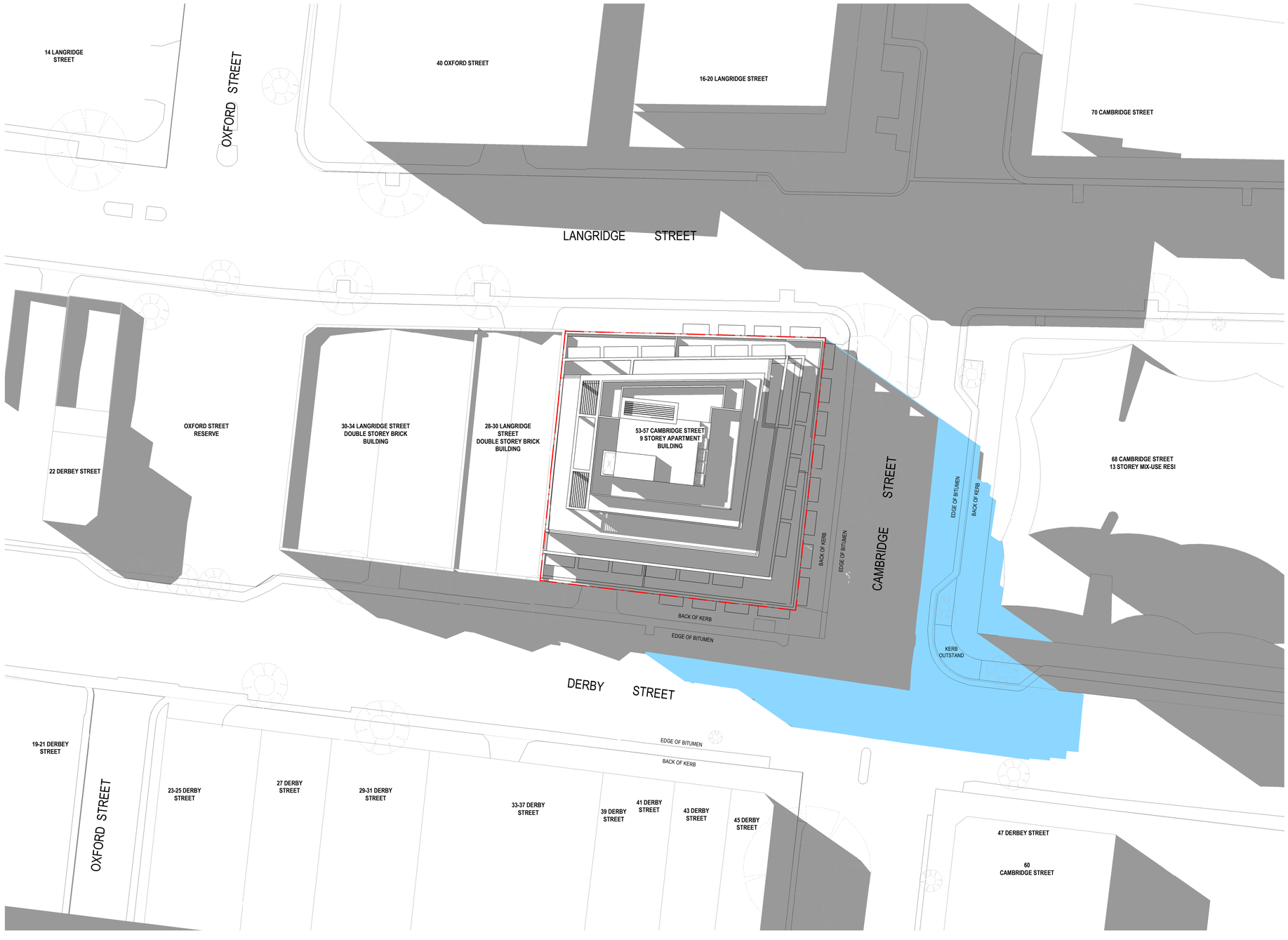
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:46:02 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP50.006

Revision B

WARREN AND MAHONEY



3pm 22 SEPTEMBER

1 : 200

SHADOW ANALYSIS LEGEND

PROPOSED BUILT FORM SHADOWS TO NEIGHBOURING PROPERTIES

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

N

TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

SHADOW DIAGRAMS_15

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:46:12 PM
Job No	10547
Drawn	Author
Checked	Checker

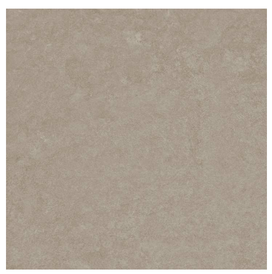
Drawing No TP50.007

Revision A

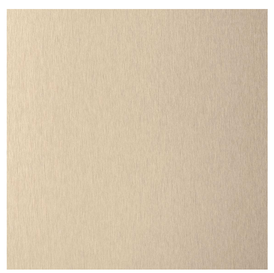
WARREN AND MAHONEY



CODE: BK-01
MATERIAL: BRICK
COLOUR: LIGHT BIEGE



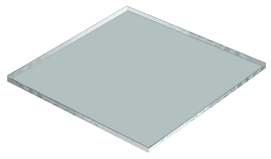
CODE: RE-01
MATERIAL: CONCRETE RENDER
COLOUR: WARM TONE



CODE: ME-01
MATERIAL: METAL FINISH
COLOUR: LIGHT BRONZE



CODE: AW-01
MATERIAL: TEXTIEL AWNIING
COLOUR: DEEP GREEN



CODE: GL-01
MATERIAL: GLAZING
COLOUR: CLEAR

NOTE: SPECULAR LIGHT REFLECTANCE TO BE LESS THAN 15% FOR ALL EXTERNAL BUILDING GLAZING WHEN MEASURED AT AN ANGLE OF 90 DEGREES TO THE SURFACE.



CODE: SC-01
MATERIAL: SCREEN - VERTICAL
COLOUR: TO MATCH ME-01



CODE: SC-02
MATERIAL: SCREEN - PLANT
COLOUR: TO MATCH ME-01



CODE: SC-03
MATERIAL: SCREEN - PENTHOUSE SUN SHADE
COLOUR: TO MATCH ME-01



CODE: LV-01
MATERIAL: ALUMINIUM FULLY ADJUSTABLE AND RETRACTABLE VENETIAN BLINDS FOR SOLAR PROTECTION
COLOUR: LIGHT BRONZE

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Melbourne VIC 3000
Australia
Phone + 61 3 8547 6977

Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

TOWN PLANNING - MATERIAL SCHEDULE

Drawing Status

TOWN PLANNING

Drawing Details

Scale	1 : 1@ A1
Date	28/03/2025 2:46:16 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.001

Revision B

WARREN AND MAHONEY

WARREN AND MAHONEY®

APARTMENT DESIGN GUIDELINE COMPLIANCE SCHEDULE

JOB NUMBER 10547
JOB NAME 53 Cambridge Street, Collingwood
STAGE Town Planning Application

REV	DATE
A	12/02/2025

SITE AREA 811

					LIVING AREA			BEDROOM			PRIVATE OPEN SPACE	STORAGE			
					2 BED	3 BED		MAIN BEDROOM	BED 2	BED 3	DEPTH / AREA / USEASBLE AREA	2 BEDROOM		3 BEDROOM	
APARTMENT NUMBER	DRAWING REFERENCE	BEDROOMS	CROSS VENTILATION	ACCESSIBLE	3.6m / 12m2	3.6m / 12m2	ROOM DEPTH 9m	3 x 3.4m / 10.2m2	3 x 3m / 9m2	3 x 3m / 9m2	2 BED / 3 BED 2m - 8m2 / 2.4m - 12m2	9m3 INTERNAL	14m3 TOTAL	12m3 INTERNAL	18m3 TOTAL
101	TP60.100	3				✓	✓	✓	✓	✓	✓			✓	✓
102	TP60.101	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
103	TP60.102	2			✓		✓	✓	✓		✓	✓	✓		
104	TP60.103	3	✓			✓	✓	✓	✓	✓	✓			✓	✓
105	TP60.104	2		✓	✓		✓	✓	✓		✓	✓	✓		
201	TP60.100	3				✓	✓	✓	✓	✓	✓			✓	✓
202	TP60.101	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
203	TP60.102	2			✓		✓	✓	✓		✓	✓	✓		
204	TP60.103	3	✓			✓	✓	✓	✓	✓	✓			✓	✓
205	TP60.104	2		✓	✓		✓	✓	✓		✓	✓	✓		
301	TP60.100	3				✓	✓	✓	✓	✓	✓			✓	✓
302	TP60.101	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
303	TP60.102	2			✓		✓	✓	✓		✓	✓	✓		
304	TP60.103	3	✓			✓	✓	✓	✓	✓	✓			✓	✓
305	TP60.104	2		✓	✓		✓	✓	✓		✓	✓	✓		
401	TP60.105	2		✓	✓		✓	✓	✓		✓	✓	✓		
402	TP60.106	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
403	TP60.107	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
404	TP60.108	2			✓		✓	✓	✓		✓	✓	✓		
501	TP60.109	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
502	TP60.110	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
503	TP60.111	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
601	TP60.109	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
602	TP60.110	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
603	TP60.111	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
701	TP60.112	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
702	TP60.113	3	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
801	TP60.114	3	✓			✓	✓	✓	✓	✓	✓			✓	✓

APARTMENT COUNT	CROSS VENTILATION	ACCESSIBLE
28	61%	61%

MINIMUM COMMUNAL OPEN SPACE REQUIREMENT

58.03-2 Communal Open Space: Standard D7	*Area Requirement: m2*
Development ≥ 10 Dwellings	30
Additional Area for Every Dwelling > 13	2.5
Number of Dwellings > 13	15
Total Required COS	**67.5**

COMMUNAL OPEN SPACE

Communal Open Space	*Area Provided: m2*
Total Provided COS	**68**

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

Consultants

Project Manager
Structural Engineer
Mechanical Engineer
Fire Engineer
Electrical Engineer

Client
CARPE GROUP

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Project Title
53 Cambridge St, Collingwood
53 Cambridge St, Collingwood VIC 3066

Drawing Title
TOWN PLANNING - ADG COMPLIANCE SCHEDULE

Drawing Status
TOWN PLANNING

Drawing Details

Scale	@ A1
Date	28/03/2025 2:46:18 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.002
Revision B

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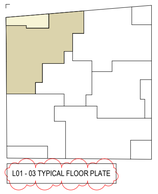

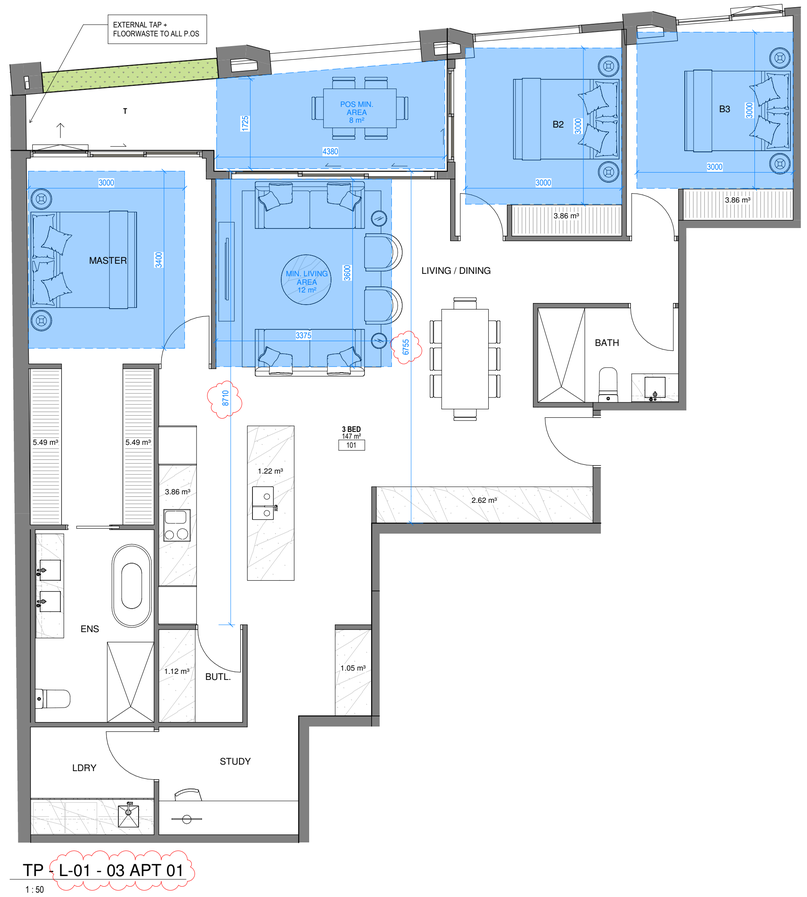

STORAGE - FIRST FLOOR	
Apartment Type	Storage Volume
1.01	28.57 m³
1.02	22.93 m³
1.03	17.73 m³
1.04	26.43 m³
1.05	19.46 m³

STORAGE VOLUME FOR LEVEL 2 AND 3 APARTMENTS EQUIVALENT TO LEVEL 1

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Revisions

A 20.02.2025	TOWN PLANNING APPLICATION
B 28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

NOTE : >80% OF FIRE TEST WATER IS TO BE REUSED ON SITE.

NOTE : ELECTRICITY AND COLD-WATER METERING IS TO BE PROVIDED TO EACH INDIVIDUAL APARTMENT, COMMERCIAL TENANCY AND COMMUNAL AREAS.

NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 01
LEVEL 1 - 3
(PODIUM)

Drawing Status

TOWN PLANNING

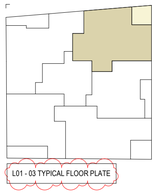
Drawing Details

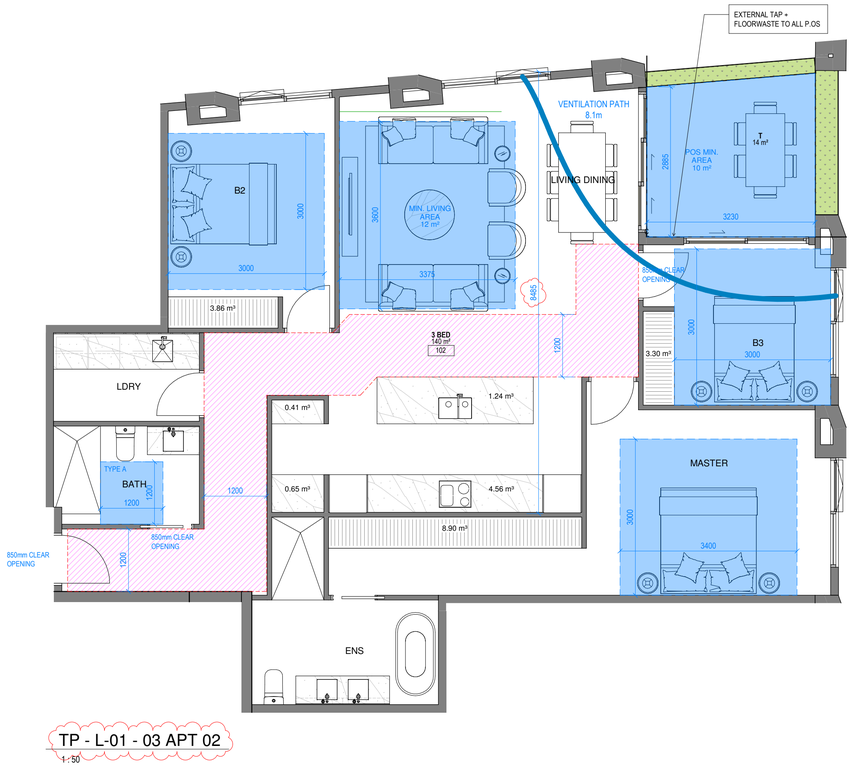
Scale	As indicated@ A1
Date	28/03/2025 2:46:23 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.100

Revision B

WARREN AND MAHONEY





STORAGE - FIRST FLOOR	
Apartment Type	Storage Volume
1.01	28.57 m³
1.02	22.93 m³
1.03	17.73 m³
1.04	26.43 m³
1.05	19.46 m³

STORAGE VOLUME FOR LEVEL 2 AND 3 APARTMENTS EQUIVALENT TO LEVEL 1

All dimension to be verified on site before producing shop drawings or commencing any work.
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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

NOTE : >80% OF FIRE TEST WATER IS TO BE REUSED ON SITE.

NOTE : ELECTRICITY AND COLD-WATER METERING IS TO BE PROVIDED TO EACH INDIVIDUAL APARTMENT, COMMERCIAL TENANCY AND COMMUNAL AREAS.

NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

Level 3, 380 Collins Street
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Phone + 61 3 8547 6977

Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 02
LEVEL 1 - 3
(PODIUM)

Drawing Status

TOWN PLANNING

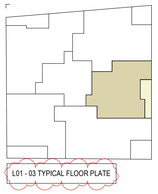
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:46:27 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No **Revision**

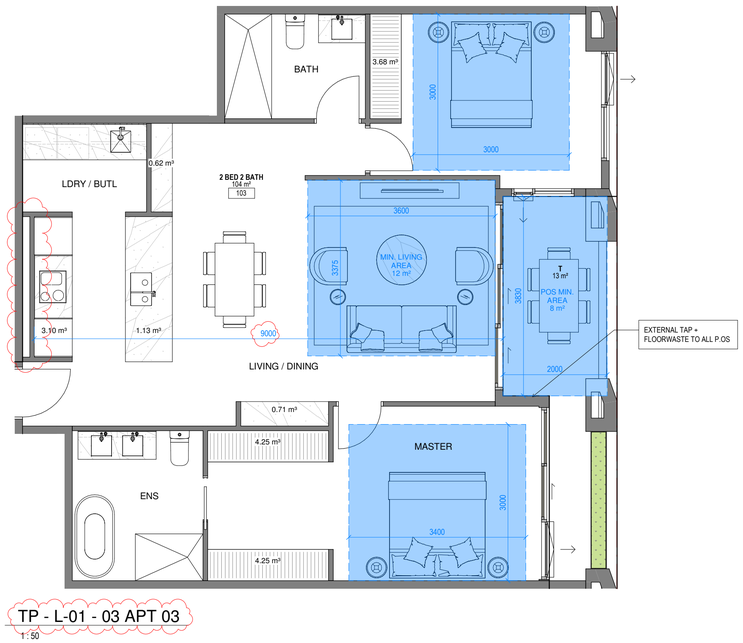
TP60.101 B

WARREN AND MAHONEY



STORAGE - FIRST FLOOR	
Apartment Type	Storage Volume
1.01	28.57 m³
1.02	22.93 m³
1.03	17.73 m³
1.04	26.43 m³
1.05	19.46 m³

STORAGE VOLUME FOR LEVEL 2 AND 3 APARTMENTS EQUIVALENT TO LEVEL 1



TP - L-01 - 03 APT 03
1 : 50

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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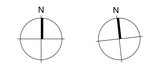
NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS



Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 03
LEVEL 1 - 3
(PODIUM)

Drawing Status

TOWN PLANNING

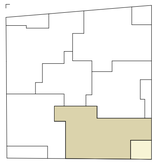
Drawing Details

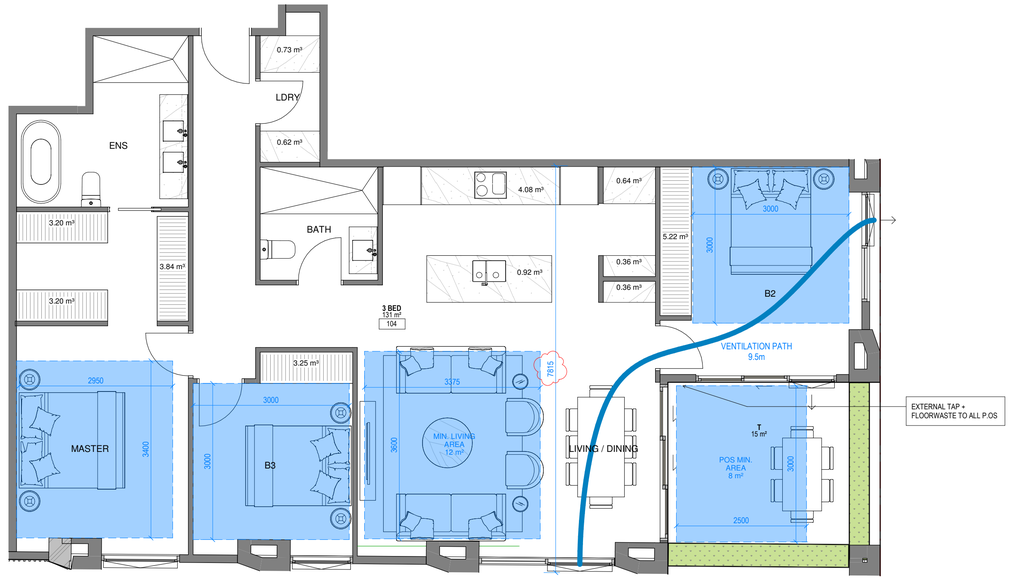
Scale	As indicated@ A1
Date	28/03/2025 2:46:32 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No **Revision**

TP60.102 B

WARREN AND MAHONEY





TP - L-01 APT 1.04

1 : 50

STORAGE - FIRST FLOOR	
Apartment Type	Storage Volume
1.01	28.57 m³
1.02	22.93 m³
1.03	17.73 m³
1.04	26.43 m³
1.05	19.46 m³

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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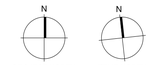
NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS



Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 1.04 (PODIUM)

Drawing Status

TOWN PLANNING

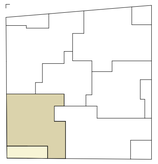
Drawing Details

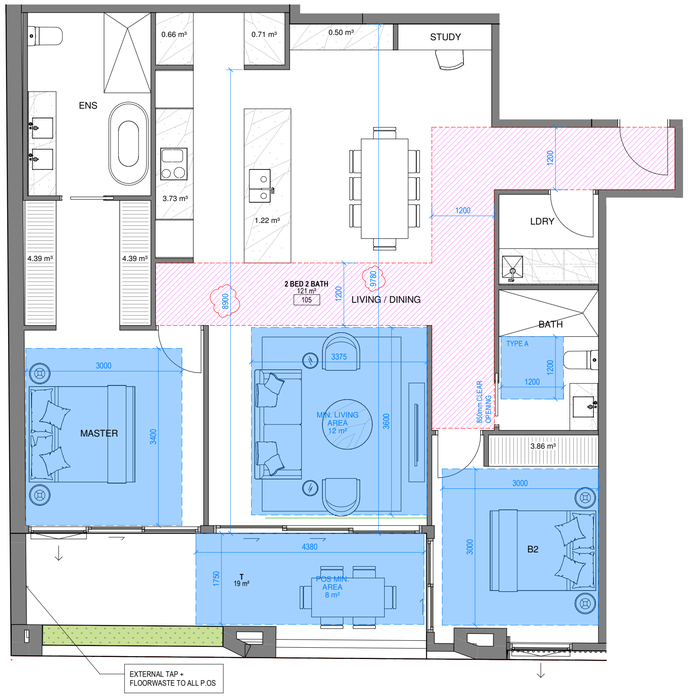
Scale	As indicated@ A1
Date	28/03/2025 2:46:36 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.103

Revision B

WARREN AND MAHONEY





TP - L-01 APT 1.05

1 : 50

STORAGE - FIRST FLOOR	
Apartment Type	Storage Volume
1.01	28.57 m³
1.02	22.93 m³
1.03	17.73 m³
1.04	26.43 m³
1.05	19.46 m³

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Revisions

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B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 1.05 (PODIUM)

Drawing Status

TOWN PLANNING

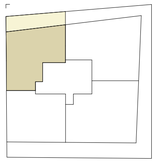
Drawing Details

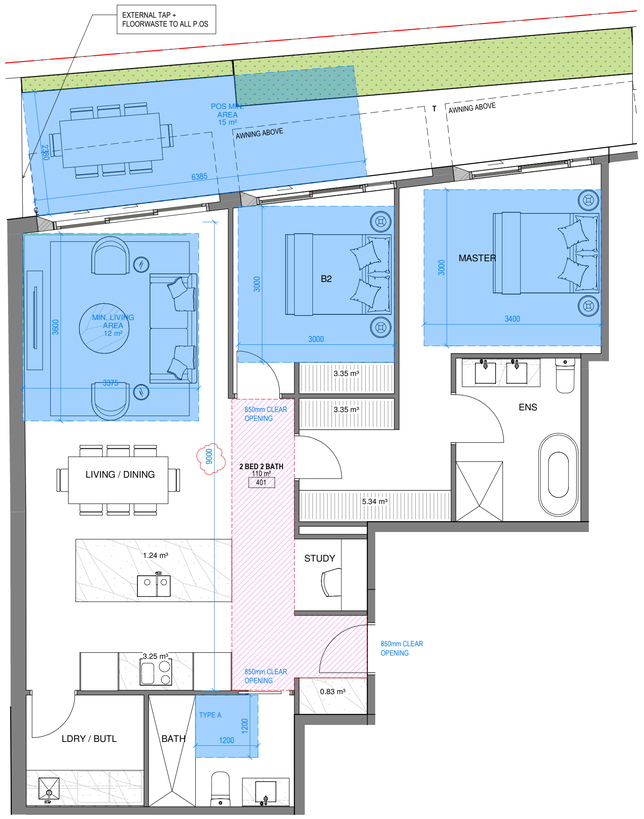
Scale	As indicated@ A1
Date	28/03/2025 2:46:41 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.104

Revision B

WARREN AND MAHONEY





TP - L-04 APT 4.01

1 : 50

STORAGE - FOURTH FLOOR	
Apartment Type	Storage Volume
4.01	17.36 m³
4.02	29.85 m³
4.03	32.41 m³
4.04	19.39 m³

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

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THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 4.01 (TOP PODIUM)

Drawing Status

TOWN PLANNING

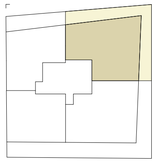
Drawing Details

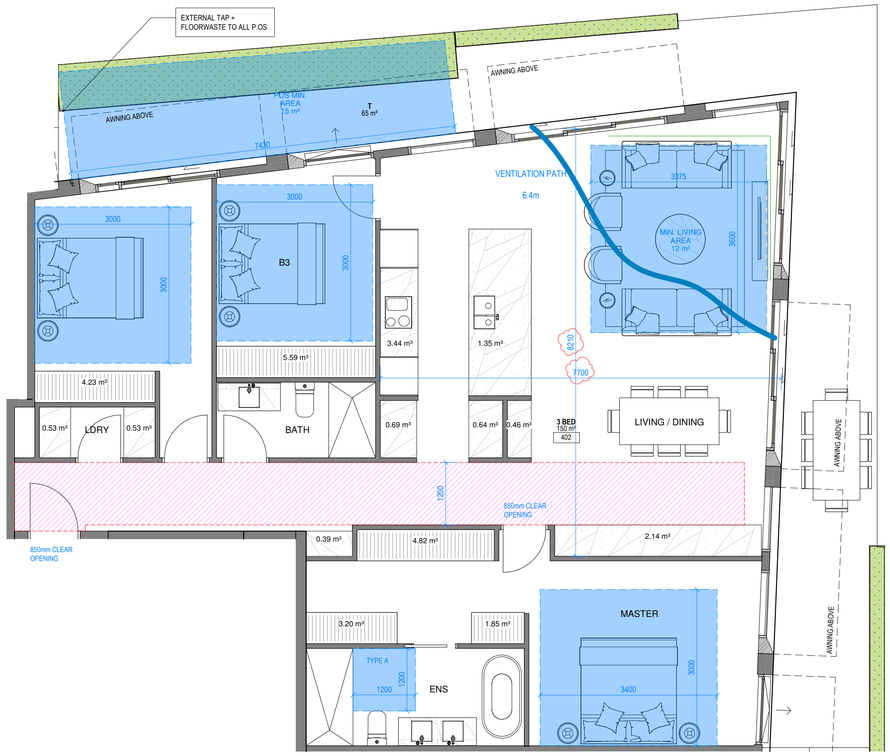
Scale	As indicated@ A1
Date	28/03/2025 2:46:45 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.105

Revision B

WARREN AND MAHONEY





TP - L-04 APT 4.02

1 : 50

STORAGE - FOURTH FLOOR	
Apartment Type	Storage Volume
4.01	17.36 m³
4.02	29.85 m³
4.03	32.41 m³
4.04	19.39 m³

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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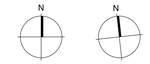
THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS



Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 4.02 (TOP PODIUM)

Drawing Status

TOWN PLANNING

Drawing Details

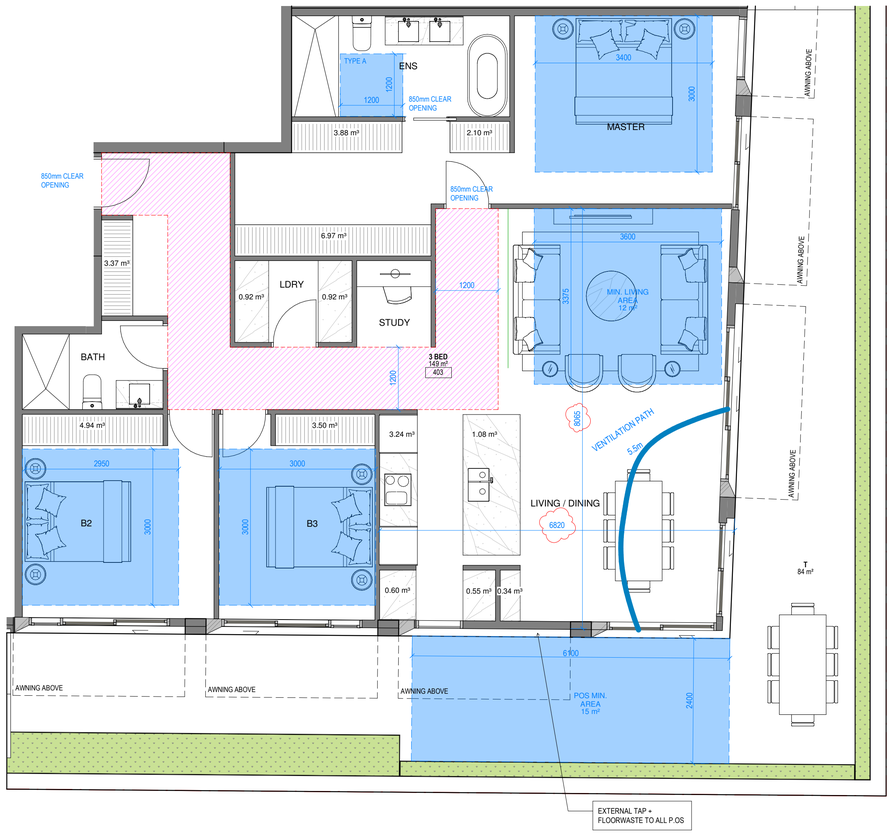
Scale	As indicated@ A1
Date	28/03/2025 2:46:50 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.106

Revision B

WARREN AND MAHONEY





TP - L-04 APT 4.03

1 : 50

STORAGE - FOURTH FLOOR	
Apartment Type	Storage Volume
4.01	17.36 m³
4.02	29.85 m³
4.03	32.41 m³
4.04	19.39 m³

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N
PROJECT NORTH

N
TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

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Melbourne VIC 3000
Australia
Phone + 61 3 8547 6977

Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 4.03 (TOP PODIUM)

Drawing Status

TOWN PLANNING

Drawing Details

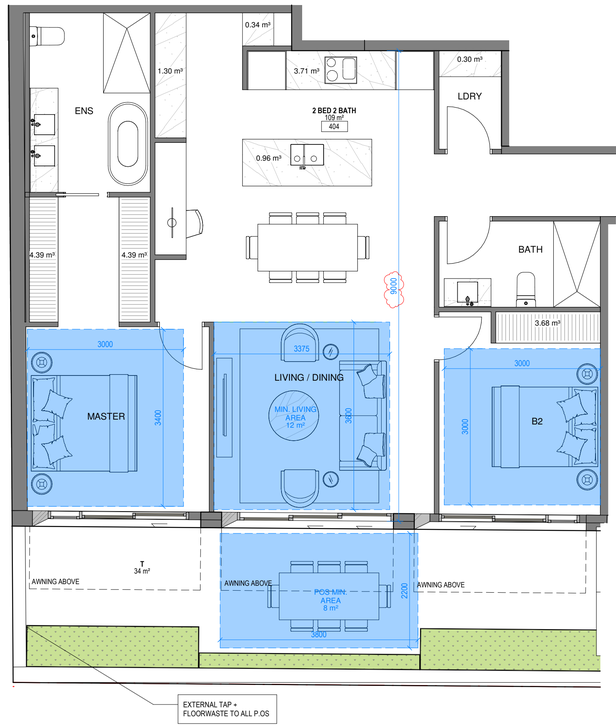
Scale	As indicated@ A1
Date	28/03/2025 2:46:54 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.107

Revision B

WARREN AND MAHONEY





TP - L-04 APT 4.04

1 : 50

STORAGE - FOURTH FLOOR	
Apartment Type	Storage Volume
4.01	17.36 m³
4.02	29.85 m³
4.03	32.41 m³
4.04	19.39 m³

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Revisions

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B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

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Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 4.04 (TOP PODIUM)

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:46:59 PM
Job No	10547
Drawn	WM
Checked	WM

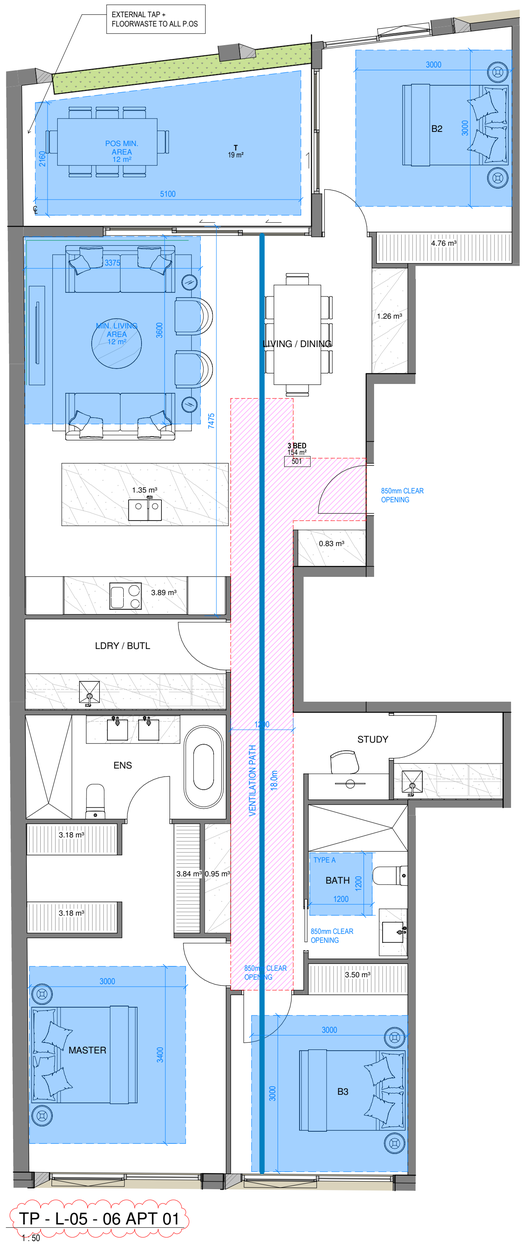
Drawing No TP60.108

Revision B

WARREN AND MAHONEY



L05 - 06 TYPICAL FLOOR PLATE



TP - L-05 - 06 APT 01

1 : 50

STORAGE - FIFTH FLOOR	
Apartment Type	Storage Volume
5.01	26.72 m³
5.02	30.06 m³
5.03	32.70 m³

STORAGE VOLUME FOR LEVEL 5 APARTMENTS EQUIVALENT TO LEVEL 6

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

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THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

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Australia
Phone + 61 3 8547 6977

Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 01
LEVEL 5 - 6 (TOWER)

Drawing Status

TOWN PLANNING

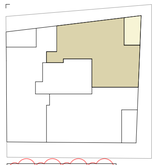
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:47:03 PM
Job No	10547
Drawn	WM
Checked	WM

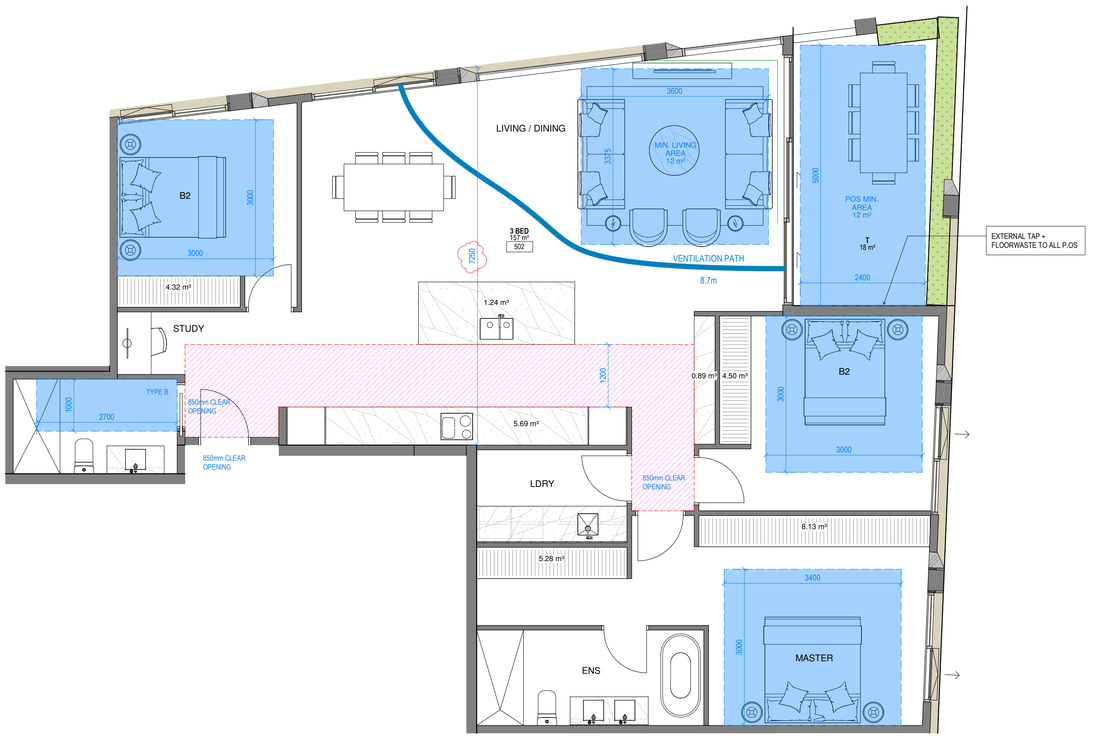
Drawing No TP60.109

Revision B

WARREN AND MAHONEY



L05 - 06 TYPICAL FLOOR PLATE



TP - L-05 - 06 APT 02

1 : 50

STORAGE - FIFTH FLOOR	
Apartment Type	Storage Volume
5.01	26.72 m³
5.02	30.06 m³
5.03	32.70 m³

STORAGE VOLUME FOR LEVEL 5 APARTMENTS EQUIVALENT TO LEVEL 6

NOTE: ACCESSIBLE APARTMENT SHOWERS TO BE STEP-FREE WITH REMOVEABLE SCREEN WHERE APPLICABLE

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Revisions

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N PROJECT NORTH

N TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 02
LEVEL 5 - 6 (TOWER)

Drawing Status

TOWN PLANNING

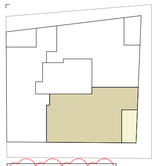
Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:47:08 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.110

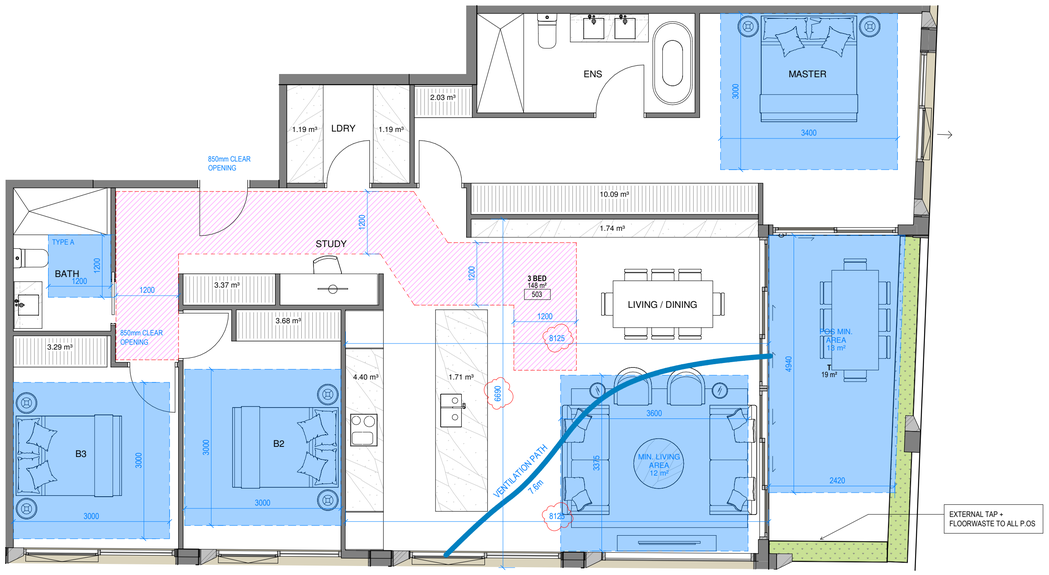
Revision B

WARREN AND MAHONEY



STORAGE - FIFTH FLOOR	
Apartment Type	Storage Volume
5.01	26.72 m³
5.02	30.06 m³
5.03	32.70 m³

STORAGE VOLUME FOR LEVEL 5 APARTMENTS EQUIVALENT TO LEVEL 6



TP - L-05 - 06 APT 03
1 : 50

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Revisions

A	20.02.2025	TOWN PLANNING APPLICATION
B	28.03.2025	TOWN PLANNING RFI RESPONSE

Notes

NOTE : >80% OF FIRE TEST WATER IS TO BE REUSED ON SITE.

NOTE : ELECTRICITY AND COLD-WATER METERING IS TO BE PROVIDED TO EACH INDIVIDUAL APARTMENT, COMMERCIAL TENANCY AND COMMUNAL AREAS.

NOTE : ALL ELECTRIC DEVELOPMENT WITH NO GAS CONNECTION

THE RESIDENTIAL UNITS TO ACHIEVE AN AVERAGE 7.5 STAR RATING, WITH NO UNIT ACHIEVING BELOW 6.0 STARS

N
PROJECT NORTH

N
TRUE NORTH

Consultants

Project Manager

Structural Engineer

Mechanical Engineer

Fire Engineer

Electrical Engineer

Client

CARPE GROUP

Warren and Mahoney Living Australia Pty Ltd

Level 3, 380 Collins Street
Melbourne VIC 3000
Australia
Phone + 61 3 8547 6977

Registered Architects and Designers
www.warrenandmahoney.com

Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 03
LEVEL 5 - 6 (TOWER)

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:47:13 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.111

Revision B

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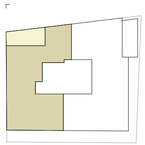

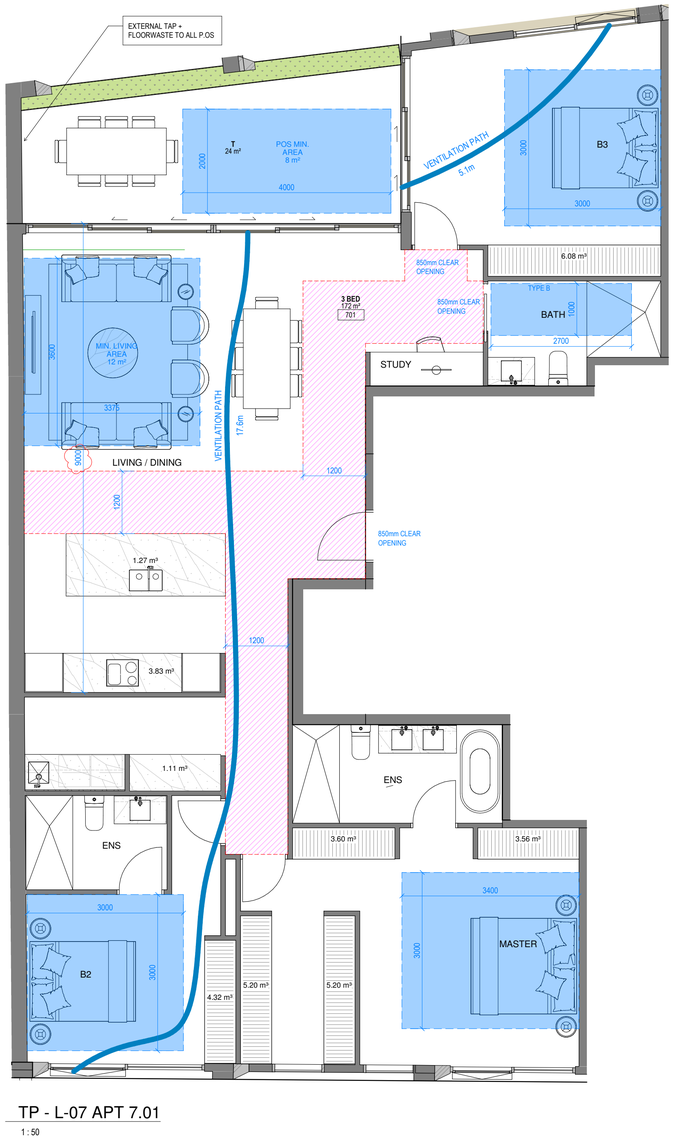

TP - L-07 APT 7.01

1 : 50

STORAGE - SEVENTH FLOOR	
Apartment Type	Storage Volume
7.01	34.17 m³
7.02	39.22 m³

NOTE: ACCESSIBLE APARTMENT SHOWERS TO BE STEP-FREE WITH REMOVEABLE SCREEN WHERE APPLICABLE

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 7.01 (SUB-PENTHOUSE)

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:47:17 PM
Job No	10547
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Checked	WM

Drawing No — TP60.112

Revision — B

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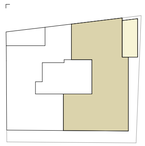

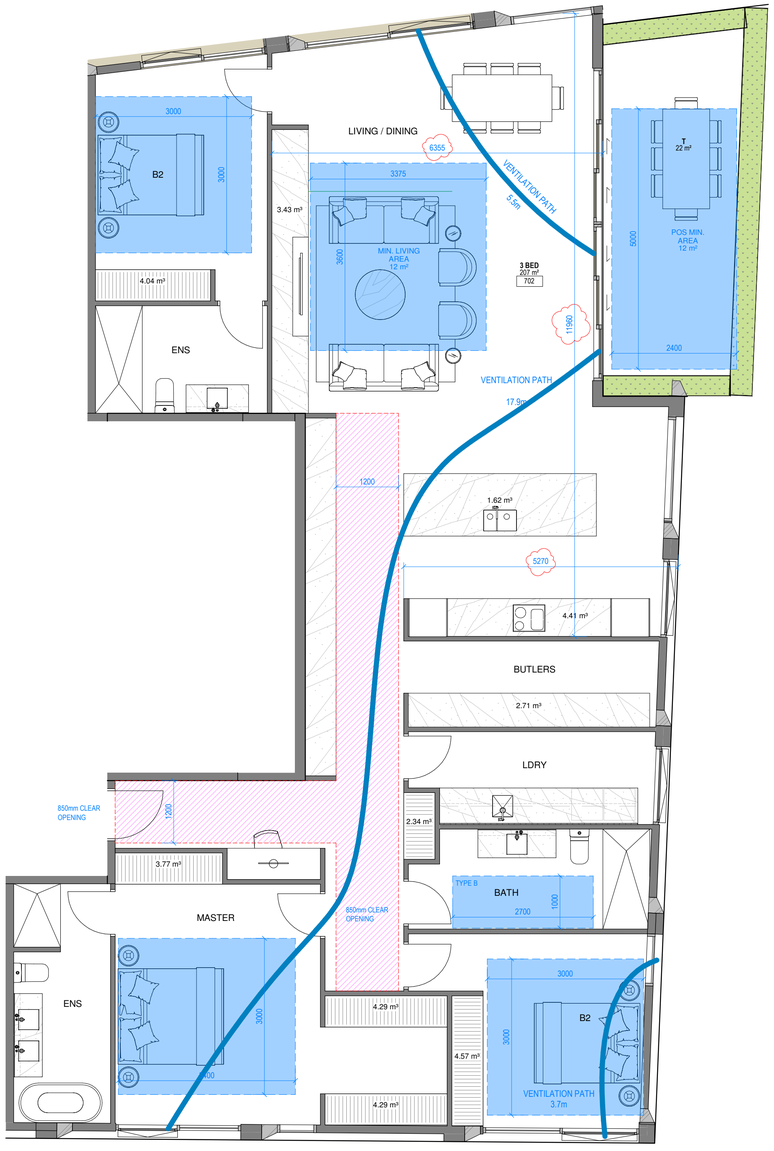

TP - L-07 APT 7.02

1 : 50

STORAGE - SEVENTH FLOOR	
Apartment Type	Storage Volume
7.01	34.17 m³
7.02	39.22 m³

NOTE: ACCESSIBLE APARTMENT SHOWERS TO BE STEP-FREE WITH REMOVEABLE SCREEN WHERE APPLICABLE

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Project Title

53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 7.02 (SUB-PENTHOUSE)

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
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Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.113

Revision B

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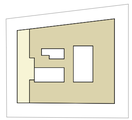



TP - L-08 APT 8.01

1 : 50

STORAGE - EIGHTH FLOOR	
Apartment Type	Storage Volume
8.01	27.26 m³

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Revisions

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53 Cambridge St, Collingwood

53 Cambridge St, Collingwood VIC 3066

Drawing Title

APARTMENT 8.01 (PENTHOUSE)

Drawing Status

TOWN PLANNING

Drawing Details

Scale	As indicated@ A1
Date	28/03/2025 2:47:28 PM
Job No	10547
Drawn	WM
Checked	WM

Drawing No TP60.114

Revision B

WARREN AND MAHONEY



February 2025

Cambridge Residences

Town Planning
Urban Context Report

53-57 Cambridge Street Collingwood, Vic 3066

Prepared for:
Carpe Group

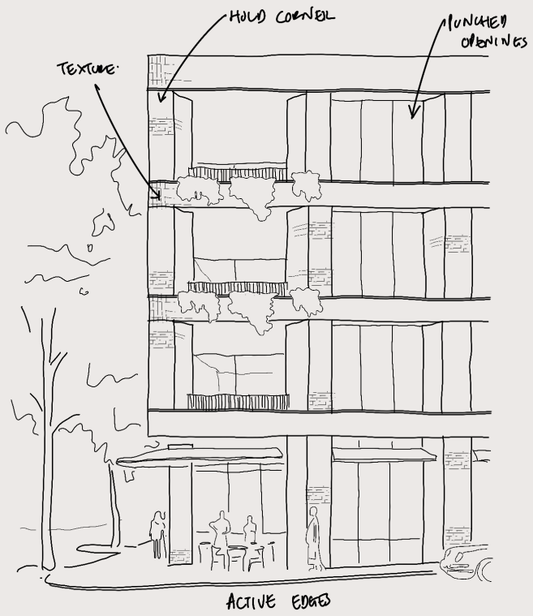
Document Revision Status:
Revision A

February 2025

WARREN AND MAHONEY®

carpe.

Contents



Context 01
Site Analysis 02
Site Response 03
Proposal 04

Prepared For:
Town Planning Application

Document Revision Status:
Revision A
February 2025

Contact:
Warren and Mahoney Australia Living Pty Ltd
Level 3, 380 Collins Street
Melbourne, Vic, 3000
Australia

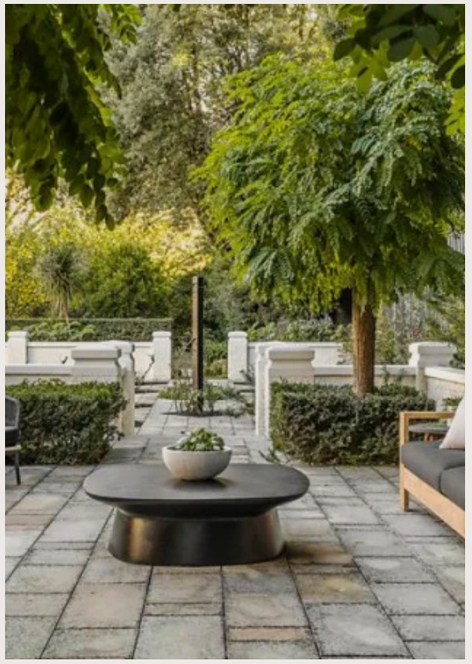
Disclaimer:

While Warren and Mahoney has endeavoured to summarise the Concept Design process in this document and appendices, the report format cannot represent the broad range and depth of information captured on the Concept Design Drawings, Specifications and Schedules. Approval of the specific issues contained in this report does not discharge the obligation of the client team to review the drawings and specifications in their entirety.

Team









Carpe Group
Developer

Carpe Group's ethos is to evoke a sense of effortlessness; clean lines, efficiency with a sense purpose with every project. Having delivered numerous, high-class residential developments across Melbourne, every project strives to create a harmonious balance between form and function

Warren and Mahoney
Architecture

Working at the intersection of culture, sustainability, and technology, Warren and Mahoney's design and consulting services and sector expertise deliver innovative solutions and value for people, clients, and communities across Australia and New Zealand. With a cohesive portfolio of successful projects, many of which in Melbourne completed in colloboration with Carpe Group, Warren and Mahoney embrace the challenge and possibilities of how design can meet the needs of a rapidly changing world.

John Patrick
Landscape Architecture

John Patrick Landscape Architects create captivating outdoor spaces that harmoniously blend nature and design. Covering a wide breadth of typologies, all services encompass the art and science of designing outdoor environments.

Contour
Town Planning

Contour has a track record of delivering unparalleled expertise and exceptional value across all property sectors, from acquisition to occupation. Dedicated to achieving outstanding development outcomes throughout Victoria, their comprehensive coverage of statutory planning and permits help shape Victoria's urban landscape with high-quality town planning advisory and management services.

Project Overview

Collingwood is an eclectic mix of inner city living, blue collar industry, and youthful energy all combining to create an increasingly sought after address.

Characterised by busy high streets, it's proximity to the CBD and an edgy culture of energy and creativity; Collingwood is simultneously pulling away from and reinventing its historical past.

This project seeks to capture what is iconic in the classic examples of Collingwood's architecture, rejuvenated with a contemporary image of its possibilities.

Building on principles of restraint, rigour and rhythm, the proposal aims to define a new architectural language for the suburb that acknowledges its predominantly red-brick, industrial heritage while aspiring to be a beacon of its future as a hub of commerce and community.

We are fascinated by modern inserts we see in the suburb and the way these interventions rethink the past. The building expression we have expressed pays homage to the industrial nature and these moments of history ingrained in Collingwood's industrial past.



Project Overview

This devlopment explores a new vision for Collingwood. A refined and articulated piece of architecture that is bold in its expression but refined in its composition.

This report has been prepared by Warren and Mahoney Architects on behalf of Carpe Group , the permit applicant. This Proposal seeks approval for a mixed-use project on the corner of Cambridge Street and Langridge Street, Collingwood.

Site

The site is currently occupied by a two storey commercial building, predominantly featuring undercroft carparking space along its Cambridge Street Frontage.
A long existing vehicle crossings to accompanies this and large, mature trees to the north-east corner of site in the naturestrip.

Immediate Context

To the north and east of the site, large multi-residential towers and mixed use mid-scale buildings of varying architectural character populate the major roads of Langridge Street and Wellington Road.

A typical masonry podium, predominantly featuring a mix of old and new red brick buildings form the surrounding street walls, topped by setback tower forms of varying setbacks and height.

To the west of the site, low-rise brick commercial offices and warehouses populate the block, softened by the Oxford Street Reserve that marks a residential transition before retuning to retail and commercial buildings along Smith Street.

To the south of site along Derby street, a mix of one and two storey brick terrace buildings occopied by small-scale commercial businesses are fronted with street parking and small trees.

Response

The building is rigorous is in its presentation and refined in its detailing. A four storey street wall, expressed with a rhythm of masonry columns, that frame the ground floor commercial tenancies and carved building entrances, sets the considered language for the development.

Inspired by an expression of material and repetition, the building continues the stable façade grid to its rooftop terrace, at each setback varying the nuanced detail of its negative space between. A consistent masonry superstructure is punctured by angled window bay sections that angle to best capture the natural light and views to surroundings.

The heavy masonry base, complimented by fine metalwork detailing and framework is lightened in the mid-rise portion of the building where metal window shrouds that mimic the tapered brick columns are inserted within the frame to give a sense of lightness as the building steps up and away from the street.

The top floors of the development, further setback to not encroach on sensitive shadow constraints, sees the gridded façade recede to its lightest expression with vertical and horizontal blades taking on a considerate and passive shading device for the north and west facing penthouse.

Project Overview

Site Area:	812sqm	
Site Coverage:	812sqm	*100%*
Total GFA:	7 639sqm	

Number of Apartments (27 Total):

8 x	2 Bedroom Apartments
20 x	3 Bedroom Apartments

Parking

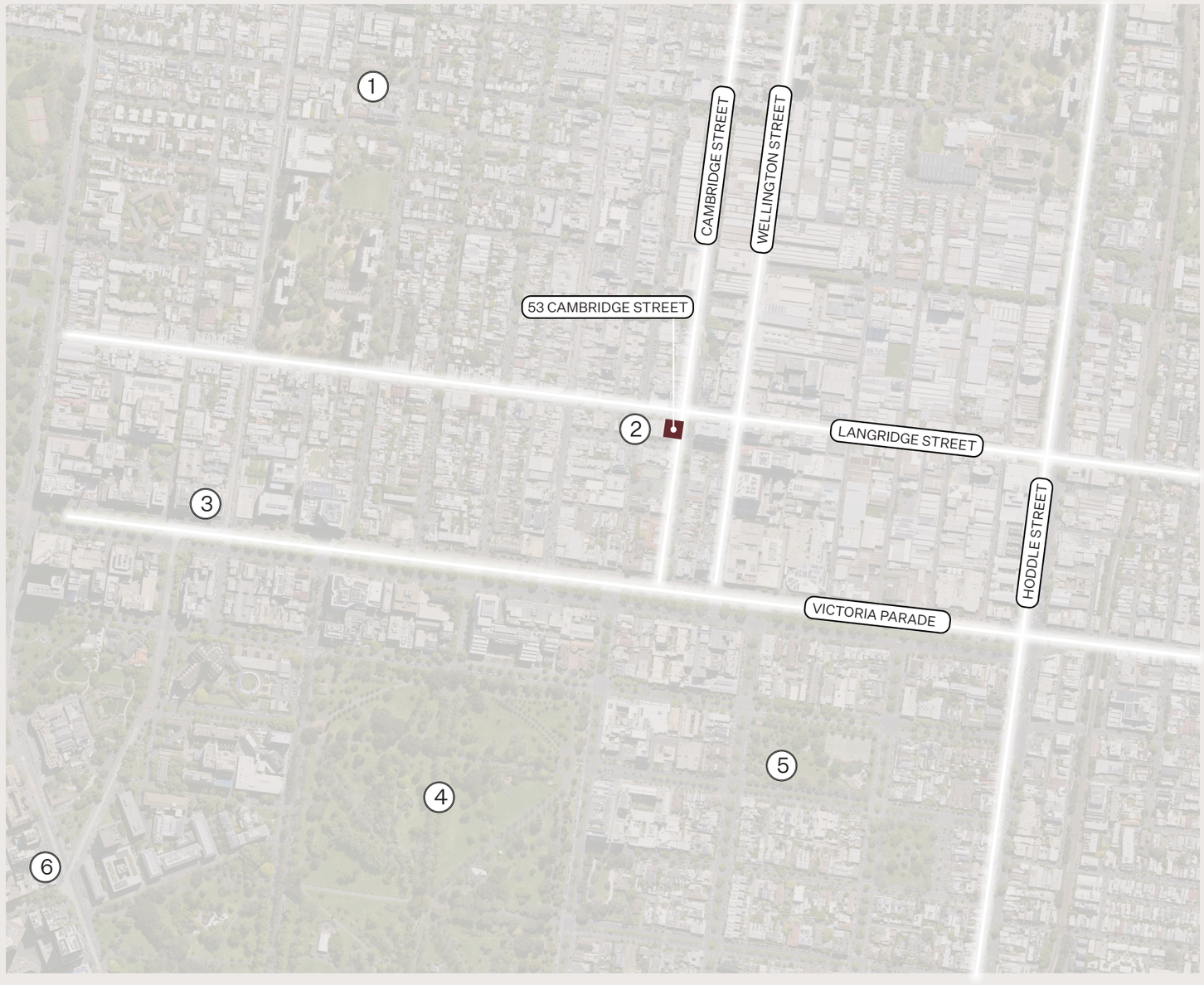
49 x	Vehicle Car-parks
33 x	Secure Bicycle Parking Spaces



01. Context

Urban Context

1.	Fitzroy Town Hall
2.	Oxford Street Reserve
3.	St Vincent's Private Hospital
4.	Fitzroy Gardens
5.	Powlett Reserve
6.	CBD



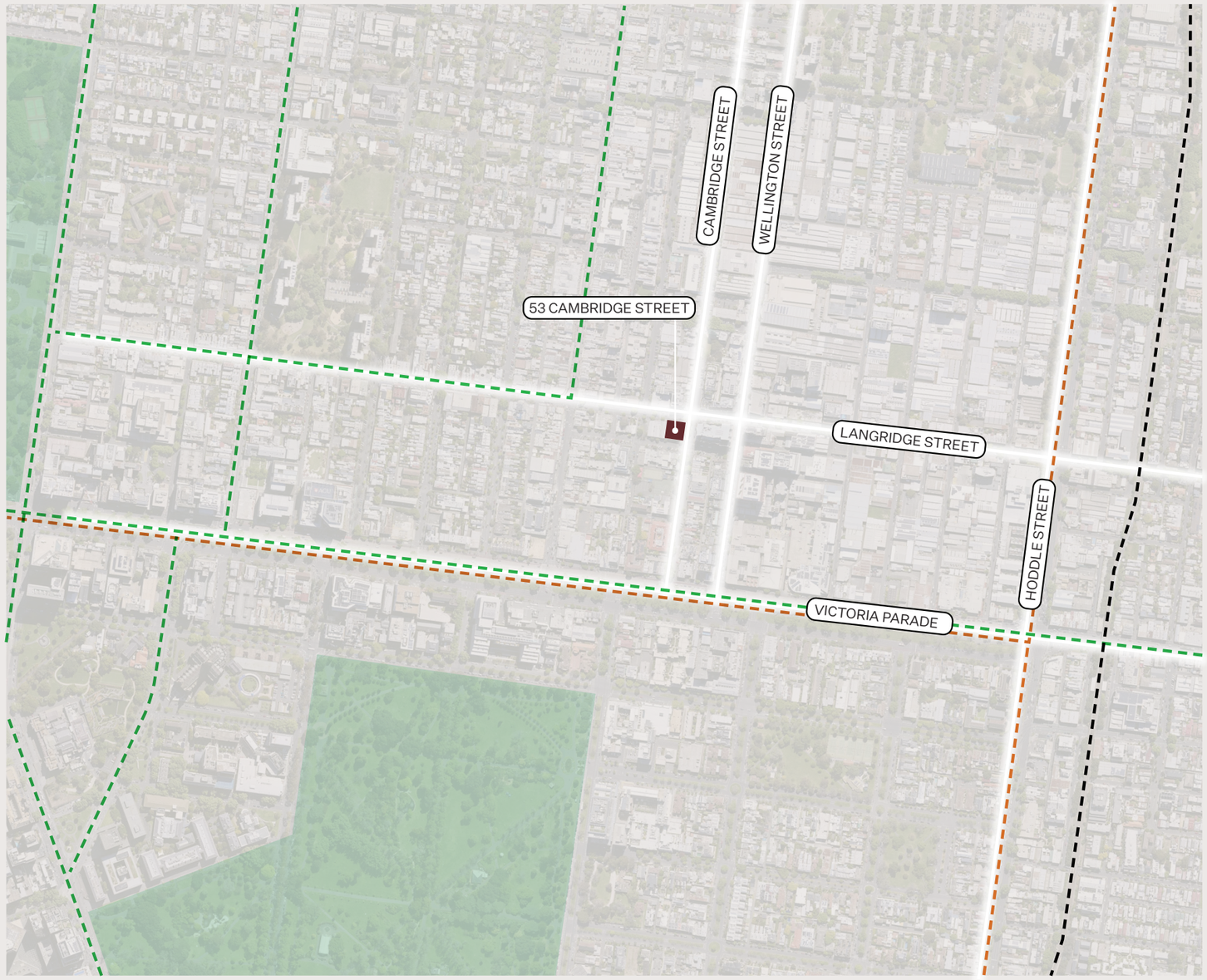
Subject Site

February 2025

Site Location & Amenity

The site has excellent access to sustainable transport modes and is well located with regard to public transport.

Trams and trains are in close proximity to both Smith Street and Victoria, while cycling paths along Wellington Street provide easy routes to the CBD and beyond.



- Subject Site
- Train
- Tram
- Bus
- Parks

Existing Approvals & Recent Developments



(a) 72-94 Cambridge Street (PLN15/1083) – 10 storey



(e) 1-57 Wellington Street (PLN16/0922) – max. 11 storey



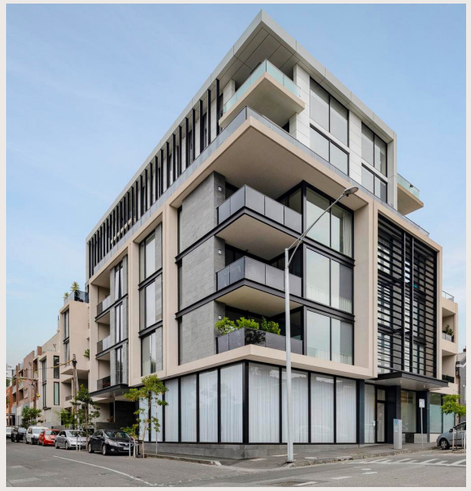
(i) 61-71 Wellington Street and 37-39 Langridge Street (PLN15/0641)) – 13 storey mixed use building;



(l) 73-77 Wellington Street (PLN15/1138) – 10 storey mixed use building



(p) 42 – 44 Oxford Street (PLN18/0497) – multi- storey, mixed use building containing a residential hotel, shops and food and drinks premises.



(q) 15-21 Derby Street & 27 Oxford Street (PLN16/0092) Development of the land for construction of a multi-storey building containing two or more dwellings, use of the land

Streetscape Elevation

South Elevation - Derby Street



Low-scale street with terrace homes and offices. Tree lined strees in proximity of Oxford Street Reserve compliment the residential nature.

53 CAMBRIDGE STREET
(SUBJECT SITE)

North Elevation - Langridge Street



Industrial buildings and mid-scale apartment buildings present 3-4 storey street walls of primarily masonry construction.

53 CAMBRIDGE STREET
(SUBJECT SITE)

Streetscape Elevation

East Elevation - Cambridge Street



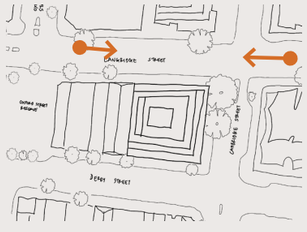
North-South arterial with a dense tree canopy and activated shopfronts.

02. Site Analysis

Key Viewlines







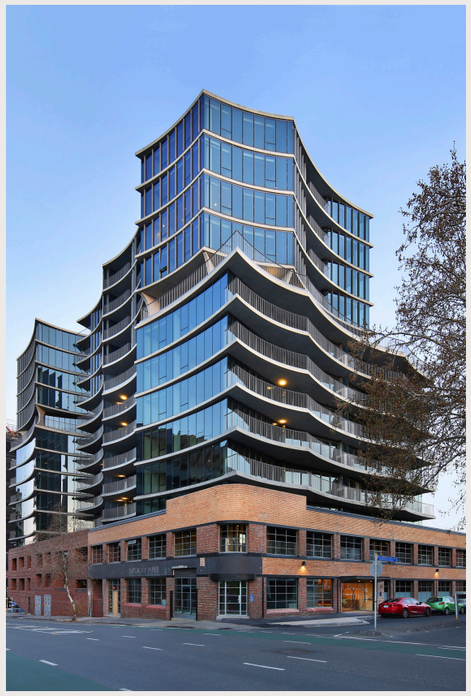
Key Viewlines





Existing Context





1. Holme Apartments

68 Cambridge Street

14 storey tower featuring masonry podium with a consistent facade rhythm. Expressive tower form that embraces the shared Cambridge / Langridge Street corner.



2. Australian Galleries

28 Derby Street

Low scale shopfront with large punched openings and modest entry expression.



3. 51 Langridge Street

Corner tower building with a sculpted masonry podium and uniform tower that continues the vertical rhythm of the base.



4. Victoria & Vine

Wellington Street Precinct

Large Development to the south-east of the site with predominant street wall expression, large glazed apertures and grid facade language.

Site Analysis

Context :

The site is bound by streets to the North, east and south. A slope of approximately 1.4m falls from west to east to a low point along Cambridge Street.

The large street widths allow for good dalighting levels despite the surrounding buildings of vaired heights.

The uninterrupted Langridge St elevation poses an ideal opportunity for North facing apartments and terraces. To the west of the site, a 2 storey masonry building abuts the boundary.

Views are afforded to the north and south back towards the city. To the east, large street trees shade the building corner and prodive a connection to nature.

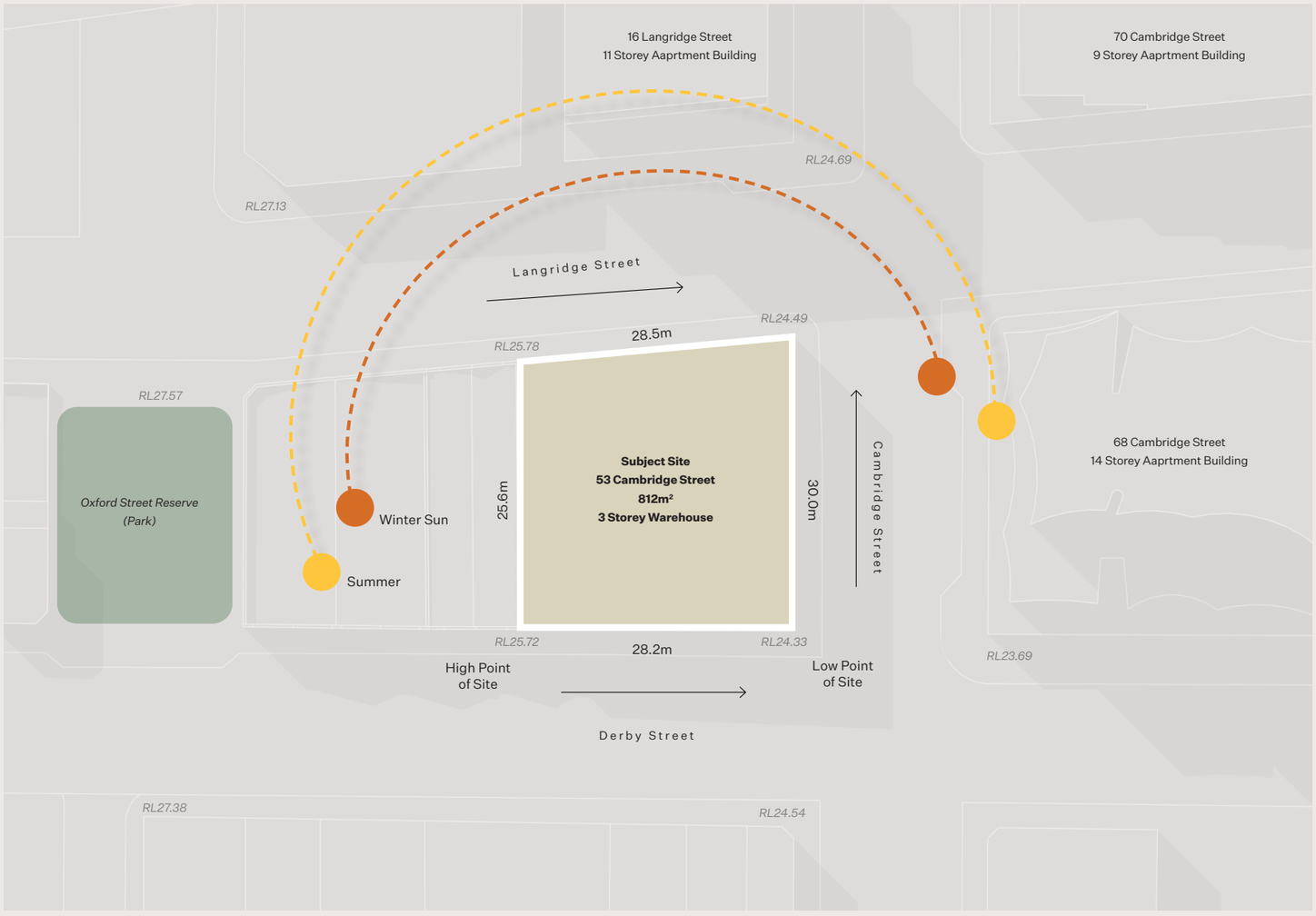
The southern boundary of the site features an existing crossover proposed to be retained and high visibility Derby st/Cambridge St corner on the approach from the CBD.

Street Character :

Langridge Street - Connector road running east-west lined with bicycle paths, parrallel street parking, industrial buildings and contemporary multi-residential developments.

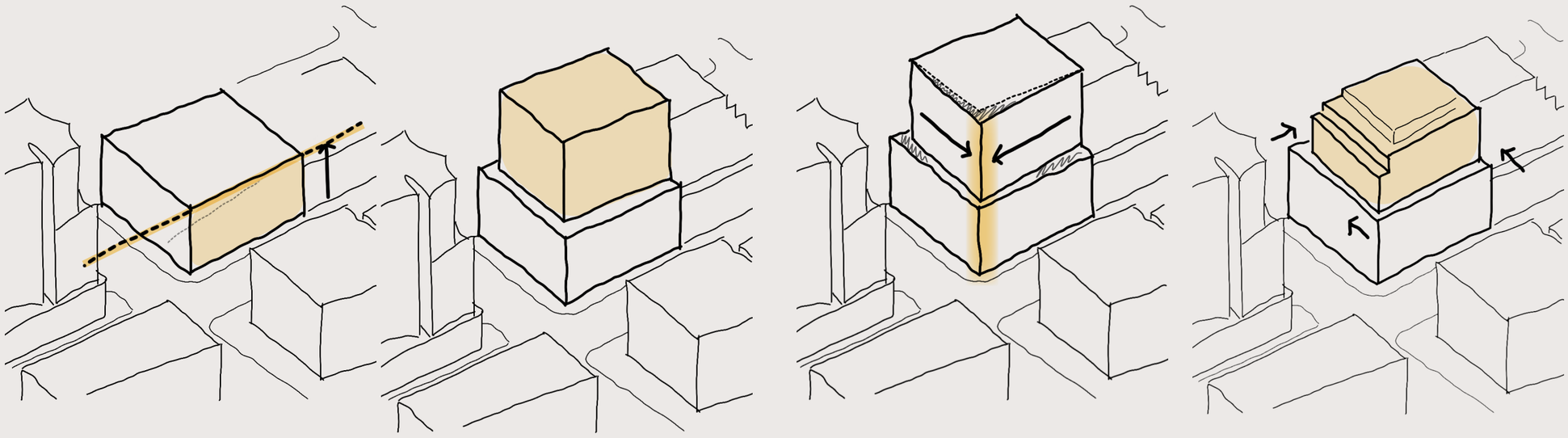
Derby Street - Low-scale residential street with kerbside parking and terrace buidling vernacular.

Cambridge Street - Tree lined north-south road, typically used as a pedestrian thoroughfare away from Wellington and Smith Street that run parrallel.



03. Site Response

Built Form Massing



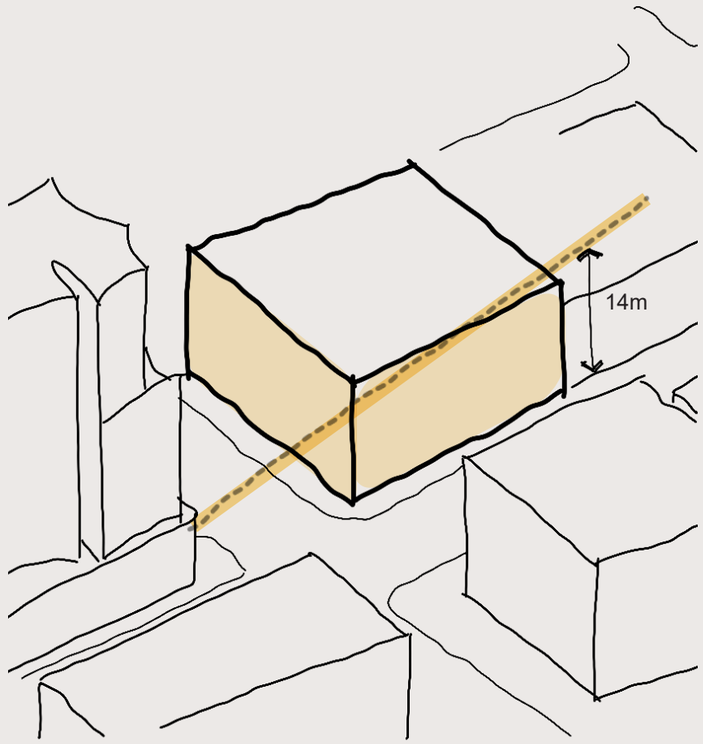
Define Streetwall

Express Upper Form

Embrace The Corner

Setback Articulation

Built Form Massing

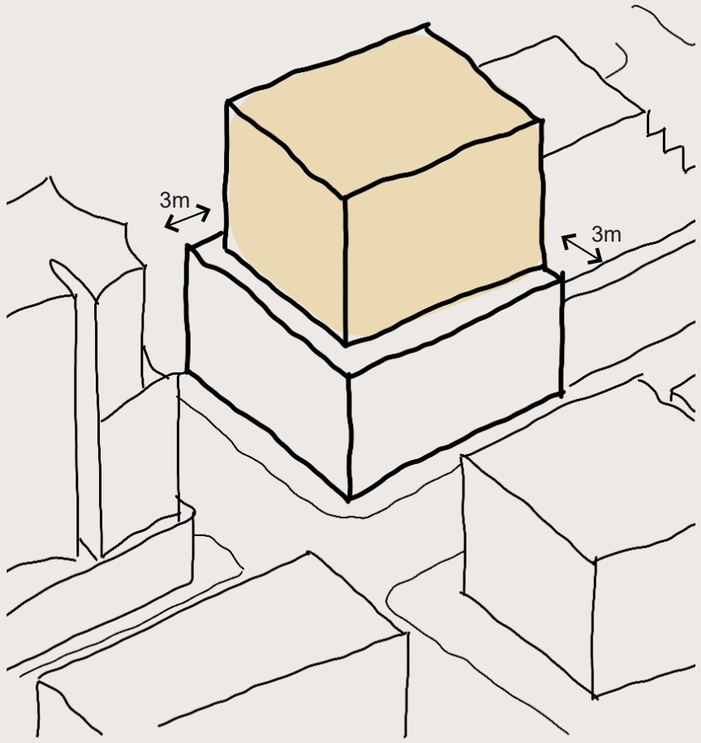


Defined Streetwall

Rising four stories the podium manages the significant slope across the site from west to east. In building to the two primary street corners, a streetwall is created consistent with surrounding developments and creates a visual anchor for the site.

The preferred streetwall height of 14m is balanced in comfortably complying with the western end of the site and providing viability for engaging ground plane activation along Cambridge Street to the east.

Built Form Massing

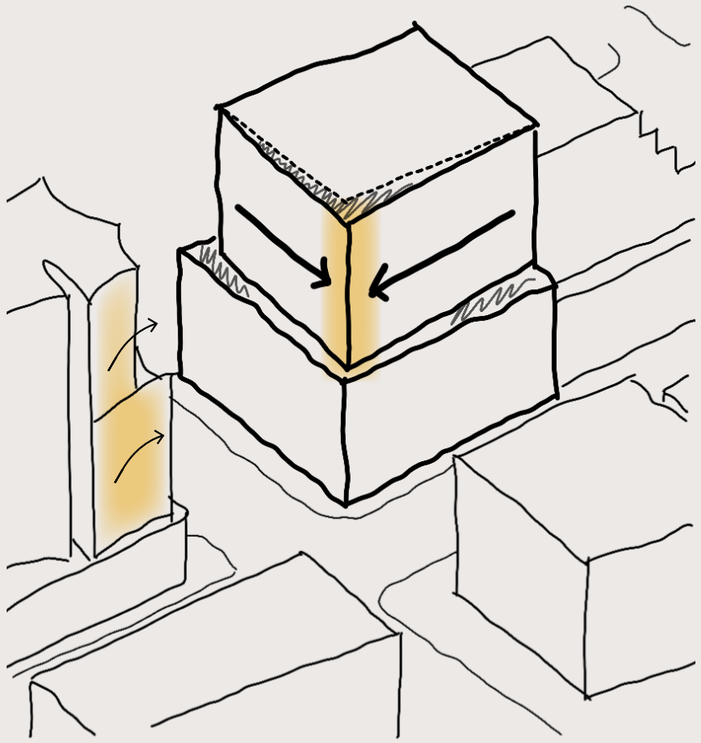


Expressed Upper Form

The design incorporates a setback streetwall condition which to provide a human scale expression to the base and prioritise the ground plane experience.

To the east, the built form extends to the site boundary to ensure equitable development opportunities for the western site at 28 Derby Street.

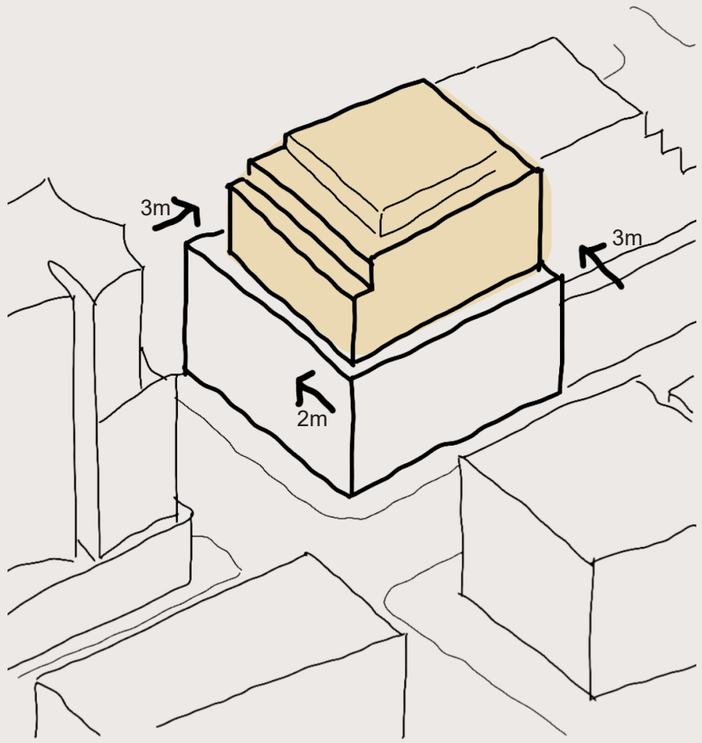
Built Form Massing



Embrace The Corner

The setback built form gestures towards the primary corner at Langridge / Cambridge Street intersection. Whilst maintaining a generous seperation to the podium corner, the resulting upper form also creates variation to the lower form and reference the gesture of the adjacent Holme Apartments building.

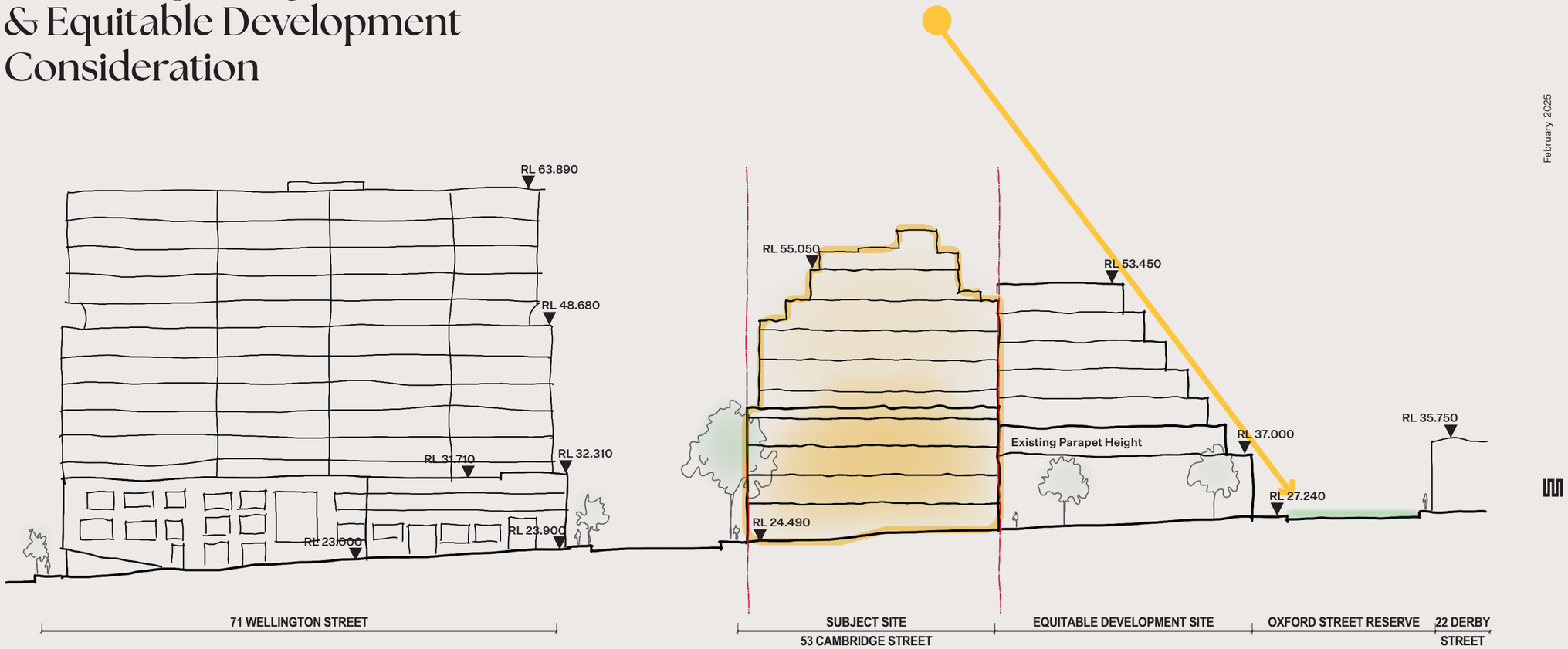
Built Form Massing



Setback Articulation

Built form is articulated to minimise overshadowing to neighbouring streets + buildings and compliment the combined residential and urban nature of the surrounds.

Streetscape Height Study & Equitable Development Consideration



A familiar Scale.

By transitioning from heavy to light (from base to top) the design can extend historical 19th Century traditions of mass and scale and recognise the technologies and techniques of the 21st century.

The design takes into consideration the height and mass of buildings to Wellington Street to the east and sympathicetically transitions down to its low scale neighbours to the west

The robust podium base will is experienced from the pedestrian ground plane. This strategy is reinforced by material selections and architectural columns that frame journey around the building on all interfaces.

Equitable Development

The sites to the west at 28-34 Derby Street are given a considered opportunity for equitable development in the future.

The proposal builds to the extent of its western boundary to provide a mirrored massing to neighbouring sites.

The equitable development scenario is guided by a preservation of daylight to the Oxford Street Reserve, proposing that the form will cascade to maintain solar access and reduce overshadowing in the morning hours until midday.

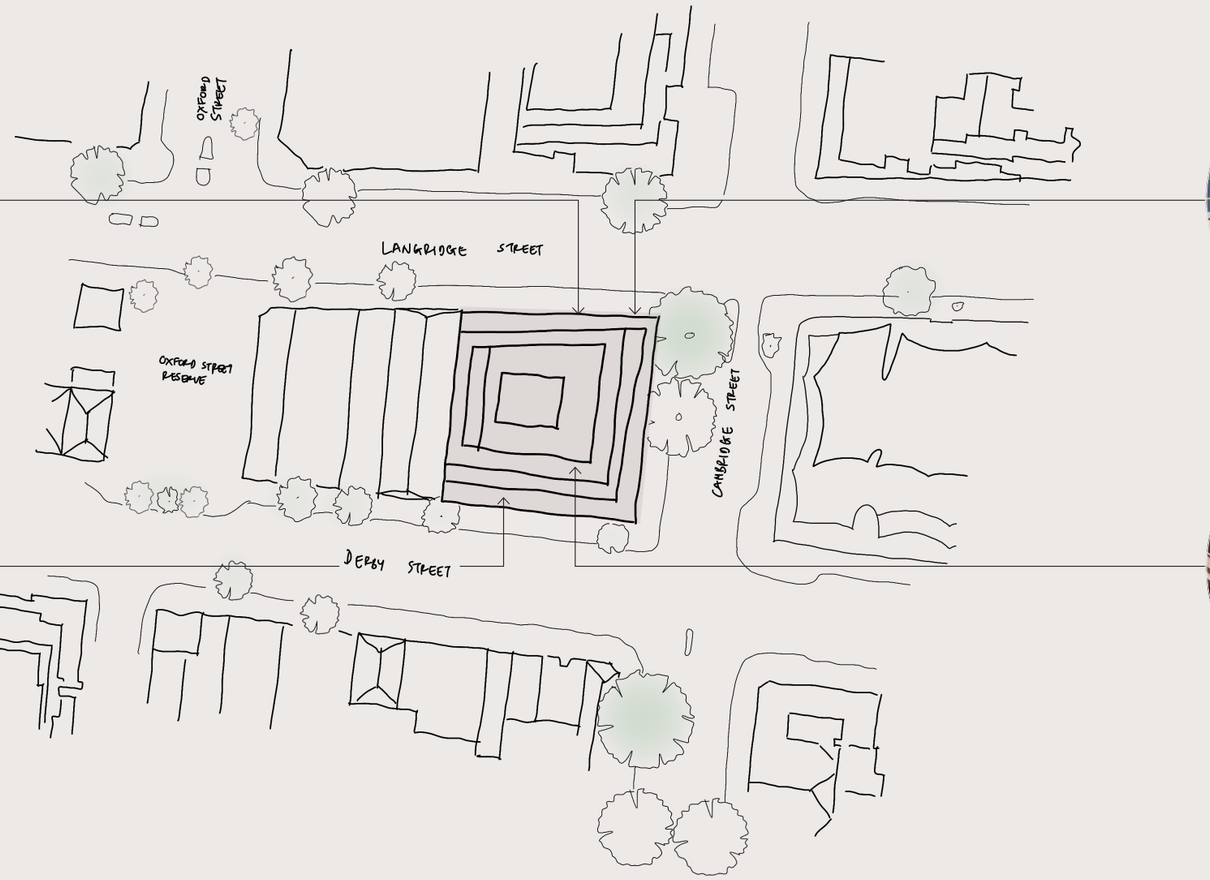
Sketch Plan

Refined Streetscape experience



Considered approach and softening





Rigour & rhythm



Cohesive facade languge



A new vision for 53 Cambridge Street.

This development presents a bold yet refined vision for Collingwood. Comprising a series of volumes that embody the essence of home, it balances strong expression with thoughtful composition.

The ground floor fosters a welcoming arrival experience, establishing a clear identity for residents, visitors, and the public. A masonry colonnade frames porous entry points, softened by awnings that extend the urban fabric.

The masonry collonade that frames the porous entry points are softened with awnings and identification that continue the urban fabric. The upper forms of the building compliment the rhythm of lower floors to create a building in the round. Contrary to other distinct podium and setback tower developments in the area, 53 Cambridge Street proposes a new cohesive architectural language that allows the rigour of the planning and materiality to express itself in full.

04. Proposal



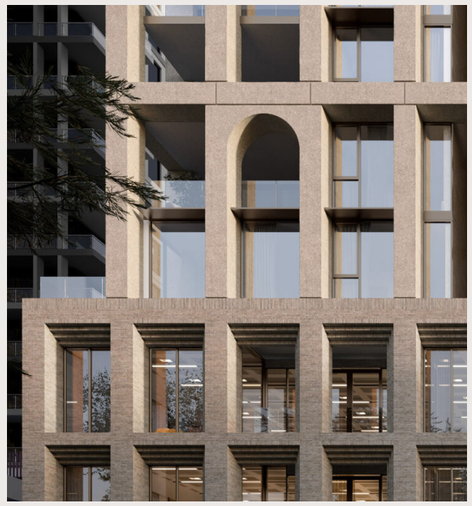
February 2025

Cambridge Residences

This devlopment explores a new vision for Collingwood. A refined and articulated piece of architecture that is bold in its expression but refined in its composition.

Facade Approach









Rhythm

A considered repitition of elements promotes movement along and through the ground plane.

Consistent Rigour

An approach that seeks to avoid the typical podium to tower differentiation of development sites in the inner city suburbs with a timeless style.

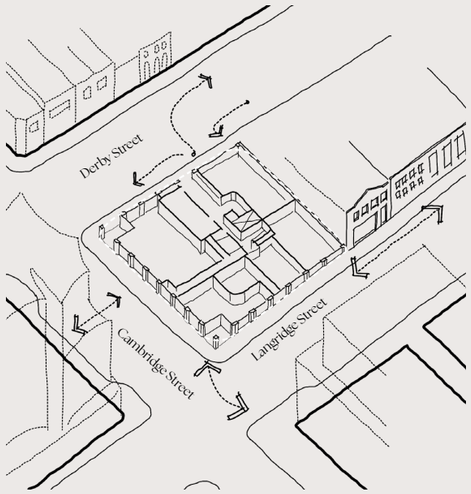
Honest Materiality

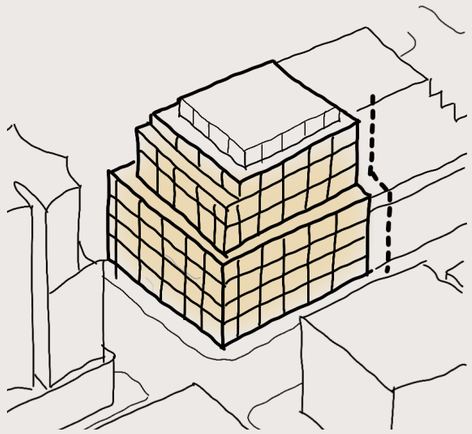
Materiality that honour the indistrial heritage of the location allows the building to feel part of the urban fabric whilst utilising contemporary construction techniques.

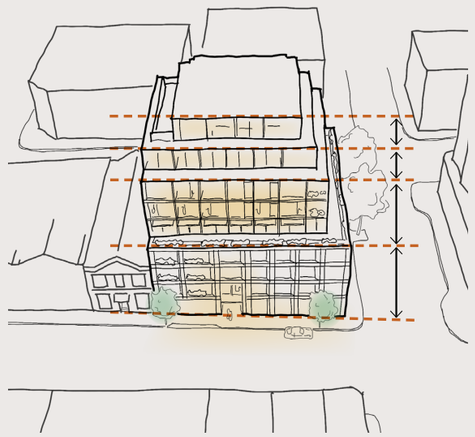
Articulated Openings

Striking a balance between the privacy required in a dense urban environment and an openess that embraces the environmenal conditions and views surrounding the site.

Design Strategies









Responsive Ground Plane

The ground floor interaction is responsive to all three streetscapes, with its own quality.

The residential nature of Derby street provides a familiar primary address for residents and vehicles.
Langridge Street continues the flow of activity from Smith and Wellington Street with open corners and apertures into the development.
Cambridge Street prioritises its uninterrupted frontage at the lowest portion of the site to maximise ceiling heights and pedestrian activity.

Cohesive Rigour

Beginning at the base of the building, a gridded layout is applied to all facades to generate flow and rhythm along all street interfaces. This approach is continued for the full extent of the building that responds to framed views for apartments and provides a timeless quality to the development. A consistent material palette further enhances the continuity.

Transitioning Facades

Although conistent in materiality and formal response, the facade is delineated between the podium,mid-rise and upper floor.

A transition from a defined podium that responds to the streetscape, to a thinner mid-rise expression, then fine top floor reduce the visual scale of the building as it rises. These elements are all tied together by the grid response that varies in scale for further differentiation..

Architecture as Wayfinding

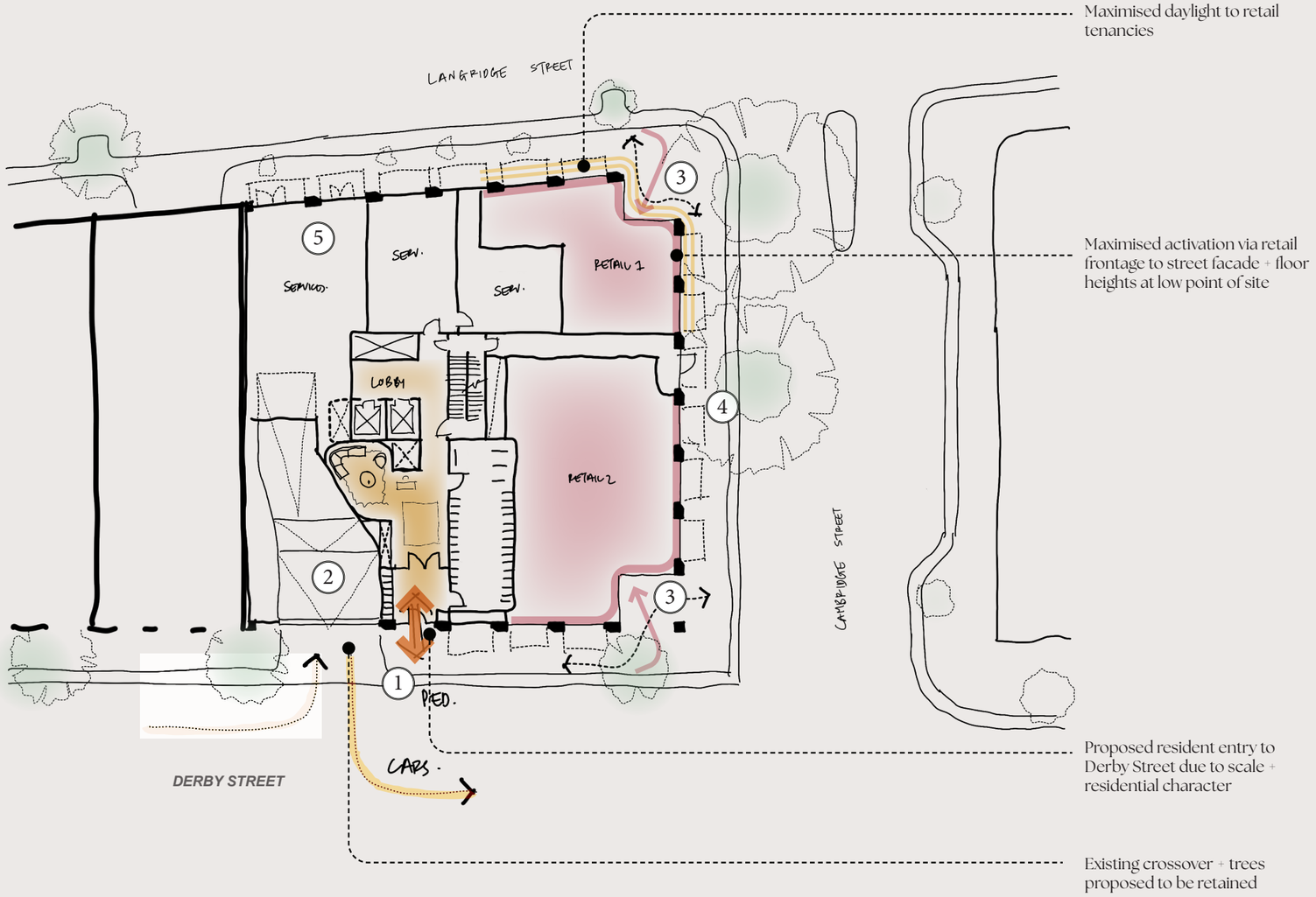
The use of simple architectural moves aims to navigate occupants through elements of the buiiing.

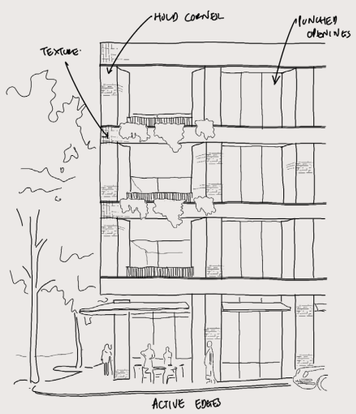
Portal conditions cultivate views while indicating direction to key aspects within the floorplan, for example, the large double height entry expresses an entry condition to the streetfront. Similarly, textile awnings express shopfronts.

To the key corners, the proposal erodes and widens the pedestrian experience.

Interface Response

1. Primary Resident Entry - Derby Street
2. Vehicular Tenancy Entrance
3. Proposed Tenancy Entrance
4. Primary Commercial Facade
5. Service Zone





Entry Nodes, Activation & Permeability





The design of the ground floor prioritises an inviting arrival experience, creating a strong sense of identity and welcome for both residents and visitors. Thoughtfully framed entry sequences, natural transitions, and distinct apertures work together to establish a defined address that feels both open and intimate. This space balances privacy with connectivity, ensuring a seamless flow from public to private zones while enhancing the buildings character and presence.

Arrival Experience - Derby Street

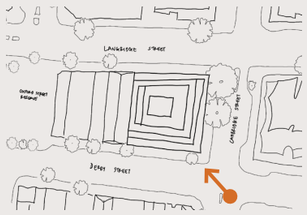


Podium / Tower Expression



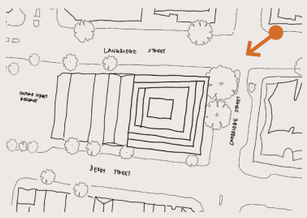
Cambridge / Derby St





Cambridge / Langridge St





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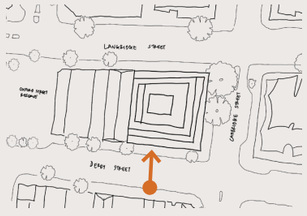
Derby St Entrance



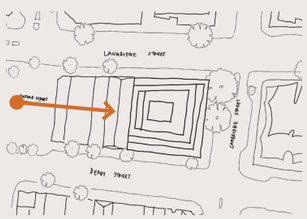


Oxford Street Reserve

- View From Oxford Street Reserve

- Taken from 1700mm above Ground

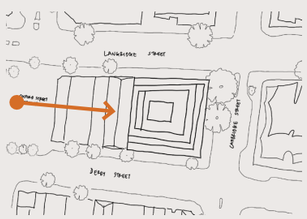




Oxford Street Reserve

Equitable Development Scenario to 28-34 Derby Street

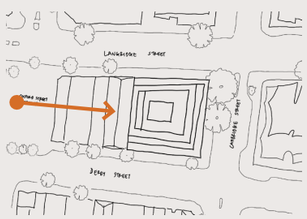




Oxford Street Reserve

Equitable Development Scenario to 28-34 Derby Street





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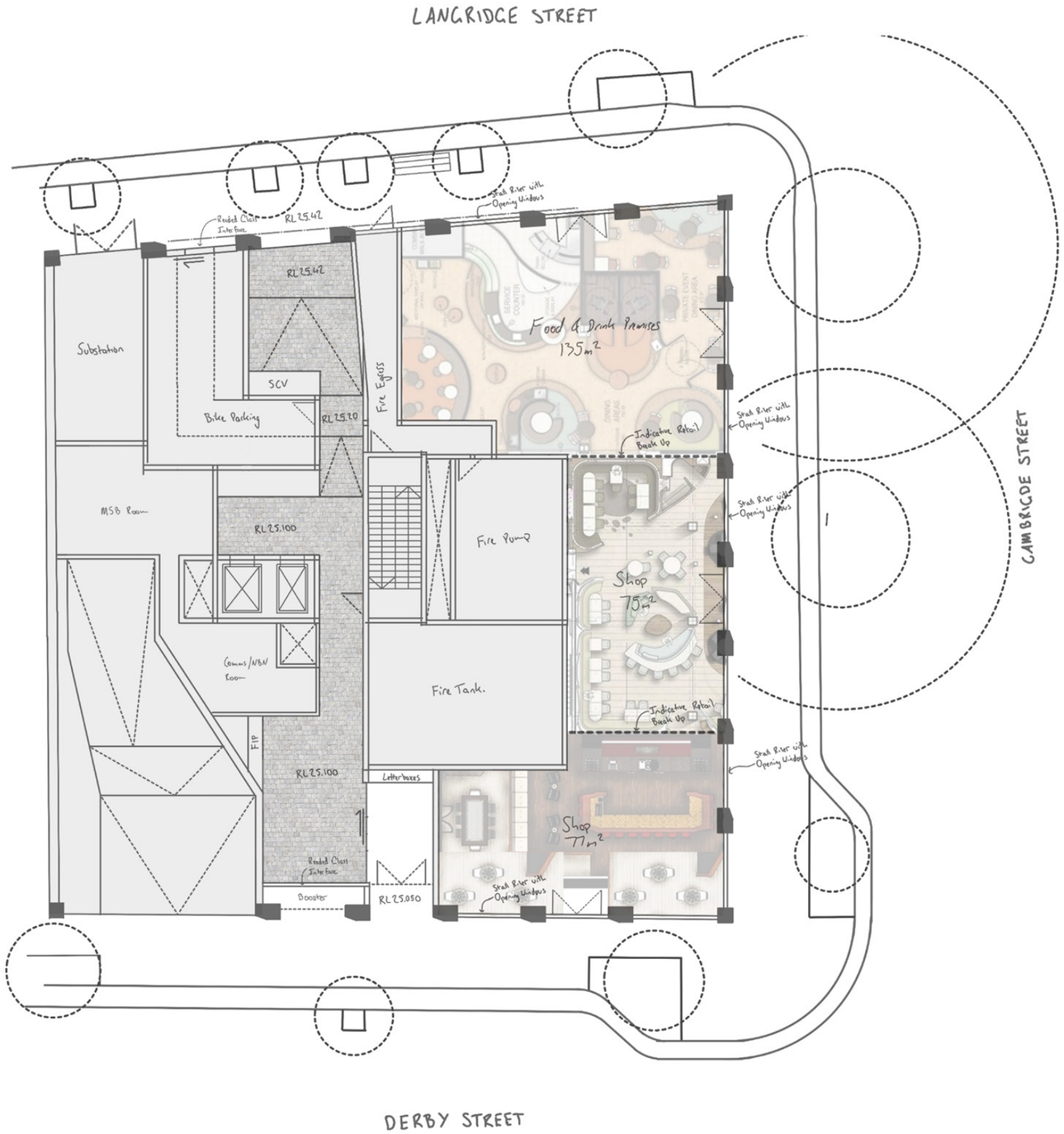
Ground Floor and Public Realm Improvements

The adjacent sketch proposes enhancements to the Ground Floor of 53 Cambridge Street, following the review of the City of Yarra and Hansen Urban Design Comments.

Specifically:

- The corner rebated entrances in the South East and North East corners are removed
- The corner columns remain and are integral to the design. They are a prevalent feature of the neighbourhood character, and given the Public Realm improvements the footpaths are generous around the corners of the site
- We believe the awnings are a strong feature of the design, and enable the facade language to be grounded. We are open to explore removing some, to focus on entrances, but would like continue presuing this design
- The Fire Booster has been repositioned to move the pedestrian entrance further along Derby Street, with Glazing behind allowing additional daylight in the entry lobby
- We have reconfigured the building services to pull off the facade wherever possible. We are unable to relocate the substation underground due to site and Citipower constraints
- We have added an additional lobby to Langridge Street
- We have relocated the bicycle parking, and allowed for all visitor parking, to the Langridge Street elevation to better tie into the local bike lanes along the Northern boundary
- All entry thresholds are intended to be flush to ensure equitable access to the internal spaces.
- We are happy to explore the integration of both Stall Risers and Opening windows to the retail tenancy facades
- The sketch plan includes all, except the Sewer Vent, public realm improvements. Whilst we would like to relocate the Sewer Vent, we are unclear of the cost and risk associated with this. We are committed to exploring the possibility though.



Attachment – Clause 58 Assessment

Clause 58 comprises design objectives and standards to guide the assessment of new residential development. Given the site's location within a built-up inner city residential area, strict application of the standard is not always appropriate, whether the proposal meets the objective is the relevant test.

The proposal complies with the following standards/objectives of Clause 58 as set out in the table below.

Clause 58 Objective and Standard	Complies with Standard or Objective Achieved?
Clause 58.02-1 – Urban Context To ensure that the design responds to the existing urban context or contributes to the preferred future development of the area. To ensure that development responds to the features of the site and the surrounding area. **Standard D1** The design response must be appropriate to the urban context and the site. The proposed design must respect the existing or preferred urban context and respond to the features of the site.	**Complies with Standard and Objective** These matters have been discussed previously within the Built Form assessment. The assessment has highlighted that the site is located within an area identified for mixed use and mid-rise development. The overall height and upper level setbacks have been previously discussed and would appropriately respond to the surrounding urban context. As such, compliance with this standard is achieved.
Clause 58.02-2 – Residential policy To ensure that residential development is provided in accordance with any policy for housing in the Municipal Planning Strategy and the Planning Policy Framework. To support higher density residential development where development can take advantage of public and community infrastructure and services. **Standard D2** An application must be accompanied by a written statement to the satisfaction of the responsible authority that describes how the development is consistent with any relevant policy for housing in the Municipal Planning Strategy and the Planning Policy Framework.	**Complies with Standard and Objective** As outlined within the report, the proposal is considered on-balance to be compliant with relevant Residential Policy objectives.
Clause 58.02-3 – Dwelling diversity	**Complies with Standard and Objective**

To encourage a range of dwelling sizes and types in developments of ten or more dwellings. **Standard D3** Developments of ten or more dwellings should provide a range of dwelling sizes and types, including dwellings with a different number of bedrooms.	The proposal is for a total of 28 dwellings, including 8 x 2 bedroom dwellings and 20 x 3 bedroom dwellings. This provides for a diverse mix of dwellings, and will cater for families, as encouraged by this Standard.
Clause 55.02-4 – Infrastructure To ensure development is provided with appropriate utility services and infrastructure. To ensure development does not unreasonably overload the capacity of utility services and infrastructure. **Standard D4** Development should be connected to reticulated services, including reticulated sewerage, drainage and electricity, if available. Development should not unreasonably exceed the capacity of utility services and infrastructure, including reticulated services and roads. In areas where utility services or infrastructure have little or no spare capacity, developments should provide for the upgrading of or mitigation of the impact on services or infrastructure.	**Complies with Standard and Objective** The proposal is located within an established area with existing utility services and infrastructure; there is no evidence to suggest that the proposed development would unreasonably overload the capacity of these existing services. A substation will be provided for the development. The standard and objective are met.
Clause 58.02-5 - Integration with the street To integrate the layout of development with the street. To support development that activates street frontage. **Standard D5** Development should be oriented to front existing and proposed streets. Along street frontage, development should:	**Complies with Standard and Objective subject to conditions** This has been discussed in the Public Realm assessment in the body of the main report. Conditions will require further changes to the ground floor layout to improve the development's integration with the street.

• Incorporate pedestrian entries, windows, balconies or other active spaces. • Limit blank walls. • Limit high front fencing, unless consistent with the existing urban context. • Provide low and visually permeable front fences, where proposed. • Conceal car parking and internal waste collection areas from the street. Development next to existing public open space should be designed to complement the open space and facilitate passive surveillance.	
Clause 58.03-1 – Energy efficiency To achieve and protect energy efficient dwellings and buildings. To ensure the orientation and layout of development reduce fossil fuel energy use and make appropriate use of daylight and solar energy. To ensure dwellings achieve adequate thermal efficiency. **Standard D6** Buildings should be: • Oriented to make appropriate use of solar energy. • Sited and designed to ensure that the energy efficiency of existing dwellings or small second dwellings on adjoining lots is not unreasonably reduced. Living areas and private open space should be located on the north side of the development, if practicable. Developments should be designed so that solar access to north-facing windows is optimised. Dwellings located in a climate zone identified in Table D1 should not exceed the maximum NatHERS annual cooling load specified in the following table.	**Complies with Standard and Objective subject to conditions** Redevelopment of the site located in an existing built-up area would make efficient use of existing infrastructure and services, and the proximity of the subject site to numerous public transport modes reduces residents and visitors from relying on private vehicles. Policy at Clauses 15.01-2S, 15.01-2L-01 and 19.03-3L of the Scheme encourage environmentally sustainable development, with regard to energy efficiency, building construction and ongoing management. The submitted Sustainability Management Plan (SMP) shows a BESS score of 61%, which exceeds 'best practice' (50% BESS score). The following are some of the development's key ESD commitments: • 61% of apartments are naturally cross-ventilated; • 7.5 star average NatHERS Energy Rating result; • 5kW solar PV system covering 5% roof area; • Water and energy efficient appliances and fixtures throughout; • 15,000L rainwater tank to harvest rainwater and use for toilets and landscape irrigation, achieving a STORM score of 100%; • Provision of resident and employee bicycle parking, above the requirements of the Scheme; • Electric vehicle infrastructure readiness proposed to all car parks. • All-electric development; • Individual metering. Council's ESD advisor reviewed the submitted SMP and the development plans, commenting that the following items need to be provided in order for the proposed ESD outcomes to be achieved:

Table D1 Cooling load **NatHERS climate zone** / **NatHERS maximum cooling load MJ/M² per annum** Climate zone 21 Melbourne / 30	• Satisfactory natural ventilation to dwellings except the single aspect dwellings (101, 103, 105, 201, 203, 205, 301, 303, 305, 401, 404) which have depths well over 5m. Recommend heat recovery ventilation to all single sided dwellings with balanced air supply and extraction. • Non-residential areas will have low VOC paints, adhesives, sealants, carpets and low formaldehyde levels in line with Green Star Buildings credits. Recommend low VOC strategy also applied to residential areas. • Sustainable products are committed to 'where deemed appropriate'. This is ambiguous and could lead to misinterpretation. Please clarify exactly what products will meet this 'sustainable' criteria or remove this and any other ambiguous language from the SMP. • 5 kW solar PV array proposed to rooftop, but roof plan shows five panels only. Update with an accurate depiction of a 5 kW array. These recommendations are generally reasonable for ensuring a good ESD outcome and would be included as conditions for amendment plans and an amended SMP. A condition will also require the bicycle parking provision to be consistent with what is shown on the development plans. Standard D6 requires dwellings located in Climate Zone 21 (Melbourne) to not exceed the NatHERS annual cooling load of 30mj/m2. The applicant's SMP provided cooling load analysis, identifying that no apartments exceeded a cooling load of 20.6 mj/m2 which is satisfactory. The objective and standard are met.
Clause 58.03-2 – Communal open space (COS) To provide communal open space that meets the recreation and amenity needs of residents. To ensure that communal open space is accessible, practical, attractive, easily maintained. To ensure that communal open space is integrated with the layout of the development and enhances resident amenity. **Standard D7**	**Objective met** The development is for 28 dwellings, thus the minimum requirement prescribed by the standard is 30 + (28 x 2.5), which equates to 100sqm. The development provides COS in the form of a 64qm roof terrace. A variation to the standard is considered acceptable considering each dwelling is also provided with generously sized balconies for their private recreational purposes. In terms of location, the proposed COS is well resolved in accordance with the requirements of the standard, given that: • Landscaped perimeter planters ensure mitigation of overlooking into lower level apartments; • Inclusion of canopy trees; • Designed to obscure views of the plant and services area when viewed from Cambridge and Langridge Streets;

A development of 10 or more dwellings should provide a minimum area of communal outdoor open space of 30 square metres. If a development contains 13 or more dwellings, the development should also provide an additional minimum area of communal open space of 2.5 square metres per dwelling or 220 square metres, whichever is the lesser. This additional area may be indoors or outdoors and may consist of multiple separate areas of communal open space. Each area of communal open space should be: • Accessible to all residents. • A useable size, shape and dimension. • Capable of efficient management. • Located to: • Provide passive surveillance opportunities, where appropriate. - Provide outlook for as many dwellings as practicable. - Avoid overlooking into habitable rooms and private open space of new dwellings. - Minimise noise impacts to new and existing dwellings and existing small second dwellings. Any area of communal outdoor open space should be landscaped and include canopy cover and trees	• Generous setbacks to ensure no unreasonable overlooking to existing habitable room windows (HRWs) and secluded private open space (SPOS); • Accessible to all residents, via two lifts; • North, east, and west aspects for optimal solar access. The objective is therefore met.
Clause 58.03-3 – Solar access to communal outdoor open space To allow solar access into communal outdoor open space. **Standard B8** The communal outdoor open space should be located on the north side of a building, if appropriate. At least 50 per cent or 125 square metres, whichever is the lesser, of the primary communal outdoor open space should receive a minimum of two hours of sunlight between 9am and 3pm on 21 June.	**Complies with Standard and Objective** The application does not include shadow diagrams for the COS on 21 June (i.e. the winter solstice). However, its location on the northern side of the roof and its north, east, and west orientations will ensure a very high level of solar access for the COS; and given the northerly buffer provided by Langridge Street, it is likely that future development to the north will not substantially overshadow this space. The standard has been met.
Clause 58.03-4 – Safety	**Complies with Standard and Objective, subject to conditions**

To ensure the layout of development provides for the safety and security of residents and property. **Standard D9** Entrances to dwellings should not be obscured or isolated from the street and internal accessways. Planting which creates unsafe spaces along streets and accessways should be avoided. Developments should be designed to provide good lighting, visibility and surveillance of car parks and internal accessways. Private spaces within developments should be protected from inappropriate use as public thoroughfares.	As discussed in the Public Realm section of this report, the proposed residential entrance as shown in the Sketch Plan is well resolved and will be formally addressed via a condition. The condition will also require the elevation to demonstrate a well-expressed residential entry on Langridge Street. A condition will also require appropriate lighting to be provided for the building entrances, including the residential entry from Derby Street as well as the main residential entry on Langridge Street. The standard and objective are met.
Clause 58.03-5 – Landscaping To provide landscaping that supports the existing or preferred urban context of the area and reduces the visual impact of buildings on the streetscape. To preserve existing canopy cover and support the provision of new canopy cover. To ensure landscaping is climate responsive, supports biodiversity, wellbeing and amenity and reduces urban heat. **Standard D10** Development should retain existing trees and canopy cover. Development should provide for the replacement of any significant trees that have been removed in the 12 months prior to the application being made. Development should: • Provide the canopy cover and deep soil areas specified in Table D2. Existing trees can be used to meet the canopy cover requirements of Table D2. • Provide canopy cover through canopy trees that are:	**Complies with Objective subject to conditions** The site has an area of 812sqm. Standard D10 prescribes for this site that: • 5% site area (i.e. 40.6sqm) include at least 1 Type A tree; • 12sqm of deep soil planting is provided. The Apartment Design Guidelines for Victoria (the ADGV) provides additional guidance for assessing the requirements of Clause 58. With respect to Standard D10, the ADGV sates that: *Where the deep soil standard cannot be met due to the urban context, alternative forms of landscaping should demonstrate equivalent canopy cover:* *Planting over structures and green facades and roofs can assist to integrate landscape into small or constrained sites* *Planters with adequate soil depth, soil quality, drainage and irrigation can support significant tree planting and climbing planting over structures to provide shade and vertical greenery.* The proposal includes the following landscaped areas: • Planter boxes within the two recessed entries and residential entry on Derby Street at ground level; • Planter boxes within the balustrades of private balconies;

- Located in an area of deep soil specified in Table D3. Where deep soil cannot be provided trees should be provided in planters specified in Table D3.
- Consistent with the canopy diameter and height at maturity specified in Table D4.
- Located in communal outdoor open space or common areas or street frontages.

- Comprise smaller trees, shrubs and ground cover, including flowering native species.
- Include landscaping, such as climbing plants or smaller plants in planters, in the street frontage and in outdoor areas, including communal outdoor open space.
- Shade outdoor areas exposed to summer sun through landscaping or shade structures and use paving and surface materials that lower surface temperatures and reduce heat absorption.
- Be supported by irrigation systems which utilise alternative water sources such as rainwater, stormwater and recycled water.
- Protect any predominant landscape features of the area.
- Take into account the soil type and drainage patterns of the site.
- Provide a safe, attractive and functional environment for residents.
- Specify landscape themes, vegetation (location and species), irrigation systems, paving and lighting.

Table D2 Canopy cover and deep soil requirements

Site area	Canopy cover	Deep soil
1000 square metres or less	5% of site area Include at least 1 Type A tree	5% of site area or 12 square metres whichever is the greater
1001 - 1500 square metres	50 square metres plus 20% of site area above 1,000 square metres Include at least 1 Type B tree	7.5% of site area
1501 - 2500 square metres	150 square metres plus 20% of site area above 1,500 square metres Include at least 2 Type B trees or 1 Type C tree	10% of site area
2501 square metres or more	350 square metres plus 20% of site area above 2,500 square metres Include at least 2 Type B trees or 1 Type C tree	15% of site area

- Planter boxes within the perimeter of the communal roof terrace balustrades, including provision of two trees including a Crepe Myrtle and Upright Olive.

The proposal does not comply with the Standard in terms of canopy cover as none of the proposed canopy cover is provided at ground level. However, the proposed landscaping is considered to achieve the objective for the following reasons:

- Extensive landscaping has been proposed across the development and has responded to the additional guidance provided within the ADGV;
- The subject site is located in the MUZ and Smith Street MAC where high site coverage and robust development is encouraged and the provision of substantial landscaping at ground level is impractical;
- The proposal includes smaller plants in planters along the street frontages and in outdoor areas, including the communal outdoor open space; and,
- The proposal provides a safe, attractive and functional environment for residents.

The submitted landscape plan was reviewed by Hansen who advised the landscape response is broadly supported, subject to the following recommendations:

(a) Foyer entrance planters relocated further west to avoid shading by structural column;
(b) Confirmation the species selection has had consideration to the surrounding environment, including impacts of passers-by, light conditions, wind conditions and direct sunlight;
(c) Additional planting at the communal terrace that incorporates herbs and dwarf varieties of citrus species for the enjoyment of residents;
(d) Provision of an outdoor tap for residents' use, in close proximity to the barbecue;
(e) Public realm improvements such as kerb outstands and additional street tree planting, public seating areas;
(f) Dimensions of the planter boxes included on the landscape plan; and
(g) Planter box detail to include depth of soil dimension.

Recommendation (a) will not be adopted, given the Sketch Plans will result in these recessed entries being built out and incorporated into the commercial tenancy floor spaces, as discussed in the Public Realm section above. Recommendations (b) – (d) and (f) - (g) will form conditions for an amended landscape plan should a permit issue. Recommendation (e) relates to public realm improvements. This has been discussed in the Public Realm assessment earlier in the report where conditions will require various

Table D3 Soil requirements for trees **Tree type** / **Tree in deep soil** Area of deep soil / **Tree in planter** Volume of planter soil / **Depth of planter soil** A: 12 square metres (min. plan dimension 2.5 metres); 12 cubic metres (min. plan dimension of 2.5 metres); 0.8 metre B: 49 square metres (min. plan dimension 4.5 metres); 28 cubic metres (min. plan dimension of 4.5 metres); 1 metre C: 121 square metres (min. plan dimension 6.5 metres); 64 cubic metres (min. plan dimension of 6.5 metres); 1.5 metre	streetscape improvements such as new kerb outstands, landscaping, etc. Based on these conditions, the proposed landscaping within the development is supported. The objective is met.
Clause 58.03-6 – Access objective To ensure that vehicle crossovers are designed and located to provide safe access for pedestrians, cyclists and other vehicles. To ensure the vehicle crossovers are designed and located to minimise visual impact. **Standard D11** Vehicle crossovers should be minimised. Car parking entries should be consolidated, minimised in size, integrated with the façade and where practicable located at the side or rear of the building. Pedestrian and cyclist access should be clearly delineated from vehicle access. The location of crossovers should maximise pedestrian safety and the retention of on-street car parking spaces and street trees. Developments must provide for access for service, emergency and delivery vehicles.	**Complies with Standard and Objective, subject to conditions** In accordance with Standard D11: • Only a single vehicle crossover is proposed on Derby Street. The development will utilise this existing crossover, which will be upgraded to meet standard requirements. • All existing crossovers on Cambridge Street will be removed and reinstated with footpath, kerb and channel. • The vehicle entrance is located on Derby Street which is considered a secondary frontage. • Separate pedestrian and cyclist entry is provided. This is currently located on Derby Street. However, a condition will require the main residential entry to be located on Langridge Street, in accordance with the Sketch Plan dated 19/06/2025. • A condition will require a convex mirror to facilitate pedestrian visibility to vehicles on Derby Street; • Access for service, emergency and delivery vehicles is available via Cambridge, Langridge and Derby Streets.

Clause 58.03-7 – Parking Location To provide convenient parking for resident and visitor vehicles. To protect residents from vehicular noise within developments. **Standard D12** Car parking facilities should: • Be reasonably close and convenient to dwellings. • Be secure. • Be well ventilated if enclosed. Shared accessways or car parks of other dwellings should be located at least 1.5 metres from the windows of habitable rooms. This setback may be reduced to 1 metre where there is a fence at least 1.5 metres high or where window sills are at least 1.4 metres above the accessway.	**Complies with Standard and Objective** The proposal includes basement car parking accessed via Derby Street, with access to the apartments via lifts and stairs. The vehicle entry is sufficiently separated from the proposed dwellings, which commence at Level 1 (i.e. the ground floor commercial uses and services/amenities area create a buffer between the vehicle access and car parking area and the nearest apartment dwellings). Notations on the basement plans also show the provision of a car park ventilation system. The parking location is otherwise provided conveniently and the standard and objective are considered met. Further discussion on the car parking provision is provided in the main report.
Clause 58.03-8 – Integrated water and stormwater management To encourage the use of alternative water sources such as rainwater, stormwater and recycled water. To facilitate stormwater collection, utilisation and infiltration within the development. To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site. **Standard D13** Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use. Buildings should be connected to a non-potable dual pipe reticulated water supply, where available from the water authority. The stormwater management system should be:	**Complies with Standard and Objective** The SMP and plans confirm the development is provided with a 15,000L rainwater tank which would be connected to the toilets on ground floor up to Level 3 as well as the landscaping irrigation system. The rainwater tank will be located in the Level 3 basement. Page 33 of the SMP outlines the maintenance requirements for the water tank. The STORM report provided achieves a score of 100% which is in line with the policy direction under Clause 19.03-3L (Water Sensitive Urban Design). Council's ESD advisor raised no concern with the proposed stormwater management and it is considered that the requirements of Clause 52.18 (Stormwater Management in Urban Development) have also been met. The standard and objective are met.

• Designed to meet the current best practice performance objectives for stormwater quality as contained in the *Urban Stormwater - Best Practice Environmental Management Guidelines* (Victorian Stormwater Committee, 1999). • Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.	
Clause 58.04-1 – Building setback To ensure the setback of a building from a boundary appropriately responds to the existing urban context or contributes to the preferred future development of the area. To allow adequate daylight into new dwellings. To limit views into habitable room windows and private open space of new and existing dwellings. To provide a reasonable outlook from new dwellings and existing small second dwellings. To ensure the building setbacks provide appropriate internal amenity to meet the needs of residents. **Standard D14** The built form of the development must respect the existing or preferred urban context and respond to the features of the site. Buildings should be set back from side and rear boundaries, and other buildings within the site to: • Ensure adequate daylight into new habitable room windows. • Avoid direct views into habitable room windows and private open space of new and existing dwellings and existing small second dwellings. Developments should avoid relying on screening to reduce views. • Provide an outlook from dwellings that creates a reasonable visual connection to the external environment.	**Complies with Standard and Objective** As outlined within the built form assessment of this report, the setbacks of the building are considered to achieve a good design response to the character of the surrounding area and are broadly compliant with the setback controls of DDO23. Further, the proposed massing arrangement allows for: • Minimal overlooking impacts, as discussed in the Off-site Amenity section of this report; • All apartments provided with unscreened balconies and windows, ensuring optimal outlook and *visual connection to the external environment as prescribed* by the Standard; • Good daylight access. The standard and objectives have been met.

• Ensure the dwellings are designed to meet the objectives of Clause 58.	
Clause 58.04-2 – Internal views To limit views into the private open space and habitable room windows of dwellings within a development. **Standard D15** Windows and balconies should be designed to prevent overlooking of more than 50 per cent of the private open space of a lower-level dwelling directly below and within the same development.	**Complies with Standard and Objective subject to conditions** Due to the siting and setbacks of the building, there will be no overlooking from balconies / windows to lower level apartments between Levels 1 - 4. At Level 4, views between the balconies will be restricted by 1.7m high privacy screens. The materials or transparency of these screens have not been notated and will be required via condition. At Level 5 a horizontal privacy and sunshade is proposed, which will obscure downward views from Levels 5 and above to the Level 4 balconies. These awnings will be 1.2m deep and will project from the north, south and east interfaces. The material of these awnings has not been notated and will be required via condition. There will be no internal overlooking opportunities between the upper levels (5-8). The standard and objective are met.
Clause 58.04-3 – Noise impacts To contain noise sources in developments that may affect existing dwellings or small second dwellings. To protect residents from external and internal noise sources. **Standard D16** Noise sources, such as mechanical plants should not be located near bedrooms of immediately adjacent existing dwellings or small second dwellings. The layout of new dwellings and buildings should minimise noise transmission within the site. Noise sensitive rooms (such as living areas and bedrooms) should be located to avoid noise impacts from mechanical plants, lifts, building services, non-residential uses, car parking, communal areas and other dwellings. New dwellings should be designed and constructed to include acoustic attenuation measures to reduce noise levels from off-site noise sources.	**Complies with Standard and Objective subject to conditions** The consideration of internal noise amenity (as well as assessment of Standard D16) is contained within the Noise Impacts subsection of the Off-site Amenity section of this report. This is due to the nature of the mixed-use development; as the consideration of noise impacts extend beyond the residential uses. The standard and objective are met.

Buildings within a noise influence area specified in Table D5 should be designed and constructed to achieve the following noise levels:

- Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am.
- Not greater than 40dB(A) for living areas, assessed LAeq,16h from 6am to 10pm.

Buildings, or part of a building screened from a noise source by an existing solid structure, or the natural topography of the land, do not need to meet the specified noise level requirements.

Noise levels should be assessed in unfurnished rooms with a finished floor and the windows closed.

Table D5 Noise influence area

Noise source	Noise influence area
Zone interface	
Industry	300 metres from the Industrial 1, 2 and 3 zone boundary
Roads	
Freeways, tollways and other roads carrying 40,000 Annual Average Daily Traffic Volume	300 metres from the nearest trafficable lane
Railways	
Railway servicing passengers in Victoria	80 metres from the centre of the nearest track
Railway servicing freight outside Metropolitan Melbourne	80 metres from the centre of the nearest track
Railway servicing freight in Metropolitan Melbourne	135 metres from the centre of the nearest track

Clause 58.04-4 – Wind impacts

To ensure the built form, design and layout of development does not generate unacceptable wind impacts within the site or on surrounding land.

Standard D17

Development of five or more storeys, excluding a basement should:

- not cause unsafe wind conditions specified in Table D6 in public land, publicly accessible areas on private land, private open space and communal open space; and
- achieve comfortable wind conditions specified in Table D6 in public land and publicly accessible areas on private land within a distance

Complies with Standard and Objective subject to conditions
Clause 15.01-1L (Building Design) seeks to minimise the potential for development, particularly taller buildings, to create adverse wind conditions in the public realm at street level through building siting and design. In respect of wind impacts, Council commissioned a peer review by VIPAC Consultants of the applicant's wind impact assessment and agrees with the conclusions that:

(a) The wind conditions in the streetscapes surrounding the proposed development would be expected to satisfy the walking comfort criterion at a minimum and the wind safety criterion;

of half the greatest length of the building, or half the total height of the building measured outwards on the horizontal plane from the ground floor building façade, whichever is greater.

Trees and landscaping should not be used to mitigate wind impacts. This does not apply to sitting areas, where trees and landscaping may be used to supplement fixed wind mitigation elements.

Wind mitigation elements, such as awnings and screens should be located within the site boundary, unless consistent with the existing urban context or preferred future development of the area.

Table D6 Wind conditions

Unsafe	Comfortable
Annual maximum 3 second gust wind speed exceeding 20 metres per second with a probability of exceedance of 0.1% considering at least 16 wind directions.	Hourly mean wind speed or gust equivalent mean speed (3 second gust wind speed divided by 1.85), from all wind directions combined with probability of exceedance less than 20% of the time, equal to or less than: • 3 metres per second for sitting areas, • 4 metres per second for standing areas, • 5 metres per second for walking areas.

(b) The wind conditions outside the main residential entrance located at centrally along the Derby Street frontage would be expected to satisfy the standing comfort criterion;

(c) The wind conditions outside the north and south-facing retail entrances that satisfy the standing comfort criterion;

(d) The wind conditions outside the east-facing retail entrance located within the southeastern recessed corner has been assessed to only satisfy the walking comfort criterion due to its proximity to the building corner and has been recommended to be moved away from the building corner or removed; and

(e) The wind conditions on the terraces over the entire proposed development have been assessed to satisfy the walking comfort criterion, as a minimum, and the safety criterion.

Overall, VIPAC confirm that the applicant's wind impact assessment uses the proper analysis and methodology to analyse the wind effects on the pedestrian level surrounding the proposed development and that the development would generate winds within the recommended wind comfort criterion. VIPAC also agree that the development would generate acceptable wind impacts to the surrounding area as well as proposed balconies and terraces, which achieve walking comfort criterion.

However, the above outcomes for wind impacts to the private balconies and roof terrace are not considered satisfactory by Council. The site is not within proximity to any significant areas of open space, and future occupants would be reliant on these outdoor areas for recreational needs. Regarding wind impacts to the communal roof terrace, Council relies on the VCAT decision for No. 84 Johnston Street, Fitzroy *(SMA No. 17 Pty Ltd v Yarra CC [2020] VCAT 1364 (11 December 2020)),* which supported more stringent criteria for outdoor areas within residential buildings, via the following order:

> *[111] The key concerns relating to the wind impacts are in respect of the rooftop communal open space area. The evidence is that walking criterion is an acceptable outcome for this area. The Council does not agree, arguing that sitting criterion should be achieved.*
>
> *[112] The rooftop space is an important area and will make a notable contribution to residents' amenity given its size, proportions, landscaping, opportunity for views and solar access. It will provide an attractive option for occupants and their visitors as an alternative to the individual balconies.*

	[113] According to the evidence, it is possible to create areas within the rooftop communal open space that achieve the sitting criteria, with reference being made to the use of vegetation and screens. We consider that an acceptable outcome would be achieved by ensuring that the designated sitting area (comprising a table and seating) is designed to meet the sitting criterion in order for occupants to experience comfortable conditions while in this part of the rooftop open space. This outcome would be conducive to the intended use and provide an acceptable level of amenity to encourage residents to occupy this area. On this basis, Council does not support the proposed wind conditions within the communal roof terrace as well as the private balconies. The applicant confirmed via email correspondence on 19 June 2026 that after consultation with their wind consultant (MEL), a 10sqm seated area of the communal roof terrace is capable of achieving sitting comfort criteria. This outcome is supported and will form a condition and will need to be demonstrated without the reliance on vegetation. Regarding the private balconies, a condition will require that all private balconies achieve a minimum standing comfort criterion. This is a reasonable outcome considering residents could elect to not use the terraces on windier days. The communal roof terrace will also provide a designated area that meets sitting comfort criterion as will be required via condition. The requirement for standing comfort criterion would ensure that all upper level balconies will benefit from the same level of amenity experienced by the Level 1 – Level 3 balconies, located on the podium. VIPAC advised that an increase to the parapet height would be required to achieve standing comfort criterion on the private balconies. Any mitigation measures, including an increase to parapet heights would need to be confirmed by a wind tunnel study. However, should this be the only available option, an increase to parapet heights would not result in substantial changes to the overall building envelope and would not have an unreasonable visual impact on the surrounding public realm. .
Clause 58.05-1 - Accessibility To ensure the design of dwellings meets the needs of people with limited mobility. **Standard D18**	**Complies with Standard and Objective subject to conditions** The Clause 58 summary table (Drawing TP60.002) confirms that 61% of apartments meet Standard D18. An assessment undertaken by Council officers also confirms that in order to meet the standard, the following must be met:

At least 50 per cent of dwellings should have:

- A clear opening width of at least 850mm at the entrance to the dwelling and main bedroom.
- A clear path with a minimum width of 1.2 metres that connects the dwelling entrance to the main bedroom, an adaptable bathroom and the living area.
- A main bedroom with access to an adaptable bathroom.
- At least one adaptable bathroom that meets all of the requirements of either Design A or Design B specified in Table D7.

Table D7 Bathroom design

	Design option A	Design option B
Door opening	A clear 850mm wide door opening.	A clear 820mm wide door opening located opposite the shower.
Door design	Either: ▪ A slide door, or ▪ A door that opens outwards, or ▪ A door that opens inwards that is clear of the circulation area and has readily removable hinges.	Either: ▪ A slide door, or ▪ A door that opens outwards, or ▪ A door that opens inwards and has readily removable hinges.
Circulation area	A clear circulation area that is: ▪ A minimum area of 1.2 metres by 1.2 metres. ▪ Located in front of the shower and the toilet. ▪ Clear of the toilet, basin and the door swing. The circulation area for the toilet and shower can overlap.	A clear circulation area that is: ▪ A minimum width of 1 metre. ▪ The full length of the bathroom and a minimum length of 2.7 metres. ▪ Clear of the toilet and basin. The circulation area can include a shower area.
Path to circulation area	A clear path with a minimum width of 900mm from the door opening to the circulation area.	Not applicable.
Shower	A hobless (step-free) shower.	A hobless (step-free) shower that has a removable shower screen and is located on the furthest wall from the door opening.
Toilet	A toilet located in the corner of the room.	A toilet located closest to the door opening and clear of the circulation area.

- All Type A bathrooms to locate the toilet in the corner of the room or otherwise provide a nib wall adjacent the toilet a minimum 700mm long;
- All Type B bathrooms to show the toilet located closest to the door;
- The dwelling entry and main bedroom entry widths of Apt 1.05 dimensioned at a minimum 850mm
- Apt 7.02 adaptable bathroom door to open outwards, be sliding or have readily removable hinges.

These deficiencies will be addressed as conditions.

Clause 58.05-2 – Building entry and circulation

To provide each dwelling and building with its own sense of identity.

To ensure the internal layout of buildings provide for the safe, functional and efficient movement of residents.

To ensure internal communal areas provide adequate access to daylight and natural ventilation.

Standard D19

Entries to dwellings and buildings should:

- Be visible and easily identifiable.
- Provide shelter, a sense of personal address and a transitional space around the entry.

The layout and design of buildings should:

Complies with Objective subject to conditions

As previously discussed under the Safety objective and also the Public Realm section of the main report, the building entrances are considered safe and well designed, subject to conditions. Per the Sketch Plan dated 19/06/2025 the main residential entry will be relocated to the Langridge Street frontage. A secondary entrance will be retained on Derby Street. Conditions will require these entries to be well lit and provide a sense of address. Separate entrances are provided directly from the street to the commercial tenancies at ground level.

The ground level lobby will receive access to natural light and ventilation. Awnings are proposed along all three street frontages to provide for weather protection. These are supported. However, the breaks in the awnings undermine their capacity to provide adequate weather protection, particularly during wet weather. Their clearance above footpath level is also non-compliant with the Victorian Building Regulations 2018. A condition will require these awnings to maintain appropriate clearances above the footpath and be modified to improve their weather protection.

• Clearly distinguish entrances to residential and non-residential areas.
• Provide windows to building entrances and lift areas.
• Provide visible, safe and attractive stairs from the entry level to encourage use by residents.
• Provide common areas and corridors that:
  ○ Include at least one source of natural light and natural ventilation.
  ○ Avoid obstruction from building services.
  ○ Maintain clear sight lines.
	The corridors to the upper levels will not receive natural light and ventilation. The lack of natural light is acceptable considering the relatively small circulation area. However, a condition will require provision of mechanical ventilation to these spaces.
	
	The objective is met.

Clause 58.05-3 – Private open space To provide adequate private open space for the reasonable recreation and service needs of residents. **Standard D20** A dwelling should have private open space consisting of at least one of the following: • An area at ground level of at least 25 square metres, with a minimum dimension of 3 metres and convenient access from a living room. • A balcony with at least the area and dimensions specified in Table D8 and convenient access from a living room. • An area on a podium or other similar base of at least 15 square metres, with a minimum dimension of 3 metres and convenient access from a living room. • An area on a roof of 10 square metres, with a minimum dimension of 2 metres and convenient access from a living room. If a cooling or heating unit is located on a balcony, the minimum balcony area specified in Table D8 should be increased by at least 1.5 square metres. If the finished floor level of a dwelling is 40 metres or more above ground level, the requirements of Table D8 do not apply if at least the area specified in Table D9 is provided as living area or bedroom area in addition to the minimum area specified in Table D11 or Table D12 in Standard D25.	**Complies with Standard and Objective** The Clause 58 plans confirm that all apartments will comply with the standard, with all apartments providing balconies that exceed the minimum specifications of the standard. A range of balcony sizes are proposed, from 13sqm up to 84sqm which will cater to diverse household types and needs. The standard and objective are met.



Table D8 Balcony size

Orientation of dwelling	Dwelling type	Minimum area	Minimum dimension
North (between north 20 degrees west to north 30 degrees east)	All	8 square metres	1.7 metres
South (between south 30 degrees west to south 30 degrees east)	All	8 square metres	1.2 metres
Any other orientation	Studio or 1 bedroom dwelling	8 square metres	1.8 metres
	2 bedroom dwelling	8 square metres	2 metres
	3 or more bedroom dwelling	12 square metres	2.4 metres

Table D9 Additional living area or bedroom area

Dwelling type	Additional area
Studio or 1 bedroom dwelling	8 square metres
2 bedroom dwelling	8 square metres
3 or more bedroom dwelling	12 square metres

View table in full screen

Clause 58.05-4 - Storage

To provide adequate storage facilities for each dwelling.

Standard D21

Each dwelling should have convenient access to usable and secure storage space.

The total minimum storage space (including kitchen, bathroom and bedroom storage) should meet the requirements specified in Table D10.

Table D10 Storage

Dwelling type	Total minimum storage volume	Minimum storage volume within the dwelling
Studio	8 cubic metres	5 cubic metres
1 bedroom dwelling	10 cubic metres	6 cubic metres
2 bedroom dwelling	14 cubic metres	9 cubic metres
3 or more bedroom dwelling	18 cubic metres	12 cubic metres

Complies with Standard and Objective
All apartments exceed the applicable minimum storage requirements without reliance on basement storage cage. Some storage cages are shown in the basement levels however it is unclear which apartments these have been allocated to. This will be addressed via condition. The standard and objective are met.

Clause 58.06-1 – Common property

To ensure that communal open space, car parking, access areas and site facilities are practical, attractive and easily maintained.

To avoid future management difficulties in areas of common ownership.

Standard D22
Developments should clearly delineate public, communal and private areas.

Common property, where provided, should be functional and capable of efficient management.

Complies with Standard and Objective
The proposed common property areas (with respect to the dwellings) include:

- All basement areas;
- Residential entrance and lobby at ground floor;
- All residential corridors, stairwells and lifts;
- The communal roof terrace including all landscaping.

Broadly speaking, these are clearly delineated and would not create areas which are difficult to maintain into the future. The lobby and vehicle access areas are well conceived as discussed throughout this report. The standard is met.

Clause 58.06-2 – Site services To ensure that site services are accessible and can be installed and maintained. To ensure that site services and facilities are visually integrated into the building design or landscape. **Standard D23** Development should provide adequate space (including easements where required) for site services to be installed and maintained efficiently and economically. Meters and utility services should be designed as an integrated component of the building or landscape. Mailboxes and other site facilities should be adequate in size, durable, water-protected, located for convenient access and integrated into the overall design of the development.	**Complies with Standard and Objective subject to conditions** As discussed in the Public Realm assessment in the main report, the Langridge Street frontage is heavily dominated by site services. The Sketch Plan dated 19/06/2025 seeks to address these issues by locating services to more internal areas of the building. The Langridge Street frontage would consequently accommodate the bike store and main residential entry, which will improve activation to Langridge Street. The sketch plan shows the letterboxes will be located within the secondary residential entry from Derby Street. However, given the primary entrance will be via Langridge Street, a condition will require the mailboxes to be located closer to this entrance, to improve the functionality of the ground level layout. The fire pump room and substation doors will open beyond the Langridge Street alignment, as will the fire booster cupboard doors within Derby Street. Conditions will require notations to confirm these doors will open a maximum 180 degrees and will be latched to the building when open. The standard and objective are met.

Clause 58.08-3 – Waste and recycling
 	
To ensure dwellings are designed to encourage waste recycling.
 	
To ensure that waste and recycling facilities are accessible, adequate and attractive.
 	
To ensure that waste and recycling facilities are designed and managed to minimise impacts on residential amenity, health and the public realm.
 	
Standard D24
Developments should include dedicated areas for:
• Waste and recycling enclosures which are:
  ○ Adequate in size, durable, waterproof and blend in with the development.
  ○ Adequately ventilated.
  ○ Located and designed for convenient access by residents and made easily accessible to people with limited mobility.
• Adequate facilities for bin washing. These areas should be adequately ventilated.
	Complies with Standard and Objective
	Waste storage is proposed within the Level 1 basement and will include separate facilities for residential and commercial waste. The submitted waste management plan (WMP) confirms that waste will be collected by a private contractor, which will take place within the Level 1 basement.
	
	Waste collection will take place outside of the peak traffic generating periods to minimise potential disruption to residents and commercial staff. Swept path diagrams demonstrating vehicle access entering and exiting the site in a forwards direction have been provided. This has been reviewed by Council's engineering unit, who confirmed these turning movements are satisfactory.
	
	Council's City Works – Waste Management unit have reviewed the WMP and confirm that it is satisfactory.
	
	The standard and objective are met.

• Collection, separation and storage of waste and recyclables, including where appropriate opportunities for on-site management of food waste through composting or other waste recovery as appropriate. • Collection, storage and reuse of garden waste, including opportunities for on-site treatment, where appropriate, or off-site removal for reprocessing. • Adequate circulation to allow waste and recycling collection vehicles to enter and leave the site without reversing. • Adequate internal storage space within each dwelling to enable the separation of waste, recyclables and food waste where appropriate. Waste and recycling management facilities should be designed and managed in accordance with a Waste Management Plan approved by the responsible authority and: • Be designed to meet the better practice design options specified in *Waste Management and Recycling in Multi-unit Developments* (Sustainability Victoria, 2019). • Protect public health and amenity of residents and adjoining premises from the impacts of odour, noise and hazards associated with waste collection vehicle movements.	
Clause 58.06-4 – External walls and materials To ensure external walls use materials appropriate to the existing urban context or preferred future development of the area. To ensure external walls endure and retain their attractiveness. **Standard D25** External walls should be finished with materials that: • Do not easily deteriorate or stain. • Weather well over time. • Are resilient to the wear and tear from their intended use. External wall design should facilitate safe and convenient access for maintenance.	**Complies with Standard and Objective** The proposed materials are of a high quality and respond well to the surrounding character as has been discussed in the Built Form section of this report. A condition will require a Façade Strategy to ensure to ensure the materials are reviewed prior to construction with a higher degree of detail provided to ensure they are of a high architectural quality in accordance with the plans submitted to date. The standard and objective are met.
Clause 58.07-1 – Functional layout	**Complies with Standard and Objective subject to conditions** Dimensions of the habitable rooms are provided on the Clause 58 plans, demonstrating that the proposal complies with the standard for all apartments.

To ensure dwellings provide functional areas that meet the needs of residents.

Standard D26

Bedrooms should:

- Meet the minimum internal room dimensions specified in Table D11.
- Provide an area in addition to the minimum internal room dimensions to accommodate a wardrobe.

Table D11 Bedroom dimensions

Bedroom type	Minimum width	Minimum depth
Main bedroom	3 metres	3.4 metres
All other bedrooms	3 metres	3 metres

Living areas (excluding dining and kitchen areas) should meet the minimum internal room dimensions specified in Table D12.

Table D12 Living area dimensions

Dwelling type	Minimum width	Minimum area
Studio and 1 bedroom dwelling	3.3 metres	10 sqm
2 or more bedroom dwelling	3.6 metres	12 sqm

Regarding the bedrooms, the Clause 58 summary table confirms that all main bedrooms comply with Standard D26. However, the main bedroom of Apt 1.04 has a minimum width of 2.95m instead of the required 3m. There is adequate space to accommodate a minimum 3m dimension and as such a condition will require the plans to be updated accordingly.

The Clause 58 plans confirm all secondary bedrooms have 3m x 3m dimensions, except for Apt 4.03 Bedroom 2. There is adequate space to accommodate 3m x 3m dimensions in this room and as such this will be required via condition.

All bedrooms are provided with built in robes in addition to the minimum room dimensions.

The Clause 58 summary table confirms all living rooms comply with the minimum dimension and area requirements. However, a review of the plans confirms that the living rooms are not provided within the minimum 3.6m dimension (3.375m is provided). There is ample area to be able to accommodate a minimum dimension of 3.6m without obstructing dining tables, and as such a condition will require the plans to be updated accordingly.

The standard and objective are met.

Clause 58.07-2 – Room depth

To allow adequate daylight into single aspect habitable rooms.

Standard D27

Complies with Objective subject to conditions
Level 1-7 apartments have floor to ceiling heights of 2.7m. Level 8 has a 3m floor to ceiling height, with the maximum room depth being 7.5m.

All apartments exceed the maximum 6.75m room depth. However, as the rooms combine the living area, dining area and kitchen, the kitchen is located furthest from the

Single aspect habitable rooms should not exceed a room depth of 2.5 times the ceiling height. The depth of a single aspect, open plan, habitable room may be increased to 9 metres if all the following requirements are met: • The room combines the living area, dining area and kitchen. • The kitchen is located furthest from the window. • The ceiling height is at least 2.7 metres measured from finished floor level to finished ceiling level. This excludes where services are provided above the kitchen. The room depth should be measured from the external surface of the habitable room window to the rear wall of the room.	window and ceiling height is at least 2.7m, the room depth can be increased to 9m. Except for Apt 1.05, all room depths are no deeper than 9m. Apt 1.05 has a maximum 9.78m. A variation is supported considering the living area is located closest to the windows and that the kitchen is located within the 9m maximum depth area. However, a condition will require the Clause 58 table to be updated to remove this compliance claim from this apartment. Level 8 is dual aspect and is not subject to this standard. The objective is met.
Clause 58.07-3 – Windows objective To allow adequate daylight into new habitable room windows. **Standard D28** Habitable rooms should have a window in an external wall of the building. A window may provide daylight to a bedroom from a smaller secondary area within the bedroom where the window is clear to the sky. The secondary area should be: • A minimum width of 1.2 metres. • A maximum depth of 1.5 times the width, measured from the external surface of the window.	**Complies with Standard and Objective** The standard prescribes that habitable rooms should contain a window within an external wall of the building. All habitable rooms comply with this requirement. The standard and objective are met.
Clause 58.07-4 – Natural ventilation To encourage natural ventilation of dwellings. To allow occupants to effectively manage natural ventilation of dwellings. **Standard D29**	**Complies with Standard and Objective** The Clause 58 plans demonstrate that 61% of dwellings (17 dwellings of 28) achieve the cross ventilation standard.

The design and layout of dwellings should maximise openable windows, doors or other ventilation devices in external walls of the building, where appropriate. At least 40 per cent of dwellings should provide effective cross ventilation that has: • A maximum breeze path through the dwelling of 18 metres. • A minimum breeze path through the dwelling of 5 metres. • Ventilation openings with approximately the same area. The breeze path is measured between the ventilation openings on different orientations of the dwelling.	

hansen

Urban Design Memo

To:	Erryn Megennis	Date:	16/05/2025
Company:	City of Yarra	From:	Hansen Urban Design Team
Re:	**53-57 Cambridge Street, Collingwood**		

Thank you for the opportunity to review the application package for this 9 storey mixed-use development at **53-57 Cambridge Street, Collingwood**. Following our site inspection, we have reviewed the relevant Planning Scheme provisions including DDO23 and Architectural Plans Rev B prepared by Warren and Mahoney Living Australia Pty Ltd dated 28 March 2025, the associated Urban Context report and landscape plans prepared by and undertaken an analysis of the urban context and on our own intimate knowledge of Collingwood.

We provide the following assessment in relation to urban design matters:

Site and context

The subject site is rectangular in shape, occupying a corner position with frontages to Cambridge Street (west), Langridge Street (north), and Derby Street (south). The primary frontage is 30.0m along Cambridge Street and the secondary frontage of 28.4m directly fronting Langridge Street and 28.1m directly fronting Derby Street. The total site area is 812.69 m^2. The built form extends to the property boundaries along all street frontages and comprises of a 2 storey commercial brick building currently unoccupied. Along the Cambridge Street boundary, ground floor carparking is provided for 10 car spots directly accessing the street via a crossover spanning the full block width.

The subject site is located within the inner urban neighbourhood of Collingwood, an area undergoing ongoing transition and intensification. The surrounding context is characterised by a mix of heritage buildings, warehouse conversions, and more recent medium to high-density developments. The area is well serviced by public transport, with Tram Route 86 operating along Smith Street near the Langridge Street intersection, and Tram Routes 12 and 109, as well as Bus Routes 302, 303, 304, 305, 309, 318, 350, 905, 906, 907 and 908, running along Victoria Street.



Site Context (nearmap)

The key site interface conditions are as follows:

- To the immediate **west** is 28-30 Derby Street, a double storey brick building with a gabled parapet, currently occupied by 'Australian Galleries', the property fronts both Derby and Langridge Street. Further west is 30-34 Oxford Street a double storey office building also with gabled parapet design, fronting Derby, Langridge and Oxford Street. Adjacent is the Oxford Street Reserve located at 15 Langridge Street. Previously a local two-way street with a road reserve approximately 20m wide, it is now converted to a park with timber deck area with seating, lawn space and garden beds.
- Beyond the reserve, to the **west**, are three fine grain, double storey residential dwellings at 18, 20, and 22 Derby Street. Further along the street, at 10, 12, 14-16 Derby Street contain double storey period dwellings.
- To the immediate **north** is Langridge Street, an approximately 20m-wide Main Road reserve with two-way traffic, a central median strip, dedicated cycle lanes, parallel parking and footpaths on both sides. Directly across the street at 61 Cambridge Street, is a 9 storey apartment complex with a 4 storey street wall and Ground Floor bar and diner. There is a 4.4m wide access path between 61 Cambridge St and 40 Oxford St with stairs and raised planter boxes. This development fronts Langridge, Cambridge and Oxford Street, and wraps around a 40 Oxford Street located to its north and west boundary which contains a double storey office building.
- To the immediate **east** is Cambridge Street, a local two-way street with a road reserve approximately 20m wide, with street trees and parallel parking on both sides. Across the street, at 68 Cambridge Street, an island site with all interfaces fronting the street. The development is a 14 storey mixed use apartment building with commercial and retail uses. The building features a double storey street wall formed by a retained heritage brick façade, above which rises a 12 storey tower.
- To the immediate **south** is Derby Street, a local two-way street with a road reserve approximately 20m wide, with street trees and parallel parking on the north and 45 degree angled parking on the south of the street. Across the street, are 4 fine grain double storey buildings. Located at 45 Derby Street is a red brick corner building with a café at ground level. Adjacent to this, at 43 Derby Street, is a retail premises. Abutting it at 41 Derby Street is an office building, followed by 39 Derby Street, a brick dwelling. At 37 Derby Street is a single-storey gallery space and at 35 Derby Street is a fine grain 2 storey office space.



Subject site, Cambridge Street frontage



West – Subject site southern boundary abutting 28-30 Derby Street



North – 61 Cambridge Street



East – 68 Cambridge Street



South – fine grain double storey buildings along Derby Street

Planning Policy

The subject site is located within the **Mixed Use Zone (MUZ)** which seeks to:

- *To provide for a range of residential, commercial, industrial and other uses which complement the mixed-use function of the locality.*
- *To provide housing at higher densities*
- *To encourage development that responds to the existing or preferred neighbourhood character of the area.*
- *To facilitate the use, development and redevelopment of land in accordance with the objectives specified in a schedule to this zone.*

It is affected by the **Design and Development Overlay – Schedule 23 (DDO23)** which seeks the following design objectives:

- *To support mixed-use form on infill sites with a prominent street-wall edge, incorporating upper level setbacks and high-quality design features to create a distinction between lower and upper levels.*
- *To ensure the scale and form of development is low-rise to mid-rise which is responsive to the topography of the precinct and provides a suitable transition in height as the land slopes upwards, while minimising amenity impacts to existing residential properties, including visual bulk, overlooking and overshadowing.*
- *To protect the industrial, residential and institutional built heritage of the precinct and maintaining the prominence of the corner heritage buildings on Wellington Street.*
- *To ensure development respects individual and groups of heritage buildings through recessive upper levels and a transition in scale from taller form towards the interface with heritage buildings.*
- *To promote and encourage pedestrian-oriented, high quality urban design outcomes through street edge activation and protect footpaths and public open spaces from loss of amenity through overshadowing.*



Excerpt from DDO23, built form controls.

The subject site is also affected by the **Environment Audit Overlay (EAO)**, and the **Development Contributions Plan Overlay – Schedule 1 (DCPO1)** however these have no built form implications and therefore are considered irrelevant from an urban design perspective.

The following State and Local planning policies are considered relevant:

- *Clause 02.03-1 – Settlement;*
- *Clause 02.03-4 – Built Environment & Heritage;*
- *Clause 11 – Settlement;*
- *Clause 11.03-1S – Activity Centres;*
- *Clause 11.03-1L – Activity Centres;*
- *Clause 15 – Built Environment and Heritage;*
- *Clause 15.01-1S – Urban Design;*
- *Clause 15.01-1L - Urban Design;*
- *Clause 15.01-2S – Building Design;*
- *Clause 15.01-2L - Building Design;*
- *Clause 15.01-2L-02 – Landmarks; and*
- *Clause 15.01-2S – Neighbourhood Character.*
- *Clause 16 – Housing*
- *Clause 16.01-1L – Location of Residential Development*
- *Clause 58 Apartment Developments*

Other relevant documents include:

- *Collingwood Built Form Framework (2017);*
- *Yarra Housing Strategy (2018);*
- *Smith Street Built Form Framework (2019);*
- *Plan Melbourne: Metropolitan Planning Strategy (2017);*
- *Urban Design Guidelines Victoria (2017); and*
- *Victorian Government, Urban Design Charter (2010).*



Zones



DDO23



Heritage Overlays

The Proposal

The proposal seeks the construction of a 9 storey mixed use building, with retail, and food & drink on the Ground Floor. From Level 1 onwards, the upper floors are dedicated entirely to residential apartments. Specifically, key components of the proposal are as follows:

- 3 Levels of basement car parking (49 spaces). The basement is accessed via the existing crossover on the rear southern boundary to Derby Street.
- The Ground Floor includes retail space (193m^2), food and drink (102m^2), lobby (162m^2), communal lounge (13m^2), and secure bicycle storage (33 spaces). Pedestrian entry points are provided on Cambridge Street.
- 8 levels of apartments, comprising a mixture of 2 and 3 bedroom apartments (total 28 apartments).
- The roof includes a Rooftop Terrace (54m^2), semi-surrounded by planter boxes and landscape.
- The building reaches an overall height of 30.64m with a 4 storey street wall that rises to 14.49m, as measured from the South Elevation.
- The architectural design features a modular brick façade with rectilinear framing and integrated landscape planters. Horizontal and vertical articulation define the street wall, with upper levels recessed to reduce visual bulk and enhance solar access. Warm-toned masonry and a glazed street frontage along Cambridge Street activates the public realm and supports pedestrian amenity. The street wall includes vertical elements that align with the surrounding built form. Vertical green elements and structured planting are incorporated on balconies and terraces, softening the façade. Cladding comprises face brickwork, metal cladding, and rendered concrete.



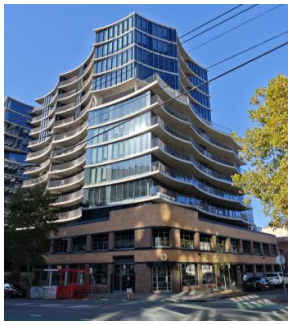
Artist's Render of the proposal as viewed from Cambridge St looking southwest

Urban Design Assessment

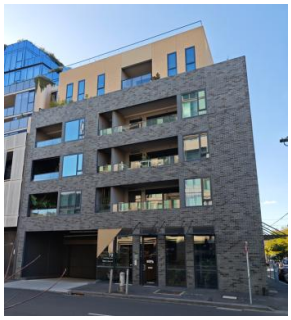
Strategic Context and Urban Form

- At a strategic level, the Yarra Planning Scheme seeks to reinforce Yarra's neighbourhoods by directing mid-rise buildings to appropriate locations, within major neighbourhood activity centres, employment areas, major regeneration areas and along boulevards. Clause 02.03-4 also seeks to *'ensure mid-rise buildings are in accordance with any building height requirements set out in the relevant zone or overlay, or where there are no building height requirements specified, having regard to the physical and strategic context of the site.'*
- Clause 15.01-1S seeks to *'require development to respond to its context in terms of character, cultural identity, natural features, surrounding landscape and climate.'*
- Clause 15.01-2L seeks for *building forms to 'Reflect and respond to streetscape elements, including:*
  - Pattern of development
  - Building Spacing'
- Councils' ambitions regarding building form and scale is further contemplated in Clause 15.01-2L (Building Height) and seeks to *'design development to reflect and respond to streetscape elements, including pattern of development and building spacing'*. Additionally, regarding building height it seeks to *'support mid-rise development that provides a transitional scale to the building in adjoining low-rise neighbourhoods to protect amenity and discourage visual bulk'*.
- The subject site is located in an area subject to Schedule 23 to Clause 43.02 Design and Development overlay (DDO23). This overlay has been adopted through amendment C293yara as a permanent control over development. It seeks to *'foster an emerging, contemporary, mixed-use form on infill sites with a prominent street-wall edge, incorporating upper level setbacks and high-quality design features that create a distinction between lower and upper levels.'*
- South Collingwood has been subject to significant investment in development and change over more than a decade, most recently guided by Council's built form Built Form Review (2018) and Collingwood South Mixed Use Precinct Draft Yarra Planning Scheme Amendment C293yara (2022). These planning documents guided development on recent developments located within the immediate context of the site, including 68 Cambridge Street.
- The Yarra Housing Strategy (2018) identifies the site in a 'High Change' location. The strategy expects that *'high change areas will support increased residential densities and housing diversity through mixed use, infill and urban renewal apartment development that will establish new character for a site of precinct.'*

We consider that the project meets the strategic aspirations for the site and support the development of this site as a multi-level mixed use apartment building.



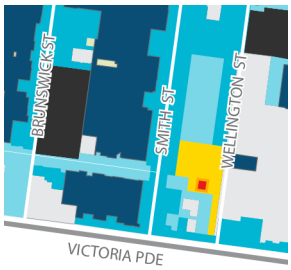
68 Cambridge Street (13 storey)



70 Cambridge Street (6 storey)



16 – 20 Langridge St. (9 storey)



Extract from Yarra Housing Strategy indicating High Change area (yellow). Site is red dot.

Site Context

The subject site is located in an area that is experiencing substantial change. This is primarily through the redevelopment of sites with buildings of substantially increased height and mass. These comprise a mixture of buildings that are entirely new constructions, with many others expressing former uses and buildings at the lower levels. This creates a diverse local character, with a broad mixture of building forms and shapes.

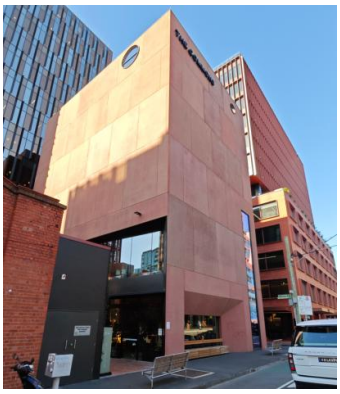
The site is located within the Smith Street Major Activity Centre, which is identified as '*an areas suitable for further development and housing growth as per Plan Melbourne 2017 – 2050 and Council's Housing Strategy*' (Draft Amendment C293YARA Explanatory Report). DDO23 reflects this consideration through its objectives and built form controls.

DDO23 seeks to '*To protect the industrial, residential and institutional built heritage of the precinct…*' and to '*promote and encourage pedestrian-oriented, high quality urban design outcomes through street edge activation…*'

- We consider the site plan a good response to the site with retail uses fronting Cambridge Street replacing the existing multi-vehicle crossovers, and activating the Cambridge Street Frontage. The proposed shop / café wraps around Derby and Langridge Street, contributing to their activation. This is supplemented by the Bicycle storage area and main entrance on Derby Street further contributing to activation. We note that Services are located along Langridge Street, comprising the substation, fire tank and fire pump room.
- While we support the overall approach, we do recommend the following refinements to improve the overall site planning and response to the public realm:
  - We consider that the ground floor elevation should extend to the northeast and south east site corners, avoiding the corner recess entries. These are potential 'hiding places' at night time, and are inconsistent with the prevailing architectural character where buildings form continuous unbroken corners. We note DDO23's preference for minimum 1m x 1m splays to facilitate pedestrian sightlines. We consider the grounding of the building with corner masonry columns a good response to the local character, and consider that terminating the building at this corner is consistent with the treatment applied consistently at other prominent corners and reflects the local character.
  - We note and consider appropriate the retention of the existing street trees, noting that there may be an opportunity to re-establish a street tree at the southern end of the Cambridge Street frontage.
  - We consider that awnings should either be used directly over entrances, or preferably extend the entire length of Langridge Street, wrapping around the corners into Derby and Langridge Street. The proposed intermittent array of separate awnings invites future



Subject site indicating multiple crossovers to Cambridge Street.



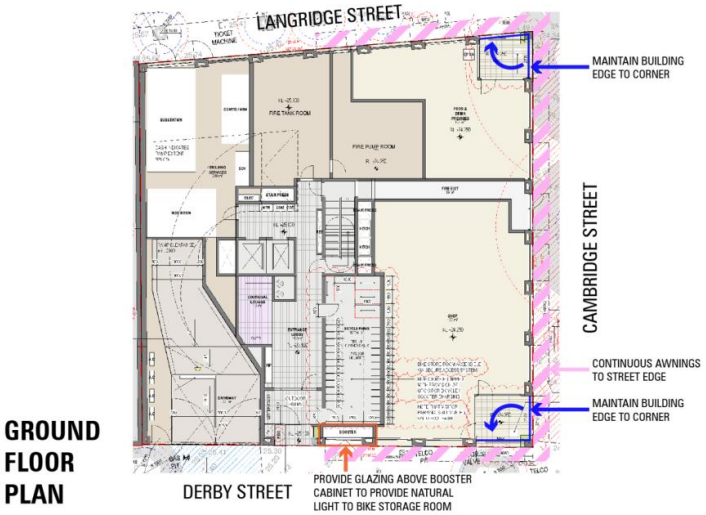
60 Wellington Street above and 104 Cambridge Street below – illustrating the diversity of recent development.





Large Street Trees (Plane Trees) at northern end of site fronting Cambridge Street.

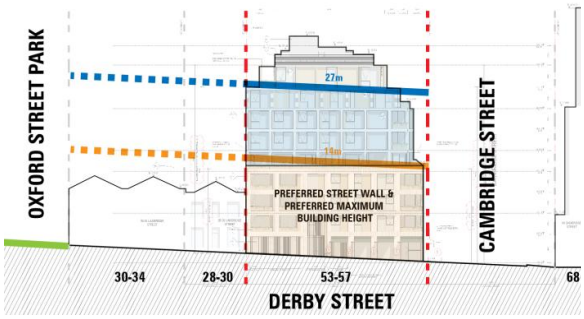
maintenance and drainage issues. We note that the local context comprises a mixture of both heritage and new buildings (and a combination of the above) on which awnings are either absent or located immediately over entrances. This contributes to the local character of street walls extending to the ground without the interruption of awnings. Consequently, we consider that limiting the number of awnings would be an acceptable site response. However, if the number of awnings are limited, these should be located above entrances and at other locations where people may congregate.



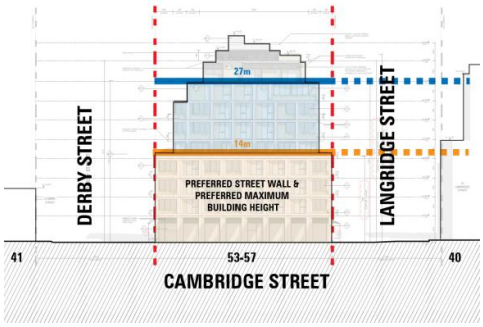
Overall height and massing

Overall Height

- DDO23 establishes a preferred maximum height of 27m. The subject site experiences a fall to the east of approximately 1.6m, resulting in a significant variation in building height from west to east.
- The proposed height to the top of level 9 varies between 29.1m (east) amd 30.7m (west). This excludes the 3.0m additional height provided for access to the roof terrace, plus approximately 1.5m lift overun.
- The site benefits from recent developments at both 68 Cambridge Street and 16 – 20 Langridge Street. These developments have building heights of approximately 39.6m (west elevation) and approximately 32.8m respectively (based on survey information provided by the applicant). Although the building at 68 Cambridge Street benefits from a higher preferred maximum building height of 40m, it nevertheless provides a significant step increase in height from the subject site.

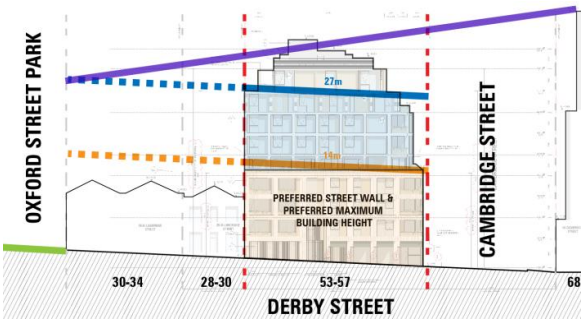


DDO23 Preferred Street wall and building heights.



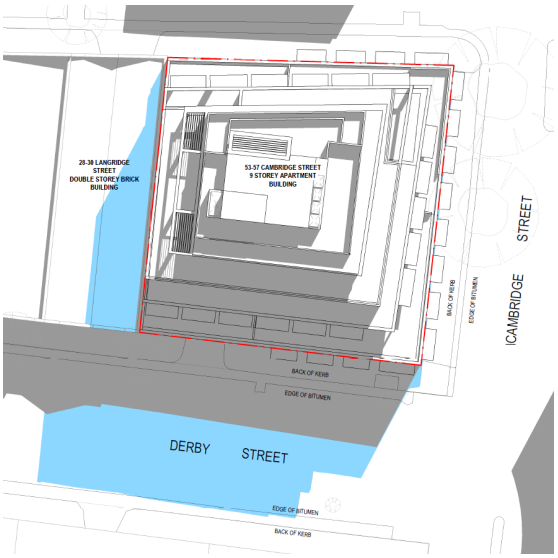
DDO23 Preferred Streetwall and building heights.

- The site abutting the subject site to its west is identified with the same preferred maximum height of 27m, but with a lower street wall of 11m, which fronts a small public open space (Oxford Street Reserve). West of this open space is a row of small heritage buildings at 22 Derby St., with a maximum height identified in DDO23 as 11m. Consequently, there is a clear transition in height from the higher form at 88 Cambridge Street, to the lower form at 22 Derby St.
- The subject site forms part of this transition, and consequently can entertain a height that exceeds the preferred height to assist in creating this transition.



Transition in height (Purple line) from 68 Cambridge Street to Oxford Street Park.

- The site benefits from its location at the low point of the broader city block, 3.5m below the ground level at Oxford Street Reserve, with similar height expectations to the site immediately to the west. Consequently the transition from the higher building form at 68 Cambridge Street, will be countered by the natural fall across the site. We consider that a higher building form on the subject site will assist with this transition.
- A design objective of DDO23 is to ensure that buildings provide '*a suitable transition in height as the land slopes upwards…*'
- The east elevation expresses a similar transition with recent development at 16 – 20 Langridge street exceeding the preferred building height by approximately 3m. The DDO23 prescribes a preferred maximum building height of 14m south of Derby Street, with an open school play space abuting this site to its south.
- Consequently the subject site provides a transition from the higher building form to the lower preferred heights identified on the south side of Derby Street.
- Importantly, maintaining solar access to the southern footpath is identified in DDO23 as a key criterion, ensuring that '*Development musts not overshadow any part of the southern side footpath…between 10am and 2pm on 22 September*.'
- Shadow diagrams prepared by the applicant indicate that any shadows during this period do not encroach south of the back of kerb, meeting this requirement. Consequently, the proposed building height is acceptable in its response to overshadowing.
- We consider that the building height is acceptable and appropriate for this location, reflecting the expectations and ambitions of DDO23 in achieving building heights and building character consistent with a rapidly evolving area in a 'High Change' location.
- We consider the 3m rooftop access space acceptable, as this level is significantly setback from the boundaries(approximately 10m from the north, east and south property boundaries), and solely provided for communal access to the rooftop terrace area.



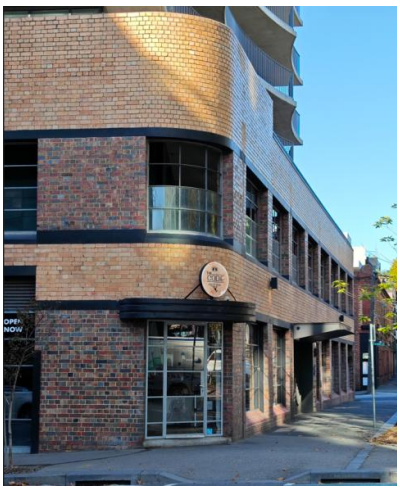
Extent of shadows at 22 September (2pm) illustrating shadows do not encroach onto southern footpath.

Street walls

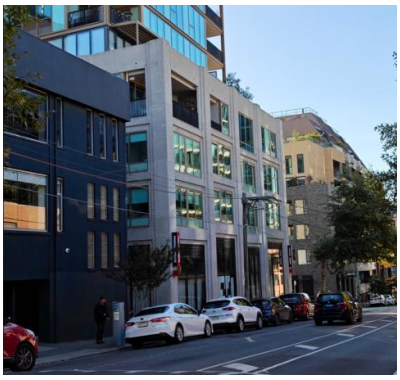
- The surrounding area comprises numerous new developments, completed in the last approximately 7 years including numerous sites on both Langridge and Cambridge Street. A feature of nearly all recent developments of more than 5 storeys is a clearly defined street wall. These both anchor the buildings to the site boundaries, but also provide a visually solid base to the buildings with upper levels set back, with upper level façades comprising lightweight materials in contrast to the solidity of the building base and associated street wall. In some cases, façades of previous buildings have been incorporated into the street wall (e.g. 88 Cambridge Street).
- DDO23 identifies a 14m high street wall to the north, east and south elevations. This height is reflected in the street wall heights to the north and south elevations of the abutting development site to the north, the west elevation of 16 – 20 Langridge Street fronting opposite the site to the east and the south elevation of 88 Cambridge Street, fronting the site to the north.
- We consider the proposed street wall heights consistent with the DDO23 and the adjoining sites. We note the variations to the street wall height encountered across new recent developments, and consider that this diversity is consistent with the character of the area and an acceptable feature. As the proposed street wall closely reflects the preferred height of the DDO23, we consider that it will contribute to both the local streetscape and character.
- As previously noted, we consider a contributory feature to the local character is the use of masonry on street walls, meeting the ground. The proposed used of masonry columns is supported as contributing to this character.
- We believe the proposal's street wall profile is consistent with the abutting and nearby developments and are closely aligned with the guidelines outlined in the revised UDF (2023). Therefore, the street walls are considered reasonable.



Steet wall at 70 Cambridge Street.



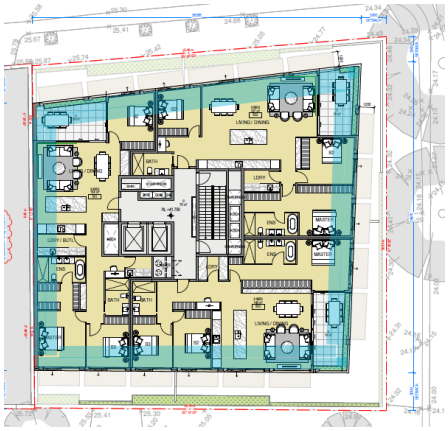
Street wall at 68 Cambridge St. incorporating façade of former building.



Street walls to Langridge Street from 40 Oxford Street & 16 – 20 Langridge Street.

Upper-Level Setbacks

- The proposed upper level setbacks occur at levels 4 and 7 & 8.
- At level 4 (top of street wall) the northern setback varies from east to west from 2.0m and 3.0m. The eastern setback varies from 2.0m to 3.0m from north to south and the southern setback is consistently 3.0m for the entire length of the elevation.
- The subject site is located in Area B as identified in DDO23. Area B seeks for buildings to be '*setback a minimum of 3 metres…*'

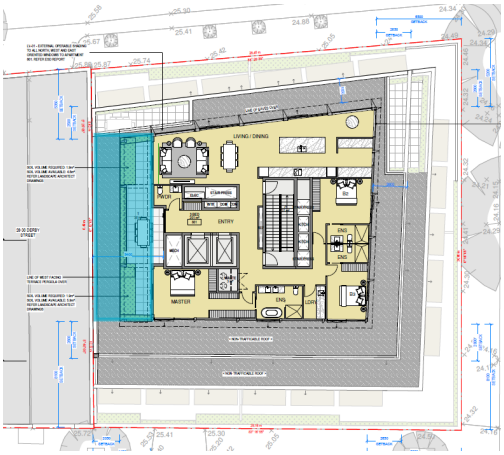


Level 5 plan illustrating trapezoidal shape of upper levels focussed on the north east corner of the subject site..

- We note that the proposed setbacks encroach into this 3 metres, resulting in a trapezoidal building plan that creates greater upper building prominence at its north east corner.
- We have considered this encroachment in the context of the immediate surrounding buildings, again identifying recent developments at 68 Cambridge Street and 16 – 20 Langridge Street. Whilst both buildings were constructed prior to the preparation of the draft DDO23, the nevertheless reflect the intention of a building form clearly distinguished above a solid base. This is assisted both through varying the upper level materials, and also through varying the geometry, particularly with respect to 88 Cambridge Street, where the concave façade elements encroach to approximately 1.8m from the boundary.
- We note that the upper levels proposed the use of masonry to maintain the 'grid' façade pattern on the upper levels. We consider that the use of light weight materials to replace masonry in the upper levels will reduce its visual impact and the associated prominence of the north-east corner.
- With the adoption of the above recommendation, we consider the level 4 setbacks acceptable.
- At levels 7 and 8, the additional setbacks are 1.8m to the east, 2.0m to the south (Level 7) and a further 2.5m to the east and south setbacks and 1.85m to the north (Level 8). These setbacks parallel the building form above the street wall. These setbacks apply only to levels 7 and 8, with level 9 comprising a rooftop access lift foyer setback at least a further 4.0m from the south and east elevations and over 10m from the northern boundary.
- We consider the setbacks to the upper levels consistent with creating a suitable 'cap' to the building and consistent with the local character including the development at 88 Cambridge Street. DDO23 does not identify minimum setbacks for these upper levels, other than ensuring that the amenity of surrounding public space is preserved through avoiding overshadowing. The upper levels have been setback to avoid overshadowing the south footpath on Derby Street, and consequently we consider the setbacks acceptable.

Equitable Development

- The subject site has a common boundary with the abutting site to the west at 28 – 30 Derby Street, Collingwood. This site spans the entire block from Langridge Street to Derby Street. Both sites are subject to the same preferred maximum heights and street wall heights (to north and south elevations) as the subject site.
- The proposal includes a boundary wall on the common boundary to a height of 25.7m above the natural ground line. Above this height, at level 8, the apartment is setback from the wall by 4.45m, although the space to its west is occupied by a balcony which encroaches approximately 2.5m into this setback.

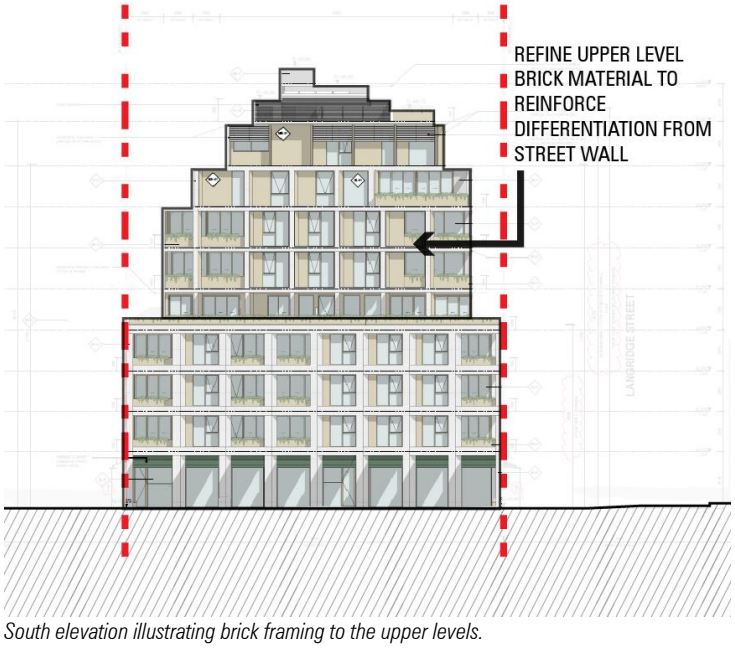


Level 8 plan. Extend the apartment to the western boundary. Relocate balconies to north and/or south.

- The site to the left comprises a north south orientated lot, suggesting that any development on this site (without lot consolidation) would deliver north and south facing apartments. The DDO23 identifies a preferred height of 27m which by virtue of the sloped site, suggests apartments may be constructed at or above the height of level 8 of the proposed development on the subject site.
- Consequently, we consider that the Level 8 of the proposed development should extend to the boundary wall, without set back to its west. This setback does not need to extend the full depth of the level 8 apartment if space is desired for a balcony to either (or both) its north and south.
- Alternatively, the western wall could be maintained at 4.45 from the western boundary. However, an outdoor deck would be considered an encroachment into this space and should be either relocated to the north or south sides of level 8 (or both).

Architectural Expression

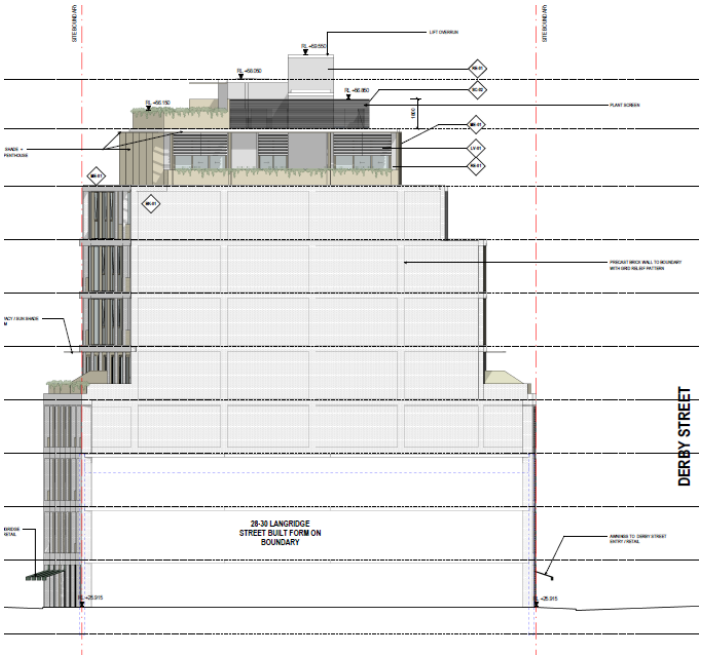
- We are supportive of the architectural approach and generally the use of materials. We consider the use of masonry to provide the architectural expression to the street walls and appropriate response to the character of the area.
- The extension of this expression to the upper levels is supported, but we consider that the material should be refined to a lighter weight material that assists with providing the contrast between the upper the lower levels as per the requirements of DDO23.
- Overall, we consider the shape and form of the proposed balanced and well considered and one that will contribute to the both the streetscape and local built form character.



South elevation illustrating brick framing to the upper levels.
This should be replaced with a lightweight material.

Visual Bulk

- The proposal occupies the entire block between Derby Street and Langridge Street, extending west from Cambridge Street for a depth of approximately 28.1m. Consequently, the proposal will result in a considerable visual bulk when viewed from the 3 adjoining streets. However, we consider that the architectural expression and the upper-level setbacks are effective in mitigating this visual bulk and therefore the proposal is acceptable in term of visual bulk as viewed from the east, south and north.
- A key concern is the sheer height and extent of the blank boundary walls to the west (directly abutting the site at 28 – 30 Derby Street). We note the proposal to articulate the wall with a precast brick wall. We are unsure what this material refers to and suggest it be included in the material palette. We consider that the elevation as illustrated on the drawings would benefit from some further refinement of the pattern to further improve the visual interest of the western elevation until such time as the adjoining site is developed.



West Elevation – further refinement of western blank façade should be identified.

Amenity Considerations

- The proposal includes numerous features that will contribute to the amenity of the residents. These include:
- Communal Lounge adjacent to Entrance Lobby. We note the space between this lounge and the vehicle access ramp and question whether the lounge can be extended to occupy this space.
- Bicycle storage adjacent to the front entrance. As previously noted, some daylighting to this space is preferable, and may be achieve through glazing above the booster connection cupboard.
- Power supplied to all car parking spaces.
- Larger lift suitable for the movement of furniture.
- North facing communal rooftop terrace space with pergola shading.

We support these initiatives and suggest the following further minor refinement:

- Provide continuous canopy awnings along the building façade at the ground level (in lieu of the array of individual canopies), and
- Extend the canopy along the south elevation to include the area below B2 in apartment 105.

Other Design issues.

DDO23 identifies a range of built form design issues that require consideration in the preparation of development proposals in addition to the issues discussed above. We have reviewed the range of requirements as identified in DDO23 Subclause 2.8, and consider that the proposal has provided an acceptable response to these requirements, except where we have recommended refinements as noted earlier in this memo.

Conclusion

In summary, we broadly support the proposed development at 53 – 57 Cambridge Street, Collingwood, and have recommended a number of refinements that should be undertaken to ensure the proposed better reflects the objectives of the planning scheme.

Our recommendations are summarised as follows:

- Remove rebated entrances at the south east and north east corners. The façade may extend to the corner pillars, or alternatively provide a splay at the corner.
- Allow for the re-planting of a 3rd Street tree near the south east corner of the building on Cambridge Street.
- Delete the separate awnings along the façade, and replace with either a continuous awning that wraps around the eastern façade, and part way along the north and south façades extending below bedroom B2 of Apartment 105. Alternatively, provide awnings in select locations along the façades at entrance locations and where people are likely to congregate.
- Provide glazing above (or behind) the booster connection point to provide daylight into the bicycle storage area.
- Replace the brick masonry above the street wall on the north, west and south elevations with a lightweight material.
- Identify the material proposed for the east (boundary wall elevation) and include in the material palette.
- Improve the pattern applied to the blank wall forming the west elevation.
- Extend the apartment at the 8th level to the northern boundary and relocate the outdoor balcony space to the north and / or south sides of the apartment.
- Improve the pattern treatment to the blank boundary wall to the west, particularly at the upper levels.

We would be happy to liaise with the design team directly to progress these refinements in a timely manner. Should you have any further enquiries, please don't hesitate to contact us on 9664 9836.

Yours faithfully,

Hansen Partnership Pty Ltd

Urban Design Team 16/05/2025

SLR Consulting Australia
Level 11, 176 Wellington Parade, East Melbourne VIC 3002, Australia

1 May 2025
SLR Ref: 640.030695.00107-L01-v1 53-57 Cambridge St.docx

Attention: Erryn Megennis
City of Yarra
PO Box 168
Richmond, VIC 3121

RE: Development Application – Review of Acoustic Report
53-57 Cambridge Street, Collingwood

Introduction

SLR Consulting Pty Ltd (SLR) has been retained by the City of Yarra to provide acoustic advice regarding the planning application for 53-57 Cambridge Street, Collingwood.

Details of the report are as follows:

- Title: Acoustic Report for Town Planning Application
- Date: 1 April 2025 (Revision 2)
- Prepared for: Cambridge Street Collingwood Development Co.
- Prepared by: Enfield Acoustics

The report has been prepared as part of the planning application for a new mixed-use building. The proposed development includes a retail tenancy (“shop”), a food & beverage premises, a substation on the Langridge Street facade, apartments on levels 1-8 and a communal rooftop terrace. Item 10 of the Council RFI for the planning application states:

> 10. Provide an Acoustic Report prepared by a suitably qualified acoustic engineer to assess and make recommendations for the management of noise from within the development, including from the substation, vehicle entrance and commercial tenancies to the proposed dwellings.
>
> The acoustic report must make recommendations to limit the noise impacts in accordance with the Environment Protection Regulations under the Environment Protection Act 2017 and the incorporated Noise Protocol (Publication 1826.4, Environment Protection Authority, May 2021) or any other requirement to the satisfaction of the Responsible Authority, as may be amended from time to time.

At this stage, a detailed review of the acoustic report has not been conducted. The purpose of this memo is to outline the additional information that we suggest are added to the report, in order to better understand the acoustic risks for Council.

Nearby sensitive receivers

SLR recommends that the locations of nearby sensitive receivers be shown (as a mark-up on a map) in the acoustic report. In particular, any sensitive receivers at 61 Cambridge Street to the north should be identified, since this is a relatively recent construction which is not shown on Google Street View.

Mechanical plant and substation

The first paragraph of Section 2.3 states that noise from any base building mechanical plant must comply with the Noise Protocol (EPA Publication 1826 Part I). SLR agrees that this is the relevant regulation.

SLR recommends that EPA Publication 1826 Part I noise limits at the most-affected sensitive receiver (which may be either on the subject site or an existing dwelling) be presented in the report, so that Council is able to review the basis for the design.

Domestic air-conditioning units

A significant number of air-conditioning units are proposed for the roof of the proposed development (although it is not stated which of these are base building units). We note that there are overlooking apartments approximately 25 metres to the east of this plant area.

We recommend that an indicative assessment of noise from domestic air-conditioning units be provided.

Traffic noise break-in

SLR has not currently conducted a detailed review of the traffic noise assessment. However, our preliminary advice is that the traffic noise criteria (shown in the table on page 5 of the report) should be consistent with Section 3.3 of the City of Yarra *Guidelines - managing noise impacts in urban development*, as follows:

- 40 dBA $L_{eq,16h}$ in habitable rooms (i.e. including bedrooms)
- 35 dBA $L_{eq,8h}$ in bedrooms
- Loudest hour not to exceed 45 dBA L_{eq} in habitable rooms from 7 am to 10 pm,
- Loudest hour not to exceed 40 dBA L_{eq} in bedrooms from 10 pm to 7 am

Communal rooftop terrace

If the rooftop terrace is proposed to be used between 10 pm to 7 am, we recommend that noise impacts from the terrace be considered (a formal assessment of the noise levels may not be necessary, depending on the sensitive receiver locations).

Recommendations section of the acoustic report

SLR suggests that all of the report's recommendations be included in the "Recommendations and Conclusion" section, to avoid any of them being overlooked. For example, we suggest that the recommendations regarding the garage roller door source level (Section 2.5 of the report) and the future review of mechanical plant noise (the last paragraph in Section 2.3 of the report) be added to this section.

Summary of SLR advice

SLR's preliminary recommendations regarding the acoustic report for 53-57 Cambridge Street, Collingwood are as follows:

- locations of nearby sensitive receivers be presented, as a mark-up on a map
- EPA Publication 1826 Part I noise limits at the most-affected sensitive receiver (which may be either on the subject site or an existing dwelling) be presented
- an indicative assessment of noise from domestic air-conditioning units be provided
- traffic noise criteria should be as per the City of Yarra guidelines
- if the rooftop terrace is proposed to be used between 10 pm to 7 am, we recommend that noise impacts from the terrace be considered (a formal assessment of the noise levels may not be necessary, depending on the sensitive receiver locations)
- we suggest that all of the report's recommendations be summarised in the "Recommendations and Conclusion" section

Further details are presented in the previous sections of this memo.

Regards,

SLR Consulting Australia

Checked/
Authorised by: JA

SDL

Simon de Lisle
Associate- Acoustics

Vipac Engineers and Scientists Ltd
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City of Yarra

22 April 2025

Ref: 30N-25-0137-GCO-103285-0

333 Bridge Road Richmond, Victoria, 3121, Australia

Dear Erryn Megennis,

PLN25-0129 53-57 Cambridge St, Collingwood VIC 3066

This peer review of MEL Consultants "Environmental Wind Assessment" (Report: 24146A-DE-EWA00) is based on Vipac's experience as a wind engineering consultancy. No wind tunnel studies have been undertaken to support this review.

Vipac has reviewed the assessment as well as the drawings provided (see References attached) and has the following comments:

i. The MEL Consultants Environmental Wind Assessment has been prepared based on drawings dated 29th Jan 2025 and consultancy experience. No wind tunnel testing has been carried out to support their assessment. We have no issues with this method for a desktop study as this is a common approach to provide architects, developers, and responsible authorities advice on the wind impact of the proposed design.

ii. We have no issues with the analysis approach or description of the wind environment. MEL Consultants have clearly described the process for a desktop assessment, and this is consistent with the approach that Vipac would take.

iii. The report has used the assessment criteria from City of Yarra Planning Scheme Section 58.04-4 (Standard D32), Vipac have no issues with this.

iv. The report analysed the wind effects, and its findings can be summarised as follows:

   a) The wind conditions in the streetscapes surrounding the proposed development would be expected to satisfy the walking comfort criterion at a minimum and the wind safety criterion;

   b) The wind conditions outside the main residential entrance located at centrally along the Derby Street frontage would be expected to satisfy the standing comfort criterion;

   c) The wind conditions outside the north and south-facing retail entrances that satisfy the standing comfort criterion;

   d) The wind conditions outside the east-facing retail entrance located within the southeastern recessed corner has been assessed to only satisfy the walking comfort criterion due to its proximity to the building corner and has been recommended to be moved away from the building corner or removed; and

   e) The wind conditions on the terraces over the entire proposed development have been assessed to satisfy the walking comfort criterion, as a minimum, and the safety criterion.

v. Vipac agrees with the report's conclusions and recommendations summarised above.
   a) It is noted that the drawings in Figure 10 is east elevation however misnamed South and West elevations.

In conclusion, the MEL Consultants Environmental Wind Assessment report uses the proper analysis and methodology to analyse the wind effects on the pedestrian level surrounding the proposed development. The report found that the proposed design would be expected to generate winds within the recommended wind comfort criterion. Vipac generally agrees with the assessment conclusions and recommendations made in the Environmental Wind Assessment.

Vipac has reviewed the updated design dated 28 March 2025 and can confirm that the report is still valid for the updated scheme. Mel Consultant should confirm this.

As per council required, the peer review should also check the followings:

- Wind impacts of the proposed development on the surrounding area;
- Wind impacts to proposed private balconies and the communal roof terrace; and
- Whether walking comfort criterion is acceptable for private balconies (Council has flagged this as a potential concern and recommends standing comfort criterion be achieved at minimum).

Vipac agrees that the proposed design would be expected to generate acceptable wind impacts of the surrounding areas and to the private balconies and communal terraces. Vipac also believes that walking comfort criterion as a minimum for the private balconies is acceptable.

Should standing criterion as a minimum be targeted for the private balconies, to increase the parapet heights is recommended and the proper height could be determined via a wind tunnel test.

Yours sincerely,

Vipac Engineers & Scientists Ltd

Zhuyun Xu
Principal Engineer

Mohamed Zaid
Wind Consultant

References:

1. Warren and Mahoney Living Australia Pty Ltd, Town Planning Application/RFI Response, 53 Cambridge St, Collingwood, Rev B, 28th March 2025.
2. A. Loie, MEL Consultants, 53-57 CAMBRIDGE STREET COLLINGWOOD, VICTORIA, Environmental Wind Assessment (24146A-DE-EWA00), 12th Feb 2025.

Urban Design
Formal Referral Response

Application Information:

Referral Officer:	Hayley McNicol
Officer:	Erryn Megennis
Council Reference:	PLN25/0129
Address:	53-57 Cambridge St, Collingwood VIC 3066
Proposal:	Construction of a 9 storey mixed use building (including basement and roof terrace) comprising a Shop, Food and Drink Premises and Dwellings (planning permit not required for Food and Drink and Dwelling uses), reduction in the car parking requirements of the Yarra Planning Scheme.
Comments Sought:	Click here to view referral memo: Record D25/137885: IREF25/00565 - Referral Request
Disclaimer:	Council's Urban Designer provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	

Recommendation

Changes are required to make the proposal acceptable from an urban design perspective.

Comment Summary

Public realm comments are requested, including on the development's public realm interface and overshadowing impacts on the kerb outstand on the opposite side of Cambridge Street. Comments are provided below.

Public Realm Interface

Ground level program

- The site has frontages to Langridge, Cambridge and Derby Streets. The development is arranged with the food and drink/shop units at the NE and SE corners (taking up the majority of the Cambridge Street frontage), substation and services clustered together on the Langridge Street frontage, and the vehicle entry, residential lobby entry and booster cabinet on Derby Street. We have concerns about the ground floor program, in particular:
  - A large proportion of the Langridge Street frontage is taken up with back of house services and substation.
  - The residential entrance is sandwiched between the vehicle entry and booster cabinet. As a result, the residential entrance has a poor presence/amenity and this proximity may cause conflict between people accessing the residential entry and cars entering/exiting the basement car park.
- DDO23 includes the following relevant policies related to the ground level interface.
  - DDO23 seeks *"To promote and encourage pedestrian-oriented, high quality urban design outcomes through street edge activation."*

  - Section 2.9 notes: *Vehicle ingress and egress into development, including loading facilities and building servicing, should be designed to ensure a high standard of pedestrian amenity and limit potential conflict between vehicle movements and pedestrian activity and avoid adversely impacting the continuity of the public realm.*
  - Section 2.8 notes: *"Development should achieve good urban design outcomes and architectural excellence by including but not being limited to… achieving active, fine grain design to create a pedestrian-oriented environment and passive surveillance towards the public realm"*.
  - Section 2.8 notes: *"Lower levels of development should locate building service entries/access doors and cabinets away from the primary street frontage, or where not possible, they should be sensitively designed to integrate into the facade of the building and complement the street frontage and character"*.
- The following recommendations are made to improve the ground floor program and interface with the street and support the abovementioned policies in DDO23:
  - Relocate substation underground if feasible, with the potential to integrate this with the vehicle entry point on Derby Street.
  - Move fire tank room and pump room to Cambridge or Derby Streets. This could allow the food and drink premises to have more of a northerly aspect.
  - Move the residential entrance to Langridge Street; this could include a proposal for a primary and secondary frontage on both Langridge and Derby Streets if practicable. If there is any entrance from Derby Street this should be further away from the car entry (for instance this could be swapped with the booster cabinet). These entrances should provide step-free access to improve accessibility wherever possible.
  - Explore any opportunities to reduce the width of the services (e.g. the current plans show the fire pump room having a narrower entrance which is a supported approach).

Ground level frontage

- The two retail units incorporate a recessed undercroft area at the NE and SE corners which accommodate the entrance doors. A column is located at the corners which has climbing plants. It is recommended that these recessed undercroft areas are converted to an open setback to provide a more generous footpath space at these corners. This would better support DDO23 Section 2.4, which states that *"Development of non-heritage buildings on street corners should provide a corner splay at minimum of 1 x 1 metre at the site's corner boundaries"*.
- Awnings are provided on the three frontages. These are designed as separate awnings that fit in between the brick piers. The design of the awnings is not practical and does not provide adequate weather protection due to the broken nature of the awnings. Furthermore, awnings are not part of the urban character of the area. Therefore, we recommend that the awnings are removed.
- The ground floor provides floor to ceiling windows. Whilst the brick piers are supported, it is recommended that the windows provide a stall riser to better complement the industrial character of the area and meet Section 2.8 of DDO23: *"creating an appropriate ratio of solid and void elements that resemble the industrial past of the area"* and *"discourage floor to ceiling glass with limited entries for large expanses of the ground floor"*. The adjacent development on the east side of Cambridge Street is a good example of this.
- To improve the interface with the street, it is suggested that the food and drink premises provide openable windows onto Langridge and/or Cambridge Streets.

Other

- Any recessed areas should provide a seamless transition between the footpath and paved areas within the site, with no steps and any level changes to meet required standards. Refer to any advice from Civil Engineering team.
- Development should consider levels of building and basement car park entry in relation to street and drainage conditions, to avoid flooding issues. Refer to advice from the Civil Engineering team.

Overshadowing

- DDO 23 provides direction on acceptable levels of overshadowing. Section 2.6 states that: *"development should not increase the amount of overshadowing as caused by existing conditions, measured between 10am and 2pm on 22 September for the following areas of open space and/or public realm:*
    - *Any kerb outstands, seating or planting areas on the opposite side of the street, as applicable."*
- As shown on the image below, the development overshadows a section of the plantes outstand on the east side of Cambridge Street. It is noted that the development exceeds the preferred heights in the DDO23. It is recommended that the development reduces the height / increases the setback so that the development does not overshadow this kerb outstand.

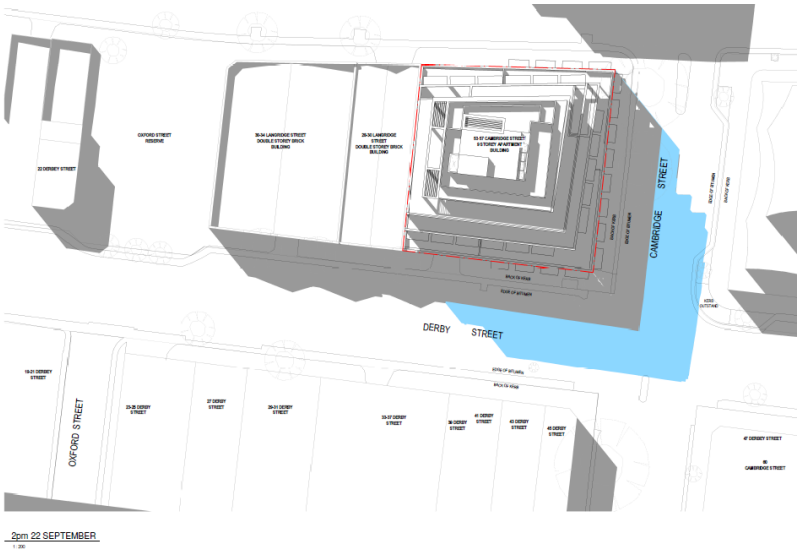

Figure 1: Overshadowing at 2pm

Streetscape and Capital Works

- Considering the scale of this development and where it sits in relation to other sites which have upgrades the surrounding footpaths, we recommend that streetscape improvements are secured through this development. Please refer below to marked up plan, these should be investigated and drawn up by the applicant before a decision has been made, so that any planning conditions can focus on resolving the minor details for these streetscape works.
- It is noted that the development includes provision of two bike hoops on the footpaths to provide visitor bike parking. All visitor parking should be provided within the site; however we will consider additional bike parking on the footpath (above the visitor parking provision) as a public realm contribution.

- There are no known planned / approved capital works around the site being led by the Urban Design Team.

The following changes are required to make the proposal acceptable from an urban design perspective:

- Relocate substation underground if feasible, with the potential to integrate this with the vehicle entry point from Derby Street.
- Move fire tank room and pump room to Cambridge or Derby Streets. This could allow the food and drink premises to have more of a northerly aspect.
- Move the residential entrance to Langridge Street; with the potential to have two entrances from both Langridge and Derby Streets if practicable.
- Explore any opportunities to reduce the width of the services (as has been done for the fire pump room).
- Provide an open splayed setback at the NE and SE corners of the site.
- Remove awnings on all frontages.
- Provide a stall riser for all the ground floor windows.
- Provide openable windows for the food and drink premises if practicable.
- Ensure set back paved areas provide a seamless and step free transition from the public footpaths.
- Ensure that floor and basement entry levels consider levels on the footpath/road and drainage conditions to avoid flooding issues.
- Reduce the height of the development (or increase the setback) to ensure that planted outstand on east side of Cambridge Street is not overshadowed.
- Design up streetscape improvements around the site, using the recommended marked up plan to guide the extent of works.
- Provide all visitor bike parking on site, and any footpath bike parking should be surplus to the development's visitor provision.

These comments exclude any advice provided from the following teams:

- Open Space Planning and Design
- Open Space Services
- Civil Engineering

Urban Designer: Hayley McNicol
Date: 13 May 2025



LEGEND

Existing Tree to be Retained
Blue Line Denotes TPZ
Orange Line Denotes SRZ
Refer To Arboriculture Report Prepared by Arbor Survey Dated 14th Dec 2024

Proposed Shrubs
Refer To Plant Schedule

Proposed Groundcovers & Grasses
Refer To Plant Schedule

Proposed Climbers
Refer To Plant Schedule

Proposed Paving Type 1
To Later Detail

Proposed Coloured Concrete
To Architect's Detail

Proposed Raised Planters
As Per Architect's Detail
Refer To Typical Detail (TP08)

Recommended streetscape improvements

1. Reinstate footpath, kerb and channel along site frontages. Materials to include asphalt footpaths and sawn Bluestone kerb to align with recent streetscape upgrades on adjacent sites. Refer to any reinstatement requirements from the Civil Engineering team.
2. New pram crossings to align with crossing points across Cambridge, Derby and Langridge Streets.
3. New kerb outstand on Cambridge Street to mirror one on opposite side of the road. Outstand to accommodate garden bed and tree. Potential to extend outstand to the north to accommodate two trees. Extent of kerb outstand to be determined by required parking space length between outstand and existing Plane tree.
4. New kerb outstand on Derby Street. Extent of kerb outstand to be determined by required parking space length to the west on Derby Street. Outstand to accommodate garden bed (integrated with existing tree pit) and bike hoop.
5. New garden bed on Langridge Street which retains alignment of existing kerb and channel for drainage.
6. Improve radius of kerbs to tighten up intersection as much as possible, whilst still accommodating required overland flow and swept paths.
7. Remove sewer vent pole, and if its removal is not feasible, then align the kerb on the outside of the pole (making the pole within the asphalt footpath).
8. Potential for bike parking / car parking / loading / drop-off space, subject to any requirements from the Parking, Strategic Transport and Traffic teams.
9. Improve tree cut outs and extend to east/west.
10. Provide footpath seat, subject to space availability. Preferred location is on Langridge Street frontage.
11. Remove all visitor bike hoops from footpath and provide within site. Opportunity for a bike hoop on Langridge Street footpath and Derby Street outstand in addition to the required visitor parking provision, to contribute to public offering.

Notes:
Work subject to drainage assessment and requirements as well as site survey / detailed dimensions.
Garden beds to be at least 5m2 in area.

PLANT SCHEDULE - GROUND

SYM	BOTANICAL NAME	COMMON NAME	D/E N/Ex*	HEIGHT X WIDTH AT MATURITY	MIN SUPPLY SIZE	QTY
SHRUBS						
RDM	*Raphiolepsis indica 'Snow Maiden'*	Snow Maiden Indian Hew thorn	E/Ex	1 x 0.5m	200mm pot	TO LATER DETAIL
					TOTAL	
GROUNDCOVERS						
AcMB	*Arthropodium cirratum 'Matapouri Bay'*	Renga Lily	E/Ex	0.6 x 0.6m	140mm pot	
As	*Asplenium antiquum*	Japanese Bird's Nest Fern	E/Ex	1 x 1m	140mm pot	
Om	*Clivia miniata*	Clivia	E/Ex	0.6 x 0.6m	140mm pot	
LmJR	*Liriope muscari 'Just Right'*	Just Right Lily-turf	E/Ex	0.5 x 0.5m	140mm pot	
Vh	*Viola hederacea*	Native Violet	E/N	0.15 x Spreading	140mm pot	
					TOTAL	
CLIMBERS						
MCP	*Mandevilla 'Classic Cream Pink'*	Mandevilla	E/Ex	Climber	140mm pot	
					TOTAL	

*D/E = Deciduous/Evergreen N/Ex = Native/Exotic

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NOT FOR CONSTRUCTION

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REVISION		DATE	BY
-	Issued for Town Planning	14.02.2025	SA
A	Standard DES Calculations Added	21.02.2025	SA

CLIENT
Cambridge Street Collingwood Development Co. P/L
PROJECT
PROPOSED DEVELOPMENT
53-57 Cambridge Street, Collingwood

DRAWING
Landscape Plan - GROUND
for Town Planning

SCALE	1:100 pA3
DATE	FEB 2025
DRAWN	SA
CHECKED	MS
JOB NO	25-029
DWG NO	L-TP01
CAD FILE	25-029-L (A) TP.dwg

Development Engineering Formal Referral Response

Application Information:

Referral Officer:	Erryn Megennis
Officer:	Mark Pisani
Council Reference:	PLN25/0129
Referral Number:	IREF25/00560
Address:	53-57 Cambridge Street, Collingwood
Proposal:	Construction of a 9 storey mixed use building (including basement and roof terrace) comprising a Shop, Food and Drink Premises and Dwellings (planning permit not required for Food and Drink and Dwelling uses), reduction in the car parking requirements and a waiver of the visitor bicycle parking requirements of the Yarra Planning Scheme.
Comments Sought:	Reduction in car parking; traffic impact; access arrangements; internal layout design;
Disclaimer:	Council's Development Engineering unit provides the following advice based on information provided in the referral request memo referenced above.

Engineering Referral Details

Council's Engineering Referral team has reviewed the drawings and documents provided by the Statutory Planning department, as outlined in ***Table 1*** below.

A list of requirements for the applicant and proposed conditions to be included in the Planning Permit have been outlined in ***Section 1 – Engineering Requirements*** and ***Section 2 – Engineering Conditions*** respectively. Specific details of the engineering assessment are provided in ***Section 3 – Engineering Detailed Assessment*** and have informed the requirements and conditions.

Note: the engineering related matters highlighted in the Planning referral have been assessed and included in the response.

Table 1 - Drawings and Documents reviewed by Engineering

Author / Consultant	Drawing No. or Document	Revision	Dated
Warren and Mahoney Living Australia	TP00.002 *Survey Plan* TP10.000 *Basement 03* TP10.001 *Basement 02*	B B B	28 March 2025 28 March 2025 28 March 2025

Author / Consultant	Drawing No. or Document	Revision	Dated
	TP10.002 *Basement 01* TP10.003 *Ground Floor* TP10.004 *Level 01* TP20.001 *Elevation - North* TP20.002 *Elevation - South* TP20.003 *Elevation - East* TP20.004 *Elevation - West* TP30.001 *Building Section A-A* TP30.002 *Building Section B-B* TP30.003 *Building Section C-C* TP30.004 *Building Section D-D*	B B B B B B B B B B B	28 March 2025 28 March 2025 28 March 2025 28 March 2025 28 March 2025 28 March 2025 28 March 2025 28 March 2025 28 March 2025 28 March 2025 28 March 2025
Land Dimensions	24412FL-A *Feature & Level Survey*	A	17 October 2024
Traffix Group	Traffic Engineering Assessment	B	20 February 2025

SECTION 1: Engineering Requirements – Issue to the Applicant

The applicant must satisfy the engineering items outlined in ***Table 2*** below. A written response must be provided for each requirement, and the action is to be completed prior to resubmission.

Any amendments to plans/drawings or updates to reports/documents must be highlighted using a *red cloud* around the relevant section. In the written response, indicate the relevant sheet/pages of each document which have been amended.

Table 2 - Engineering Requirements for Applicant

Item	Engineering Requirement	Action for Applicant
Traffic Engineering Items		
1	Provide a convex mirror at the development entrance for existing motorists to view the Cambridge Street footpath (towards the east).	Update the drawings.
2	Provide a maximum transverse grade of 1 in 40 for the accessible space and shared area or alternatively relocate elsewhere.	Update the drawings.
3	Depict the columns in the basement car parks, dimensioning the column offset from the aisles and the depths of the columns. The positions of the columns must not encroach the parking space envelopes required in Diagram 1 Clearance to car parking spaces in Clause 52.06-9.	Update the drawings.
4	The existing vehicle crossing must be demolished and a new vehicle crossing is to be constructed for the development's main accessway. The new vehicle crossing must be designed and constructed in accordance with Council's Standard Drawings.	Update and annotate the drawings.
5	Prepare a vehicle crossing cross sectional drawing for the new vehicle crossing to ensure that a B99 design vehicle can enter and exit the property via Cambridge Street without scraping or bottoming out. For guidance in preparing the cross sectional drawing, please refer to the information appended to this memo (Appendix A of this memo). A ground clearance check of the vehicle crossing using the B99 design vehicle must be provided by the applicant.	Provide a cross sectional drawing for the new vehicle crossing, together with a ground clearance check using the B99 design vehicle.
Civil Engineering Items		
7	Provide a functional layout plan (FLP) for all proposed works within the public realm areas, required as part of the development. The FLP must include all civil and landscape aspects within the public realm, indicating general dimensions and providing annotations where relevant. The FLP must be consistent with the details outlined in the relevant sheets of the architectural plans and must comprise all Council requirements.	Provide a FLP of the proposed works within the public realm areas. The FLP must be reviewed and approved by Council prior to endorsement of Condition 1 plans.

Item	Engineering Requirement	Action for Applicant
8	All footpaths adjacent to the development must have DDA compliant grades (cross & longitudinal). *Note: existing conditions do not set a precedent – all footpaths must be brought up to current standards.* Footpaths must be finished in asphalt (existing), requiring the following grades for DDA: *Cross* – max steepness of 1 in 33 (3%) from the property boundary *Longitudinal* – varies dependant on lengths of sections (see DDA guidelines)	Update the relevant sheets within the architectural plans to include the relevant annotations.

SECTION 2: Engineering Conditions – Planning Permit

The conditions outlined in ***Table 3*** below must be included in the Planning Permit to ensure the specific engineering requirements are complied with.

Note: further conditions may be required if any of the items in Table 2 are not fulfilled prior to the issuing of the Planning Permit.

Table 3 - Engineering conditions to be included in the Planning Permit

Condition related to…	Engineering condition
VC: *Design*	Concurrent with the submission of Condition 1 plans or by such later date as approved in writing by the Responsible Authority, a vehicle crossing design must be submitted to Council's Civil Engineering Department for approval. The submitted design must demonstrate compliance with City of Yarra's, *Vehicle Crossing Information Sheet*.
VC: *Construction*	Before the building/s is/are occupied, or by such later date as approved in writing by the Responsible Authority, any new vehicle crossing must be constructed: (a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority.
VC: *Reinstatement*	Before the building/s is/are occupied, or by such later date as approved in writing by the Responsible Authority, any redundant vehicular crossing must be demolished and re-instated as footpath, verge (if applicable), and kerb and channel: (a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority.
Public lighting: *Design*	Before the use and/or development commences, or by such later date as approved in writing by the Responsible Authority, a Public Lighting Plan must be submitted to and approved by Council's Civil Engineering Department. When approved, the Public Lighting Plan will be endorsed and will form part of this permit. The Public Lighting Plan must be designed: (a) address lighting along Langridge St, Cambridge St and Derby St frontage and at the entrance to the approved building. (b) to comply with uniformity, access and maintenance requirements as per standard AS1158.3.1; (c) to control light spillage in accordance with the requirements of AS 4282 – 2019," *Control of the obtrusive effects of outdoor lighting*"; *and* (d) to the satisfaction of the Responsible Authority.

Condition related to…	Engineering condition
Public lighting: *Construction*	The provisions, recommendations and requirements of the endorsed Public Lighting Plan must be implemented and complied with at no cost to Council and to the satisfaction of the Responsible Authority.
Public lighting: *Temporary lighting*	Before any existing public lighting is removed a temporary lighting plan to the satisfaction of the Responsible Authority must be submitted and approved by Council's Civil Engineering Department. The temporary lighting plan is to be installed at the permit holder's cost and must remain operational until a new permanent lighting scheme is installed and operational to the satisfaction of the Responsible Authority.

Condition related to…	Engineering condition
Public Realm: *Footpath specific*	Before the building/s is/are occupied or by such later date as approved in writing by the Responsible Authority, the footpath along the property's Langridge Street, Cambridge Street and Derby Street frontages must be reconstructed in asphalt: (a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority(s).
Public Realm: *Kerb & channel specific*	Before the building/s is/are occupied, or by such later date as approved in writing by the Responsible Authority, the kerb and channel along the property's Langridge Street, Cambridge Street and Derby Street frontage/s must be reconstructed: (a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority(s).
Public Realm: *Functional layout plan [High level details]*	Concurrent with the submission of Condition 1 plans, or by such later date as approved in writing by the Responsible Authority, a Public Realm Plan of all public realm improvements associated with the development must be prepared, submitted and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The Public Realm Plan must show, but not be limited to, the following: (a) the reconstructed footpaths along the property frontages; (b) the reconstructed kerb and channel along the property frontages (c) the construction of the kerb extension at the north west corner of the Cambridge Street-Derby Street intersection; (d) all associated drainage works;

Condition related to…	Engineering condition
	(e) at the permit holder's cost; *and* (f) to the satisfaction of the Responsible Authority.
Public Realm: *Detailed design plans*	Before the development commences (excluding site preparations, demolition and bulk excavation), or by such later date as approved in writing by the Responsible Authority, detailed design drawings of the works approved under the Public Realm Plan (as required by Condition XX) addressing all road infrastructure works (including soft/hard landscaping), must be submitted to and approved by Council's Civil Engineering Department. Once approved, the detailed design drawings will be endorsed and will then form part of the permit.
Public Realm: Construction & handover	Before the building is occupied, all associated works shown on the endorsed detailed design plans for the public realm (as required by Condition XX) must be fully constructed and completed to the satisfaction of the Council's Civil Engineering Department and at no cost to the Responsible Authority.

Condition related to…	Engineering condition
Reinstatement of damages caused during development works	Within 2 months of the completion or by such later date as approved in writing by the Responsible Authority, any damage to Council infrastructure resulting from the development must be reinstated: (a) In accordance with Yarra Standard Drawings | Yarra City Council (b) at the permit holder's cost; and (c) To the satisfaction of the Responsible Authority.

Table 4 - Notes to be included in the Planning Permit

Note related to…	Engineering note
Stormwater: Site discharge	The site stormwater must be directed to the nominated legal point of discharge (LPD) and shall be limited to equivalent pre-development levels *or* 70% impervious coverage, whichever is lowest, for a 20% AEP rainfall event.
Stormwater: Onsite detention	The development must detain onsite, at a minimum, the 10% AEP storm event. For cases where a safe overland flow path cannot be provided or where flows exceeding pipe capacity may impact the development or adjacent, upstream, or downstream properties, the requirement will be to detain the 1% AEP storm event.

Note related to…	Engineering note
Redundant stormwater outlets	All redundant property drain outlets are to be demolished and reinstated to Council's satisfaction and at the Permit Holder's cost.
Service infrastructure adjustment to suit finished grades, alignments, etc.	Any service poles, structures or pits located within the public realm areas that interfere with the proposal, must be adjusted accordingly: (a) at the permit holder's cost; and (b) to the satisfaction of the Responsible Authority.
Existing parking infrastructure	No parking restriction signs, or line-marked on-street parking bays are to be removed, adjusted, changed or relocated without approval or authorisation from Council's Parking Management unit and Construction Management branch.
Private utility assets	Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, boundary traps, valves or meters on Council property will be accepted.
Adjusting utility infrastructure	Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the owner's expense after seeking approval from the relevant authority.
Existing parking infrastructure	Any on-street parking reinstated as a result of development works must be approved by Council's Parking Management unit.
Parking sensors	The removal of any kerbside parking sensors and any reinstatement of parking sensors will require the Permit Holder to pay Council the cost of each parking sensor taken out from the kerb/footpath/roadway. Any costs associated with the reinstatement of road infrastructure due to the removal of the parking sensors must also be borne by the Permit Holder.

SECTION 3: Engineering Detailed Assessment

CAR PARKING PROVISION

Proposed Development

Under the provisions of Clause 52.06-5 of the Yarra Planning Scheme, the development's parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate*	No. of Spaces Required	No. of Spaces Allocated
Two-Bedroom Dwelling	8	1.0 space per dwelling	8	8
Three-Bedroom Dwelling	20	2.0 spaces per dwelling	40	38
Food and Drink	102 m^2	3.5 spaces per 100 m^2 of net floor area	3	1
Shop	193 m^2	3.5 spaces per 100 m^2 of leasable floor area	6	2
		Total	**57 spaces**	**49 spaces**

***** Since the site is located within the Principal Public Transport Network Area, the parking rates in Column B of Clause 52.06-5 now apply.

To reduce the number of car parking spaces required under Clause 52.06-5 (including to reduce to zero spaces), the application for the car parking reduction must be accompanied by a Car Parking Demand Assessment.

Car Parking Demand Assessment

In reducing the number of parking spaces required for the proposed development, the Car Parking Demand Assessment would assess the following:

Parking Demand Consideration	Details
Parking Demand for the Three-Bedroom Dwellings	To assess the parking demand of the three-bedroom dwellings, Traffix Group has sourced average car ownership data for the Collingwood area from the 2021 ABS Census. Data indicates that some 49% of three-bedroom households have one car and 22% contain no cars. The data suggests that there is a significant proportion of three-bedroom dwellings that own one or no cars. Allocating one space to some of the three-bedroom dwellings is considered appropriate and is consistent with the current statistic trend.
Parking Demand for the Food and Drink and Shop Uses	For both the food and drink and shop uses, a staff parking demand of 1.0 space per 100 square metres could be adopted. Applying this rate would equate to one staff space for the food and drink use and two spaces for the shop. All patron and

Parking Demand Consideration	Details
	customer parking would be accommodated off-site. The proposed on-site parking provision for the food and drink and shop uses is considered appropriate.
Availability of Public Transport in the Locality of the Land	The following public transport services can be accessed to and from the site by foot: ▪ Smith Street trams – 170 metre walk ▪ Victoria Parade trams – 330 metre walk ▪ North Richmond railway station – 990 metre walk ▪ Parliament railway station - 1400 metre walk
Multi-purpose Trips within the Area	Customers and clients to the development could combine their visit by engaging in other activities or business whilst in the area.
Convenience of Pedestrian and Cyclist Access	The site is very well positioned in terms of pedestrian access to public transport nodes, shops, supermarket, places of employment and education and other essential facilities. The site also has good connectivity to the on-road bicycle network.

Appropriateness of Providing Fewer Spaces than the Likely Parking Demand

Clause 52.06 lists a number of considerations for deciding whether the required number of spaces should be reduced. For the subject site, the following considerations are as follows:

Consideration	Details
Availability of Car Parking	The level of on-street parking in this part of Fitzroy is very high during business hours. The area surrounding the subject site is blanketed in time based parking restrictions. The high parking demand in the surrounding streets would be a disincentive for employees to drive. Short-stay visitors should be able to find an on-street car parking space in the vicinity of the site.
Relevant Local Policy or Incorporated Document	In terms of transport, the proposed development is considered to be in line with the objectives contained in Council's *Moving Forward – Yarra's Transport Strategy 2022-32*. The site is ideally located with regard to sustainable transport alternatives and the reduced provision of on-site car parking would potentially discourage private motor vehicle ownership and use.
Other Relevant Considerations	Residents and visitors of the new dwellings will be ineligible to apply for on-street resident and visitor parking permits.

Adequacy of Car Parking

From a traffic engineering perspective, the waiver of parking associated with the various uses is considered appropriate in the context of the development and the surrounding area.

The operation of the development should not adversely impact on the existing on-street parking conditions in the area.

The Engineering Referral team has no objection to the reduction in the car parking requirement for this site.

TRAFFIC IMPACT

Trip Generation

The trip generation for the site adopted by Traffix Group is as follows:

Proposed Use	Adopted Traffic Generation Rate	Daily Traffic	AM Peak Hour	PM Peak Hour
Residential (28 dwellings)	0.5 trips per dwelling in each peak hour 5.0 trips per dwelling per day	140	14	14
Commercial (Food & drink; shop)	1.0 trip per space in each peak hour 2.0 trips per space per day	6	3	3
	Total	**146 trips**	**17 trips**	**17 trips**

The traffic generated by the development is not unduly high (an average of one trip every 3 minutes and 31 seconds) and should not adversely impact the traffic operation of Derby Street or the surrounding road network.

DEVELOPMENT LAYOUT DESIGN

Layout Design Assessment

Item	Assessment
Access Arrangements	
Development Entrance	The 6.4 metre wide development entrance satisfies the Australian/New Zealand Standard AS/NZS 2890.1:2004.
Vehicle Passing Area	The vehicle passing area has a slightly irregular shape. We are satisfied that a moving B99 design vehicle can pass a stationary B99 design vehicle at the development entrance. The passing area arrangement is considered satisfactory.
Visibility	The exit lane of the development entrance has not been provided with a pedestrian sight triangle as required by *Design standard 1 - Accessways* of Clause 52.06-9. It is recommended that a convex mirror be installed at the development entrance to improve visibility for exiting motorists.
Headroom Clearance	Headroom clearances of no less than 2.3 metres have been provided along the ramped accessways, which satisfy AS/NZS 2890.1:2004.
Internal Ramped Accessways	The single lane ramped accessways have wall-to-wall widths of 3.6 metres, which satisfy AS/NZS 2890.1:2004.
Car Parking Modules	
At-grade Parking Spaces	The dimensions of the parking spaces (2.6 to 3.0 metres by 4.9 metres) satisfy *Design standard 2: Car parking spaces* of Clause 52.06-9.
Accessible Parking Space	The dimensions of the accessible parking space and shared area (each 2.4 metres by 5.4 metres) satisfy the Australian/New Zealand Standard AS/NZS 2890.6:2022. The accessible parking space and shared area have been sited on a transverse grade of 1 in 16 - the Standard requires a maximum gradient of 1 in 40. It is agreed that the gradient of the space and shared area be adjusted to a maximum transverse grade of 1 in 40 or alternatively the space and shared area be relocated elsewhere.
Aisles	The aisle widths range from 5.3 to 6.4 metres, which satisfy *Table 2: Minimum dimensions of car parking spaces and accessways* of Clause 52.06-9.
Column Depths and Setbacks	No columns have been depicted on the basement car park layout plans. Columns are to be clearly depicted on the drawings, with dimensions and offsets from the aisles. The positions of the columns must not encroach the car parking space clearance envelopes as required by *Diagram 1 Clearance to car parking spaces* of Clause 52.06-9.
Clearances to Walls	Spaces adjacent to walls have been provided with 300 mm clearances, which satisfy *Design standard 2.*

Item	Assessment
Gradients	
Ramp Grade for the first 5.0 metres inside the Property	The ramp grade for the first 5.0 metres insides the property line is 1 in 10, which satisfies *Design standard 3: Gradients*.
Ramp Grades and Changes of Grade	The ramp grades and changes of grade satisfy *Table 3 Ramp Gradients* of Clause 52.06-9.
Swept Path Assessment	
Vehicle Entry and Exit Movements Development Entrance - Derby Street G36167-01* Sheet 01	The swept path diagrams for a B99 design vehicle exiting the site while a stationary B99 design vehicle is propped at the development entrance are considered satisfactory.
Vehicle Circulation Ramped Accessways G36167-01 Sheet 02	The swept path diagrams of a B99 design vehicle circulating around the aisles and single lane ramped accessways are considered satisfactory.
Waste Collection Vehicle Circulation and Turn Around Movement G36167-01 Sheet 03	The swept path diagrams for a 6.345 metre long waste collection vehicle accessing the bin collection area, undertaking a turn around movement and exiting in a forward direction are considered satisfactory.
Vehicle Turning Movements End Car Parking Spaces G36167-01 Sheet 04	The swept path diagrams of a B85 design vehicle
Other Items	
Traffic Signal System	The applicant proposes to provide a traffic signal system to help regulate vehicle movements within the development, particularly along the single lane ramped accessways. Typically, the entrance would have a default green signal to enable vehicles to enter a single lane accessway. Lanterns would be located on each level with detector loops. Details on the operation of the traffic signal system could be incorporated into the development's Car Parking Management Plan. We have no objection to the use of a traffic signal system for this development.
Loading Arrangements	Deliveries of goods to the site would be for the food and drink and shop uses. No on-site loading facility has been provided. Vans and small commercial vehicles could utilise on-street parking or the existing Loading Zone on the south side of Cambridge Street.
Vehicle Crossing Vehicle Crossing Ground Clearance	The existing vehicle crossing on the north side of Cambridge Street is to be demolished. A new vehicle crossing servicing the development entrance must be constructed in accordance with Council's Standard Drawings and engineering requirements. The applicant is to prepare a cross sectional drawing for the proposed vehicle crossing on Cambridge Street. Information in relation to preparing the vehicle crossing section drawings is appended to this memo (Appendix A). A ground clearance check is to be undertaken for the vehicle crossing using the B99 design vehicle to confirm that vehicles

Item	Assessment
	can enter and exit the property via Cambridge Street without scraping or bottoming out.

* Traffix Group swept path diagram drawing number.

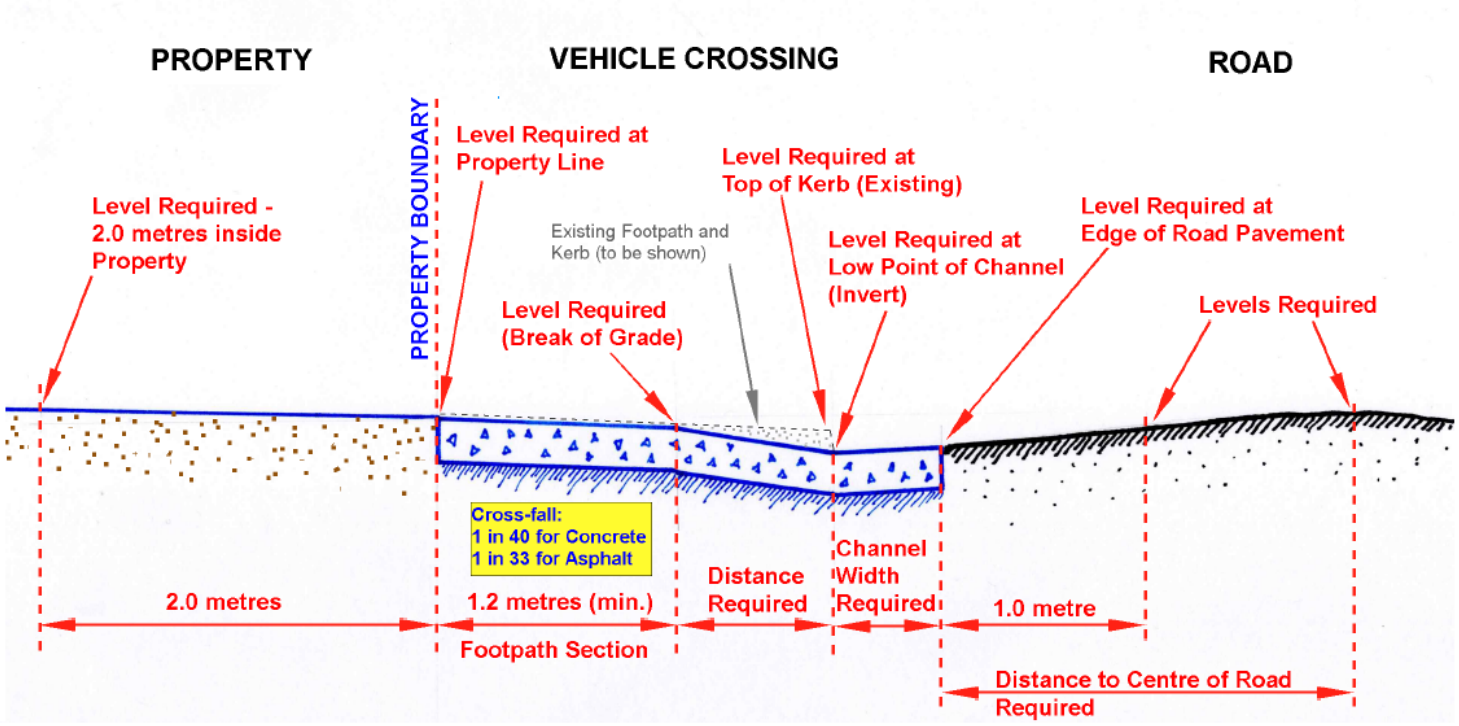
SECTION 4: Acknowledgement

Engineer: Mark Pisani

Signature: 

Date: 11 June 2025

Appendix A - Vehicular Access - Cross Sectional Drawing Information to be Provided



The Cross Sectional Drawing must provide the following:
- **All Levels (to three decimal places) as shown above.**
- **All Dimensions to points/levels as shown above.**
- **Ground clearance check using the B85 design vehicle (domestic)* or B99 design vehicle as per AS/NZS 2890.1:2004.**
- **The existing footpath and kerb to be shown (as a dashed line).**
- **The existing Top of Kerb level should be shown.**
- **The property boundary must be shown/labelled.**

* Domestic - one to three residential units.

ESD Formal Referral Response

Application Information:

Referral Officer:	Euan Williamson
Officer:	Erryn Megennis
Council Reference:	PLN25/0129
Address:	53-57 Cambridge St, Collingwood VIC 3066
Proposal:	Construction of a 9 storey mixed use building (including basement and roof terrace) comprising a Shop, Food and Drink Premises and Dwellings (planning permit not required for Food and Drink and Dwelling uses), reduction in the car parking requirements of the Yarra Planning Scheme.
Comments Sought:	Click here to view referral memo: Record D25/137853: IREF25/00562 - Internal Referral Request
Disclaimer:	Council's ESD Officer provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	

ESD comments were requested on the following:

- New referral

In assessing this application, the following documents were reviewed:

- SMP prepared by GIW dated 21 February 2025
- Architectural drawings prepared by Warren and Mahoney dated 28/3/2025

Comments

The standard of the submitted ESD does not meet Council's Environmentally Sustainable Design (ESD) standards.

Furthermore, it is recommended that all ESD commitments (1), deficiencies (2) and the outstanding information (3) are addressed in an updated SMP report and are clearly shown on Condition 1 drawings. ESD improvement opportunities (4) have been summarised as a recommendation to the applicant.

Should a permit be issued, the following ESD commitments (1) and deficiencies (2) should be conditioned as part of a planning permit to ensure Council's ESD standards are fully met:

1. Applicant ESD Commitments
   - Good daylight to dwellings and non-residential spaces.
   - 7.5 Star average NatHERS thermal energy ratings.
   - Non-residential components will exceed NCC requirements in energy efficiency.
   - Heat pump hot water.

- All electric appliances and no gas connected.
- Car park to have CO sensor controlled VSD for extraction air.
- Lighting at least 20% lower than NCC2022 max lighting power density.
- 5 kW solar PV array proposed to rooftop.
- Water efficient taps, fixtures and fittings.
- Water meters to all tenancies.
- Irrigation to be supplied by rainwater.
- Best practice STORM score of 100% relying on a minimum of 476 m2 of roof connected to 15,000 litre rainwater tank for irrigation and flushing on toilets GF-L3.
- At least 40% of course aggregate in concrete from recycled sources.
- All steel from Responsible Steel Maker.
- Timber to meet FSC/PEFC certified sustainable timber.
- Formwork, pipes, flooring, blinds and cables to meet GBCA guidelines or ISO14001 certification for PVC.
- 28 residential bicycle parking spaces and 5 for non-residential staff, plus 4 visitor bikes spaces.
- Electric vehicle infrastructure readiness proposed to all car parks.
- 80% of construction and demolition waste to be recycled or reused onsite.
- Residential waste streams for organics, glass, landfill and recycling. Non-res to include paper. cardboard, food waste and general waste and recycling.
- Various initiatives will reduce urban heat, including roof to have a minimum SRI of 60.
- Vegetated landscape in planter boxes from L1 to roof. A total of 13% of the site area is proposed to be vegetated.
- A building users guide will be provided to building users.

2. Application ESD Deficiencies
   - Satisfactory natural ventilation to dwellings except the single aspect dwellings (101, 103, 105, 201, 203, 205, 301, 303, 305, 401, 404) which have depths well over 5m. Recommend heat recovery ventilation to all single sided dwellings with balanced air supply and extraction.
   - Non-residential areas will have low VOC paints, adhesives, sealants, carpets and low formaldehyde levels in line with Green Star Buildings credits. Recommend low VOC strategy also applied to residential areas.
   - Sustainable products ‘where deemed appropriate’. This is ambiguous and could lead to misinterpretation. Please clarify exactly what products will meet this ‘sustainable’ criteria or please remove this and any other ambiguous language from the SMP.

3. Outstanding Information
   - 5 kW solar PV array proposed to rooftop, but roof plan shows five panels only. Please update with an accurate depiction of a 5 kW array.

4. ESD Improvement Opportunities
   - Apartments will have ~6% in GHG. Recommend purchasing 100% renewable energy via Green Power retail contracts to deliver zero carbon operational emissions.
   - Recommend reducing car parking to encourage sustainable transport modes.

- Recommend comprehensive commissioning and tuning of all lighting and major appliances.
- Recommend that the construction contractor hold valid ISO14001 accreditation or equivalent EMS.

ESD Advisor: Euan Williamson
Date: 07 May 2025

Sustainable Management Plan (SMP)
for planning applications being considered by Yarra Council



ESD in the Planning Permit Application Process

Yarra City Council's planning permit application process includes Environmentally Sustainable Development (ESD) considerations. This is now supported by the ESD Local Policy Clause 22.17 of the Yarra Planning Scheme, entitled *Environmentally Sustainable Development.*

The Clause 22.17 requires all eligible applications to demonstrate best practice in ESD, supported by the Built Environment Sustainability Scorecard (BESS) web-based application tool, which is based on the Sustainable Design Assessment in the Planning Process (SDAPP) program.

As detailed in Clause 22.17, this application is a 'large' planning application as it meets the category Non-r*esidential 1. 1,000m^2 or greater*.

What is a Sustainable Management Plan (SMP)?
An SMP is a detailed sustainability assessment of a proposed design at the planning stage. An SMP demonstrates best practice in the 10 Key Sustainable Building Categories and;

- Provides a detailed assessment of the development. It may use relevant tools such as BESS and STORM or an alternative assessment approach to the satisfaction of the responsible authority; and
- Identifies achievable environmental performance outcomes having regard to the objectives of Clause 22.17 (as appropriate); and
- Demonstrates that the building has the design potential to achieve the relevant environmental performance outcomes, having regard to the site's opportunities and constraints; and
- Documents the means by which the performance outcomes can be achieved.

An SMP identifies beneficial, easy to implement, best practice initiatives. The nature of larger developments provides the opportunity for increased environmental benefits and the opportunity for major resource savings. Hence, greater rigour in investigation is justified. It may be necessary to engage a sustainability consultant to prepare an SMP.

Assessment Process:

The applicant's town planning drawings provide the basis for Council's ESD assessment. Through the provided drawings and the SMP, Council requires the applicant to demonstrate best practice.

1. Indoor Environment Quality (IEQ)

Objectives:

- to achieve a healthy indoor environment quality for the wellbeing of building occupants
- to provide a naturally comfortable indoor environment will lower the need for building services, such as artificial lighting, mechanical ventilation and cooling and heating devices

Issues	Applicant's Design Responses	Council Comments	CAR*
Natural Ventilation and Night Purging	Satisfactory natural ventilation to dwellings except the single aspect dwellings (101, 103, 105, 201, 203, 205, 301, 303, 305, 401, 404) which have depths well over 5m.	Recommend heat recovery ventilation to all single sided dwellings with balanced air supply and extraction.	2
Daylight & Solar Access	Good daylight to dwellings and non-residential	Satisfactory.	1
External Views	No specific information provided.	Satisfactory.	1
Hazardous Materials and VOC	Non-residential areas will have low VOC paints, adhesives, sealants, carpets and low formaldehyde levels in line with Green Star Buildings credits.	Recommend low VOC strategy also applied to residential areas.	2
Thermal Comfort	-	-	-

* Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 1. Indoor Environment Quality
- Good Environmental Choice Australia Standards www.geca.org.au
- Australian Green Procurement www.greenprocurement.org
- Residential Flat Design Code www.planning.nsw.gov.au
- Your Home www.yourhome.gov.au

2. Energy Efficiency

Objectives:

- to ensure the efficient use of energy
- to reduce total operating greenhouse emissions
- to reduce energy peak demand
- to minimize associated energy costs

Issues	Applicant's Design Responses	Council Comments	CAR*
NCC Energy Efficiency Requirements	7.5 Star average NatHERS thermal energy ratings	Satisfactory	1
Thermal Performance	Non-residential components will exceed NCC requirements		
Greenhouse Gas Emissions	Apartments will have ~6% in GHG	Recommend purchasing 100% renewable energy via Green Power retail contracts to deliver zero carbon operational emissions.	4
Hot Water System	Heat pump hot water	Satisfactory	1
Peak Energy Demand	Various measures	Satisfactory	1
Effective Shading			
Efficient HVAC system	Energy efficient heating cooling within one star of best available, and min 3.4 COP in non-res areas.	Satisfactory	1
Car Park Ventilation	CO sensor controlled VSD for extraction air.	Satisfactory	1
Efficient Lighting	Lighting at least 20% lower than NCC2022 max lighting power density.	Satisfactory	1
Electricity Generation	5 kW solar PV array.	Satisfactory. Roof plan shows five panels only. Please update with an accurate depiction of a 5 kW array	1, 3
Other	No gas connected. All electric.	Satisfactory	1

* Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY

- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 2. Energy Efficiency
- House Energy Rating www.makeyourhomegreen.vic.gov.au
- Building Code Australia www.abcb.gov.au
- Window Efficiency Rating Scheme (WERS) www.wers.net
- Minimum Energy Performance Standards (MEPS) www.energyrating.gov.au
- Energy Efficiency www.resourcesmart.vic.gov.au

3. Water Efficiency

Objectives:

- to ensure the efficient use of water
- to reduce total operating potable water use
- to encourage the collection and reuse of rainwater and stormwater
- to encourage the appropriate use of alternative water sources (e.g. grey water)
- to minimise associated water costs

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising Amenity Water Demand	Water efficient WELS rated taps and fixtures as follows. - 6 Star taps - 5 Star dishwashers - 4 Star toilets - 4 Star showerheads (<7.5l/min)	Satisfactory	1
Water for Toilet Flushing	15,000 litres of rainwater storage connected to toilets for flushing on GF-L3 and landscape irrigation	Satisfactory	1
Water Meter	Water meters to all individual tenancies	Satisfactory	1
Landscape Irrigation	Irrigation connected to rainwater tank.	Satisfactory	
Other	-	-	-

* Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 3. Water Efficiency
- Water Efficient Labelling Scheme (WELS) www.waterrating.gov.au
- Water Services Association of Australia www.wsaa.asn.au
- Water Tank Requirement www.makeyourhomegreen.vic.gov.au
- Melbourne Water STORM calculator www.storm.melbournewater.com.au
- Sustainable Landscaping www.ourwater.vic.gov.au

4. Stormwater Management

Objectives:

- to reduce the impact of stormwater runoff
- to improve the water quality of stormwater runoff
- to achieve best practice stormwater quality outcomes
- to incorporate Water Sensitive Urban Design principles

Issues	Applicant's Design Responses	Council Comments	CAR*
STORM Rating	Best practice STORM score of 100% relying on a minimum of 476 m2 of roof connected to 15,000 litre rainwater tank for irrigation and flushing on toilets GF-L3.	Satisfactory	1
Discharge to sewer	-	-	-
Stormwater Diversion	-	-	-
Stormwater Detention	-	-	-
Stormwater Treatment	-	-	-
Others	-	-	-

* Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 4. Stormwater Management
- Melbourne Water STORM calculator www.storm.melbournewater.com.au
- Water Sensitive Urban Design Principles www.melbournewater.com.au
- Environmental Protection Authority Victoria www.epa.vic.gov.au
- Water Services Association of Australia www.wsaa.asn.au
- Sustainable Landscaping www.ourwater.vic.gov.au

5. Building Materials

Objectives:

- to minimise the environmental impact of materials used by encouraging the use of materials with a favourable lifecycle assessment

Issues	Applicant's Design Responses	Council Comments	CAR*
Reuse of Recycled Materials	*See below.*	Satisfactory	
Embodied Energy of Concrete and Steel	At least 40% of course aggregate in concrete from recycled sources. All steel from Responsible Steel Maker	Satisfactory	1
Sustainable Timber	Timber to meet FSC/PEFC certified sustainable timber.	Satisfactory	1
Sustainable products	Various products 'where deemed appropriate'	'Where deemed appropriate'. This is ambiguous and could lead to misinterpretation. Please clarify exactly what products will meet this 'sustainable' criteria or please remove this and any other ambiguous language from the SMP.	2
PVC	Formwork, pipes, flooring, blinds and cables to meet GBCA guidelines or ISO14001 certification.	Satisfactory	1

*Council Assessment Ratings**:**

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 5. Building Materials
- Building Materials, Technical Manuals www.yourhome.gov.au
- Embodied Energy Technical Manual www.yourhome.gov.au
- Good Environmental Choice Australia Standards www.geca.org.au
- Forest Stewardship Council Certification Scheme www.fsc.org
- Australian Green Procurement www.greenprocurement.org

6. Transport

Objectives:

- to minimise car dependency
- to ensure that the built environment is designed to promote the use of public transport, walking and cycling

Issues	Applicant's Design Responses	Council Comments	CAR*
Minimising the Provision of Car Parks	3 levels of basement car parking not attempting to minimise car parks.	Recommend reducing car parking to encourage sustainable transport modes.	4
Bike Parking Spaces	28 residential bicycle parking spaces and 5 for non-residential staff, plus 4 visitor bikes spaces.	Satisfactory	1
End of Trip Facilities	NA	-	-
Car Share Facilities	No information provided.	Satisfactory	1
Electric vehicle charging	Electric vehicle readiness proposed to all car parks	Satisfactory	1
Green Travel Plan	NA	-	-

*Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 6. Transport
- Off-setting Car Emissions Options www.greenfleet.com.au
- Sustainable Transport www.transport.vic.gov.au/doi/internet/icy.nsf
- Car share options www.yarracity.vic.gov.au/Parking-roads-and-transport/Transport-Services/Carsharing/
- Bicycle Victoria www.bv.com.au

7. Waste Management

Objectives:

- to ensure waste avoidance, reuse and recycling during the design, construction and operation stages of development
- to ensure long term reusability of building materials.
- to meet Councils' requirement that all multi-unit developments must provide a Waste Management Plan in accordance with the *Guide to Best Practice for Waste Management in Multi-unit Developments 2010*, published by Sustainability Victoria

Issues	Applicant's Design Responses	Council Comments	CAR*
Construction Waste Management	80% of construction and demolition waste to be recycled or reused onsite.	Satisfactory	1
Operational Waste Management	Residential waste streams for organics, glass, landfill and recycling. Non-res to include paper. cardboard, food waste and general waste and recycling.	Satisfactory	1
Storage Spaces for Recycling and Green Waste	Space for the waste streams above can be identified on the Basement 01 plan	Satisfactory	1
Others	-	-	-

*Council Assessment Ratings**:**

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 7. Waste Management
- Construction and Waste Management www.sustainability.vic.gov.au
- Preparing a WMP www.epa.vic.gov.au
- Waste and Recycling www.resourcesmart.vic.gov.au
- Better Practice Guide for Waste Management in Multi-Unit Dwellings (2002) www.environment.nsw.gov.au
- Waste reduction in office buildings (2002) www.environment.nsw.gov.au

8. Urban Ecology

Objectives:

- to protect and enhance biodiversity
- to provide sustainable landscaping
- to protect and manage all remnant indigenous plant communities
- to encourage the planting of indigenous vegetation

Issues	Applicant's Design Responses	Council Comments	CAR*
On Site Topsoil Retention	There is no topsoil onsite currently.	Satisfactory	1
Maintaining / Enhancing Ecological Value	Vegetated landscape in planter boxes from L1 to roof. A total of 13% of the site area is proposed to be vegetated.	Satisfactory	1
Heat Island Effect	Various initiatives including roof to have SRI or 60	Satisfactory	1
Green wall, roofs, facades	Information provided.	Satisfactory	1
Other	-	-	-

*Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 8. Urban Ecology
- Department of Sustainability and Environment www.dse.vic.gov.au
- Australian Research Centre for Urban Ecology www.arcue.botany.unimelb.edu.au
- Greening Australia www.greeningaustralia.org.au
- Green Roof Technical Manual www.yourhome.gov.au

9. Innovation

Objectives:

- to encourage innovative technology, design and processes in all development, which positively influence the sustainability of buildings

Issues	Applicant's Design Responses	Council Comments	CAR*
Improving on Green Star Benchmarks	-	-	-
Global Sustainability	-	-	-
Others	-	-	-

*Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 9. Innovation
- Green Building Council Australia www.gbca.org.au
- Victorian Eco Innovation lab www.ecoinnovationlab.com
- Business Victoria www.business.vic.gov.au
- Environment Design Guide www.environmentdesignguide.com.au

10. Construction and Building Management

Objectives:

- to encourage a holistic and integrated design and construction process and ongoing high performance

Issues	Applicant's Design Responses	Council Comments	CAR*
Building Tuning	No information provided	Recommend comprehensive commissioning and tuning of all lighting and major appliances.	4
Building Users Guide	A BUG will be provided	Satisfactory	1
Contractor has Valid ISO14001 Accreditation	No information has been provided	Recommend that the construction contractor hold valid ISO14001 accreditation or equivalent EMS.	1
Construction Management Plan	A CMP will be prepared.	Satisfactory	1
Others	-	-	-

*Council Assessment Ratings:

- 1 – Design Response is SATISFACTORY
- 2 – Design Response is NOT SATISFACTORY
- 3 – MORE INFORMATION is required
- 4 – ESD IMPROVEMENT OPPORTUNITIES

References and useful information:

- SDAPP Fact Sheet: 10. Construction and Building Management
- ASHRAE and CIBSE Commissioning handbooks
- International Organization for standardization – ISO14001 – Environmental Management Systems
- Keeping Our Stormwater Clean – A Builder's Guide www.melbournewater.com.au

Sustainable Management Plan (SMP)
for planning applications being considered by Yarra Council



Applicant Response Guidelines

Project Information:

Applicants should state the property address and the proposed development's use and extent. They should describe neighbouring buildings that impact on or may be impacted by the development. It is required to outline relevant areas, such as site permeability, water capture areas and gross floor area of different building uses. Applicants should describe the development's sustainable design approach and summarise the project's key ESD objectives.

Environmental Categories:

Each criterion is one of the 10 Key Sustainable Building Categories. The applicant is required to address each criterion and demonstrate how the design meets its objectives.

Objectives:

Within this section the general intent, the aims and the purposes of the category are explained.

Issues:

This section comprises a list of topics that might be relevant within the environmental category. As each application responds to different opportunities and constraints, it is not required to address all issues. The list is non-exhaustive and topics can be added to tailor to specific application needs.

Assessment Method Description:

Where applicable, the Applicant needs to explain what standards have been used to assess the applicable issues.

Benchmarks Description:

The applicant is required to briefly explain the benchmark applied as outlined within the chosen standard. A benchmark description is required for each environmental issue that has been identified as relevant.

How does the proposal comply with the benchmarks?

The applicant should show how the proposed design meets the benchmarks of the chosen standard through making references to the design brief, drawings, specifications, consultant reports or other evidence that proves compliance with the chosen benchmark.

ESD Matters on Architectural Drawings:

Architectural drawings should reflect all relevant ESD matters where feasible. As an example, window attributes, sun shading and materials should be noted on elevations and finishes schedules, water tanks and renewable energy devices should be shown on plans. The site's permeability should be clearly noted. It is also recommended to indicate water catchment areas on roof- or site plans to confirm water re-use calculations.

City Works
Formal Referral Response

Application Information:

Referral Officer:	Atha Athanasi
Officer:	Erryn Megennis
Council Reference:	PLN25/0129
Address:	53-57 Cambridge St, Collingwood VIC 3066
Proposal:	Construction of a 9 storey mixed use building (including basement and roof terrace) comprising a Shop, Food and Drink Premises and Dwellings (planning permit not required for Food and Drink and Dwelling uses), reduction in the car parking requirements of the Yarra Planning Scheme.
Comments Sought:	Click here to view referral memo: Record D25/137849: IREF25/00561 - Internal Referral Request
Disclaimer:	Council's City Works Unit provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	

Comments:

The waste management plan for 53-57 Cambridge St, Collingwood authored by Traffix Group and dated 20/2/25 is satisfactory from a City Works Branch's perspective.

Waste Management Officer: Atha Athanasi

Signature: Atha Athanasi

Date: 8/05/2025

C&R Ryder Consulting P/L
12/8 Sigma Drive
Croydon South, VIC, 3136
ABN: 47 376 684 521
E: cameron@crryder.com.au
P: 0434 351 567

Planning Referral Response

Date:	Monday, 28 April 2025	Reference No:	**PLN25/0129**
Address:	53-57 Cambridge St, Collingwood VIC 3066	Site visit completed:	No

Nature of Referral: Review of impacts to street trees from multistorey proposal

Overlays

None affecting trees

Scope

This referral has reviewed the supplied arborist report and plans in relation to the proposed works proposed as detailed above. Of prime concern is the potential for the development to impact street trees that surround the site.

Documents Reviewed

- Features and Levels Survey, prepared by Land Dimensions Pty. Ltd., dated 17/10/2024
- Town Planning Drawings, prepared by Warren and Mahoney, Job No. 10547, dated 28/03/2025, 50 pages
- Development Impact Assessment, 53-57 Cambridge Street Collingwood, prepared by Arbor Survey, dated 12/02/2025

Findings

I have reviewed the plans by Warren and Mahoney and Development Impact Assessment by Arbor Survey. They appear to be true and accurate.

I agree that the proposed works are generally unlikely to have significant impacts to the street. The only exception to this is the potential awnings that are proposed near Trees 6 & 7. The arborist report has not detailed what pruning is required to install the awnings.

It may be that awnings aren't achievable in the vicinity of Trees 6 & 7; however, this could be assessed throughout the build and omitted if there are structural branches on the trees. Pruning of branches greater than 50mm diameter is not supported for installation of awnings.

The greatest risk to the trees is the method of construction, access, cranes and other equipment. This can be best managed with the implementation of a Tree Management Plan.

Recommendations

It is recommended that:

1. Trees 1-10 are retained.
2. An asset protection bond of $30,000 is implemented for the protection of the 10 street trees, being approximately 50% of their total amenity value
3. Prior to the commencement of any works at the site (including demolition and excavation), a Tree Management Plan is prepared to the satisfaction of the responsible authority. The TMP must be prepared by a suitably qualified arborist and clearly detail:
   - 3.1 for Trees 1-10, a Tree Protection Zone (TPZ) and Structural Root Zone (SRZ) calculated in accordance with the AS4970-2009 *Protection of Trees on Development Sites*.
   - 3.2 the development layout, all built features, including: pavement, retaining walls, utilities, and drainage infrastructure.
   - 3.3 a Tree Protection Plan (scaled drawing) showing tree protection requirements for retained trees in accordance with the AS4970-2009 *Protection of Trees on Development Sites* including:
     - 3.3.1 tree protection fence alignments and dimensions for various stages of development
     - 3.3.2 areas of ground protection if required, ie where fencing cannot adequately afford tree protection or access across the TPZ is required.
     - 3.3.3 location of Tree Protection Zone signage
     - 3.3.4 a notation to refer to the TMP for additional detail
     - 3.3.5 any exclusions or limitations to the TPP, including a list of any plans not assessed.
   - 3.4 a timeline of when the Project Arborist will be on site during demolition, construction and regular, planned visits to ensure compliance with the TMP.
   - 3.5 any pruning or canopy protection measures required to Trees 6, 7, 8 & 10 for installation of scaffolding, awnings or walls. This must include marked up photos of canopy proposed to be pruned.
4. Before works start (including demolition and excavation), notice in writing must be provided to the responsible authority from a Project Arborist confirming their engagement to oversee all relevant tree protection works. The Project Arborist must be an appropriately experienced and qualified professional (minimum Diploma of Arboriculture or equivalent in experience).
5. Within 2 months of the completion of the development, a final Tree Certification Report must be prepared by the project arborist and submitted by the applicant to the satisfaction of the responsible authority for all retained trees. It must include:
   - 5.1 Tree condition (Trees 1-10) at the conclusion of the development and a statement that the trees will remain viable.
   - 5.2 All involvement by the project arborist including dates of when the project arborist was on-site.
   - 5.3 A statement that the approved tree management plan was implemented or detail any changes that were made during the construction.
   - 5.4 Detail of any remedial measures that are required to improve tree health.

If you have any further queries, please don't hesitate to contact me on 0434 351 567.

Regards



Cameron Ryder
C&R Ryder Consulting Pty Ltd

Strategic Transport Formal Referral Response

Application Information:

Referral Officer:	Philip Mallis
Officer:	Erryn Megennis
Council Reference:	PLN25/0129
Address:	53-57 Cambridge St, Collingwood VIC 3066
Proposal:	Construction of a 9-storey mixed use building (including basement and roof terrace) comprising a Shop, Food and Drink Premises and Dwellings (planning permit not required for Food and Drink and Dwelling uses), reduction in the car parking requirements and a waiver of the visitor bicycle parking requirements of the Yarra Planning Scheme.
Comments Sought:	Comments on the application from a Strategic Transport perspective are requested on the following: • Access and Safety • Bicycle Parking Provision • Adequacy of bicycle parking spaces provided (and waiver of visitor spaces) • Design and location of bicycle parking spaces and facilities
Disclaimer:	Council's Strategic Transport unit provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	First Referral

Comments

Access and Safety

No issues identified.

Bicycle Parking Provision

Statutory Requirement

Under the provisions of Clause 52.34-3 of the Yarra Planning Scheme, the development's bicycle parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate	No. of Spaces Required	No. of Spaces Allocated
Dwelling	28 dwellings	In developments of four or more storeys, 1 resident space to each 5 dwellings	6 resident spaces	28 resident spaces

		In developments of four or more storeys, 1 visitor space to each 10 dwellings	3 visitor spaces	4 visitor spaces
Shop	193 sqm	1 to each 600 sqm of leasable floor area if the leasable floor area exceeds 1000 sqm	0 employee spaces	3 employee spaces
		1 to each 500 sqm of leasable floor area if the leasable floor area exceeds 1000 sqm	0 visitor spaces	0 visitor spaces
Retail premises other than specified in this table (café)	102 sqm	1 employee space to each 300 sqm of leasable floor area	0 employee spaces	2 employee spaces
		1 visitor space to each 500 sqm of leasable floor area	0 visitor spaces	0 visitor spaces
Bicycle Parking Spaces Total			**6 resident spaces**	**33 employee / resident spaces**
			3 visitor spaces	**4 visitor spaces**
Showers / Change rooms		1 to the first 5 employee spaces and 1 to each additional 10 employee spaces	**0 showers / change rooms**	**0 showers / change rooms**

The development provides a total of 27 additional resident / employee spaces and one (1) additional visitor space above the requirements of the Scheme.

Adequacy of visitor spaces

Number of Spaces

The provision of four (4) visitor spaces is inadequate for the following reasons:

- The proposed development requires three (3) external visitor bicycle parking spaces, as per the City of Yarra Planning Scheme requirements. Four (4) external visitor bicycle parking spaces have been identified on the architectural plans, therefore satisfying requirements. **(adequate)**
- Supply is less than the CASBE requirements, which require one (1) visitor space per four (4) dwellings for residential developments and 1 per 500 sqm for non-residential developments, equating to a total requirement of seven (7) visitor bicycle spaces. **(inadequate)**

Design and Location of Visitor Spaces

The design and location of visitor spaces is adequate for the following reasons:

- Pursuant to Clause 52.34-5, all visitor spaces are to be provided at a bicycle rail. The visitor parking facilities at Cambridge Street and Langridge Street are provided as horizontal facilities aligning with this requirement. **(adequate)**

- Visitor bicycle parking is to be provided at ground level in an external area and be readily accessible to the public. The visitor parking facilities at Cambridge Street and Langridge align with this requirement. **(adequate)**
- Visitor parking spaces are provided in a public area, with adequate passive surveillance and activity, providing a safe and accessible bicycle parking space. **(adequate)**
- Bicycle hoops do not provide 500mm clearance from the kerb however, due to the limited space available on the footpath clearance from the building wall has been prioritised. **(adequate)**

Adequacy of employee/resident spaces

Number of spaces

The provision of 33 employee/resident spaces is adequate for the following reasons:

- The proposal provides 27 additional employee/resident spaces over the requirements of the planning scheme. **(adequate)**
- The supply meets CASBE requirements, which require a provision of one (1) secure undercover bicycle space per residential dwelling and 1 employee parking space for 10% of building employees (based on 1 employee per 50sqm), which equates to a total requirement of 28 employee/resident spaces. **(adequate)**

Design and location of employee/resident spaces and facilities

Employee/resident bicycle parking spaces are inadequately located and designed for the following reasons:

- Pursuant to AS2890.3, more than 20% of the employee/resident bicycle parking must be floor level, horizontal spaces. In the given development, employee parking is provided by 26 vertical wall-mounted spaces, and seven (7) horizontal hoops. The horizontal hoops represent 21% of the total spaces provided, therefore meeting requirements. **(adequate)**
- The bicycle storage room is easily accessible from the development's entrance and sufficient accessway widths are provided. **(adequate)**
- The aisle widths within the bicycle storage room meet the minimum requirements set out in AS2890.3. **(adequate)**
- The architectural plans confirm that the bicycle storage room will contain locking mechanisms pursuant to Clause 52.34-3 & AS2890.3 which requires that bicycle spaces for employees must be provided in a bicycle locker, or a lockable compound. **(adequate)**
- Pursuant to AS2890.3, vertically mounted spaces require a width of 700mm if handlebars of adjacent bicycles are vertically aligned, or 500mm if the handlebars of adjacent bicycles are vertically offset. While the architectural plans identify a width of 500mm for the spaces, a vertical offset has not been identified. **(inadequate)**
- Pursuant to AS2890.3, the access aisle for vertically wall mounted spaces must have a minimum width of 1,500mm. The architectural plans identify an access path width of 1,500mm in parking compound, therefore satisfying requirements. **(adequate)**

Recommendations

The following should be shown on the plans before endorsement:

1. Provide a minimum of 7 visitor bicycle parking spaces for the residential component of the development, in line with CASBE requirements.
2. A minimum width of 700mm for all vertically mounted parking spaces, unless a vertical offset of 300mm+ is specified.

Sustainable Transport Planner (Strategic Transport Unit): Philip Mallis

Date: 13/05/2025

6. DTP Applications

6.1. – PPE25/0291 675 Victoria Street, Abbotsford

Author	Paul Iacuone – Coordinator Statutory Planning
Authoriser	General Manager City Sustainability and Strategy

Executive Summary

Property	675 Victoria Street, Abbotsford
Ward	Boulevard Ward
Application number	PPE25/0291
Proposal	Use and development of a 14 storey mixed-use building, removal of vegetation, reduction of the statutory car parking (office) requirement and alteration to a road in a Transport Zone 2.
Zoning & Overlay/s	- Commercial 1 Zone (C1Z) - Public Park and Recreation Zone (PPRZ) - Significant Landscape Overlay (SLO1) - Design and Development Overlay – Schedule 1 (DDO1) - Design and Development Overlay – Schedule 2 (DDO2) - Land Subject to Inundation Overlay (LSIO) - Development Contributions Plan Overlay – Schedule 1 (DCPO1)
Strategic setting	Design and Development Overlay – Schedule 1 - Yarra (Birrarung) River Corridor. Design and Development Overlay – Schedule 2 - Main Roads and Boulevards Birrarung (Yarra River) Clause 12.03 - Water Bodies and Wetlands.
Submissions	DTP notified Council of this application on 15 May 2025 under s52(1)(b) of the *Planning and Environment* Act 1987 DTP placed the application on public notification on the 30 June 2025 and is due to finish on 14 July 2025.

Key reasons for support	- The site is suitable for development, however the current proposal raises a number of concerns in relation to height, massing, tree retention and visual bulk impacts on the wider environs. - Conditions are recommended that address the overall scale of the development, protect relevant trees and ensure a satisfactory public realm response is provided to both Victoria Street and the Yarra River.
Recommendation	That Council notify the Department of Transport and Planning outlining Council's position that the proposal is supported for the reasons listed in this reporting. The recommended conditions should be included on any planning permit should the Department of Transport and Planning be of a mind to grant the permit. Key conditions include: - Overall height reduction of the development (deletion of two levels in total) - Greater building and basement separation from the western boundary. - Increased ground floor setback from Victoria Street. - Public realm plan/treatment of interface with Yarra Trail and Victoria Street. - Landscape plan and additional information about tree protection.
Contact Officer	Paul Iacuone, Coordinator Statutory Planning

Officer Recommendation

That Council:

1. Note the officer report and the application material.
2. Delegate the Manager Statutory Planning to write to the Department of Transport and Planning outlining Council's position that the proposal is supported based on the following recommended conditions being included:

Conditions

1. Before the development commences, amended plans to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plans will be endorsed and will then form part of this permit. The plans must be drawn to scale with dimensions, and must be generally in accordance with the plans prepared by SJB Architects, Rev 1 & 2, dated 23.10.2024 and 14.03.2025 but modified to show:
   (a) The deletion of two levels, one level between levels 7-9 and Level 10;
   (b) The ground floor of the building to be setback a minimum of 3 metres from Victoria Street title boundary and the substation to be relocated underground;

(c) The building and basement levels to be setback a minimum of 4.5m from the western boundary and the changes absorbed within the approved building envelope;

(d) The through-site pedestrian link to be clear to the sky with no built form above and clear of columns;

(e) The ground floor 'commercial space' re- labelled as 'office'

(f) Increased depth of the landing adjacent to the Main Yarra Trail to a minimum of 1.8m;

(g) Bicycle channels along both sides of the stairs leading to the Main Yarra Trail;

(h) Plan notation to confirm security details of the bicycle storage compound;

(i) Dimensions for the vehicle entry and exit lane widths at the development entrance;

(j) Basement headroom clearance that will not be obstructed by any structural elements protruding from the underside of the ceiling;

(k) Vehicle crossing dimensions including section diagrams;

(l) The annotation – 'proposed Vehicle Crossing to satisfy the Department of Transport and Planning's geometric requirements and be constructed to Council's satisfaction.';

(m) The annotation - 'the maximum size of delivery vehicle permitted on the site for loading purposes is the B99 design vehicle';

(n) The vehicle crossing design to be adjusted/modified to provide a greater level difference between the invert level and the property line level without compromising the ground clearance for a B99 design vehicle and any subsequent re-grading of the footpath on either side of the new vehicle crossing;

(o) The footpath and the footpath area of the vehicle crossing to be DDA compliant;

(p) The basement ramp apex level must be maintained at no lower than RL 14.75 m AHD;

(q) The southeast corner of the ground level (commercial-office) within Council's local flood overlay must either be flood-proofed or have their sill level set at a minimum of 14.75 m AHD;

(r) The levels of the first 4.2m of the pedestrian link must be modified to provide a freeboard height of min 150mm above the applicable flood level to prevent surface water from Victoria Street entering the development;

(s) Trees 3, 6 & 18-25 shown as retained;

(t) Trees 1, 2, 4, 5 & 7-17 shown as removed;

(u) The proposed works alignment for Tree 6 and the plans updated to show the methods of retention and protection of Tree 6;

(v) The correct location of Tree 20;

(w) The staircase to the main Yarra Trail relocated to ensure the retention and protection of Trees 21 & 22;

(x) Further details of any elevation changes within the Tree Protection Zone (TPZ) of Tree 24;

(y) Methods for the retention of Tree 3 as detailed in the Ryder Arboriculture & Environment Report dated 2 July 2025;

(z) Additional visitor bicycle parking provided along the pedestrian path in accordance with Condition 29;

(aa) Any changes as a result of the Façade Strategy (Condition 5);

(bb) Any changes as a result of the Public Realm Functional Layout Plan (Condition 8);

(cc) Any changes as a result of the amended Sustainability Management Plan (Condition 11);

(dd) Any changes as a result of the amended Wind Report (Condition 14); and

(ee) Any changes as a result of the amended Landscape Plan (Condition 24);

Development Conditions

2. The use and development as shown on the endorsed plans must not be altered (unless the Yarra Planning Scheme specifies that a permit is not required) without the prior written consent of the Responsible Authority.

3. Prior to the commencement of the development, the Development Infrastructure Levy and Community Infrastructure Levy must be paid to Yarra City Council in accordance with the approved Development Contributions Plan, or the Owner must enter into an agreement with Yarra City Council to pay the amount of the levy within a time specified in the agreement.

4. As part of the ongoing consultant team, SJB Architects, or an architectural firm to the satisfaction of the Responsible Authority, must be engaged to:

   (a) Oversee design and construction of the development; and

   (b) Ensure the design quality and appearance of the development is realised as shown in the endorsed plans or otherwise to the satisfaction of the Responsible Authority.

Façade Strategy

5. Concurrent with the submission of Condition 1 Plans, a Façade Strategy and Materials and Finishes Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the Façade Strategy and Materials and Finishes Plan will be endorsed and will then form part of this permit. This must detail:

   (a) Elevation drawings at a scale of 1:20 illustrating typical podium details, entries and doors, and utilities and typical tower facade details;

   (b) Section drawings to demonstrate façade systems, including fixing details and joints between materials or changes in form;

   (c) Information about how the façade will be maintained, including any vegetation; and

   (d) Sample images or coloured drawings outlining colours, materials and finishes.

Tree Management Plan

6. Before the development commences, a Tree Management Plan to the satisfaction of the Responsible Authority must be prepared by a suitably qualified arborist and must be submitted to and approved by the Responsible Authority. When approved, the Tree Management Plan will be endorsed and will form part of this permit. In accordance with AS 4970 and to the satisfaction of the Responsible Authority, the TMP must make recommendations for the protection and preservation of the retained trees within the site

and adjacent to the Main Yarra Trail for each stage of the development (pre, during and post-construction). The recommended tree protection measures must include:

(a) Trees 3, 6 & 18-25 shown as retained including retention and protection methods;

(b) Trees 1, 2, 4, 5 & 7-17 shown as removed;

(c) Further non-root destructive investigation completed along the proposed works alignment for Tree 6 and plans updated to show methods of retention of Tree 6;

(d) The correct location of Tree 20;

(e) Retention and protection measures for Trees 21 & 22;

(f) Further details of any elevation changes within the TPZ of Tree 24;

(g) Tree Management Plans updated to detail 'no excavation or soil tillage within the TPZs of retained trees';

(h) Methods for the retention of Tree 3 as detailed in the Ryder Arboriculture & Environment Report dated 2 July 2025;

(i) Recommendations for robust TPZ fencing with appropriate signage;

(j) The provision of any barriers;

(k) Any pruning requirements; and

(l) Watering and maintenance regimes.

7. The provisions, recommendations and requirements of the endorsed Tree Management Plan must be complied with and implemented to the satisfaction of the Responsible Authority.

Public Realm Plan

8. Concurrent with the submission of Condition 1 plans, or by such later date as approved in writing by the Responsible Authority, a Public Realm Plan of all public realm improvements associated with the development including the pedestrian through link must be prepared, submitted and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The Public Realm Plan must show, but not be limited to the following, to satisfaction of the Responsible Authority:

(a) The levels of the first 4.2m of the pedestrian link must be modified to provide a freeboard height of min 150mm above the applicable flood level to prevent surface water from Victoria Street entering the development;

(b) A raised pedestrian crossing where the proposed vehicle crossover intercepts the footpath on Victoria Street;

(c) The new vehicle crossing;

(d) The reconstructed kerb and channel;

(e) The reconstructed footpath outside the property frontage;

(f) All footpath specifications;

(g) All kerb and channel specifications;

(h) All road pavement specifications;

(i) All detailed design plans;

(j) All roading and drainage infrastructure works including soft/hard landscaping;

(k) Public lighting details;

(l) Signage and wayfinding details;

(m) Seating;

(n) Street trees;

(o) At the permit holder's cost; and

(p) To the satisfaction of the Responsible Authority.

Public Realm Detailed Design Plan

9. Before the development commences (excluding site preparations, demolition and bulk excavation), or by such later date as approved in writing by the Responsible Authority, detailed design drawings of the works approved under the Public Realm Plan (as required by Condition 8) addressing all road infrastructure works (including soft/hard landscaping), must be submitted to and approved by Council's Civil Engineering Department. Once approved, the detailed design drawings will be endorsed and will then form part of the permit.

10. Before the development is occupied, or by such later date as approved in writing by the Responsible Authority, all works required by the endorsed Public Realm Plan must be constructed and completed to the satisfaction of the Council's Civil Engineering Department and at no cost to the Responsible Authority.

Sustainability Management Plan

11. In conjunction with the submission of development plans under Condition 1, an amended Sustainable Management Plan (SMP) to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended SMP will be endorsed and will form part of this permit. The amended SMP must be generally in accordance with the SMP prepared by GIW and dated 7 April 2025, but modified to show or detail:

    (a) Mechanical assisted ventilation to all dwellings that do not meet the BESS criteria for effective natural ventilation;

    (b) Re-submission of the daylight modelling, and relevant sections of the SMP, using the BESS internal reflectance values, ensuring that best practice daylight standards can be demonstrated;

    (c) A clear commitment to net-zero operational energy within the ESD Summary on page 7;

    (d) Increase the scale of the solar PV on the rooftop to utilise all suitable available roof space; and

    (e) Increase battery energy storage to utilise solar energy more effectively onsite,

    to the satisfaction of the Responsible Authority.

12. Prior to the occupation of the development approved under this permit, a report from the author of the sustainable management plan, approved pursuant to this permit, or similarly qualified person or company, must be submitted to the Responsible Authority. The report must be to the satisfaction of the Responsible Authority and must confirm that

all measures specified in the sustainable management plan have been implemented in accordance with the approved plan.

13. The provisions, recommendations and requirements of the endorsed SMP must be implemented and complied with to the satisfaction of the Responsible Authority.

Wind Report

14. Concurrent with the submission of Condition 1 Plans an amended Wind Assessment Report to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the amended Wind Assessment Report will be endorsed and will form part of this permit. The amended Wind Assessment Report must be generally in accordance with the Wind Assessment Report prepared by MEL Consultants and dated 14 February 2025, but modified to include (or show):
    (a) Consistency with the Condition 1 Plans; and
    (b) The wind conditions for private balconies and the communal roof terrace confirmed via a wind tunnel test.
15. The provisions, recommendations and requirements of the endorsed Wind Assessment Report must be implemented and complied with to the satisfaction of the Responsible Authority.

Waste Management

16. The provisions, recommendations and requirements of the endorsed waste management plan by Traffix Group dated 4 April 2025 must be implemented and complied with to the satisfaction of the Responsible Authority.

Engineering

17. Concurrent with the submission of Condition 1 plans or by such later date as approved in writing by the Responsible Authority, a vehicle crossing design must be submitted to Council's Civil Engineering Department for approval. The submitted design must demonstrate compliance with City of Yarra's Vehicle Crossing Information Sheet and the Department of Transport and Planning's geometric requirements.
18. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, any new vehicle crossing must be constructed:
    (a) at the permit holder's cost; and
    (b) to the satisfaction of the Responsible Authority.
19. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, any redundant vehicular crossing must be demolished and re-instated as footpath, verge (if applicable), and kerb and channel:
    (a) at the permit holder's cost; and
    (b) to the satisfaction of the Responsible Authority.
20. Before the building is occupied or by such later date as approved in writing by the Responsible Authority, the footpath along the property's Victoria Street frontage must be reconstructed in asphalt:
    (a) at the permit holder's cost; and
    (b) to the satisfaction of the Responsible Authority(s).

21. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the kerb and channel along the property's Victoria Street frontage must be reconstructed:
    (a) at the permit holder's cost; and
    (b) to the satisfaction of the Responsible Authority(s).
22. Before the development commences (excluding site preparations, demolition and bulk excavation), or by such later date as approved in writing by the Responsible Authority, detailed design drawings of the works approved under the Public Realm Plan (as required by Condition 4) addressing all road infrastructure works (including soft/hard landscaping), must be submitted to and approved by Council's Civil Engineering Department. Once approved, the detailed design drawings will be endorsed and will then form part of the permit.
23. Before the building is occupied or by such later date as approved in writing by the Responsible Authority, any damage to Council infrastructure resulting from the development must be reinstated:
    (a) In accordance with Yarra Standard Drawings | Yarra City Council;
    (b) at the permit holder's cost; and
    (c) To the satisfaction of the Responsible Authority.

Landscape Plan

24. Before the development commences, an amended Landscape Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the Landscape Plan will be endorsed and will form part of this permit. The amended Landscape Plan must be generally in accordance with the Landscape Design Plan prepared by Oculus, dated June 2024, but modified to show:
    (a) Removal of the two proposed raingardens and an alternate arrangement provided;
    (b) A detailed planting plan(s) for each level of the development showing the location of proposed planting, including plant species and quantities, as well as a legend containing key features, materials, and surfaces;
    (c) A planting schedule listing the proposed plant species (botanical and common name), installation size, width x height at maturity, and plant quantities;
    (d) Detailed drawings for built elements such as landscaping walls and furniture, including critical dimensions;
    (e) Vertical growing structures (if proposed) including detail drawings, servicing methodology, mounting technique etc.;
    (f) The areas proposed for deep soil planting;
    (g) On-slab container planter detail drawings demonstrating:
        (i) Minimum soil depth to be provided for each planting type;
        (ii) Volume and type of growing media;
        (iii) Minimum dimensions of 450mm in width for perimeter planters; and
        (iv) Wind-resistant mulch is to be used for above ground planted areas;

(g) Typical detail drawings for surface materials such as paver types, gravel treatment, etc..

to the satisfaction of the Responsible Authority.

25. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the landscaping works shown on the endorsed landscape plan must be carried out and completed to the satisfaction of the Responsible Authority. The landscaping shown on the endorsed landscape plan must be maintained by:

(a) Implementing and complying with the provisions, recommendations and requirements of the endorsed Tree Management Plan;

(b) Not using the areas set aside on the endorsed landscape plan for landscaping for any other purpose; and

(c) Replacing any dead, diseased, dying or damaged plants,

to the satisfaction of the Responsible Authority.

Legal Agreement - Affordable Housing

26. Before the development starts(excluding demolition, bulk excavation, site preparation and remediation works), the owner of the land must enter into an agreement with the Responsible Authority under section 173 of the Act, in a form to the satisfaction of the Responsible Authority, that provides for a contribution towards affordable housing (affordable housing contribution) in the following manner:

(a) At least 10 per cent of the total number of dwellings in the development must be provided as affordable housing for sale or lease to a registered housing agency or to Homes Victoria. The details of when and how the affordable housing will be delivered and the total value of the affordable housing contribution must be set out in the agreement. The affordable housing dwellings provided should be representative of the approved dwelling mix to the satisfaction of the responsible authority; or

(b) An alternative contribution towards the provision of affordable housing must be provided to the satisfaction of the responsible authority. The details of when and how the alternative contribution is to be made and the total value of the affordable housing contribution must be set out in the agreement.

27. The landowner must pay the responsible authority's reasonable costs of the preparation, execution, registration and ending of the S173 Agreement (where applicable)

Legal Agreement - Through-site pedestrian link

28. Unless otherwise agreed by the Responsible Authority, prior commencement of the development authorised by this permit (excluding retention, bulk excavation and early works), the owner (or another person in anticipation of becoming the owner) must enter into an agreement with the Responsible Authority under section 173 of the Planning and Environment Act 1987, which provides for the following;

(a) Publicly accessible pedestrian link to remain unobstructed and maintained in good order to the satisfaction of the Responsible Authority'; and

(b) 24-hour unfettered public access provided to the Main Yarra Trail from Victoria Street.

The owner, or other person in anticipation of becoming the owner, must meet all of the expenses of the preparation and registration of the agreement, including the Responsible Authority's costs and expenses (including legal expenses) incidental to the preparation, registration and enforcement of the agreement.

Green Travel Plan

29. Before the development commences, an amended Green Travel Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the Green Travel Plan will be endorsed and will form part of this permit. The amended Green Travel Plan must be generally in accordance with the Green Travel Plan prepared by Traffix Group, dated April 2025, but modified to show:
    (a) Sustainable transport goals linked to measurable targets, performance indicators and monitoring timeframes;
    (b) Details of bicycle parking specifications;
    (c) Security arrangements to access the employee bicycle storage spaces;
    (d) Signage and wayfinding information for bicycle facilities and pedestrians pursuant to Australian Standard AS2890.3; and
    (e) Reference to a minimum 40A single phase electrical sub circuit should be installed to the car park areas for 'EV readiness'.

General Conditions

30. Any new apartment development allowed by this permit must not be connected to a reticulated gas service (within the meaning of Clause 53.03 of the relevant planning scheme). This condition continues to have force and effect after the development authorised by this permit has been completed.
31. Except with the prior written consent of the Responsible Authority:
    (a) No less than 104 resident bicycle parking spaces must be provided with 20% of those level horizontal spaces;
    (b) No less than 6 employee spaces; and
    (c) No less than 31 visitor spaces must be provided.
32. All visitor and employee bicycle spaces must comply with the clearance and access-way requirements of AS2890.3.
33. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, the area set aside on the endorsed plans for the car parking spaces, access lanes, driveways and associated works must be:
    (a) constructed and available for use in accordance with the endorsed plans;
    (b) formed to such levels and drained so that they can be used in accordance with the endorsed plans;
    (c) treated with an all-weather seal or some other durable surface; and
    (d) line-marked or provided with some adequate means of showing the car parking spaces,

    to the satisfaction of the Responsible Authority.

34. Before the building is occupied, any wall located on a boundary facing public property must be treated with a graffiti proof finish to the satisfaction of the Responsible Authority.

35. Finished floor levels shown on the endorsed plans must not be altered or modified without the prior written consent of the Responsible Authority.

36. The amenity of the area must not be detrimentally affected by the use or development, including through:

    (a) the transport of materials, goods or commodities to or from land;

    (b) the appearance of any buildings, works or materials;

    (c) the emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil; or

    (d) the presence of vermin,

    to the satisfaction of the Responsible Authority.

37. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, external lighting capable of illuminating access to the basement car park, pedestrian walkway and dwelling entrances must be provided within the property boundary. Lighting must be:

    (a) Located;

    (b) Directed;

    (c) Shielded; and

    (d) O limited intensity,

    to the satisfaction of the Responsible Authority.

38. The use and development must at all times comply with the noise limits specified in the Environment Protection Regulations under the Environment Protection Act 2017 and the incorporated Noise Protocol (Publication 1826.4, Environment Protection Authority, May 2021), as may be amended from time to time.

39. Before the development commences, a Construction Management Plan to the satisfaction of the Responsible Authority must be submitted to and approved by the Responsible Authority. When approved, the plan will be endorsed and will form part of this permit. The plan must provide for (as appropriate):

    (a) A pre-conditions survey (dilapidation report) of the land and all adjacent Council road frontages and nearby road infrastructure;

    (b) works necessary to protect road and other infrastructure;

    (c) remediation of any damage to road and other infrastructure;

    (d) containment of dust, dirt and mud within the land and method and frequency of clean up procedures to prevent the accumulation of dust, dirt and mud outside the land;

    (e) facilities for vehicle washing, which must be located on the land;

    (f) the location of loading zones, site sheds, materials, cranes and crane/hoisting zones, gantries and any other construction related items or equipment to be located in any street;

(g) site security;

(h) management of any environmental hazards including, but not limited to:

  (i) contaminated soil;

  (ii) materials and waste;

  (iii) dust;

  (iv) stormwater contamination from run-off and wash-waters;

  (v) sediment from the land on roads;

  (vi) washing of concrete trucks and other vehicles and machinery; and

  (vii) spillage from refuelling cranes and other vehicles and machinery;

(i) the construction program;

(j) preferred arrangements for trucks delivering to the land, including delivery and unloading points and expected duration and frequency;

(k) parking facilities for construction workers;

(l) measures to ensure that all work on the land will be carried out in accordance with the Construction Management Plan;

(m) an outline of requests to occupy public footpaths or roads, or anticipated disruptions to local services;

(n) an emergency contact that is available for 24 hours per day for residents and the Responsible Authority in the event of relevant queries or problems experienced;

(o) the provision of a traffic management plan to comply with provisions of AS 1742.3-2002 Manual of uniform traffic control devices - Part 3: Traffic control devices for works on roads;

(p) a Noise and Vibration Management Plan showing methods to minimise noise and vibration impacts on nearby properties (including businesses) and to demonstrate compliance with Noise Control Guideline 12 for Construction (Publication 1254) as issued by the Environment Protection Authority in October 2008. The Noise and Vibration Management Plan must be prepared to the satisfaction of the Responsible Authority. In preparing the Noise and Vibration Management Plan, consideration must be given to:

  (i) using lower noise work practice and equipment;

  (ii) the suitability of the land for the use of an electric crane;

  (iii) silencing all mechanical plant by the best practical means using current technology;

  (iv) fitting pneumatic tools with an effective silencer; and

  (v) other relevant considerations (including impacts on the operation of businesses);

(q) a detailed dilapidation report detailing and documenting the existing and post construction conditions of surrounding road infrastructure and adjoining private properties;

(r) if any existing public lighting assets require temporary disconnection, alternative lighting must be provided to maintain adequate lighting levels. A temporary lighting scheme can only be approved by Council and relevant power authority. Existing public lighting could only be disconnected once temporary alternative lighting scheme becomes operational; and

(s) any site-specific requirements.

40. During construction:

(a) any stormwater discharged into the stormwater drainage system must be in compliance with Environment Protection Authority guidelines;

(b) stormwater drainage system protection measures must be installed as required to ensure that no solid waste, sediment, sand, soil, clay or stones from the land enters the stormwater drainage system;

(c) vehicle borne material must not accumulate on the roads abutting the land;

(d) the cleaning of machinery and equipment must take place on the land and not on adjacent footpaths or roads; and

(e) all litter (including items such as cement bags, food packaging and plastic strapping) must be disposed of responsibly.

41. The provisions, recommendations and requirements of the endorsed Construction Management Plan must be implemented and complied with to the satisfaction of the Responsible Authority.

42. Except with the prior written consent of the Responsible Authority, demolition or construction works must not be carried out:

(a) Monday-Friday (excluding public holidays) before 7 am or after 6 pm;

(b) Saturdays and public holidays (other than ANZAC Day, Christmas Day and Good Friday) before 9 am or after 3 pm; or

(c) Sundays, ANZAC Day, Christmas Day and Good Friday at any time.

43. Responsible Authority, any damage to Council infrastructure resulting from the development must be reinstated:

(a) at the permit holder's cost; and

(b) to the satisfaction of the Responsible Authority.

44. Before the building is occupied, or by such later date as approved in writing by the Responsible Authority, all new on-boundary walls must be cleaned and finished to the satisfaction of the Responsible Authority.

45. Before the development is occupied, or by such later date as approved in writing by the Responsible Authority, all screening and other measures to prevent overlooking as shown on the endorsed plans must be installed to the satisfaction of the Responsible Authority. Once installed the screening and other measures must be maintained to the satisfaction of the Responsible Authority.

Use Condition

46. The place of assembly land use must not exceed a maximum capacity of 12 patrons.

Department of Transport and Planning conditions

47. .....

Melbourne Water conditions

48. .....

Parks Victoria conditions

49. .....

Expiry

50. This permit will expire if:

    (a) the development is not commenced within two years of the date of this permit; or

    (b) the development is not completed within four years of the date of this permit; or

    (c) The use is not commenced within five years of the date of this permit.

    The Responsible Authority may extend the periods referred to if a request is made in writing before the permit expires or within six months afterwards for commencement or within twelve months afterwards for completion.

History and Background

1. This report provides Council with an assessment of a planning application currently being considered by the Department of Transport and Planning (the 'DTP') for a planning permit to develop 675 Victoria Street, Abbotsford. It follows a previous application (PLN22/0732) that was lodged with the Council in 2022 which sought approval for a 16 storey mixed use development that was subsequently withdrawn in March 2024 prior to Council determining the application. Prior to the application being withdrawn, issues previously raised by Council included the design response and building height amongst other issues.

2. The current application was made to the Minister for Planning pursuant to Clause 53.23 Significant Residential Development with Affordable Housing.



Figure 1 – Aerial Plan – Tract Planning Report dated 8 April 2025

3. In brief, the application proposes the development of the Site with a 14-storey building, removal of vegetation, a reduction in car parking and alteration of access to a road in a transport zone.

4. The building will comprise of a ground floor commercial tenancy (287m2), community facility (122m2), 123 dwellings (1-3 bedrooms) and two levels of basement and a lower ground level comprising of 169 car parking spaces and 158 bicycle spaces.



Figure 2 – Victoria Street visual – Tract Planning Report dated 8 April 2025.



Figure 3 – River interface visual – Tract Planning Report dated 8 April 2025

5. The attached **Council Officer Application Assessment Table** sets out a brief overview of the application, the relevant planning framework, key aspects of proposal and internal and external consultation undertaken.

Advertising

6. The application was notified to Council and surrounding properties. At the time of finalising this report, notice is underway and due to be completed on 14 July 2025.

Extent of advertising

7. Council wrote to the DTP on 19 June 2025 and requested that the following properties be notified by way of letter and signs displayed on the Site:



Figure 4 – YCC recommended extent of public notification (Site shown with blue cross)

8. DTP disagreed with the extent of public notification requested by Council and instead only gave notice to the properties (identified by the stars) identified in the below map:

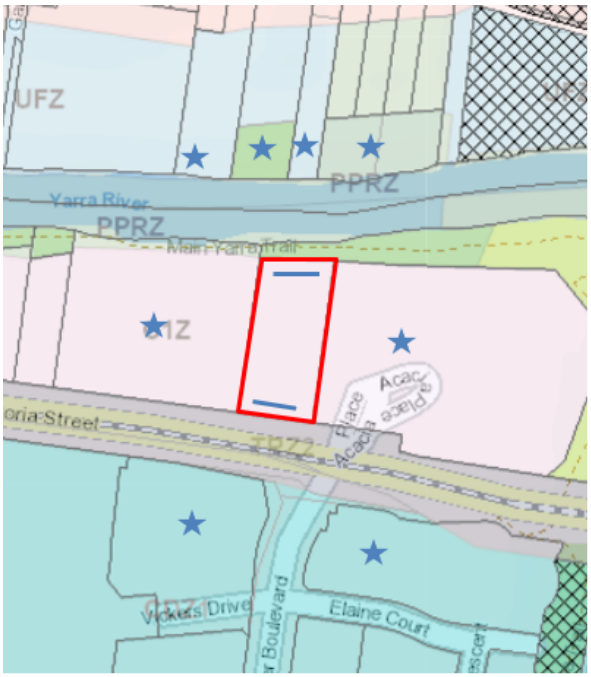


Figure 5 – DTP's map of publicly notified properties (Site highlighted in Red)

Referrals

9. Council's flood mapping has recently been updated. The flood mapping has no formal status and does not form part of the Yarra Planning Scheme. However, the information has been made public and Council officers are checking applications and advising potentially affected applicants. On review of the mapping area, it appears that the subject site is affected.

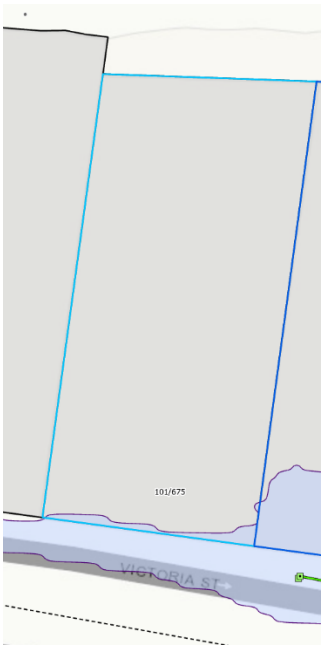


Figure 6- Yarra Flood Maps showing subject site affected by 1:100 year flood event.

10. The maximum 1 in 100 year flood level for the subject site is 14.52m to Australian Height Datum (AHD). This means that when the flood mapping has formal status, any new development must be built with floor levels 300mm above this. Council's Civil Engineers have reviewed the application and are generally satisfied with the basement ramp apex height and have required the level of the pedestrian link to be addressed. Council's Drainage Department has reviewed the proposal and has recommended a number of conditions be included on any approval granted to the site.

11. The application was referred to following internal business units within Council, whose full advice is attached to this report:

Internal Business Unit	Comments
Strategic Planning	Summary of comments: The mid street location and size of the site does not provide a rationale for why this development should exceed the height of existing built form. It is considered necessary in this context to provide additional setback at the ground level. It is noted that the neighbouring building to the east has a street wall height of 7 storeys. The proposed street wall height could be

	considered appropriate due to the width of the street and the neighbouring site if the upper-level setbacks are adequate to provide a distinction from the upper-levels and the proposed street wall. Considering the scale of the building, the proposed 2.4m upper-level setback is not adequate. The upper-levels of this development also overshadow the southern footpath at 10am. A greater setback of upper-levels would likely rectify this. The application has not provided the impact of the building on view lines to the Skipping Girl Sign, this should be included to properly understand the impacts. While the proposed separation generally is adequate and, in some locations, greater than, there are portions that are non-compliant. It would be recommended that the separation to the western boundary be increased if the building wishes to have a height of 41m approved. Recommendations: 1. The height of the development should be reconsidered or further amendments to other elements of the built form be made to justify the height. 2. Provide greater upper level setback to Victoria Street. 3. Provide information on the impacts to the Skipping Girl Sign. 4. Building separation to the western boundary be increased. 5. The upper two most levels be removed or recessed so they are not visually seen from the Main Yarra River Trail.
Urban Design	Supported in Principle, subject to the following changes: Built form and Massing: • Reduce the overall building height by 1 storey (removing from Levels 7-9). • Increase the setback of the uppermost two levels (Levels 10-11) to the north to reduce the visibility from the River corridor. • Provide a 4.5m setback along the length of the western boundary (basement and upper levels), to allow for further tree retention, deep soil planting and building separation. Victoria Street Interface • Increase the ground floor setback to 3m (along the entire length) to allow for more generous circulation space, landscaping and seating opportunities. • Investigate undergrounding the substation, providing an extended lobby space to activate the Victoria Street frontage. • Provide direct access to the commercial tenancy from the Victoria Street frontage and a secondary entrance from the pedestrian link. Pedestrian Link to the Main Yarra Trail

	• The pedestrian link should be clear to the sky with no building overhang and clear of columns. • Confirm if seating is to be provided and update Landscape Plan accordingly. • Ensure the pedestrian link is well maintained and kept open to the public. • Provide a Signage and Wayfinding Plan and Lighting Plan. Yarra Rail Interface • Increase the depth of the landing adjacent to the Main Yarra Trail to a minimum of 1.8m. • Provide bicycle channels along both sides of the staircase. Streetscape and Capital Works • Provide a Public Realm and Streetscape Plan (for review and approval by Council) that includes a raised pedestrian crossing where the proposed vehicle crossover disrupts the footpath on Victoria Street. Landscape Plan • Remove two proposed rain gardens from the landscape design. • Provide an updated Landscape Plan that meets Council's general requirements and includes details of: o planting plan(s) showing the location of proposed planting and plant numbers and species, as well as a legend containing key features, materials and surfaces. This should be provided for each landscaped area within the site. o vertical growing structures (if proposed) including detail drawings, servicing methodology, mounting technique etc. o the areas proposed for deep soil planting. o the location of each 'tree type' proposed. Bicycle Parking • Ensure the visitor bicycle along the western boundary receives some level of passive surveillance. • Distribute some visitor parking along the pedestrian link to better integrate with commercial.
Development Engineering	Development Engineering has supported the proposal from a traffic engineering perspective. The car parking provision for the various uses is considered appropriate in the context of the development and the surrounding area based on the exiting roading network and the availability of public transport in close proximity. The operation of the development was found to not adversely impact on the existing on-street parking conditions in the area. The magnitude of traffic generated by the development is not considered to be unreasonable and is not considered to adversely impact on the traffic operation of Victoria Street.

	A number of standard conditions are recommended to ensure the public realm is protected and the development does not detrimentally impact on infrastructure and the roading network.
ESD	Council's ESD officer identified the following application deficiencies be addressed as follows: • Mechanical assisted ventilation to all dwellings that do not meet the BESS criteria for effective natural ventilation. • Re-submission of the daylight modelling, and relevant sections of the SMP, using the BESS internal reflectance values, ensuring that best practice daylight standards can be demonstrated. Council's ESD officer Identified the following outstanding information: • Recommend updating the SMP to include a clear commitment to net-zero operational energy within the ESD Summary. Identified the following Improvement opportunities: • Consider increasing the scale of the solar PV on the rooftop to utilise all suitable available roof space. • Consider battery energy storage to utilise solar energy more effectively onsite.
Waste Management	Confirmed that the Waste Management Plan (WMP) is satisfactory
Strategic Transport	Recommended that: • The proposal provides 32 visitor spaces in line with CASBE requirements. • The plans identify security access arrangements for the bicycle storage compound in accordance with Clause 52.34-3 & Australian Standard AS2890.3 The Green Travel Plan be updated to include the following: • Sustainable transport goals linked to measurable targets, performance indicators and monitoring timeframes • Details of bicycle parking specifications • Security arrangements to access the employee bicycle storage spaces • Signage and wayfinding information for bicycle facilities and pedestrians pursuant to Australian Standard AS2890.3 • Reference to a minimum 40A single phase electrical sub circuit should be installed to the car park areas for 'EV readiness'
Open Space	Council's arborist supports the proposal based on a number of additional trees being retained and protected. Additional information is required about the building's impact on existing trees and the Yarra Trail interface. The application is required to provide methods

	for ensuring root protection and the relocation of the proposed pedestrian path to ensure the protection of further established trees on site. A number of the findings recorded in the submitted arborist report were not supported by Council's arborist. The conditions recommended in Condition 1 will address Council's arborist's concerns and ensure the landscape presentation of the building towards the Yarra Trail and Victoria Street is enhanced.
Flooding	Council's Drainage Department has reviewed the proposal as the frontage of the proposed development at 675 Victoria Street falls within the local flood overlay. Council flood mapping shows potential surface flooding in Victoria Street during a 1% AEP event. Councils Drainage Department has stated that the following concerns are required to be addressed via conditions: • Basement ramp apex to be set at RL 14.75 m, meeting freeboard requirements to prevent stormwater entering the basement from Victoria Street. • The pedestrian link along the eastern boundary is below the flood level and may allow surface water from Victoria Street to flow north toward the building entrances. Thus, pedestrian link design should be adjusted to prevent surface water entering the development. The levels of the first 4.2m of the pedestrian link are to be redesigned to provide a freeboard of min 150mm above the applicable flood level. • The southeast corner of the proposed development at ground level, falls within the local flood extent. To prevent flooding the interior, the windows must either be flood-proofed or have their sill level set at a minimum of 14.75 m AHD. • Any new fencing along the southern boundary and part of the eastern boundary (within the flood overlay) must be semi-permeable to avoid obstructing overland flow paths. • There should be no changes to the natural ground level (NGL) along the southern site boundary to avoid changing the flow pattern In addition Victoria Street is a Head, Transport Victoria asset and any flooding or ponding in the road reserve is the responsibility of this department. The Council's role is to ensure the property itself is protected from overland flows.

Officer Assessment

12. The attached **Council Officer Application Assessment Table (see attachment 1)** sets out a high level assessment of the application against the key considerations in the planning scheme.

13. This has led to the recommendation that the application be supported subject to recommended changes outlined at the beginning of the report.

Legal and Legislative obligations

Conflict of interest disclosure

14. Section 130 of the Local Government Act 2020 requires members of Council staff and persons engaged under contract to provide advice to Council to disclose any conflicts of interest in a matter to which the advice relates.

15. The Officer reviewing this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.

Report attachments

1. 6.1.1 Attachment 1 - Council Officer Application Assessment Table
2. 6.1.2 Attachment 2 - Plans
3. 6.1.3 Appendix 3 - Referral Responses
4. 6.1.4 Appendix 4 - Wind Tunnel Test
5. 6.1.5 Appendix 5 - Waste Management Plan
6. 6.1.6 Appendix 6 - Traffic Engineering Assessment
7. 6.1.7 Appendix 7 - Sustainability Management Plan
8. 6.1.8 Appendix 8- Applicant's Planning Report
9. 6.1.9 Appendix 9 - Landscape Concept Report
10. 6.1.10 Appendix 10 - Green Travel Plan
11. 6.1.11 Appendix 11 - Acoustic Report
12. 6.1.12 Appendix 12 - Flood Impact Assessment

DTP Application – Council Officer Assessment

Overview	
Property	675 Victoria Street, Abbotsford
Ward	Boulevard Ward
DTP Ref & Status/ reason for referral	PA2503647 – Notification underway Application made to Minister under Clause 53.23 Significant Residential Development with Affordable Housing. Council was notified under s52 of the Act on 15 May 2025.
Council Ref	PPE25/0291
Proposal	The application proposes the use and development of a 14-storey building, removal of vegetation, a reduction in car parking and alteration of access to a road in a transport zone. The building will comprise of a ground floor commercial tenancy (287m2), community facility (122m2), 123 dwellings (1-3 bedrooms) and two levels of basement and a lower ground level comprising of 169 car parking spaces and 158 bicycle spaces. The proposal is described in detail in the application material. The plans under assessment are those prepared by SJB Architects and dated 24 January 2025.
Site & Context	Described in the application material in detail. In summary: The subject site is rectangular in shape and has an area of 3,495m$^{2.}$ The site is situated on the northern side of Victoria Street in Abbotsford and sits directly opposite of the Victoria Gardens Shopping Centre. The site has a direct northern abuttal to the Yarra River and the associated Main Yarra Trail. In terms of transport, the Route 109 tram stop is located directly in front of the subject site. The closest train station being the Hawthorn Station located 1.45km away.

Notable application history	A previous application PLN22/0732 lodged with Council proposed a 16 storey mixed use development that was subsequently withdrawn in March 2024 prior to Council determining the application. Issues previously raised by Council included the urban design response, building height and massing. Notably, Melbourne Water, as a determining authority, objected to the proposal.
Planning Framework	
Zoning & Overlays	• Commercial 1 Zone (C1Z) • Public Park and Recreation Zone (PPRZ) • Significant Landscape Overlay (SLO1) • Design and Development Overlay – Schedule 1 (DDO1- Area G) • Design and Development Overlay – Schedule 2 (DDO2) • Land Subject to Inundation Overlay (LSIO) • Development Contributions Plan Overlay – Schedule 1 (DCPO1)
Statutory controls	A planning permit is required for the following: • use of the land for dwellings (123 dwellings) and community facility (place of assembly) at Clause 34.01-1 of the Yarra Planning Scheme (the Scheme). • to construct a building or to construct or carry out works under Clause 34.02-4, Clause 42.03-2, Clause 43.02-2, and Clause 44.04-2 of the Scheme. • a reduction in car parking under Clause 52.06-3 • to alter access to a road in a TRZ2 under Clause 52.29-2. The subject site is also subject to a development infrastructure contribution under the DCPO. <u>Clause 52.06 - Car parking</u> Pursuant to Clause 52.06-2, before a new use commences or the floor area of an existing use is increased or the measure specified in Column B of Table 1 to Clause 52.06-5 for that use is increased, the required car parking spaces must be provided on the land. Under the provisions of Clause 52.06-5 of the Scheme, the Site falls within the Principal Public Transport Network and has a reduced statutory car parking requirement

	The development has a total statutory car parking rate of 169 car spaces for all land uses on the site. This includes 158 spaces for the dwellings, 8 spaces for the office use and 3 spaces for the place of assembly (community facility). The proposal provides a total of 167 car spaces. These spaces are primarily assigned for the dwellings with one space for the commercial land use and one space for the community facility. The total provision equates to a statutory reduction of 9 spaces which is associated with the office land use and the community facility only. Pursuant to Clause 52.06-3 of the Scheme, a permit is required to reduce (including reduce to zero) the number of car spaces required under Clause 52.06-5. <u>Clause 52.34 – Bicycle Facilities</u> The development provides a total of 105 additional resident/employee bicycle spaces and 16 additional visitor spaces and meets the above the bicycle provision requirements of Clause 52.34. <u>Clause 53.23 Significant Residential Development with Affordable Housing</u> The application has been formally lodged through DTP under Clause 52.23 (Category 1). The applicant has stated that the cost meets the listed requirements as the estimated development cost exceeds $50 million, has an affordable housing cash contribution of 3% of the residential development cost and has provided written advice from the CEO of Invest Victor confirming financial feasibility will likely be obtained (based on advice from the Development Facilitation Program team).
Relevant planning policies	Broadly, the following policies within the Scheme are of most relevance to this application: (a) Clause 02.01 – Context (b) Clause 02.02 – Vision (c) Clause 02.03 – Strategic Directions (d) Clause 02.04 Strategic Framework Plan (d) Clause 11.01-S – Settlement (e) Clause 12 – Environmental and Landscape Values (d) Clause 13 – Environmental risks and amenity (e) Clause 15 – Built environment and heritage (f) Clause 16 - Housing

	(f) Clause 17 - Economic Development (g) Clause 18 – Transport (h) Clause 19 – Development infrastructure
Other relevant documents	Strategic Built form work has included the Victoria Street and Bridge Road Activity Centre Built Form Framework, (the BFF) which was undertaken for the interim planning controls and ultimately informed subsequent permanent controls for Victoria street. This strategic work examined this portion of Victoria Street. They prescribed a height of 18m for the site. At the time this was influenced by DDO1 which had a height of 18m, this is still the case though discretionary. Clause 12.03-1R Birrarung (Yarra River) was introduced in the Scheme on 14/4/25 by way of amendment VC281. The objective is to enhance the natural beauty, biodiversity, environmental health, cultural values, and recreational opportunities of the Birrarung (Yarra River) Corridor. Strategies aim to avoid detrimental cumulative impacts from land use and development on the natural and cultural values and the overall health of the Birrarung (Yarra River) Corridor and its tributaries and parklands.
Internal & External consultation	
Consultation	DTP notified adjoining and surrounding property owners on the 30 June 2025, and notice is currently underway and due to be completed on 14 July 2025.
Internal referrals	The proposal has been referred to the following internal business units, whose comments are attached in full, and whose recommendations have generally been incorporated into the recommended list of conditions: • Development Engineers, including the Drainage team; • Waste Management; • ESD; • Urban Design Unit; • Open Space Unit; • Strategic Transport; and • Strategic Planning Unit.

Other expertise required	DTP are recommended to obtain expert advice in relation to: - Wind – to review the anticipated wind conditions both within and external to the site; and - Acoustic advice – in relation to potential noise impacts from the proposed use on other surrounding more sensitive land uses. - Parks Victoria - Any submission and recommendations from Parks Victoria will need to be implemented as works are occurring on Parks Victoria land. - Melbourne Water – for matters in relation to flooding and interface with Yarra River - Head, Transport for Victoria (VicRoads) - for vehicle access/egress and impacts on Victoria Street.
Key considerations	**Generally complies?**
Strategic support	**Supported in part subject to deletion of top two floors, increased ground and upper level setbacks and appropriate massing and setbacks along the western boundary.** Broadly, there is support from the Planning Policy Framework for the redevelopment of the site to provide a higher density building. Policy at Clauses 11, 16 and 18 of the Scheme, together with Plan Melbourne, encourage the accumulation of activities and the intensification of development in and around activity centres. The commercial uses are consistent with Clause 17.01.1L (Employment) which highlights that commercial sectors underpin a sustainable economy and provide employment, consistent with Yarra's plans to foster a diverse and viable economic base. The application proposes the construction of a 14-storey building on land that is zoned for commercial purposes. At State level, the metropolitan planning strategy Plan Melbourne seeks to create 20-minute neighbourhoods, where people can access most of their everyday needs (including employment) within a 20-minute walk, cycle or via public transport. Planning Policy Framework directives seek to promote the use of sustainable personal transport and increased development close to high-quality transport routes (Clauses18.02-1L (Walking), 18.02-2L (Cycling) and 18.02-4L (Road System)). Proximity to public transport encourages the use of alternative transport modes to and from the site; this outcome is encouraged by Clause 02.03 (Strategic direction) and Clause 18 (Transport). This is detailed within Council's Engineer's advice and is supported.

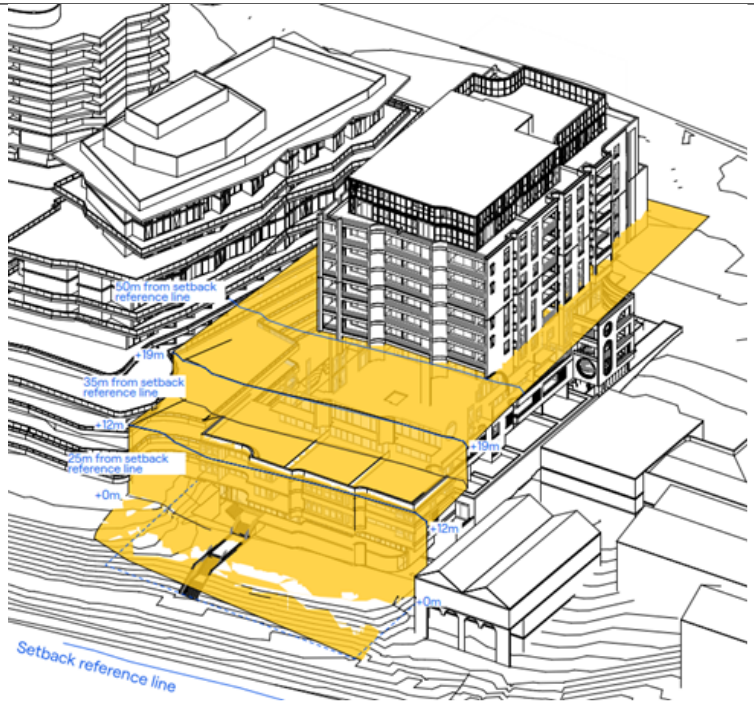
	Importantly the Main Yarra Trail and its environs must be protected against the detrimental cumulative impacts of land use and development. As the site has an interface with the Yarra River a proposal's resultant height, massing, scale and design response must be designed respectfully whilst also providing an appropriate and safe walking and cycling connection to the Main Yarra Trail.
Land use	**Supported.** The proposed land uses on the site (dwellings, office -shown as the 247m2 of commercial office space on the application plans and place of assembly) are not considered to be at odds with the strategic policy framework for the area. A condition will ensure that the 247m2 of "commercial" as found on the submitted plans is labelled correctly as "office" which is stipulated in the planning report. Similar land uses and built form outcomes are readily found along the northern and southern side of Victoria Street. The subject site is in very close proximity to public transport and the Victoria Gardens Shopping Centre. Traffic and its demand for parking beyond can readily be accommodated on site and by the surrounds. The community facility will support the wider needs of the community in addition to the employment opportunities afforded by the new office tenancy at ground floor. The residential land use is strategically well located in close proximity to the Victoria Gardens Shopping Centre and an established public transport network. A recommended condition will ensure patron numbers do not exceed a maximum number of 12 to ensure the parking provision is adequate for the proposed use.
Built Form, Height and Massing – (Including DDO1)	**Supported subject to reduction of built form and height and additional setbacks** The Design and Development Overlay – Schedule 1 has an overarching design objective of protecting the Yarra River Corridor. Table G of the DDO1stipulates mandatory height controls within nominated setbacks from the Yarra River:

Table G

			Maximum building height		Discretionary maximum building height
Map Reference Area	**Location**	**Minimum setback**	**0m to 10m from setback line**	**10m to 25m from setback line**	**>25m from setback line**
G	Victoria Street, Abbotsford	25 metres	11 metres	18 metres	18 metres

Section 2 of the DDO1 '*Requirements that cannot be varied by a planning permit'* states that *new buildings must not exceed the maximum building height specified in the applicable table to this schedule. A building may exceed the maximum building height by up to 1 metre if the slope of the ground level, measured at any cross section of the site of the building wider than 8 metres, is greater than 2.5 degrees.*

In line with the above, the proposal exceeds the mandatory height limits by 1m at the riverfront interface due to the land slope being greater than 2.5 degrees across the rear of the site. To demonstrate compliance with Table G the architect has provided the below 3D Diagram showing the building sitting within the mandatory height controls with the exception of the balustrades with are shown in white (the balustrades are discussed separately):



The building balustrades shown above the mandatory height requirements are setback 500mm from the building edge of the floors below. A condition is requested that they are setback a minimum of 1m from the edge of the building line and be constructed of a more lightweight material instead of the proposed brick to ensure they appear visually separated from the brick building element below and not visually impede on the wider Yarra environs.

Building Height

The overall building height proposed by the applicant is taller than all other buildings along the northern side of Victoria Street and significantly exceeds the 18m anticipated by the DDO1. As the overall building height exceedance

	is discretionary and a vast number of existing built form outcomes vastly exceed this height an assessment has been made against the urban context of the Site and existing built form outcomes along Victoria Street. The mid-block location and size of the site do not provide a design rationale for why it should exceed those already developed nearby. The removal of one level (between floors 7-9) has been recommended by Council's Urban Design Unit, along with increased setbacks for the upper-two-most levels from the river frontage. From the Yarra River environs, the visual impact of the uppermost levels is a significant concern. These levels require removal or subsequent additional recession to limit their visibility along the Main Yarra River Trail and the wider river environs. In this case, the deletion of one level (level 10) has been chosen as its visibility is most prominent as demonstrated in the submitted renders. The deletion of this level and one from levels 7-9 is considered to provide a mitigated and appropriate outcome for the Yarra River environs and wider Victoria Street streetscape. This change would result in a reduced built form outcome that would be more commensurate to the adjoining buildings which sits at approximately 11-12 storeys when viewed from Victoria Street. The image below shows the proposed building height sitting significantly higher than the built form located at 679 Victoria Street.



To the north, the remainder of the development steps down towards the Yarra corridor, within the building envelope specified in DDO1 being met. The below image shows the building's eastern elevation and the required DDO1 setback line from the Yarra River (purple dashed line).

	
	Victoria Street street wall height The width of Victoria Street measured approximately at 32m and the street wall also proposes 32m. This is a street width to street wall height ratio of 1:1. In the case of the Victoria Street, west of Burnley Street, the BFF has used a ratio slightly less than 1:1.

	Officer have undertaken a number of built form reviews across Yarra's activity centres. Typically, in areas where renewal is expected street wall heights of 4 storeys (15m) as in the case of Victoria Street (e.g. Council adopted DDO50), 4 storeys (16m) in higher change areas in Cremorne and in some cases within Collingwood South Mix Use Area (DDO23) 20m. The proposed height of the street wall to Victoria Street far exceeds what is typically prescribed in previous built form amendments. It is noted that the neighbouring building to the east has a street wall height of 7 storeys. The proposed street wall height at 8 storeys is therefore considered appropriate due to the width of the street and the neighbouring site. While Council's Strategic Planning Unit has recommended the upper-level setback (above the street wall) to Victoria Street be increased to 5 metres above the podium, this recommendation is considered unwarranted given the lack of policy calling for this and was not a recommendation put forward by Council's Urban Design Unit. **Building Separation** Design and Development Overlay Schedule 1 (Yarra Birrarung River Corridor) seeks to "ensure sufficient space is provided between buildings to maintain views to the Yarra River and allow for the planting and growth of vegetation, including large canopy trees". The separation to the eastern boundary is generally greater than 4.5m and where it is not, the eastern property has provided a setback greater than 4.5m, or has an interface to non-sensitive spaces. The design response along the eastern boundary is considered to be satisfactory and respectful of the neighbouring building. Along the western site boundary, the proposed setback varies between 1m to 4.5m and does not allow for adequate building separation. Increasing the setback along the length of the site (including the basement) would allow for further tree retention and new deep soil planting, as well as greater visual break between buildings. The greater separation of built form from the western boundary would allow for additional mature tree planting opportunities whilst allowing a more respectful response to the wider Victoria Street streetscape, neighbouring heritage building and the Skipping Girl site.
Built form – Design and Materials	Subject to conditions, the materials and architectural presentation of the building is considered satisfactory and appropriate for the Yarra River environs which calls for materials that complement the natural landscape.

Views to Landmarks- Skipping Girl Sign	Clause 15.01-2L-02 Landmarks of the Yarra Planning Scheme calls for the protection of view lines to significant landmarks such as the Skipping Girl sign, located further to the west of the subject site, from certain vantage points. An analysis provided with the application material shows that the proposal would not impact view lines from the eastern end of Victoria Street, on approach to the sign.
Landscaping/ Vegetation	**Supported based on additional information and further reporting.** The Landscape Concept Plan demonstrates the overall concept for the development, however, contains insufficient detail. The provision of rain gardens is generally not supported within the northern building setback and surrounding the retained tree along the western boundary. Recommendation: • Remove two proposed rain gardens from the landscape design. • Provide an updated Landscape Plan that meets Council's general requirements and includes details of: o planting plan(s) showing the location of proposed planting and plant numbers and species, as well as a legend containing key features, materials and surfaces. This should be provided for each landscaped area within the site. o vertical growing structures (if proposed) including detail drawings, servicing methodology, mounting technique etc. o the areas proposed for deep soil planting. o the location of each 'tree type' proposed. The size and extent of the proposed basement levels are considered to be excessive and require reduction to ensure tree protection, increase landscaping opportunities and the protection of adjoining properties. The basement interface with the northern river corridor requires further consideration to ensure any negative construction impacts are avoided. The proposal must respond to the relevant policies and objectives of the Yarra Planning Scheme in relation to landscaping, ecological protection, basement design and flood management through water sensitive urban design.

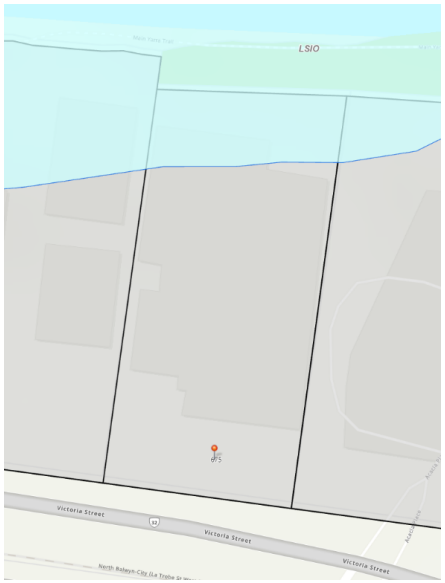
	Council's Arborist has reviewed the submitted arborist report and does not support its recommendations. Council's arborist does support the proposal subject to a number of design changes and the following recommendations being adopted by way of condition: 1. Trees 3, 6 & 18-25 are retained. 2. Approval is given for the removal of Trees 1, 2, 4, 5 & 7-17. 3. With regard to Tree 3, further information is required: 3.1 Detail of how surrounding infrastructure will be removed and/or abandoned and left in place. 3.2 Removal of raingarden and conversion to mulched garden bed at natural ground level 3.3 Removal of the brick wall that will be up to the trunk 3.4 Detail regarding the location of any new services and method of installation within the TPZ 3.5 Detailed, measured and scaled canopy drawings showing the location of the tree and its canopy in relation to: 3.5.1 The curve for the first 3 floors 3.5.2 The overhanging floors from level 4 and above 3.6 Review of proposed light levels and how a species with a high light requirement will perform in a heavily shaded environment. 4. A non-root destructive investigation is completed along the proposed works alignment for Tree 6. Insufficient justification in accordance with AS4970-2025 Protection of Trees on Development Sites has been provided as to how Tree 6 will remain viable with canopy and root loss. 5. The plans are updated to show the correct location of Tree 20 (Figure 5) 6. The staircase is moved to allow for retention of Trees 21 & 22. 7. Further detail is provided of any elevation changes within the TPZ of Tree 24. 8. Landscape plans are updated with annotation for there to be no excavation or soil tillage within the TPZs of retained trees.

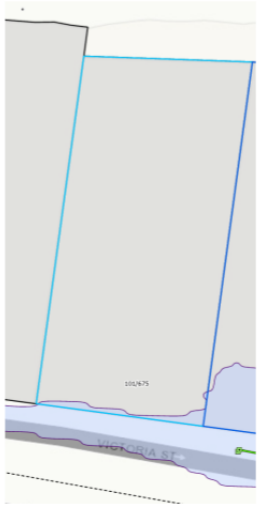
	As the subject site has such an important interface with the Yarra River it is recommended that the proposal adequately responds to all concerns raised and provides a detailed overall landscaping response prior to approval.
Sustainable development	**Supported subject to deficiencies being addressed and outstanding information being provided.** There are a large number of single aspect dwellings with no access to natural ventilation. Recommend mechanical assisted ventilation to all dwellings that do not meet the BESS criteria for effective natural ventilation. The daylight modelling is reliant on internal reflectance values that are not consistent with BESS best practice standards/methodology. These assumptions will be favourably distorting the daylight performance standards. The correct reflectance values are on the BESS Fact Sheets site, and also here; ▪ Ground plane: 0.1 ▪ External walls and obstructions: 0.4 ▪ Floor: 0.3 ▪ Wall: 0.7 ▪ Ceiling: 0.8 It is recommended that the applicant re-submits the daylight modelling, and relevant sections of the SMP, using the BESS internal reflectance values, ensuring that best practice daylight standards can be demonstrated. The commitment to net-zero operating emissions is welcomed, however this commitment is notably missing from the ESD Summary on page 7 of the SMP, despite it being included in the body of the report, the BESS report and the architectural drawings. For ease of enforcement and verification it should be included in the ESD Summary section also. The requirements have been recommended as conditions.
Public realm outcomes	**Supported subject to the following a number of design changes.** The main residential lobby is located centrally. A ground floor setback of 2.3m is provided along a portion of the frontage, narrowing to the east. Despite the site having a significant frontage to Victoria Street, there is little activation with the public at the ground level, with limited areas afforded to residential lobby and commercial tenancy. The

	public realm offering on the Victoria Street frontage could be enhanced through, relocating the substation, provide a deeper setback of 3m, incorporating deeper landscaped planters, integrated seating. The provision of a through site pedestrian link from Victoria Street to the Yarra Trail along the eastern site boundary is supported and contributes to the accessibility of the Trail for the wider precinct. The link is well activated with a reasonable level of engagement with adjacent commercial, residential and community uses. The proposal must confirm if seating opportunities are to be provided along the pedestrian link. The pedestrian link should be clear to the sky and free from any building overhang along its entire length. This would also remove the need for structural columns along the building line, keeping the pathway clear of obstructions. The success of the link relies upon continuous public access, well-integrated building and wayfinding signage and appropriate lighting. It is recommended that a Section 173 Agreement requiring 24- hour unfettered access be entered into to ensure the ongoing use of this link. The pedestrian link wraps around the building and then extends down via a series of stairs and landings to meeting the Main Yarra Trail. The stairs extend beyond the site boundary into Crown allotment (managed by Parks Victoria). A generous landing should be provided to allow safe refuge from the Main Yarra Trail and minimise and potential conflicts. All handrails and tactiles must be fully contained within this setback. Bicycle channels should be provided along both sides, for use for both ascending and descending cyclists. A condition is recommended requesting all changes listed above be addressed and a Public Realm and Streetscape Plan be provided to the satisfaction of the Responsible Authority.
Off-site amenity impacts	**Supported based on conditions to reduce built form and increase setbacks.** The proposal's interface with the heritage overlay (HO65) at 661- 663 Victoria Street is inappropriate. The development of this heritage site is not expected to occur in the near future and the transition of the proposed built form needs to be respectful. The conditions recommending greater setbacks from the western boundary and the reduction of the overall built form will address this concern. The established Victoria Street character including view lines to prominent heritage buildings and signage such as the Skipping Girl sign must be protected whilst pedestrian connectivity and improved safety conditions for pedestrians and vehicles are provided. All requirements listed within the Design and Development Overlay - Schedule 2 (Main Roads and Boulevards) must be considered.

	The proposal is not considered to be respectful of the wider Victoria Street streetscape and the adjoining property to the west nor the river corridor. As previously mentioned a number of conditions will require greater western setbacks in order to provide mature tree planting and reduced built form outcomes. The deletion of two levels as recommended will also ensure wider off site amenity impacts by way of unreasonable visual impact are addressed. **Overshadowing** Considering the current scale of the building, it appears the building will only cast marginal shadow over the southern footpath at 10am (Sept 22). The shadows cast by the proposal are considered to be acceptable based on the wide road reserve width. Due to the orientation of the building impacts are mainly confined to the south western portion of the abutting site located at 679 Victoria Street. These shadows are mainly in the afternoon period. The recommended removal of two floors will further ensure any overshadowing impacts are minimised. **Overlooking** The architectural drawings have provided typical overlooking section diagrams for unit types over a number of floors that depict compliance with the overlooking standards.
On-site amenity & issues	**Supported.** The development proposes 123 dwellings (one, two and three bedrooms). The residential component of the development should meet all the standards and must meet all the objectives of Clause 58 of the Yarra Planning Scheme. BADs standards and industry best practice must ensure adequate light and ventilation occurs. A number of conditions in relation to internal circulation, safety and access are also recommended by way of condition.
Carparking & traffic	**Supported.** From a traffic engineering perspective, the car parking provision for the various uses is considered appropriate in the context of the development and the surrounding area.

	The operation of the development should not adversely impact on the existing on-street parking conditions in the area. The Engineering Referral team has no objection to the reduction in the car parking requirement for this site. Traffic Group had conducted peak period turning movements counts for the existing access at the site with Victoria Street on Thursday 14 July 2022 from 7:00am to 7:00pm. The survey results indicated that the existing site generated some 20 trips in the AM peak hour and 14 trips in the PM peak hour. The new development would generate an additional 19 trips in the AM peak hour and an additional 25 trips in the PM peak hour. The magnitude of traffic generated by the development is not unduly high and should not adversely impact the traffic operation of Victoria Street.
Bicycle provision	**Support with changes.** All visitor bicycle parking is provided along the western boundary within the landscaped setback. The deep recessed area is accessed via a 2m wide pathway. There is concern this lacks integration with the primary building entrance and lacks visibility from Victoria Street. The development provides a total of 105 additional resident/employee spaces and 16 additional visitor spaces above the requirements of the Scheme. However, Council's Strategic Transport Unit consider the provision of 28 visitor spaces is inadequate as the supply is less than the CASBE requirements, which require 1 visitor space per 4 dwellings for residential developments and 1 per 500 sqm for non-residential developments, equating to a total requirement of 31 visitor bicycle spaces. A bicycle storage compound is provided on the Lower Ground Floor, south of the community facility. Details are required to be provided within architectural plans to confirm that all bicycle storage rooms will contain locking mechanisms pursuant to Clause 52.34-3 & Australian Standard AS2890.3 which requires that bicycle spaces for residents must be provided in a bicycle locker, or a lockable compound. The application includes a Green Travel Plan (GTP). The GTP does not adequately address sustainable transport goals, bicycle parking specifications, secure access arrangements, signage and wayfinding information, EV readiness, and should be modified to include the following: • Sustainable transport goals linked to measurable targets, performance indicators and monitoring timeframes • Details of bicycle parking specifications

	• Security arrangements to access the employee bicycle storage spaces • Signage and wayfinding information for bicycle facilities and pedestrians pursuant to Australian Standard AS2890.3 • Reference to a minimum 40A single phase electrical sub circuit should be installed to the car park areas for 'EV readiness' This information is required to be shown in the GTP before it can be approved.
Flooding	The site is impacted by a Land Subject to Inundation Overlay at the rear of the site (closest to the Yarra River). The map below shows the extent of the LSIO:  DTP is required to refer the proposal to Melbourne Water who act as a referral authority pursuant to Section 56 (1) of the Planning and Environment Act 1987.

	It is unclear if DTP has received referral response from Melbourne Water in relation to the current proposal, Council has requested a copy of this referral. It is noted that in the previously withdrawn application (PLN22/0732), Melbourne Water objected to the proposal based on a number of grounds relating floodplain management. Council Flooding Maps Council's flood mapping indicates that 675 Victoria St, Abbotsford may be subjected to flooding during a 1 in 100 rain event, from surface water in Victoria Street. Council's GIS identifies the 1% flood height maximum as RL14.52. The analysis indicates the 1 in 100-year ARI (1% ARP) as RL 14.4 in front of the development. This is depicted in the marginal encroachment at the front of the property as shown on the below map: 

	Council's Civil Engineers and Drainage Team have reviewed the application and are generally satisfied with the basement ramp apex height and have required the level of the pedestrian link to be addressed. Specifically, the pedestrian link along the east boundary falls to the north and is below the flood level identified. During severe storm events surface water from the road reserve may flow down the pedestrian link and to abutting building entry points. The pedestrian link design should ensure that surface water from the Victoria Street road reserve does not enter the development. This requirement will appear as a recommended condition to DTP. Additional recommendations include flood proofing the ground floor commercial-office tenancy windows and ensuring semi permeable fencing along the southern boundary. However, no fencing is proposed to the south and thus this will not form as a recommendation. The Victoria Street road reserve falls under the management of Head, Transport for Victoria who will provide a response to DTP. Any applicable flooding effects that may occur in the road reserve should be addressed by Head, Transport for Victoria.
Net community benefit	The development proposes to provide a cash contribution for affordable housing, to the Social Housing Growth Fund. The applicant states that a 3% contribution to the total residential development cost will enable assistance in providing housing for Victoria's most vulnerable populations. A through-site pedestrian link is proposed on the eastern side of the site, providing access from Victoria Street through to the Main Yarra Trail.

675 Victoria Street, Abbotsford

DTP Submission



Prepared for
EG

Issued
March 2025

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At SJB we believe that the future of the city is in generating a rich urban experience through the delivery of density and activity, facilitated by land uses, at various scales, designed for everyone.

SJB acknowledge the Traditional Custodians of the land on which we live, practice, and visit, and pay our respects to Elders past, present, and emerging. We recognise the continuous engagement and caring of the lands, waters, and skies by First Nations peoples for time immemorial.

We support the Uluru Statement from the Heart and accept its invitation to walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people toward a better future.

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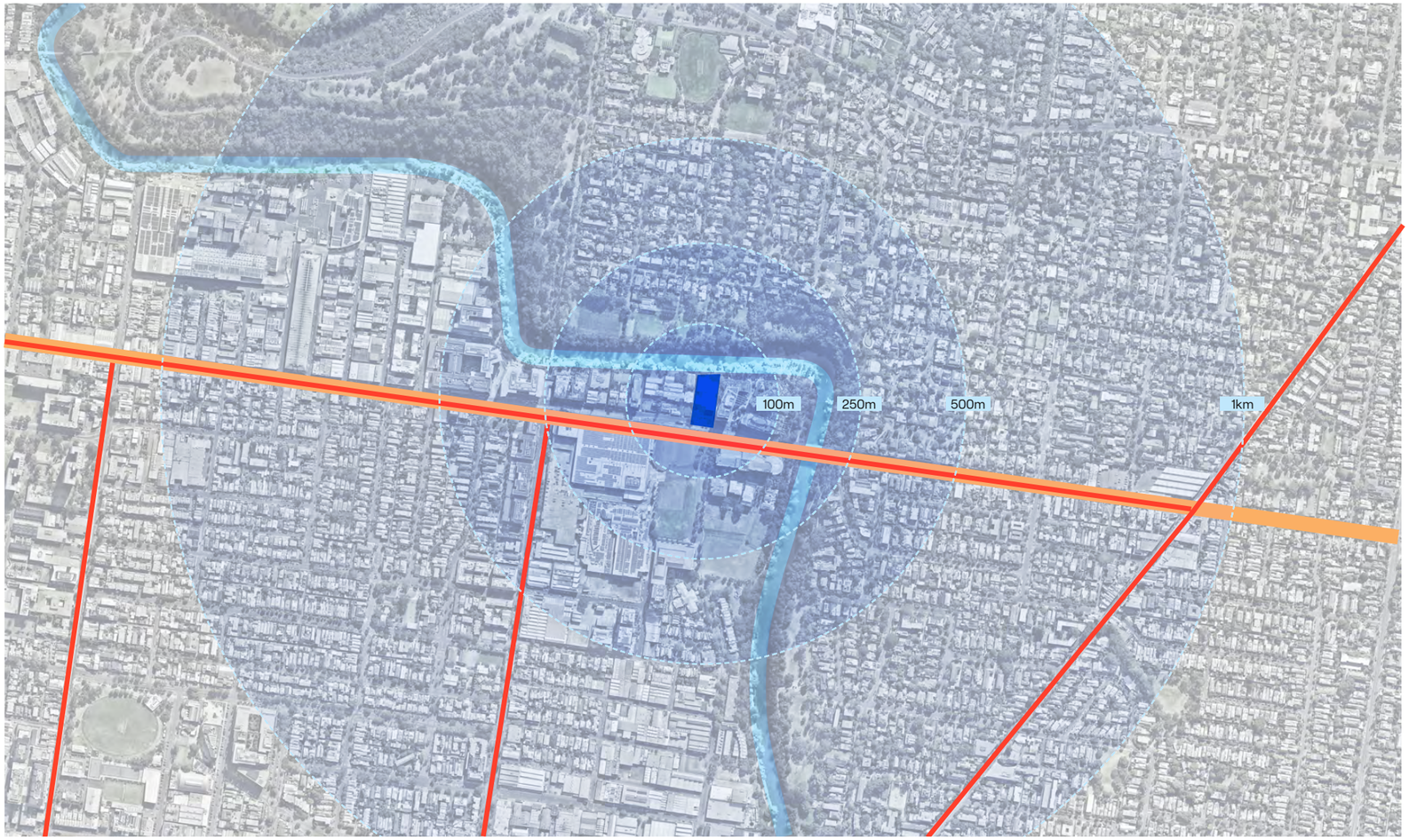
1 Site Analysis

Site Analysis

Metropolitan Context

Abbotsford is a very well serviced, inner-Melbourne suburb, 2km from the CBD.



- Subject Site
- Train Line
- Tram Line
- Arterial Road
- River
- Distance Marker

Site Analysis

Site Context

Bound by the Yarra River and Victoria Street, the site has two highly distinct interfaces to engage.

The site is well serviced by transport, with arterial roads Victoria Street and Burnley Street, pedestrian/ cycling path Main Yarra Trail, tram routes 12, 78 and 109 and numerous bus services.

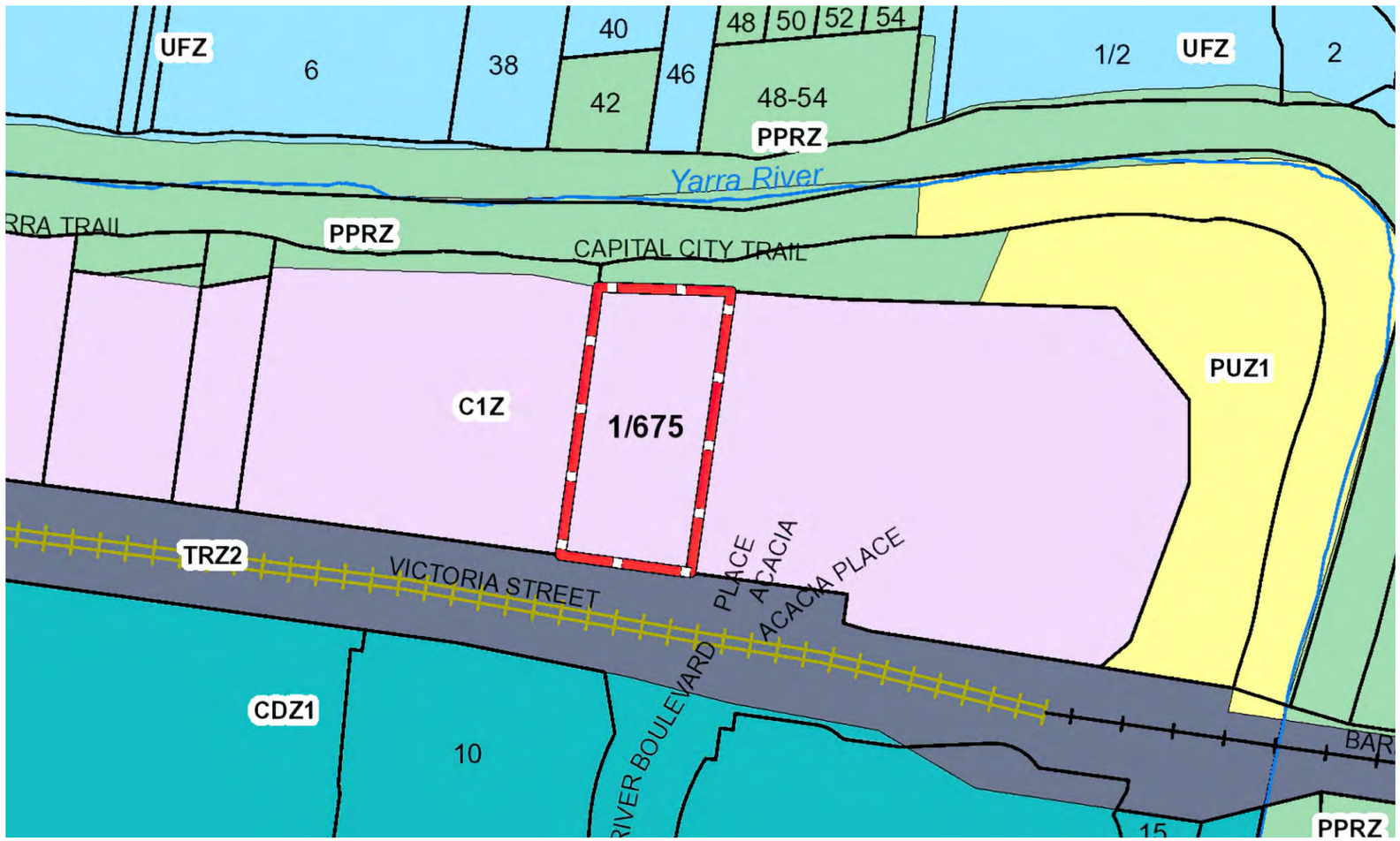
Victoria Gardens opposite the site provides a complete array of shopping and services.



- Subject Site
- Train Line
- Tram Line
- Arterial Road
- River
- Bike Path
- Tram Stop

Site Analysis

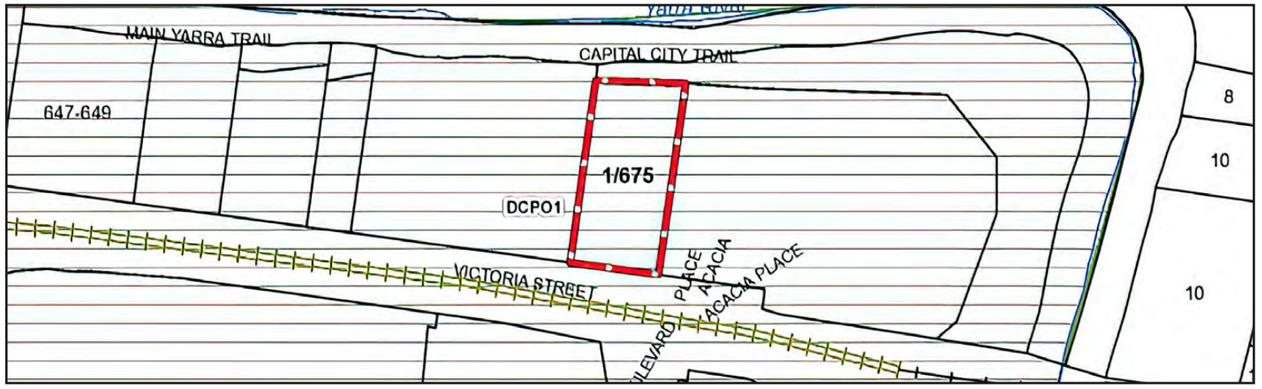
Zoning

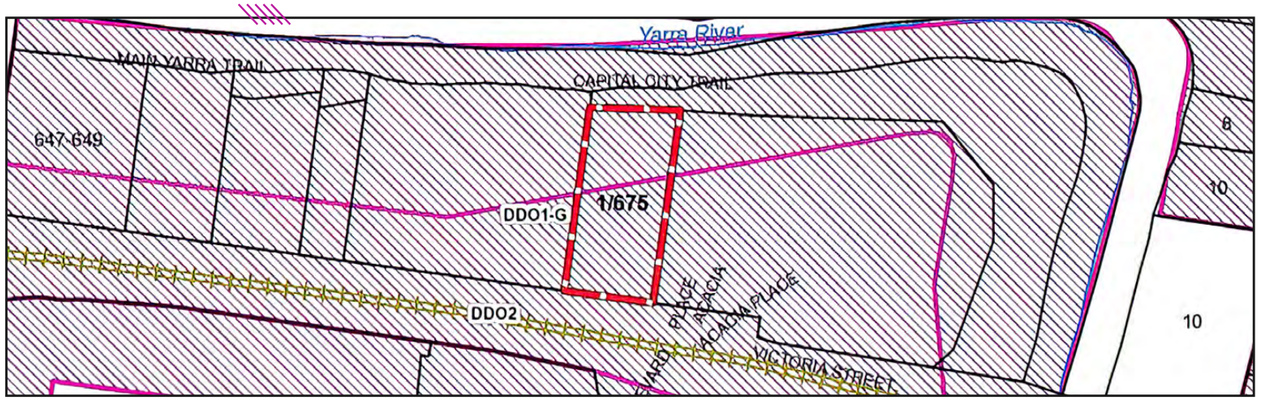


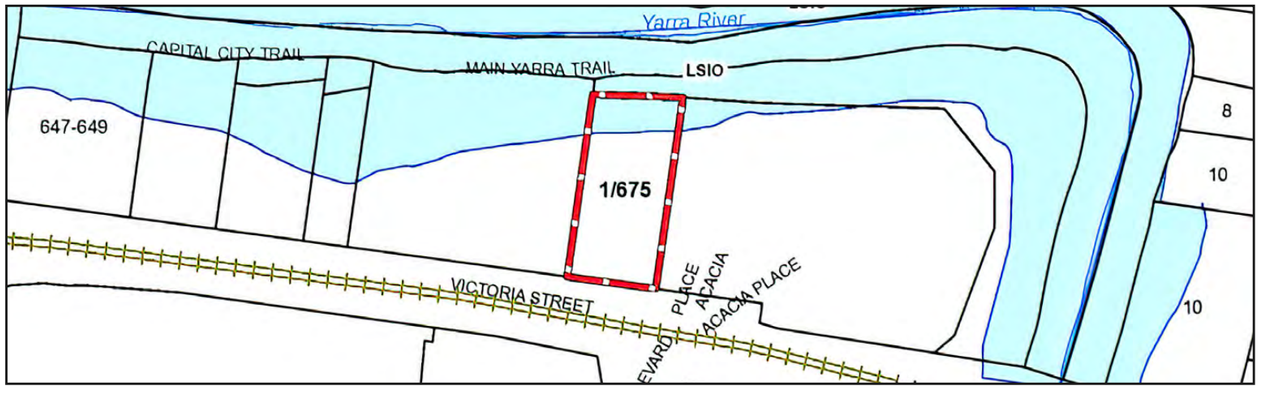
- C1Z - Commercial 1 Zone
- GRZ - General Residential Zone
- NRZ - Neighbourhood Residential Zone
- PPRZ - Public Park And Recreation Zone
- IN1Z - Industrial
- UFZ- Urban Floodway Zone
- CDZ - Comprehensive Development Zone
- PUZ1 - Public Use Service and Utility Zone
- PDZ - Priority Development Zone
- TRZ2 - Principal Road Network

Site Analysis

Planning Overlays







DCPO1 - Development Contributions Plan Overlay Schedule 1

DDO- Design Development Overlay

LSIO - Land Subject to Inundation

Site Analysis

Abbotsford Character



Site Analysis

Abbotsford Character

High Vibrancy

Bound by the Yarra River and two of Melbourne's busiest streets Victoria and Hoddle, it is one of Melbourne's most significant activity centres, and a major destination for shopping and hospitality.

A Melbourne microcosm

Its unique character is shaped by a variety of heritage buildings and cultural institutions, a diverse, multi-cultural population, a mix of commercial, residential, and industrial zones, and abundant green spaces, with excellent access to the Yarra River and its surrounding reserves.





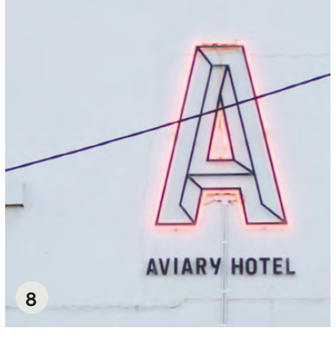












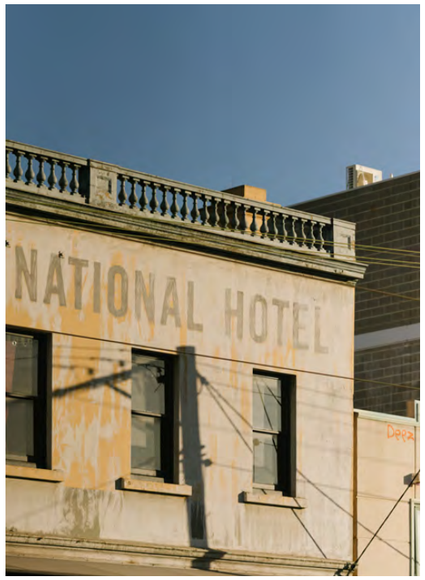




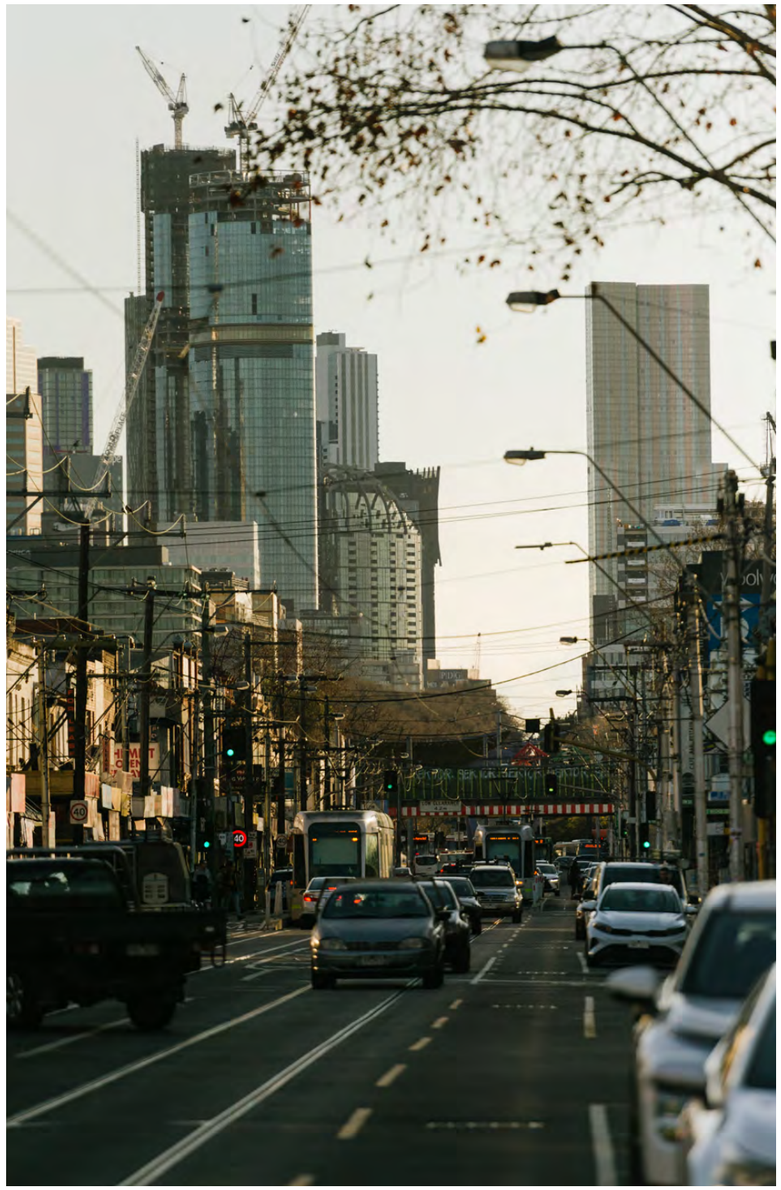
1. View from the Yarra River south west, across site and towards Melbourne CBD.
2. 'Skipping Girl' Vinegar sign. The animated neon signage is a cherished local landmark, and heritage listed on the National Trust (Victoria) and the Victorian Heritage Register.
3. Kanes Bridge. Built in 1928 and destroyed by flood in 1934 and then rebuilt in 1935, this old walking bridge crosses the Yarra River at the Studley Park Boathouse.
4. 631 Victoria Street - The Parkhouse. A Recently completed SJB residential development just a few doors down Victoria Street
5. Yarra River directly neighbouring the site.
6. 605 Victoria Street - The Terminus Hotel, a widely known bar and restaurant. Iconic and heritage-listed art deco.
7. Abbotsford Convent, founded 1863. A significant cultural centre, listed on the National Heritage list.
8. 271 Victoria Street - Aviary Hotel. Upmarket but relaxed bar and restaurant is a local favourite.
9. Victoria Street is known for its wide variety of Vietnamese, Chinese and Thai stores/restaurants.
10. 281 Victoria Street - The Vic Bar. A buzzing nightspot with a casual vibe.

Site Analysis

Victoria Street Character











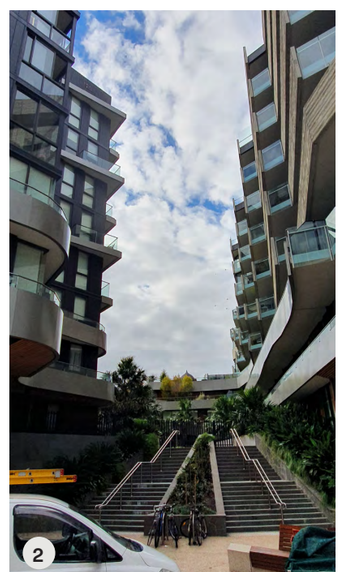


Site Analysis

Victoria Street Interfaces

As a major transport corridor, this stretch of Victoria Street Abbotsford is busy in character, and not particularly appealing to pedestrians. The nearby intersection at Burnley Street is a particularly busy interface as transport converges on the Victoria Gardens shopping centre.















1. 651 Victoria Street - Skipping Girl Place
2. Acacia Place
3. Acacia Place
4. IKEA
5. Victoria Street
6. 661-663 Victoria Street
7. 661-663 Victoria Street

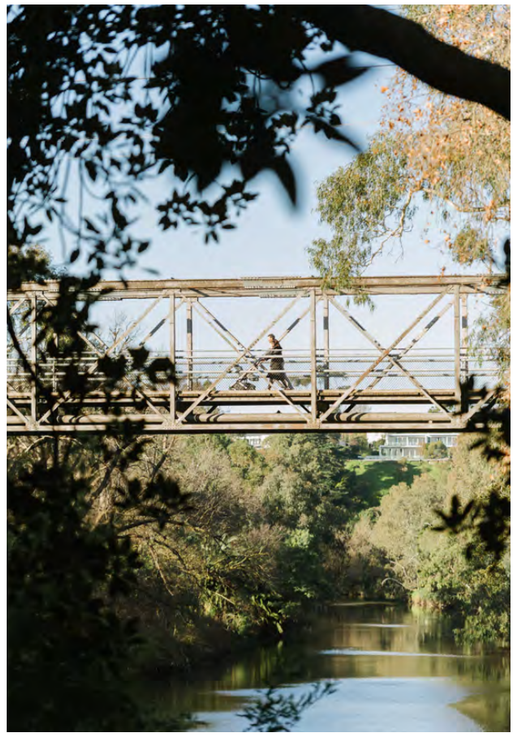

Site Analysis
Yarra River Character
SJB
625 Victoria Street, Abbotsford
13

Site Analysis

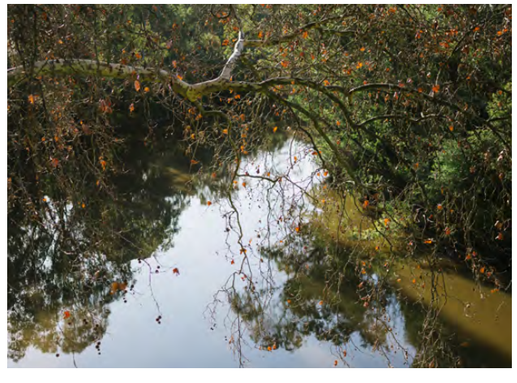
Yarra River Character









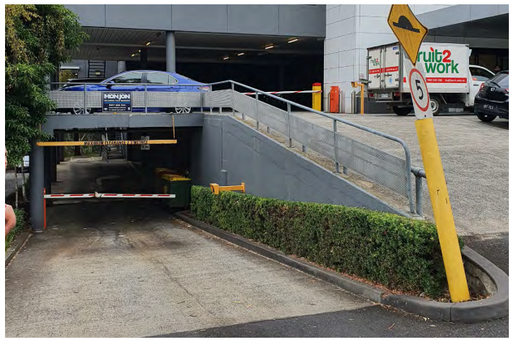


Site Analysis

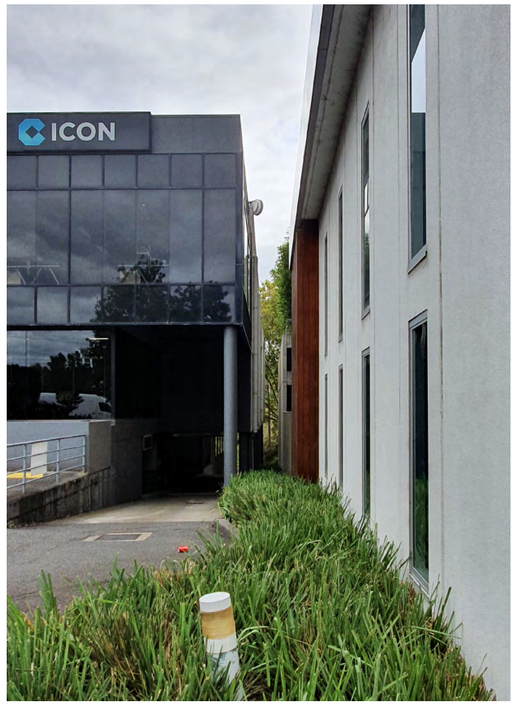
Existing Site Conditions

Victoria Street Interface









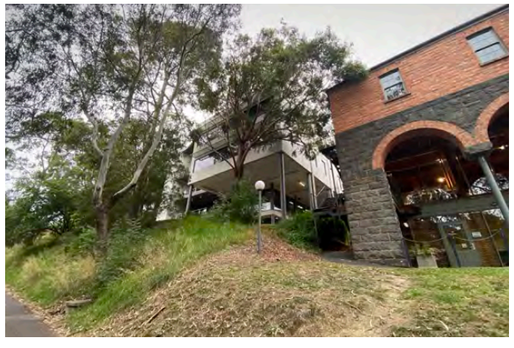
Site Analysis

Existing Site Conditions

Yarra River Interface





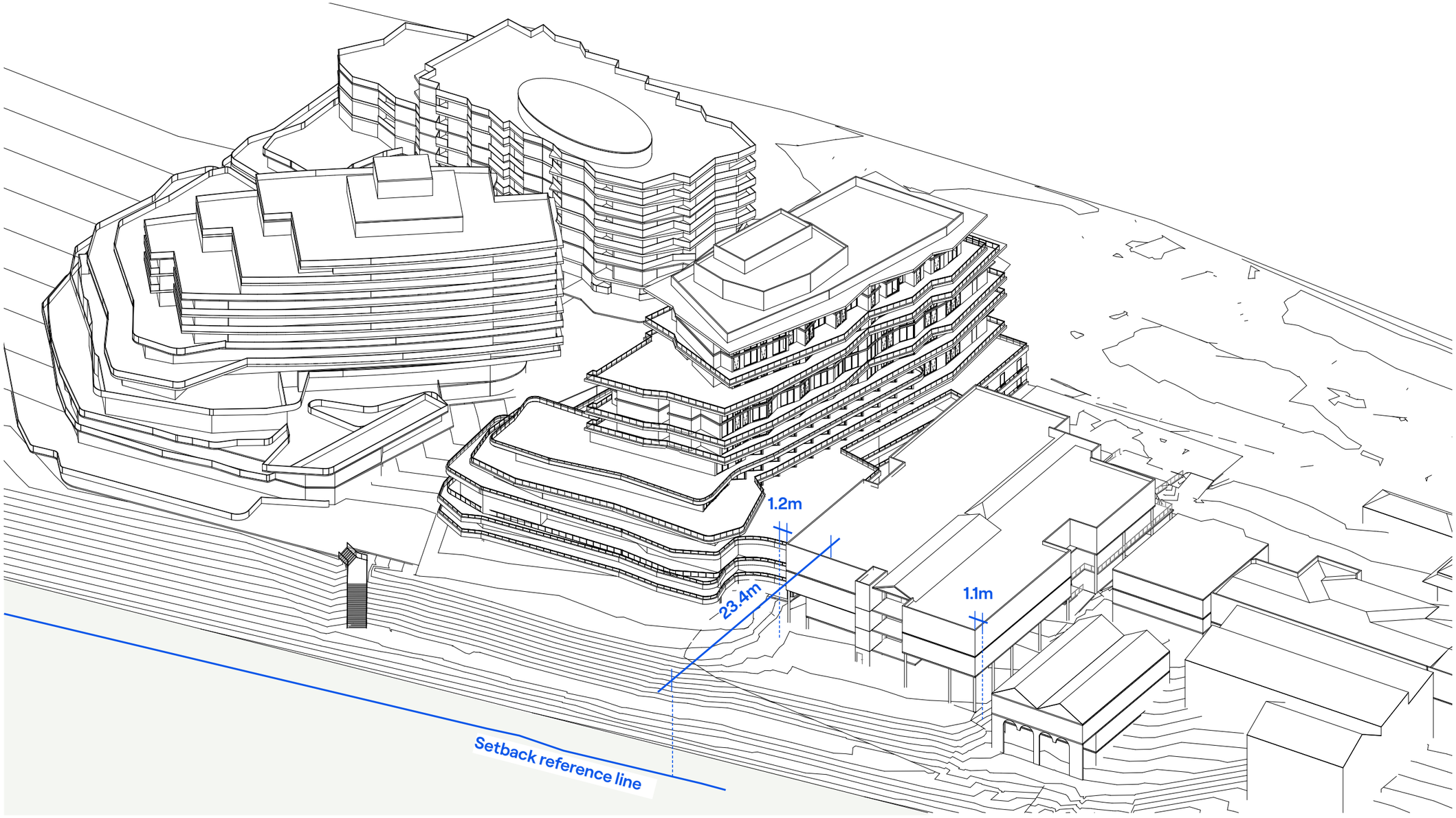




2	Site Response

Site Response

Existing Building



Site Response

Massing Diagrams

Required Setbacks

Building envelope specified in the Design and Development Overlay - Schedule 1 (DDO1) and the Significant Landscape Overlay - Schedule 1 (SLO1).

Proposed Setbacks

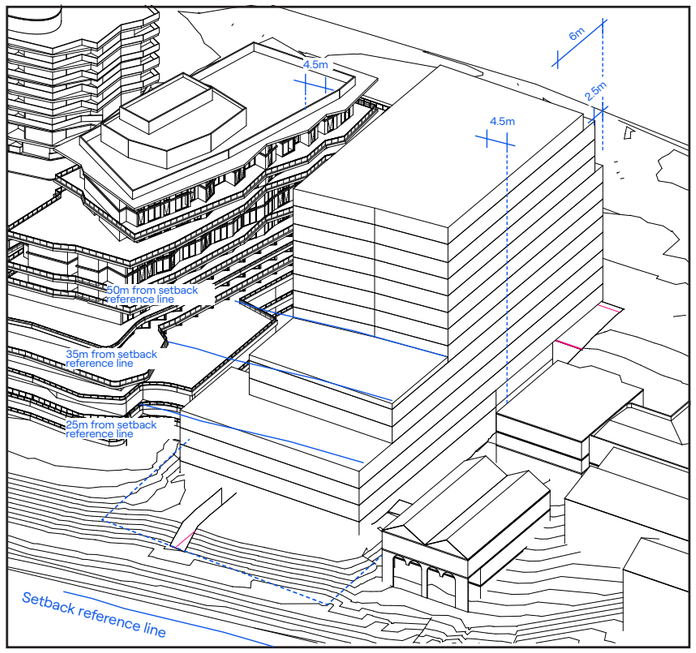
The development proposes greater setbacks to the east to respond to the existing interface with the Acacia Place.

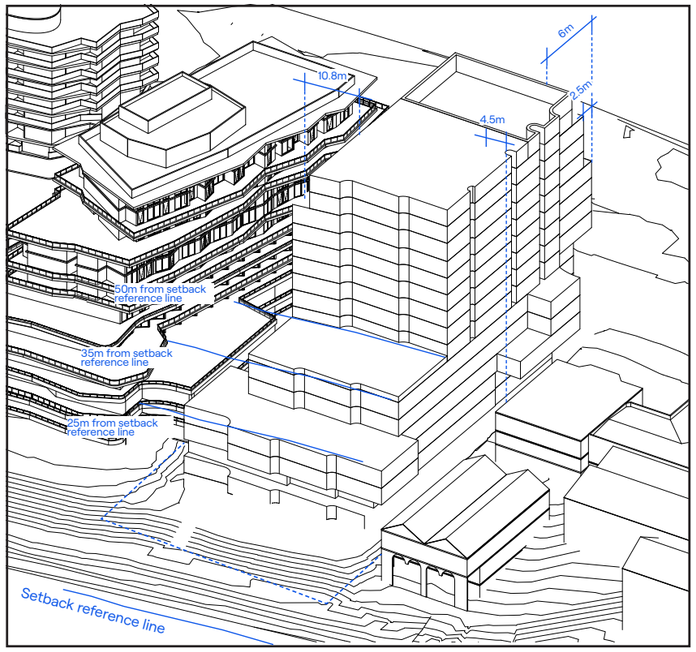
To the north, the facade is sculpted to provide better articulation to the building form and greater setbacks to the Yarra River Corridor.

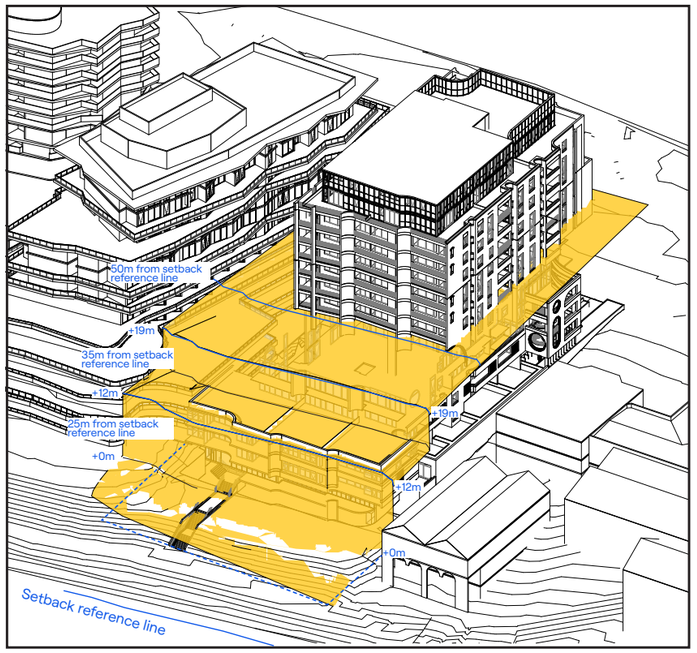
Building Heights

The development envelope follows the natural ground level by stepping towards the Yarra River corridor, this allows the building to remain within the height controls of 12m high within the 25-35m setbacks and 19m high within the 35-50m setback. Minor encroachment to the 12m height limit is seen in the balustrades which have been setback from the building edge to reduce visibility.

Beyond the 50m setback line and within the southern portion of the site adjacent to Victoria Street, the building is a maximum of 41.5m.

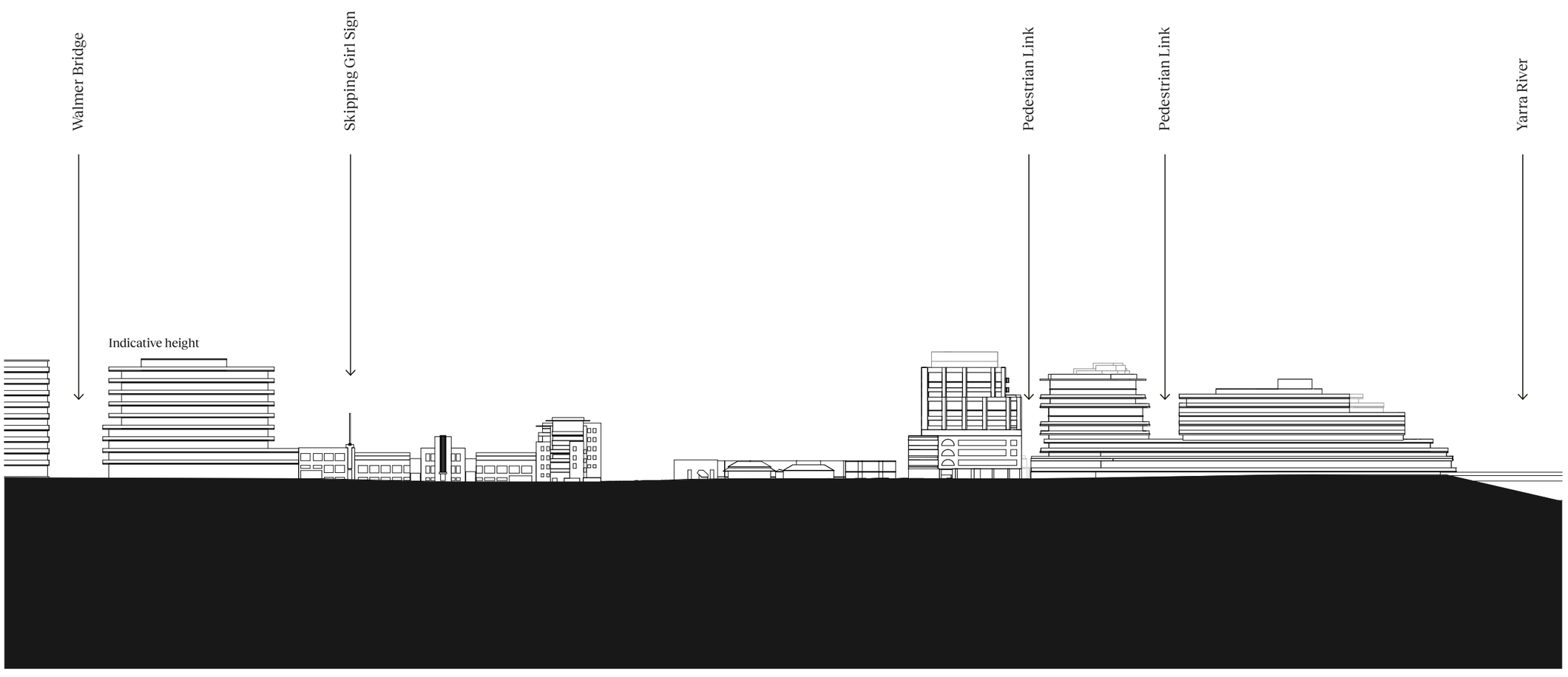






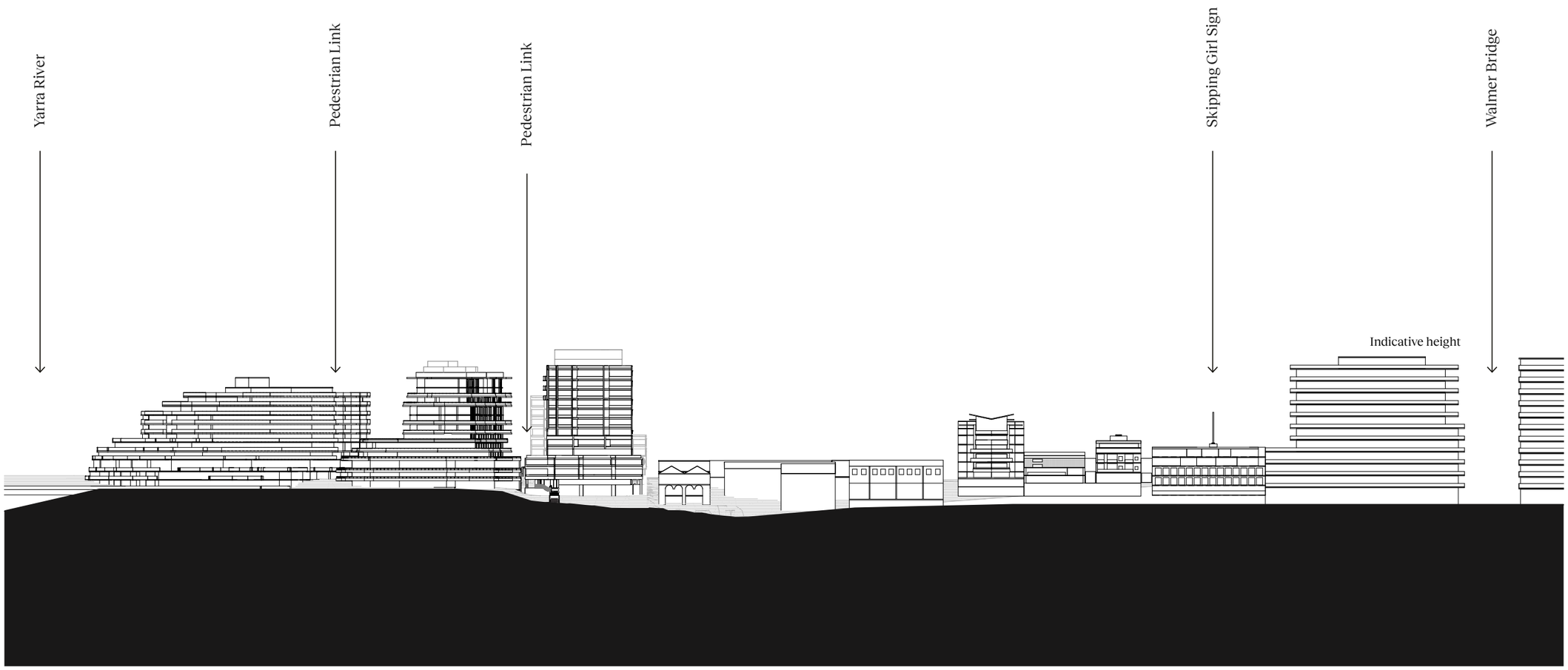
Site Response

Victoria Street Elevation



Site Response

Riverscape Elevation



Site Response

Streetscape Analysis

The recessed nature of the site frontage from Victoria Street influences the visual impact of the upper levels form.



Site Response

Visual Impact to Skipping Girl Sign

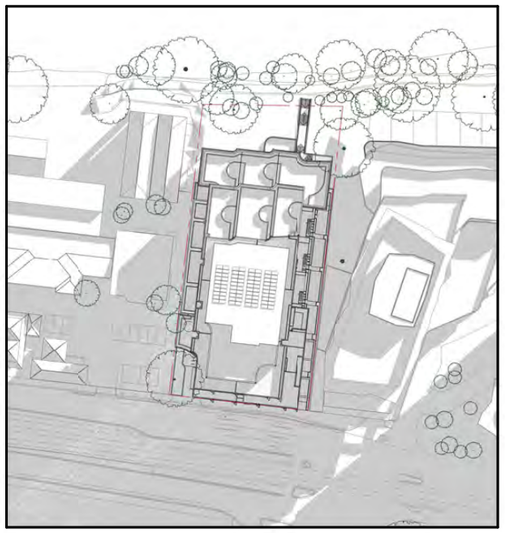
The proposed development has no visual impact to the Skipping Girl Sign from the southern side of Victoria Street footpath and the eastern entry to the City of Yarra.



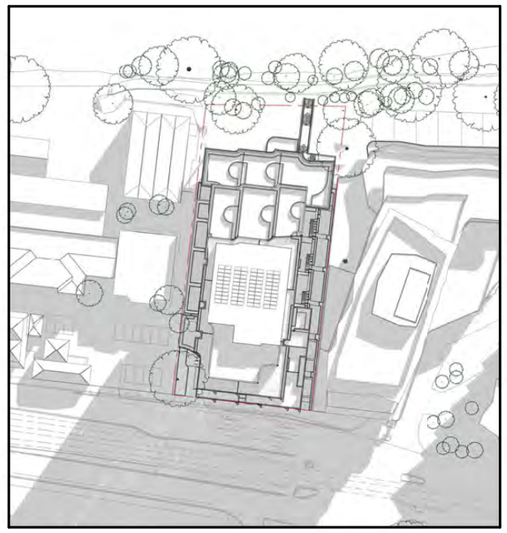
Site Response

Shadow Diagrams to the Yarra River Corridor on 22 June

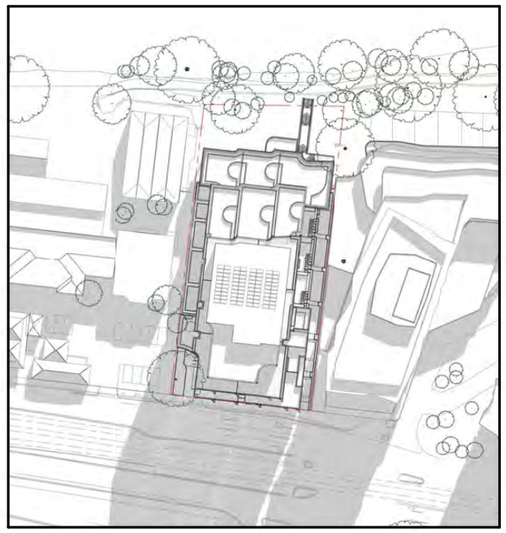
No shadow is cast to the Yarra River Corridor on 22 June from 9am to 3pm.



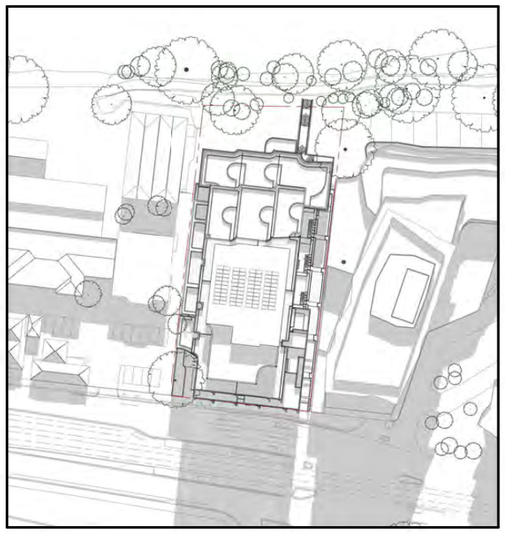
1 SD_SHADOW_22 JUNE_9.00am
SCALE 1 : 750



2 SD_SHADOW_22 JUNE_10.00am
SCALE 1 : 750



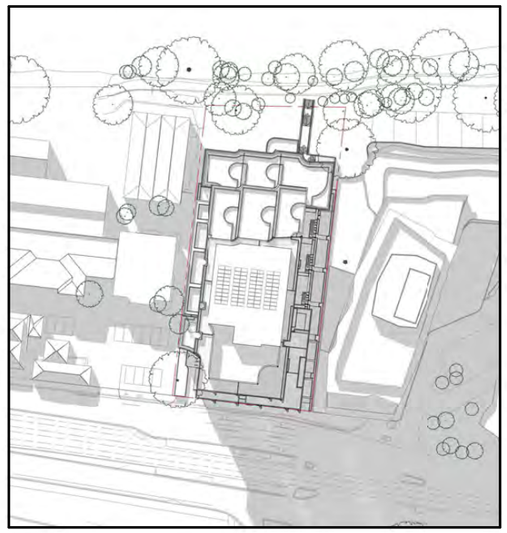
3 SD_SHADOW_22 JUNE_11.00am
SCALE 1 : 750



4 SD_SHADOW_22 JUNE_12.00pm
SCALE 1 : 750



5 SD_SHADOW_22 JUNE_1.00pm
SCALE 1 : 750



6 SD_SHADOW_22 JUNE_2.00pm
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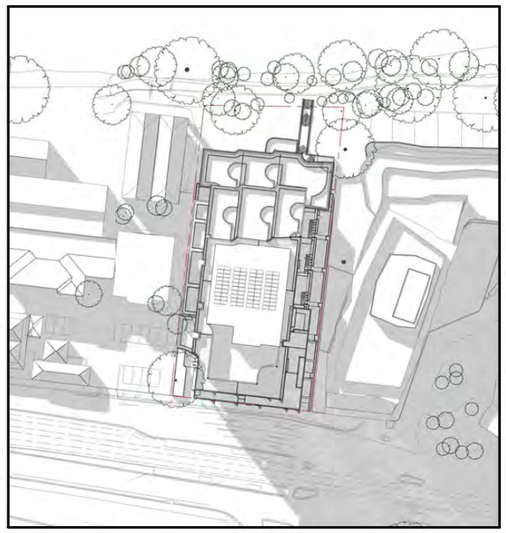
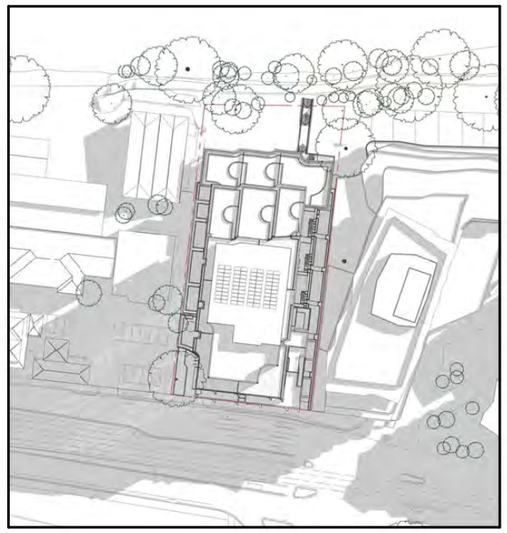


7 SD_SHADOW_22 JUNE_3.00pm
SCALE 1 : 750

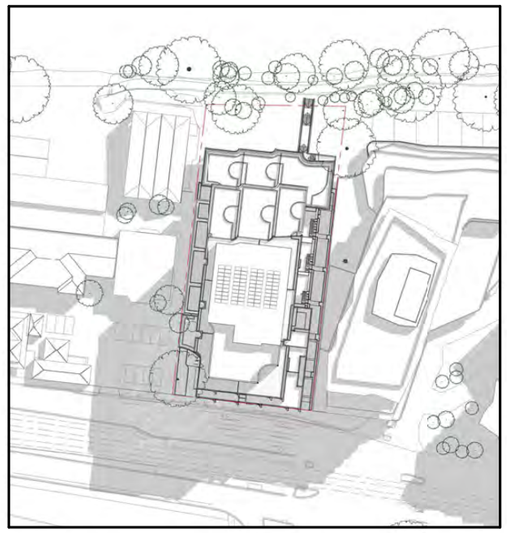
Site Response

Shadow Diagrams to the Yarra River Corridor on 22 September

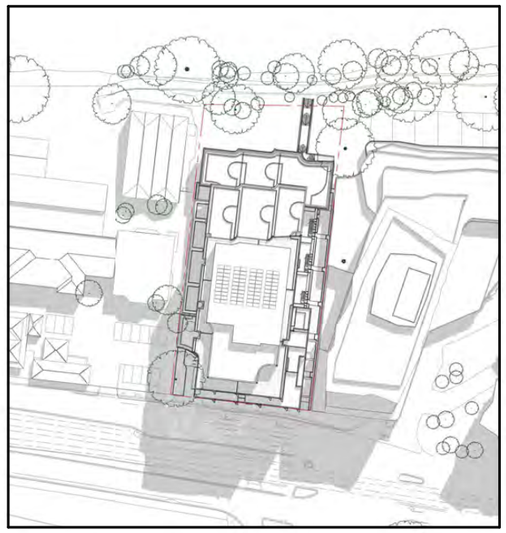
No shadow is cast to the Yarra River Corridor on 22 September from 9am to 3pm.



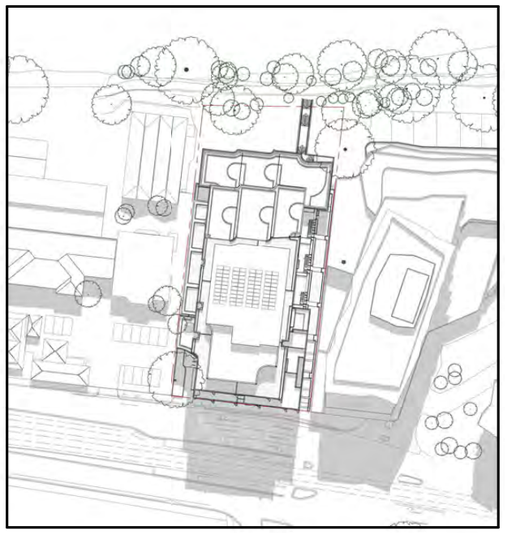
1 SD05_03 SD_SHADOW_22 SEPT_9.00am SCALE 1 : 750



2 SD05_03 SD_SHADOW_22 SEPT_10.00am SCALE 1 : 750



3 SD05_03 SD_SHADOW_22 SEPT_11.00am SCALE 1 : 750



4 SD05_03 SD_SHADOW_22 SEPT_12.00pm SCALE 1 : 750



5 SD05_03 SD_SHADOW_22 SEPT_1.00pm SCALE 1 : 750



6 SD05_03 SD_SHADOW_22 SEPT_2.00pm SCALE 1 : 750



7 SD05_03 SD_SHADOW_22 SEPT_3.00pm SCALE 1 : 750

Site Response



View from Yarra Corridor

3 Design Response

We consider excellence measured by a building's performance and sustainability, as well as the wellness of its occupants.

PERFORMANCE PRINCIPLES

ONE PLANET LIVING

TARGETING SCORE

bess
Built Environment Sustainability Scorecard

Design Response

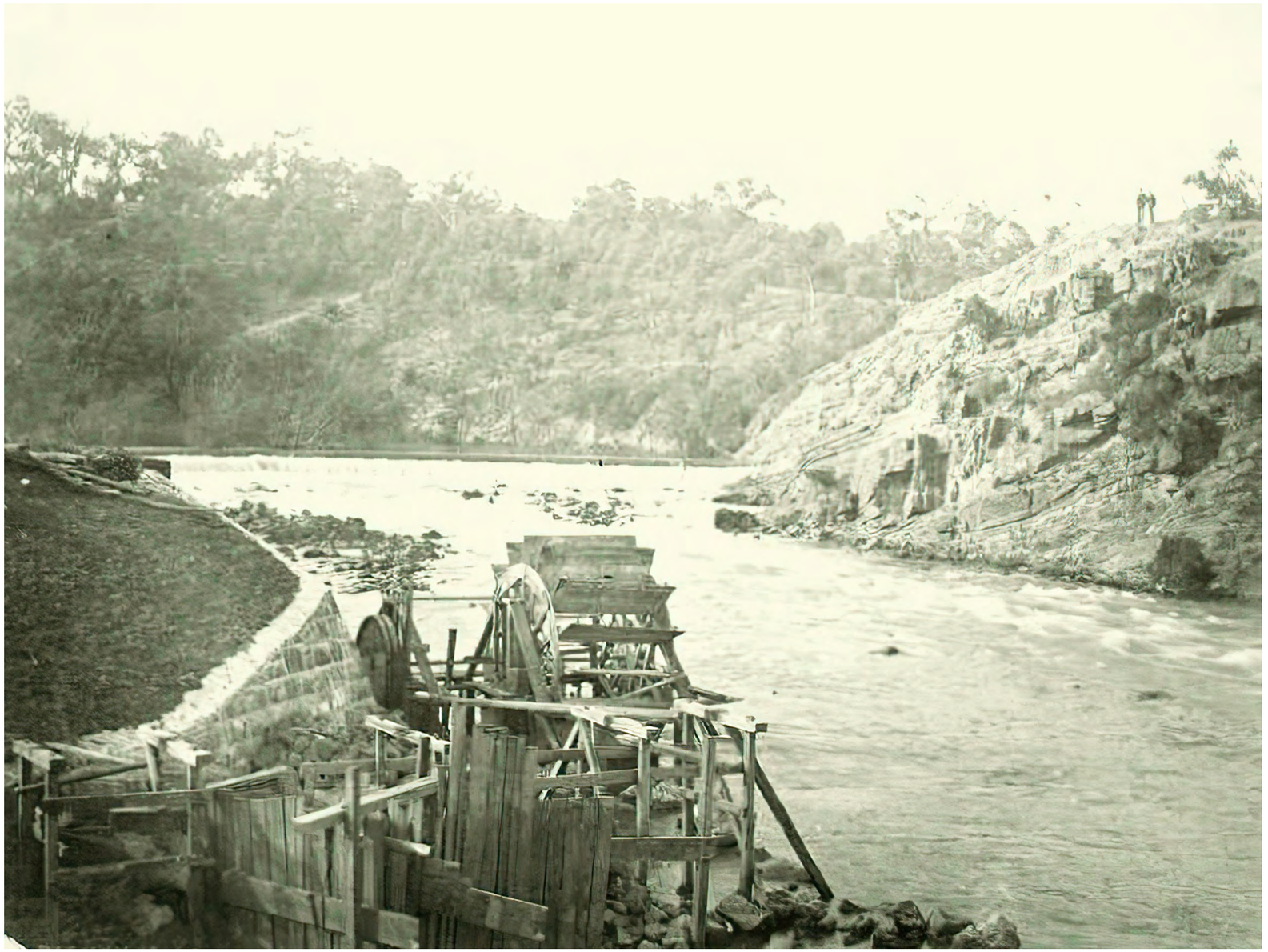
Local Context



Local History

Dights Falls, the mill

In the 1840s, an artificial weir was built on the natural bar of basalt boulders to provide water to the "Ceres" flour mill, one of the first in Victoria. Situated by the Yarra River in Collingwood is the industrial relic known locally as "Dight's Mill", one of Melbourne's oldest and most significant industrial sites. In the early 1840s John Dight established Melbourne's first water-powered flour mill on the site. In 1888 'Yarra Falls Roller Mills' built a water-turbine powered mill, which was the largest and most sophisticated of the thirty two water powered mills built in Victoria before 1900.



From: https://peternewburysblog.wordpress.com/2013/01/11/dights-falls-the-mill/
Assessed: 30/06/2022

Design Response

Local Geology

Just downstream of the junction with the Merri Creek, the Yarra river narrows and is constricted between 800,000-year-old volcanic, basaltic lava flow and a much older steep, silurian, sedimentary spur. The north side also contains abundant graphite fossils in sedimentary sandstone.







From: https://pocketozmelbourne.com.au/lost-dights-mill.html
Assessed: 30/06/2022

Design Response

Natural Inspiration

We have identified the following key aspects of local character as drivers for our 675 Victoria Street design proposal.



Geological Stratification

Stratification is the layering that occurs in most sedimentary rocks due to the changes in texture or composition during deposition. The varying series of colour changes observed reflect the differences in the mineral composition of the earth's surface or the distinct planes of parting layers.

The use of graded coloured bricks resembles the geological stratification of the surrounding area.



Sculpted by Water Flow

The integration of the building's robust architectural forms and gestures draws upon the Yarra River flow and Dight Falls.



Palette of Local Colours and Textures

The project's palette and materiality is driven by the Abbotsford's natural reserve and built heritage to deepen the connection with the area's rich history.

The use of warm tones embodies the mature gum trees present in the surrounding landscape.

Design Response

Geological Stratification

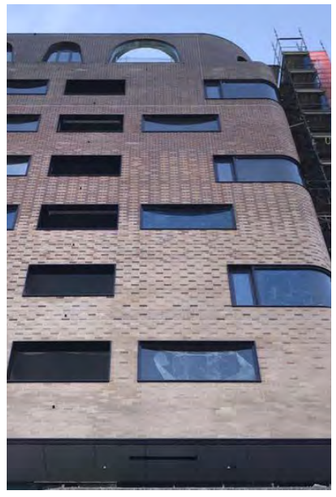
Just downstream of the junction with the Merri Creek, the Yarra river narrows and is constricted between 800,000-year-old volcanic, basaltic lava flow and a much older steep, silurian, sedimentary spur. The north side also contains abundant graphite fossils in sedimentary sandstone.



Fabric House (Newcastle East End Stage 1)
Durback Block Jaggers
2021

Clever use of a variety of brick colours to produce a stunning, highly textured facade. Part of Newcastle East End Stage 1, a collaborative precinct project by SJB, DBJ and Tonkin Zulaikha Greer.



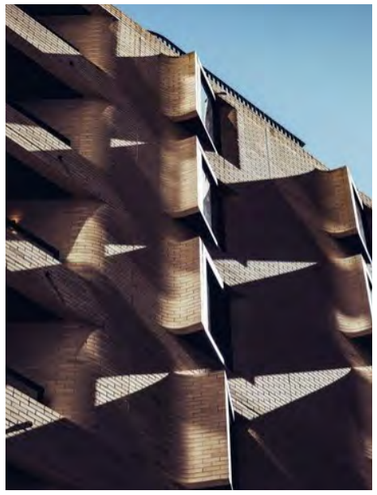


Sculpted by Water Flow



18 Loftus Street (Sydney)
Silvester Fuller
2021

The facade transition being gradual in it's motion preserves a singular, whole building identity.

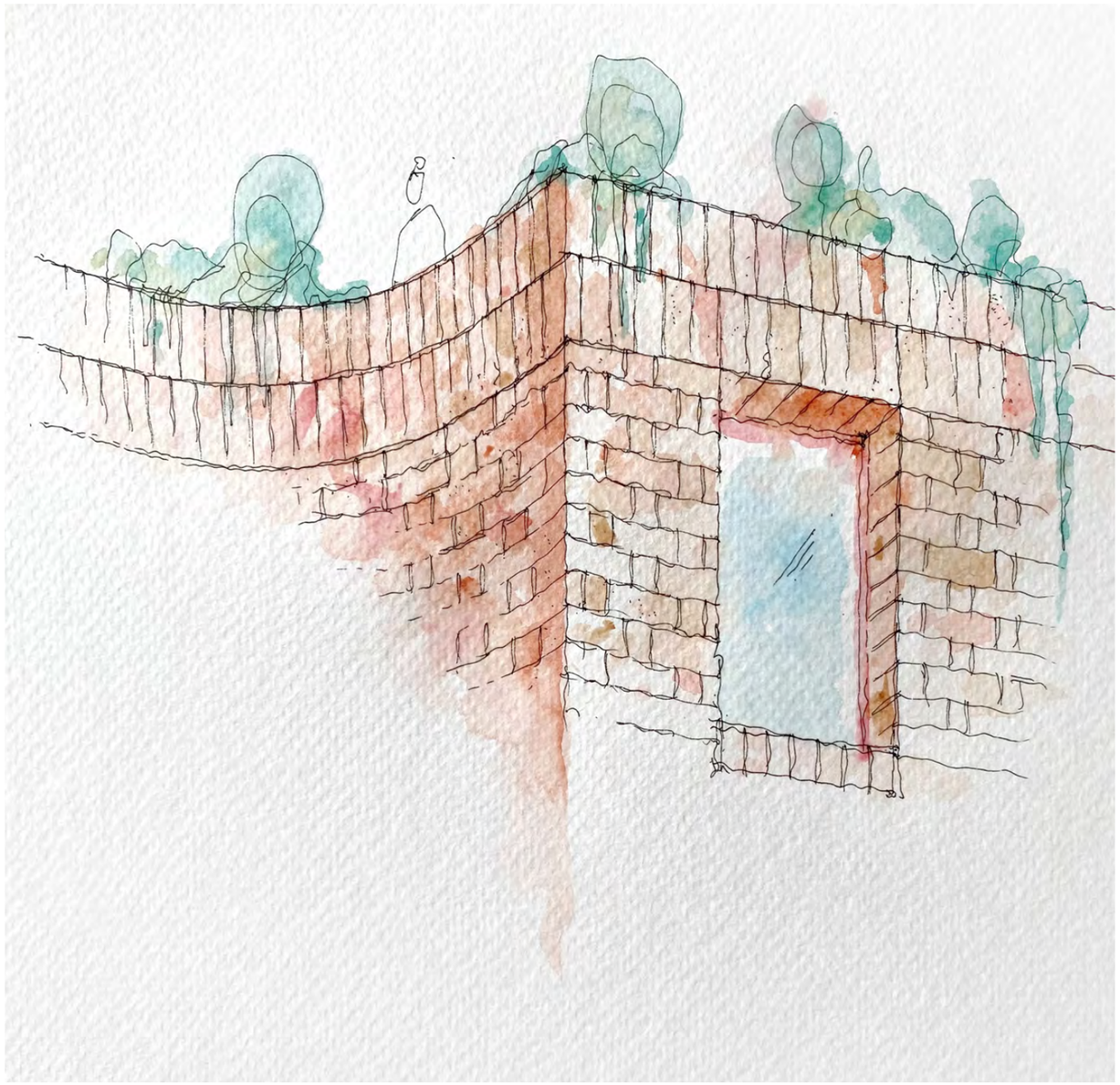




Design Response

Sculpted by Water Flow





Design Response

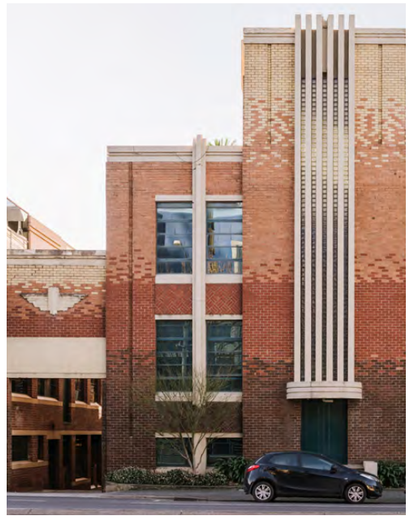
Local Colours & Textures

651 Victoria Street
Alder & Lacey
1938

Otherwise known as Skipping Girl Place. Layers of interest and embellishment are added to its façade through a gradation of brickwork. We want to draw from that historic concept/approach.







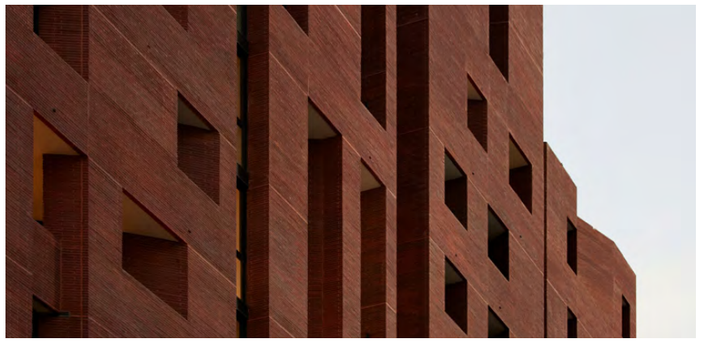
Design Response

Local Colours & Textures

9-15 Young Street
SJB
2022

The rejuvenation of a city block in the heart of Sydney City at Circular Quay.

Three new buildings designed by SJB, Silvester Fuller and Studio Bright complement the site's heritage wool store Hinchcliff House, restored by Carter Williamson and the Gallipoli Memorial Club, restored by Lippmann Partnership.



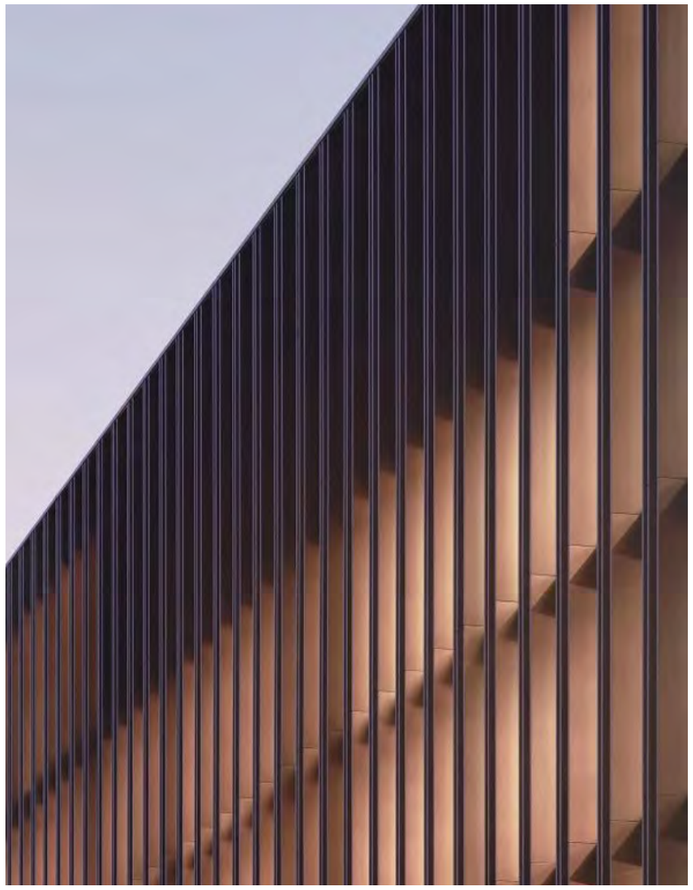


Artist's impression

Design Response

Upper Level Facade Design

Softened by setbacks, a change in materiality and architectural language - a refined and lighter rhythmic facade touched lightly on the textured, robust brick-work of the levels below.







Design Response

View from the River Looking East - Proposed Scheme



Design Response

View from the River Looking East - Proposed Scheme (trees removed for render purposes)



Design Response

View from the River Looking West - Proposed Scheme



Design Response

View from the River Looking West - Proposed Scheme (trees removed for render purposes)



Design Response

Victoria Street Looking West - Proposed Scheme



Design Response

Victoria Street Looking East - Proposed Scheme



Design Response

Victoria Street Podium



Design Response

Victoria Street Podium



Design Response

Victoria Street Residential Entry



Design Response

Western Podium Facade Articulation



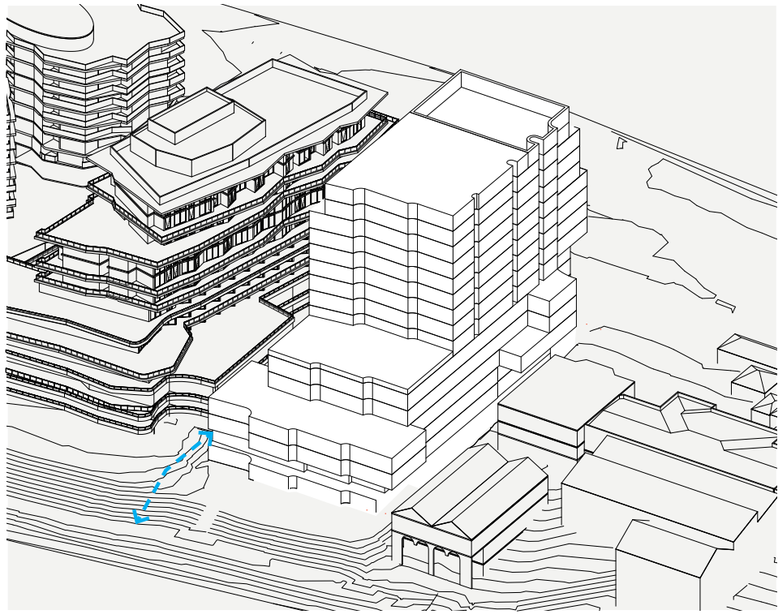
Design Response

Tower Facade

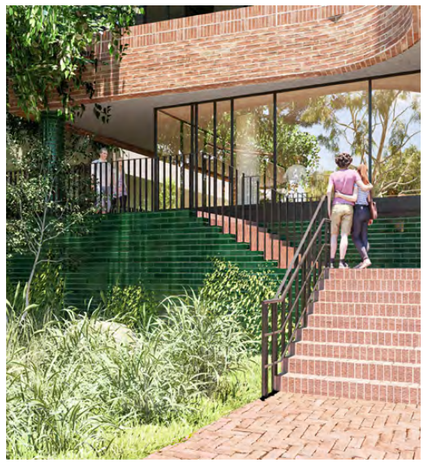


Design Response

Pedestrian Link









Pedestrian Connection Between Victoria Street and River Pathway

Strong visual and physical connections to outdoor public realm

Pedestrian Link Interface - East Elevation



Design Response

Pedestrian Link from Victoria Street - Proposed Scheme



Design Response

Pedestrian Link from Victoria Street - Proposed Scheme



Design Response

Pedestrian Link from Victoria Street - Proposed Scheme



Design Response

Pedestrian Link



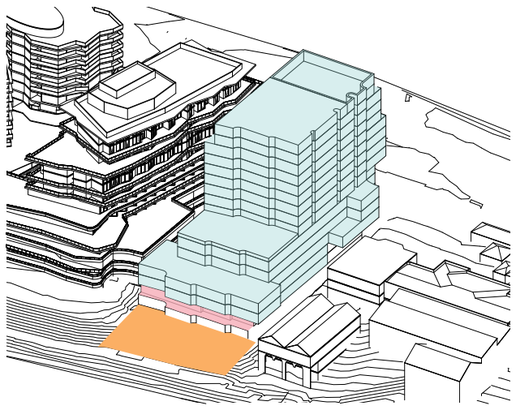
Design Response

Pedestrian Link



Design Response

Outdoor Open Spaces



Retained Riverbank 1

Active Landscape 1

Activated area for relaxation for the residents and the wider community.

Social Arena 2

Activated area for recreation and social interaction for the residents and the wider community.

Communal Facilities 3

Outdoor Terrace for residents to gather. Indoor dining facilities are provided on the same level.

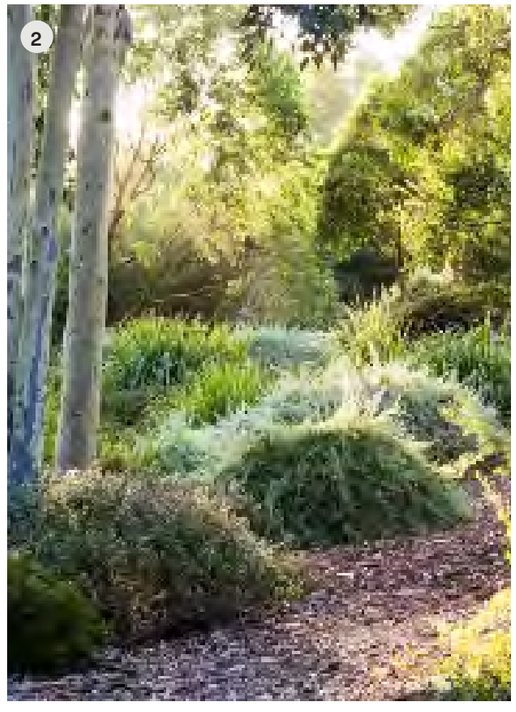
Responsive landscaping/hardscaping 4

Integrated landscaping and hardscaping that carefully responds to the context, blending seamlessly up throughout the development.

Urban Ecology 5

Integration of vegetation to the building form and in and around the buildings. The incorporation of greenery throughout the building assists in minimising local urban heat impacts.







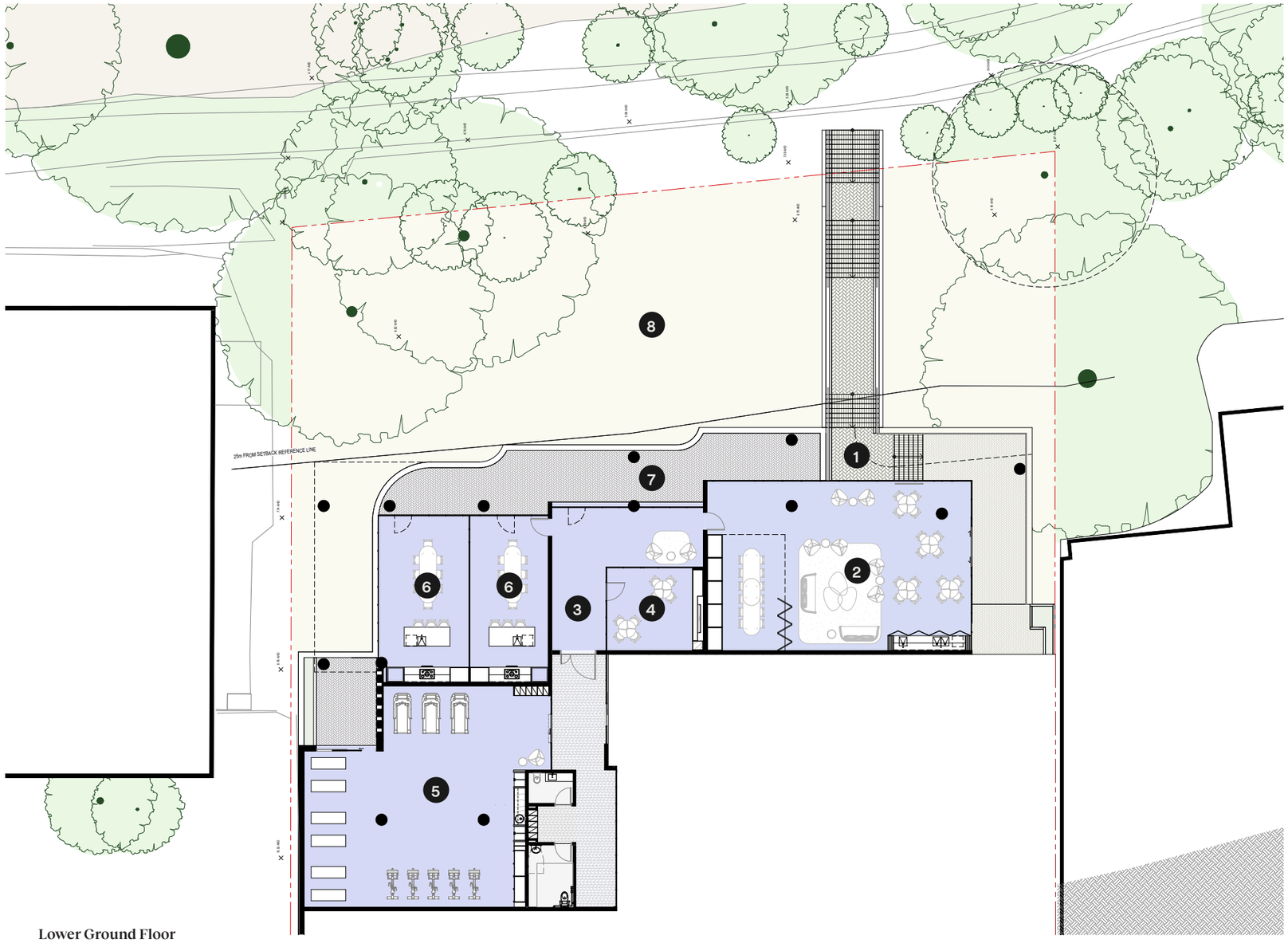




Design Response

Amenities

1. Pedestrian Link
2. Little B.I.G Foundation
3. Lounge
4. Multi-Purpose Room
5. Gym
6. Private Dining Room
7. Outdoor Terrace
8. Outdoor Landscaped Space



Lower Ground Floor

Design Response

Public Benefit

Community Spaces

Genuine and dedicated spaces for community uses.











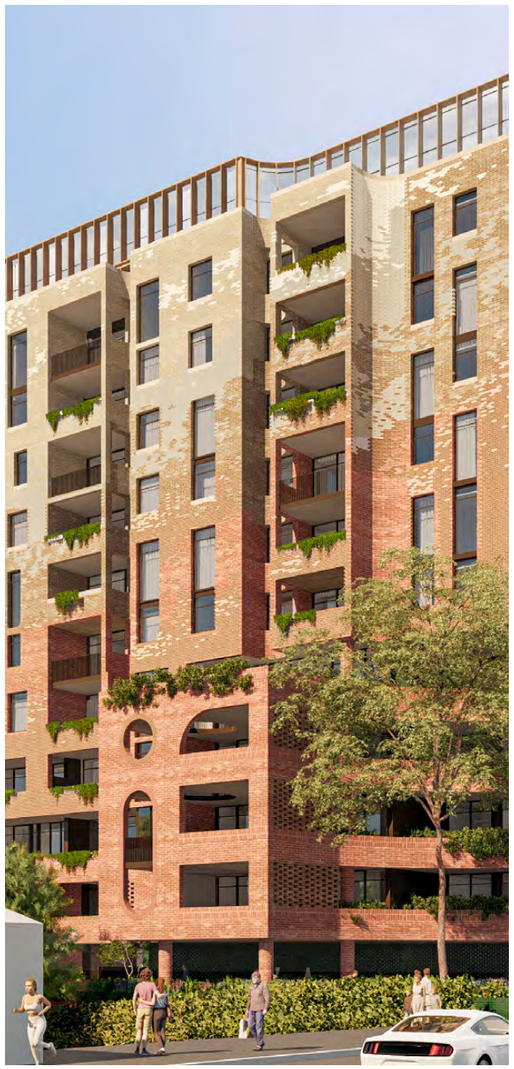
Public Link

A publicly accessible connection through the site from Victoria Street to the river corridor.



Architectural and Landscape Quality

Quality materials, articulation and commitment to landscaping to create a human centric design.



Sustainability

High commitment to ESG principles, Carbon Neutrality and repairing the river corridor.





Design Response

Little B.I.G Foundation

COMMUNITIES THAT REJECT LONELINESS

HOW IT WORKS

WHAT WE OFFER

- Volunteer program that champions community leadership
- A program of events targeted at reducing urban loneliness
- A bookable space for the whole community (not just residents of a specific building)
- Activated community precincts, outdoor space activation and community development

WHAT MAKES IT WORK

- Medium density development with access to a wider precinct / community
- Socially minded Developer that can offer a physical space on peppercorn rent and a commitment of 0.25% of GRs on the sale of the development
- A council focused on community activation and developing people-first-places









Design Response

Little B.I.G Foundation

THE LITTLE BIG HOUSE AT SUMMER HILL

90
PROGRAMS

1,561
INDIVIDUAL EVENTS



MARKETS
2,000 attendees each weekend



BOOTCAMP
10-20 attendees every day of the week



COMMUNITY GARDEN
10-20 attendees every month



CHRISTMAS TREE SALE
500 trees sold



JAZZ BY CANDLELIGHT
1,400+ attendees



FOOD TRUCK NIGHTS
3,000+ attendees each quarter



MOTHER'S GROUP
12-20 attendees fortnightly



CO-WORKING DAY
10-25 attendees weekly

Design Response

Environmental Design

Breathable Spaces

Natural ventilation to appropriately filter/circulate air without energy use.

Extensive Landscaping

Integration of vegetation to the building form, integral to the design and the user experience of the development. Increases buildings performance through mitigating solar gain.

Carbon Neutral

This development will be all electric, operating without any carbon emissions.

Responsible & Natural Materials

Use of materials with low embodied energy such as masonry. Self finished materials that age beautifully, and/or recycled and reclaimed materials.

Energy Production & Conservation

On-site electricity generation with photo voltaic panels combined with efficient, low energy lighting and appliances.

EV charging stations available for residents.









Design Response

Health & Wellbeing

Mental Health & Happiness

All aspects of the development's user experience are considered from a sustainable principles framework, promoting wellness, such as through thermal and solar comfort.

Little B.I.G Foundation

The B.I.G House fosters mental wellbeing through belonging to realise their vision of happier, healthier, kinder lives.

Comfort Control

Maintains comfortable internal temperatures all year round passively, using little or no energy.

Encouraging Sustainable Modes of Transport

The building encourages sustainable modes of transport with over 190 bike spaces for residents and visitors, promoting a healthy life style.

Active Lifestyles

The building's incentive to encourage daily mobility, exercise and social interaction by prioritizing gym facilities facing the Yarra River.

Natural Light

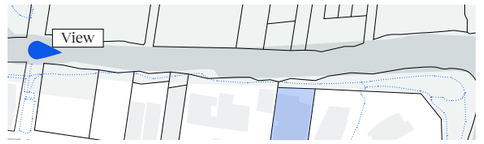
Filtered daylight improves internal amenity and further reduces dependence on artificial lighting.





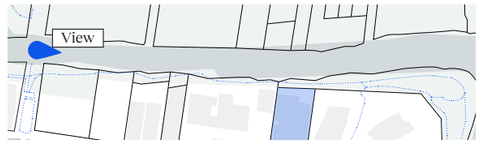


Design Response



Existing View from Walmer Bridge

Design Response



Proposed View from Walmer Bridge



4	Documentation



Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
OVERALL SITE PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 500	14.03.2025	SD01_01	/ 2

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3000 Australia
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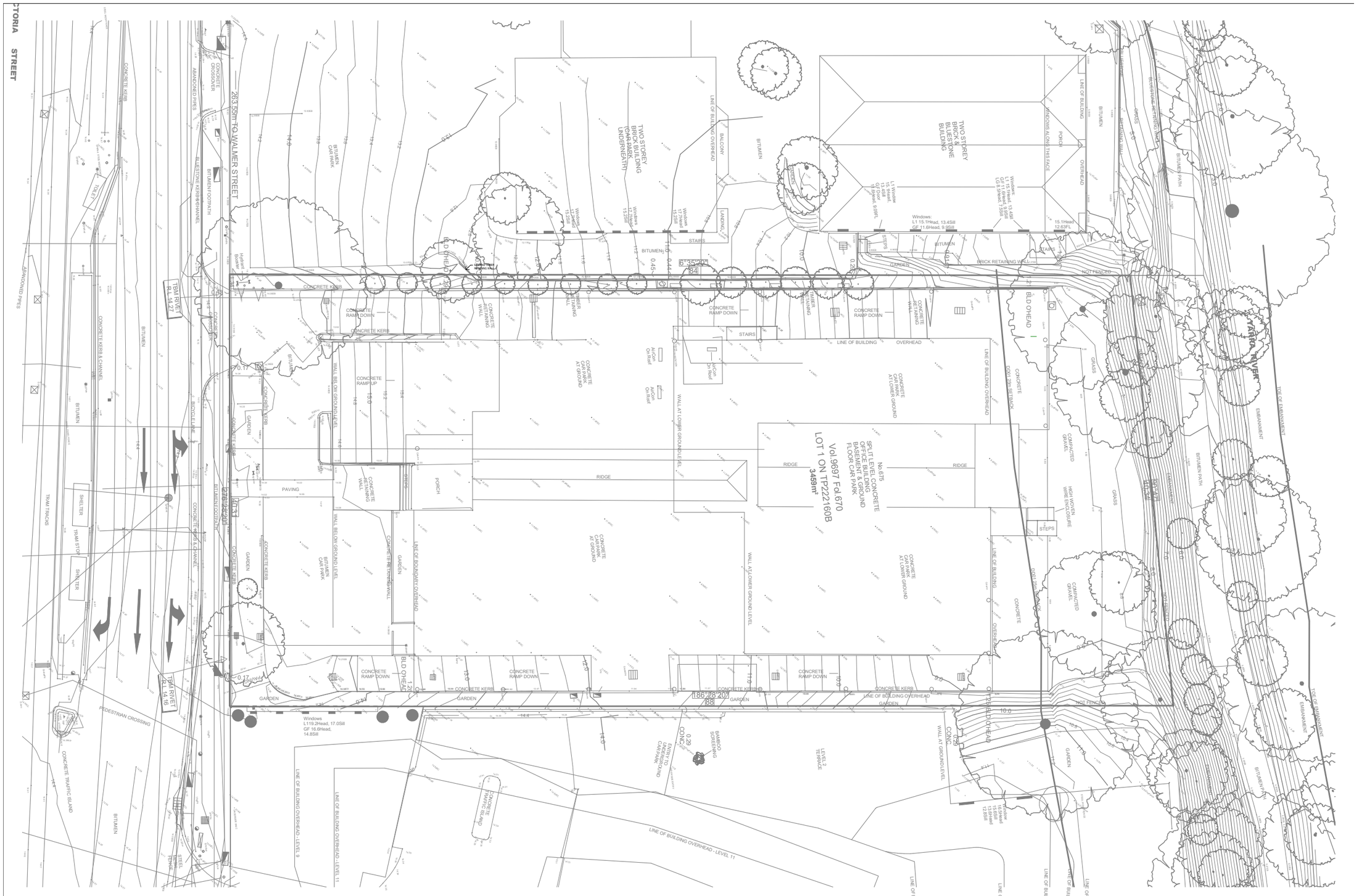

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
EXISTING CONDITIONS

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD01_02	/ 1

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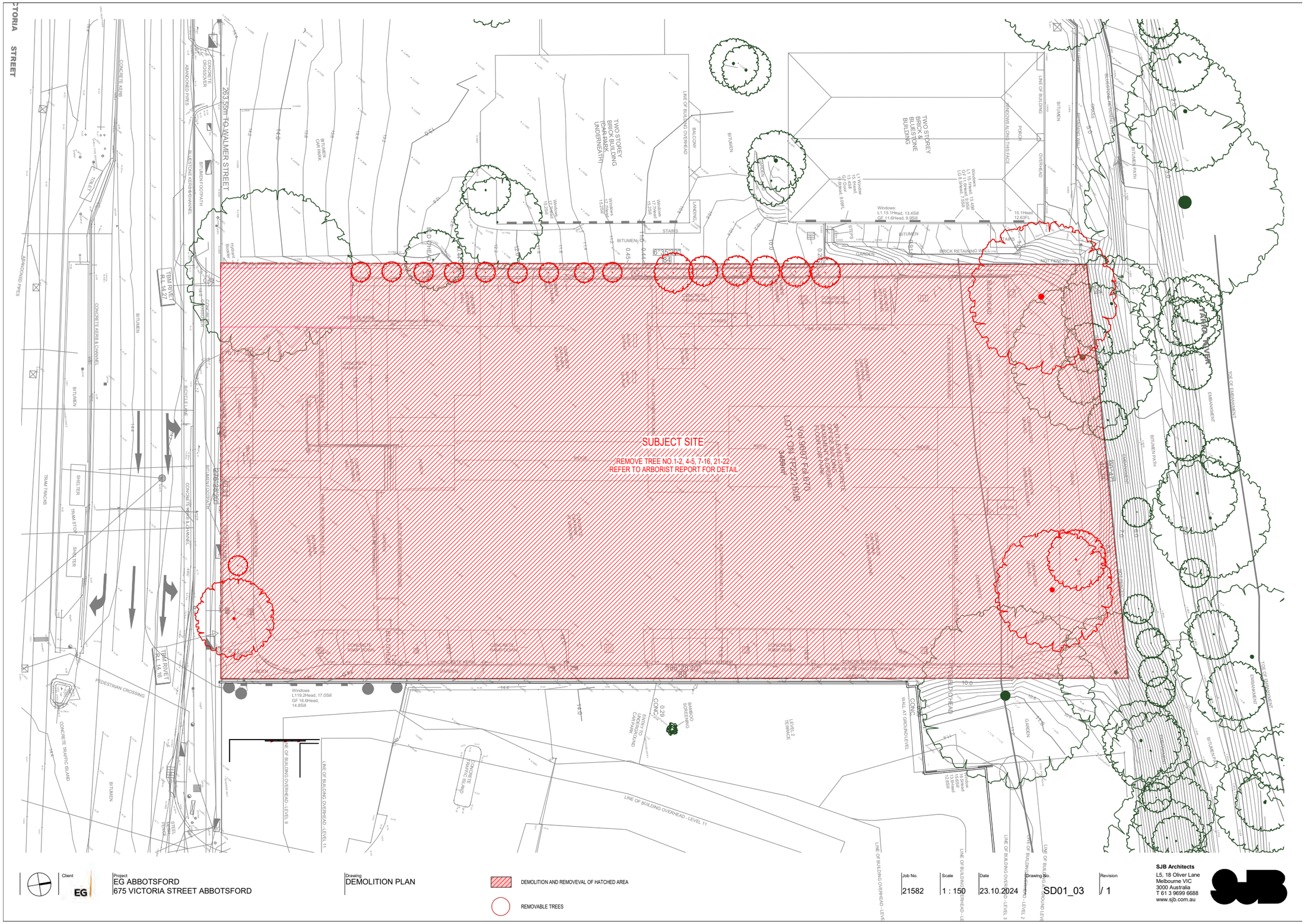

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
DEMOLITION PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD01_03	/ 1

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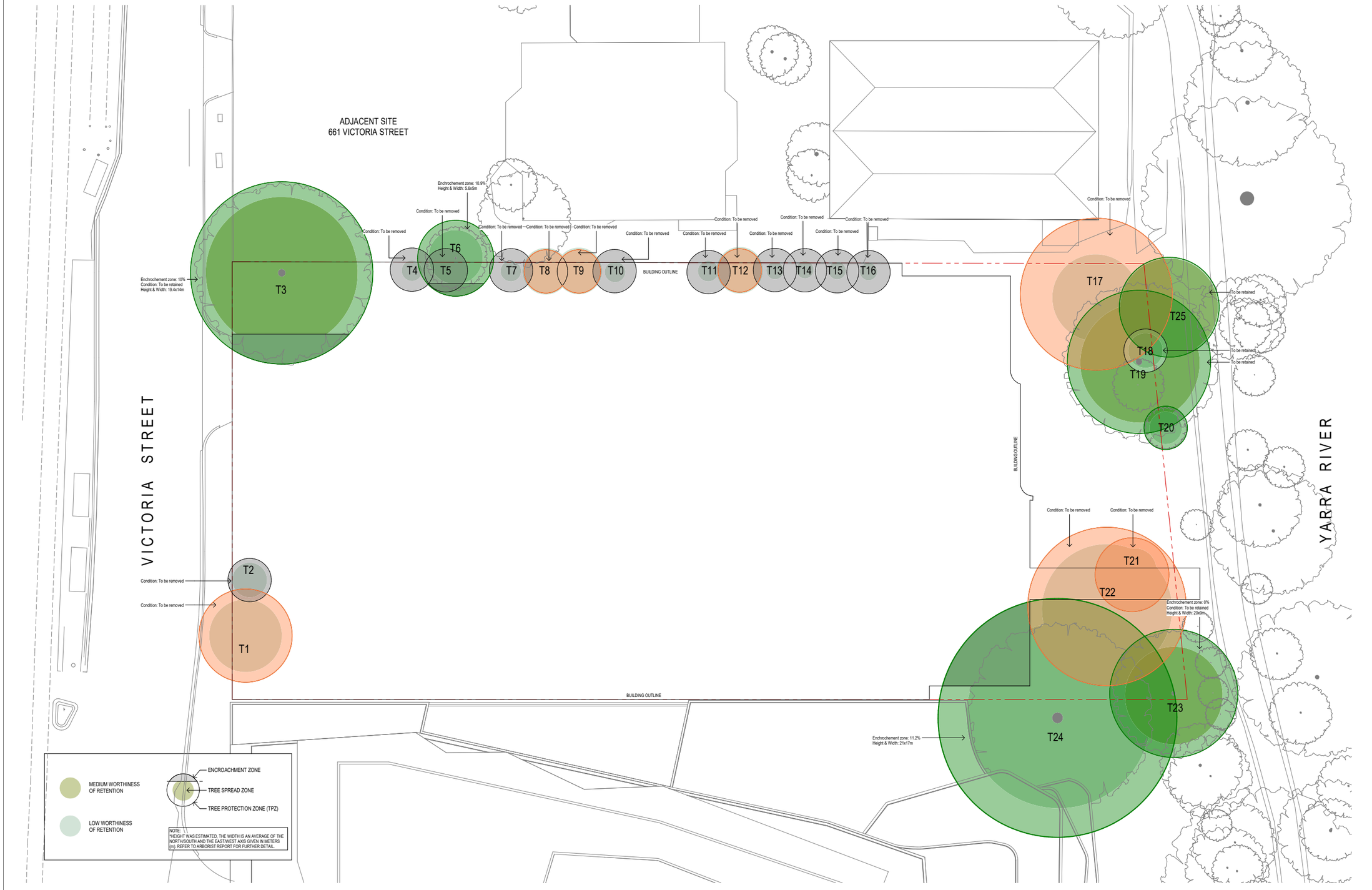

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
TREE MANAGMENT PLAN

REMOVE: PERMIT
REMOVE: NO PERMIT
RETAIN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD01_04	/ 1

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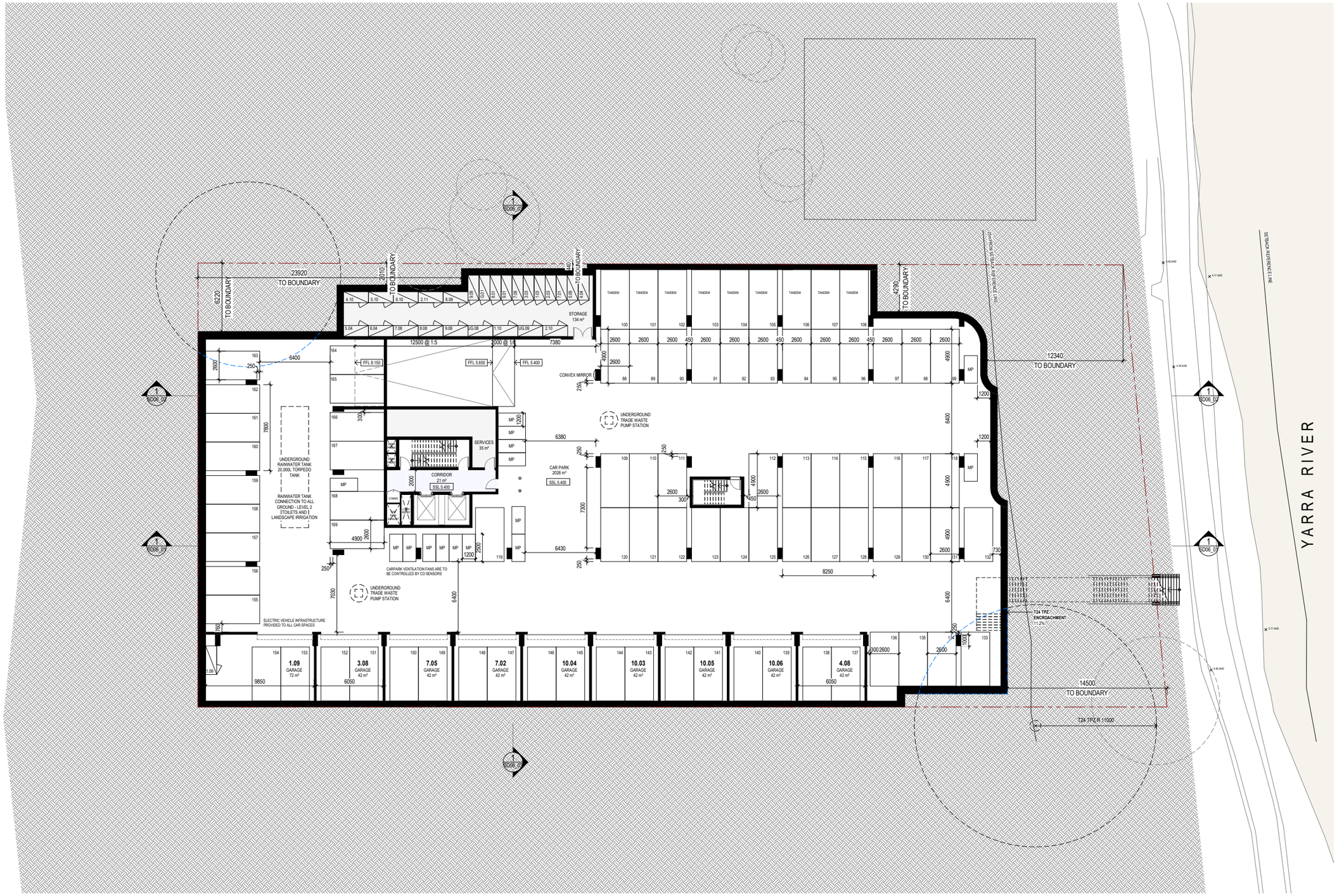

Client: EG	Project: EG ABBOTSFORD 675 VICTORIA STREET ABBOTSFORD	Drawing: BASEMENT 2 FLOOR PLAN	Job No.: 21582	Scale: 1 : 150	Date: 23.10.2024	Drawing No.: SD02_01 / Revision: 1

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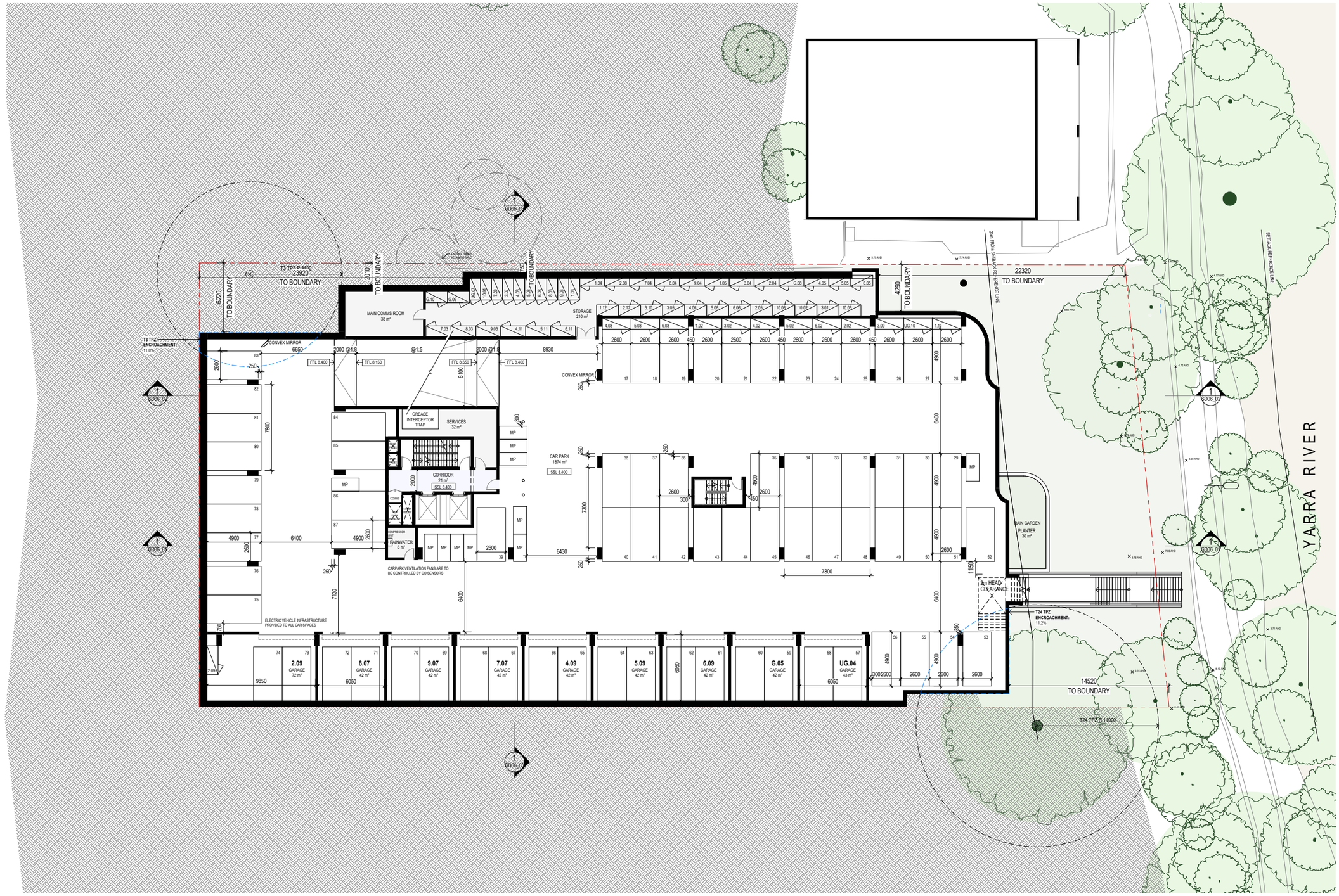

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
BASEMENT 1 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_02	/ 1

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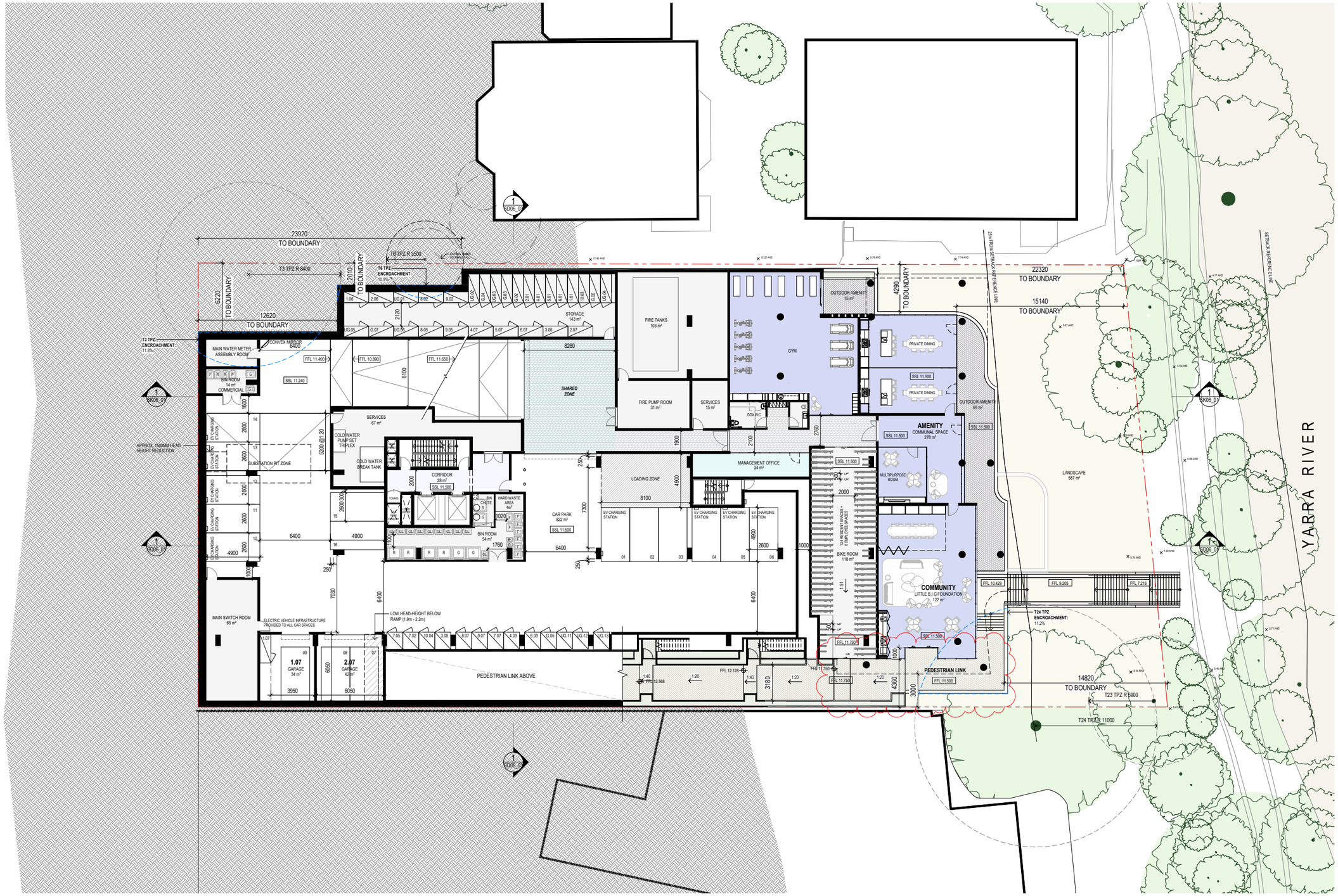

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LOWER GROUND FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD02_03	/ 2

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Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
GROUND FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD02_04	/ 2

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Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
UPPER GROUND FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_05	/ 1

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Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 1 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_06	/ 1

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Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 2 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD02_07	/ 3

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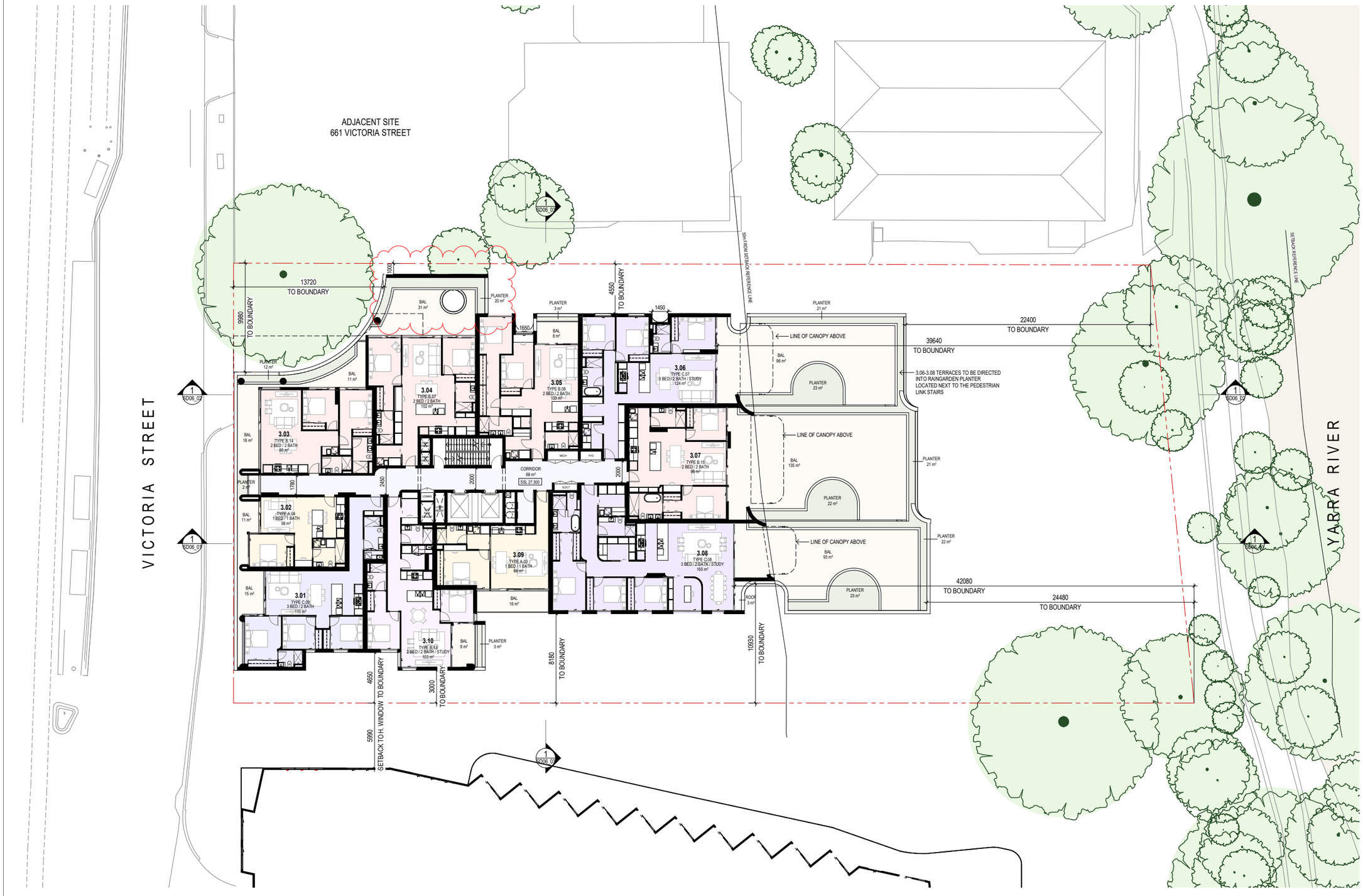

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 3 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD02_08	/ 3

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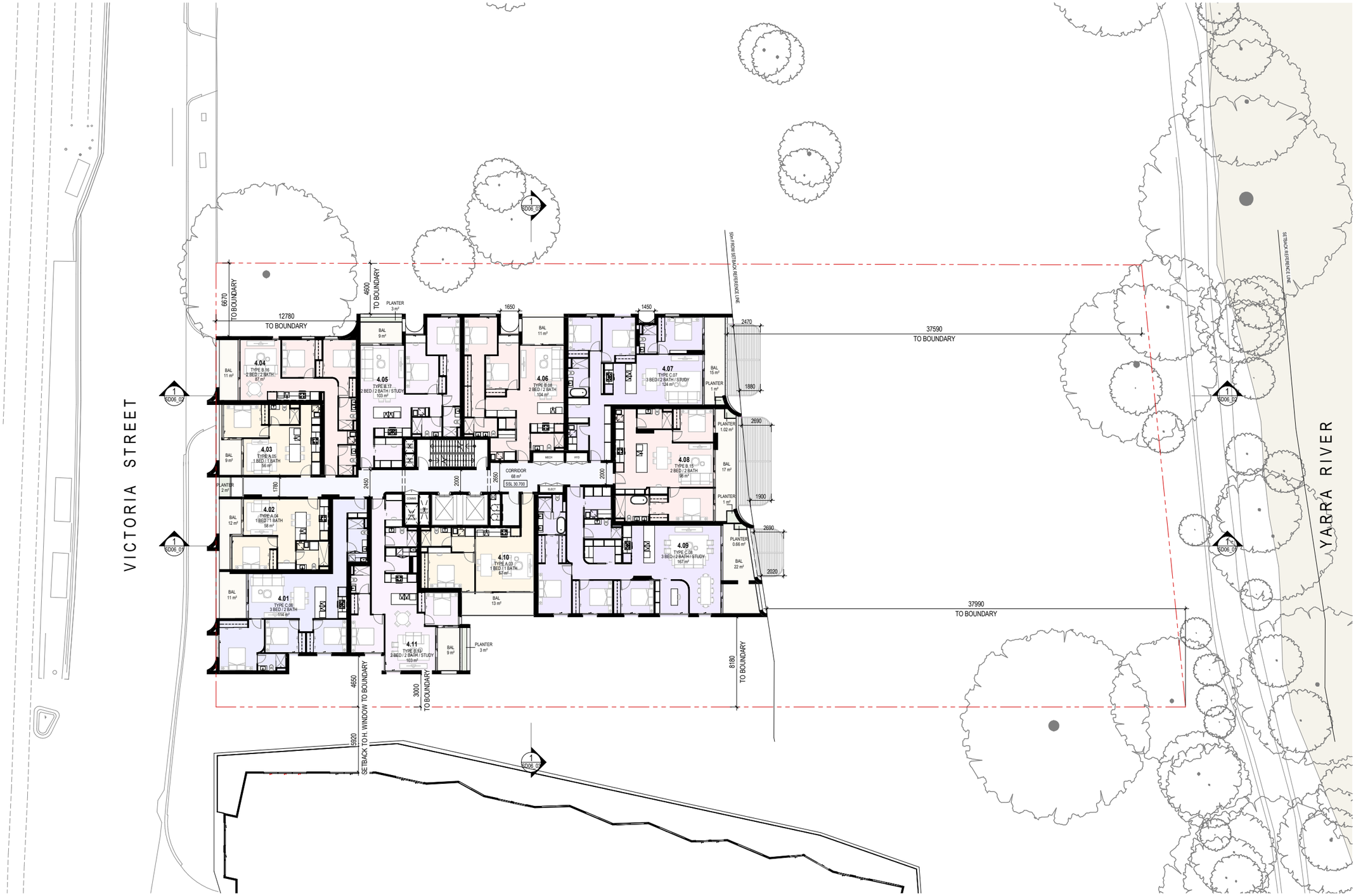

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 4 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	24.01.2025	SD02_09	/ 2

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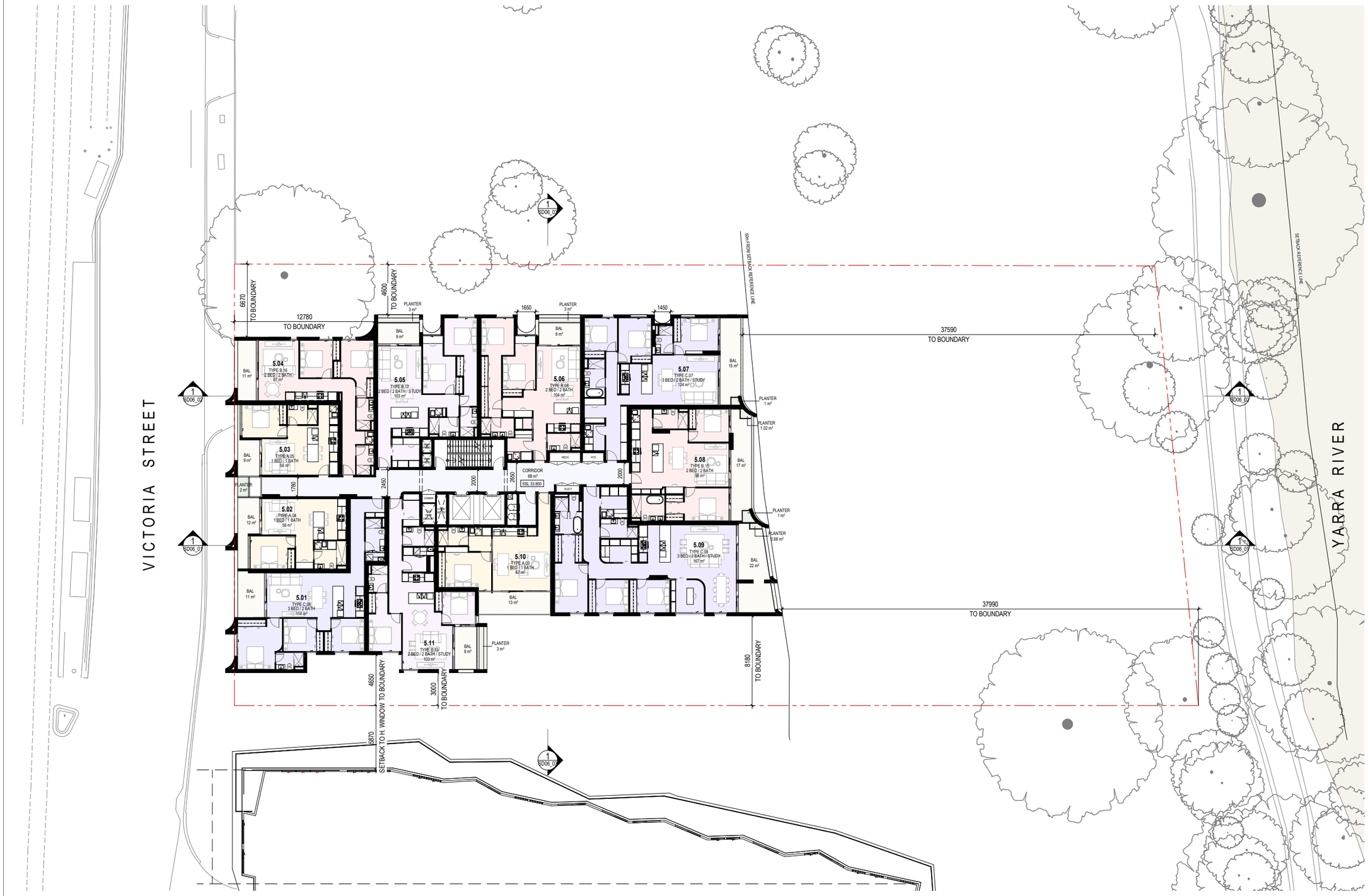

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 5 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_10	/ 1

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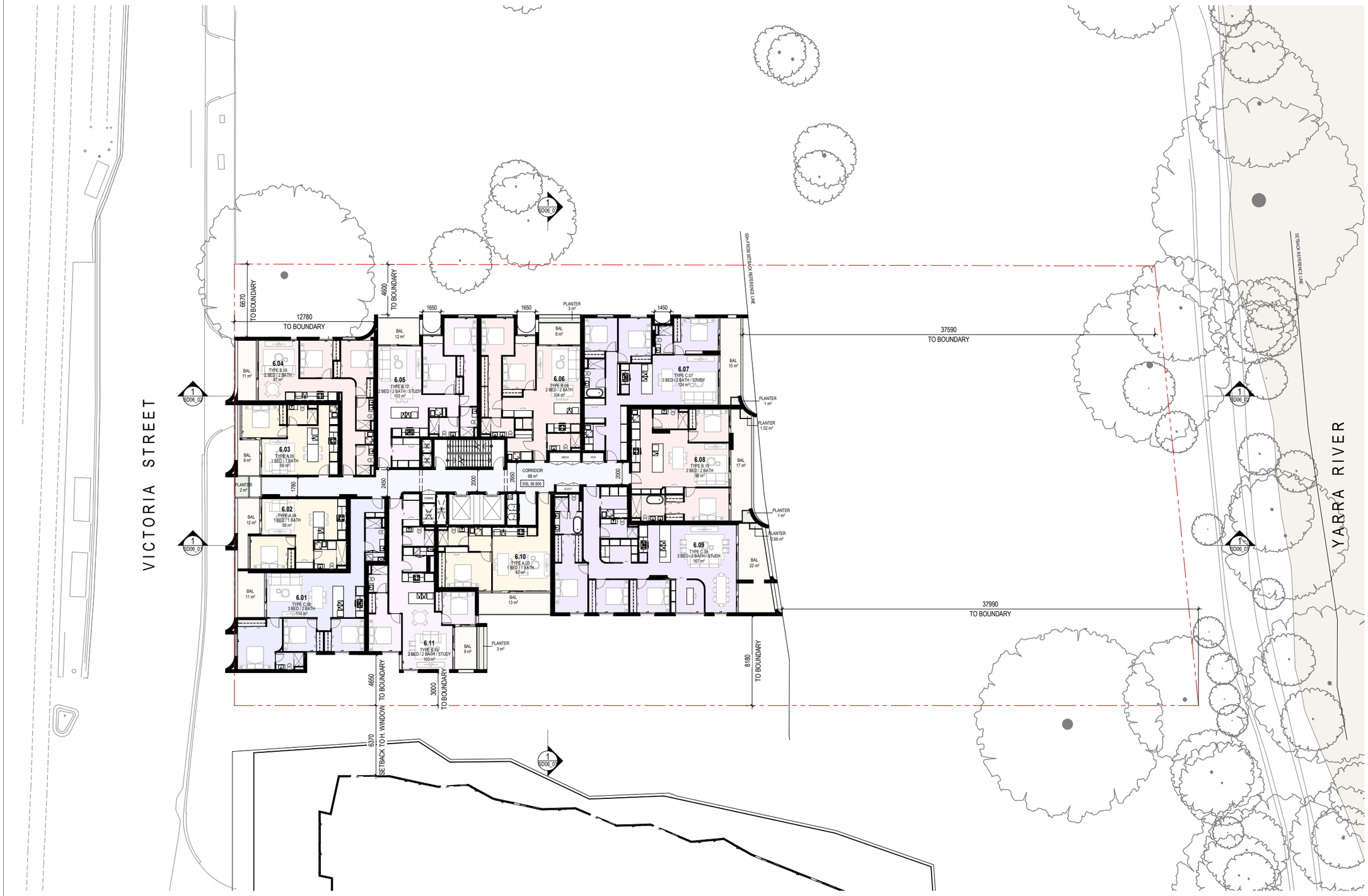

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 6 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_11	/ 1

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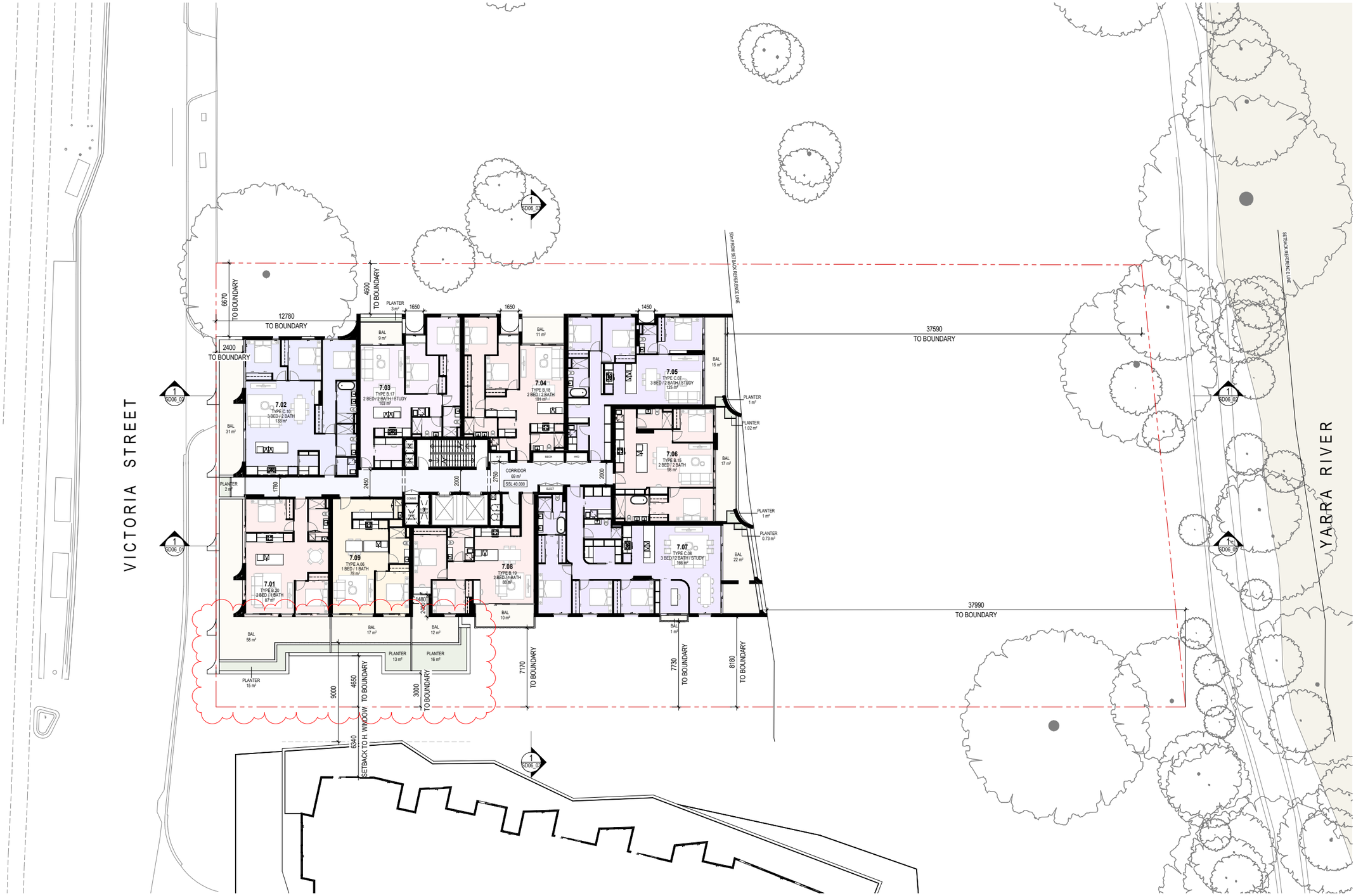

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 7 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD02_12	/ 2

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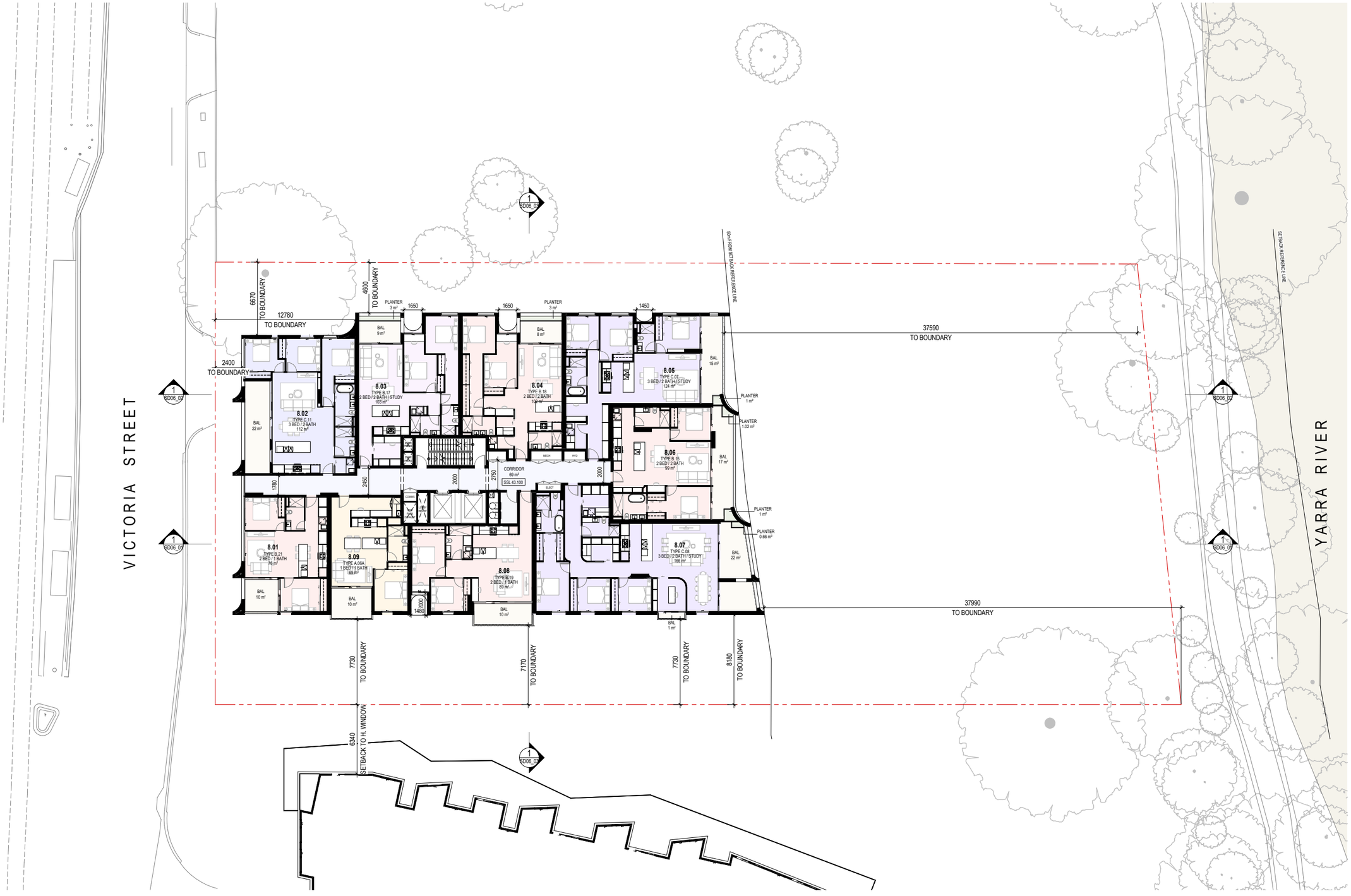

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 8 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_13	/ 1

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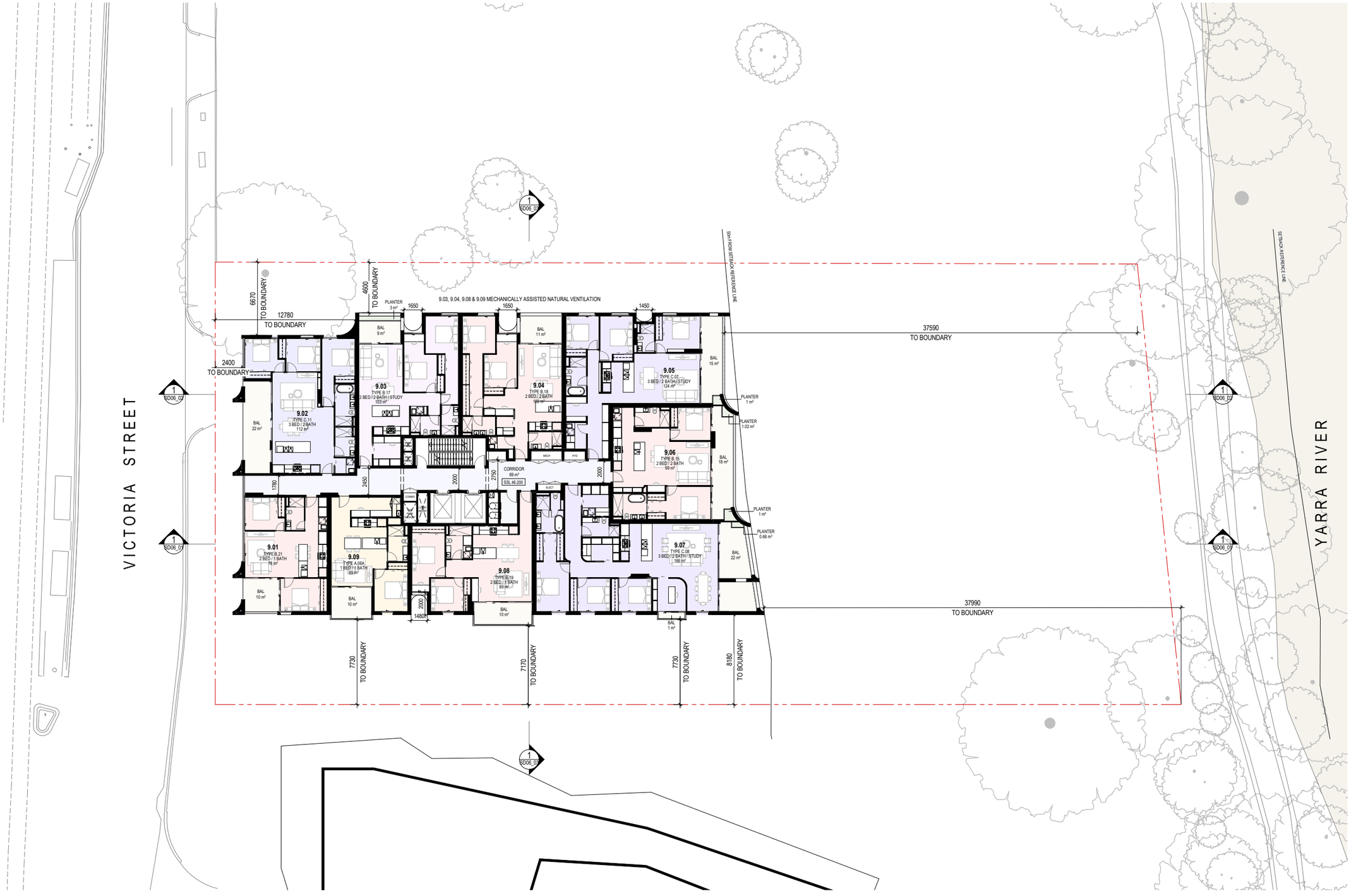

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 9 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_14	/ 1

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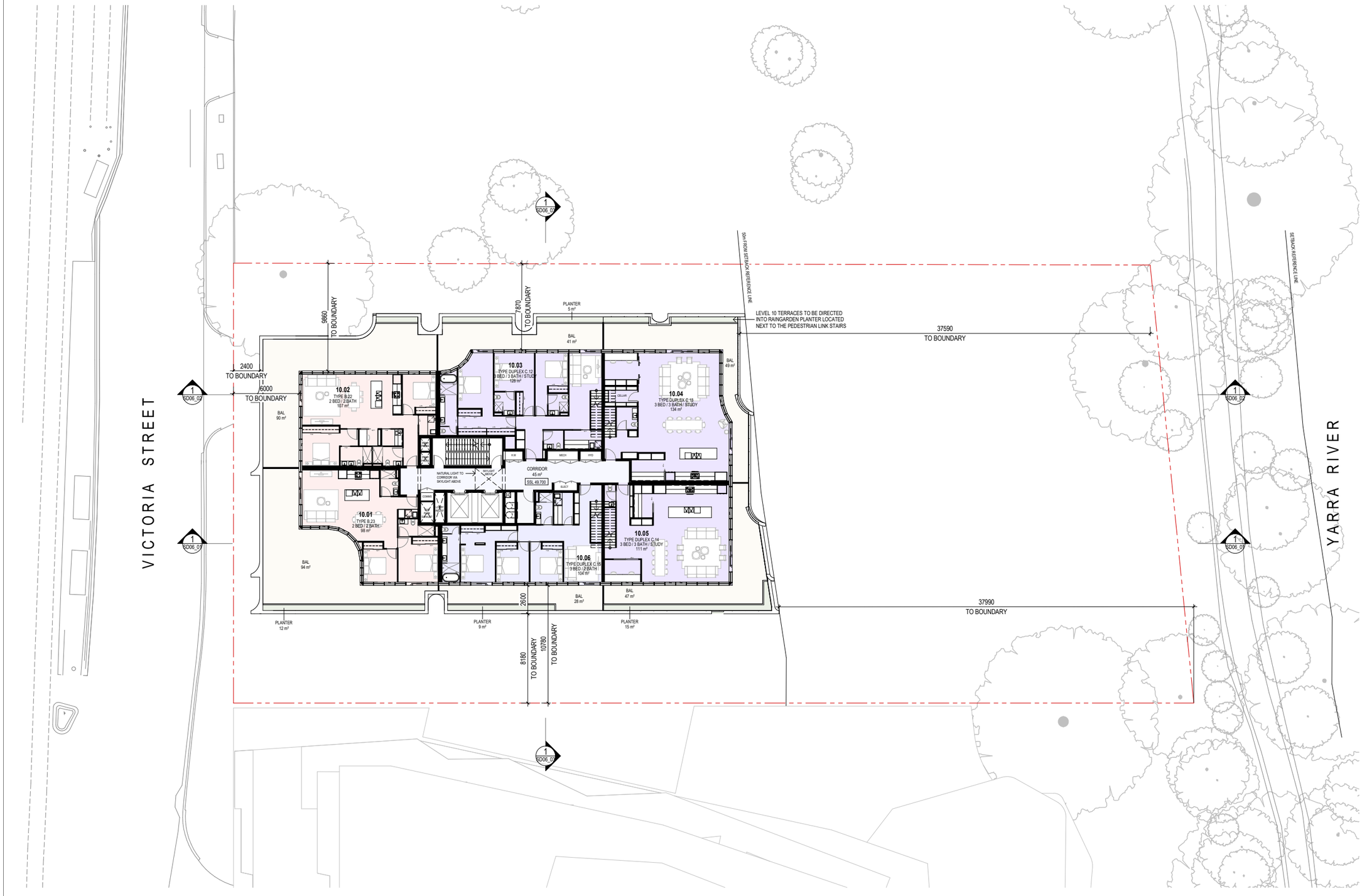

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 10 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_15	/ 1

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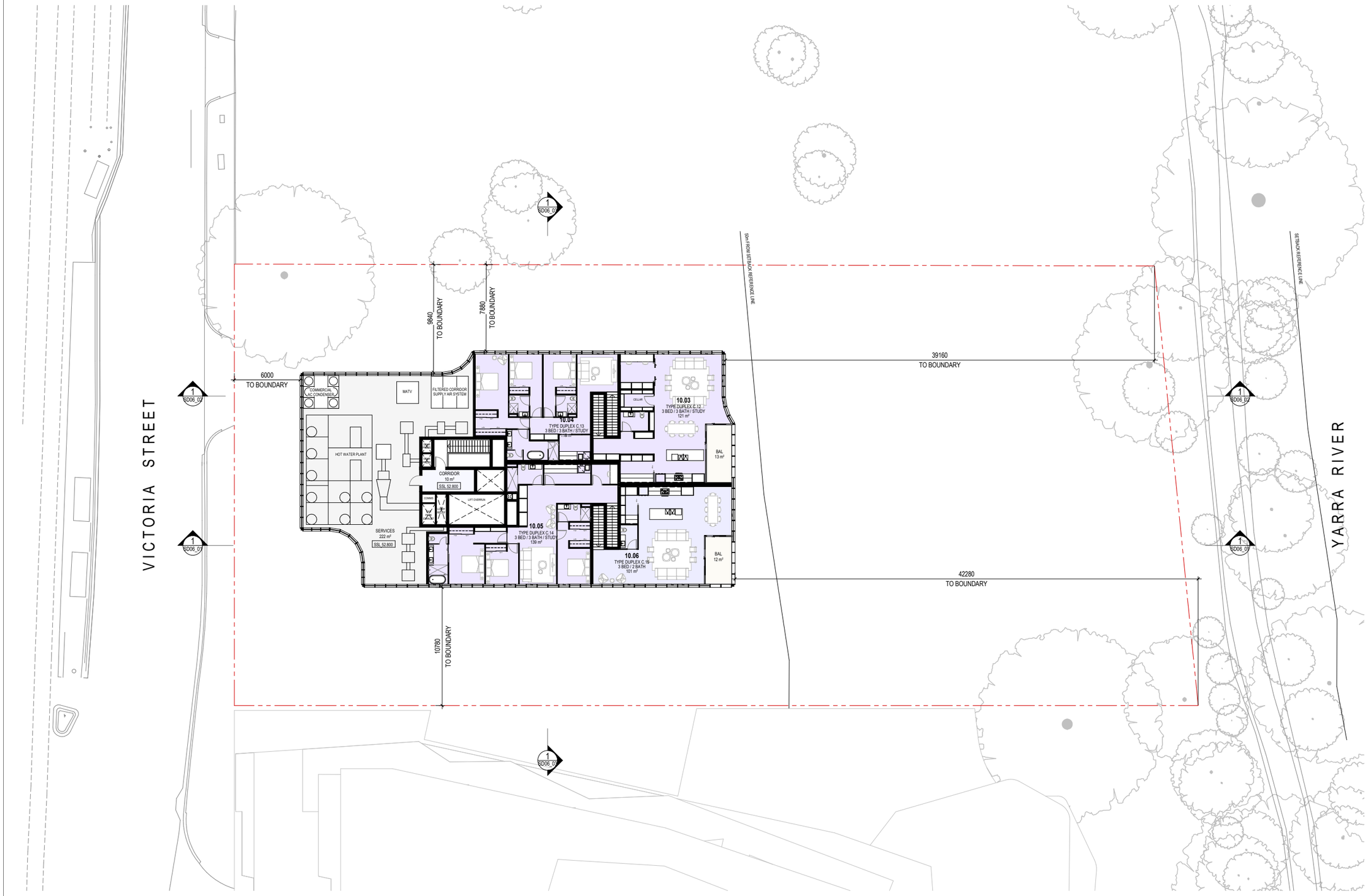

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 11 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD02_16	/ 1

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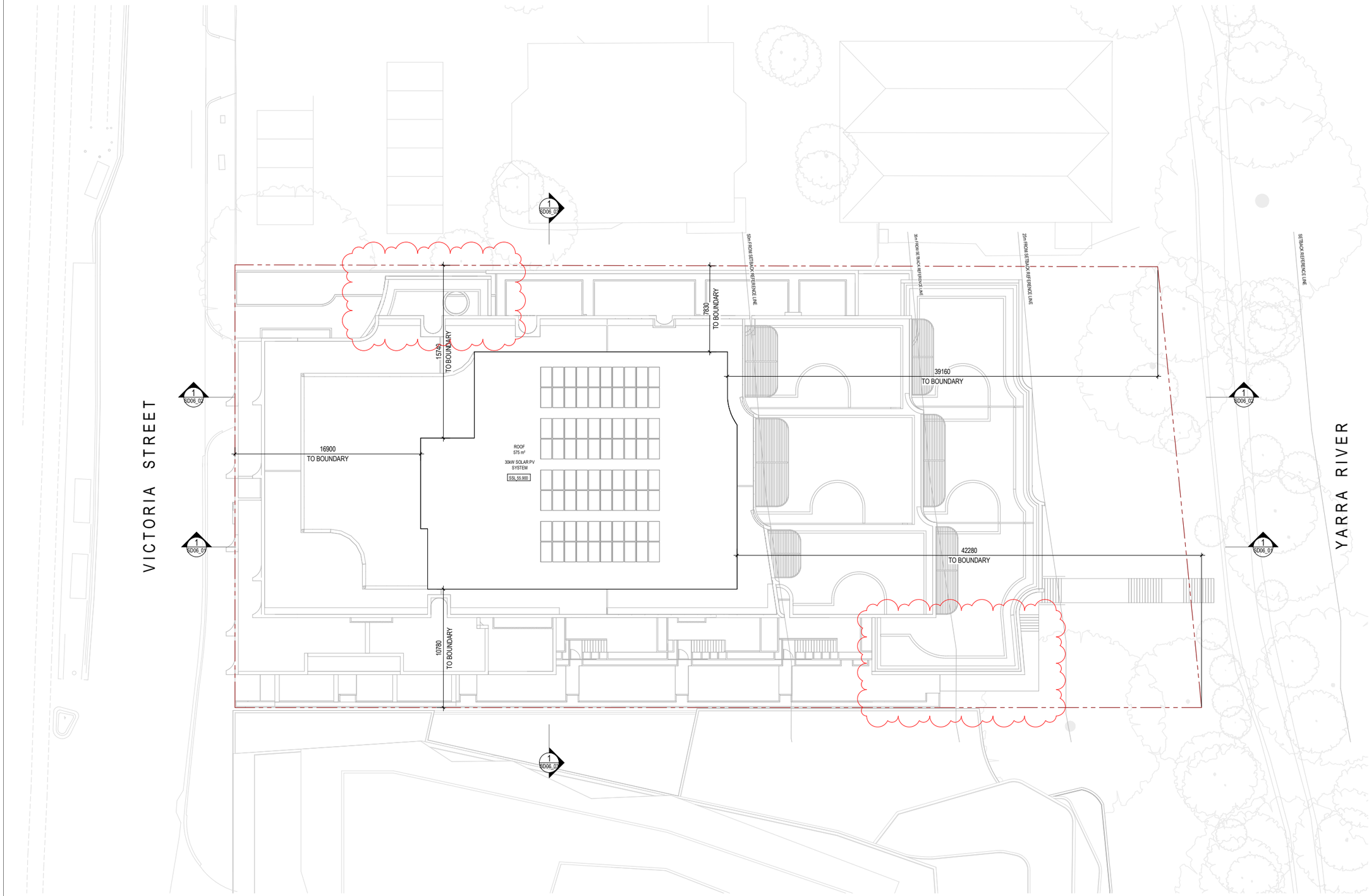

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
ROOF PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD02_17	/ 3

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MATERIAL LEGEND

BK01	BRICKWORK
BK02	BRICKWORK
BK03	BRICKWORK
BK04	BRICKWORK
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
BK10	HERRINGBONE BRICKWORK
CN01	CONCRETE FINISH
CN02	CONCRETE FINISH
CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
ME01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
ME02	METAL FINISH - GREEN POWDERCOAT FINISH
ME03	METAL FINISH - MEDIUM BRONZE POWDERCOAT FINISH
GL01	GLAZING - CLEAR
GL02	GLAZING - SPANDREL

679 VICTORIA STREET



Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: NORTH ELEVATION

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD05_01	/ 3

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MATERIAL LEGEND

BK01	BRICKWORK
BK02	BRICKWORK
BK03	BRICKWORK
BK04	BRICKWORK
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
BK10	HERRINGBONE BRICKWORK
CN01	CONCRETE FINISH
CN02	CONCRETE FINISH
CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
ME01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
ME02	METAL FINISH - GREEN POWDERCOAT FINISH
ME03	METAL FINISH - MEDIUM BRONZE POWDERCOAT FINISH
GL01	GLAZING - CLEAR
GL02	GLAZING - SPANDREL



Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: EAST ELEVATION

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	24.01.2025	SD05_02	/ 2

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MATERIAL LEGEND

BK01	BRICKWORK
BK02	BRICKWORK
BK03	BRICKWORK
BK04	BRICKWORK
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
BK10	HERRINGBONE BRICKWORK
CN01	CONCRETE FINISH
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CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
ME01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
ME02	METAL FINISH - GREEN POWDERCOAT FINISH
ME03	METAL FINISH - MEDIUM BRONZE POWDERCOAT FINISH
GL01	GLAZING - CLEAR
GL02	GLAZING - SPANDREL



Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SOUTH ELEVATION

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD05_03	/ 3

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MATERIAL LEGEND

BK01	BRICKWORK
BK02	BRICKWORK
BK03	BRICKWORK
BK04	BRICKWORK
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
BK10	HERRINGBONE BRICKWORK
CN01	CONCRETE FINISH
CN02	CONCRETE FINISH
CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
ME01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
ME02	METAL FINISH - GREEN POWDERCOAT FINISH
ME03	METAL FINISH - MEDIUM BRONZE POWDERCOAT FINISH
GL01	GLAZING - CLEAR
GL02	GLAZING - SPANDREL



Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: WEST ELEVATION

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD05_04	/ 3

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MATERIAL LEGEND

BK01	BRICKWORK
BK02	BRICKWORK
BK03	BRICKWORK
BK04	BRICKWORK
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
BK10	HERRINGBONE BRICKWORK
CN01	CONCRETE FINISH
CN02	CONCRETE FINISH
CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
ME01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
ME02	METAL FINISH - GREEN POWDERCOAT FINISH
ME03	METAL FINISH - MEDIUM BRONZE POWDERCOAT FINISH
GL01	GLAZING - CLEAR
GL02	GLAZING - SPANDREL



Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
WEST ELEVATION_GROUND FLOOR

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	23.10.2024	SD05_05	/ 1

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MATERIAL LEGEND

BK01	BRICKWORK
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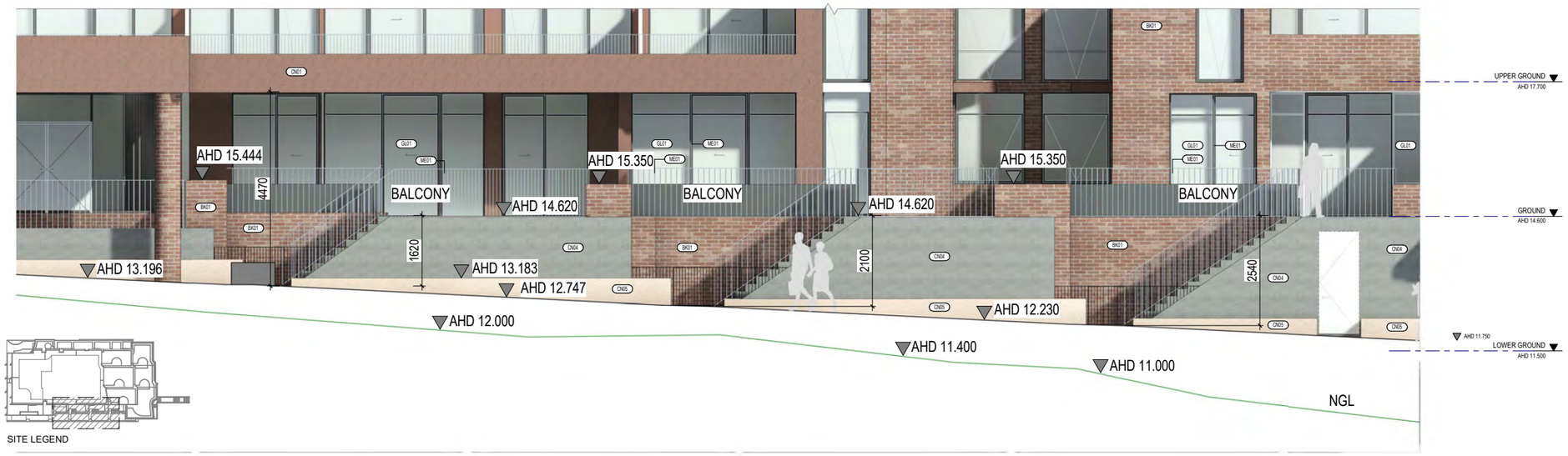
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
CN01	CONCRETE FINISH
CN02	CONCRETE FINISH
CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
ME01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
GL01	GLAZING - CLEAR





Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: PRESENTATION TO THE PEDESTRIAN LINK

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD05_06	/ 1

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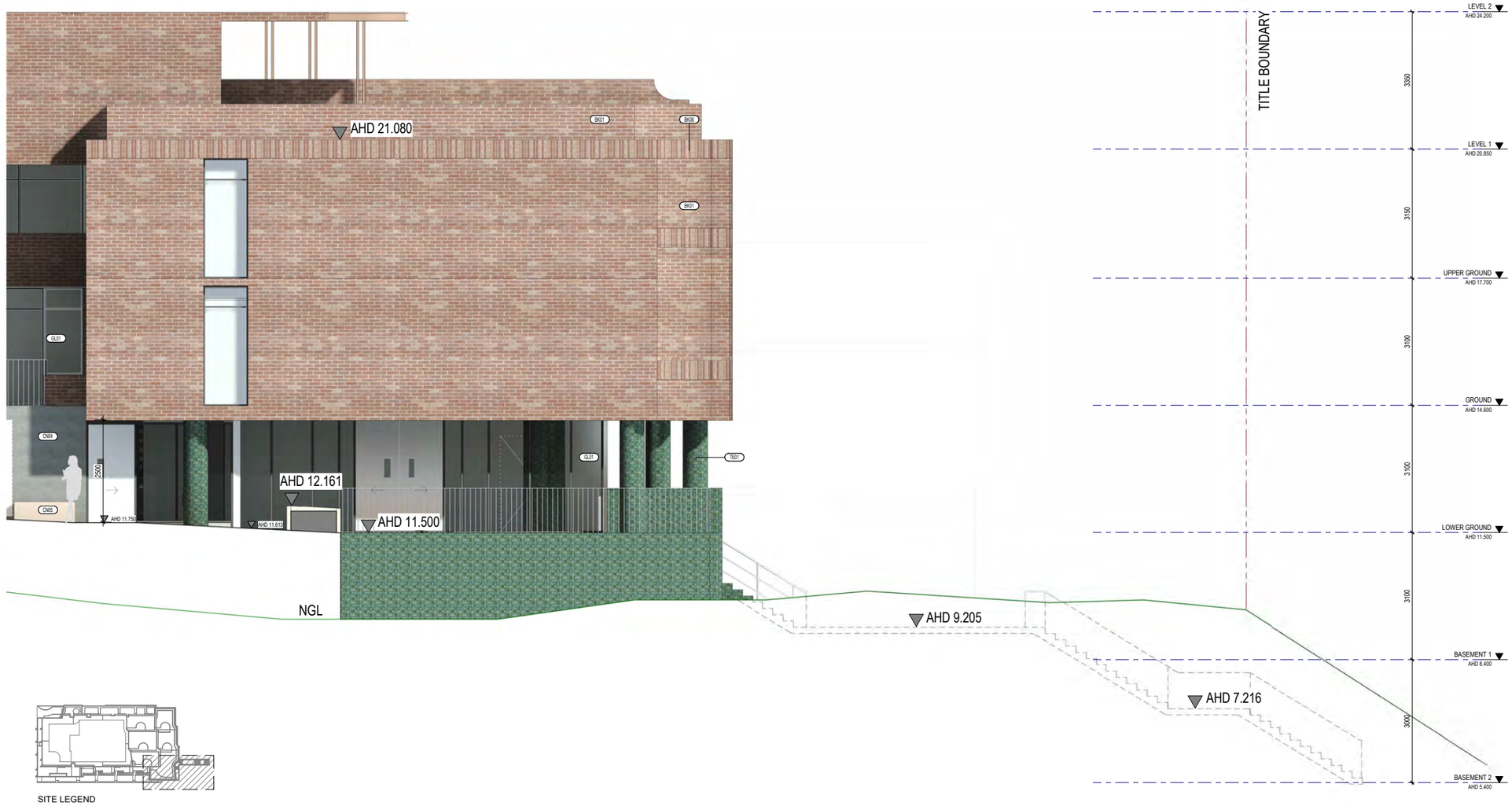
www.sjb.com.au

MATERIAL LEGEND

BK01	BRICKWORK
BK02	BRICKWORK
BK03	BRICKWORK
BK04	BRICKWORK
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
CN01	CONCRETE FINISH
CN02	CONCRETE FINISH
CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
ME01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
GL01	GLAZING - CLEAR



SITE LEGEND

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
PRESENTATION TO THE PEDESTRIAN LINK

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD05_07	/ 1

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MATERIAL LEGEND

BK01	BRICKWORK
BK02	BRICKWORK
BK03	BRICKWORK
BK04	BRICKWORK
BK05	BRICK HIT AND MISS
BK06	BRICK SOLDIER COURSE
BK07	BRICK SOLDIER COURSE
BK08	BRICK SOLDIER COURSE
BK09	BRICK SOLDIER COURSE
CN01	CONCRETE FINISH
CN02	CONCRETE FINISH
CN03	CONCRETE FINISH
CN04	CONCRETE FINISH
CN05	CONCRETE FINISH
PF01	PAINT FINISH
PF02	PAINT FINISH
PF03	PAINT FINISH
TE01	TILE FINISH
MS01	METAL FINISH - CHARCOAL POWDERCOAT FINISH
GL01	GLAZING - CLEAR



1 - ELEVATION @ FRONT - VICTORIA STREET
SCALE 1 : 50



2 - ELEVATION @ REAR - YARRA RIVER
SCALE 1 : 50

*Note: Trees have been removed for render purposes

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD
Drawing: PRESENTATION TO FRONT AND REAR
Job No.: 21582
Scale: 1 : 50
Date: 23.10.2024
Drawing No.: SD05_08
Revision: / 1

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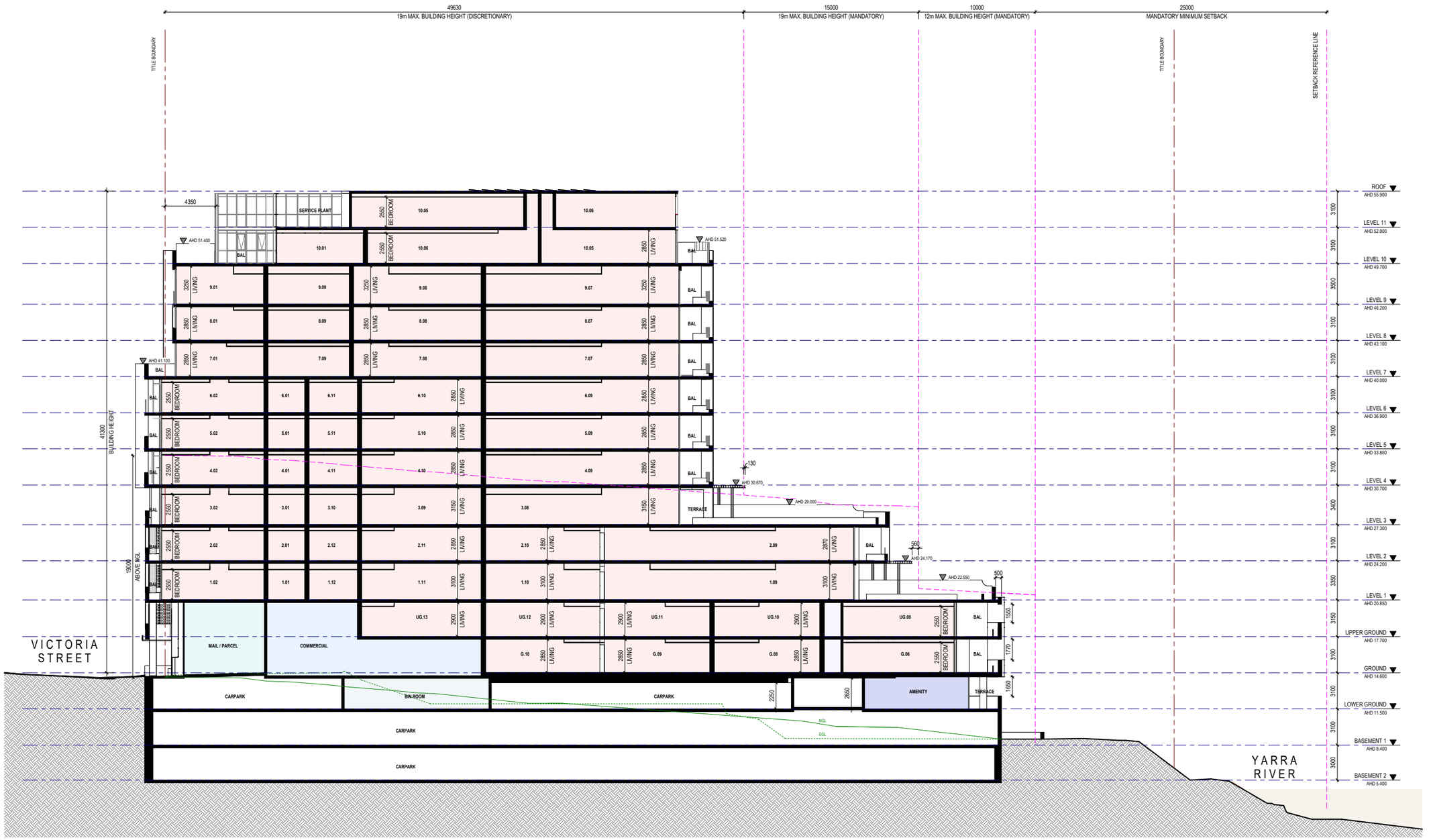

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SECTIONS

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	24.01.2025	SD06_01	/ 2

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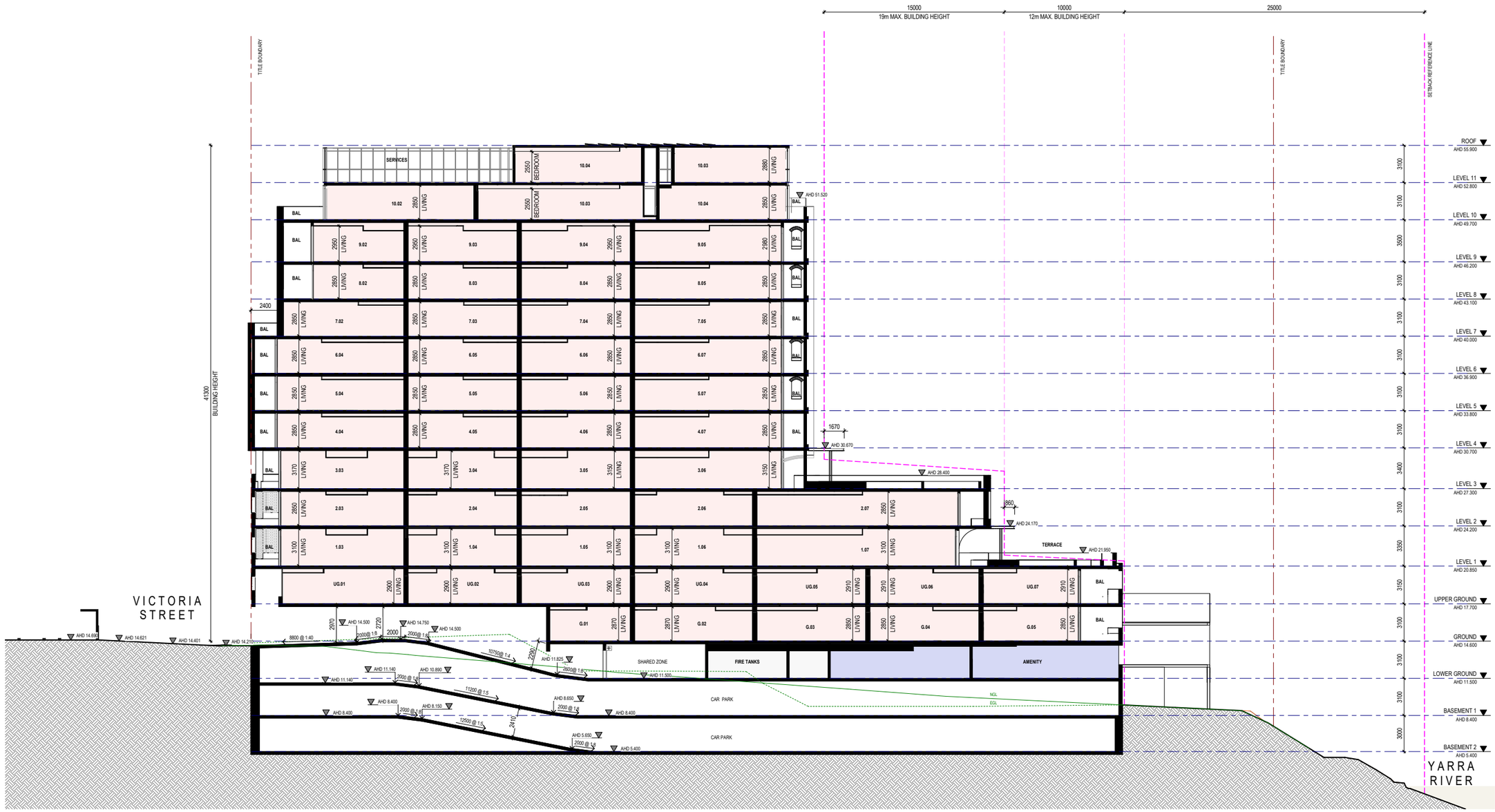

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: SECTIONS

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	24.01.2025	SD06_02	/ 2

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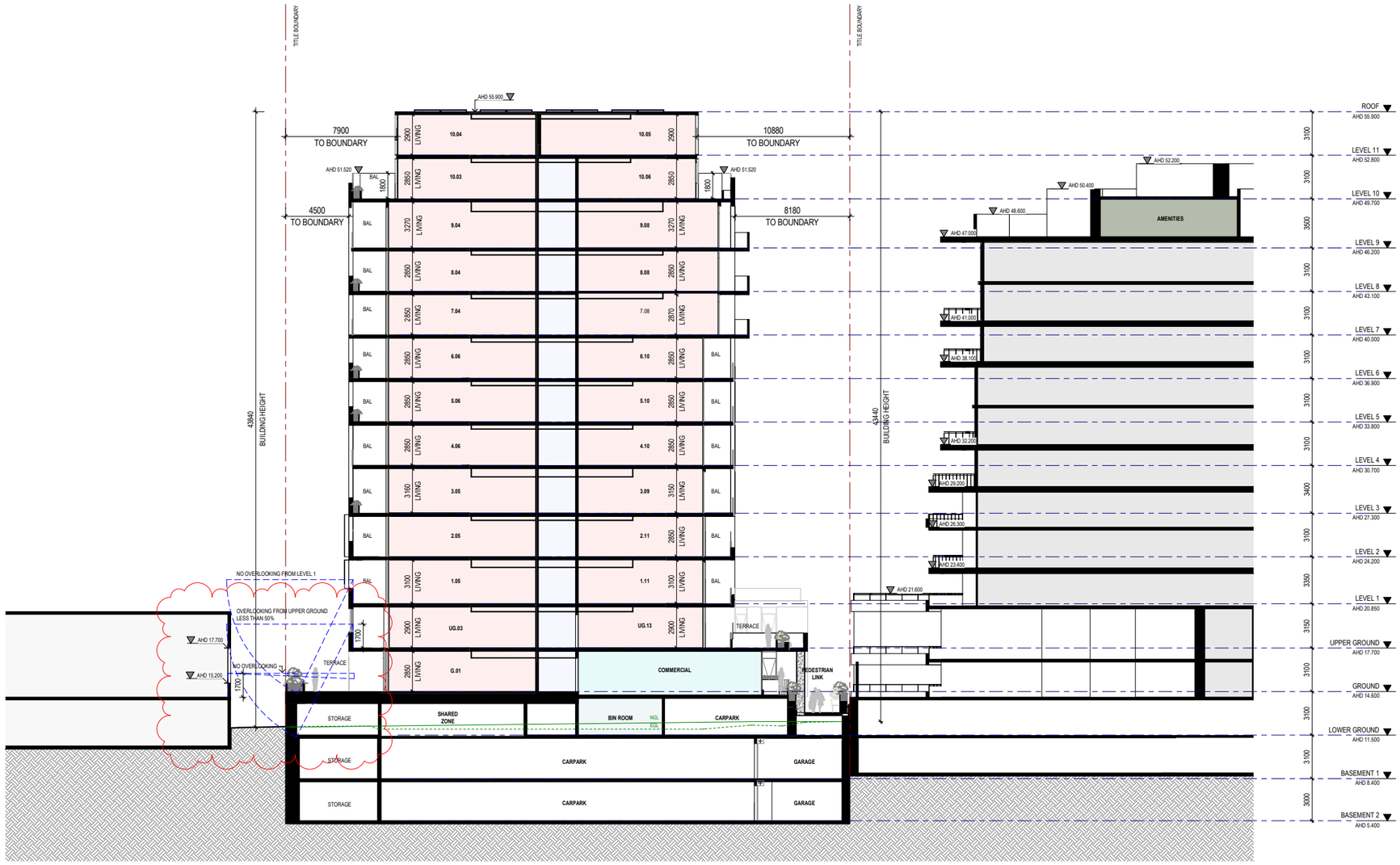

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SECTIONS

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD06_03	/ 3

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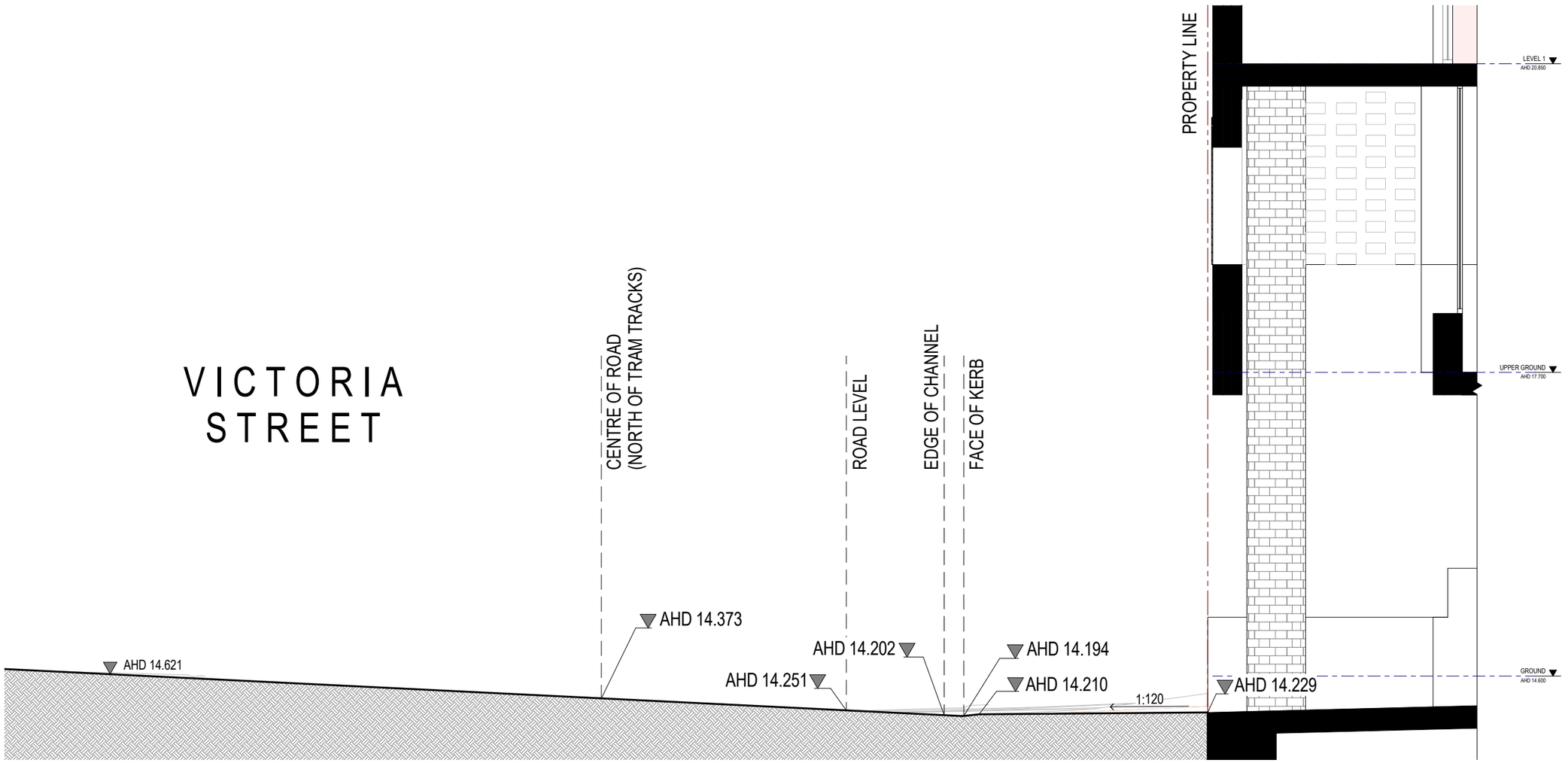

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SECTION - PROPOSED VEHICLE CROSSING

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 20	23.10.2024	SD06_04	/ 1

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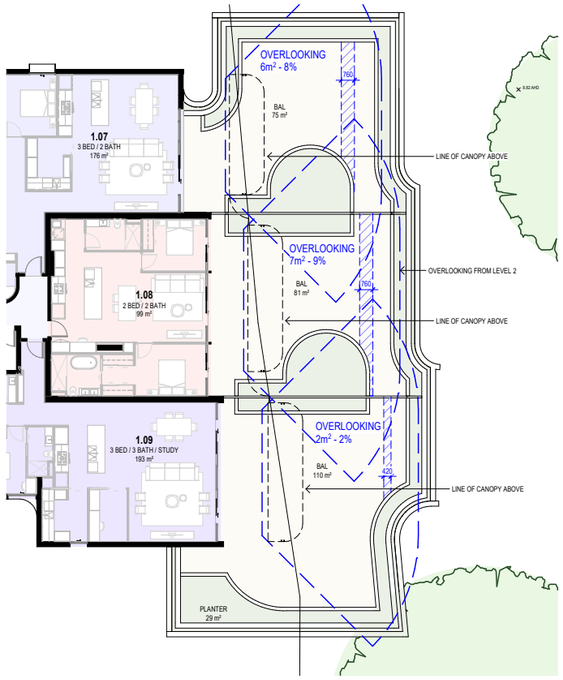
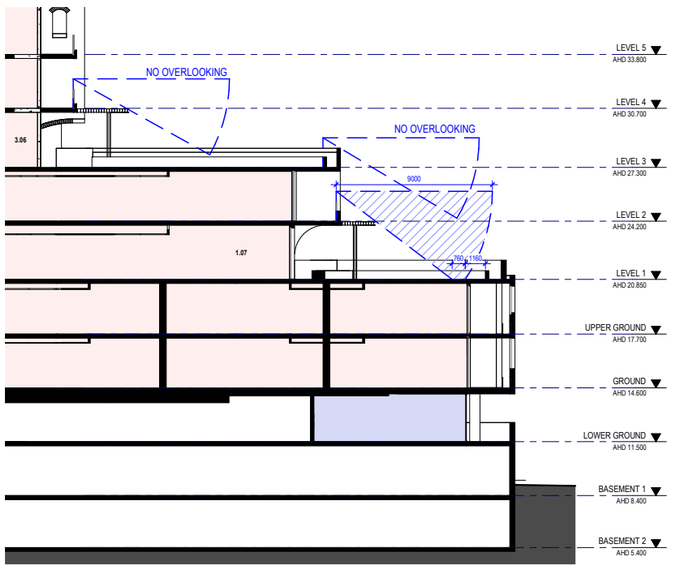
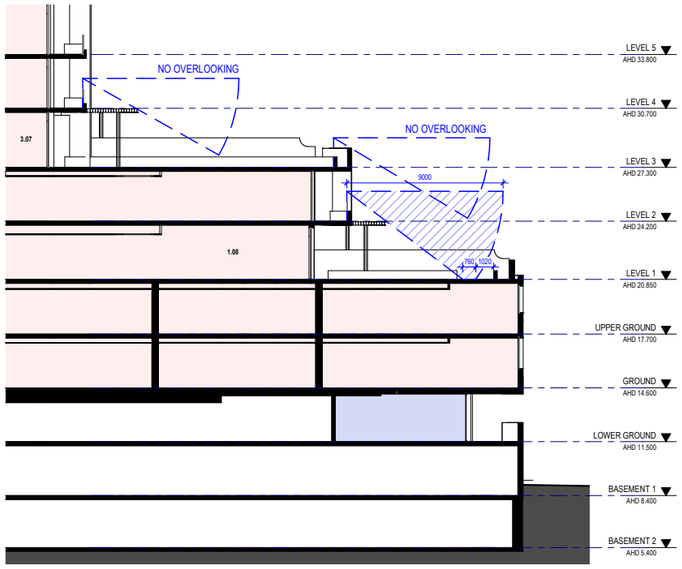


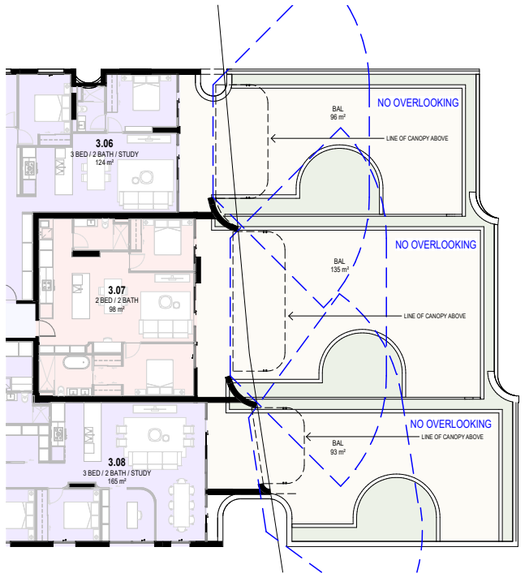
1 SD05_01 SD_L1_LEVEL 1_FLOOR PLAN_OVERLOOKING
SCALE 1 : 150



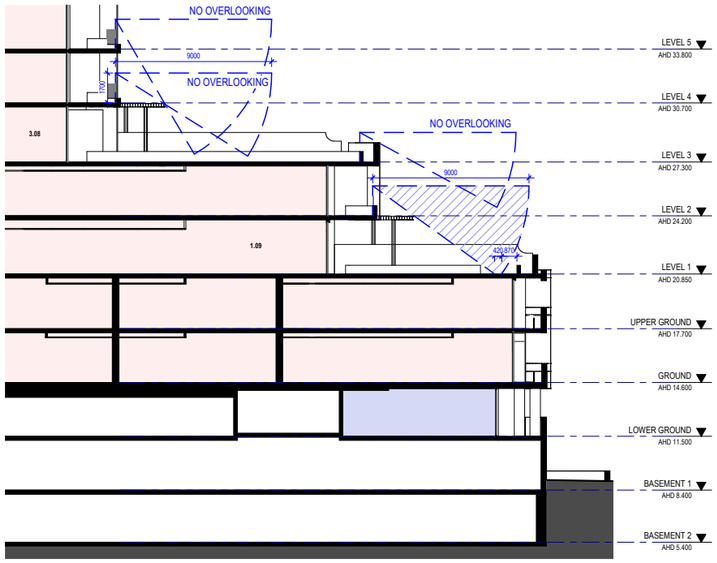
2 SD29_01 OVERLOOKING DIAGRAM - UNIT 1.07 & 3.06
SCALE 1 : 150



3 SD29_01 OVERLOOKING DIAGRAM - UNIT 1.08 & 3.07
SCALE 1 : 150



VV SD05_01 SD_L3_LEVEL 3_FLOOR PLAN_OVERLOOKING
SCALE 1 : 150



4 SD29_01 OVERLOOKING DIAGRAM - UNIT 1.09 & 3.08
SCALE 1 : 150

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: OVERLOOKING - STANDARD D15 - INTERNAL VIEWS

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	24.01.2025	SD06_05	/ 1

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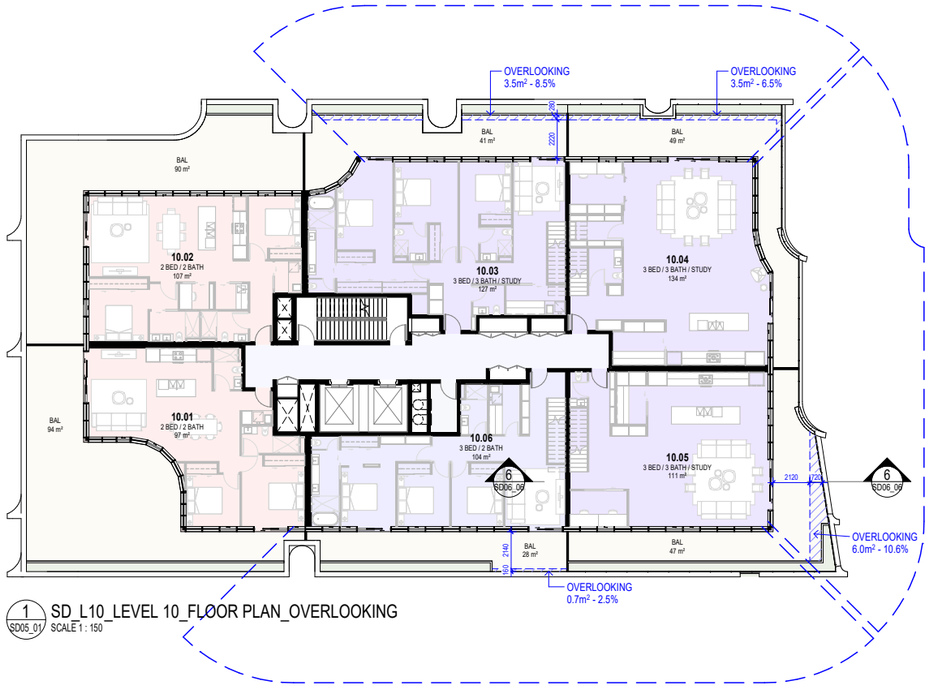
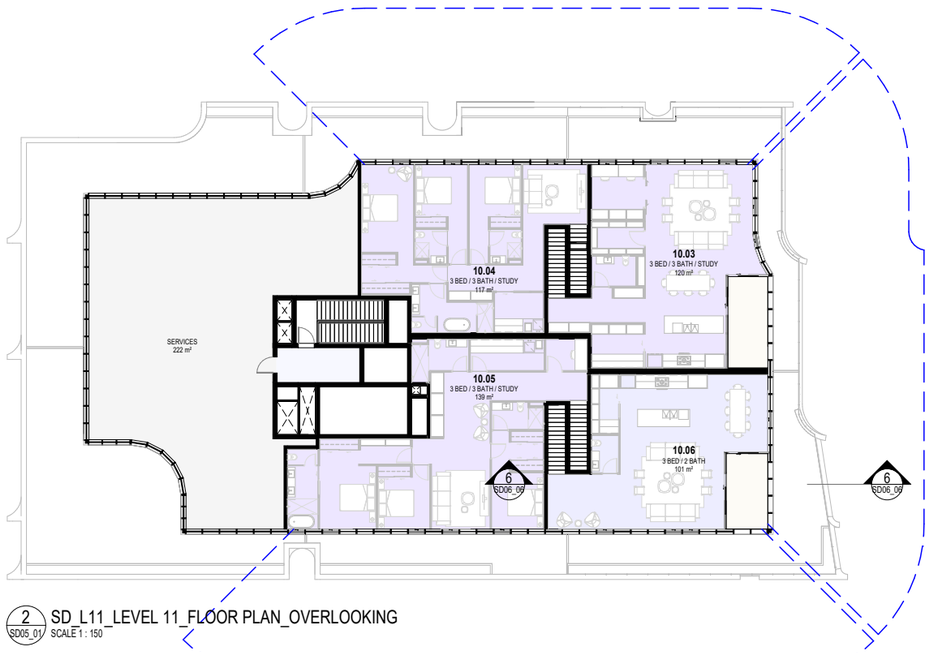
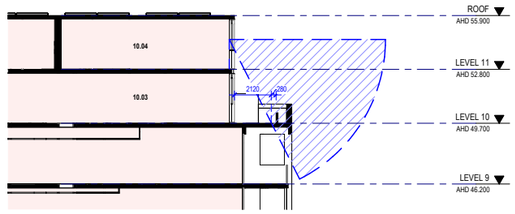


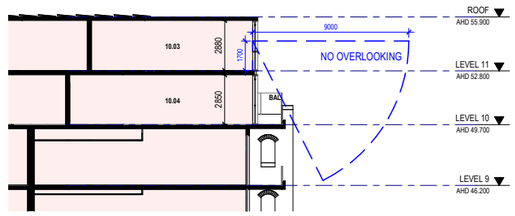
1 SD05_01 SD_L10_LEVEL 10_FLOOR PLAN_OVERLOOKING
SCALE 1 : 150



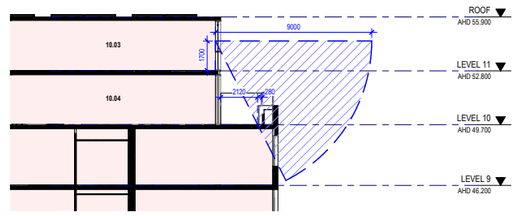
2 SD05_01 SD_L11_LEVEL 11_FLOOR PLAN_OVERLOOKING
SCALE 1 : 150



3 SD29_13 OVERLOOKING DIAGRAM - UNIT 10.03
SCALE 1 : 150



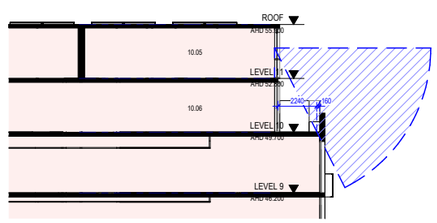
4 SD29_13 OVERLOOKING DIAGRAM - UNIT 10.04
SCALE 1 : 150



5 SD29_13 OVERLOOKING DIAGRAM - UNIT 10.04
SCALE 1 : 150

6 SD06_06 OVERLOOKING DIAGRAM - UNIT 10.05
SCALE 1 : 150

7 SD29_13 OVERLOOKING DIAGRAM - UNIT 10.05
SCALE 1 : 150



8 SD29_13 OVERLOOKING DIAGRAM - UNIT 10.06
SCALE 1 : 150



Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
OVERLOOKING - STANDARD D15 - INTERNAL VIEWS

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	24.01.2025	SD06_06	/ 1

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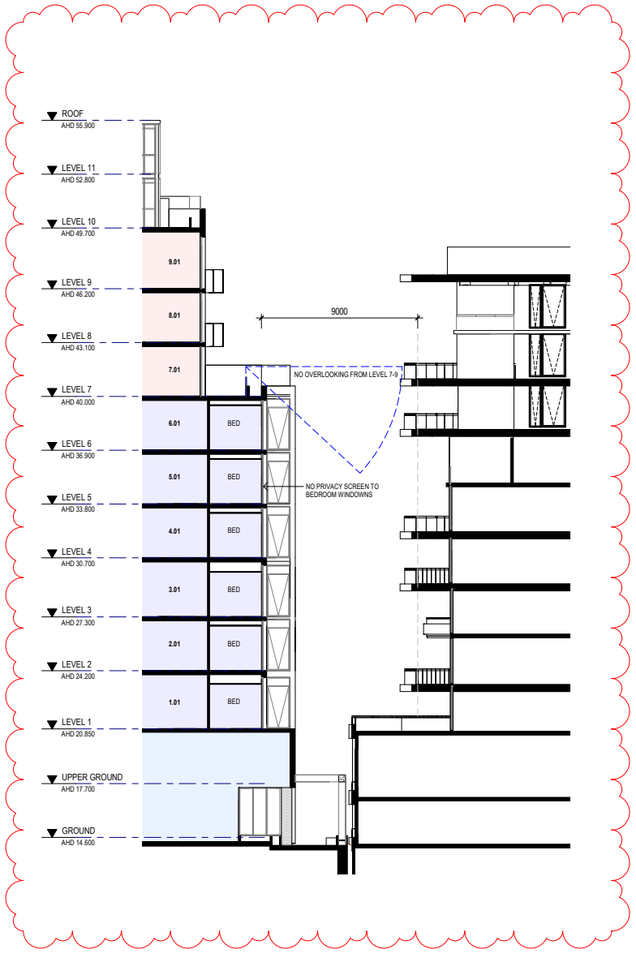

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
STANDARD D14 – BUILDING SETBACK

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD06_07	/ 1

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BK01
BRICKWORK



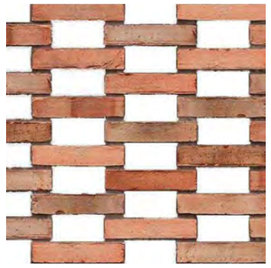
BK02
BRICKWORK



BK03
BRICKWORK



BK04
BRICKWORK



BK05
HIT AND MISS BRICKWORK



BK06
SOLDIER COURSE BRICKWORK



BK07
SOLDIER COURSE BRICKWORK



BK08
SOLDIER COURSE BRICKWORK



BK09
SOLDIER COURSE BRICKWORK



BK10
HERRINGBONE BRICKWORK



CN01
CONCRETE FINISH



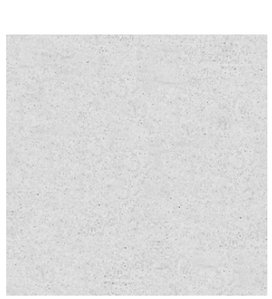
CN02
CONCRETE FINISH



CN03
CONCRETE FINISH



CN04
CONCRETE FINISH



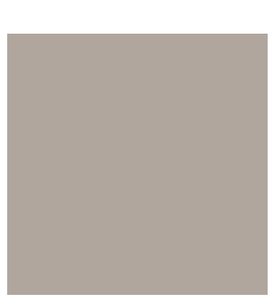
CN05
CONCRETE FINISH



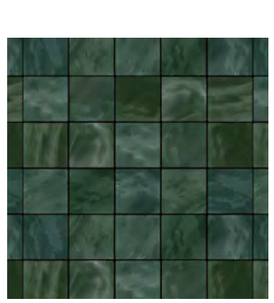
PF01
PAINT FINISH



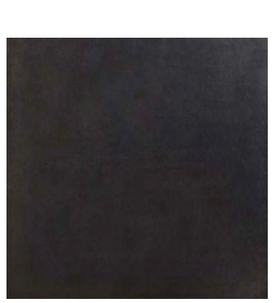
PF02
PAINT FINISH



PF03
PAINT FINISH



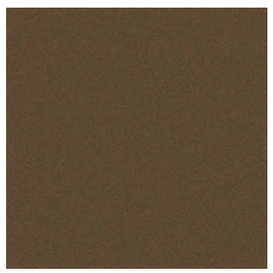
TE01
TILE



ME01
METAL PANEL - CHARCOAL POWDERCOAT FINISH



ME02
METAL PANEL - GREEN POWDERCOAT FINISH



ME03
METAL PANEL - MEDIUM BRONZE POWDERCOAT FINISH

GL01
GLASS - CLEAR GLAZING

GL02
GLASS - SPANDREL GLAZING

Client
EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
MATERIALS SCHEDULE

Job No.	Scale	Date	Drawing No.	Revision
21582		23.10.2024	SD07_01	/ 1

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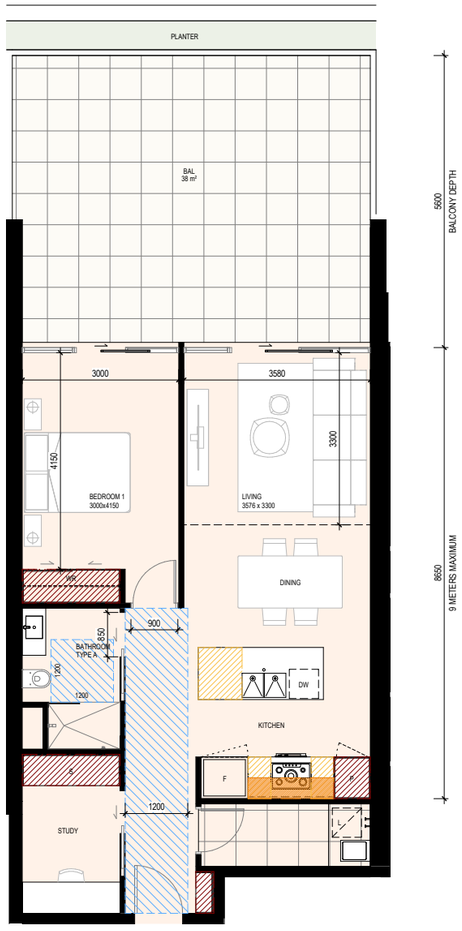

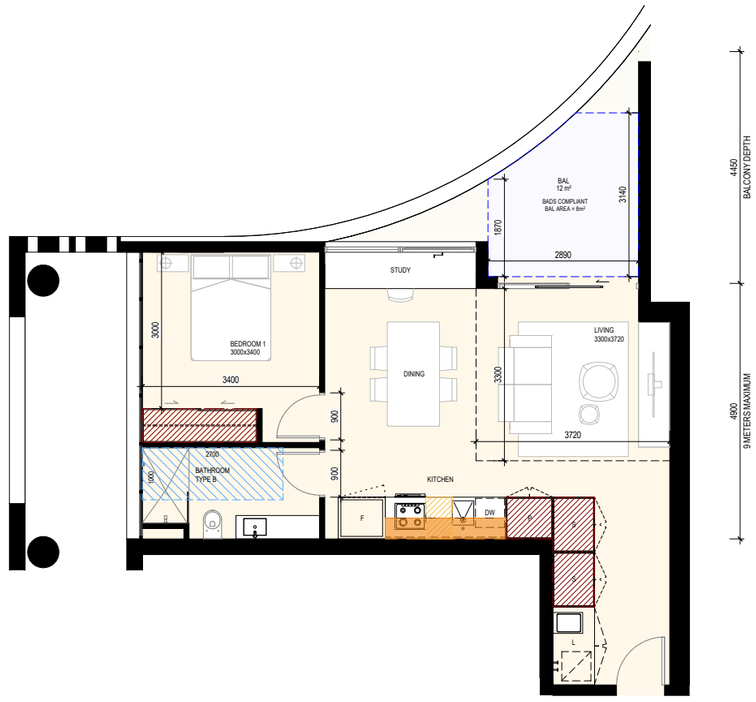

TYPE A01
1 BED / 1 BATH / STUDY
NSA 74 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

TYPE A02
1 BED / 1 BATH
NSA 70 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES A

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_01	/ 1

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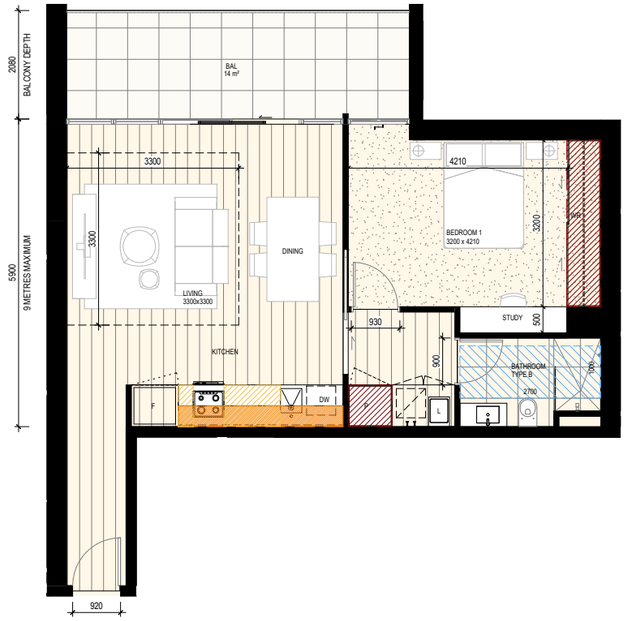
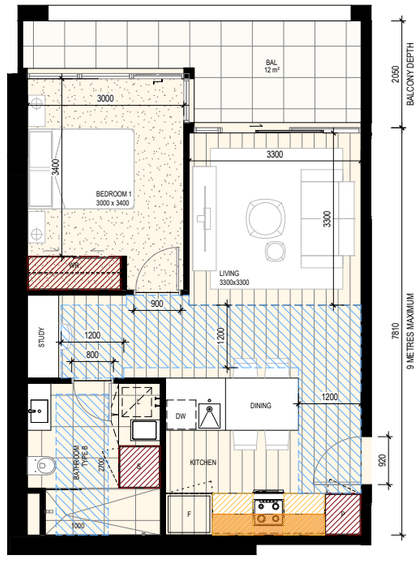


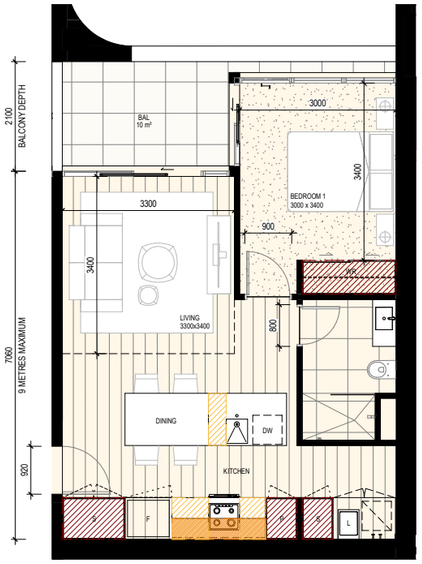
TYPE A03
1 BED / 1 BATH
NSA 67 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE A04
1 BED / 1 BATH
NSA 58 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE A05
1 BED / 1 BATH
NSA 56 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend

- Full Height Storage
- Underbench Storage
- Overhead Storage

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
APARTMENT TYPES A

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_02	/ 1

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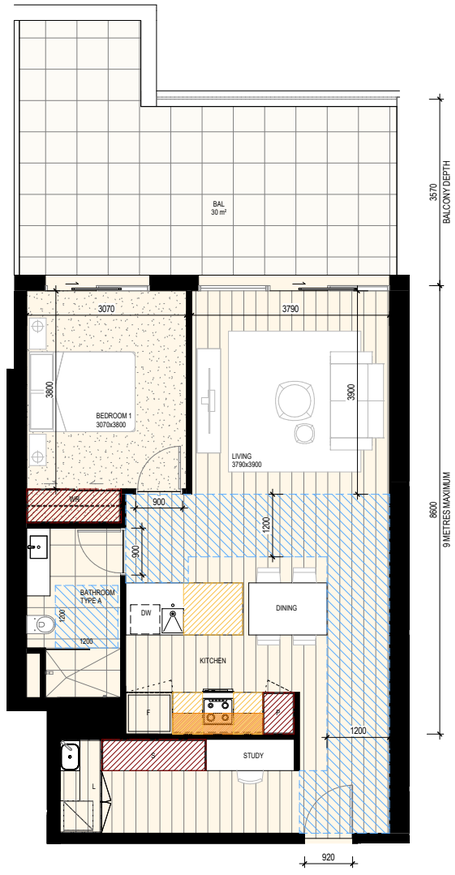
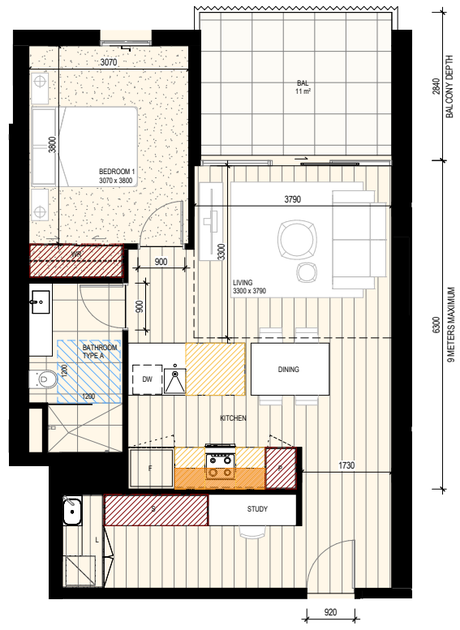


TYPE A06
1 BED / 1 BATH
NSA 78 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

UNITS 7.09, 8.09 & 9.09 ARE TO HAVE MECHANICALLY ASSISTED NATURAL VENTILATION



TYPE A06A
1 BED / 1 BATH
NSA 69 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES A

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_03	/ 1

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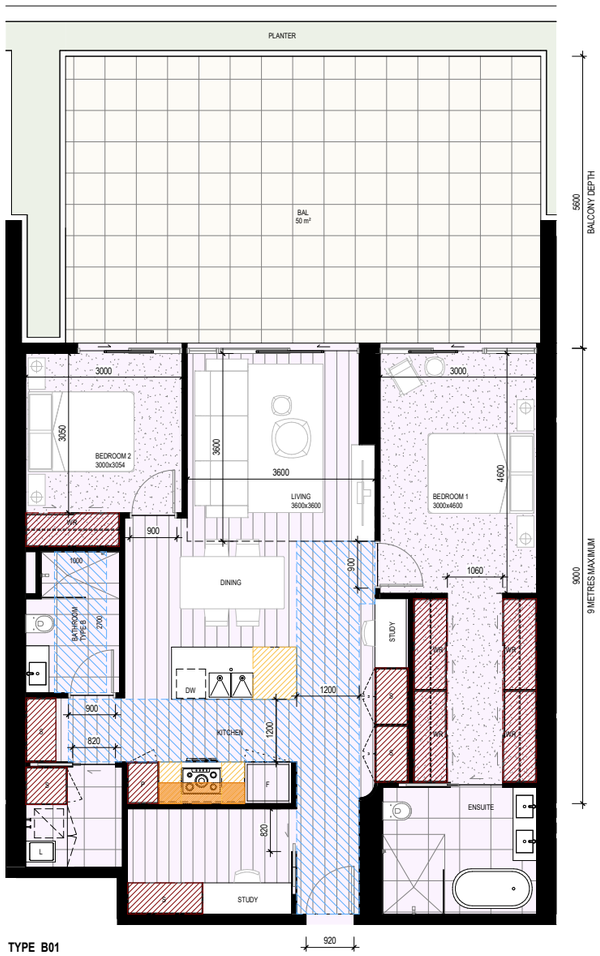


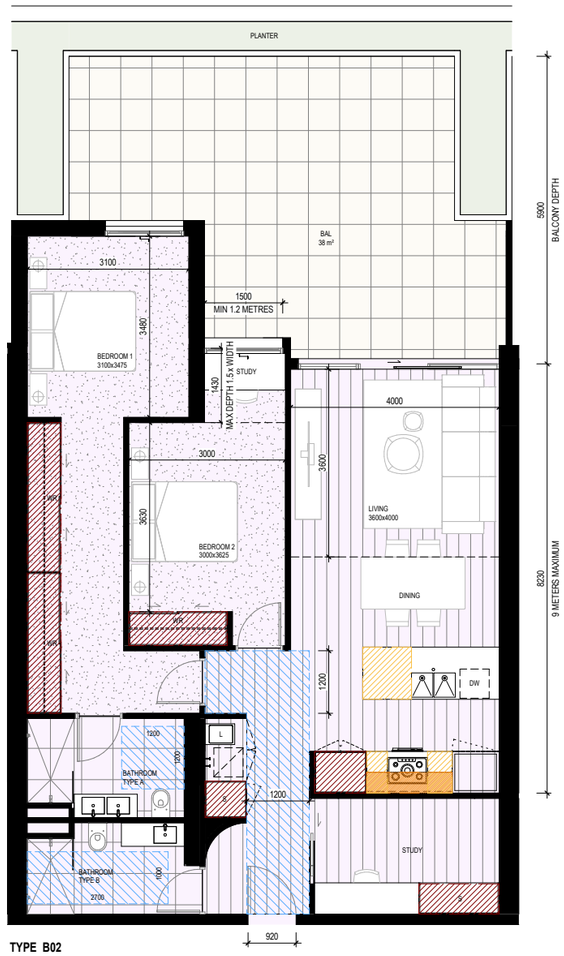
TYPE B01
2 BED / 2 BATH / STUDY
NSA 113 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

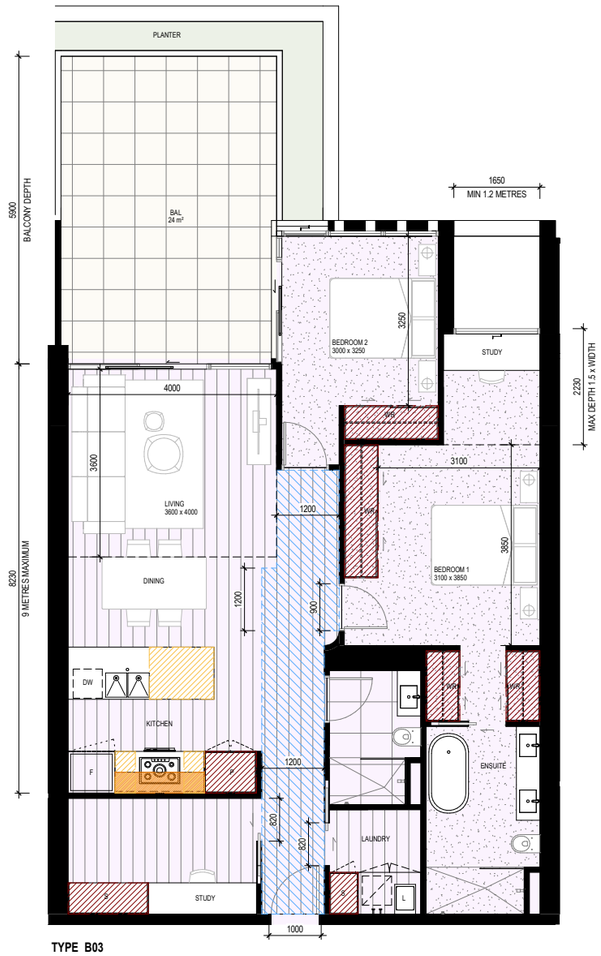
ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage



TYPE B02
2 BED / 2 BATH / STUDY
NSA 112 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B03
2 BED / 2 BATH / STUDY
NSA 112 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_04	/ 1

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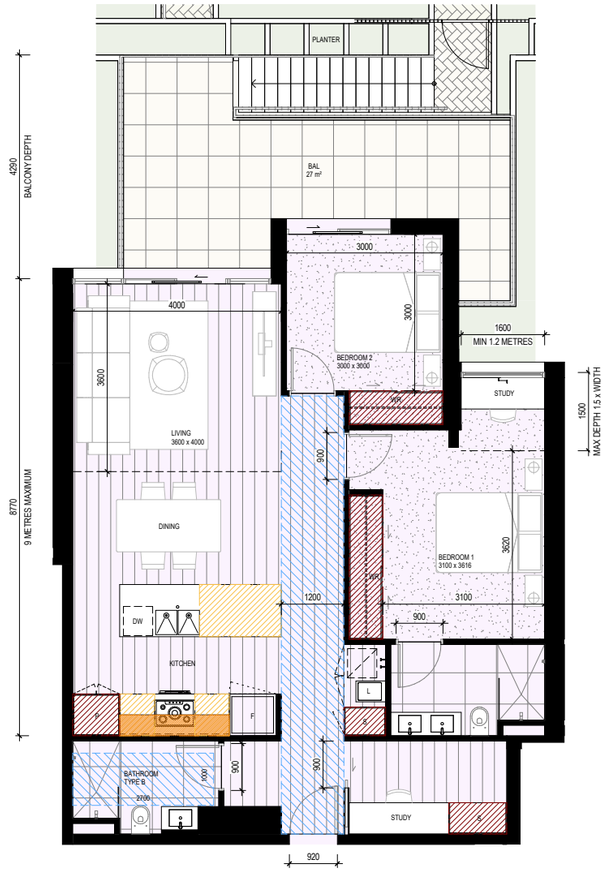
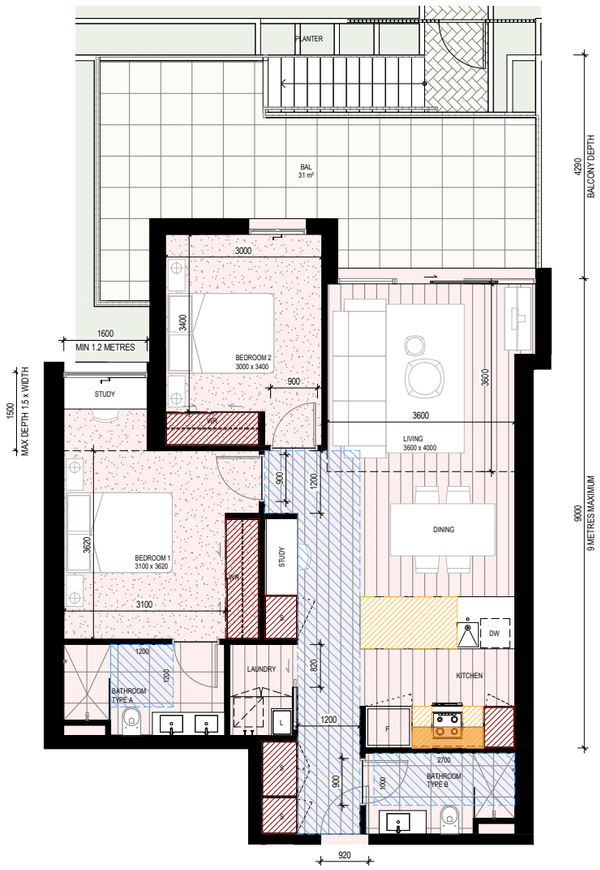


TYPE B04
2 BED / 2 BATH / STUDY
NSA 102 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B05
2 BED / 2 BATH
NSA 96 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_05	/ 1

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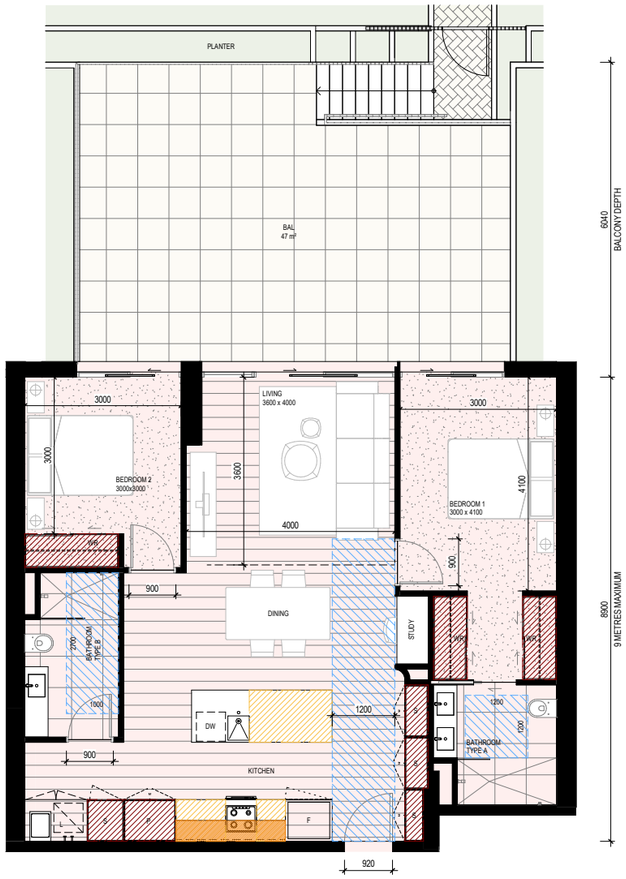

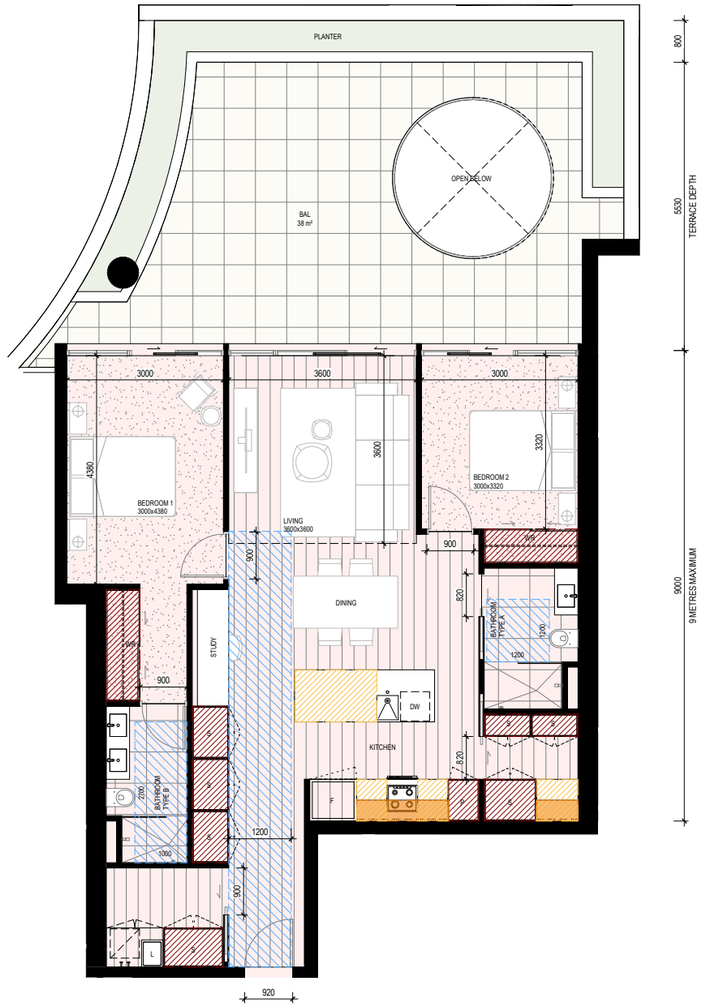

TYPE B06
2 BED / 2 BATH
NSA 93 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

TYPE B07
2 BED / 2 BATH
NSA 102 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No. 21582 | Scale 1 : 50 | Date 23.10.2024 | Drawing No. SD14_06 | Revision / 1

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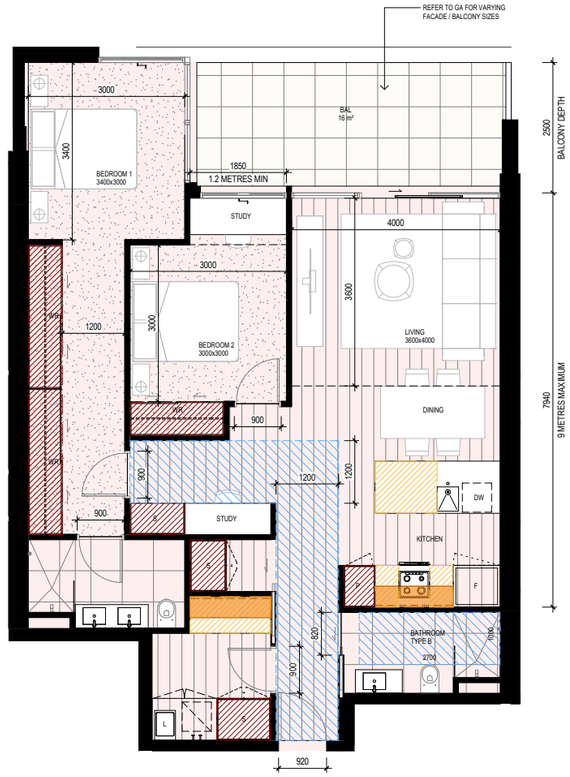
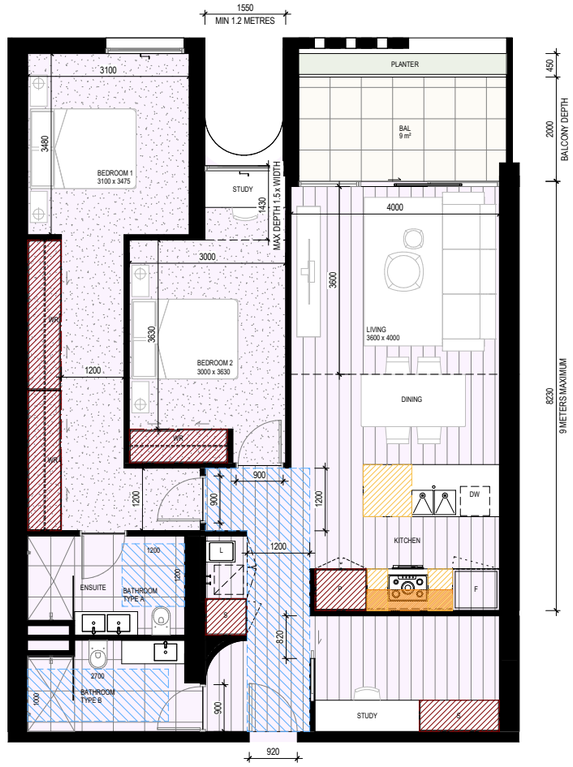


TYPE B08
2 BED / 2 BATH
NSA 102 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B09
2 BED / 2 BATH / STUDY
NSA 112 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_07	/ 1

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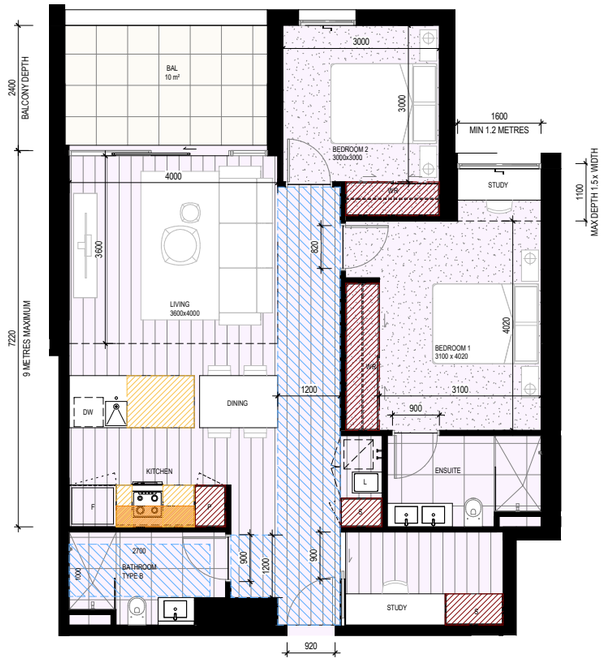
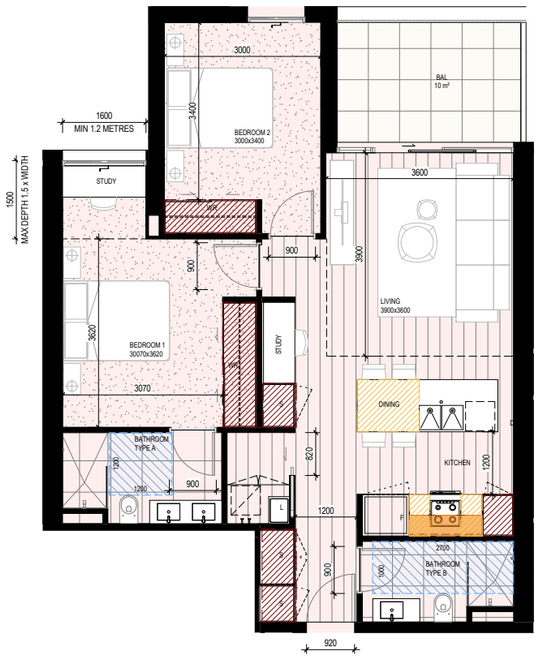


TYPE B10
2 BED / 2 BATH / STUDY
NSA 96 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B11
2 BED / 2 BATH
NSA 89 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend

- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_08	/ 1

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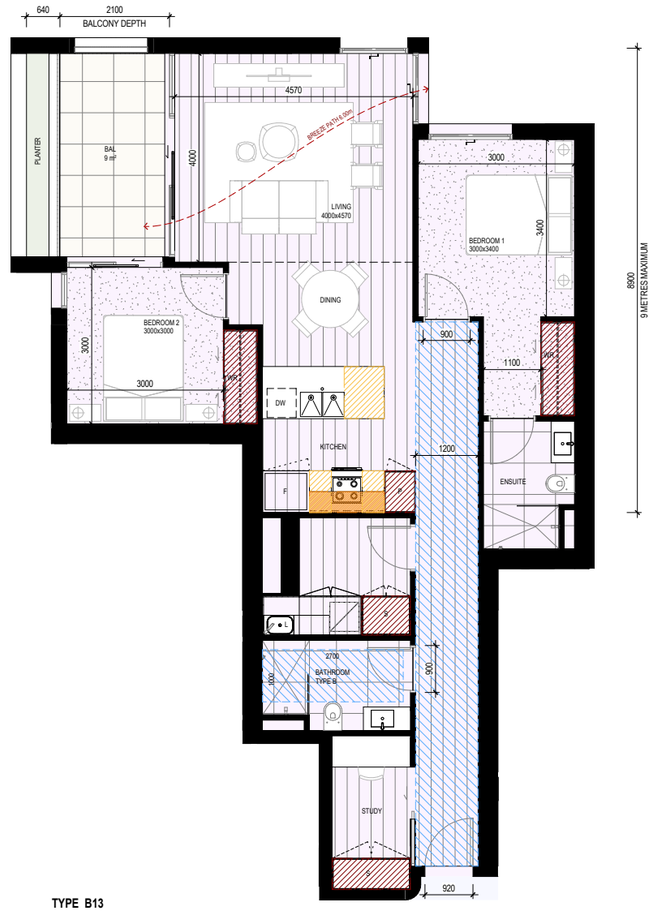
TYPE B12
2 BED / 2 BATH
NSA 100 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B13
2 BED / 2 BATH / STUDY
NSA 103 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No. 21582 | Scale 1 : 50 | Date 23.10.2024 | Drawing No. SD14_09 | Revision / 1

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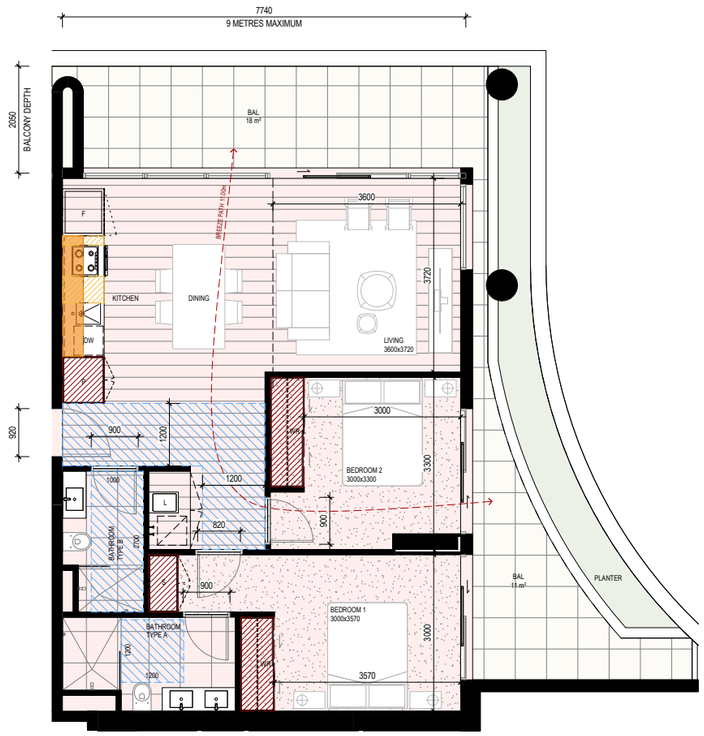



TYPE B14
2 BED / 2 BATH
NSA 86 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

TYPE B15
2 BED / 2 BATH
NSA 98 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend

- Full Height Storage
- Underbench Storage
- Overhead Storage

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_10	/ 1

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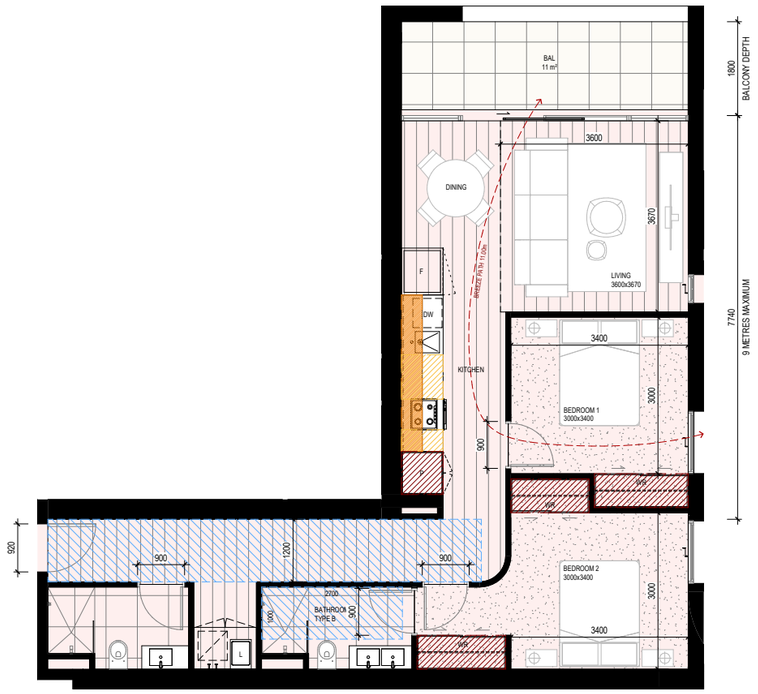
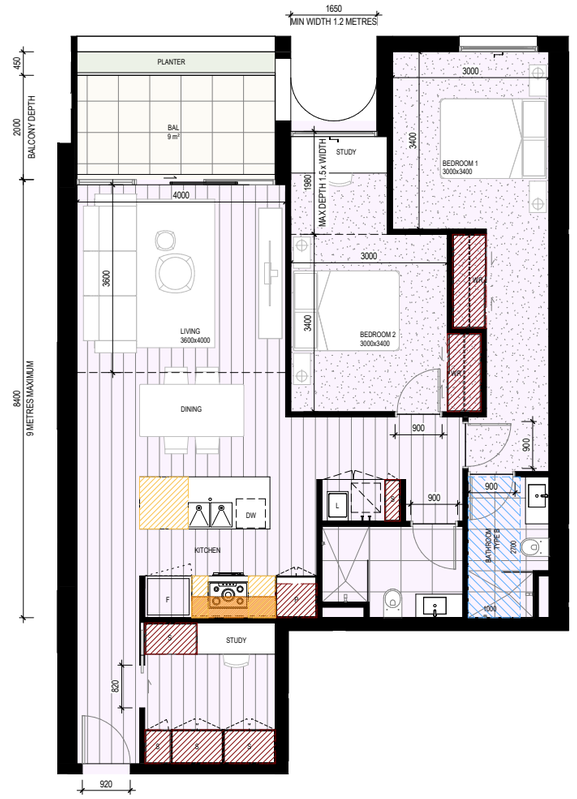


TYPE B16
2 BED / 2 BATH
NSA 87 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B17
2 BED / 2 BATH / STUDY
NSA 103 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

UNITS 7.03, 8.03 & 9.03 ARE TO HAVE MECHANICALLY ASSISTED NATURAL VENTILATION

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_11	/ 1

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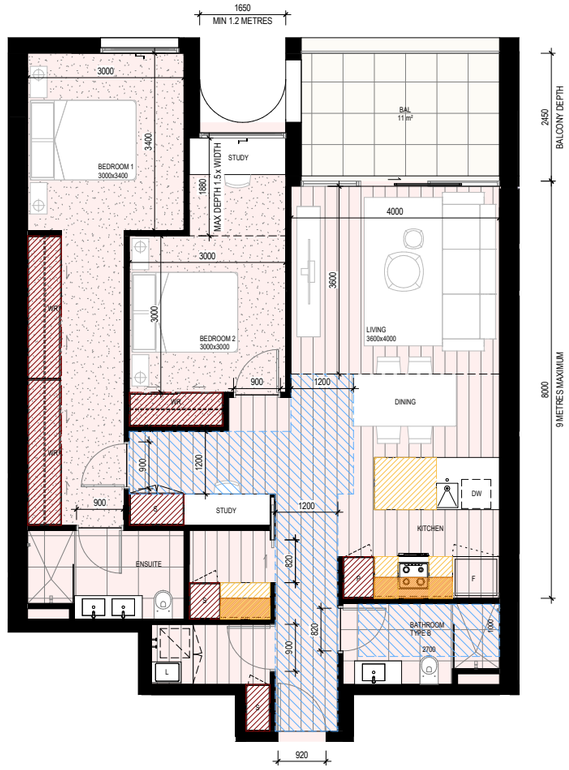

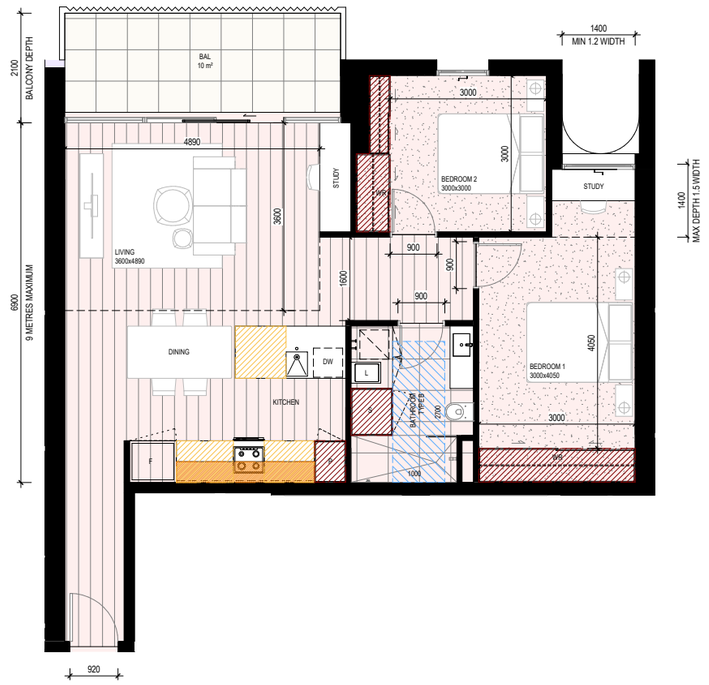

TYPE B18
2 BED / 2 BATH
NSA 101 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

UNITS 7.04, 8.04 & 9.04 ARE TO HAVE MECHANICALLY ASSISTED NATURAL VENTILATION

TYPE B19
2 BED / 1 BATH
NSA 89 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

UNITS 7.08, 8.08 & 9.08 ARE TO HAVE MECHANICALLY ASSISTED NATURAL VENTILATION

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend

- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_12	/ 1

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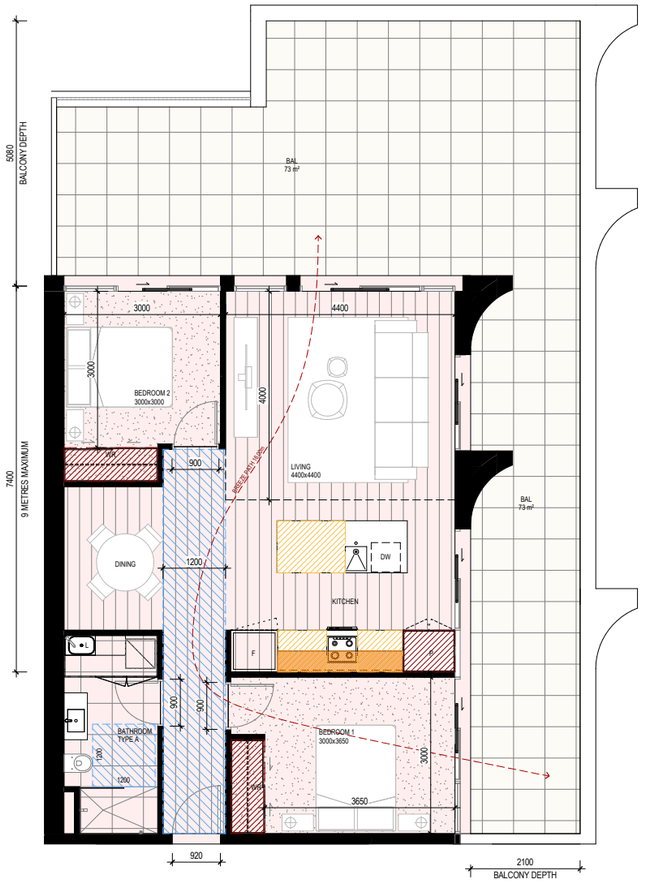
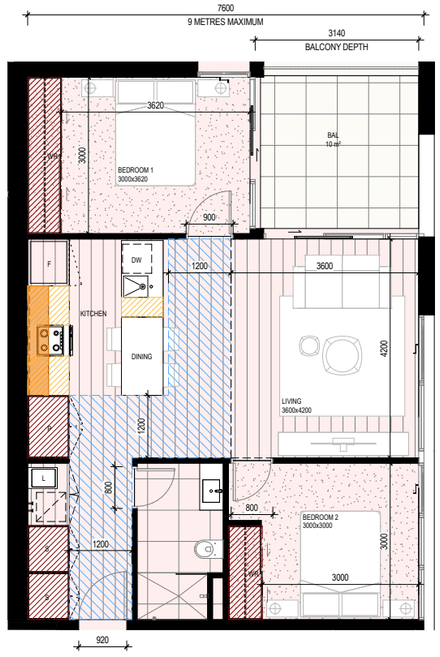


TYPE B20
2 BED / 1 BATH
NSA 87 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B21
2 BED / 1 BATH
NSA 76 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_13	/ 1

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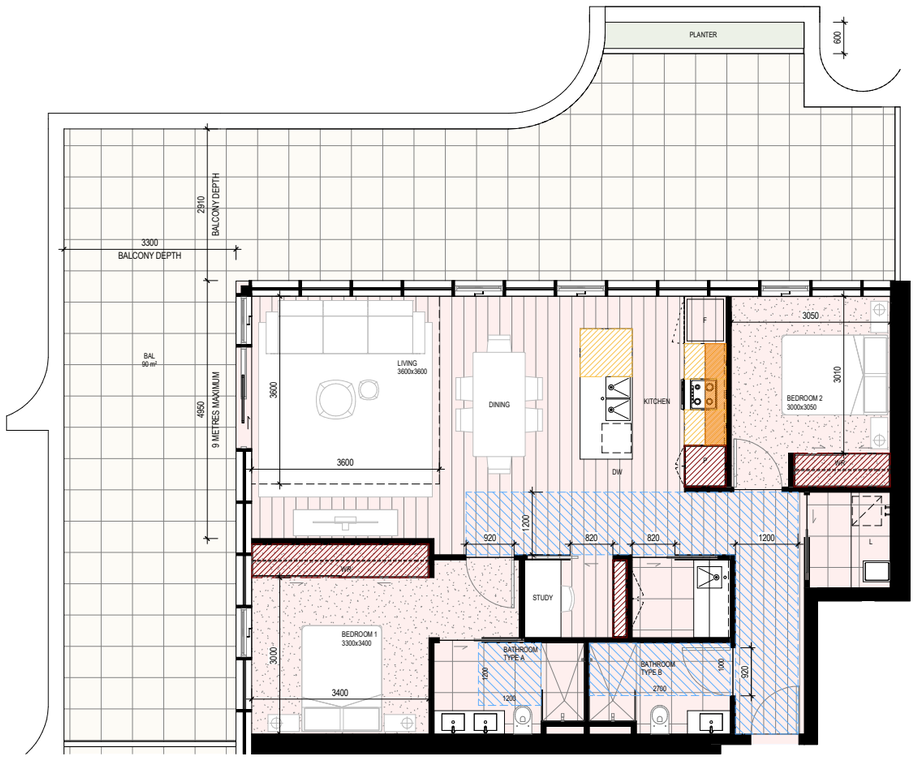
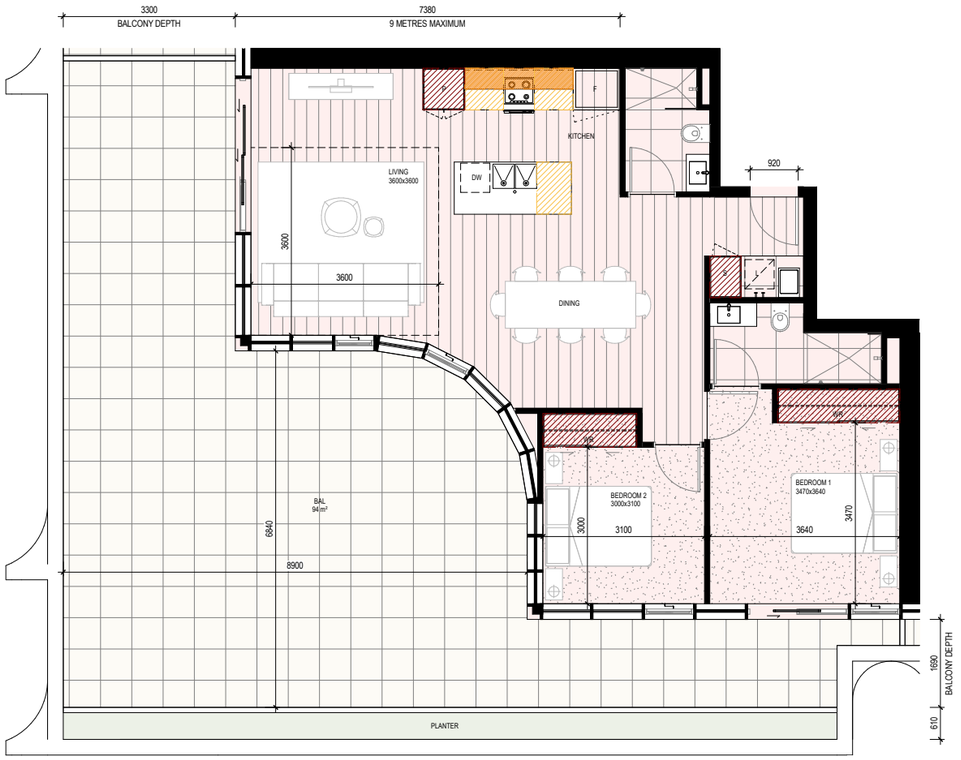


TYPE B22
2 BED / 2 BATH
NSA 107 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE B23
2 BED / 2 BATH
NSA 96 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
APARTMENT TYPES B

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_14	/ 1

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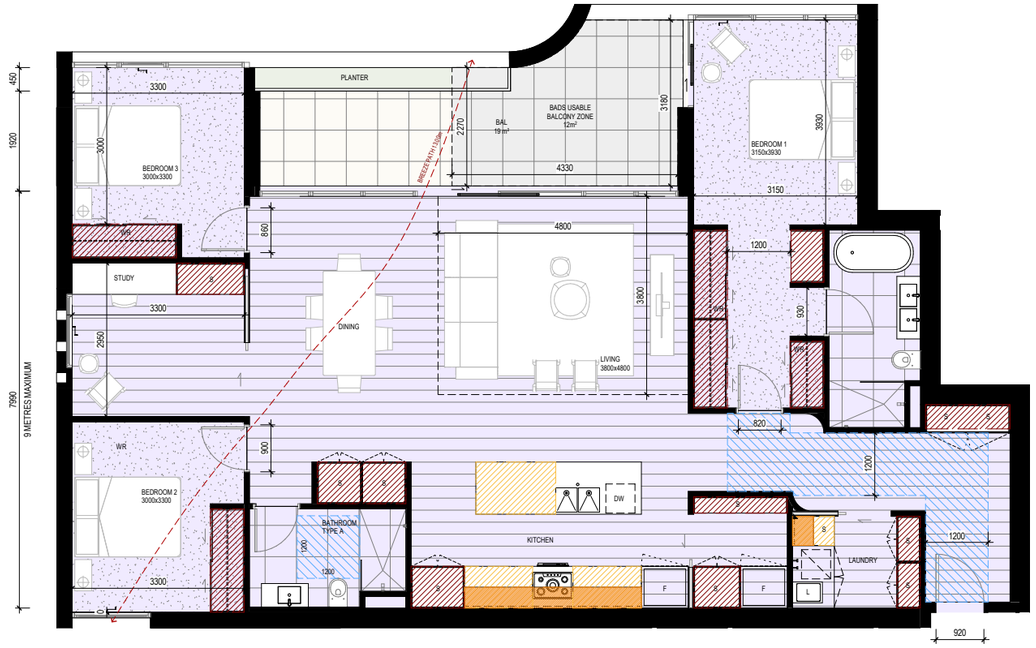

TYPE C01
3 BED / 2 BATH / STUDY
NSA 168 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE C02
3 BED / 2 BATH
NSA 120 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
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Drawing: APARTMENT TYPES C

Job No. 21582 | Scale 1 : 50 | Date 23.10.2024 | Drawing No. SD14_15 | Revision / 1

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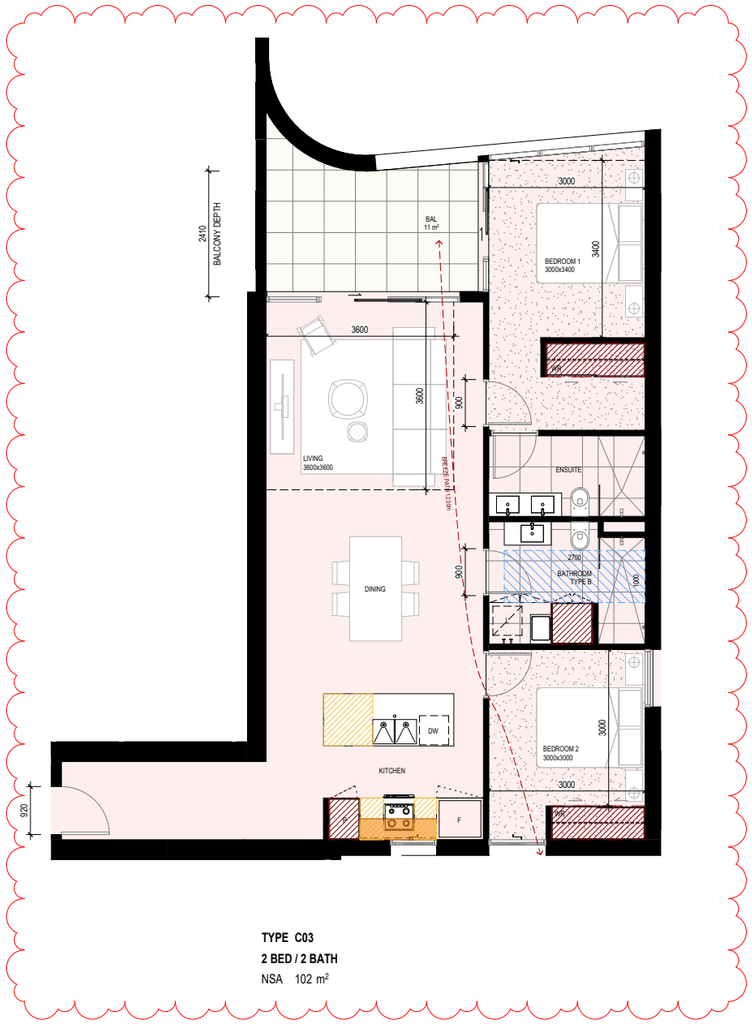

TYPE C03
2 BED / 2 BATH
NSA 102 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE C04
3 BED / 2 BATH
NSA 177 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
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Drawing: APARTMENT TYPES C

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	14.03.2025	SD14_16	/ 2

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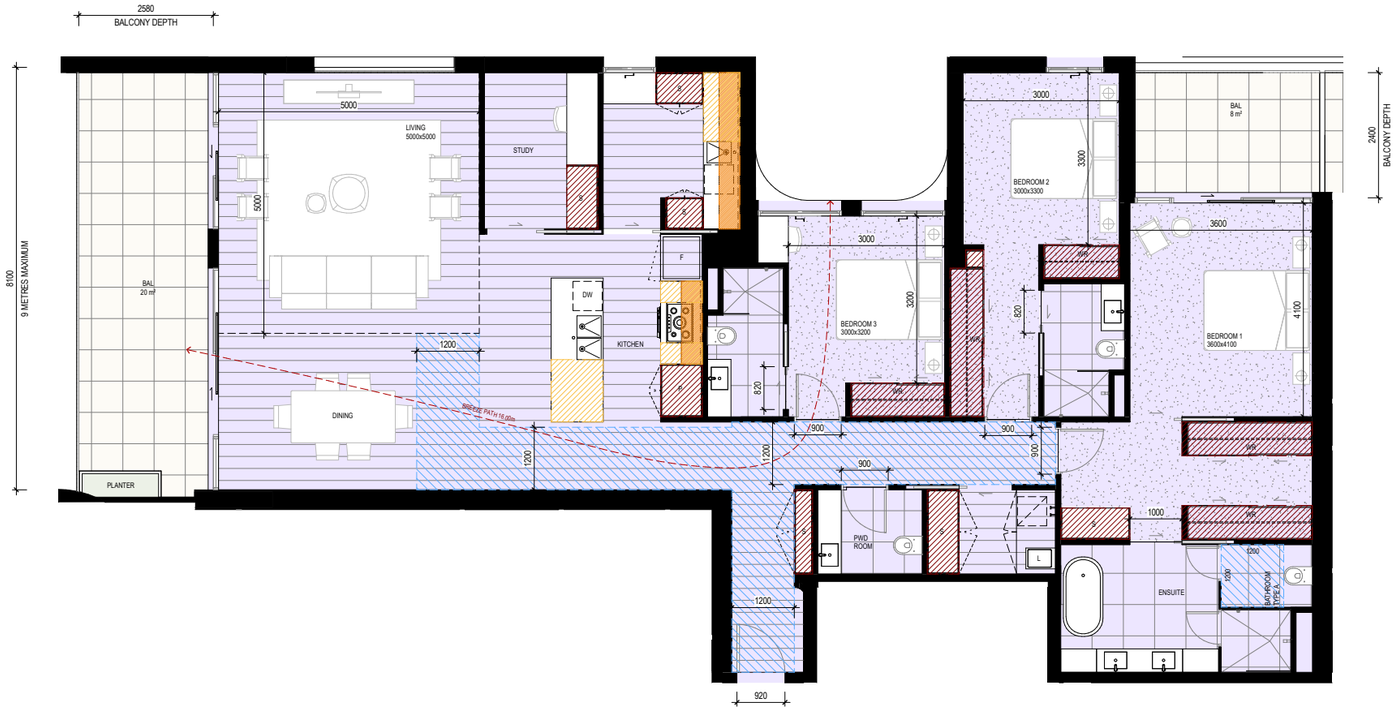

TYPE C05

3 BED / 3 BATH / STUDY

NSA 196 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend

- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES C

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_17	/ 1

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TYPE C06
3 BED / 2 BATH
NSA 114 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE C07
3 BED / 2 BATH / STUDY
NSA 124 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES C

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_18	/ 1

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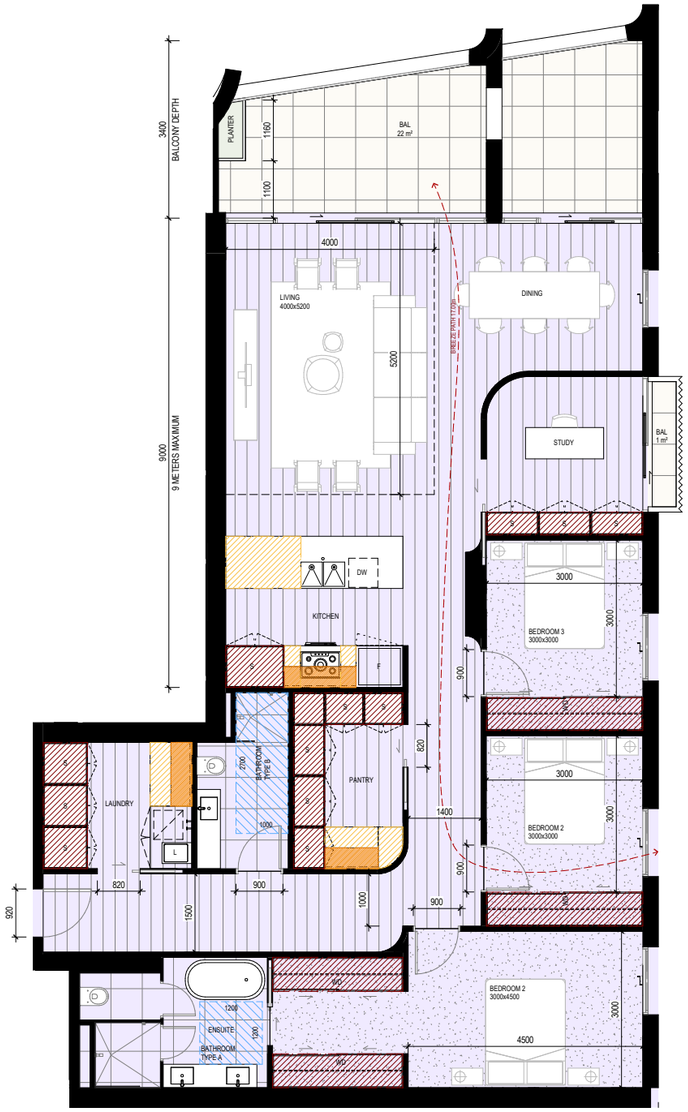



TYPE C09
3 BED / 2 BATH
NSA 110 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

TYPE C08
3 BED / 2 BATH / STUDY
NSA 166 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES C

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_19	/ 1

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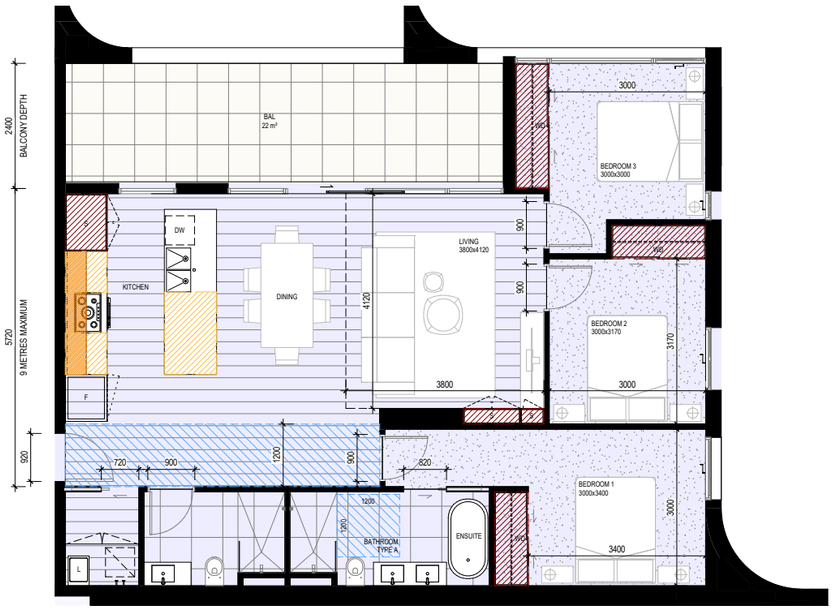

TYPE C10
3 BED / 2 BATH
NSA 133 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

TYPE C11
3 BED / 2 BATH
NSA 112 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend

- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES C

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_20	/ 1

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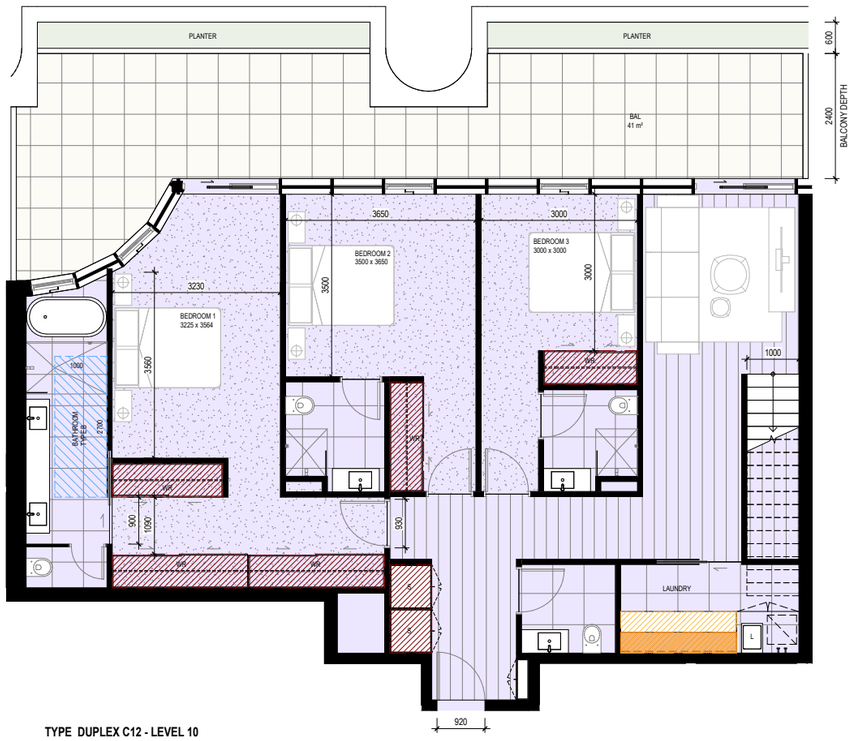
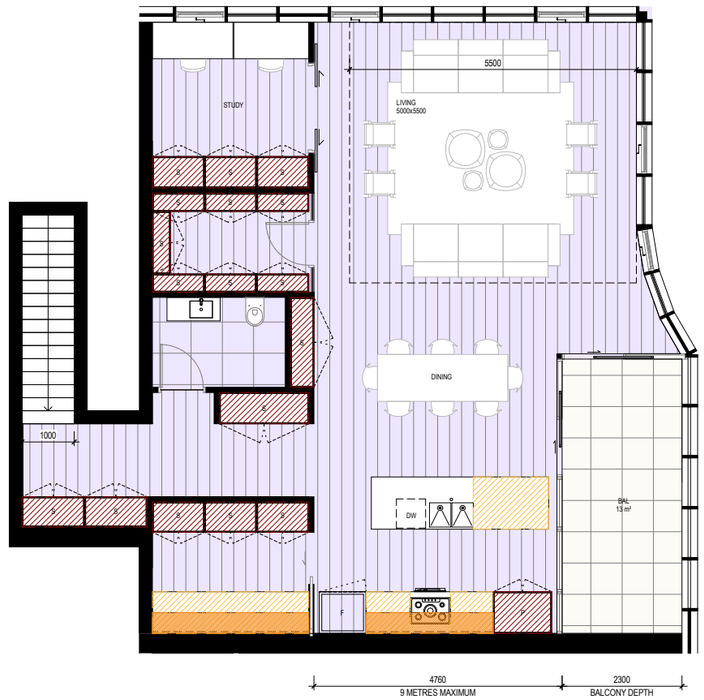


TYPE DUPLEX C12 - LEVEL 10
3 BED / 3 BATH / STUDY
NSA 130 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE DUPLEX C12 - LEVEL 11
3 BED / 3 BATH / STUDY
NSA 121 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES C

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_21	/ 1

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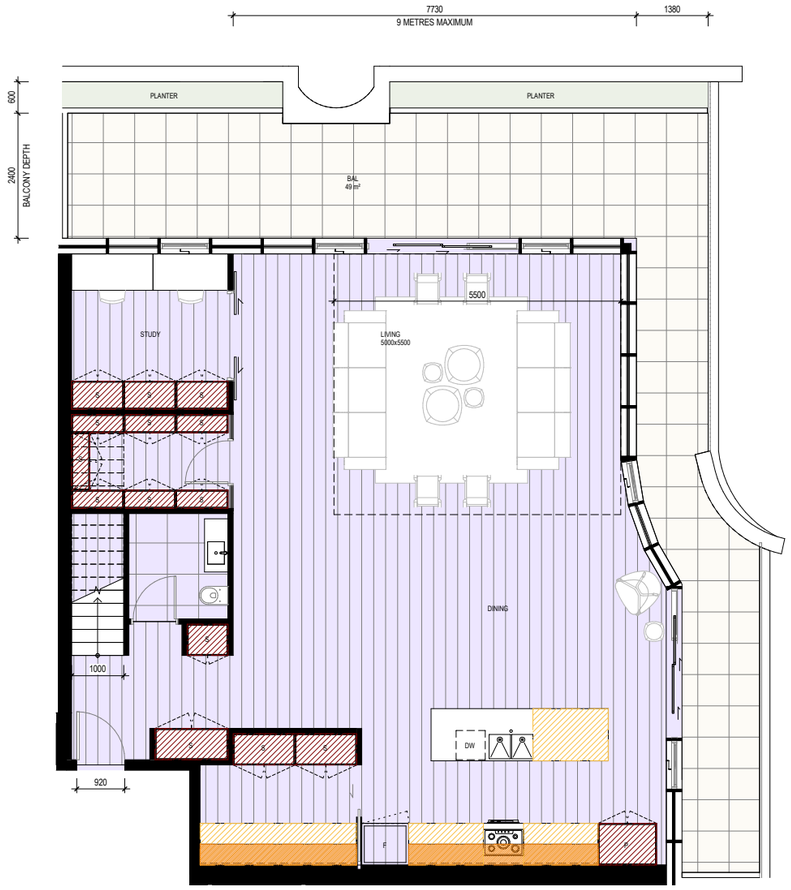

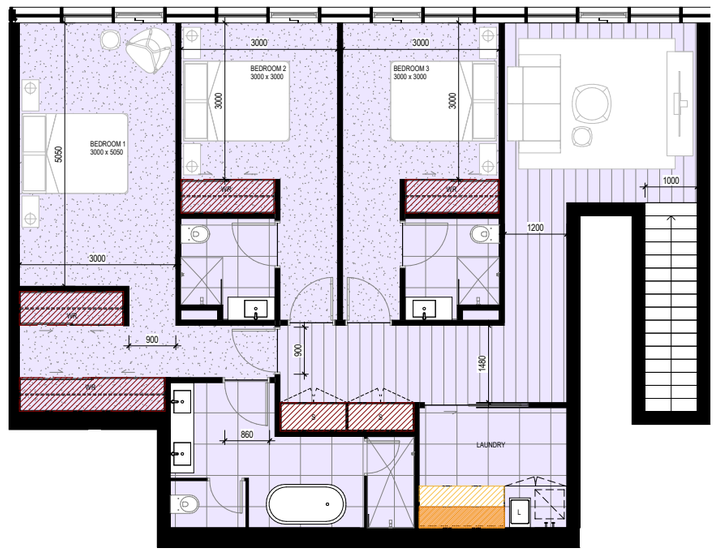

TYPE DUPLEX C13 - LEVEL 10
3 BED / 3 BATH / STUDY
NSA 134 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

TYPE DUPLEX C13 - LEVEL 11
3 BED / 3 BATH / STUDY
NSA 118 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD
Drawing: APARTMENT TYPES C
Job No.: 21582
Scale: 1 : 50
Date: 23.10.2024
Drawing No.: SD14_22
Revision: / 1

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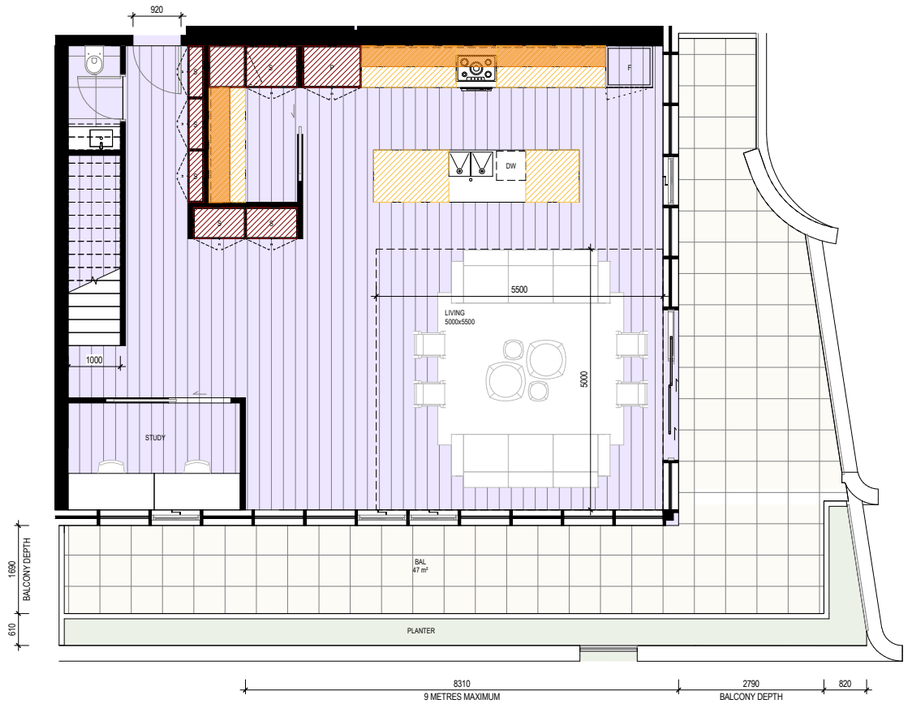
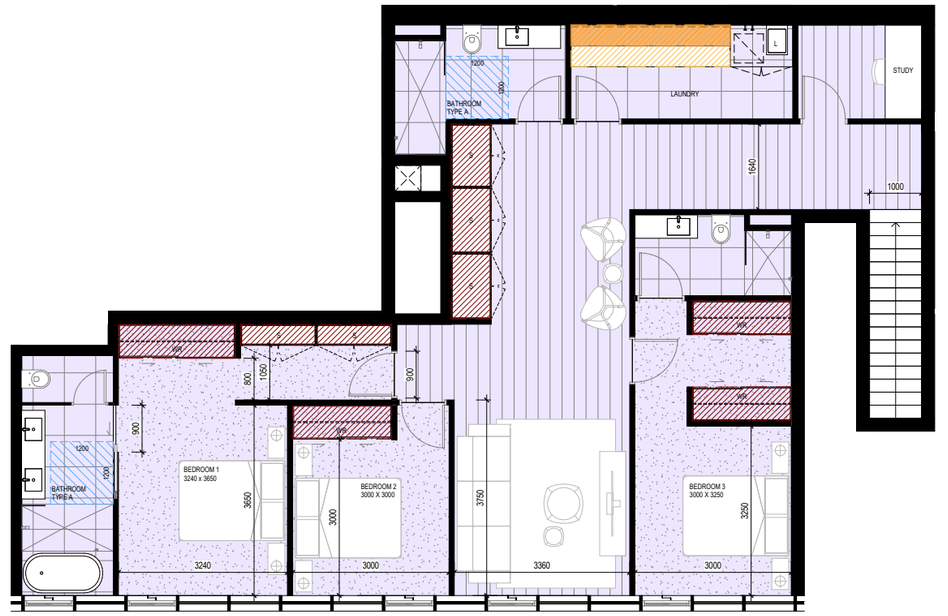


TYPE DUPLEX C14 - LEVEL 10
3 BED / 3 BATH / STUDY
NSA 111 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.



TYPE DUPLEX C14 - LEVEL 11
3 BED / 3 BATH / STUDY
NSA 139 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: APARTMENT TYPES C

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 50	23.10.2024	SD14_23	/ 1

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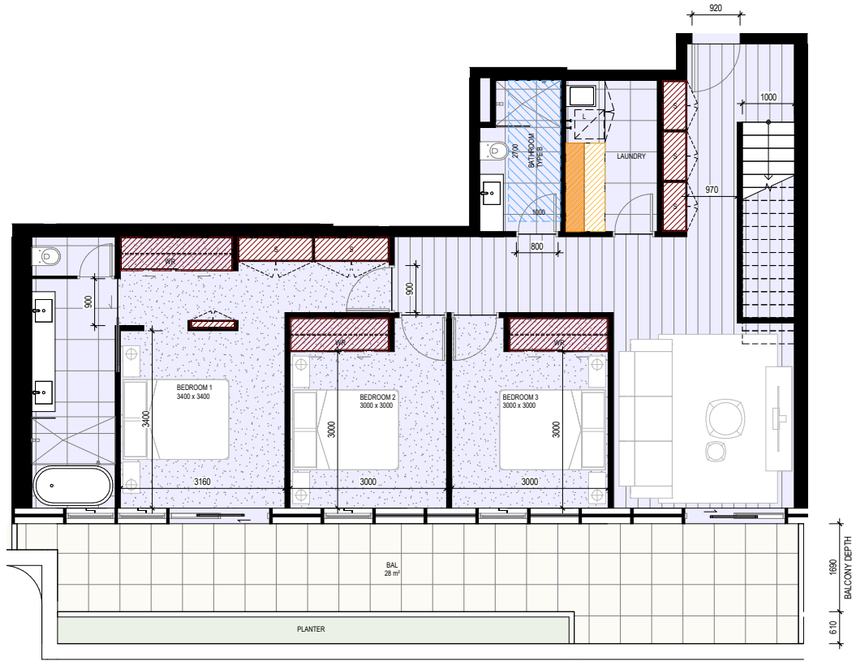

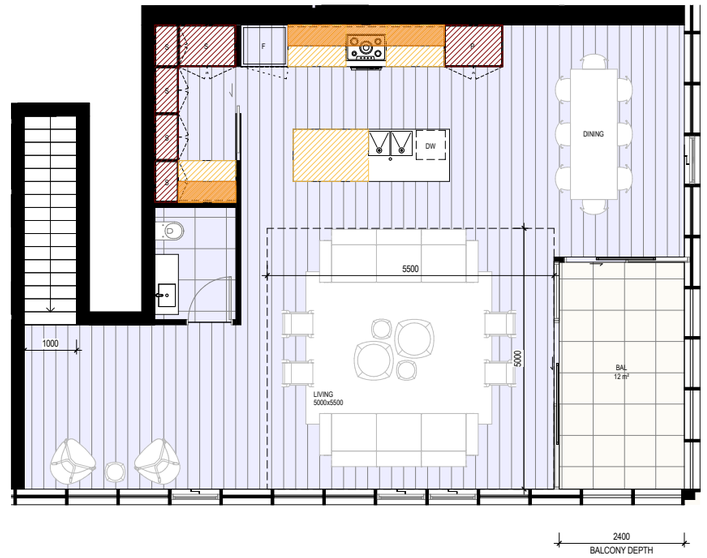

TYPE DUPLEX C15 - LEVEL 10
3 BED / 2 BATH
NSA 106 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

TYPE DUPLEX C15 - LEVEL 11
3 BED / 2 BATH
NSA 102 m²

*NOTE - BALCONY AREAS SHOWN AS TYPICALS ONLY. REFER TO GA PLANS FOR SPECIFIC BALCONY AREA TO EACH APARTMENT.

GENERAL NOTES

ALL BALCONIES OR PRIVATE OPEN SPACE TO BE PROVIDED WITH A TAP AND FLOOR WASTE.

Storage Volume Legend
- Full Height Storage
- Underbench Storage
- Overhead Storage

Client: EG
Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD
Drawing: APARTMENT TYPES C
Job No.: 21582
Scale: 1 : 50
Date: 23.10.2024
Drawing No.: SD14_24
Revision: / 1

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SJB Architects
Better Apartment Design Summary

Project: EG Abbostsford **Job No:** 21582 File: 4.3 **REV:** 2 **Date:** 14/03/2025

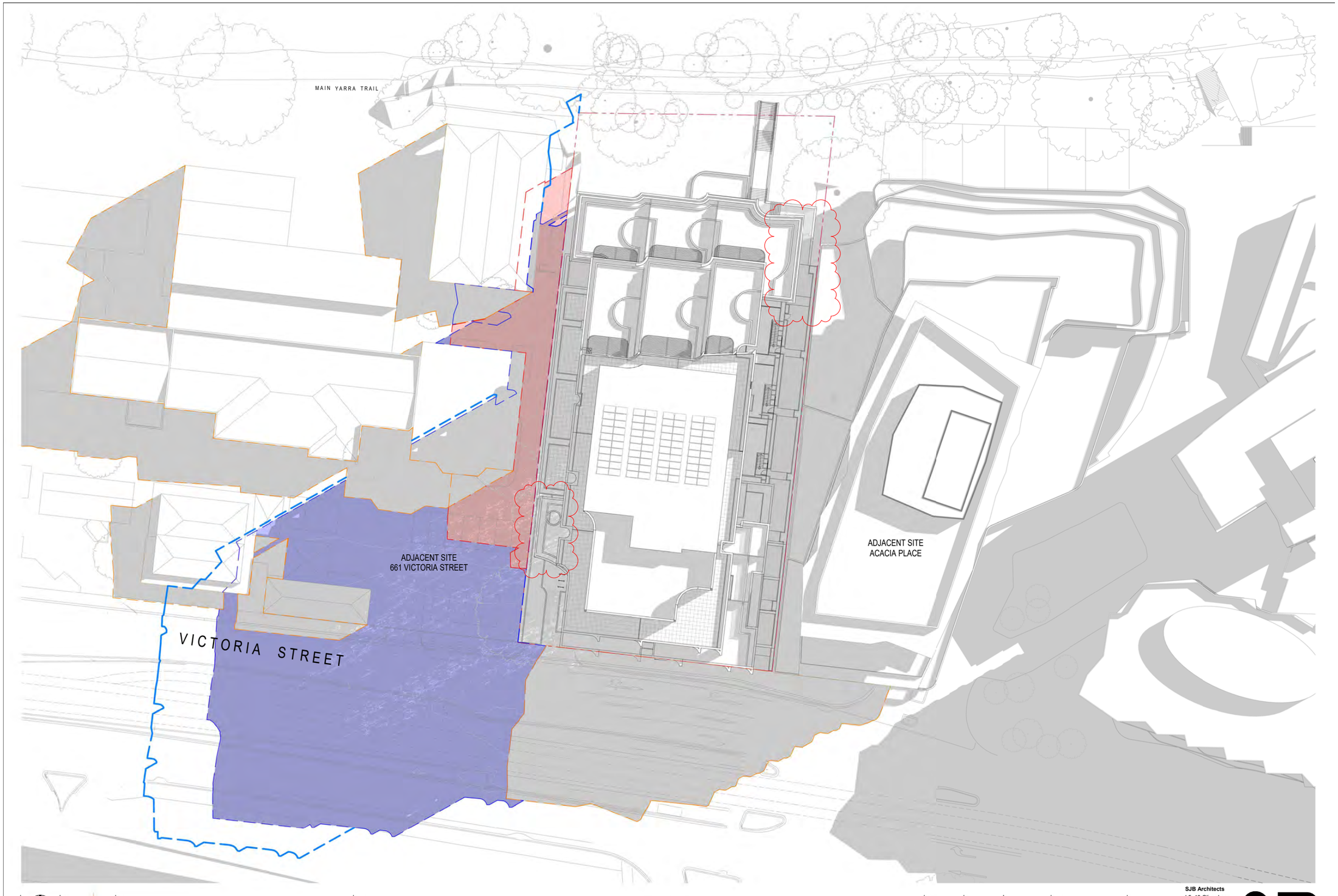
				INTERNAL AMENITY							PRIVATE OPEN SPACE					ACCESSIBILITY		STORAGE			
	Apt number	Type	Beds	Primary Bedroom (3x3.4m)	Secondary Bedrooms (3x3m)	Living Room Width (1B: 3.3m & 2-3B: 3.6m)	Living Room Area (1B: 10m² & 2-3B: 12m²)	Habitable Room Depth (Max 9m)	Living Area Ceiling Height (Min 2.7m Living & 2.4m Kitchen where impacted by services)	Natural Cross Ventilation	1 Bed 1.8m depth & 8m²		2 Bed 2m depth & 8m²		3 Bed 2.4m depth & 12m²			Storage Requirements	Inside Apartment Studio - 5m³ 1B - 6m³ 2B - 9m³ 3B+ - 12m³	Outside Apartment	Total Volume Studio - 8m³ 1B - 10m³ 2B - 14m³ 3B+ - 18m³
											1.8m	8m²	2m	8m²	2.4m	12m²					
				All	All	All	All	All	All	40% or more	All		All		All		50% or more		All		
GROUND FL																					
GROUND	G.01	A.01	1 BED / 1 BATH / STUDY	Yes		Yes	Yes	Yes	Yes		Yes	38.00					Yes		Yes	9.28	4.97	14.26
GROUND	G.02	B.01	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	52.00			Yes	Yes	Yes	25.14	5.72	30.86
GROUND	G.03	B.02	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	38.00			Yes	Yes	Yes	18.76	5.72	24.48
GROUND	G.04	B.03	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	24.00			Yes		Yes	18.11	5.72	23.83
GROUND	G.05	C.01	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	19.00	Yes	Yes	Yes	32.58	4.97	37.56
GROUND	G.06	C.02	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes						Yes	21.00	Yes	Yes	Yes	19.11	5.72	24.83
GROUND	G.07	C.03	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	11		Yes	Yes	10.14	4.97	15.37
GROUND	G.08	B.04	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	27.00			Yes	Yes	Yes	13.49	4.97	18.46
GROUND	G.09	B.05	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	29.00			Yes	Yes	Yes	14.43	4.40	18.83
GROUND	G.10	B.06	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	47.00			Yes	Yes	Yes	16.45	4.40	20.85
UPPR GR																					
UPPER GROUND	UG.01	A.02	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	9.00						Yes	Yes	10.21	4.97	15.18
UPPER GROUND	UG.02	B.07	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	30.00			Yes	Yes	Yes	21.31	5.72	27.03
UPPER GROUND	UG.03	B.08	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	15.00			Yes	Yes	Yes	20.94	5.72	26.66
UPPER GROUND	UG.04	B.01	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	22.00			Yes	Yes	Yes	25.14	5.72	30.86
UPPER GROUND	UG.05	B.09	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	8.00			Yes	Yes	Yes	18.83	4.97	23.81
UPPER GROUND	UG.06	B.03	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	8.00			Yes		Yes	18.11	4.97	23.08
UPPER GROUND	UG.07	C.01	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	19.00	Yes	Yes	Yes	32.58	4.97	37.56
UPPER GROUND	UG.08	C.02	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes						Yes	21.00	Yes	Yes	Yes	19.11	4.97	24.08
UPPER GROUND	UG.09	C.03	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	11		Yes	Yes	10.14	4.97	15.37
UPPER GROUND	UG.10	B.10	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	10.00			Yes	Yes	Yes	12.29	5.72	18.01
UPPER GROUND	UG.11	B.11	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	10.00				Yes	Yes	13.98	4.97	18.95
UPPER GROUND	UG.12	B.06	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	26.00			Yes	Yes	Yes	16.45	4.97	21.42
UPPER GROUND	UG.13	A.03	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	46.00						Yes	Yes	8.33	4.97	13.30
LEVEL 1																					
LEVEL 1	1.01	C.06	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	11.00		Yes	Yes	14.42	5.72	20.14
LEVEL 1	1.02	A.04	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes			11.00					Yes	Yes	Yes	6.71	5.72	12.43
LEVEL 1	1.03	B.11	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	29.00				Yes	Yes	13.98	4.97	18.95
LEVEL 1	1.04	B.07	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	34.00			Yes	Yes	Yes	21.31	4.97	26.28
LEVEL 1	1.05	B.08	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	16.00			Yes	Yes	Yes	20.94	4.97	25.91
LEVEL 1	1.06	B.01	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	18.00			Yes	Yes	Yes	25.14	4.97	30.11
LEVEL 1	1.07	C.04	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	80.00	Yes	Yes	Yes	32.31	5.72	38.03
LEVEL 1	1.08	B.12	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	81.00			Yes	Yes	Yes	14.32	4.97	19.29
LEVEL 1	1.09	C.05	3 BED / 3 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	132.00	Yes	Yes	Yes	34.01	5.72	39.73
LEVEL 1	1.10	B.06	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	26.00			Yes	Yes	Yes	16.45	4.97	21.42
LEVEL 1	1.11	A.03	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	16.00						Yes	Yes	8.33	5.72	14.05
LEVEL 1	1.12	B.13	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	9.00			Yes	Yes	Yes	12.12	4.40	16.52
LEVEL 2																					
LEVEL 2	2.01	C.06	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	12.00		Yes	Yes	14.42	5.72	20.14
LEVEL 2	2.02	A.04	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes			12.00					Yes	Yes	Yes	6.71	5.72	12.43
LEVEL 2	2.03	B.14	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	29.00			Yes	Yes	Yes	10.41	4.97	15.38
LEVEL 2	2.04	B.07	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	38.00			Yes	Yes	Yes	21.31	4.97	26.28
LEVEL 2	2.05	B.08	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	10.00			Yes	Yes	Yes	20.94	4.40	25.34
LEVEL 2	2.06	B.01	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	19.00			Yes	Yes	Yes	25.14	4.97	30.11
LEVEL 2	2.07	C.04	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	22.00	Yes	Yes	Yes	32.31	4.97	37.28
LEVEL 2	2.08	B.12	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	17.00			Yes	Yes	Yes	14.32	4.97	19.29
LEVEL 2	2.09	C.05	3 BED / 3 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	29.00	Yes	Yes	Yes	34.01	5.72	39.73
LEVEL 2	2.10	B.06	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	25.00			Yes	Yes	Yes	16.45	4.97	21.42
LEVEL 2	2.11	A.03	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	13.00						Yes	Yes	8.33	4.97	13.31
LEVEL 2	2.12	B.13	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	9.00			Yes	Yes	Yes	12.12	4.40	16.52
LEVEL 3																					
LEVEL 3	3.01	C.09	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	15.00		Yes	Yes	14.61	4.40	19.01
LEVEL 3	3.02	A.04	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes			11.00					Yes	Yes	Yes	6.71	5.72	12.43
LEVEL 3	3.03	B.14	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	29.00			Yes	Yes	Yes	10.41	4.97	15.38
LEVEL 3	3.04	B.07	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	38.00			Yes	Yes	Yes	21.31	4.97	26.28
LEVEL 3	3.05	B.08	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	8.00			Yes	Yes	Yes	20.94	4.40	25.34
LEVEL 3	3.06	C.07	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	96.00			Yes	25.19	4.97	30.16
LEVEL 3	3.07	B.15	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	135.00			Yes	Yes	Yes	16.37	4.97	21.34
LEVEL 3	3.08	C.08	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	93.00		Yes	Yes	38.47	4.98	43.45
LEVEL 3	3.09	A.03	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	16.00						Yes	Yes	8.33	5.72	14.05
LEVEL 3	3.10	B.13	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	9.00			Yes	Yes	Yes	12.12	4.40	16.52
LEVEL 4																					
LEVEL 4	4.01	C.06	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	12.00		Yes	Yes	14.42	5.72	20.14
LEVEL 4	4.02	A.04	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes			12.00					Yes	Yes	Yes	6.71	5.72	12.43
LEVEL 4	4.03	A.05	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	9.00							Yes	8.92	5.72	14.64
LEVEL 4	4.04	B.16	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	11.00			Yes	Yes	Yes	11.05	4.97	16.02
LEVEL 4	4.05	B.17	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	9.00				Yes	Yes	14.00	4.97	18.97
LEVEL 4	4.06	B.08	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	11.00			Yes	Yes	Yes	20.94	4.40	25.34
LEVEL 4	4.07	C.07	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes						15.00			Yes	25.19	4.97	30.16
LEVEL 4	4.08	B.15	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	17.00			Yes	Yes	Yes	16.37	4.97	21.34
LEVEL 4	4.09	C.08	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	22.00		Yes	Yes	38.47	4.98	43.45
LEVEL 4	4.10	A.03	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	13.00						Yes	Yes	8.33	4.97	13.31
LEVEL 4	4.11	B.13	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	9.00			Yes	Yes	Yes	12.12	4.97	17.09

SJB Architects
Better Apartment Design Summary

Project: EG Abbostsford **Job No:** 21582 File: 4.3 **REV:** 2 **Date:** 14/03/2025

				INTERNAL AMENITY							PRIVATE OPEN SPACE						ACCESSIBILITY		STORAGE			
	Apt number	Type	Beds	Primary Bedroom (3x3.4m)	Secondary Bedrooms (3x3m)	Living Room Width (1B: 3.3m & 2-3B: 3.6m)	Living Room Area (1B: 10m² & 2-3B: 12m²)	Habitable Room Depth (Max 9m)	Living Area Ceiling Height (Min 2.7m Living & 2.4m Kitchen where impacted by services)	Natural Cross Ventilation	1 Bed 1.8m depth & 8m²		2 Bed 2m depth & 8m²		3 Bed 2.4m depth & 12m²		Entry Door and Internal Circulation (1.2m clear path)	Adaptable Bathroom	Storage Requirements	Inside Apartment Studio - 5m³ 1B - 6m³ 2B - 9m³ 3B+ - 12m³	Outside Apartment	Total Volume Studio - 8m³ 1B - 10m³ 2B - 14m³ 3B+ - 18m³
											1.8m	8m²	2m	8m²	2.4m	12m²						
				All	All	All	All	All	All	40% or more	All		All		All		50% or more		All			
LEVEL 5																						
LEVEL 5	5.01	C.06	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	12.00		Yes	Yes	14.42	5.72	20.14
LEVEL 5	5.02	A.04	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	12.00					Yes	Yes	Yes	6.71	5.72	12.43
LEVEL 5	5.03	A.05	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	9.00							Yes	8.92	5.72	14.64
LEVEL 5	5.04	B.16	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	11.00			Yes	Yes	Yes	11.05	4.97	16.02
LEVEL 5	5.05	B.17	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	9.00				Yes	Yes	14.00	4.40	18.40
LEVEL 5	5.06	B.08	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	8.00			Yes	Yes	Yes	20.94	4.40	25.34
LEVEL 5	5.07	C.07	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	15.00			Yes	25.19	4.97	30.16
LEVEL 5	5.08	B.15	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes					17.00			Yes	Yes	Yes	16.37	4.97	21.34
LEVEL 5	5.09	C.08	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	22.00		Yes	Yes	38.47	4.97	43.44
LEVEL 5	5.10	A.03	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	13.00						Yes	Yes	8.33	4.97	13.31
LEVEL 5	5.11	B.13	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	9.00			Yes	Yes	Yes	12.12	4.97	17.09
LEVEL 6																						
LEVEL 6	6.01	C.06	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	12.00		Yes	Yes	14.42	5.72	20.14
LEVEL 6	6.02	A.04	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	12.00					Yes	Yes	Yes	6.71	5.72	12.43
LEVEL 6	6.03	A.05	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	9.00							Yes	8.92	5.72	14.64
LEVEL 6	6.04	B.16	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes				11.00			Yes	Yes	Yes	11.05	4.97	16.02
LEVEL 6	6.05	B.17	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	12.00				Yes	Yes	14.00	4.40	18.40
LEVEL 6	6.06	B.08	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	80.00			Yes	Yes	Yes	20.94	4.40	25.34
LEVEL 6	6.07	C.07	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	15.00			Yes	25.19	4.97	30.16
LEVEL 6	6.08	B.15	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	17.00			Yes	Yes	Yes	16.37	4.97	21.34
LEVEL 6	6.09	C.08	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	22.00		Yes	Yes	38.47	4.98	43.45
LEVEL 6	6.10	A.03	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	13.00						Yes	Yes	8.33	4.97	13.31
LEVEL 6	6.11	B.13	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	8.00			Yes	Yes	Yes	12.12	4.97	17.09
LEVEL 7																						
LEVEL 7	7.01	B.20	2 BED / 1 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	73.00			Yes	Yes	Yes	10.33	4.97	15.30
LEVEL 7	7.02	C.10	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	31.00	Yes	Yes	Yes	20.37	4.98	25.35
LEVEL 7	7.03	B.17	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	9.00				Yes	Yes	14.00	4.97	18.97
LEVEL 7	7.04	B.18	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	11.00			Yes	Yes	Yes	18.82	4.97	23.79
LEVEL 7	7.05	C.07	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	15.00			Yes	25.19	4.98	30.16
LEVEL 7	7.06	B.15	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	17.00			Yes	Yes	Yes	16.37	4.97	21.34
LEVEL 7	7.07	C.08	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	23.00		Yes	Yes	38.47	4.98	43.45
LEVEL 7	7.08	B.19	2 BED / 1 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	25.00				Yes	Yes	14.09	4.97	19.06
LEVEL 7	7.09	A.06	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	29.00					Yes	Yes	Yes	6.04	4.97	11.01
LEVEL 8																						
LEVEL 8	8.01	B.21	2 BED / 1 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	10.00			Yes		Yes	15.01	4.97	19.98
LEVEL 8	8.02	C.11	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	22.00	Yes	Yes	Yes	15.44	4.97	20.42
LEVEL 8	8.03	B.17	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	9.00			Yes	Yes	Yes	14.32	4.97	19.29
LEVEL 8	8.04	B.18	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	8.00			Yes	Yes	Yes	18.82	4.97	23.79
LEVEL 8	8.05	C.07	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	15.00			Yes	25.19	4.97	30.16
LEVEL 8	8.06	B.15	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	17.00			Yes	Yes	Yes	16.37	4.97	21.34
LEVEL 8	8.07	C.08	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	23.00		Yes	Yes	38.47	4.98	43.45
LEVEL 8	8.08	B.19	2 BED / 1 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	10.00				Yes	Yes	14.09	4.97	19.06
LEVEL 8	8.09	A.06A	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	10.00						Yes	Yes	8.85	4.97	13.82
LEVEL 9																						
LEVEL 9	9.01	B.21	2 BED / 1 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	10.00			Yes		Yes	15.01	4.97	19.98
LEVEL 9	9.02	C.11	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	22.00	Yes	Yes	Yes	15.44	4.97	20.42
LEVEL 9	9.03	B.17	2 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes				Yes	9.00				Yes	Yes	14.00	4.97	18.97
LEVEL 9	9.04	B.18	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	11.00			Yes	Yes	Yes	18.82	4.97	23.79
LEVEL 9	9.05	C.07	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	15.00			Yes	25.19	4.97	30.16
LEVEL 9	9.06	B.15	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	17.00			Yes	Yes	Yes	16.37	4.97	21.34
LEVEL 9	9.07	C.08	3 BED / 2 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	23.00		Yes	Yes	38.47	4.98	43.45
LEVEL 9	9.08	B.19	2 BED / 1 BATH	Yes	Yes	Yes	Yes	Yes	Yes				Yes	10.00				Yes	Yes	14.09	4.97	19.06
LEVEL 9	9.09	A.06A	1 BED / 1 BATH	Yes		Yes	Yes	Yes	Yes		Yes	10.00						Yes	Yes	8.85	4.97	13.82
LEVEL 10																						
LEVEL 10	10.01	B.23	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	94.00					Yes	10.02	4.97	14.99
LEVEL 10	10.02	B.22	2 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	90.00			Yes	Yes	Yes	12.79	4.40	17.19
LEVEL 10	10.03	DUPLEX C.12	3 BED / 3 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	41.00		Yes	Yes	22.59	5.72	28.31
LEVEL 10	10.04	DUPLEX C.13	3 BED / 3 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	49.00			Yes	25.15	4.98	30.13
LEVEL 10	10.05	DUPLEX C.14	3 BED / 3 BATH / STUDY	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	47.00		Yes	Yes	17.88	4.40	22.28
LEVEL 10	10.06	DUPLEX C.15	3 BED / 2 BATH	Yes	Yes	Yes	Yes	Yes	Yes	Yes					Yes	26.00			Yes	17.54	4.40	21.94
			Compliant:	123	102	123	123	123	123	51	17	21	63	65	36	35	73	106	123			
			Total:	123	102	123	123	123	123	123	21	21	67	67	35	35	123	123	123			
TOTAL	**123**	**Apts**	**% Compliant:**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**41%**	**81%**	**100%**	**94%**	**97%**	**103%**	**100%**	**59%**	**86%**	**100%**			

Disclaimer:
Areas yested in this schedule are approximate and based on Schematic Design plans and as such are preliminary only, may alter as work progresses and do yest necessarily represent an accurate depiction of the finished as-built development.
This schedule is yest intended to form part any contract or warranty by SJB Architects.



Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SHADOW DIAGRAM SEP 22, 09.00AM

SHADOWS FROM EXISTING BUILDING
SHADOWS FROM PROPOSED BUILDING
SHADOWS FROM NEIGHBOURING BUILDINGS
SHADOWS FROM ORIGINAL PROPOSAL 11/2023

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 250	14.03.2025	SD30_01	/ 2

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Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SHADOW DIAGRAM SEP 22, 10.00AM

SHADOWS FROM EXISTING BUILDING
SHADOWS FROM PROPOSED BUILDING
SHADOWS FROM NEIGHBOURING BUILDINGS
SHADOWS FROM ORIGINAL PROPOSAL 11/2023

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 250	14.03.2025	SD30_02	/ 2

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Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SHADOW DIAGRAM SEP 22, 11.00AM

SHADOWS FROM EXISTING BUILDING
SHADOWS FROM PROPOSED BUILDING
SHADOWS FROM NEIGHBOURING BUILDINGS
SHADOWS FROM ORIGINAL PROPOSAL 11/2023

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 250	14.03.2025	SD30_03	/ 2

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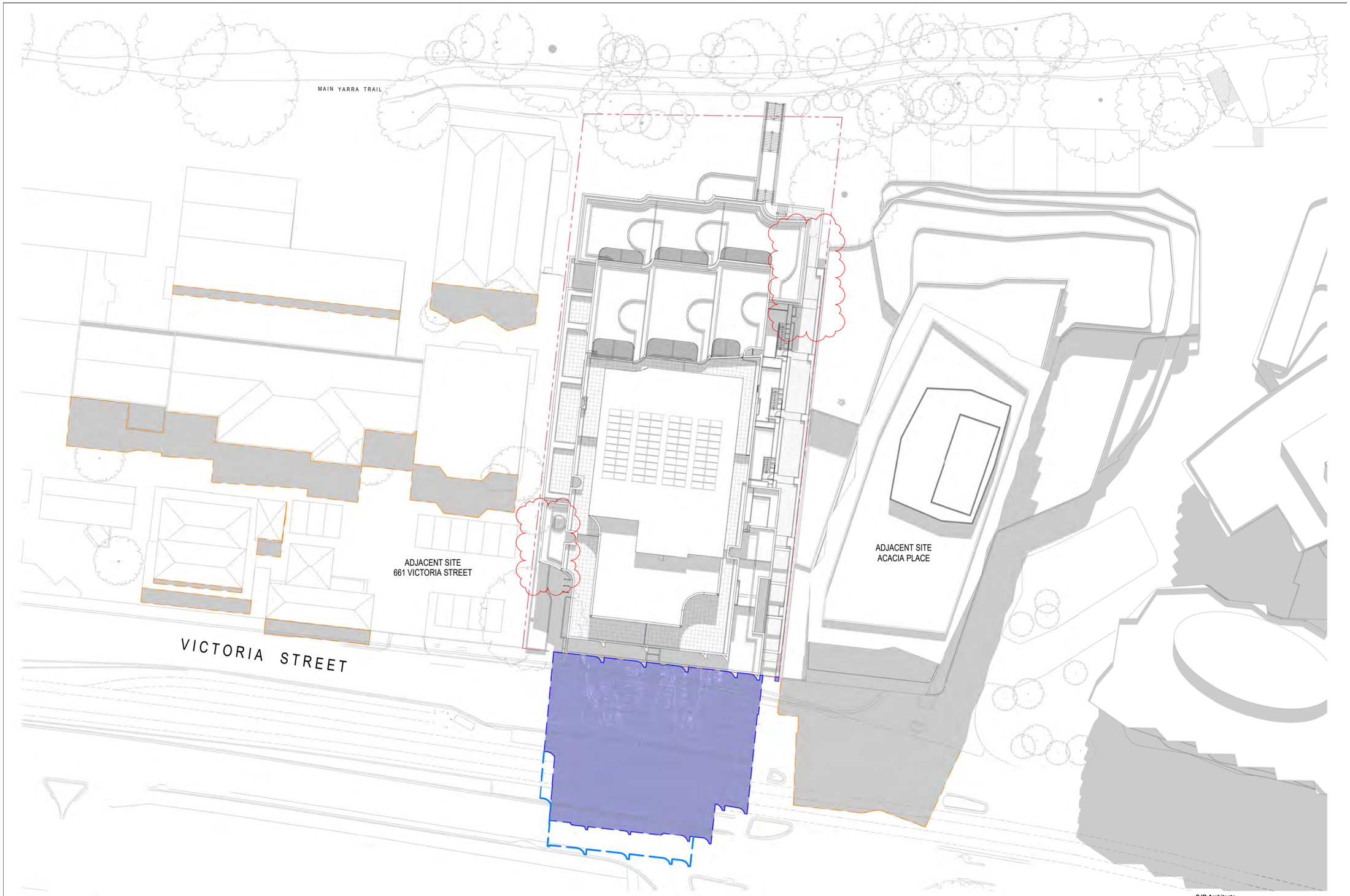

Client
EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SHADOW DIAGRAM SEP 22, 12.00PM

SHADOWS FROM EXISTING BUILDING
SHADOWS FROM PROPOSED BUILDING
SHADOWS FROM NEIGHBOURING BUILDINGS
SHADOWS FROM ORIGINAL PROPOSAL 11/2023

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 250	14.03.2025	SD30_04	/ 2

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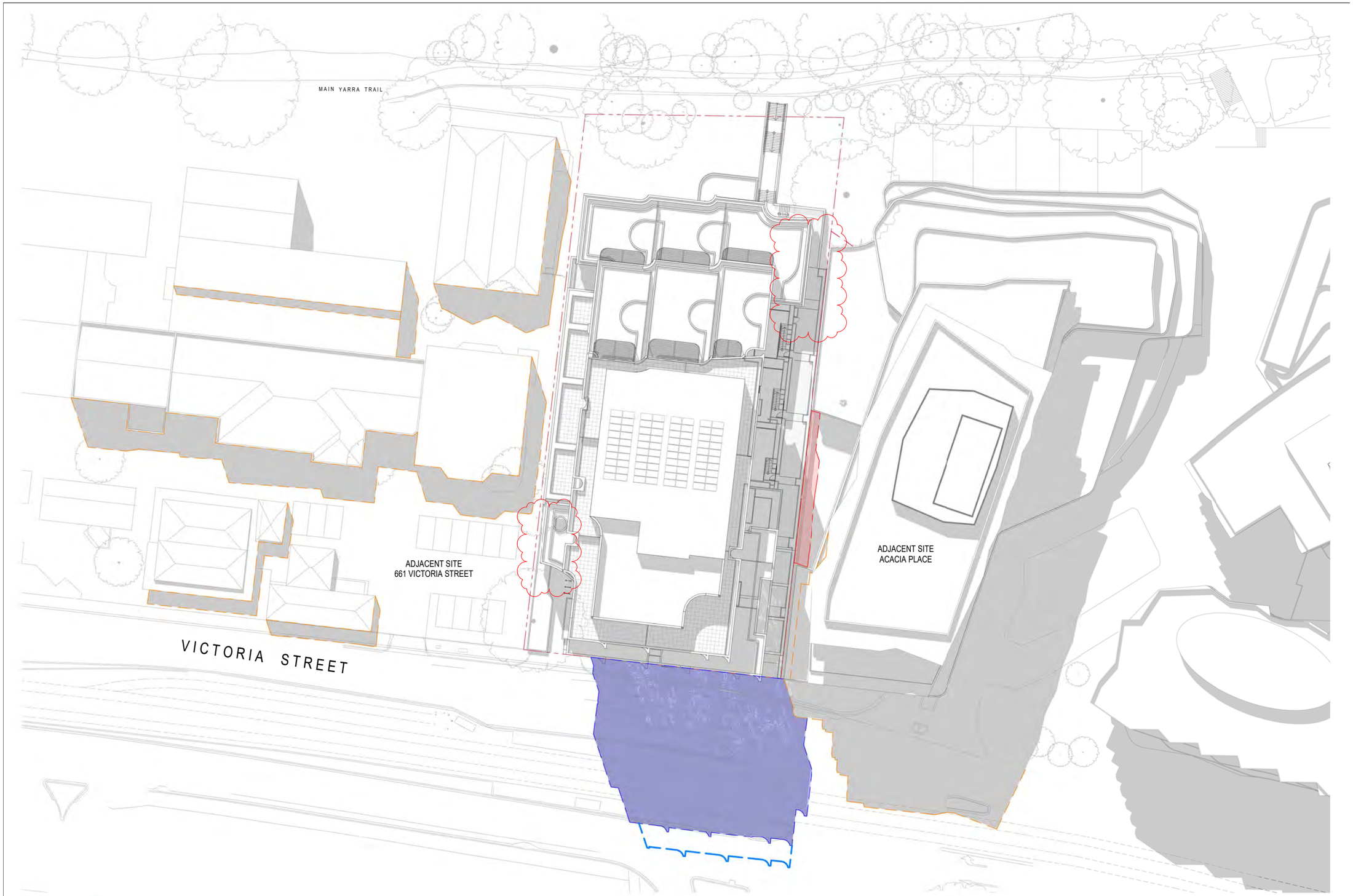

Client
EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SHADOW DIAGRAM SEP 22, 13.00PM

SHADOWS FROM EXISTING BUILDING
SHADOWS FROM PROPOSED BUILDING
SHADOWS FROM NEIGHBOURING BUILDINGS
SHADOWS FROM ORIGINAL PROPOSAL 11/2023

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 250	14.03.2025	SD30_05	/ 2

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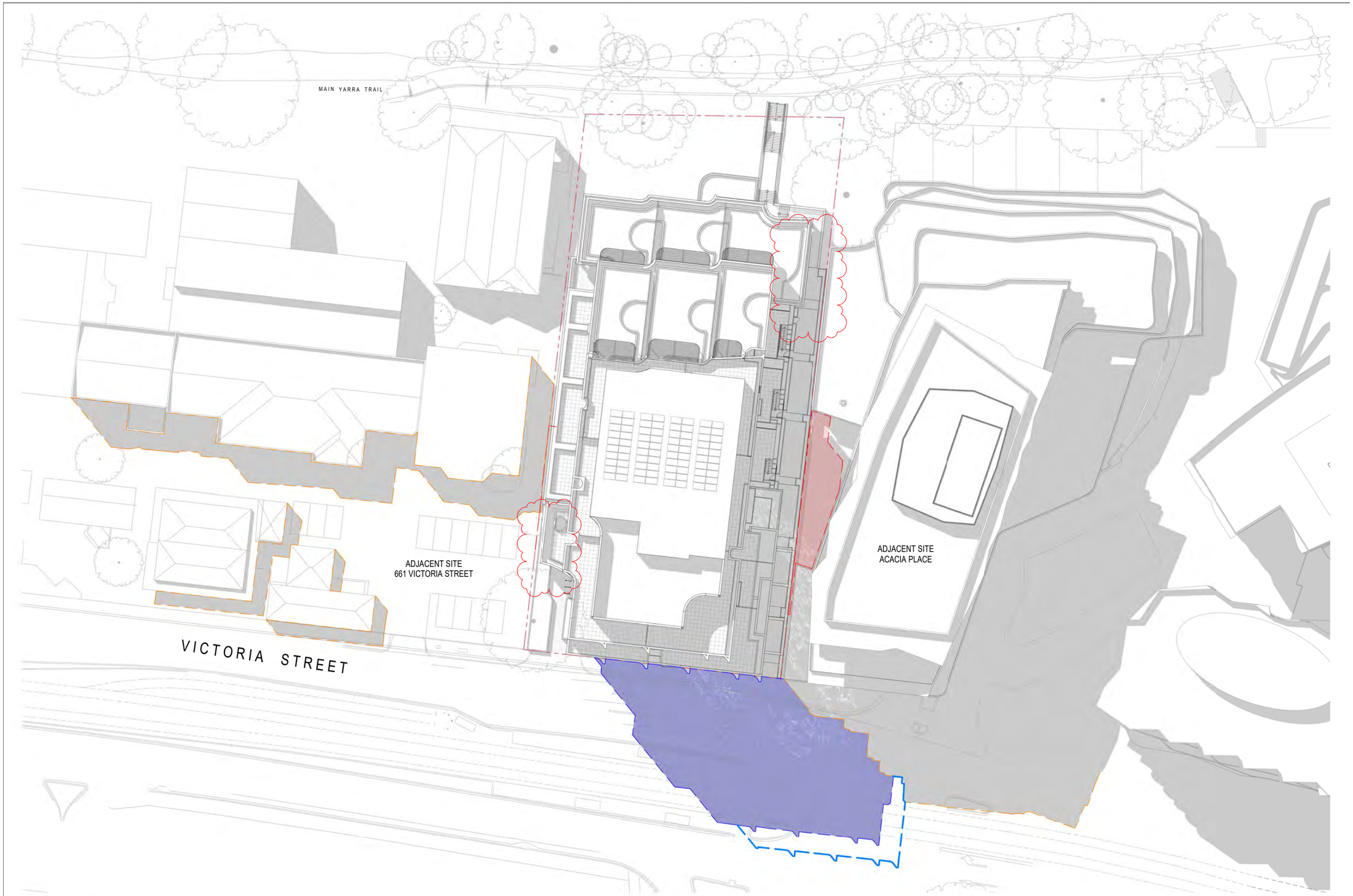

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SHADOW DIAGRAM SEP 22, 14.00PM

SHADOWS FROM EXISTING BUILDING
SHADOWS FROM PROPOSED BUILDING
SHADOWS FROM NEIGHBOURING BUILDINGS
SHADOWS FROM ORIGINAL PROPOSAL 11/2023

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 250	14.03.2025	SD30_06	/ 2

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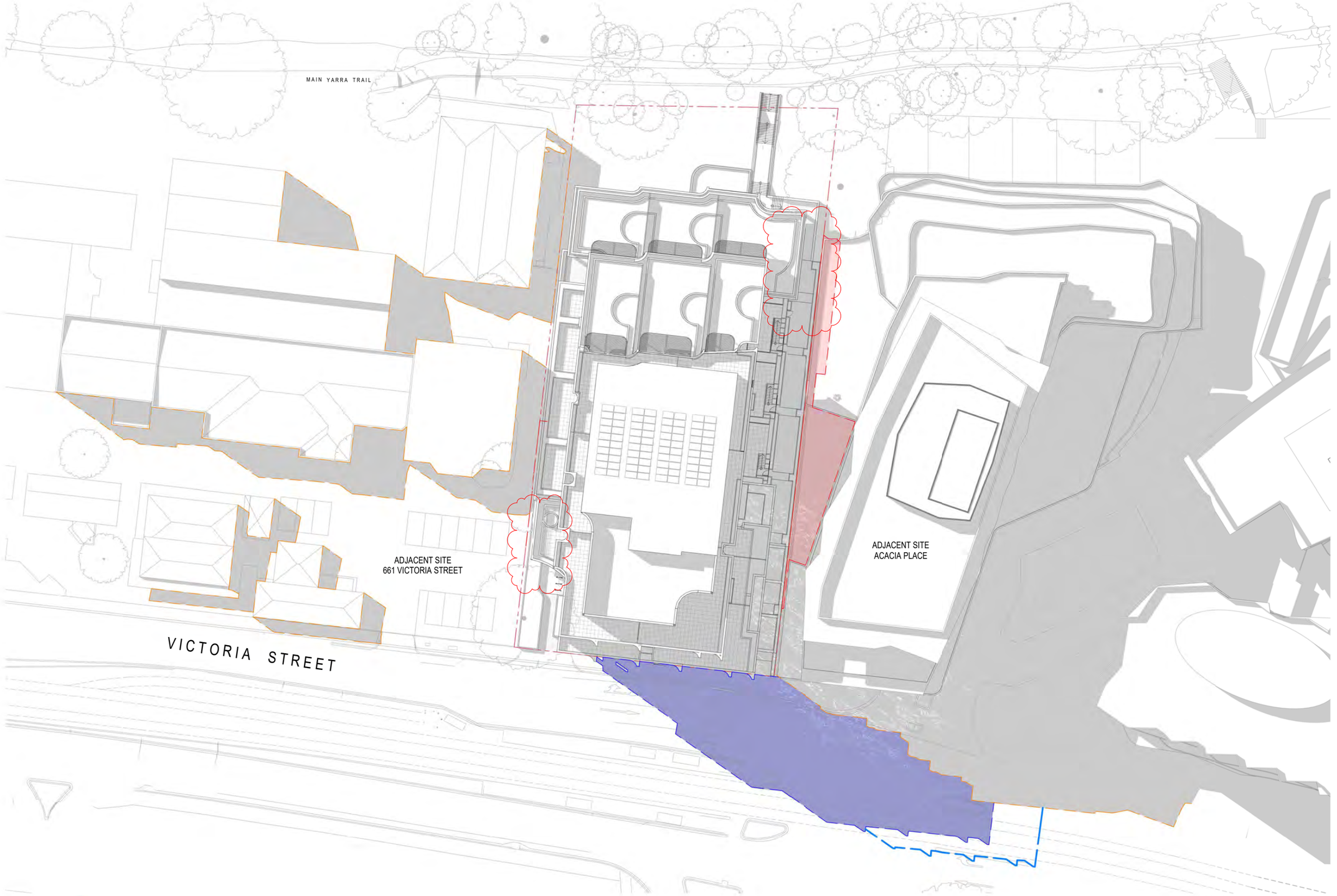

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
SHADOW DIAGRAM SEP 22, 15.00PM

SHADOWS FROM EXISTING BUILDING
SHADOWS FROM PROPOSED BUILDING
SHADOWS FROM NEIGHBOURING BUILDINGS
SHADOWS FROM ORIGINAL PROPOSAL 11/2023

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 250	14.03.2025	SD30_07	/ 2

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Documentation

Development Summary

Project
EG ABBOTSFORD - 675 Victoria Street, ABBOTSFORD

Job No. 21582 **File No.** 4.3 **Date** 14/03/2025 **Rev** 2

SITE AREA	3,459	m^2
TOTAL NSA	13,332	m^2
TOTAL NLA	410	m^2
TOTAL GFA	26,164	m^2
TOTAL GBA	29,305	m^2
TOTAL UUCA	1,939	m^2
SITE COVERAGE	2,471	m^2
IMPERVIOUS SITE COVERAGE	3,000	m^2

Clarifications

Net Saleable Area - residential areas to centreline of party walls, outside face of external and corridor walls. Excludes balconies / terraces

Net Leasable Area - commerical / retail areas to inside face of all enclosing walls

Gross Floor Area - FECA, measured to outside face of exterior walls. Excludes voids (vertical circulation / shafts), terraces and balconies with outer walls less than 1.4 metres high

Gross Building Area - FECA + UUCA - Total enclosed and unenclosed area of the building at all levels measured between the normal outside face of any enclosing walls, balustrades and supports. Excludes risers

Unenclosed Uncovered Area

Site Coverage - area covered by any proposed building

Impervious Site Coverage - any surface that cannot infiltrate water

RESIDENTIAL

LEVEL	APTS	1B / 1b	1B / 1b / S	2B /1b	2B / 1b / S	2B / 2b	2B / 2b / S	3B / 2b	3B / 2b / S	3B / 3b / S	NSA	POS	TOTAL
Basement 2											0	0	0
Basement 1											0	0	0
Lower Ground											0	0	0
Ground	10	0	1	0	0	3	4	1	1	0	1,094	414	1,508
Upper Ground	13	2	0	0	0	5	4	1	1	0	1,342	287	1,629
Level 01	12	2	0	0	0	5	2	2	0	1	1,305	619	1,925
Level 02	12	2	0	0	0	5	2	2	0	1	1,313	283	1,596
Level 03	10	2	0	0	0	4	1	1	2	0	1,016	621	1,637
Level 04	11	3	0	0	0	3	2	1	2	0	1,081	156	1,237
Level 05	11	3	0	0	0	3	2	1	2	0	1,081	156	1,237
Level 06	11	3	0	0	0	3	2	1	2	0	1,081	156	1,237
Level 07	9	1	0	2	0	2	1	1	2	0	979	262	1,241
Level 08	9	1	0	2	0	2	1	1	2	0	938	140	1,078
Level 09	9	1	0	2	0	2	1	1	2	0	938	140	1,078
Level 10	6	0	0	0	0	2	0	1	0	3	683	412	1,095
Level 11											479	26	505
Roof											0	0	0
TOTAL	**123**	**20**	**1**	**6**	**0**	**39**	**22**	**14**	**16**	**5**	**13,332**	**3,671**	**17,003**
		16%	1%	5%	0%	32%	18%	11%	13%	4%			m^2/Apt:

AMENITIES

INTERNAL	EXTERNAL
0	0
0	0
279	672
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
279	**672**
2.3	5.5
	7.7

COMMERCIAL & COMMUNITY

NLA & LITTLE B.I.G FOUNDATION
0
0
122
287
0
0
0
0
0
0
0
0
0
0
410

AREA

UUCA	GFA	GBA
0	2,631	2,756
0	2,600	2,744
759	2,147	3,099
502	2,050	2,790
0	1,754	1,806
73	2,037	2,163
4	1,709	1,765
8	1,721	1,767
4	1,320	1,363
4	1,320	1,363
4	1,320	1,363
4	1,330	1,373
0	1,164	1,203
0	1,164	1,203
0	1,157	1,195
0	739	778
575	0	575
1,939	**26,164**	**29,305**

**Refer separate Apartment Schedule A_SCD_5003 for individual buildings, apt types, apt areas*

PARKING

	CARS & MOTORCYCLES		
	RESIDENTIAL	COMMERCIAL & COMMUNITY	TOTAL
	167	2	169
TOTAL	**167**	**2**	**169**
Car/Apt Ratio:	1.36		

MOTORCYCLE
26
26

BICYCLES			
	HORIZONTAL	VERTICAL	TOTAL
Residential	114	10	124
Commercial	6		6
Visitor	28		28
TOTAL	**148**	**10**	**158**

STORAGE

CAGES	
FREE-STANDING	
123	
TOTAL	**123**

Disclaimer: Areas noted in this schedule are based on Schematic Design drawings and as such are preliminary only, may alter as work progresses and do not necessarily represent a true and accurate depiction of the finished as-built development. This schedule is not intended to form part of any contract or warranty by SJB Architects.

SJB is passionate about the possibilities of architecture, interiors, urban design and planning. Let's collaborate.

Naarm
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Strategic Planning
Formal Referral Response

Application Information:

Referral Officer:	Kyle Everett
Officer:	Paul Iacuone
Council Reference:	PPE25/0291
Address:	675 Victoria St, Abbotsford VIC 3067
Proposal:	DTP Referral/Notice of Application
Comments Sought:	Click here to view referral memo: IREF25/00791 - Referral Request
Disclaimer:	Council's Strategic Planning Unit provides the following information which is based on the information provided in the Statutory Planning referral request memo referenced above. The Strategic Planning comments in this assessment focus on compliance with work undertaken as part of Yarra's Activity Centre built form work and subsequent planning scheme amendments. They do not provide commentary on other sections of the Planning Scheme or fully assess the internal amenity of the application.
Prev. Responses:	NA

Summary of Strategic Planning comments and recommendations:

The mid street location and size of the site do not provide a rationale for why this should exceed those already developed.

This referral relies on the comments from Urban Design on whether the proposed ground floor setback is adequate or requires further adjustments. Though the referral considers it necessary in this context to provide some form of setback at ground level.

It is noted that the neighbouring building to the east has a street wall height of 7 storeys. The proposed street wall height could be considered appropriate due to the width of the street and the neighbouring site if the upper-level setbacks are adequate to provide a distinction from the upper-levels and the street wall.

Considering the scale of the building, the proposed 2.4m upper-level setback is not adequate. It also seems that the upper-levels of this development overshadow the southern footpath at 10am. A greater setback of upper-levels would likely rectify this.

The application has not provided the impact of the building on view lines to the Skipping Girl Sign, this should be included to properly understand the impacts.

While the proposed separation generally is adequate and in some locations greater than, there are portions that are none compliant. It would be recommended that the separation to the western boundary be increased if it wishes to have a height of 41m approved.

It is recommended that:

1. The height of the development should be reconsidered or further amendments to other elements of the built form be made to justify the height.
2. Provide greater upper level setback to Victoria Street.
3. Provide information on the impacts to the Skipping Girl Sign.
4. Building separation to the western boundary be increased.
5. The upper two most levels be removed or recessed so they are not visually seen from the Main Yarra River Trail.

Strategic Planning full comments:

Overall building height

The overall building height proposed by the applicant is taller than all other buildings along the northern side of Victoria Street. The mid street location and size of the site do not provide a rationale for why this should exceed those already developed. The referral does acknowledge the reduction in the original design of 16 storeys being reduced. However, there are some issues with the current design that would need to be resolved.

Built form work; *Victoria Street and Bridge Road Activity Centre Built Form Framework*, (the BFF); undertaken for the interim planning controls and informed subsequent permanent controls for Victoria street examined this portion of Victoria Street. They prescribed a height of 18m for the site. At the time this was influenced by DDO1 which had a height of 18m, this is still the case though discretionary. This is a doubling of the discretionary height within DDO1.

Strategic planning has undertaken work to apply planning controls to Victoria Street (draft Amendment C291yara), west of Burnley Street. Sites with less constraints on development have heights ranging between 24m and 34m. Those sites south of residential or sensitive areas typically have a height of 24m.

The application is proposing a height of approximately 41m.

As mentioned below the impact of the upper two most levels on the Yarra River are a concern. These should be removed or recessed so they are not visually seen from the Main Yarra River Trail.

The height of the development should be reconsidered or further amendments to other elements of the built form be made to justify the height.

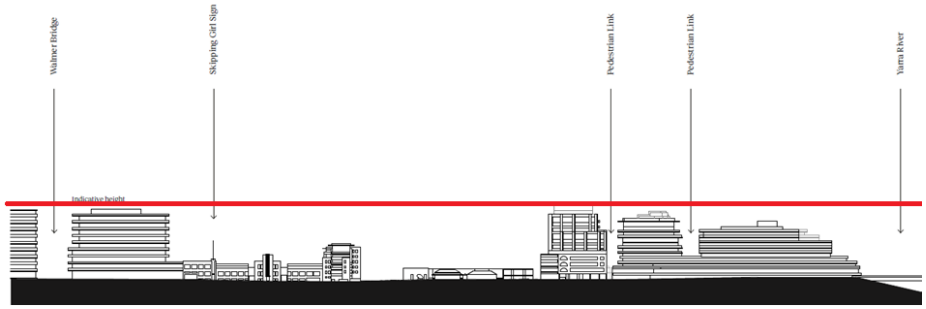

Figure 1 Victoria Street elevation, red line showing height above all other developments.

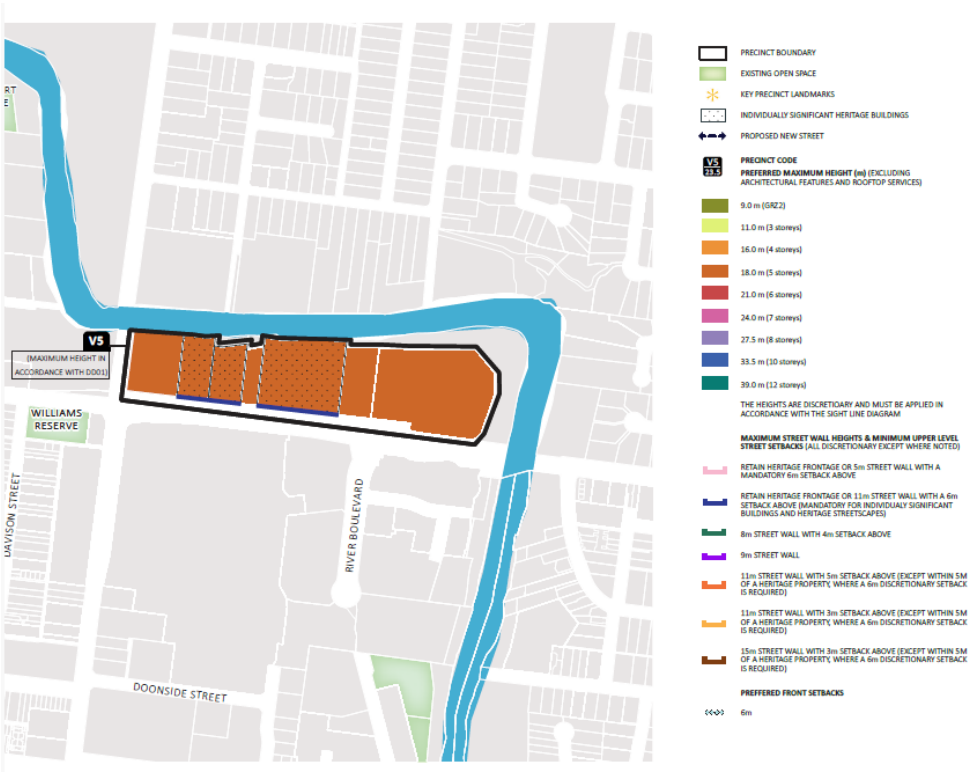

Figure 2 Propose built form controls within the BFF -

Street wall setback

The provision of a ground floor setback along Victoria Street is expected considering the height/scale of the development. The site is not located within an area where there is a consistent heritage streetscape and a setback would conflict with the heritage values of the area.

Strategic planning has progressed a number of planning controls to activity centres and employment precincts where street wall and ground floor setbacks are a provision. Notably within:

- draft C318yara (Cremorne Employment Precinct) ground floor setbacks are required to enhance the public realm and accommodate building entrances, spaces for outdoor dining, street level bike parking or landscaping.

- Draft C291yara which proposes a number of street wall setbacks including DDO50 which requires a 2m street wall setback to 551 to 585 Victoria Street.

This referral relies on the comments from Urban Design on whether the proposed ground floor setback is adequate or requires further adjustments. Though the referral considers it necessary in this context to provide some form of setback at ground level.

Street wall height

The width of the Victoria Street measured approximately at 32m and the street wall is also proposes 32m. This is a street width to street wall height ratio of 1:1. In the case of the Victoria Street west of Burnley Street the BFF have used a ratio slightly less than 1:1.

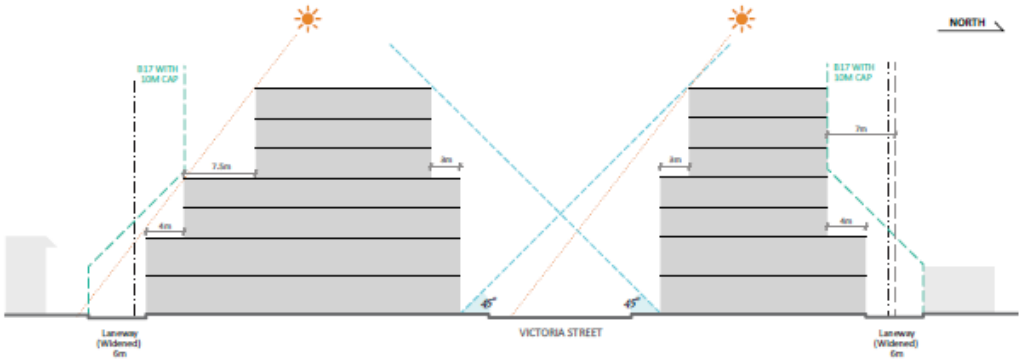

Figure 42. Example of height and setbacks of upper form in areas without notable heritage or character values

Figure 3 Cross section of future built form on Victoria Street - BFF

Yarra City Council has undertaken a number of built form reviews across Yarra's activity centres. Typically, in areas where renewal is expected street wall heights of 4 storeys (15m) as in the case of Victoria Street (e.g. Council adopted DDO50), 4 storeys (16m) in higher change areas in Cremorne and in some cases within Collingwood South Mix Use Area (DDO23) 20m. The proposed height of the street wall far exceeds what is typically prescribed in previous built form amendments.

It is noted that the neighbouring building to the east has a street wall height of 7 storeys. The proposed street wall height could be considered appropriate due to the width of the street and the neighbouring site if the upper-level setbacks are adequate to provide a distinction from the upper-levels and the street wall.

Upper-level setback and overshadowing

The upper-level setback provided in the application does not provide a distinct separation between street wall and the upper-levels. While it is acknowledged that this part of Victoria Street is wide at measuring approximately at 32m, the BFF has recommended a 5m upper level setback for this site. In other locations within Yarra:

- less constrained area built form controls typically propose a 3m upper-level setback; and
- in the case of 81-95 Burnley Street a 5m upper-level setback has been prescribed. This includes heights of the two tallest portions of the site being 38m and 42m.

Considering the scale of the building, the proposed 2.4m upper-level setback is not adequate. It also seems that the upper-levels of this development overshadow the southern footpath at 10am. A greater setback of upper-levels would likely rectify this.

Sub-precinct	Street wall height	Minimum upper level street setback	Maximum height*	Objectives
V5	Retain heritage frontage or 11m (2-3 storeys)	• 6m within the HO (mandatory for individually significant buildings) • 5m outside the HO (except within 5m of a heritage property, where a discretionary 6m is required)	In accordance with DDO1	• To maintain a view of the Skipping Girl sign from the east • To avoid visually overwhelming heritage fabric • To reinforce the existing and emerging street wall character

Views to the Skipping Girl Sign

The application has not provided the impact of the building on view lines to the Skipping Girl Sign, this should be included to properly understand the impacts.

Interface to the Yarra River

Generally the application aligns with the strategic intent of DDO1 but this referral will defer comments to the urban design and open space comments on the design of the setback of the development.

There is a concern of the two upper most levels of the development and its prominence to the Yarra River. DDO1 seeks to minimise visual bulk and light spill to the Yarra River. The renders of the building show these are quite prominent.

It is recommended that either the two upper levels are removed or setback so are not visually seen from the Main Yarra River Trail.

Building separation / Interface Requirements

Typically building separation for residential development is 4.5m from the common boundary where habitable windows or balconies are proposed. Taller buildings are also typically expected to provide building separation, this is the case in draft Amendment C318yara within Cremorne and for buildings taller than 21m within

C291yara Bridge Road and Victoria Street. If a building wishes to exceed a preferred height limit, building separation is a criteria that they must exceed to permit a variation.

While the proposed separation generally is adequate and in some locations greater than, there are portions that are none compliant.

The separation to the eastern boundary is generally greater than 4.5m and where it is not the eastern property has provided a greater than 4.5m separation.

The separation to the western boundary is not greater than 4.5m

It would be recommended that the separation to the western boundary be increased if it wishes to have a height of 41m approved.

Strategic Planner: Kyle Everett
Date: 06 June 2025

City Works
Formal Referral Response

Application Information:

Referral Officer:	Atha Athanasi
Officer:	Paul Iacuone
Council Reference:	PPE25/0291
Address:	675 Victoria St, Abbotsford VIC 3067
Proposal:	DTP Referral/Notice of Application
Comments Sought:	Click here to view referral memo: Record D25/198708: IREF25/00792 - Internal Referral Request
Disclaimer:	Council's City Works Unit provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	

Comments:

The waste management plan for 675 Victoria Street, Abbotsford authored by Traffix Group and dated 4/4/25 is satisfactory from a City Works Branch's perspective.

Waste Management Officer: Atha Athanasi

Signature: Atha Athanasi

Date:3/06/2025

ESD Formal Referral Response

Application Information:

Referral Officer:	Euan Williamson
Officer:	Paul Iacuone
Council Reference:	PPE25/0291
Address:	675 Victoria St, Abbotsford VIC 3067
Proposal:	DTP Referral/Notice of Application
Comments Sought:	Click here to view referral memo: Record D25/198731: IREF25/00793 - Internal Referral Request
Disclaimer:	Council's ESD Officer provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	

ESD comments were requested on the following:

- New referral (DTP)

In assessing this application, the following documents were reviewed:

- SMP prepared by GIW dated 7.4.2025
- Architectural drawings prepared by SJB dated 14.3.2025

Comments

The standard of the submitted documentation nearly meets Council's Environmentally Sustainable Design (ESD) standards.

1. Applicant ESD Commitments
   - 71% BESS score, satisfying all mandatory category scores.
   - 62 of the 123 dwellings are naturally cross ventilated.
   - Average 7.5 Star NatHERS
   - Non-residential areas a minimum 5% increase on NCC2022 minimum requirements.
   - Energy efficient electric heat pump.
   - 20,000 litre rainwater tank connected to toilets for flushing on levels Ground-Level 2.
   - STORM score of 101% demonstrating best practice in stormwater management.
   - Rainwater only for landscape irrigation.
   - 124 bike parking spaces for residents and 25 spaces for residential visitors.
   - 6 bike spaces for staff and 3 bike spaces for non-residential visitor parking.
   - 278m^2 of communal space on the lower ground floor.

2. Application ESD Deficiencies
   - There are a large number of single aspect dwellings with no access to natural ventilation.

Recommend mechanical assisted ventilation to all dwellings that do not meet the BESS criteria for effective natural ventilation.

- The daylight modelling is reliant on internal reflectance values that are not consistent with BESS best practice standards/methodology. These assumptions will be favourably distorting the daylight performance standards.
  The correct reflectance values are on the BESS Fact Sheets site, and also here;
  - Ground plane: 0.1
  - External walls and obstructions: 0.4
  - Floor: 0.3
  - Wall: 0.7
  - Ceiling: 0.8

  Recommend re-submitting the daylight modelling, and relevant sections of the SMP, using the BESS internal reflectance values, ensuring that best practice daylight standards can be demonstrated.

3. Outstanding Information
   - The commitment to net-zero operating emissions is welcomed, however this commitment is notably missing from the ESD Summary on page 7 of the SMP, despite it being included in the body of the report, the BESS report and the architectural drawings. For ease of enforcement and verification it should be included in the ESD Summary section also.

     Recommend updating the SMP to include a clear commitment to net-zero operational energy within the ESD Summary on page 7.

4. ESD Improvement Opportunities
   - Consider increasing the scale of the solar PV on the rooftop to utilise all suitable available roof space.
   - Consider battery energy storage to utilise solar energy more effectively onsite.

Recommendations

- Update the SMP with the recommendation above.

If you, the applicant or DTP would like to discuss this further, please contact me.

Euan.

ESD Advisor: Euan Williamson
Date: 03 June 2025

Urban Design
Formal Referral Response

Application Information:

Referral Officer:	Lucy Stratton
Officer:	Paul Iacuone
Council Reference:	PPE25/0291
Address:	675 Victoria St, Abbotsford VIC 3067
Proposal:	DTP Referral/Notice of Application
Comments Sought:	Click here to view referral memo: D25/199290 - IREF25/00794 - Referral Request
Disclaimer:	Council's Urban Designer provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	Not applicable.

Recommendation

The proposal is **supported in principle, subject to changes**.

Comment Summary

Built Form and Massing

Design and Development Overlay Schedule 1 (Yarra Birrarung River Corridor) seeks to *"ensure buildings are presented at a variety of heights, avoid visual bulk, are stepped back from the frontage of the Yarra River and adjacent public open space".*

The proposal is for a 14-storey (41m) building, that presents an 8-storey street wall to Victoria Street. The street wall height is a similar scale to that of the building to the immediate east. The subject site abuts a site with a heritage overlay to the west (661-663 Victoria Street). The street wall is composed of two distinct sections, the brick base and the concrete upper. The upper levels (Levels 7-9) are setback 2.4m above and uppermost levels (Levels 10-11) are setback 6.1m. The proposal is overly dominant in the streetscape and does not consider the need to step down to the more sensitive interface to the west. The removal of one storey from the upper levels (Levels 7-9) is recommended. To the north, the development steps down towards the Yarra corridor, within the building envelope specified in DDO1. The upper most two storeys are highly visible and add to the visual bulk of the proposal. It is recommended that these be setback further to minimise the visual bulk.

Design and Development Overlay Schedule 1 (Yarra Birrarung River Corridor) seeks to *"ensure sufficient space is provided between buildings to maintain views to the Yarra River and allow for the planting and growth of vegetation, including large canopy trees".* Along the western site boundary, the proposed setback varies between 1m to 4.5m. Increasing the setback along the length of the site (including the basement) would allow for further tree retention and new deep soil planting, as well as greater visual break between buildings.

Recommendation:

- **Reduce the overall building height by 1 storey (removing from Levels 7-9).**
- **Increase the setback of the uppermost two levels (Levels 10-11) to the north to reduce the visibility from the River corridor.**
- **Provide a 4.5m setback along the length of the western boundary (basement and upper levels), to allow for further tree retention, deep soil planting, building separation.**

Victoria Street Interface

The main residential lobby is located centrally. A ground floor setback of 2.3m is provided along a portion of the frontage, narrowing to the east. A ground floor commercial tenancy fronts Victoria Street with two access stairs via the eastern pedestrian link. The fire booster is integrated into the residential entrance frontage and the substation is accessed alongside the vehicular entrance/exit. Undergrounding the substation would provide additional ground floor space for the lobby and reduce the extent of blank frontage to Victoria Street. The public realm offering of the Victoria Street frontage could be enhanced through a deeper setback, incorporating deeper landscaped planters, integrated seating and direct access to the commercial tenancy.

Recommendation:

- **Increase the ground floor setback to 3m (along the entire length) to allow for more generous circulation space, landscaping and seating opportunities.**
- **Investigate undergrounding the substation, providing an extended lobby space to activate the Victoria Street frontage.**
- **Provide direct access to the commercial tenancy from the Victoria Street frontage and a secondary entrance from the pedestrian link.**

Pedestrian Link to Main Yarra Trail

The provision of a through site link from Victoria Street to the Yarra Trail along the eastern site boundary is supported and contributes to the accessibility of the Trail for the wider precinct. The link is well activated with a reasonable level of engagement with adjacent commercial, residential and community uses. Confirm if seating opportunities are to be provided along the pedestrian link.

The pedestrian link should be clear to the sky and free from any building overhang along its entire length. This would also remove the need for structural columns along the building line, keeping the pathway clear of obstructions.

The success of the link relies upon continuous public access, well-integrated building and wayfinding signage and appropriate lighting.

Recommendation:

- **The pedestrian link should be clear to the sky with no building overhang and clear of columns.**
- **Confirm if seating is to be provided and update Landscape Plan accordingly.**
- **Ensure the pedestrian link is well maintained and kept open to the public.**
- **Provide a Signage and Wayfinding Plan and Lighting Plan.**

Yarra Trail Interface

The pedestrian link wraps around the building and then extends down via a series of stairs and landings to meeting the Main Yarra Trail. The stairs extend beyond the site boundary into Crown allotment (managed by Parks Victoria).

A generous landing should be provided to allow a safe of refuge from the Main Yarra Trail and minimise and potential conflicts. All handrails and tactiles must be fully contained within this setback. Bicycle channels should be provided along both sides, for use for both ascending and descending cyclists.

Recommendation:

- **Increase the depth of the landing adjacent to the Main Yarra Trail to a minimum of 1.8m.**
- **Provide bicycle channels along both sides of the stair.**

Streetscape and Capital Works

The double width vehicle crossing disrupts the pedestrian footpath along Victoria Street. The footpath area of the vehicle crossing should be at grade with the adjoining footpath on both sides, providing a continuous pedestrian experience. There are no known planned / approved capital works around the site being led by the Urban Design Team.

Recommendation:

- **Provide a Public Realm and Streetscape Plan (for review and approval by Council) that includes a raised pedestrian crossing where the proposed vehicle crossover disrupts the footpath on Victoria Street.**

Landscape Plan

The Landscape Concept Plan demonstrates the overall concept for the development, however, contains insufficient detail. The provision of rain gardens is generally not supported within the northern building setback and surrounding the retained tree along the western boundary.

Recommendation:

- **Remove two proposed rain gardens from the landscape design.**
- **Provide an updated Landscape Plan that meets Council's general requirements and includes details of:**
    - **planting plan(s) showing the location of proposed planting and plant numbers and species, as well as a legend containing key features, materials and surfaces. This should be provided for each landscaped area within the site.**
    - **vertical growing structures (if proposed) including detail drawings, servicing methodology, mounting technique etc.**
    - **the areas proposed for deep soil planting.**
    - **the location of each 'tree type' proposed.**

Bicycle Parking

All visitor bicycle parking is provided along the western boundary within the landscaped setback. The deep recessed area is accessed via a 2m wide pathway. There is concern this lacks integration with the primary building entrance and lacks visibility from Victoria Street.

Recommendation:

- **Ensure the visitor bicycle along the western boundary receives some level of passive surveillance.**
- **Distribute some visitor parking along the pedestrian link to better integrate with commercial.**

Urban Designer: Lucy Stratton
Date: 16 June 2025

Strategic Transport Formal Referral Response

Application Information:

Referral Officer:	Philip Mallis
Officer:	Paul Iacuone
Council Reference:	PPE25/0291
Address:	675 Victoria St, Abbotsford VIC 3067
Proposal:	DTP Referral/Notice of Application
Comments Sought:	Comments on the application from a Strategic Transport perspective are requested on the following: • Access and Safety • Bicycle Parking Provision • Adequacy of car parking / bicycle parking spaces provided (and waiver/reduction sought) • Design and location of car parking / bicycle parking spaces and facilities • Electric vehicles / share cars / other relevant topics • Green Travel Plan • Impact on Yarra's key bicycle corridors • Impact on Yarra's bicycle lanes • City Works
Disclaimer:	Council's Strategic Transport unit provides the following information which is based on the information provided in the referral request memo referenced above.
Prev. Responses:	No - First Referral

Comments

Access and Safety

The following safety and access concerns should be addressed:

No issues identified.

Bicycle Parking Provision

Statutory Requirement

Under the provisions of Clause 52.34-3 of the Yarra Planning Scheme, the development's bicycle parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate	No. of Spaces Required	No. of Spaces Allocated
Dwellings	123 dwellings	In developments of four or more storeys, 1 resident space to each 5 dwellings	25 resident spaces	124 resident spaces
		In developments of four or more storeys, 1 visitor space to each 10 dwellings	12 visitor spaces.	25 visitor spaces
Retail premises (other than specified in the table)	122 sqm	1 employee space to each 300 sqm of leasable floor area	0 employee spaces	3 employee spaces
		1 visitor space to each 500 sqm of leasable floor area	0 visitor spaces.	3 visitor spaces
Shop	287 sqm	1 employee space to each 600 sqm of leasable floor area if the leasable floor area exceeds 1000 sqm	0 employee spaces	3 employee spaces
		1 visitor space to each 500 sqm of leasable floor area if the leasable floor area exceeds 1000 sqm	0 visitor spaces.	0 visitor spaces
Bicycle Parking Spaces Total			**25 resident / employee spaces**	**130 resident / employee spaces**
			12 visitor spaces	**28 visitor spaces**
Showers / Change rooms		1 to the first 5 employee spaces and 1 to each additional 10 employee spaces	**0 showers / change rooms**	**0 showers / change rooms**

The development provides a total of 105 additional resident/employee spaces and 16 additional visitor spaces above the requirements of the Scheme.

Adequacy of visitor spaces

Number of Spaces

The provision of 28 visitor bicycle spaces is inadequate for the following reasons:

- The proposed development requires 12 visitor bicycle parking spaces, as per the City of Yarra Planning Scheme requirements. The provision of 28 visitor spaces exceeds this requirement by 16 spaces. **(adequate)**
- Supply is less than the CASBE requirements, which require 1 visitor bicycle space per 4 dwellings, requiring a total of 31 visitor spaces for the given development. The provision of 28 visitor spaces does not meet this requirement. **(inadequate)**

Design and Location of Visitor Spaces

The design and location of the visitor bicycle parking spaces is adequate for the following reasons:

- Pursuant to Clause 52.34-5, all visitor spaces are to be provided at a bicycle rail. The visitor parking facilities are provided as horizontal facilities aligning with this requirement. **(adequate)**
- Visitor bicycle parking is to be provided at ground level in an external area and be readily accessible to the public. The visitor parking facilities align with this requirement. **(adequate)**
- Visitor parking spaces are provided in a public area, with adequate passive surveillance and activity, providing a safe and accessible bicycle parking space. **(adequate)**

Adequacy of employee spaces

Number of spaces

The provision of 130 resident/employee spaces is adequate for the following reasons:

- The proposed development requires 25 resident/employee bicycle parking spaces, as per the City of Yarra Planning Scheme requirements. The provision of 130 resident/employee spaces exceeds this requirement by 105 spaces. **(adequate)**
- In accordance with CASBE requirements, the development must provide 1 resident bicycle space per dwelling, requiring a total of 123 resident spaces. The provision of 130 resident/employee spaces exceeds this requirement. **(adequate)**

Design and location of employee spaces and facilities

Employee and resident spaces are inadequately located and designed for the following reasons:

- Pursuant to AS2890.3, more than 20% of the resident/employee bicycle parking must be floor level, horizontal spaces. In the given development, 60 two-tiered spaces (total 120 spaces) and 10 vertically mounted spaces are provided. Given that the lower tier of every two-tiered space is at ground level, this results in a provision of 60 ground-level horizontal spaces, equating to 46% of the total bicycle parking provision. This exceeds minimum requirements and is therefore compliant. **(adequate)**
- Pursuant to Clause 52.34, bicycle storage rooms should ideally be provided on the ground floor level. The bicycle storage room for the given development is located on the lower ground floor level. However, it is easily accessible via nearby lifts and an external access, making the facility suitably accessible for all users. **(adequate)**
- Dimensions on the architectural plans identify that the bicycle storage room and bicycle racks are designed in accordance with AS2890.3 and Clause 52.34 of the Planning Scheme. **(adequate)**
- Pursuant to Clause 52.34-3 & AS2890.3, bicycle spaces for employees must be provided in a bicycle locker, or a lockable compound. The architectural plans do not indicate locking mechanisms for the bicycle storage room, therefore not satisfying minimum requirements. **(inadequate)**

Electric vehicles / share cars / other relevant topics?
Council's BESS guidelines encourage the use of fuel efficient and electric vehicles (EV). Architectural plans indicate that EV charging infrastructure is provided for all EV spaces, meeting CASBE requirements. **(adequate)**

Green Travel Plan
The application includes a Green Travel Plan (GTP). The GTP provides all the required information and can be endorsed.

Yarra's key bicycle corridors
The site is located less than 300 metres to the east of both a C1 (primary) and C2 (main) cycling route, providing active travel connectivity within close proximity of the site.

Recommendations
The following should be shown on the plans before endorsement:

1. Provide a minimum of 31 visitor bicycle parking spaces in line with CASBE requirements.
2. Architectural plans must indicate locking mechanisms for the bicycle storage room, indicating a secure compound.

Sustainable Transport Planner (Strategic Transport Unit): Philip Mallis

Date:02/07/2025

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Croydon South, VIC, 3136
ABN: 47 376 684 521
E: cameron@crryder.com.au
P: 0434 351 567

Planning Referral Response

Date:	Wednesday, 2 July 2025	Reference No:	**PPE25/0291**
Address:	675 Victoria St, Abbotsford	Site visit completed:	Yes
Nature of Referral:	Construction of multistorey apartments and removal of vegetation		

Overlays

SLO1

Scope

This referral has reviewed the supplied arborist report and plans in relation to the proposed works as detailed above. In particular, the arborist report was reviewed for accuracy and compared against the plans for impacts.

Documents Reviewed

- Amended Tree Impact Assessment, prepared by Joe Kellett Arboriculture, no date for report
- Architectural Drawings, 675 Victoria Street, Abbotsford, prepared by SJB, Issued March 2025.
- Landscape Concept Design, 675 Victoria Street, Abbotsford, prepared by Tract, date 23 October 2024
- Planning Report, 675 Victoria Street, Abbotsford, prepared by Tract, 8 April 2025

Findings

I have read the report and reviewed the designs and make the following comments. I have tried to split the comments by tree rather than by report. I have retained the tree numbering as per the Arborist Report and the Tree Management Plan prepared by SJB (dwg No: SD01_04).

1. Trees proposed for removal that I easily agree with as they provide little amenity to the site include Trees 1, 2, 4, 5 & 7-17.
2. Under SLO1, A permit is required to remove, destroy or lop vegetation. This does not apply to non-native vegetation that is less than 6 metres in height, has a trunk circumference of less than 0.35 metre (11cm diameter) measured at 1.4 metres above ground level and a branch spread of less than 4 metres.
    a. Accordingly, Trees 1, 2, 8, 9, 12 & 17 would require a permit for removal.
    b. The likely pruning of roots for Trees 3, 6 & 18-24 for buildings and landscape would also trigger a permit under the ‘Lop’ category.
    c. Tree 25 is unlikely to be impacted or require a permit.

d. I note that Tree 2 shows no requirement for a permit on Drawing SD01_04; however it has a DBH of 11cm (circumference of 35cm). The planning trigger states less than 35cm. As it is 35cm, it would require a permit, unless evidence in the form of imagery is provided to show that the circumference is 34cm or less.

Tree 3

3. Tree 3 is a large mature River Red Gum *Eucalyptus camaldulensis* with good health and structure located on the Victoria Street frontage. The tree is not likely remnant. The tree is growing in a constricted location with the lower trunk growing over the kerb and utilities and meters all around (Figure 1).



Figure 1: Base of Tree 3 surrounded by infrastructure.

4. The arborist report states that the tree '*immediately on the western boundary of this property, mostly in the neighbouring property*'. This is incorrect as the feature survey (dwg no: SD01_02) clearly shows the tree within the subject site. The arborist report also states that '*The area immediately around the base of this tree will become an open mulched garden bed*'. The demolition plan (SD01_03) shows all infrastructure around the tree to be demolished and a 63m² rain garden to be installed. In my experience rain gardens are not successful around mature trees and require extensive infrastructure to be installed, most likely damaging the tree. This is not supported and a redesign is required.
5. The raingarden appears to be surrounded by a brick wall. The wall appears to be ~1m in height and I am assuming will be 'filled' with the raingarden. The wall will be virtually up to the trunk of the tree and any associated footing would cut many roots. This is not supported.
6. The design of the building has allowed for the tree, curving around the canopy. From what I could see, no detailed assessment has been completed of the canopy width and whether pruning would be required (Figure 2). The curve of the building is shown at 8.84m from the centre of the tree. This is likely to avoid the canopy; however, there has been no demonstration of how the canopy will be managed and the curve constructed including the potential for scaffolding, crane lifts and other potential impacts.

7. At level 4, the curved building design ceases, and a much squarer approach is taken. Drawing SD05_04 shows that the building is now proposed to overhang the tree at a height of 16m. Given the tree was recorded at 19.4m in the arborist report, there is significant potential for conflict between the canopy and the building. Furthermore, at 19.4m, this is not a fully grown specimen. It is easily expected that this tree could achieve a height of 25m. This would result in long-term, ongoing conflict and maintenance issues.
8. The mass of the building, its height and shape have not considered the tree's requirement for light. Having the building overhang the tree from level 4 is likely to result in inadequate light levels causing slow tree decline and premature death.



Figure 2: Tree 3 has a broad canopy that needs to be considered in more detail.

9. It is recommended that the proposal is not supported in relation to Tree 3 in its current form. The following is required:
    a. Detail regarding how surrounding infrastructure will be removed and/or abandoned and left in place.
    b. Removal of raingarden and conversion to mulched garden bed at existing level
    c. Removal of the brick wall that will be up to the trunk (drawing SD02_04 & SD05_04)
    d. Detail regarding the location of any new services and method of installation
    e. Detailed, measured and scaled canopy drawings showing the location of the tree and its canopy in relation to:
        i. The curve for the first 3 floors
        ii. The overhanging floors from level 4 and above
    f. Review of proposed light levels and how a species with a high light requirement will perform in a heavily shaded environment.
    g. If any of the above features are to be retained in the design, then detailed, non-destructive root investigations are required to identify tree roots and how they will be retained and managed.

Tree 6

10. Tree 6 is shown as ~15-20cm from the edge of the tree to the title boundary in the feature survey. It is healthy; however, it is an environmental weed and owned by a third party (Figure 3). It is proposed to construct a brick wall ~50cm in from the boundary line. This is well within the TPZ and SRZ, resulting in ~40% TPZ encroachment, much of which is already encroached. I disagree that 2 suppressed Silver Birches have created a root barrier and stopped roots entering the site as claimed in the arborist report. The report has provided nothing to justify this claim.



Figure 3: Tree 6 and approximate boundary line (yellow), subject site on left.

11. The proposal, as shown is not supported and a non-destructive root investigation is required to detail the presence of tree roots from Tree 6 and likely impacts.

Tree 17

12. I agree with the report that Tree 17 is in poor condition, a weed species and a permit for removal is appropriate.

Tree 18

13. Tree 18 is a small, non-native species (Figure 4). It is native to NSW, not Victoria. It is a fair specimen that could be retained; however, is of little value to the site. Given the size of the tree in the arborist report, a permit is not required for its removal.

Tree 19

14. Tree 19 is a large, mature Spotted Gum *Corymbia maculata* with fair health, good structure and should be retained. Contrary to the arborist report which states it is '…*growing immediately to the north of the boundary of this property'*, the tree is actually located ~1m inside the property boundary. The arborist report talks about excavation within the 'spoil'. Whilst I agree the site is clearly comprised of fill, it has been there so long, it should be considered natural soil as far as the trees are concerned. I expect that they grew in the fill.

15. The arborist report states '…*no trenching or major excavation into the existing spoil within 5.4 metres of the trunk of this tree*' without explaining why this offset was stated. I do not know how this was determined. The setback from the proposed building to the tree appears to be ~11m.
16. Subject to detailed design, Tree 19 appears to be retained within landscaping.

Tree 20

17. Tree 20 has been incorrectly located on the plans. As Figure 4 and Figure 5 clearly show, it should be immediately adjacent to Tree 19, not setback several metres. The 'tree' shown on the drawings as Tree 20 is actually a weedy Cotoneaster that was never assessed.
18. Tree 20 is a non-Victorian species and given the dimensions listed, is not subject to a permit. It will be retained within the TPZ of Tree 19.



Figure 4: Trees 18-20.

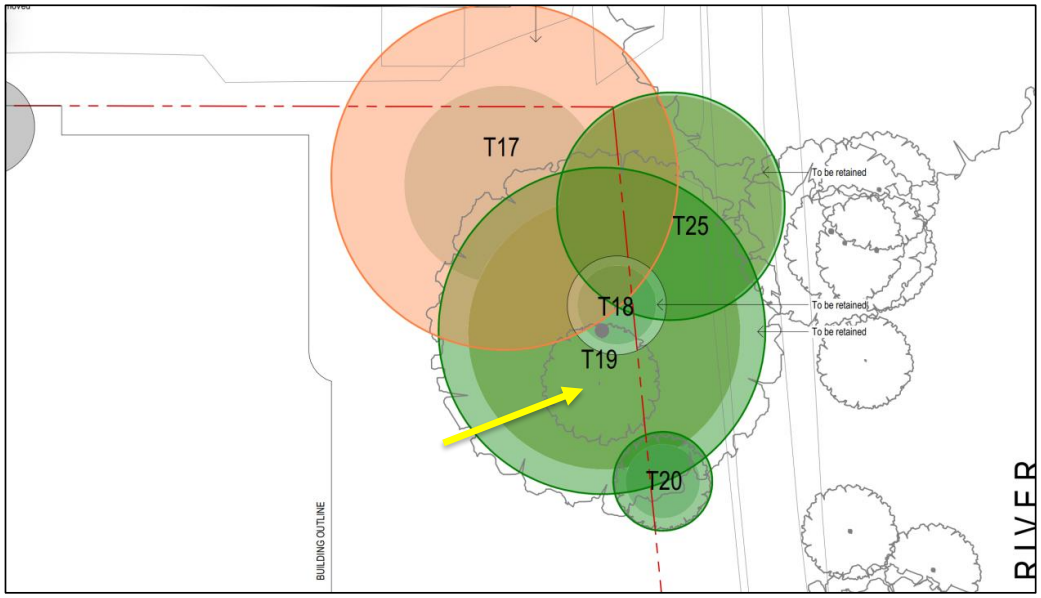


Figure 5: Correct location for Tree 20 (Yellow Arrow).

Trees 21 & 22

19. I have listed these 2 together as both are shown to be removed with little justification. Both would require a permit and both could be retained for the next 10-20 years or more (Figure 7).

20. Tree 21 is a small Red Flowering Gum *Corymbia ficifolia* that has grown on a natural lean, away from Tree 22. It would require a permit for its removal. The arborist report has given it a useful life of 'Remove', inferring that it is a hazard or represents unacceptable danger, according to the report definitions.

21. The tree's lean is likely to be decades old and there were few signs of failures. There is virtually no risk as there are no targets to hit if it did fail. The tree could be retained as part of the landscaping, allowing a mature tree to be retained in the landscape.

22. Tree 22 is a mature Spotted Gum with one main stem and 2 smaller stems arising from near the base (Figure 6). This is very common in the species and stems rarely fail. The smaller stem that is growing to the south could easily be removed with little detriment, to provide clearance if need be. The unions of the stems were sound and the tree could be retained for 20 years or more.



Figure 6: Unions of the 3 stems are sound and failure is highly unlikely.



Figure 7: Trees 21 & 22

23. The designs show that these 2 trees require removal for a proposed staircase to the river walk. It is unclear why the staircase is proposed in this location when moving it to the east ~5-6m would mean it was beyond the TPZs of any trees (Figure 8). This would be a better outcome for the trees and the permit requirements.

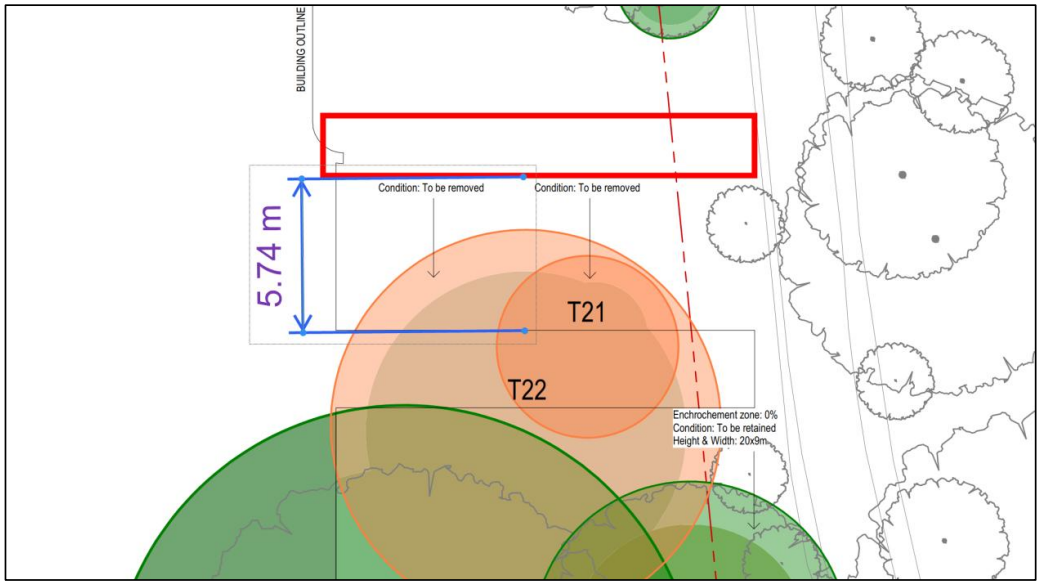


Figure 8: Proposed staircase and recommended relocation.

Tree 23

24. Tree 23 is a large, mature Spotted Gum located in the corner of the subject site. No works appear to be proposed within the TPZ other than landscaping. Detailed design for the landscaping is required to demonstrate that it will not be impacted.

Tree 24

25. Tree 24 is a large London Plane *Platanus ×acerifolia* located to the east of the site. The previous development on the adjacent site was constructed around this tree. It has been lopped and there is some decay; however, overall the tree is in fair condition and given the species, is likely to persist for some years to come.
26. The proposed building does show some TPZ encroachment, calculated at ~11%. On-site, there is a ~2m elevation change between the 2 properties that is not readily evident in the designs (Figure 9).
27. Review of the proposed drawings suggests that the design and the tree are unlikely to be conflicted. There may be some canopy pruning required. This will need to be detailed in Tree Protection Specifications if a permit is issued.
28. It is of most importance that the existing bank is retained with minimal disturbance.



Figure 9: Significant elevation change between the 2 properties.

Tree 25

29. Tree 25 is a small River Red Gum north of the property. The designs don't appear to come anywhere near this tree, and it can be protected as part of Tree Protection Specifications.

Recommendations

I have reviewed the proposal and make the following recommendations:

1. Trees 3, 6 & 18-25 are retained.
2. Approval is given for the removal of Trees 1, 2, 4, 5 & 7-17.
3. With regard to Tree 3, further information is required:
   - 3.1 Detail of how surrounding infrastructure will be removed and/or abandoned and left in place.
   - 3.2 Removal of raingarden and conversion to mulched garden bed at natural ground level
   - 3.3 Removal of the brick wall that will be up to the trunk
   - 3.4 Detail regarding the location of any new services and method of installation within the TPZ
   - 3.5 Detailed, measured and scaled canopy drawings showing the location of the tree and its canopy in relation to:
     - 3.5.1 The curve for the first 3 floors
     - 3.5.2 The overhanging floors from level 4 and above
   - 3.6 Review of proposed light levels and how a species with a high light requirement will perform in a heavily shaded environment.
4. A non-root destructive investigation is completed along the proposed works alignment for Tree 6. Insufficient justification in accordance with AS4970-2025 *Protection of Trees on Development Sites* has been provided as to how Tree 6 will remain viable with canopy and root loss.
5. The plans are updated to show the correct location of Tree 20 (Figure 5)
6. The staircase is moved to allow for retention of Trees 21 & 22
7. Further detail is provided of any elevation changes within the TPZ of Tree 24.
8. Landscape plans are updated with annotation for there to be no excavation or soil tillage within the TPZs of retained trees.

If you have any further queries, please don't hesitate to contact me on 0434 351 567.

Regards



Cameron Ryder
C&R Ryder Consulting Pty Ltd

Development Engineering Formal Referral Response

Application Information:

Referral Officer:	Paul Iacuone
Officer:	Mark Pisani / Nick Demosthenous
Council Reference:	PPE25/0291
Referral Number:	IREF25/00790
Address:	675 Victoria Street, Abbotsford
Proposal:	DTP Referral/Notice of Application
Comments Sought:	Flood Impact Analysis; reduction in car parking; traffic impact; access; internal layout design; infrastructure
Disclaimer:	Council's Development Engineering unit provides the following advice based on information provided in the referral request memo referenced above.

Engineering Referral Details

Council's Engineering Referral team has reviewed the drawings and documents provided by the Statutory Planning department, as outlined in ***Table 1*** below.

A list of requirements for the applicant and proposed conditions to be included in the Planning Permit have been outlined in ***Section 1 – Engineering Requirements*** and ***Section 2 – Engineering Conditions*** respectively. Specific details of the engineering assessment are provided in ***Section 3 – Engineering Detailed Assessment*** and have informed the requirements and conditions.

Note: the engineering related matters highlighted in the Planning referral have been assessed and included in the response.

Table 1 - Drawings and Documents reviewed by Engineering

Author / Consultant	Drawing No. or Document	Revision	Dated
Tract	Planning Report Concept Landscape Design	00 [04]	8 April 2025 23 October 2024
HARC Services	Flood Impact Analysis	03	24 October 2024
SBJ Architects	SD02_01 *Basement 2 Floor Plan* SD02_02 *Basement 1 Floor Plan*	1 1	23 October 2024 23 October 2024

Author / Consultant	Drawing No. or Document	Revision	Dated
	SD02_03 *Lower Ground Floor Plan* SD02_04 *Ground Floor Plan* SD05_01 *North Elevation* SD05_02 *East Elevation* SD05_03 *South Elevation* SD05_04 *West Elevation* SD05_05 *West Elevation_Ground Floor* SD05_06 *Presentation to the Pedestrian Link* SD05_07 *Presentation to the Pedestrian Link* SD05_08 *Presentation to Front and Rear* SD06_01 *Sections* SD06_02 *Sections* SD06_03 *Sections* SD06_04 *Section - Proposed Vehicle Crossing*	2 2 3 2 3 3 1 1 1 1 2 2 3 1	14 March 2025 14 March 2025 14 March 2025 24 January 2025 14 March 2025 14 March 2025 23 October 2024 23 October 2024 23 October 2024 23 October 2024 24 January 2025 24 January 2025 14 March 2025 23 October 2024
Traffix Group	Traffic Engineering Assessment	E	24 March 2025

SECTION 1: Engineering Requirements – Issue to the Applicant

The applicant must satisfy the engineering items outlined in ***Table 2*** and ***Table 3*** below. A written response must be provided for each requirement, and the action is to be completed prior to resubmission.

Any amendments to plans/drawings or updates to reports/documents must be highlighted using a *red cloud* around the relevant section. In the written response, indicate the relevant sheet/pages of each document which have been amended.

Table 2 – Traffic Engineering Requirements for Applicant

Item	Engineering Requirement	Action for Applicant
1	Dimension the individual entry and exit lane widths at the development entrance.	Update the drawings.
2	Confirm that the headroom clearance will not be obstructed by any structural elements protruding from the underside of the ceiling (please refer to item '*Headroom Clearance*' in Section 3 of this memo.	Provide confirmation and update the drawings.
3	Provide dimensions to Drawing SD06_04 *Section - Proposed Vehicle Crossing.*	Fully dimension the section drawing.
4	Provide the annotation – 'Proposed Vehicle Crossing to satisfy the Department of Transport and Planning's geometric requirements and be constructed to Council's satisfaction.'	Provide annotation for vehicle crossing on Ground Floor Plan.
5	With the exception of the 6.345 metre long waste collection vehicle, the maximum size of delivery vehicle permitted on the site for loading purposes is the B99 design vehicle (due to the 2.2 metre minimum headroom clearance).	Provide an annotation on the drawings of the maximum vehicle size and document in the site's Car Parking Management Plan.
6	The vehicle crossing design to be adjusted/modified to provide a greater level difference between the invert level and the property line level (currently has a level difference of only 35 mm), without compromising the ground clearance for a B99 design vehicle. Adjusting the vehicle crossing design would likely necessitate the re-grading of the footpath on either side of the new vehicle crossing	Adjust/modify the vehicle crossing design and re-test the vehicle ground clearance using the B99 design vehicle.

Table 3 – Civil Engineering Requirements for Applicant

The following comments in Table 3 have been prepared by Nick Demosthenous (Senior Project Engineer) of the Civil Engineering unit:

Item	Item	Engineering Comment
1	Flood Levels	Melbourne Water is responsible for flood levels due to Yarra River Flooding. Council's flood mapping indicates that 675 Victoria St, Abbotsford may be subjected to flooding during a 1 in 100 rain event, from surface water in Victoria St. Council's GIS identifies the 1% flood height maximum as RL14.52. A Flood Impact Analysis has been provided as part of the referral. The analysis indicates the 1 in 100-year ARI (1% ARP) as RL 14.4 in front of the development.
2	Basement Ramp Apex	Architectural plan revision /2 proposes an apex on the basement vehicle ramp approximately 8.8 metres inside the property line to prevent water entering the basement. The apex has a maximum height of RL 14.75. If Council's 1%AEP is used the apex will have 250mm freeboard. If Flood Impact Analysis is used, the Apex will have a freeboard of 350mm.
3	Driveway Levels	Levels on plan SD02_04 on each side of the driveway between the building line and the apex suggests the driveway is falling towards the apex. However, the long-section in plan SD06-02 indicates the driveway between the apex and the building line falls towards the building line. The levels shown on plan SD02-04 should be clarified.
4	Footpath Levels at the Building Line	Footpath levels at Building line levels shown on plan SD02-04 are between 14.28 and 14.33. Plan SD06-04 section view shows a vehicle ramp surface level at the building line as RL14.229. During a 1% AEP rain event, surface water from the road reserve is likely to extend/backwash into the development's vehicle ramp however it will be prevented from flowing into the basement by the proposed apex.
5	Building Line Level at the Development Entrance	Plan SD06 -04 Revision/1 section shows the building line level (RL14.229) at the driveway as being only 35mm higher than the invert of the channel (RL 14.194). This will allow channel flow to extend into the footpath area during moderate rain events and is not satisfactory. The existing conditions plan indicates the existing surface levels at the property line is 14.32 and the invert is 14.13. The existing invert and building line levels should be clearly indicated on the plans. The building line level at the vehicle crossing should not be lowered.
6	Footpaths	The footpath and the footpath area of the vehicle crossing should be DDA compliant.
7	Vehicle Crossing	The proposed vehicle crossing has very large kerb returns. The vehicle crossing should be constructed in accordance with Council standards and the footpath area of the vehicle crossing should be at grade with the adjoining footpath on both sides.
8	Telecommunications Pit in Victoria Street	The Existing Conditions plan SD01-02 shows an existing Telstra pit in the footpath 3.5m from the east property line as having a surface level of RL14.15. However, the ground floor plan SD02-04 Revision /2 shows the surface level of this pit as RL 14.34. This is a difference of 190mm. Clarify

Item	Item	Engineering Comment
		the level difference. Show existing and proposed footpath surface levels along the entire south building line on plan SD02-04 revision /2.
9	Steps to Main Yarra Trail	The steps down to the Main Yarra trail extend beyond the property's northern boundary and will require the approval of the authority responsible for that part of the river bank.
10	Demolition Plan	SD01_03 – Demolition Plan does not show the existing vehicle crossing being demolished. However, Ground Floor Plan SD02_04 Rev /2 refers to proposed crossover. The demolition plan should be amended.
11	Pedestrian Link	SD02_04 Rev/2 – Ground Floor Plan: the pedestrian link along the east boundary falls to the north. The pedestrian link connects to the Victoria St Footpath (approx. RL 14.34). This is below the flood level identified in the Flood Impact Analysis. During severe storm events surface water from the road reserve may flow down the pedestrian link and to abutting building entry points. The pedestrian link design should ensure that surface water from the Victoria Street road reserve does not enter the development.

SECTION 2: Engineering Conditions – Planning Permit

The conditions outlined in ***Table 4*** below must be included in the Planning Permit to ensure the specific engineering requirements are complied with.

Note: further conditions may be required if any of the items in Table 2 are not fulfilled prior to the issuing of the Planning Permit.

Table 4 - Engineering conditions to be included in the Planning Permit

Condition related to…	Engineering condition
VC: *Design*	Concurrent with the submission of Condition 1 plans or by such later date as approved in writing by the Responsible Authority, a vehicle crossing design must be submitted to Council's Civil Engineering Department for approval. The submitted design must demonstrate compliance with City of Yarra's *Vehicle Crossing Information Sheet* and the Department of Transport and Planning's geometric requirements.
VC: *Construction*	Before the building/s is/are occupied, or by such later date as approved in writing by the Responsible Authority, any new vehicle crossing must be constructed: (a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority.
VC: *Reinstatement*	Before the building/s is/are occupied, or by such later date as approved in writing by the Responsible Authority, any redundant vehicular crossing must be demolished and re-instated as footpath, verge (if applicable), and kerb and channel: (a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority.

Condition related to…	Engineering condition
Public Realm: *Footpath specific*	Before the building/s is/are occupied or by such later date as approved in writing by the Responsible Authority, the footpath along the property's Victoria Street frontage must be reconstructed in asphalt: (a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority(s).
Public Realm: *Kerb & channel specific*	Before the building/s is/are occupied, or by such later date as approved in writing by the Responsible Authority, the kerb and channel along the property's Victoria Street frontage must be reconstructed:

Condition related to…	Engineering condition
	(a) at the permit holder's cost; *and* (b) to the satisfaction of the Responsible Authority(s).
Public Realm: *Functional layout plan* *[High level details]*	Concurrent with the submission of Condition 1 plans, or by such later date as approved in writing by the Responsible Authority, a Public Realm Plan of all public realm improvements associated with the development must be prepared, submitted and approved by the Responsible Authority. When approved, the plan will be endorsed and will then form part of the permit. The Public Realm Plan must show, but not be limited to, the following: (a) the new vehicle crossing; (b) the reconstructed footpath outside the property frontage; (c) the reconstructed kerb and channel; (d) at the permit holder's cost; *and* (e) to the satisfaction of the Responsible Authority.
Public Realm: *Detailed design plans*	Before the development commences (excluding site preparations, demolition and bulk excavation), or by such later date as approved in writing by the Responsible Authority, detailed design drawings of the works approved under the Public Realm Plan (as required by Condition XX) addressing all road infrastructure works (including soft/hard landscaping), must be submitted to and approved by Council's Civil Engineering Department. Once approved, the detailed design drawings will be endorsed and will then form part of the permit.
Public Realm: Construction & handover	Before the building is occupied, all associated works shown on the endorsed detailed design plans for the public realm (as required by Condition XX) must be fully constructed and completed to the satisfaction of the Council's Civil Engineering Department and at no cost to the Responsible Authority.

Condition related to…	Engineering condition
Reinstatement of damages caused during development works	Within 2 months of the completion or by such later date as approved in writing by the Responsible Authority, any damage to Council infrastructure resulting from the development must be reinstated: (a) In accordance with Yarra Standard Drawings | Yarra City Council (b) at the permit holder's cost; and (c) To the satisfaction of the Responsible Authority.

Table 5 - Notes to be included in the Planning Permit

Note related to…	Engineering note
Stormwater: Site discharge	The site stormwater must be directed to the nominated legal point of discharge (LPD) and shall be limited to equivalent pre-development levels *or* 70% impervious coverage, whichever is lowest, for a 20% AEP rainfall event.
Stormwater: Onsite detention	The development must detain onsite, at a minimum, the 10% AEP storm event. For cases where a safe overland flow path cannot be provided or where flows exceeding pipe capacity may impact the development or adjacent, upstream, or downstream properties, the requirement will be to detain the 1% AEP storm event.
Redundant stormwater outlets	All redundant property drain outlets are to be demolished and reinstated to Council's satisfaction and at the Permit Holder's cost.
Service infrastructure adjustment to suit finished grades, alignments, etc.	Any service poles, structures or pits located within the public realm areas that interfere with the proposal, must be adjusted accordingly: (a) at the permit holder's cost; and (b) to the satisfaction of the Responsible Authority.
Existing parking infrastructure	No parking restriction signs, or line-marked on-street parking bays are to be removed, adjusted, changed or relocated without approval or authorisation from Council's Parking Management unit and Construction Management branch.
Private utility assets	Areas must be provided inside the property line and adjacent to the footpath to accommodate pits and meters. No private pits, boundary traps, valves or meters on Council property will be accepted.
Adjusting utility infrastructure	Any services poles, structures or pits that interfere with the proposal must be adjusted, removed or relocated at the owner's expense after seeking approval from the relevant authority.
Existing parking infrastructure	Any on-street parking reinstated as a result of development works must be approved by Council's Parking Management unit.

SECTION 3: Engineering Detailed Assessment

CAR PARKING PROVISION

Proposed Development

Under the provisions of Clause 52.06-5 of the Yarra Planning Scheme, the development's parking requirements are as follows:

Proposed Use	Quantity/ Size	Statutory Parking Rate*	No. of Spaces Required	No. of Spaces Allocated
One-Bedroom Dwelling	21	1.0 space per dwelling	21	167
Two-Bedroom Dwelling	67	1.0 space per dwelling	67	
Three-Bedroom Dwelling	35	2.0 spaces per dwelling	70	
Office	287 m^2	3.0 spaces per 100 m^2 of net floor area	8	1
Community Facility (Place of Assembly)	122 m^2 12 patrons	0.3 spaces to each patron permitted	3	1
		Total	**169 spaces**	**169 spaces**

***** Since the site is located within the Principal Public Transport Network Area, the parking rates in Column B of Clause 52.06-5 now apply.

To reduce the number of car parking spaces required under Clause 52.06-5 (including to reduce to zero spaces), the application for the car parking reduction must be accompanied by a Car Parking Demand Assessment.

Car Parking Demand Assessment

In reducing the number of parking spaces required for the proposed development, the Car Parking Demand Assessment would assess the following:

Parking Demand Consideration	Details
Parking Demand for the Dwellings	The statutory car parking requirement for the dwellings have been met.
Parking Demand for the Office Use	To assess the likely car parking demand for the office use, Traffix Group has sourced the ABS *Journey to Work* data for the Abbotsford area from the 2011 and the 2016 Census. The various travel modes have been listed in Table 4 of the Traffic Engineering Assessment report. The data shows that there is a decline in the reliance of private motor vehicle use (as a driver), whereas the usage of more sustainable forms of transport has increased.

Parking Demand Consideration	Details
	The site is very well positioned in terms of public transport services and bicycle infrastructure. The provision of only one space for the office use would encourage employees to utilise more sustainable forms of transport when commuting to and from work. In the context of the development, the provision of one space is considered appropriate.
Parking Demand for the Community Facility	The community facility would provide one space for a staff member. The balance of the car parking (two spaces) would be accommodated off-site. The facility would cater for the building and the surrounding local area. The provision of one space for this use is considered appropriate.
Availability of Public Transport in the Locality of the Land	The following public transport services can be accessed to and from the site by foot: ▪ Victoria Street trams – 40 metre walk ▪ Church Street trams – 1080 metre walk ▪ North Richmond railway station – 1800 metre walk ▪ Hoddle Street buses – 1900 metre walk
Convenience of Pedestrian and Cyclist Access	The site is very well positioned in terms of pedestrian access to public transport nodes, shops, supermarket, places of employment and education and other essential facilities. The site also has good connectivity to the on- and off-road bicycle network.

Appropriateness of Providing Fewer Spaces than the Likely Parking Demand

Clause 52.06 lists a number of considerations for deciding whether the required number of spaces should be reduced. For the subject site, the following considerations are as follows:

Consideration	Details
Availability of Car Parking	The level of on-street parking in this part of Abbotsford is very high during business hours. The area surrounding the subject site is blanketed in time based parking restrictions. The high parking demand in the surrounding streets would be a disincentive for employees and visitors to drive.
Relevant Local Policy or Incorporated Document	In terms of transport, the proposed development is considered to be in line with the objectives contained in Council's *Moving Forward – Yarra's Transport Strategy 2022-32*. The site is ideally located with regard to sustainable transport alternatives and the reduced provision of on-site car parking would potentially discourage private motor vehicle ownership and use.

Adequacy of Car Parking

From a traffic engineering perspective, the car parking provision for the various uses is considered appropriate in the context of the development and the surrounding area.

The operation of the development should not adversely impact on the existing on-street parking conditions in the area.

The Engineering Referral team has no objection to the reduction in the car parking requirement for this site.

TRAFFIC IMPACT

Trip Generation

The trip generation for the site adopted by Traffix Group is as follows:

Proposed Use	Adopted Traffic Generation Rate	Daily Traffic	AM Peak Hour	PM Peak Hour
Residential (123 dwellings)	0.3 trips per dwelling in each peak hour 3.0 trips per dwelling per day	369	37	37
Office	1.0 trip per space in each peak hour		1	1
Community Facility	1.0 trip per space in each peak hour		1	1
	Total		**39 trips**	**39 trips**

Peak Hour Directional Splits

The proposed peak hour directional split for the dwellings is as follows:

- AM Peak Hour: 20% IN (7 trips) and 80% OUT (30 trips)
- PM Peak Hour: 40% OUT (22 trips) and 60% IN (15 trips)

The peak hour directional split for office and community facility would be as follows:

- AM Peak Hour: 100% IN (2 trips) and 0% OUT (0 trips)
- PM Peak Hour: 100% OUT (2 trips) and 0% IN (0 trips)

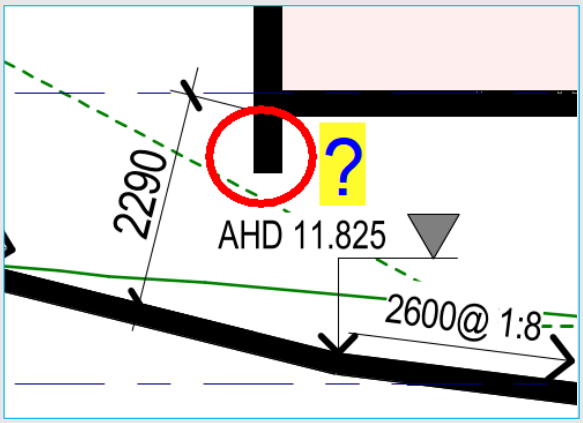
Traffic Impact of the Development

Traffic Group had conducted peak period turning movements counts for the existing access at the site with Victoria Street on Thursday 14 July 2022 from 7:00am to 7:00pm. The survey results indicated that the existing site generated some 20 trips in the AM peak hour and 14 trips in the PM peak hour.

The new development would generate an additional 19 trips in the AM peak hour and an additional 25 trips in the PM peak hour. The magnitude of traffic generated by the development is not unduly high and should not adversely impact the traffic operation of Victoria Street.

DEVELOPMENT LAYOUT DESIGN

Layout Design Assessment

Item	Assessment
Access Arrangements	
Development Entrance	The 7.35 metre wide development entrance satisfies the Australian/New Zealand Standard AS/NZS 2890.1:2004. The induvial entry and exit lanes at the development entrance have not been dimensioned.
Visibility	A pedestrian sight triangle measuring 2.0 metres by 2.5 metres has been provided at the exit lane of the development entrance as required by *Design standard 1 – Accessways* of Clause 52.06-9. A column partially obstructs this sight triangle, however, an exiting motorist can adequately view pedestrian movements to the east of the column.
Headroom Clearance	The section drawing of the ramped accessways indicates that the minimum headroom clearance would 2.29 metres. The section drawing indicates that there appears to be a protruding structural element on the underside of the ceiling, as shown below:  The applicant must confirm that the headroom clearance would be obstructed by a protruding structural element.
Internal Ramped Accessways	Internal ramped accessways have wall-to-wall widths of 6.1 metres, which satisfy AS/NZS 2890.1:2004.
Car Parking Modules	
At-grade Parking Spaces	The dimensions of the parking spaces (2.6 metres by 4.9 metres) satisfy *Design standard 2: Car parking spaces* of Clause 52.06-9.
Tandem Parking Sets	Tandem parking sets have lengths of 10.3 metres, which satisfy Design standard 2.
Aisles	The 6.4 metre wide aisle satisfies *Table 2: Minimum dimensions of car parking spaces and accessways* of Clause 52.06-9.

Item	Assessment
Column Depths and Setbacks	Columns have depths of 1000 mm and are set back 250 mm from the aisles and are positioned outside of parking space clearance envelopes as required by *Diagram 1 Clearance to car parking spaces* in Clause 52.06-9.
Clearances to Walls	Spaces adjacent to walls have been provided with 300 mm clearances, which satisfy *Design standard 2.*
Motorcycle Spaces	The dimensions of the motorcycle spaces (1.2 metres by 2.5 metres) satisfy AS/NZS 2890.1:2004.
Gradients	
Ramp Grade for the first 5.0 metres inside the Property	The ramp grade for the first 5.0 metres inside the development is 1 in 40 (grading upwards from the property line), which satisfies *Design standard 3: Gradients*.
Ramp Grades and Changes of Grade	The ramp grades and changes of grade satisfy *Table 3 Ramp Gradients* of Clause 52.06-9.
Swept Path Assessment and Ground Clearance	
Vehicle Turning Movements End Spaces – Basement 2 Car Park 31423***** Sheet 01	The swept path diagrams of a B85 design vehicle entering and exiting the end spaces (Nos. 163 and 164) in Basement 2 Car Park are considered satisfactory.
Waste Collection Vehicle Movements Loading Area – Lower Ground Floor 31423 Sheet 02	The swept path diagrams for a 6.345 metre long waste collection vehicle manoeuvring into and out of the loading bay via the ramped accessway, are considered satisfactory.
Waste Collection Vehicle Entry and Exit Movements Development Entrance – Victoria Street 31423 Sheet 02	The swept path diagrams for a waste collection vehicle entering and exiting the development entrance via Victoria street are considered satisfactory.
Vehicle Ground Clearance Development Entrance – Victoria Street 31243 Sheet 03	The ground clearance of a B99 design vehicle entering and exiting the development entrance via Victoria Street is considered satisfactory. There is concern that the level difference between the invert and the property line is only 35 mm, which may potentially cause stormwater from the kerb and channel to enter the property during moderate to heavy storm events. The applicant would need to consider adjusting the crossing design to provide a greater level difference between the property line level and the invert level without compromising the ground clearance of a B99 design vehicle.
Other Items	
Proposed Vehicle Crossing Drawing No. SD06_04	The applicant must fully dimension the proposed vehicle crossing drawing (SD06_04).
Proposed Vehicle Crossing Geometric Design	The design (plan view) of the proposed vehicle crossing must satisfy the Department of Transport and Planning's geometric requirements.

Item	Assessment
Loading Arrangements	The dimensions of the loading bay (4.9 metres by 8.1 metres) in the Lower Ground Floor car park can satisfactory accommodate a 6.345 metre long waste collection vehicle. With the exception of the waste collection vehicle, the maximum vehicle size that could enter the development is a B99 design vehicle (due to a minimum headroom clearance of 2.2 metres). The vehicle size restriction should be documented in the site's Car Parking Management Plan.

* Traffix Group swept path diagram drawing number.

INFRASTRUCTURE ITEMS AND CONSTRUCTION ACTIVITIES

Item	Details
General	
Impact on Council Road Assets during Construction	The construction of the new buildings/retrofitting of existing buildings, the provision of underground utilities and construction traffic servicing and transporting materials to the site will impact on Council assets. Trenching and areas of excavation for underground services invariably deteriorates the condition and integrity of footpaths, kerb and channel, laneways and road pavements of the adjacent roads to the site. It is essential that the developer rehabilitates/restores laneways, footpaths, kerbing and other road related items, as recommended by Council, to ensure that the Council infrastructure surrounding the site has a high level of serviceability for employees, visitors and other users of the site.
Victoria Street road Frontage	
Kerb and Channel Reconstruction Footpath Reconstruction	Construction works at the site and the occupation of the footpath during works will impact on the condition of the footpaths and kerb and channel. The provision of underground utilities often require open cut trenches to be made – which result in patch-work reinstatements. The Permit Holder is to reconstruct the footpath and kerb and channel along the property's Victoria Street road frontage.

SECTION 4: Acknowledgement

Engineer: Mark Pisani

Signature: 

Date: 3 June 2025

09/07/25
Council Reference: PPE25/0291

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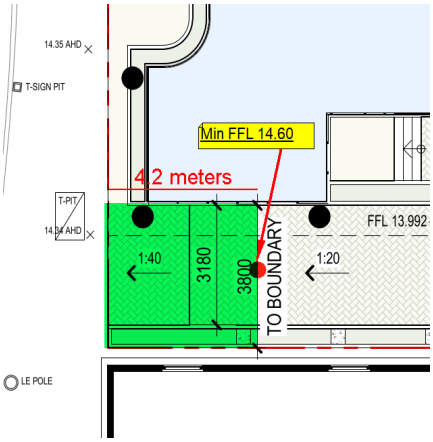
Flood Condition Letter for development at 675 Victoria St, Abbotsford

The frontage of the proposed development at 675 Victoria Street falls within the local flood overlay. Therefore, specific considerations must be addressed at the design stage to ensure the development is protected from inundation during a 1 in 100 AEP storm event.

- Council flood mapping shows potential surface flooding in Victoria Street during a 1% AEP event.
- This has been confirmed by the flood impact analysis performed by HARC on 24 October 2024 and the applicable flood level at the frontage has been identified as **14.45m** AHD during a 1% AEP.
- This means the property frontage may experience ponding during severe storm events, and the development must protect against this.
- Basement ramp apex is set at RL 14.75 m, meeting freeboard requirements to prevent stormwater entering the basement from Victoria Street.
- The pedestrian link along the eastern boundary is below the flood level and may allow surface water from Victoria Street to flow north toward the building entrances. Thus, pedestrian link design should be adjusted to prevent surface water entering the development. This has been recommended as a permit condition.
- The levels of the first 4.2m of the pedestrian link to be redesigned to provide a freeboard of min 150mm above the applicable flood level (refer below snippet).

National Relay Service
TTY 133 677 then (03) 9205 5555

Languages
العربية 9280 1930
中文 9280 1937
Ελληνικά 9280 1934
Italiano 9280 1931
Español 9280 1935
Tiếng Việt 9280 1939
Other 9280 1940





- GL01, located at the southeast corner of the proposed development, falls within the local flood extent. To prevent flooding the interior, the windows must either be flood-proofed or have their sill level set at a minimum of 14.75 m AHD.



- Any new fencing along the southern boundary and part of the eastern boundary (within the flood overlay) must be semi-permeable to avoid obstructing overland flow paths.
- There should be no changes to the natural ground level (NGL) along the southern site boundary to avoid changing the flow pattern.

LPD Application Status

- LPD application eRC24/00753 has been submitted.
- Further information was requested in the pre-app letter dated 22 January 2025.
- No further documentation has been received from the applicant.

Road Drainage Responsibility

- Victoria Street is a VicRoads asset.
- Any flooding or ponding in the road reserve is their responsibility.
- The council's role is to ensure the property itself is protected from overland flow from the road.
- The development is not expected to worsen the flooding on Victoria Street itself, as stormwater within the road reserve falls under the responsibility of Transport for Victoria.

Recommended Planning Permit Conditions (for discussion)

- The levels of the first 4.2m of the pedestrian link must be modified to provide a freeboard height of min 150mm above the applicable flood level to prevent surface water from Victoria Street entering the development.
- Semi-permeable fencing must be installed along the southern and part of the eastern boundaries within the flood overlay to maintain overland flow paths.
- The basement ramp apex level must be maintained at no lower than RL 14.75 m AHD.
- Standard stormwater discharge to the Legal Point of Discharge (LPD) to Council's satisfaction.
- Stormwater drainage works must be designed to protect the building from a 1% AEP flood event with appropriate freeboard.
- GL01, located at the southeast corner of the proposed development, falls within the local flood extent. To prevent flooding the interior, the windows must either be flood-proofed or have their sill level set at a minimum of 14.75 m AHD.

X Scott Carroll

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Yarra City Council acknowledges the Wurundjeri as the Traditional Owners of this country, pays tribute to all Aboriginal and Torres Strait Islander people in Yarra, and gives respect to the Elders past and present.

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Perpetual Corporate Trust Yield Plus Infrastructure Property Fund No.2 Trust 2B Ownership Trust No.5

675 Victoria Street, Abbotsford

Pedestrian Level Winds - Wind Tunnel Test



30N-22-0060-TRP-91297-0

22 October 2024

Job Title:	675 Victoria Street, Abbotsford
Report Title:	Pedestrian Level Winds - Wind Tunnel Test
Document Reference:	30N-22-0060-TRP-91297-0

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Issued By:	Eric Yuen 22 Oct 2024		Wind Team Leader

Revision History:

Rev. #	*Comments / Details of change(s) made*	*Date*	*Revised by:*
Rev. 00	Original issue	14 Oct 2024	

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Executive Summary

Perpetual Corporate Trust Yield Plus Infrastructure Property Fund No.2 Trust 2B Ownership Trust No.5 commissioned Vipac Engineers and Scientists Pty Ltd to carry out a wind tunnel test to determine the likely pedestrian level wind conditions for the proposed development at **675 Victoria Street, Abbotsford.**

The model was constructed based on drawings supplied by **SJB Architects** in **October 2024**. The proposed development and surrounding buildings covering a circular area of approximately 500 m radius were modelled at a 1:400 scale. The approaching mean and turbulent flows of the Terrain Category 2.5 (340 to 360 & 0 to 20 azimuth degrees), Terrain and Terrain Category 3 (all other wind directions) Atmospheric Boundary Layer were modelled based on Australian Standard AS 1170.2-2021.

The findings of the study are summarised as follows:

The proposed design of the development:

- fulfils the recommended criterion for **Safety** at all test locations **with recommendations**;
- fulfils the recommended criterion for **Walking** at all footpath locations;
- fulfils the recommended criterion for **Standing** at all building entrances **with recommendations**; and
- fulfils the recommended criteria for **Walking** at all open terraces and communal terraces **with the recommendations.**

The proposed development would not cause a significant adverse impact on the adjacent areas.

As a general statement, common to all new developments, educating occupants about wind conditions at high-level terraces/balconies during high-wind events and tying down loose furniture are highly recommended.

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1 Introduction

Vipac Engineers & Scientists Ltd was commissioned by **Perpetual Corporate Trust Yield Plus Infrastructure Property Fund No.2 Trust 2B Ownership Trust No.5** to carry out a wind tunnel test of the likely wind conditions for the proposed development at **675 Victoria Street, Abbotsford.**

The proposed development is a 12-storey residential building with a roof height of 41.7m from Victoria Street and 45.9m from Yarra Riverbank. The site is bounded by Victoria Street to the south, Yarra Riverbank to the North, and existing developments to the west and east. A satellite image of the proposed development site, east elevation of the building, and the ground floor plan with approximate dimensions overlaid are shown in Figure 1, Figure 2 and Figure 3, respectively.

The proposed development is located on southern bank of the Yarra River. The site is surrounded within an approximately 3 km radius predominately by low to mid-rise developments with the high-rise development of the Melbourne CBD to the far west. Considering the surroundings and terrain, the site of the proposed development is assumed to be within Terrain Category 2.5 for the azimuth degrees of 340° to 360° and Terrain Category 3 for all other directions (Figure 4).

This report details the pedestrian level wind assessment results of the tests carried out on a 1:400 scale model of the proposed development in Vipac's Boundary Layer Wind Tunnel in Melbourne, during October 2024. The results show the wind effects in ground level public areas adjacent to the development as proposed.

The pedestrian wind environment study of the development was conducted using Omni-directional pressure sensor techniques to predict wind velocities. The study investigated safety and comfort in ground level pedestrian access-ways adjacent to the project.

The model was constructed to drawings supplied by **SJB Architects** in **October 2024**. Figure 5 and Figure 6 show the 1:400 scaled models in the wind tunnel. A complete list of the drawings used to construct the model is provided in Appendix B of this report.

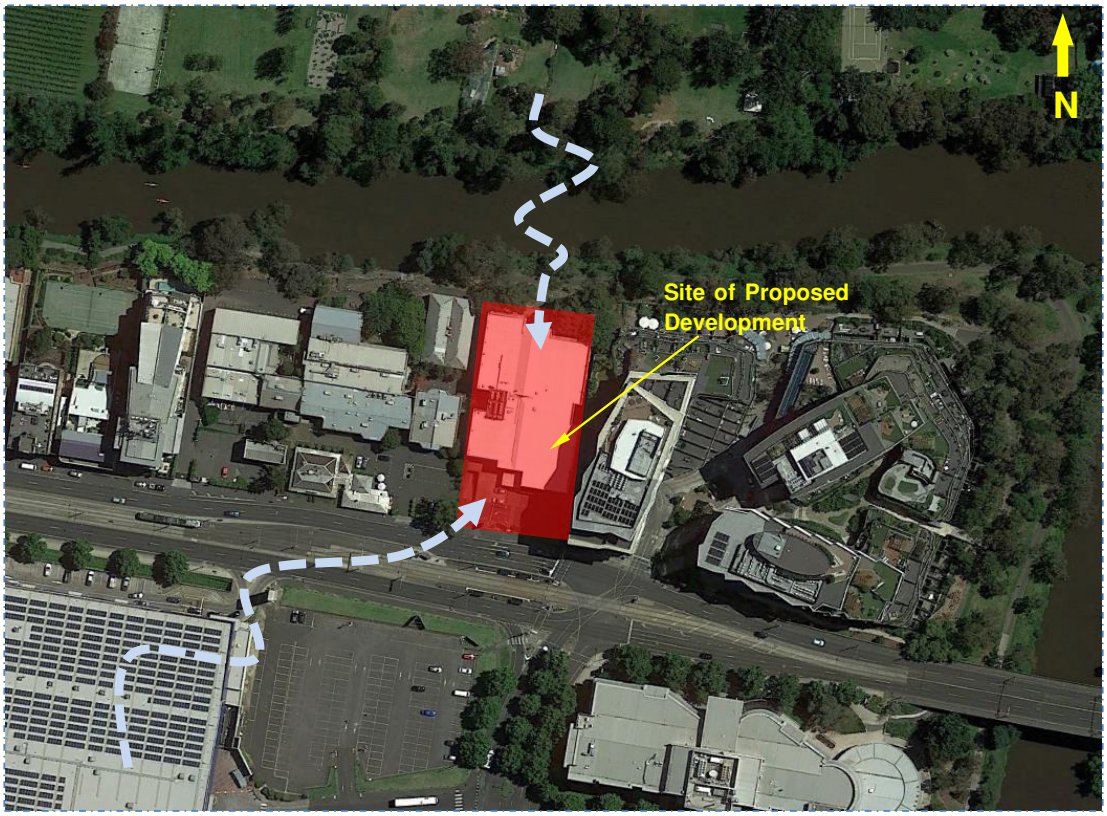


Figure 1: Aerial view of the proposed development site.



Figure 2: East Elevation of the proposed development.

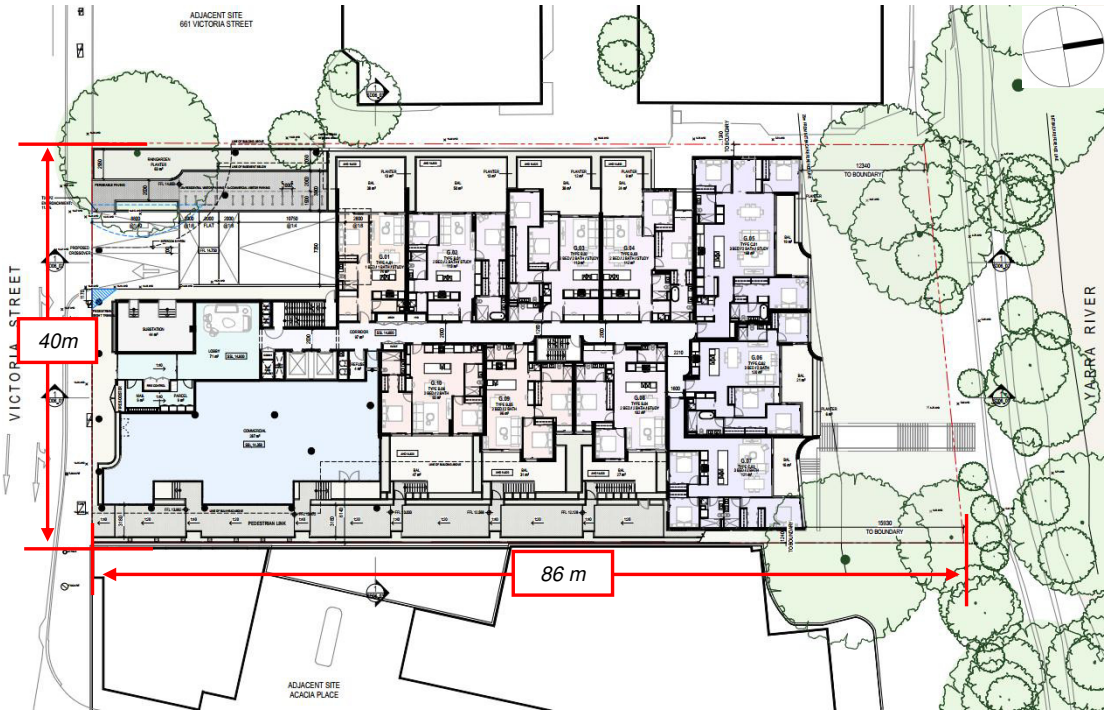


Figure 3: Ground level plan with the overall dimensions overlaid.

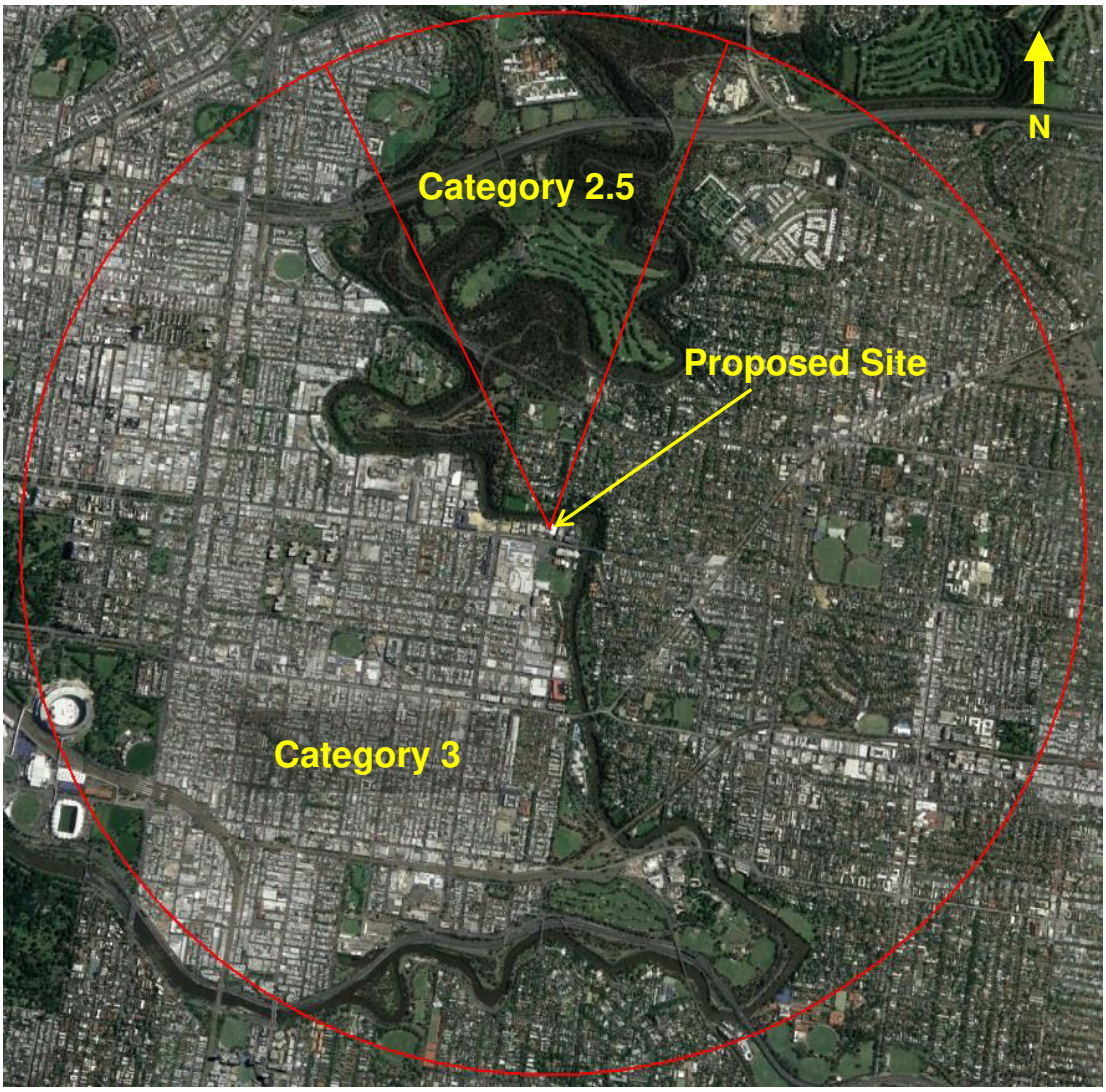


Figure 4: Assumed terrain roughness for wind speed estimation.

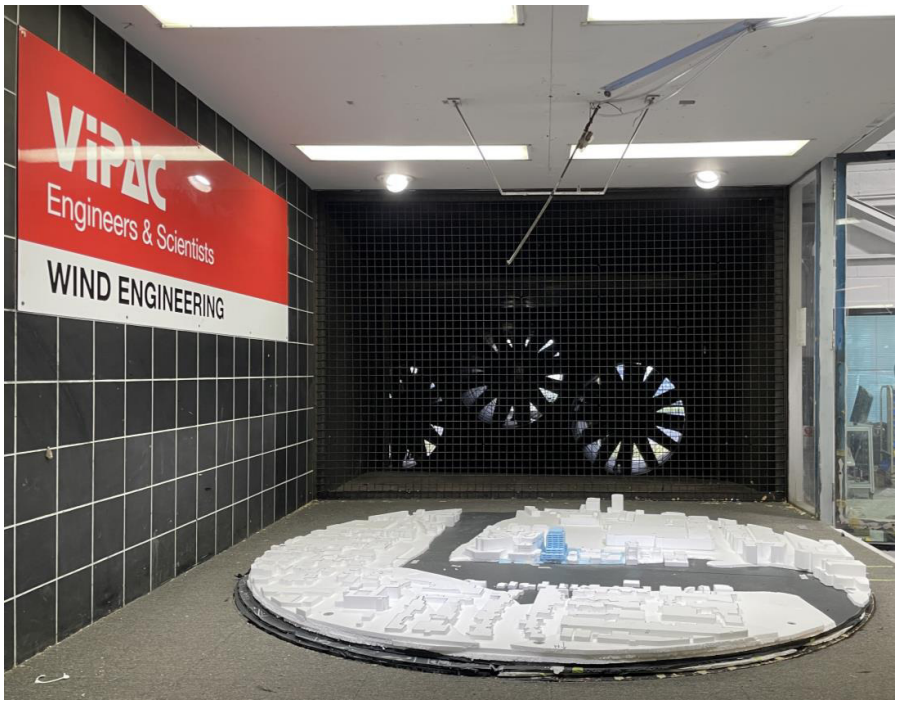


Figure 5: Overall view from northwest of the 1:400 scale model of the proposed development in the wind tunnel.

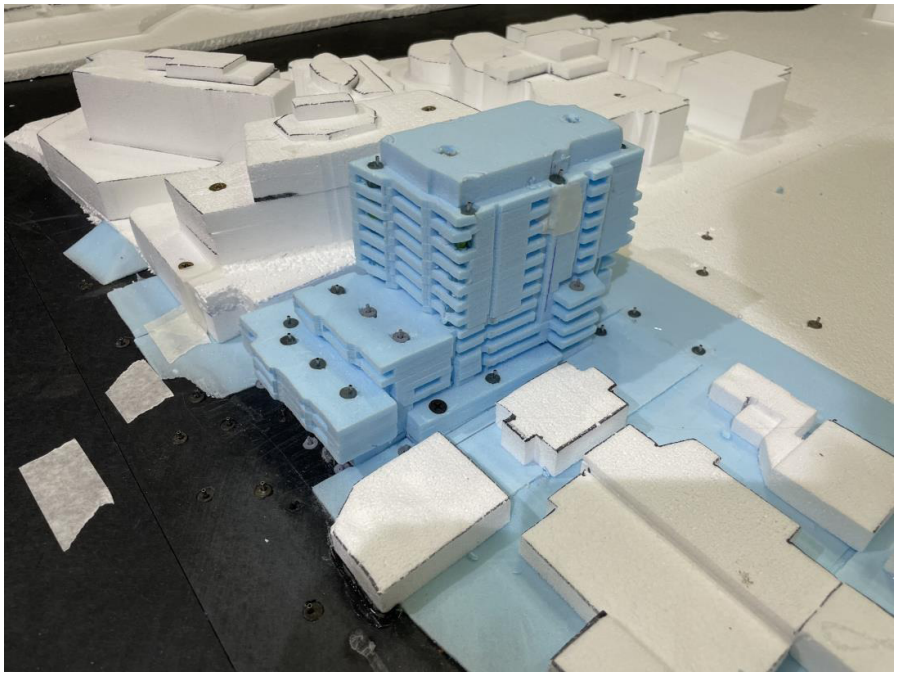


Figure 6: Close up view from the northwest of the 1:400 scaled model in the wind tunnel.

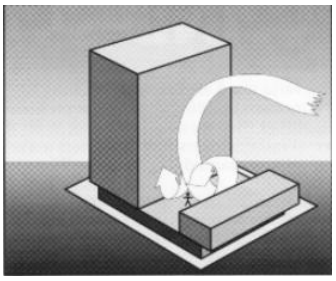
1.1 Environmental Wind Effects

Atmospheric Boundary Layer

As wind flows over the earth it encounters various roughness elements and terrain such as water, forests, houses and buildings. To varying degrees, these elements reduce the mean wind speed at low elevations and increase air turbulence. The wind above these obstructions travels with un-attenuated velocity, driven by atmospheric pressure gradients. The resultant increase in wind speed with height above ground is known as a wind velocity profile. When this wind profile encounters a tall building, some of the fast moving wind at upper elevations is diverted down to ground level resulting in local adverse wind effects.

The terminology used to describe the wind flow patterns around the proposed Development is based on the aerodynamic mechanism, direction and nature of the wind flow.

Downwash – refers to a flow of air down the exposed face of a tower. A tall tower can deflect a fast moving wind at higher elevations downwards.

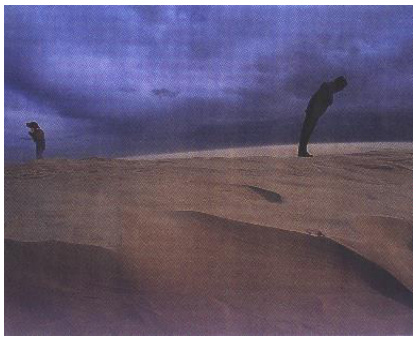


Corner Accelerations – when wind flows around the corner of a building it tends to accelerate in a similar manner to airflow over the top of an aeroplane wing.

Flow separation – when wind flowing along a surface suddenly detaches from that surface and the resultant energy dissipation produces increased turbulence in the flow. Flow separation at a building corner or at a solid screen can result in gusty conditions.

Flow channelling – the well-known "street canyon" effect occurs when a large volume of air is funnelled through a constricted pathway. To maintain flow continuity the wind must speed up as it passes through the constriction. Examples of this might occur between two towers, in a narrowing street or under a bridge.

Direct Exposure – a location with little upstream shielding for a wind direction of interest. The location will be exposed to the unabated mean wind and gust velocity. Piers and open water frontage may have such exposure.



2 Regional Wind Climate

The mean and gust wind speeds have been recorded in the Melbourne area for over 30 years. This data has been analysed and the directional probability distribution of wind speeds has been determined. The directional distribution of hourly mean wind speed at the gradient height, with a probability of 0.1% of time and 20% of time exceeded are shown in Figure 7. The wind data at this free stream height is common to all Melbourne city sites and may be used as a reference to assess ground level wind conditions at the site.

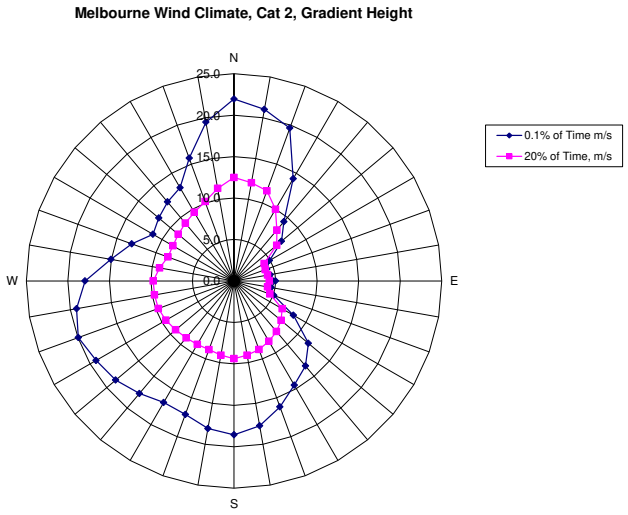


Figure 7: Directional Distribution of Mean Hourly Wind Velocities (m/s) for 0.1% and 20% exceeded at Gradient Height for Melbourne.

3 Assessment Criteria

The Better Apartment Guidelines Environment and Clause 58.04-4 criteria for wind impact were applied in the study. The document recommends the following wind comfort criteria (Table 1).

Table 1: Wind criteria.

Unsafe	Comfortable
Annual maximum 3 second gust wind speed exceeding **20m/sec** with a probability of exceedance of 0.1% considering at least 16 wind directions.	Hourly mean wind speed or gust equivalent mean speed from all wind directions combined with probability of exceedance less than 20% of the time, equal to or less than: **3m/sec** for sitting areas (outdoor cafés) **4m/sec** for standing areas (window shopping, queuing) **5m/sec** for walking areas (steady steps for most pedestrians)

This criterion specifically calls for the safety criterion to be used to assess infrequent winds (e.g. peak event of ≤ 0.1% of the time); and the perceived pedestrian comfort to be assessed based on frequently occurring winds (e.g. winds that occurs 80% of the time).

The mean wind speed is hourly mean speed or gust equivalent mean (3 sec gust divided by 1.85), whichever is greater.

The Schedule specifies that safe and comfortable wind conditions must be achieved in publicly accessible areas within a distance equal to half the longest width of the building measured from all facades or half the overall height of the building, whichever is greater, as shown in Figure 8.

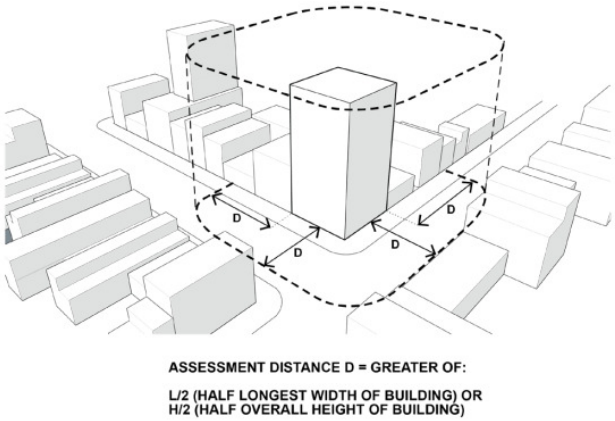


Figure 8: Assessment distance as detailed in Clause 58.04-4

3.1.1 Use of Adjacent Pedestrian Occupied Areas & Recommended Comfort Criteria

The following table lists the specific areas adjacent to the proposed development and the corresponding recommended criteria.

Table 3 – Recommended application of criteria.

Area	Specific location	Recommended Criteria
Public Footpaths, Accessways	Along Victoria Street, Pedestrian link to east and the Yarra Riverbank (Figure 9)	Walking
Building Entrances	Main building entrance throughout site (Figure 9)	Standing
Outdoor Amenity Areas	North of site on the ground level (Figure 9)	Walking
Balcony/Terraces	Up the height of the building (Figure 10 and Figure 11)	Walking

3.1.2 Terrace / balcony Recommended Criterion Discussion

Vipac recommends as a minimum that rooftop terrace areas meet the criterion for walking since:

- these areas are not public spaces;
- the use of these areas is optional;
- many similar developments in Melbourne and other Australian capital cities experience wind conditions on balconies and elevated deck areas in the vicinity of the criterion for walking.

However, it should be noted that meeting the walking criterion on elevated recreation areas will be no guarantee that occupants will find wind conditions in these areas acceptable at all times.

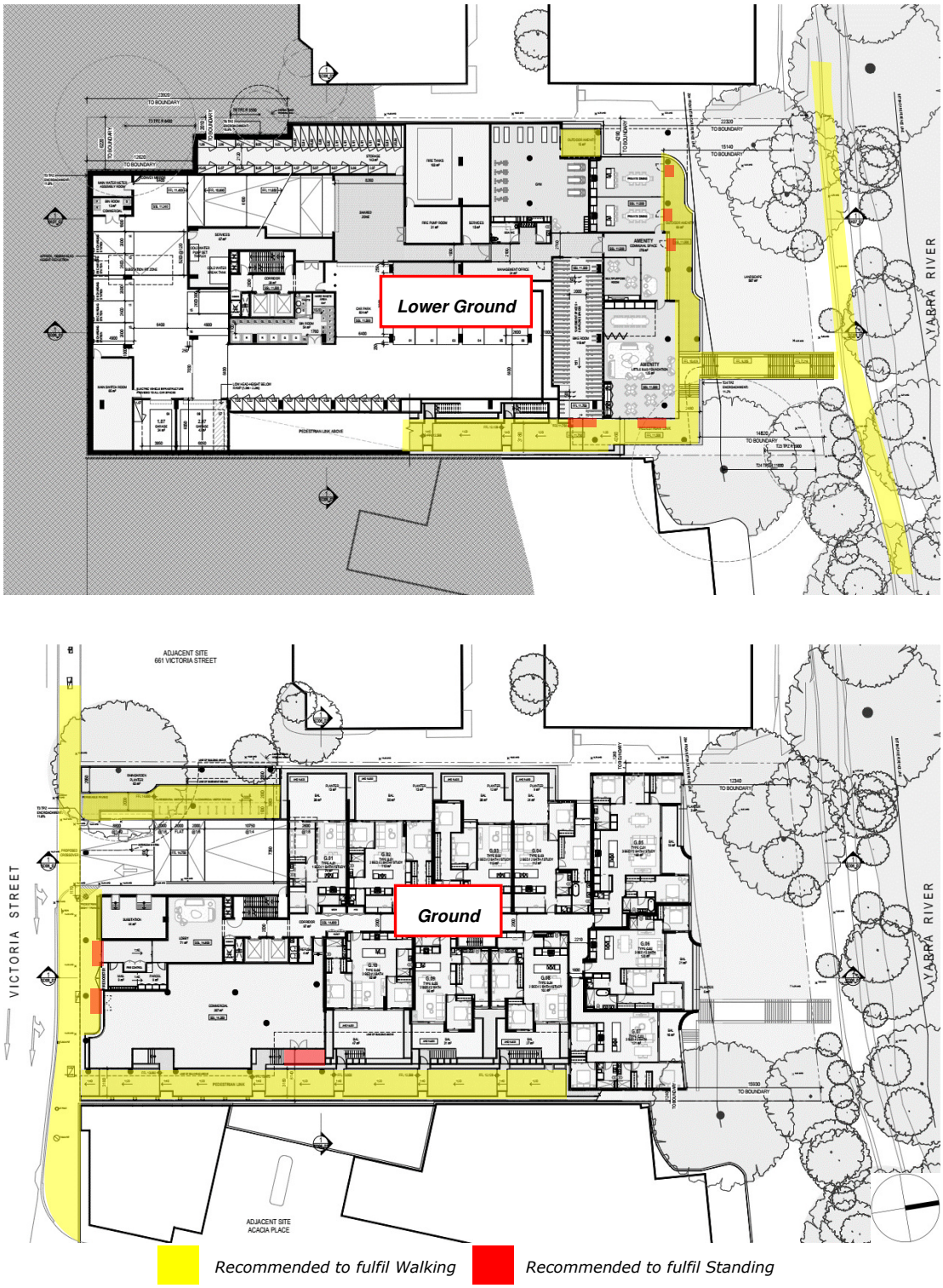


Figure 9: Lower Ground (top) and Ground floor (bottom) plans with recommended wind criteria overlaid.



Figure 10: Level 1 (top) and Level 3 (bottom) plans with recommended wind criteria overlaid.

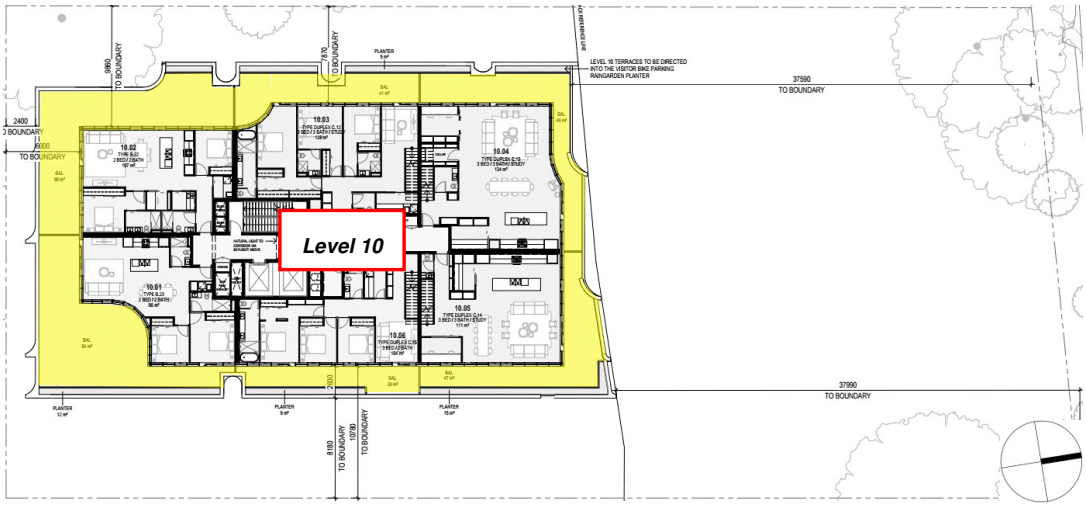


Figure 11: Level 10 floor plan with recommended wind criteria overlaid.

4 Wind Tunnel Simulation

4.1 Similarity Requirements

The validity of wind tunnel testing relies on the similarity between model and full-scale parameters. This requires undistorted length scaling (ie. geometric similarity), similarity of flow parameters (i.e. kinematic similarity) and finally similarity of pressures and forces.

Complete similarity is usually impossible to obtain because of the competing requirements of the various non-dimensional parameters, (e.g. Reynolds Number, Rossby Number and Richardson Number). Some requirements (i.e. Reynolds Number equality) can be waived for sharp edged structures immersed in a neutrally stable atmospheric boundary layer and geometric and kinematic similarity suffice. These are the requirements specified in Section C1.4, AS/NZS 1170.2 Supplement 1: 2011 [4] and are employed in this study.

4.2 Approach Wind Simulation

The wind effects tests were carried out in the 3m wide × 2m tall × 16m long Boundary Layer Wind Tunnel at Vipac Engineers and Scientists Ltd in Melbourne. The Boundary Layer Wind Tunnel is designed to simulate the flow incident on a proposed development by modelling the upstream terrain characteristic roughness. To this end, an estimate of the upstream terrain properties for the Development has been made and reproduced in the wind tunnel.

The approaching mean and turbulent flows of the Terrain Categories 2.5 and 3 Atmospheric Boundary Layers based on different exposures were modelled based on Australia Standard AS 1170.2-2021. The wind tunnel calibration velocity and turbulence intensity profiles for Terrain Categories 2.5 and 3 are shown in Figure 12 and Figure 13 respectively. These represent the wind velocity and turbulence intensity profiles approaching the model of the development. Closer to the ground the wind moves more slowly but with increased turbulence. The simulated approach is indicative of full-scale planetary boundary layer velocity and turbulence intensity profiles.

Velocity correction factors are used to adjust the measured wind speed to ensure that the ratio of mean roof-height to reference height wind speed in the wind tunnel matches expected full-scale values.

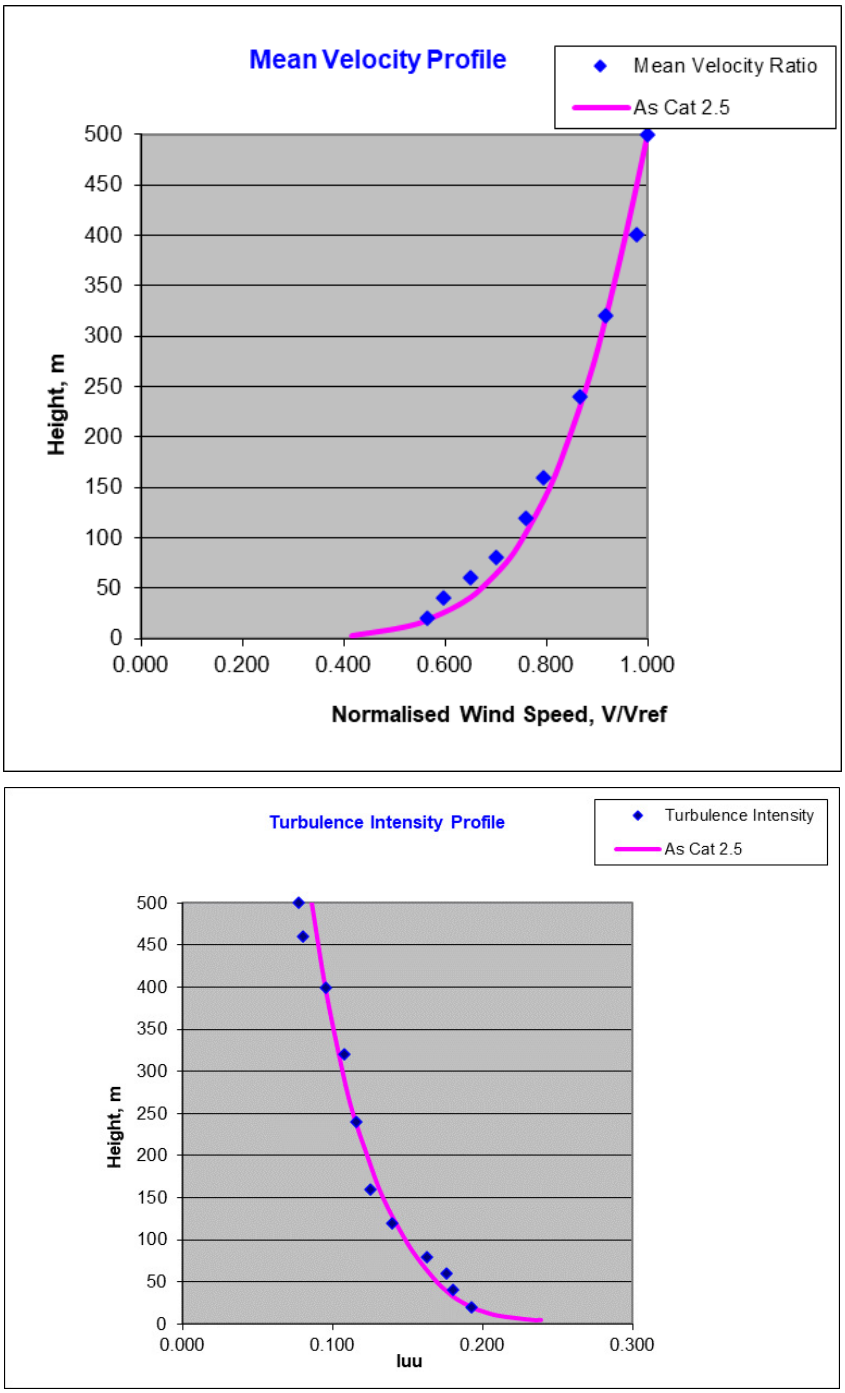
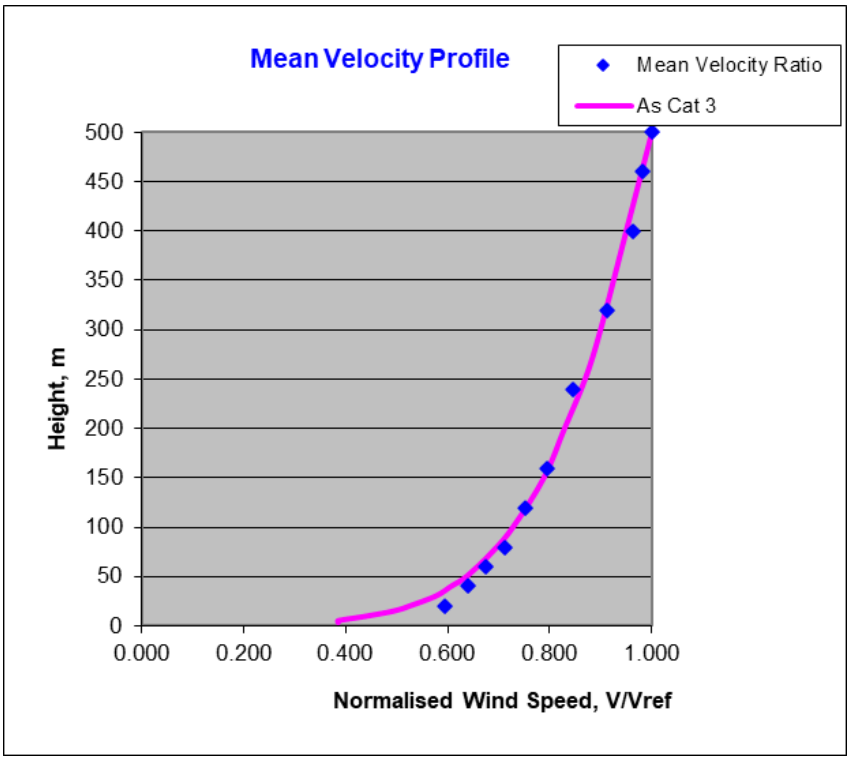


Figure 12: Mean Velocity and Turbulence Intensity Profiles for Terrain Category 2.5 (1:400 scale).



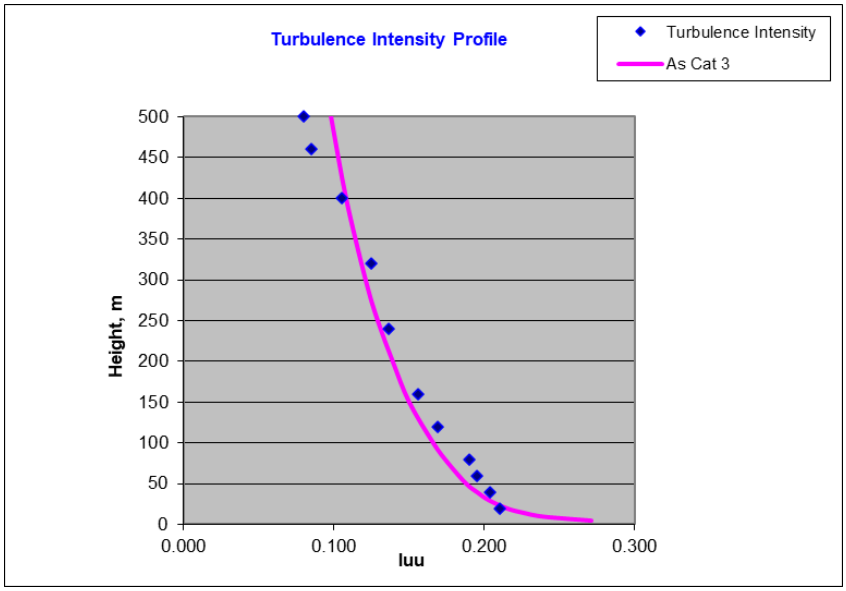


Figure 13: Mean Velocity and Turbulence Intensity Profiles for Terrain Category 3 (1:400 scale).

5 Test Procedure

The pedestrian wind environment in the adjacent footpath areas along Victoria Street, Yarra Trail, eastern pedestrian link and some selected private terrace areas were assessed using Omni-directional pressure sensor measurements [4].

Velocity measurements were made using Irwin sensors (Omni-directional pressure sensors) installed at different locations at the adjacent ground level footpath areas and terraces at different levels of the proposed development. The test was conducted without any landscaping. The distribution of Irwin sensors has allowed the determination of the variation in velocity sufficient to capture the changes in velocity distribution that can typically occur over such areas. The resolution of measurement locations is in accordance with that prescribed in the Wind Tunnel Testing Quality Assurance Manual of the Australasian Wind Engineering Society.

PVC tubes with 1.3 mm internal diameter linked the Irwin sensors to pressure transducer device using a tuned arrangement to prevent harmonic fluctuations.

Velocity measurements were obtained at 10° wind azimuth increments starting from 0° (north) for a full 360° circle. The sampling time is determined based on the similarity criteria and corresponds to a total time of one hour in full scale. Statistical analysis was carried out on the signals for the mean and standard deviation. All velocity coefficients derived from the wind tunnel were converted to velocities by integrating the data with the regional wind climate and corresponding to design wind speeds with a probability 0.1% of time for safety criterion assessment and 20% of time for comfort criteria assessment.

A total of **47** sensors were used in order to provide a quantitative measure of the ground level wind speeds at various locations around the footpaths and garden. The sensor locations are shown in Figure 14 to Figure 17.

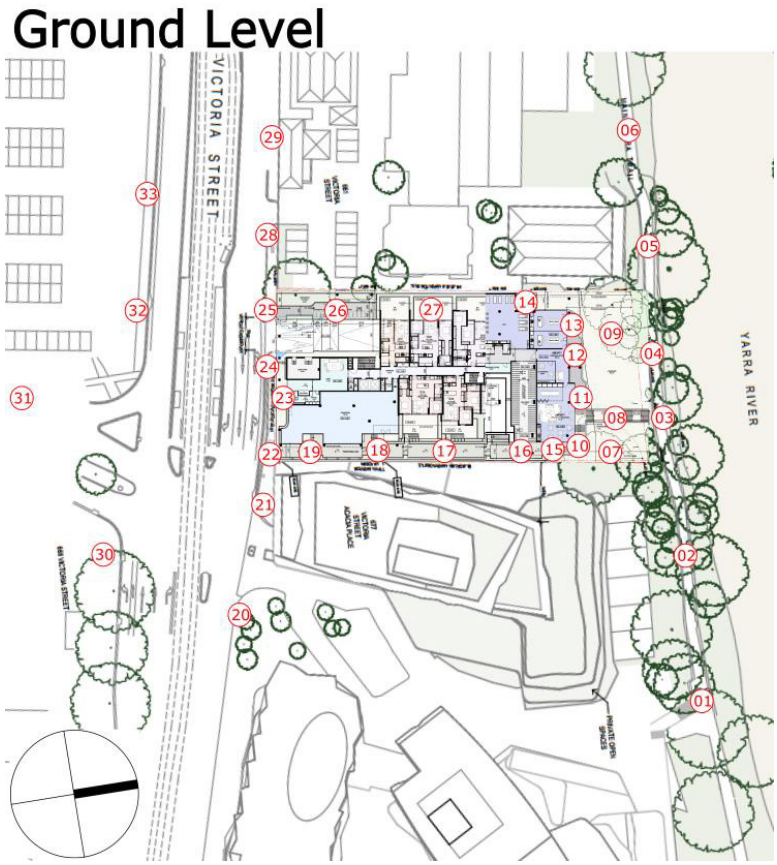


Figure 14: Sensor numbers and locations on the ground level.

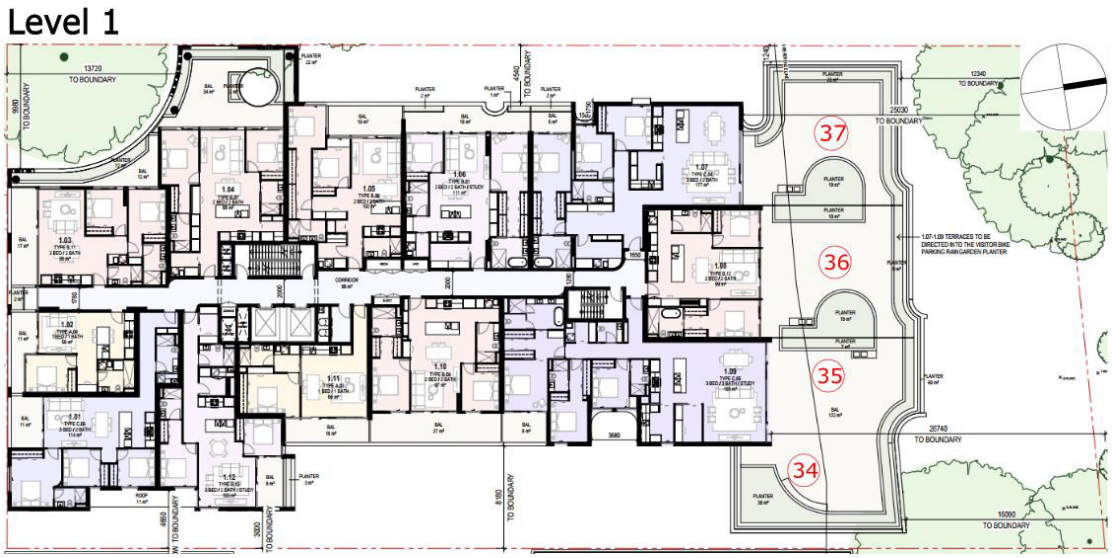


Figure 15: Sensor numbers and locations on Level 1.

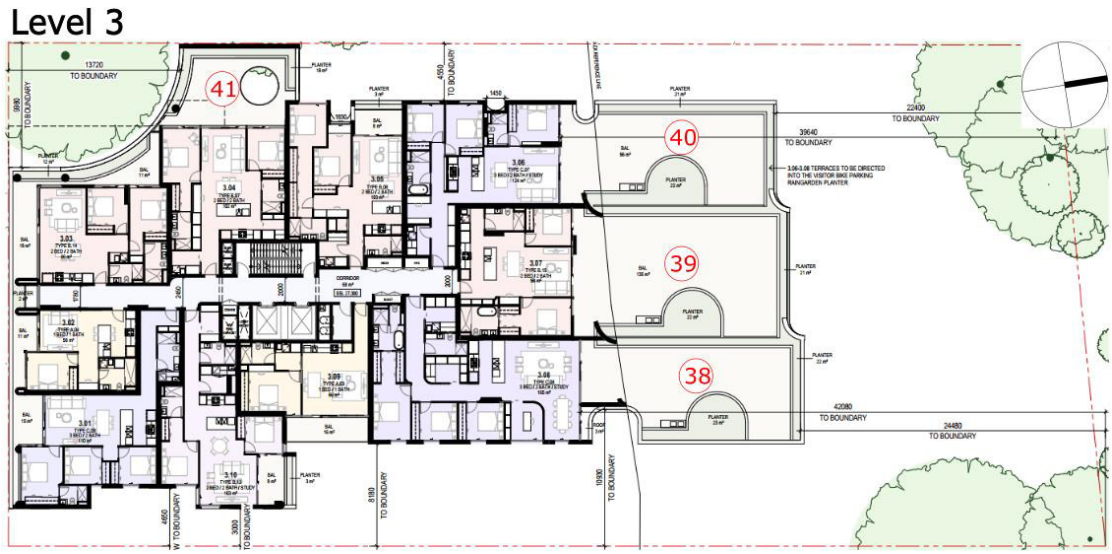


Figure 16: Sensor numbers and locations on Level 3.

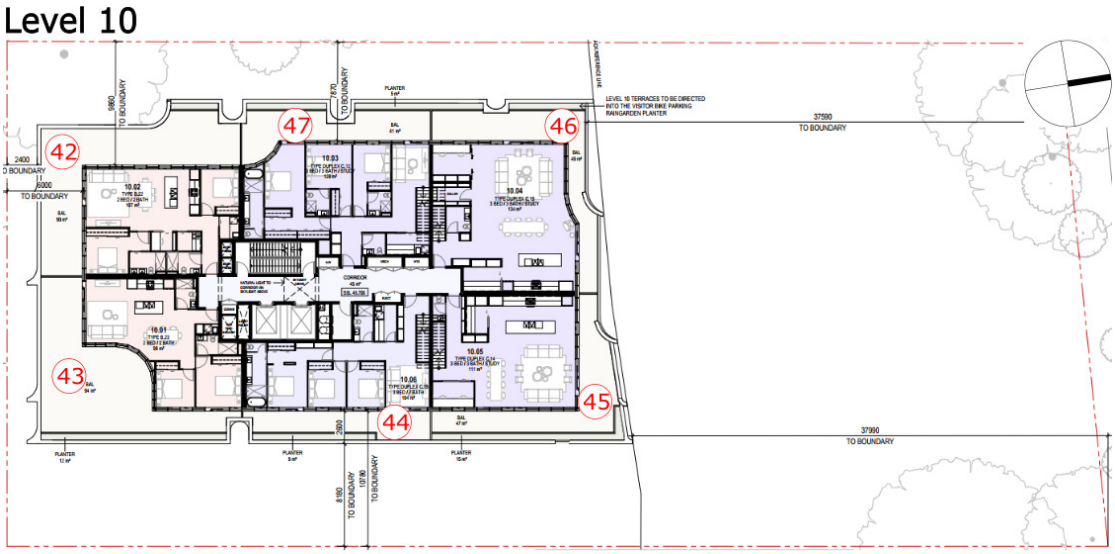


Figure 17: Sensor numbers and locations on Level 10.

6 Results and Discussion

The pedestrian wind environment in the footpath, main entrances and outdoor communal terraces were assessed using omnidirectional pressure sensor tests.

Two configurations were conducted, namely:

1) **Existing:** a reference configuration of low-rise building conditions with Lower Ground to Level 2 only (Figure 18).
2) **Proposed**: test with the proposed development and existing surrounding developments (Figure 19).

The tests were conducted without any landscaping at the ground level.

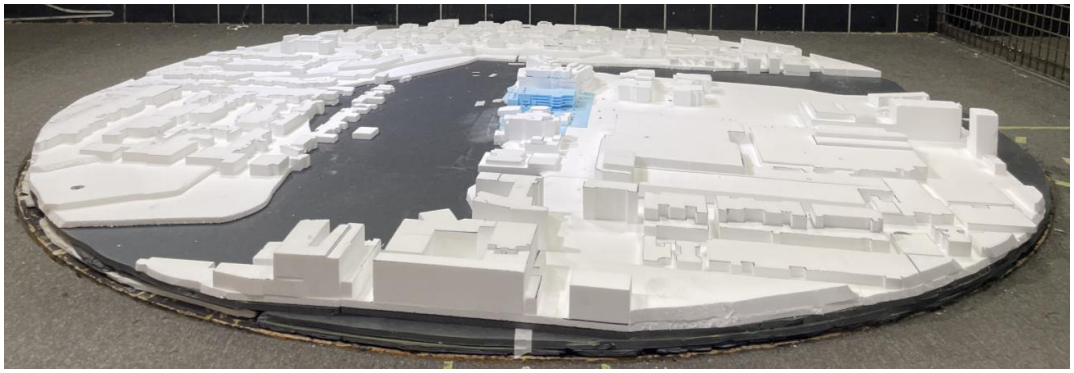


Figure 18: Overall view of the proposed development model from the east in the wind tunnel (Existing).

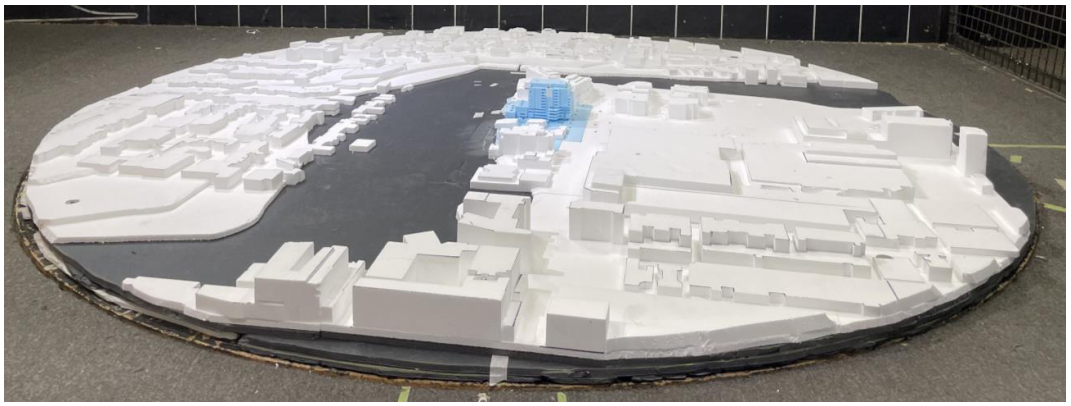


Figure 19: Overall view of the proposed development model from the east in the wind tunnel (Proposed).

The test results are presented as polar plots for the gust wind speeds appended in Appendix C of this report. Figure 20 shows an example of these plots. In the figure, the red circle represents the velocities for the safety criterion and the set of data points represent the different test configurations and the predicted gust wind speeds for the 36 directions for Location 23.

The plot shows that with the proposed design, Location 23 was within the recommended safety criterion for the Proposed configuration. This location also measured windspeeds within the recommended standing comfort criterion (Figure 21).

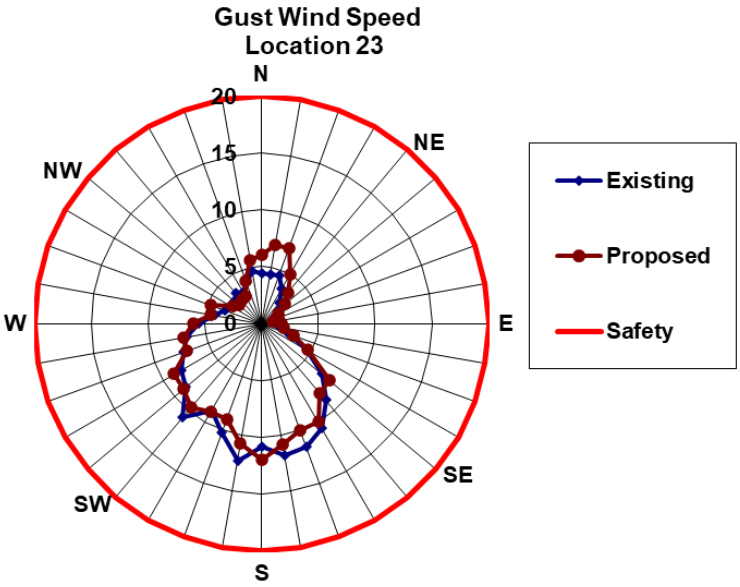


Figure 20: Polar plot showing the wind speed compared with safety criteria (Location 23).

Figure 21 and Figure 23 show the comparison between the comfort criteria and predicted hourly mean wind speeds (maximum of statistic mean and GEM). In these figures, the colour lines represent the threshold velocities for the different criteria and the data series (bars) represent the predicted values of the mean velocities. For the all wind direction combination, there are no particular methods specified in the guidelines, the up-crossing prediction method described in Appendix D was used in the study.

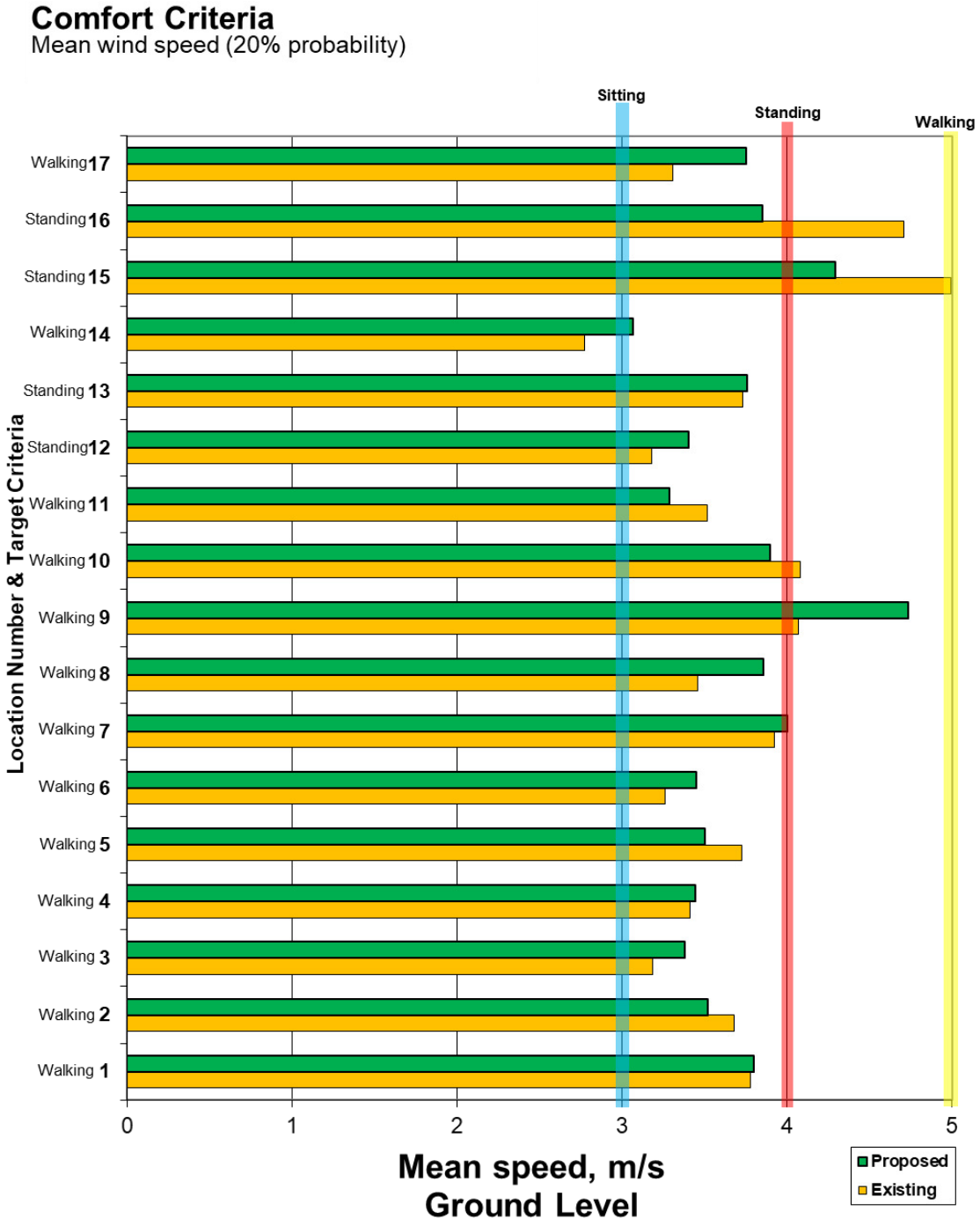


Figure 21: Bar plot showing the wind speed compared with comfort criteria (Locations 1 - 17).

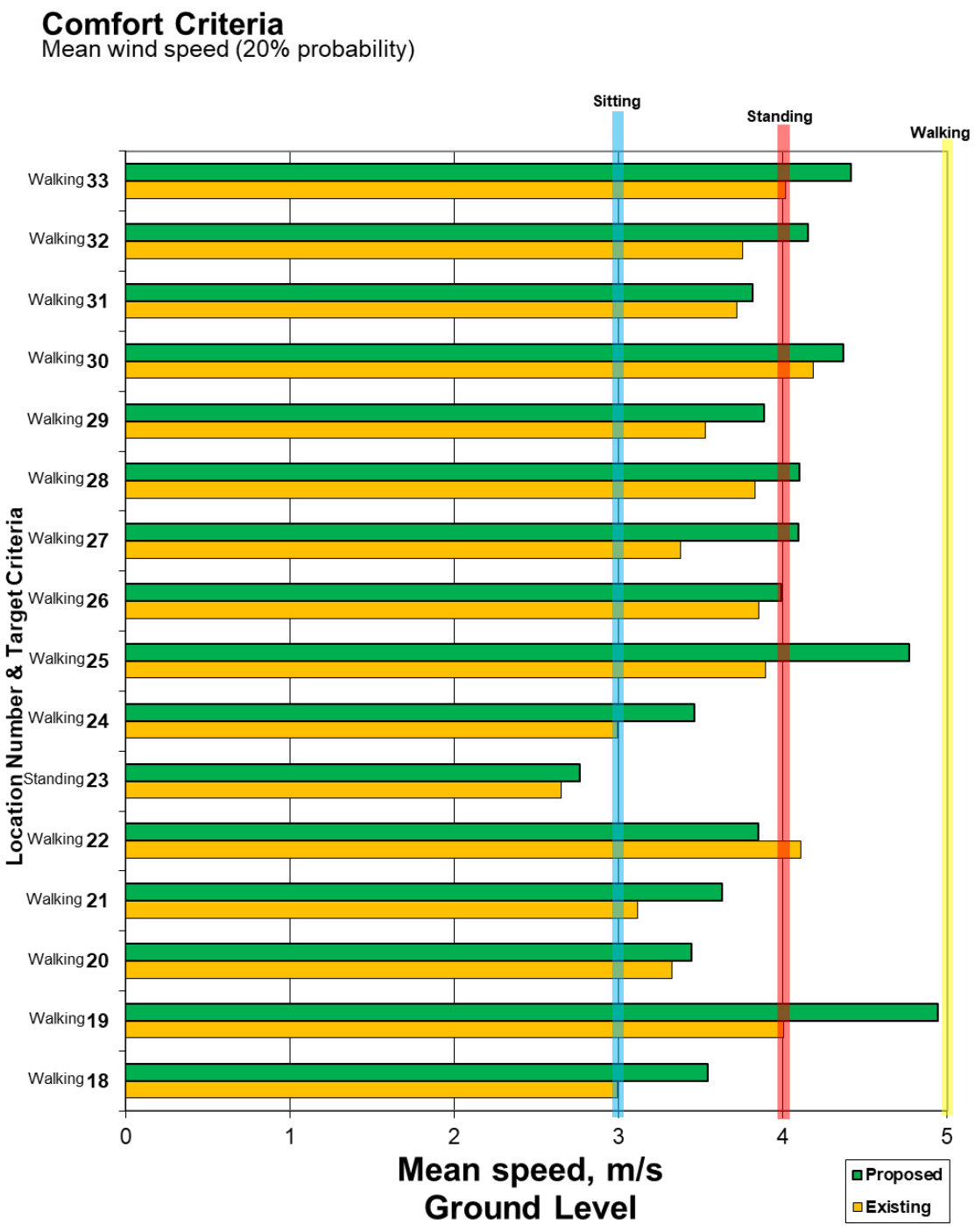


Figure 22: Bar plot showing the wind speed compared with comfort criteria (Locations 18 - 33).

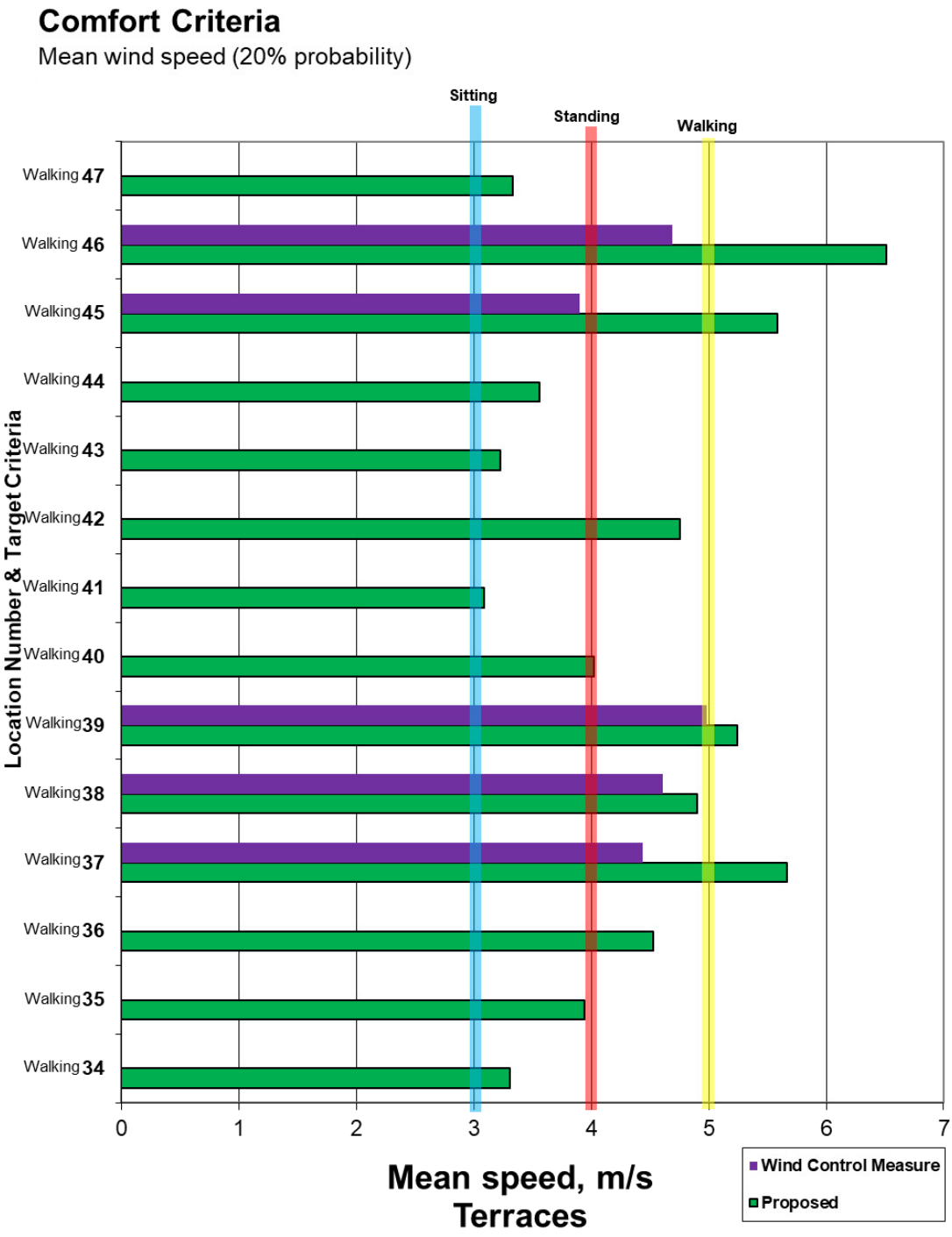


Figure 23: Bar plot showing the wind speed compared with comfort criteria (Locations 34 - 47).

Based on the tests conducted, the following points were observed.

6.1 Safety Criterion Test

All ground level locations within the immediate vicinity of the proposed development measured gust windspeeds within the recommended safety criterion for the Proposed configuration.

Locations 39 (level 3) and 45 (level 10) exceeded the safety criterion. Recommendations for wind amelioration have been provided for these locations and are discussed further in Section 6.2.4.3 and 6.2.4.4 respectively.

6.2 Comfort Criteria

6.2.1 Pedestrian Footpath and Accessways

Locations 1-14 & 15-33

All locations within the immediate vicinity of the proposed development measured mean windspeeds within the recommended walking comfort criterion for the Proposed configuration. As such, no recommendations for wind amelioration have been provided.

6.2.2 Building Entrances

Locations 12, 13, 15, 16 & 23

Most locations measured mean windspeeds within the recommended standing comfort criterion for the Proposed configuration.

Location 15 exceeded this criterion, however, was within the walking comfort criterion. As such, this entrance is recommended to be setback by 1m (Figure 24).

6.2.3 Outdoor Amenity Areas

Locations 11-14

All locations measured mean windspeeds well within the recommended walking comfort criterion for the Proposed configuration. As such, no recommendations for wind amelioration have been provided.

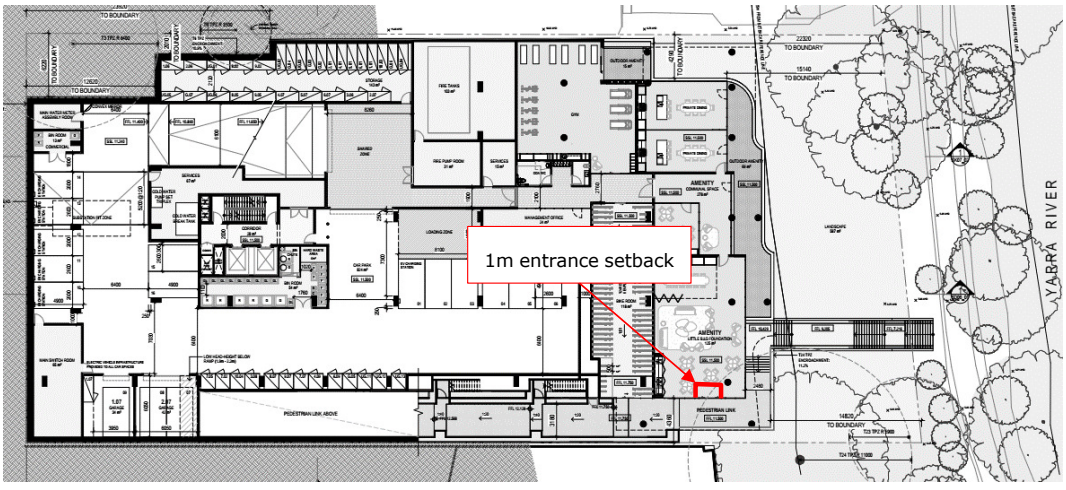


Figure 24: Recommendations for wind amelioration overlaid on the Lower Ground floor plan.

6.2.4 Terraces

6.2.4.1 Ground Floor

Location 27

This location measured mean windspeeds within the recommended walking comfort criterion for the Proposed configuration. As such, no recommendations for wind amelioration have been provided.

6.2.4.2 Level 1

Locations 34-37

Tests were performed with 1.1m high solid balustrades and privacy screens, as proposed

Most locations measured mean windspeeds within the recommended walking comfort criterion for the Proposed configuration.

Location 37 exceeded this criterion. As such, a 2m deep porous canopy (40% porosity) is recommended along the balcony line above (Figure 25).

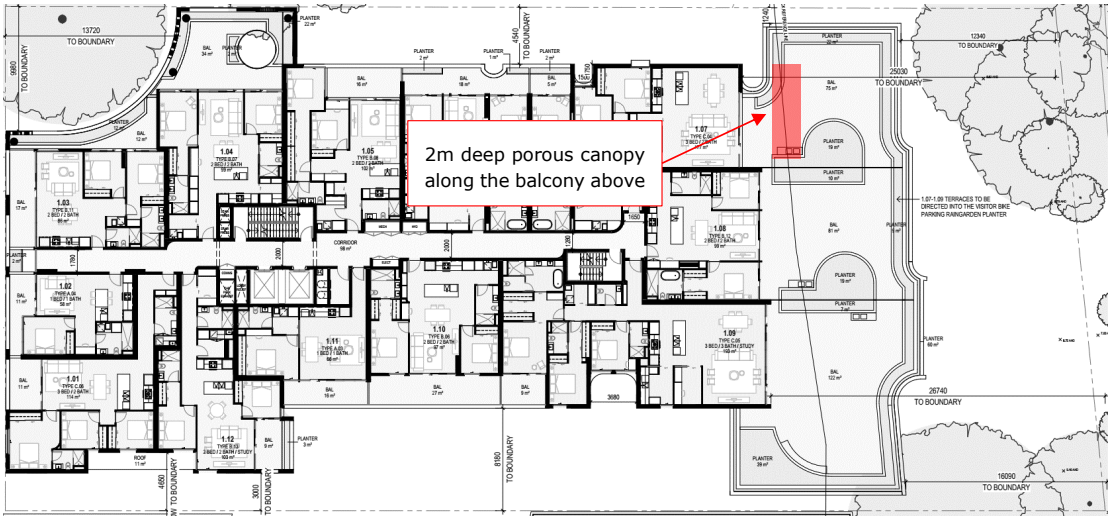


Figure 25: Recommendations for wind amelioration overlaid on the Level 1 floor plan.

6.2.4.3 Level 3

Locations 38-41

Tests were performed with 1.1m high solid balustrades and privacy screens, as proposed

Location 40 measured mean windspeeds within the recommended walking comfort criterion for the Proposed configuration. As such, no recommendations for wind amelioration have been provided.

Locations 38 and 39 measured windspeeds exceeding this comfort criterion. As such, a 3m deep porous canopy (40% porosity) is recommended along the balcony line above (Figure 26).

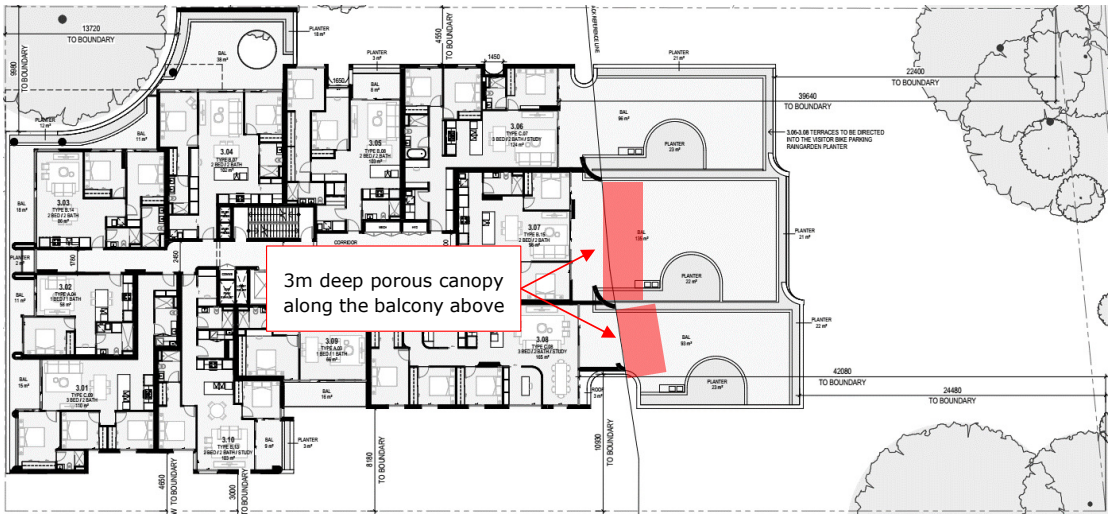


Figure 26: Recommendations for wind amelioration overlaid on the Level 3 floor plan.

6.2.4.4 Level 10

Locations 42-47

Tests were performed with 1.1m high solid balustrades and privacy screens, as proposed

Most locations measured mean windspeeds within the recommended walking comfort criterion for the Proposed configuration.

Locations 45 and 46 measured windspeeds exceeding this comfort criterion. As such, the balustrades along the perimeter of the northern balconies are recommended to be raised to 1.8m high (Figure 27).

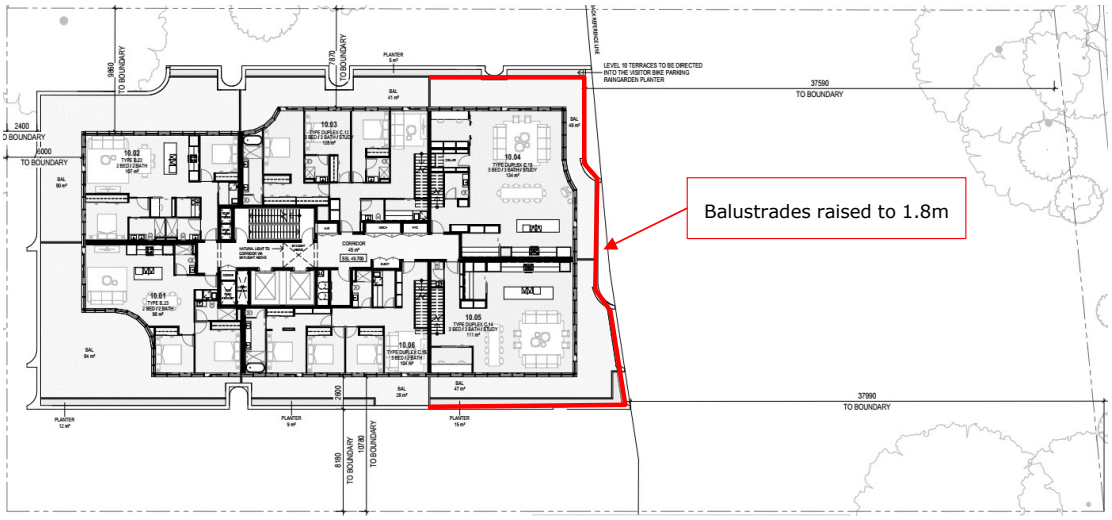


Figure 27: Recommendations for wind amelioration overlaid on the Level 10 floor plan.

7 Conclusion

Vipac has carried out an assessment of the pedestrian level winds for the proposed development at **675 Victoria Street, Abbotsford** based on a scaled wind tunnel test.

The findings of the study are summarised as follows:

The proposed design of the development:

- fulfils the recommended criterion for **Safety** at all test locations **with recommendations**;
- fulfils the recommended criterion for **Walking** at all footpath locations;
- fulfils the recommended criterion for **Standing** at all building entrances **with recommendations**; and
- fulfils the recommended criteria for **Walking** at all open terraces and communal terraces **with the recommendations.**

The proposed development would not cause significant adversely impact to the adjacent areas.

As a general statement, common to all new developments, educating occupants about wind conditions at high-level terraces/balconies during high-wind events and tying down loose furniture are highly recommended.

Appendix A References

1. Australian/New Zealand Standard 1170.2:2021, Wind actions
2. Melbourne, W. H., "Criteria for Environmental Wind Conditions", Jour. Industrial Aerodynamics, Vol. 3, 241-249, 1978
3. Simiu E, Scanlan R, "*Wind Effects on Structures*". Wiley-Interscience
4. Aynsley R., Melbourne W., Vickery B., *Architectural Aerodynamics* Applied Science Publishers

Appendix B Drawing List

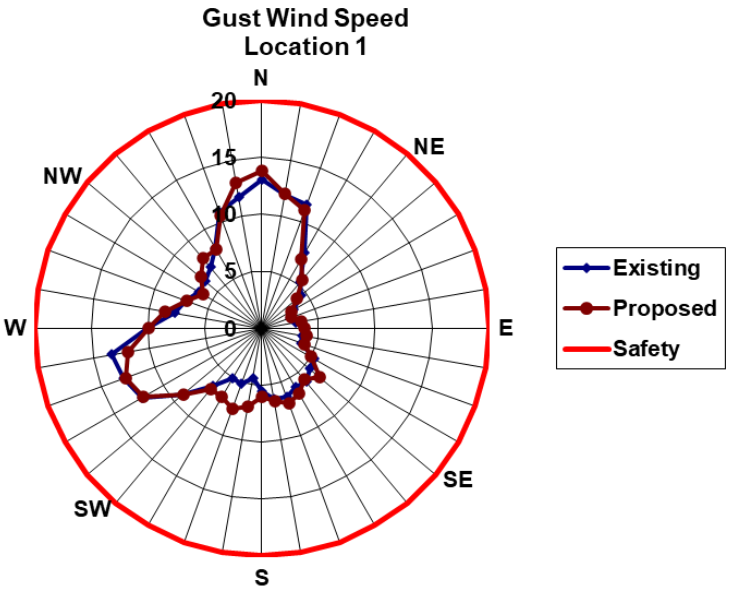
Drawings Received: October 2024

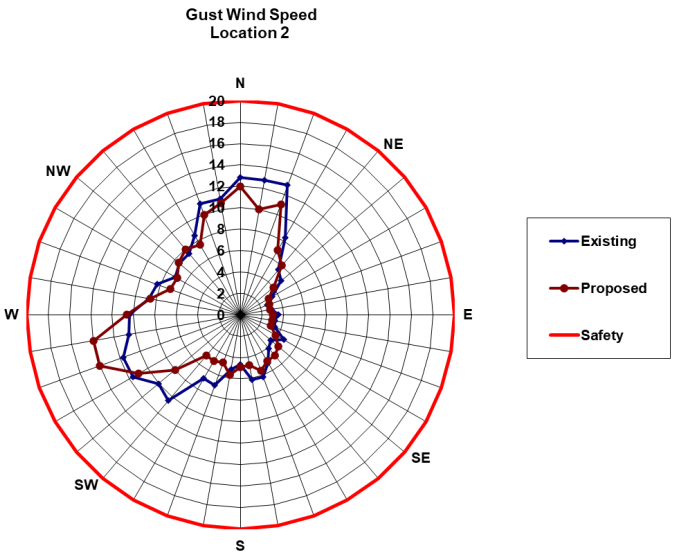
SD02-01 Revision 1 Basement 2 Floor
SD02-02 Revision 1 Basement 1 Floor
SD02-03 Revision 1 Lower Ground Floor
SD02-04 Revision 1 Ground Floor Plan
SD02-05 Revision 1 Upper Ground Floor
SD02-06 Revision 1 Level 1 Floor Plan
SD02-07 Revision 1 Level 2 Floor Plan
SD02-08 Revision 1 Level 3 Floor Plan
SD02-09 Revision 1 Level 4-6 Floor Plan
SD02-12 Revision 1 Level 7 Floor Plan
SD02-13 Revision 1 Level 8 Floor Plan
SD02-14 Revision 1 Level 9 Floor Plan
SD02-15 Revision 1 Level 10 Floor Plan
SD02-16 Revision 1 Level 11 Floor Plan
SD02-17 Revision 1 Roof Plan

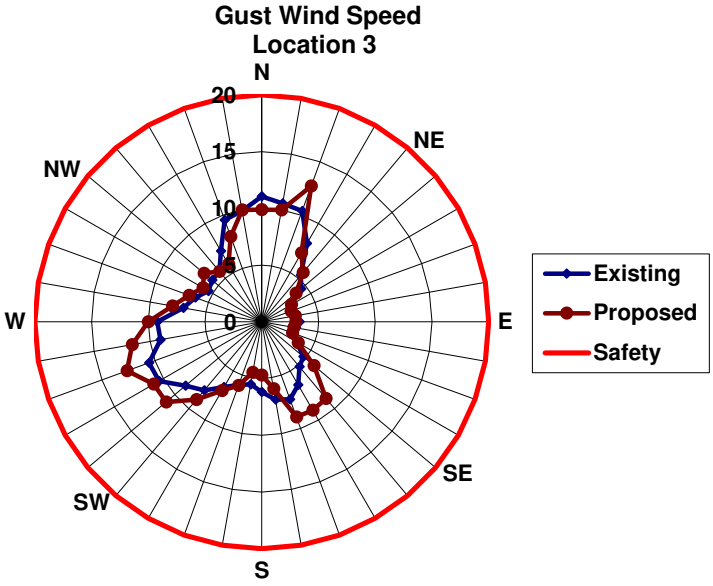
SD05-01 Revision 1 North Elevation
SD05-02 Revision 1 East Elevation
SD05-03 Revision 1 South Elevation
SD05-04 Revision 1 West Elevation

SD06-01 Revision 1 Sections
SD06-02 Revision 1 Sections
SD06-03 Revision 1 Sections

Appendix C Omni Polar Plots – Gust Wind Speeds (Safety Criterion)



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Location 3
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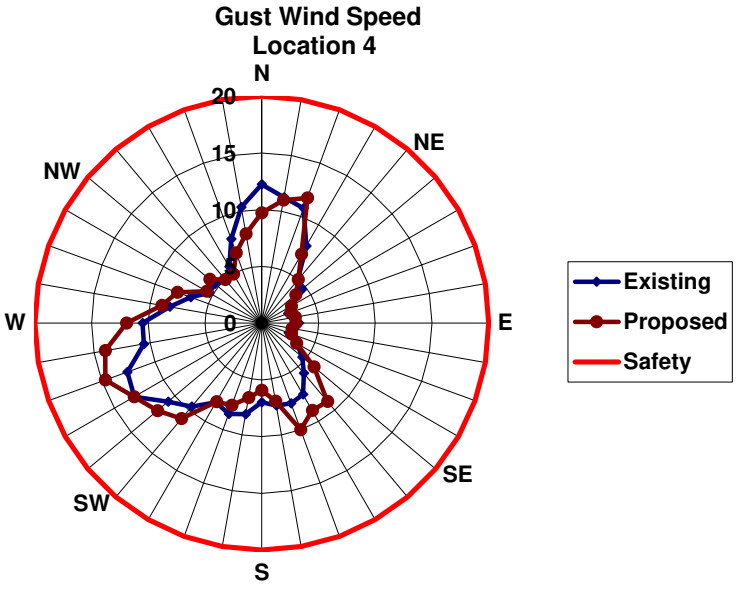
Gust Wind Speed
Location 4
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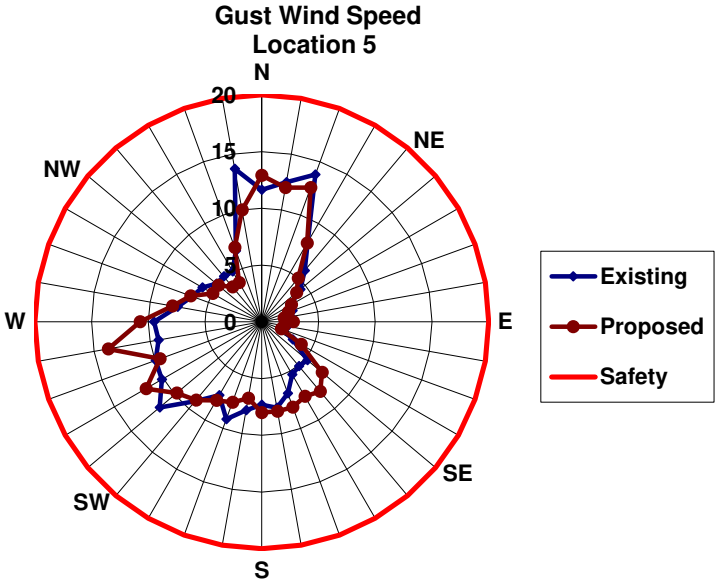
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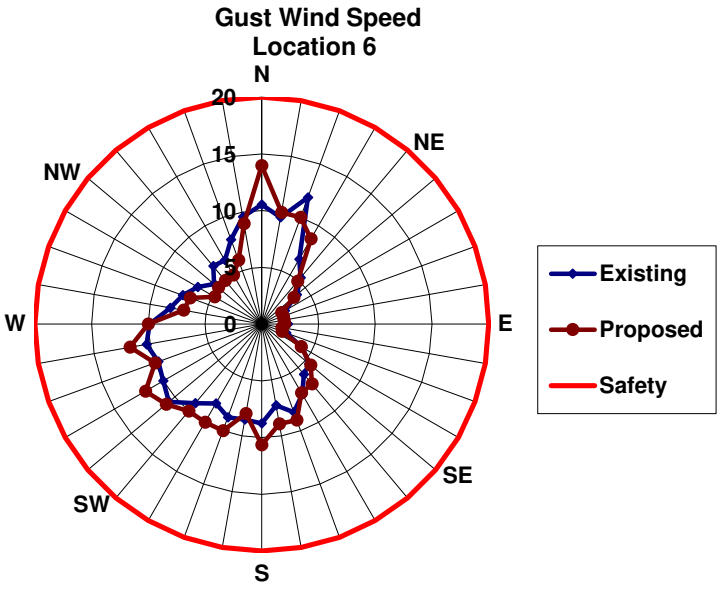
Gust Wind Speed
Location 6
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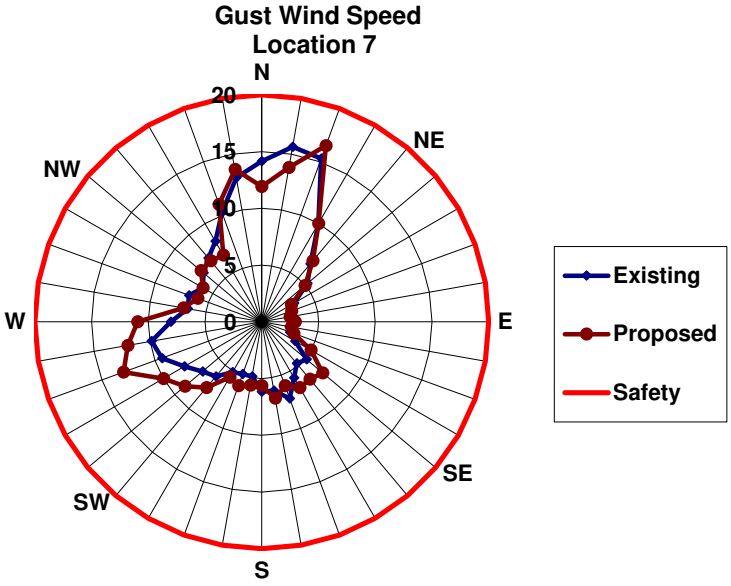
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Location 7
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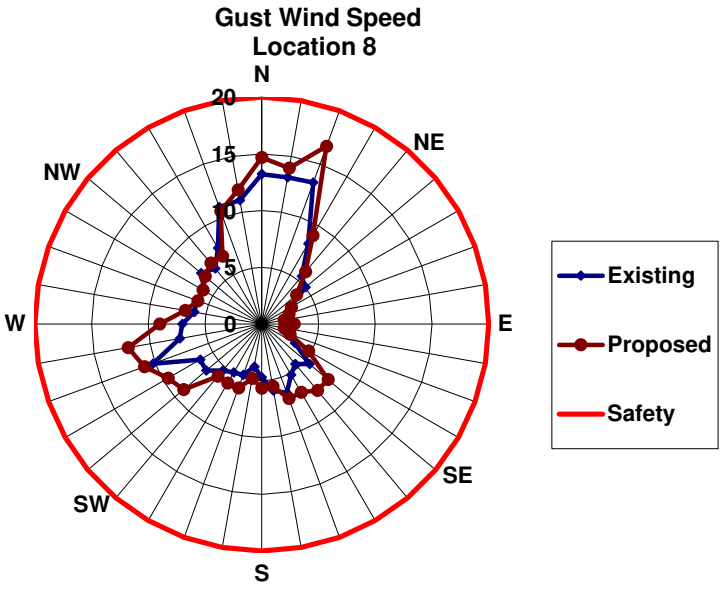
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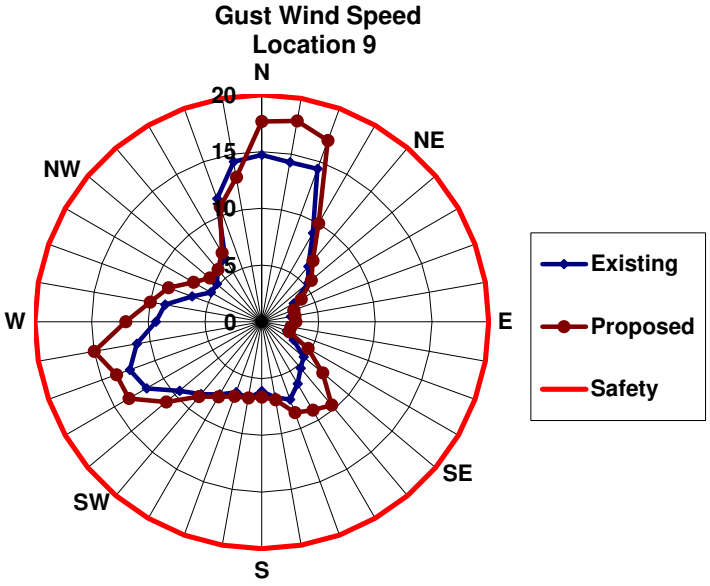
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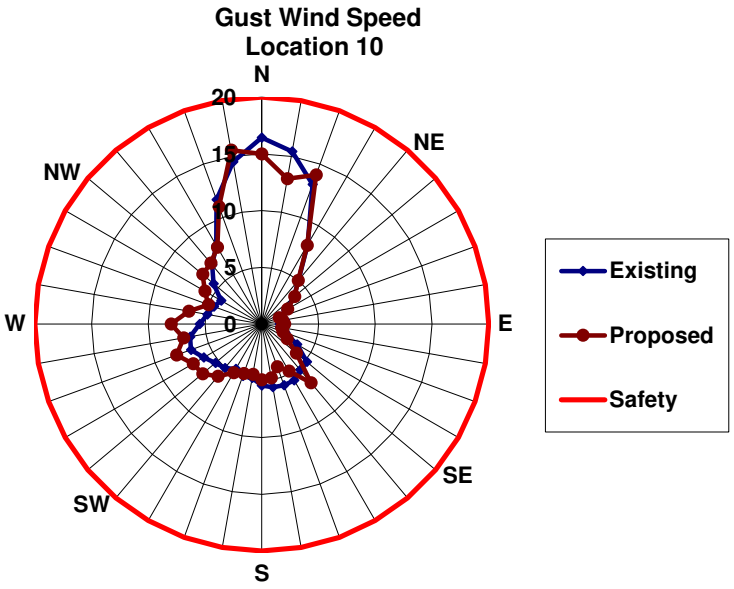
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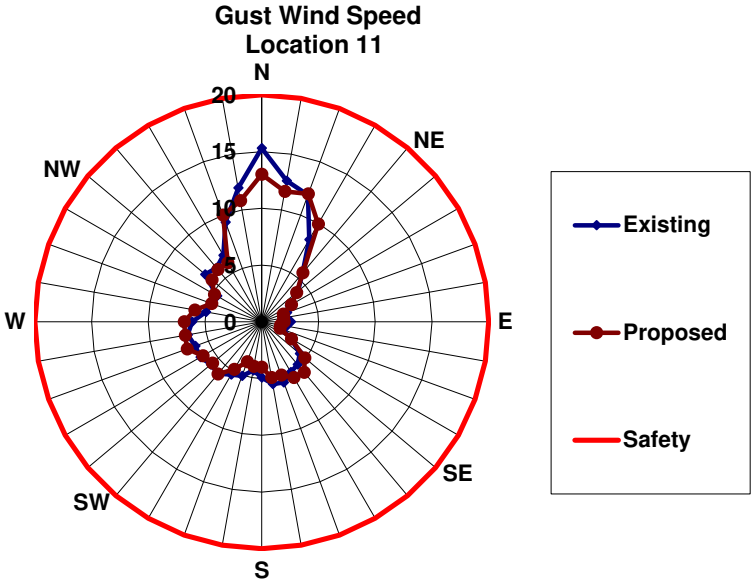
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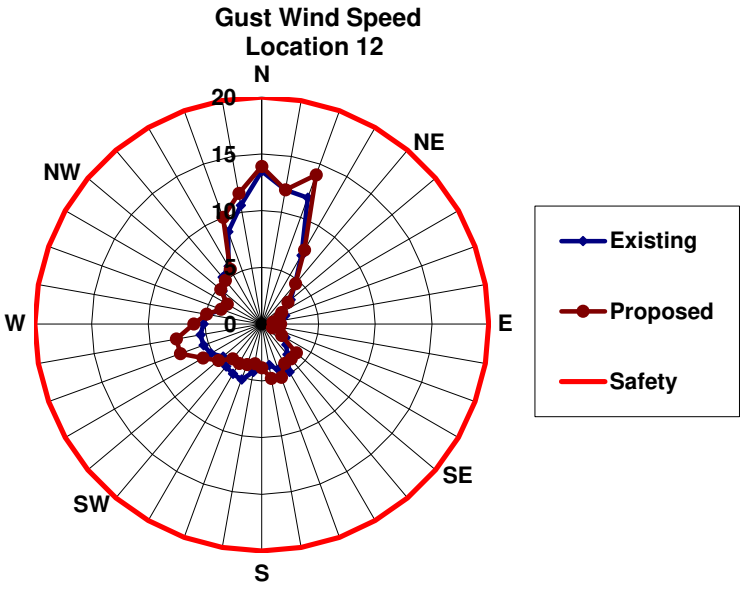
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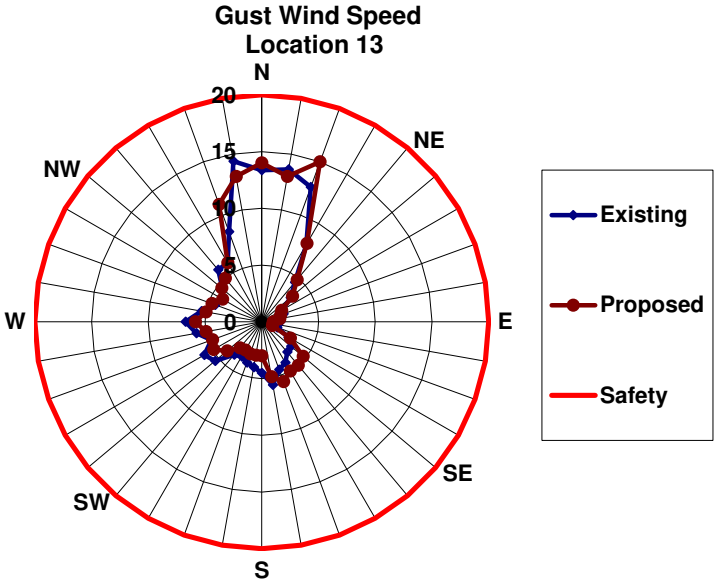
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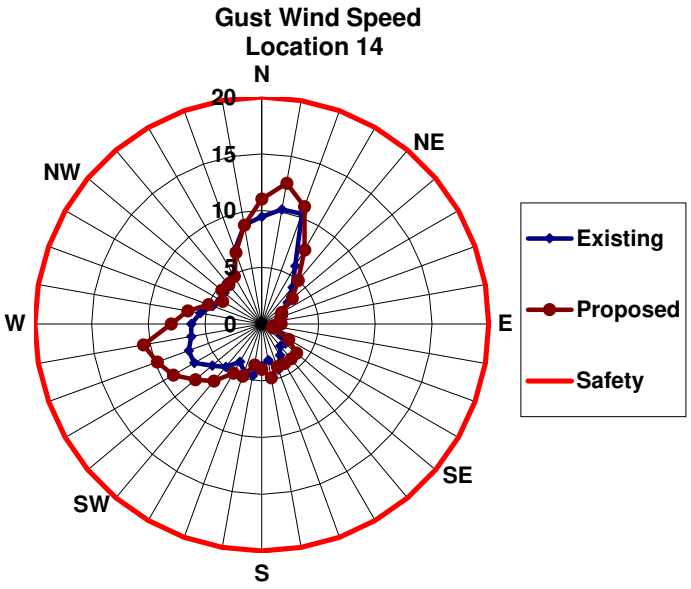
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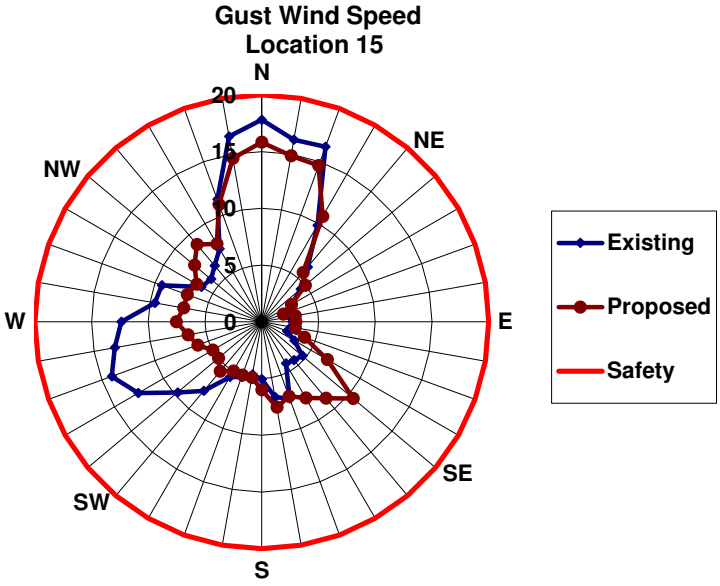
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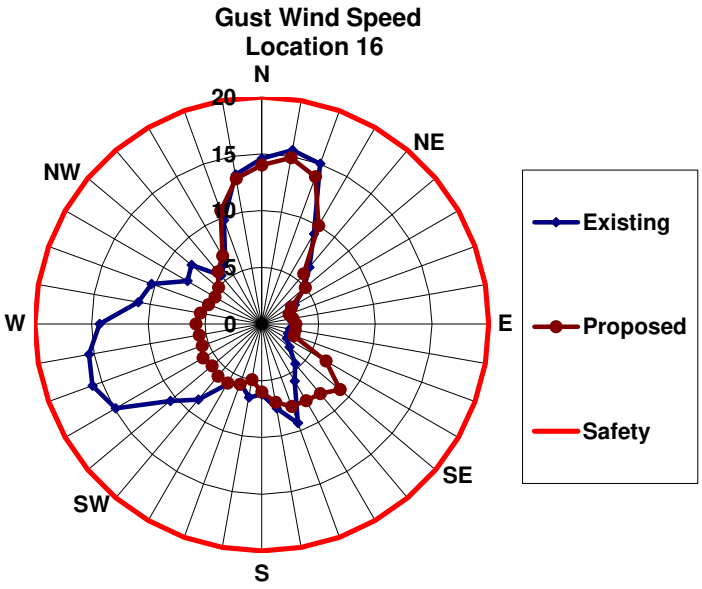
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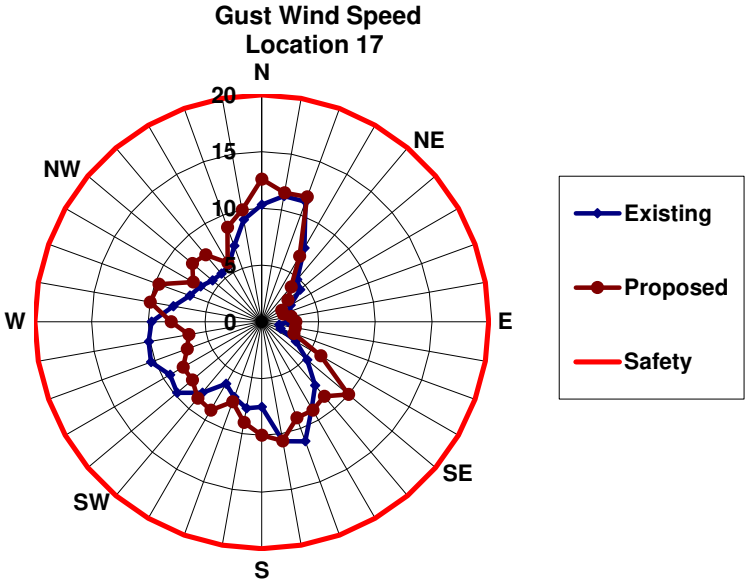
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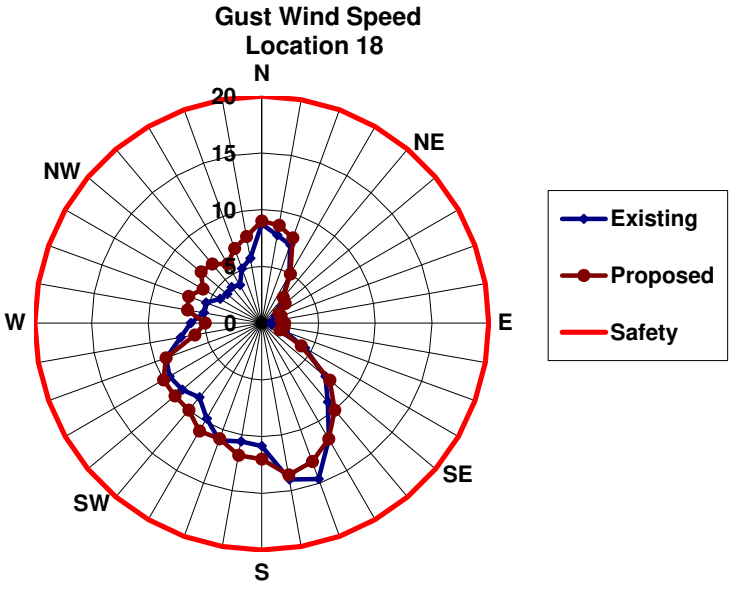
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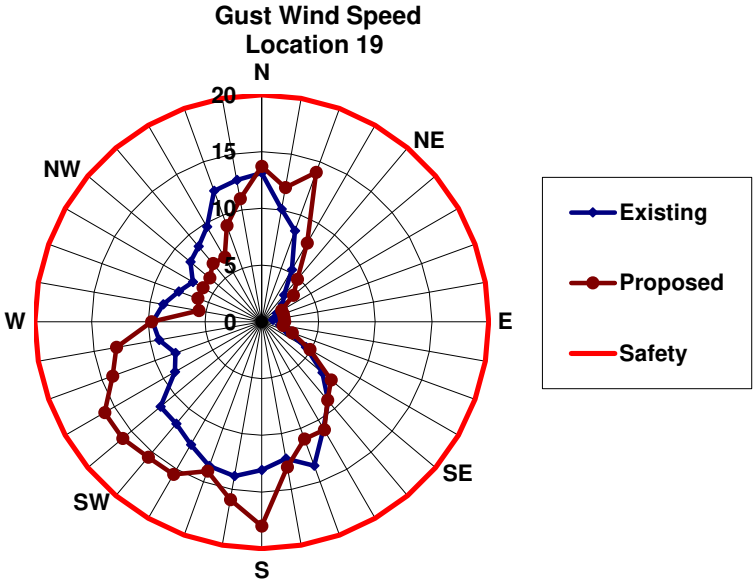
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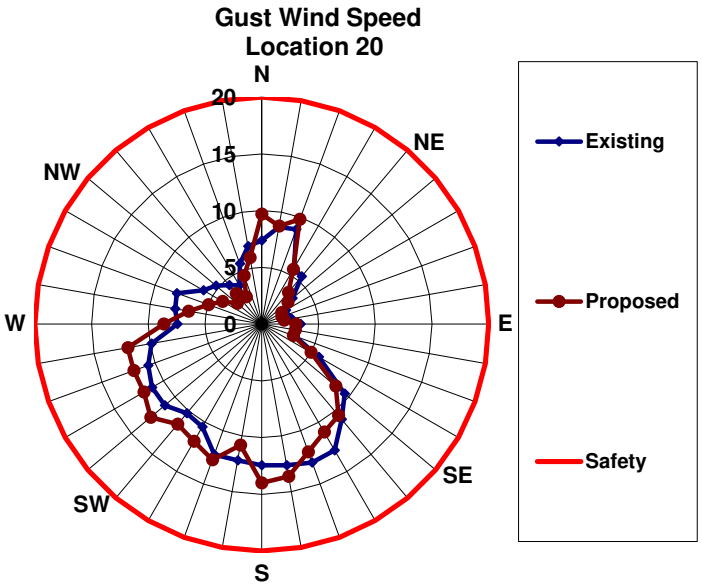
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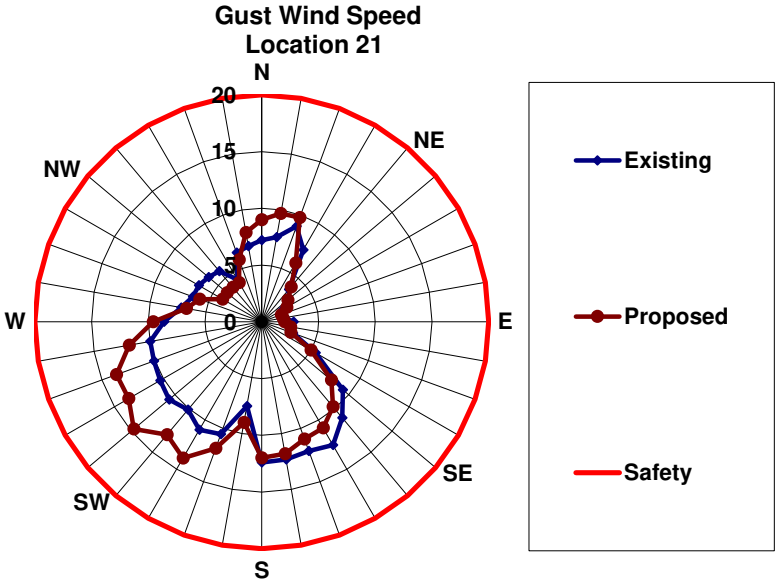
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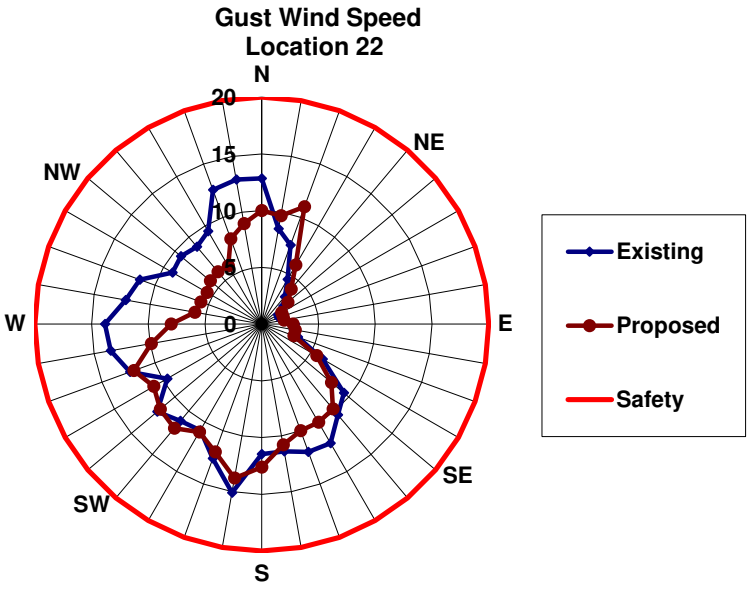
Gust Wind Speed
Location 22
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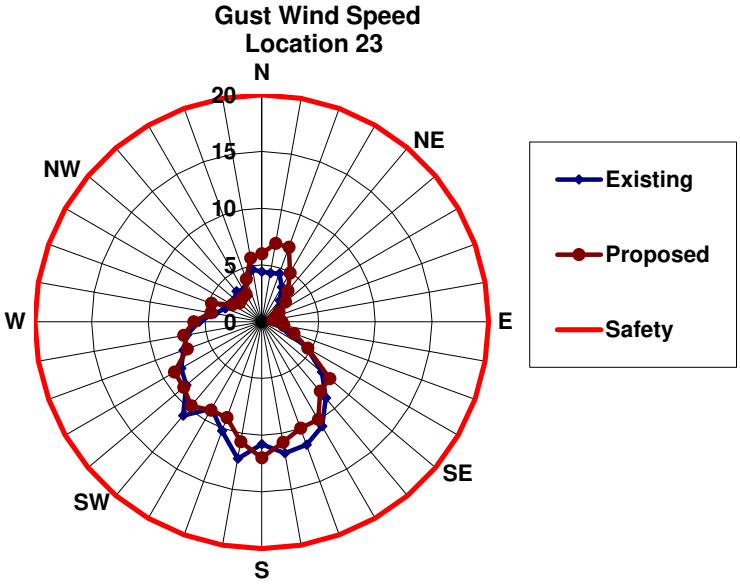
Existing
Proposed
Safety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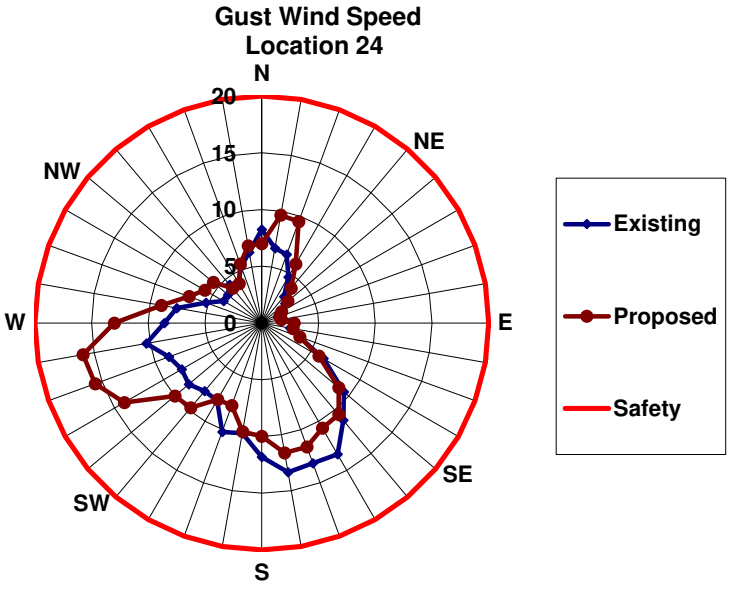
Safety


Gust Wind Speed
Location 24
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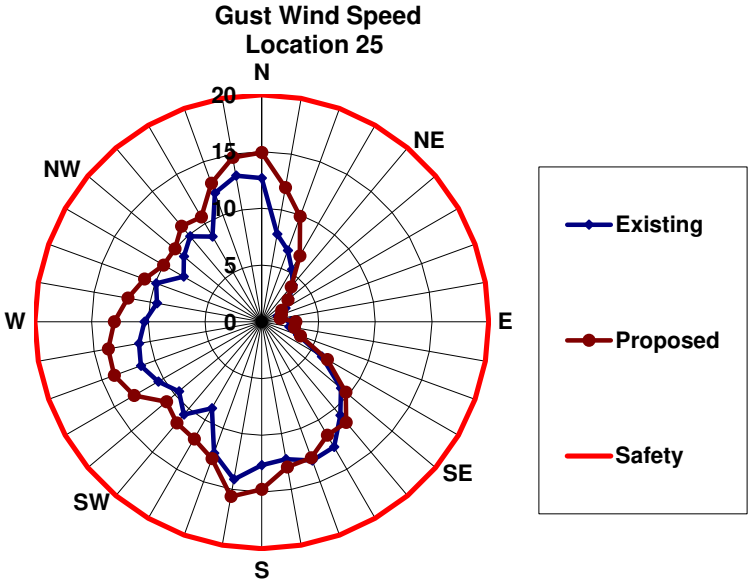
Existing
Proposed
Safety


Gust Wind Speed
Location 25
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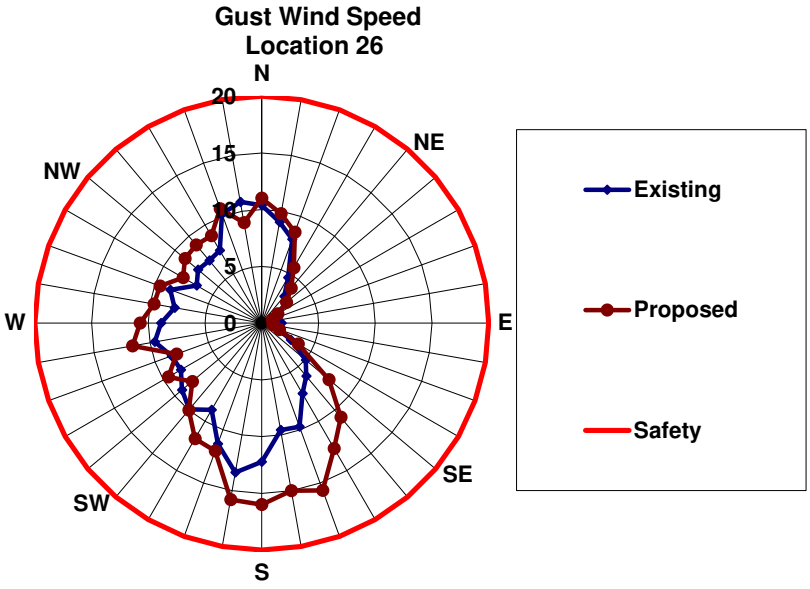
Existing
Proposed
Safety


Gust Wind Speed
Location 26
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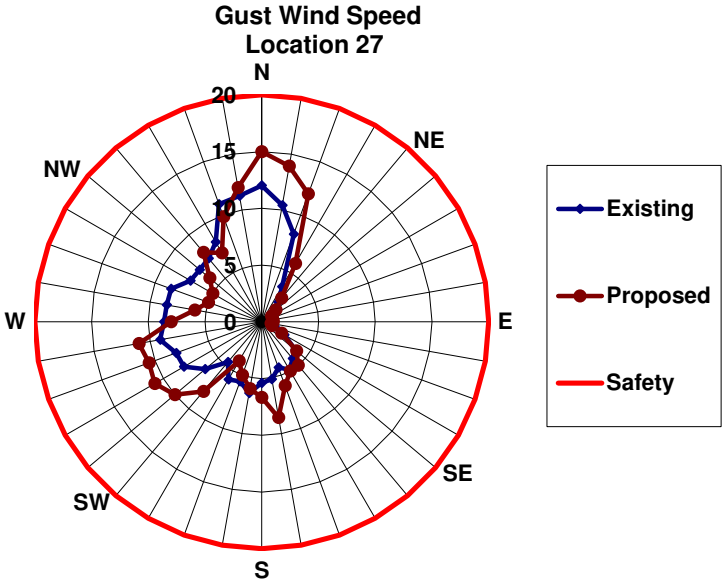
Existing
Proposed
Safety


Gust Wind Speed
Location 27
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Existing
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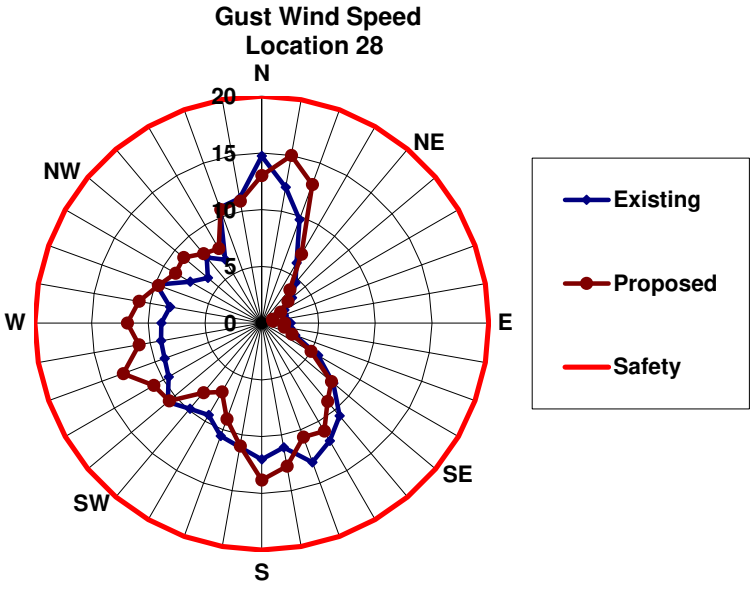
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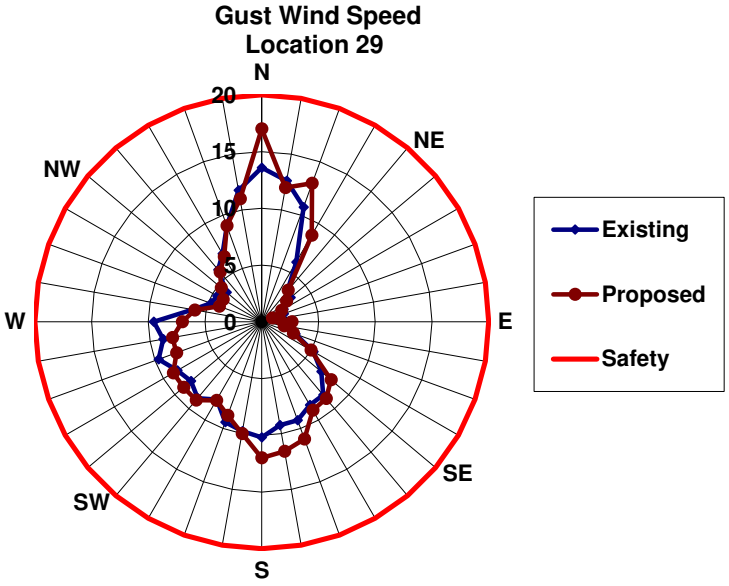
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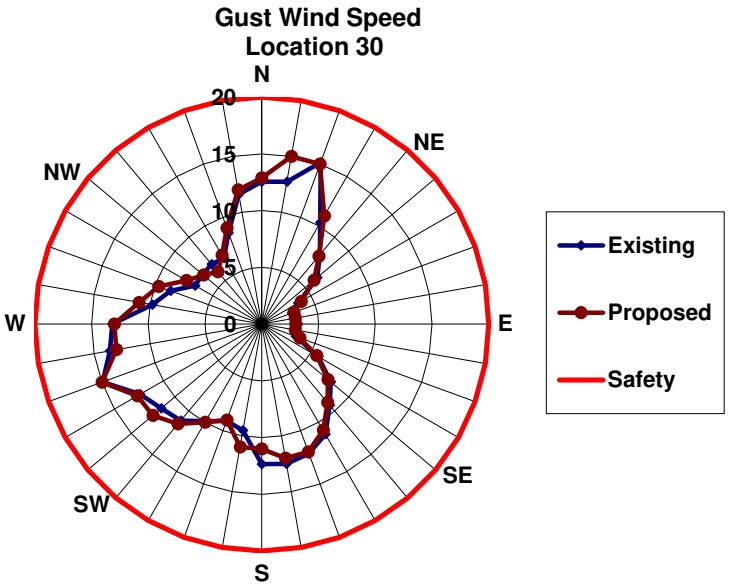
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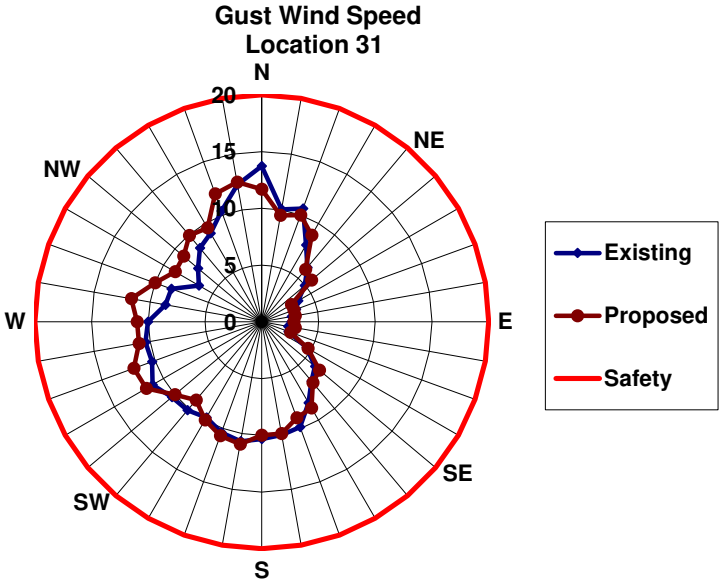
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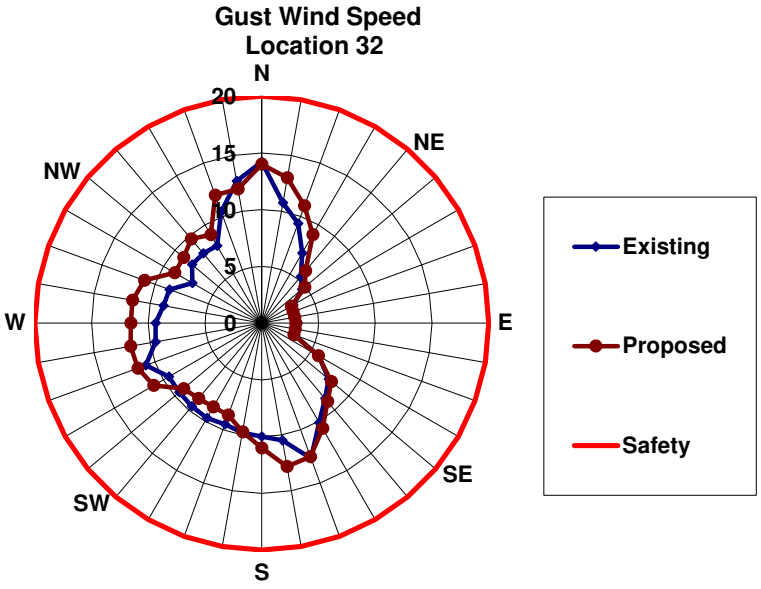
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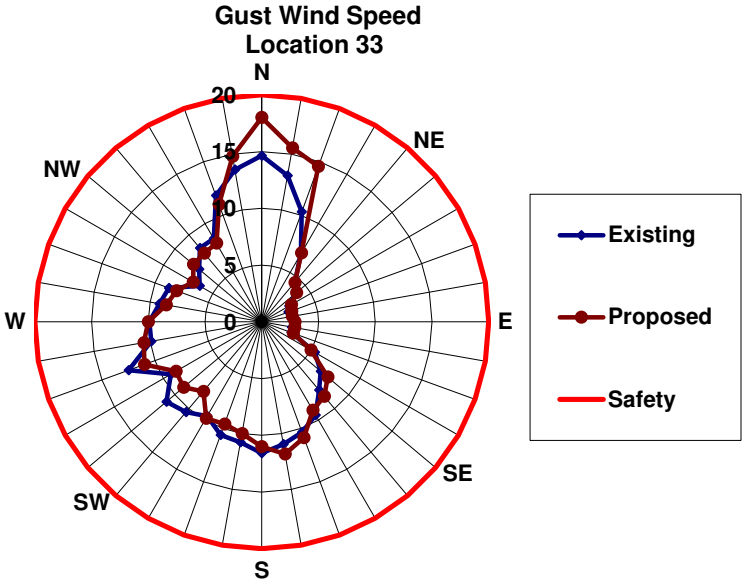
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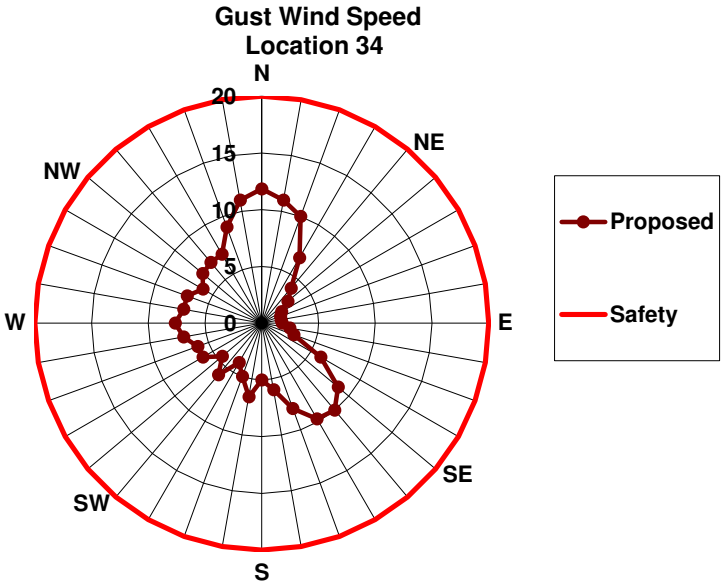
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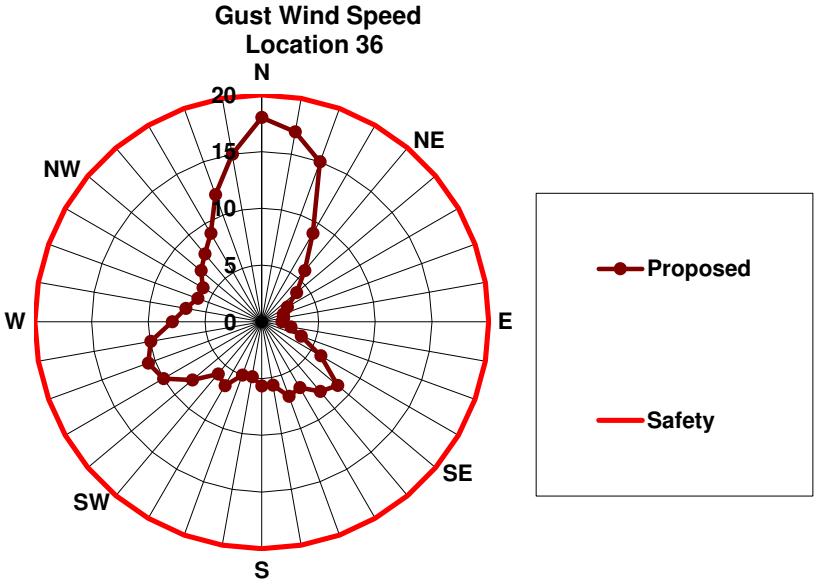
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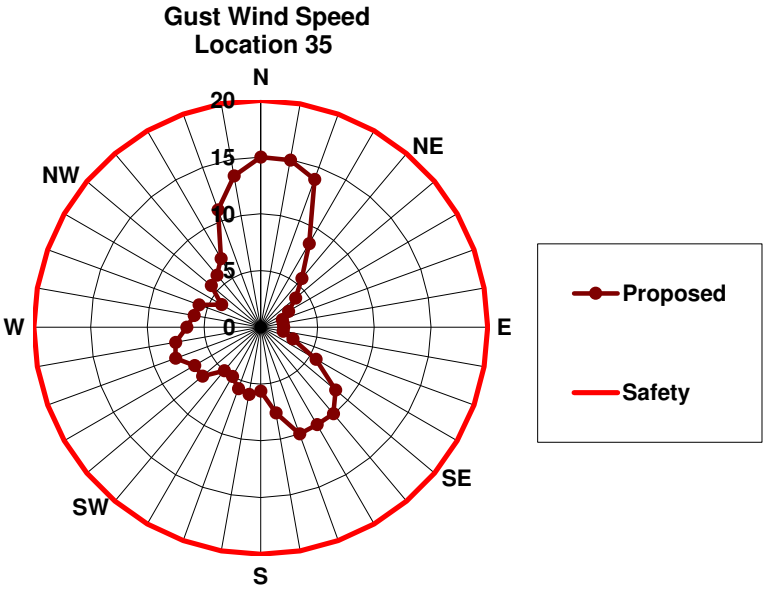
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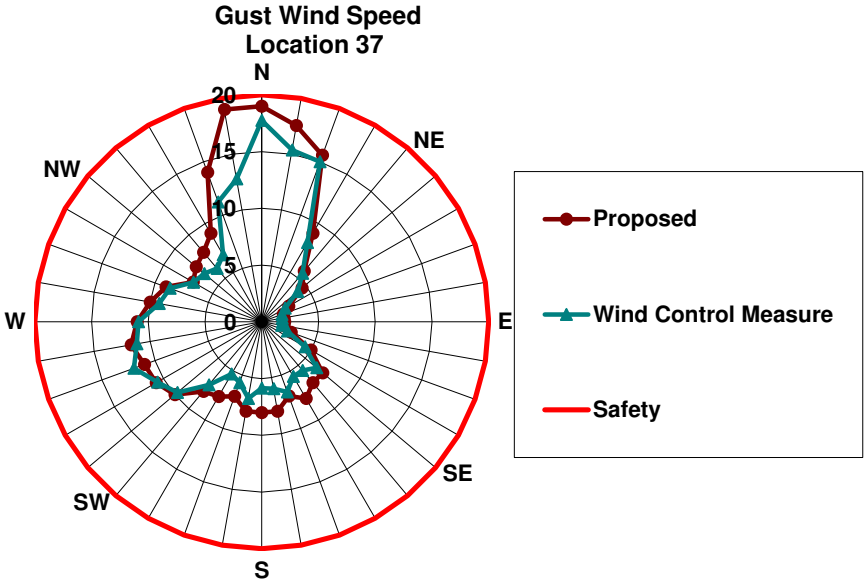
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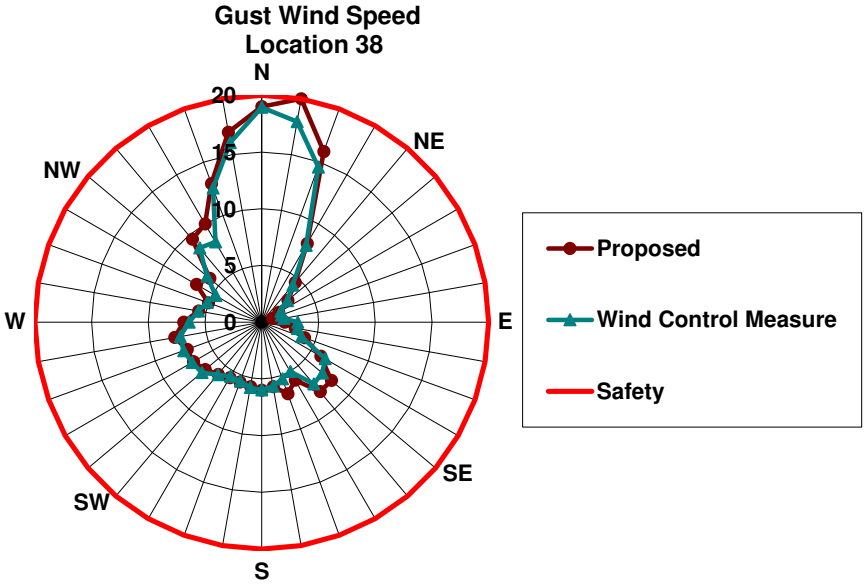
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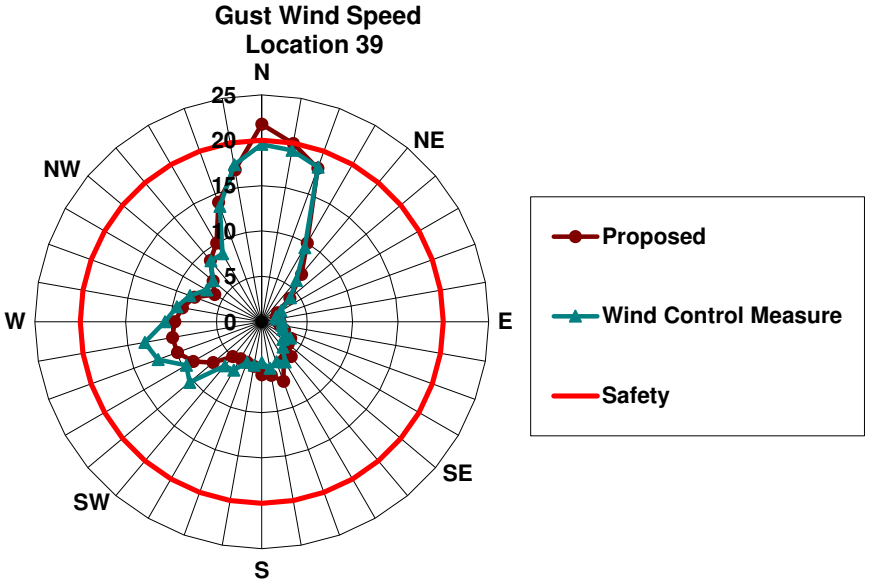
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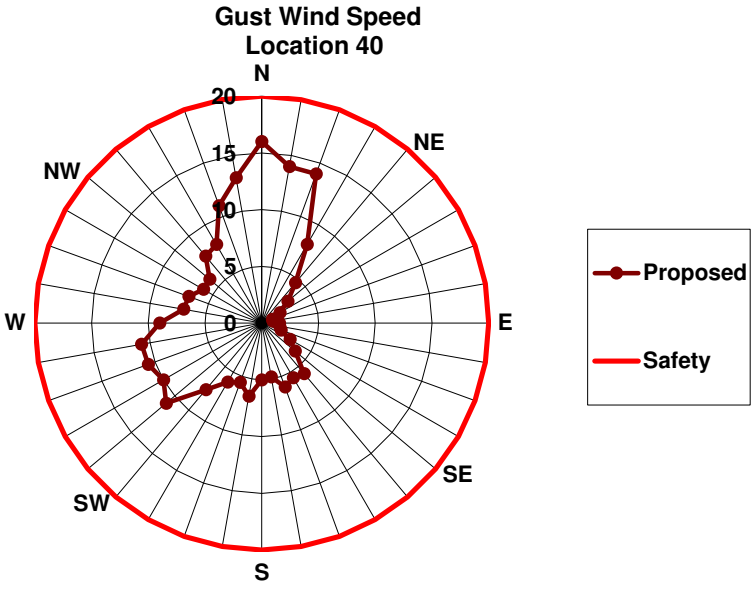
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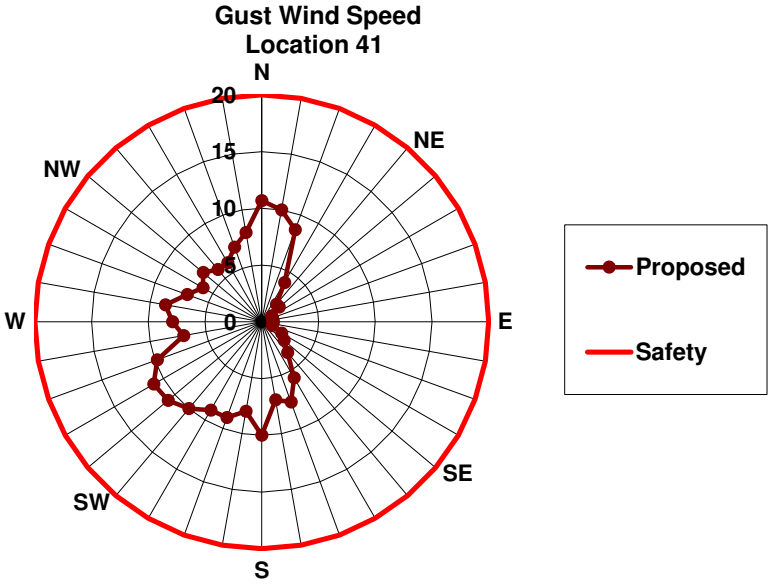
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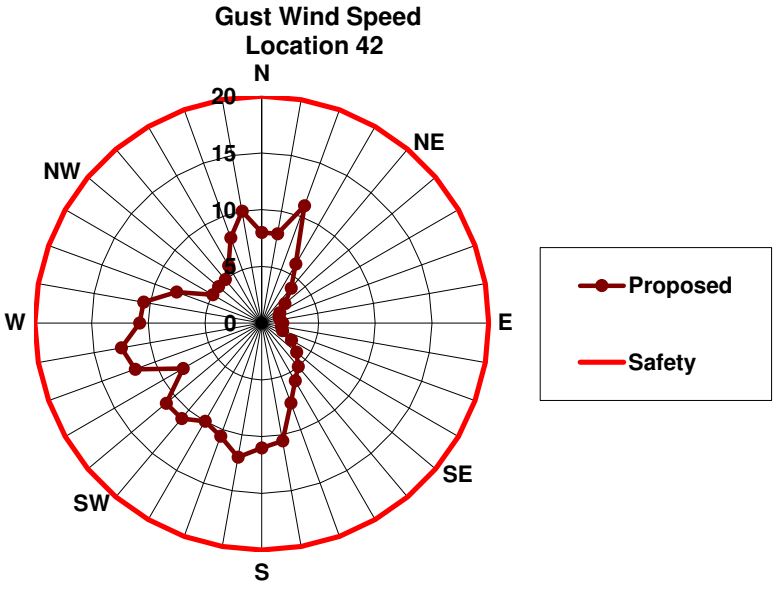
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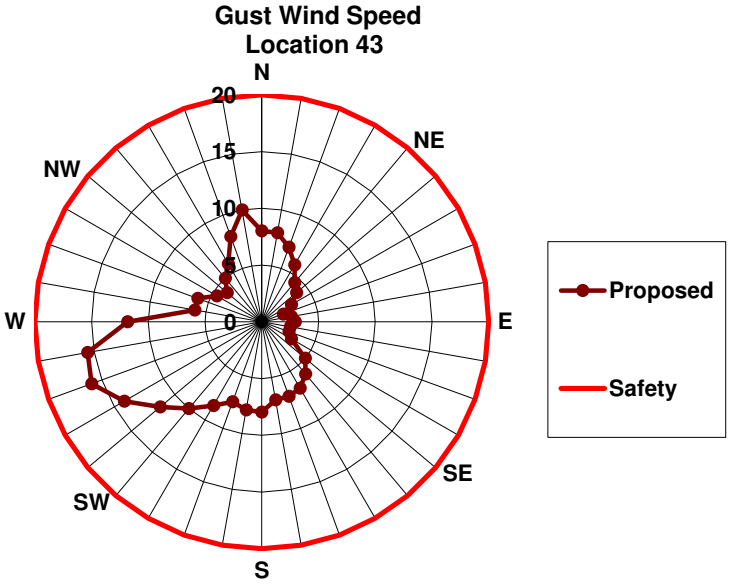
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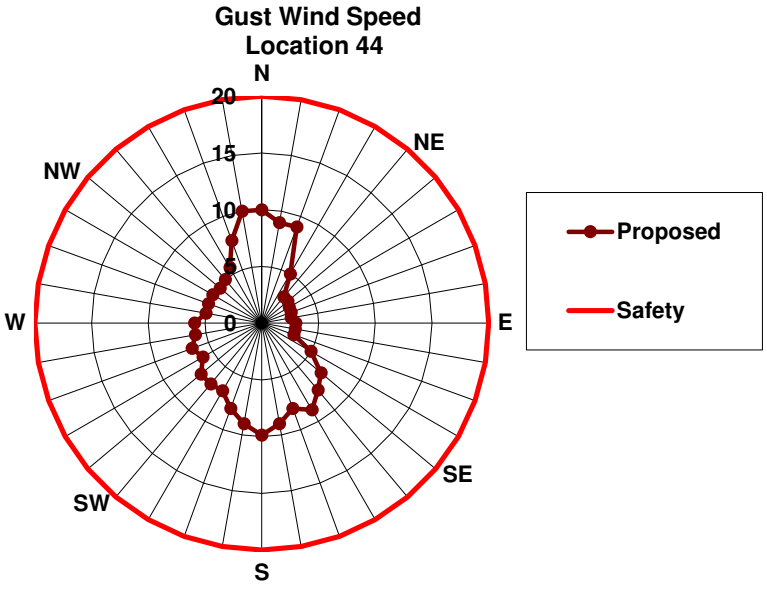
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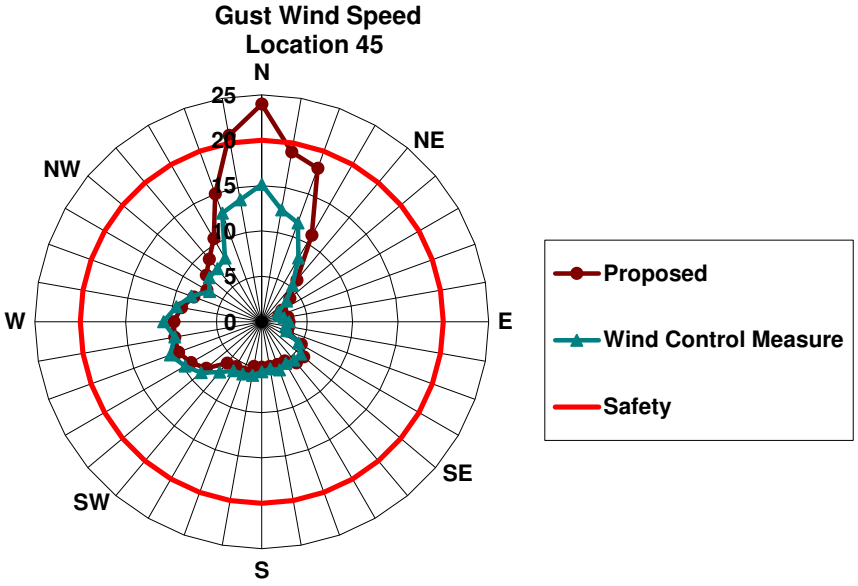
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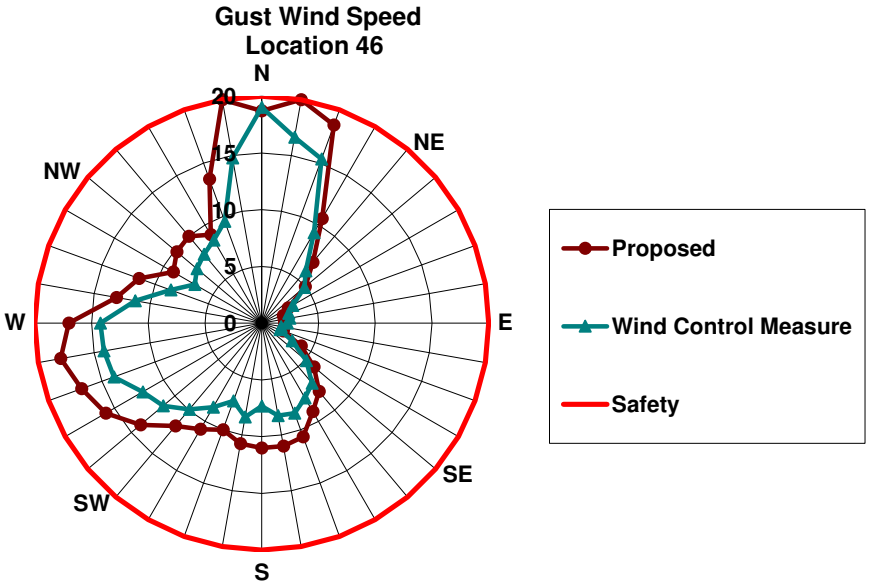
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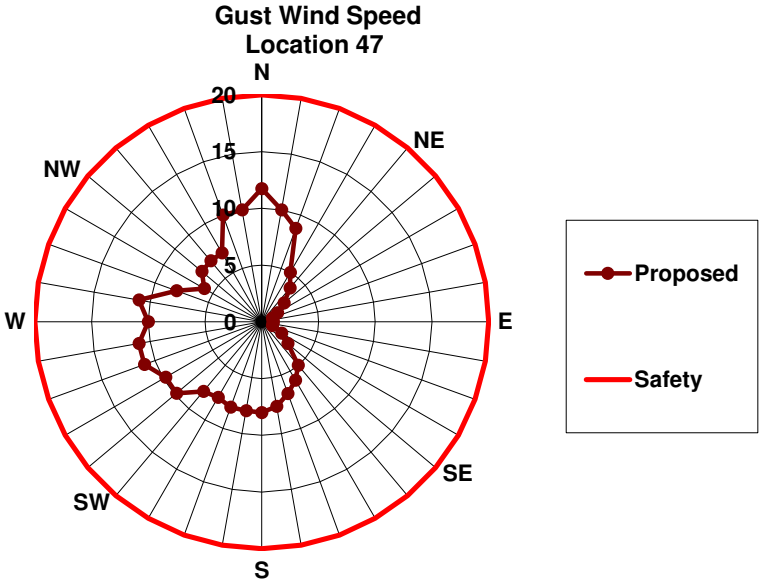
Gust Wind Speed
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Appendix D Up-crossing Prediction

The up-crossing method was used at Boundary Layer Wind Tunnel Laboratory, University of Western Ontario decades ago and adapted at VIPAC recently. The methodology is based on the following theory.

The expected number of excursions beyond a level x per unit time, or the rate of crossing with positive slope, according to Rice's theory (D.2), is given by:

$$N_x(x) = \int_0^\infty \dot{x}\, p(x, \dot{x})\, dx \tag{1}$$

where $\dot{X}$ is the rate of change of x and $p(x, \dot{x})$ is the joint probability density function of x and $\dot{X}$. For a stationary random process, x and $\dot{X}$ are statistically independent, thus

$$p(x, \dot{x}) = p(x)\, p(\dot{x}) \tag{2}$$

For a Gaussian process,

$$\int_0^\infty \dot{x}\, p(\dot{x})\, d\dot{x} = \frac{\sigma_{\dot{x}}}{\sqrt{2\pi}} \tag{3}$$

where $\sigma_{\dot{x}}$ is the standard deviation of $\dot{x}(t)$. Thus, the crossing rate now becomes

$$N_x(x) = \frac{\sigma_{\dot{x}}}{\sqrt{2\pi}}\, p(x) \tag{4}$$

The statistical frequency or the cycling rate of process $x(t)$ is defined as

$$\nu = \frac{1}{2\pi}\ \frac{\sigma_{\dot{x}}}{\sigma_x} \tag{5}$$

Substituting this in equation (4) yields

$$N_x(x) = \sqrt{2\pi}\ \nu\ \sigma_x\ p(x) \tag{6}$$

Extending Rice's theory, Davenport (D.3) has shown that for a two-dimensional variable, $x = x(V, \alpha)$, the crossing rate of a particular boundary $x = x_1$ becomes:

$$N_x(x) = \sqrt{2\pi}\ \nu\ \sigma \int_0^{2\pi} \sqrt{1 + \left(\frac{d\,V_1}{V_1\, d\alpha} \right)^2}\ p_V(V_1, \alpha)\, d\alpha \tag{7}$$

where $x_1 = x(V_1, \alpha)$ and $p_V(V, \alpha)$ is the joint probability density function of V and α.

Approximating the probability distribution of the wind speed V and the direction α by a generalized Weibull distribution,

$$p_V(>V, \alpha) = A(\alpha)\, e^{-|V/C(\alpha)|^{K(\alpha)}} \tag{8}$$

the probability density function of V and α becomes

$$p_V(V, \alpha) = A(\alpha)\, \frac{K(\alpha)}{C(\alpha)} \left(\frac{V}{C(\alpha)} \right)^{|K(\alpha)-1|}\ e^{-|V/C(\alpha)|^{K(\alpha)}}\ d\alpha \tag{9}$$

Hence the crossing rate of a particular boundary $x_1 = x_1(V_1, \alpha)$ from Equation (7) becomes:

$$N_x(x_1) = \sqrt{2\pi}\ \nu\ \alpha \int_0^{2\pi} \left\{ 1 + \frac{d\,V_1}{V_1\, d\alpha} \right\}^{\frac{1}{2}}\ A(\alpha)\, \frac{K(\alpha)}{C(\alpha)} \left(\frac{V}{C(\alpha)} \right)^{|K(\alpha)-1|}\ e^{-|V/C(\alpha)|^{K(\alpha)}}\, d\alpha \tag{10}$$

The cycling rate, ν, and the standard deviation, σ, in Equation (10) are taken as those of the wind speed, V, regardless of direction; namely they are based on the marginal statistical properties of V and $\dot{V}$. With ν expressed in terms of occurrences per annum, $N_x(x_1)$ gives the yearly crossing rate.

The return period, or the average interval of time between events during which the response equals or exceeds the response boundary $x = x_1$, is the inverse of the crossing rate of that boundary. Consequently, from Equation (10) the return period for the response level $x = x_1$ in years is taken as

$$R_x(x_1) = \frac{1}{N_x(x_1)} \tag{11}$$

The risk of exceeding the response level associated with the return period $R_x(x_1)$ in a time period L is:

$$r(x_1) = 1 - \left(1 - \frac{1}{R_x(x_1)}\right)^L \tag{12}$$

From the above equation, the risk of exceeding x_1 within a time interval of $L = R_x(x_1)$ is approximately 63 percent.

References

[D.1] Irwin, P, Garber, J and Ho, E., "Integration of Wind Tunnel Data with Full Scale Wind Climate", 10th Americas Conference on Wind Engineering, Baton Rouge, Louisiana, U.S.A., May 2005.

[D.2] Rice, S.O., "Mathematical Analysis of Random Noise", Bell Tech. Journal Vol. 18 and 19, 1945.

[D.3] Davenport, A.G., "The Prediction of Risk Under Wind Loading", 2nd International Conf. on Structural Safety and Reliability (ICOSSAR), Sept. 1977, Munich Germany.

Traffix Group

Waste Management Plan

Proposed Mixed Use Development

675 Victoria Street, Abbotsford

Prepared for
EG

October 2024

G31423R-04C (WMP)

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Melbourne Victoria 3000

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Document Control

Our Reference: G31423R-04C (WMP)

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B	Updated WMP	23/10/2024	M. Jora	C. Morello (RPE7781)
C	Updated WMP	04/04/25	N. McCaffrey	J. Cossins (RPE11767)

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Appendix A Development Plans

Appendix B Swept Path Diagrams

1. Introduction

Traffix Group has been engaged by EG to undertake a Waste Management Plan (WMP) for the proposed mixed use development at 675 Victoria Street, Abbotsford.

This Waste Management Plan is intended to act as a guideline for the proposed development and may be subject to ongoing updates, post-development.

2. Proposal

The proposal is for a mixed-use development comprising the following:

- 21 x one-bedroom apartments,
- 67 x two-bedroom apartments,
- 35 x three-bedroom apartments,
- 122 square metres of community facility (Place of Assembly), and
- 287 square metres of commercial office space.
- 279 square metres of internal amenity spaces including a gym and private dining room to be used by residents of the development only.

Separate dedicated waste storage areas are provided at lower ground level for both the residential dwellings and commercial spaces.

Vehicle access to the site is to be provided via Victoria Street at the south eastern corner of the site.

Waste collection is proposed to be undertaken onsite within the lower ground level via a private contractor using the 6.4m long mini rear loaded waste collection vehicle.

A copy of the development plans prepared by SJB Architects (dated March 2025) is attached at Appendix A.

3. Waste Management Plan

3.1. Waste Generation

The proposed land uses have been assessed against the waste generation rates specified under the *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments* by Sustainability Victoria.

It is noted that the Guidelines do not set out a waste generation rate for the Place of Assembly (Community Facility). Based on the proposed operation the waste generation rates for 'office' have been applied to this use.

The following table sets out the expected waste generation for the proposed mixed-use development.

Table 1: Waste Generation Rates

Waste Source	Garbage	Recycling
Residential		
One-bedroom dwellings	80L/dwelling per week	80L/dwelling per week
Two-bedroom dwellings	100L/dwelling per week	100L/dwelling per week
Three-bedroom dwellings	120L/dwelling per week	120L/dwelling per week
Residential Amenities	10L/100m² floor area/day	10L/100m² floor area/day
Commercial		
Place of Assembly (Community Facility) (1)	10L/100m² floor area/day	10L/100m² floor area/day
Office	10L/100m² floor area/day	10L/100m² floor area/day
Note: 1. It should be noted that waste generation for the place of assembly and office rates are expected to most closely reflect the intended operation.		

An estimate of the total waste generated by the proposed development is detailed in Table 2.

Table 2: Expected Waste Generation for the Proposed Use

Waste Source	Size/No.	Garbage	Recycling
Residential			
One-bedroom dwellings	21	1,680L per week	1,680L per week
Two-bedroom dwellings	67	6,700L per week	6,700L per week
Three-bedroom dwellings	35	4,200L per week	4,200L per week
Residential amenities	279 m^2	195L per week	195L per week

Waste Source	Size/No.	Garbage	Recycling
TOTAL RESIDENTIAL WASTE GENERATED		**12,775L per week**	**12,775L per week**
Commercial			
Community Facility (5-days)	122m^2	85L per week	85L per week
Office (5-days)	287m^2	144L per week	144L per week
TOTAL COMMERCIAL WASTE GENERATED		**229L per week**	**229L per week**

3.2. Alternative Waste Streams

In accordance with the Victorian Government's *Circular Economy Policy*: *Recycling Victoria*, food organics green organics (FOGO), glass and paper & cardboard waste have been considered separately to help reduce landfill at the source or help separate commingled recycling.

Residential Component

Organic waste is included within the 'garbage' waste rates. Based on the *Victorian Statewide Garbage Bin Audit* – 30% of recycling waste from the residential uses is considered as glass.

Based on the above, the residential component will produce:

- Garbage – 8,304L/week,
- Commingled Recycling – 8,943L/week,
- FOGO – 4,471L/week, and
- Glass – 3,833L/week

Commercial Component

Paper & cardboard waste is included within the 'recycling' waste rates. Approximately 50% of the recycling waste from the office tenancy is considered as paper & cardboard.

Based on the above, the commercial component will produce:

- Garbage – 144L/week,
- Commingled Recycling – 72L/week, and
- Paper & cardboard – 72L/week.

Community Facility

FOGO waste is included within the Garbage waste. Approximately 30% of the FOGO waste from the community is considered as FOGO waste.

- Garbage – 60L/week,
- Commingled Recycling – 85L/week, and
- FOGO– 26L/week.

Three (3) standard 240L sized bins of each (Garbage, Commingled Recycling and FOGO) waste stream will be provided within the commercial bin room.

3.3. Waste Equipment

Based on the determined waste generation, Table 3 provides a summary of the nominated waste storage area provisions and the frequency of collection.

Table 3: Waste Bins and Collection Frequencies

Waste Source	Waste Stream	Waste Volume (L/week)	Bin Capacity	No. of Bins Required	Collection Frequency (per week)
Residential Component	Garbage	8,304L	1,100L	3	3
	Recycling	8,943L	1,100L	5	2
	FOGO	4,471L	240L	7	3
	Glass	3,833L	240L	8	2
Office	Garbage	144L	360L	1	1
	Recycling	72L	240L	1	1
	Paper & cardboard	72L	240L	1	1
Community facility	Garbage	60L	240L	1	On Demand
	Recycling	85L	240L	1	On Demand
	FOGO	26L	240L	1	On Demand

Overall, the proposed mixed-use development requires the following bins:

- Residential dwellings – 15 x 240L bins and 8 x 1,100L bin, and
- Office tenancy – 2 x 240L bins and 1 x 360L bin.
- Community facility – 3 x 240L bins.

Further details regarding the waste equipment required for the development are detailed in Table 4

Table 4: Bin Details and Colours

Waste Stream	Bin Capacity	Dimensions (H x W x D) [1]	Bin Lid Colour [2]	Bin Body Colour [2]
Garbage	240L 1,100L	1,060 x 440 x 496mm 1,200 x 1,240 x 1,070mm	Red	Dark Green
Recycling	240L 1,100L	1,060 x 440 x 496mm 1,200 x 1,240 x 1,070mm	Yellow	
FOGO	240L	1,060 x 440 x 496mm	Light Green	
Glass	240L	1,060 x 440 x 496mm	Purple	
Paper & cardboard	360L	1,100 x 680 x 770mm	Blue	

Notes:
1. Bin capacity and dimensions are provided as an indicative dimension, sourced from Bin Supplier, 'Sulo'.
2. Bin lid and body colours are based on the bin colour scheme set out by Sustainability Victoria.

3.4. Waste Systems

The waste management systems of the proposed development comprise of the following components:

- Immediate smaller bins within individual dwellings/commercial tenancies for temporary storage of garbage, FOGO, recycling, glass and paper & cardboard waste,
- A dual-chute system for garbage and recyclable waste at each building level, and
- Mobile garbage bins within the respective waste storage areas at lower ground level.

3.4.1. Waste Streams

The waste generated by the proposed development will be separated and managed into the following waste streams, as detailed below.

Table 5: Waste Streams

Waste Type	Waste Management	
	Residential	**Commercial Tenancies**
Garbage	Residents will place general landfill waste in tied plastic bags and dispose of the bagged garbage directly into the garbage chute at each residential level.	Staff will place general landfill waste in tied plastic bags and dispose of the bagged garbage directly into the respective garbage bin within the commercial waste area at lower ground.
Recycling	Residents will dispose of recyclable items directly into the recycling chute within the residential waste area at each level. Larger cardboard items shall be folded and transferred to the basement bin room where appropriate.	Staff will transfer recyclable items from smaller bins directly into the respective recycling bin within the commercial waste area at lower ground.
FOGO	Residents will be provided with a plastic bin in each dwelling for the separating of FOGO waste from general waste. FOGO waste will be bagged (with compostable bags) and residents will dispose of their FOGO waste from their dwelling into the organic bins within the residential waste area at lower ground.	Organic waste generated by the office tenancy is anticipated to be low and can be accommodated within the garbage bin. A 240L FOGO waste bin is provided within the commercial waste storage area for community facility.
	The property manager will be responsible for the collection and disposal of garden organics via a landscape maintenance contractor.	
Glass	Residents will be provided with a plastic bin in each dwelling for the separating of glass from general recycling. They will be responsible for transferring this waste directly into the glass bins within the waste area at basement level.	Glass waste generated by the commercial tenancies is anticipated to be low and can be accommodated within the recycling bin.
Paper & cardboard	Paper and cardboard waste generated by residents are anticipated to be low and can be accommodated within the general recycling bin.	Staff will dispose of loose cardboard directly into the paper & cardboard bin within the commercial waste area at lower ground. Cardboard shall be folded appropriately.
Hard Waste	Residents will dispose of hard waste including used furniture and white goods with the assistance of the property manager. A temporary hard waste storage area is provided at lower ground. Residential hard waste will be collected via private contractor as required.	The commercial tenancies will dispose of any hard waste via a private contractor on a required basis.

Waste Type	Waste Management	
	Residential	Commercial Tenancies
Other	Residents will dispose of electric waste directly into the electric waste bins within the waste storage area at lower ground. Residents can dispose of any charity goods at the charity bin provided at lower ground.	The tenancies will dispose of any electric waste including batteries, phones, computers etc. with the assistance of a private contractor or drop it off at Whelans Waste Transfer Station (Kirkdale Street, Brunswick East). Electronic waste must not be disposed in landfill.

3.4.2. Dual Chute System

A dual waste chute system will be provided on each level with residential dwellings. A dedicated chute will be provided for garbage and recycling separately which will terminate into the appropriate bins located in the residential waste area at lower ground. Skirting/equivalent system should be provided at the termination of the chutes to reduce the impact of materials falling into the bins. Residential garbage and recycling bins can have reinforced bases to increase the durability of the bins.

The chutes shall be designed to the manufacturer's specifications and appropriate signage and instructions will be provided to residents to ensure correct and safe use of the chute system. Access to the chute outlet at ground level will be secured and accessible to trained personnel only. Bins would be rotated as required by trained personnel.

3.4.3. Waste Areas and Access

The proposed development provides separate residential waste storage area and a commercial waste storage area at lower ground level.

Access to the waste area will be via the lifts/stairs, as required.

The waste areas are illustrated at Figure 1.

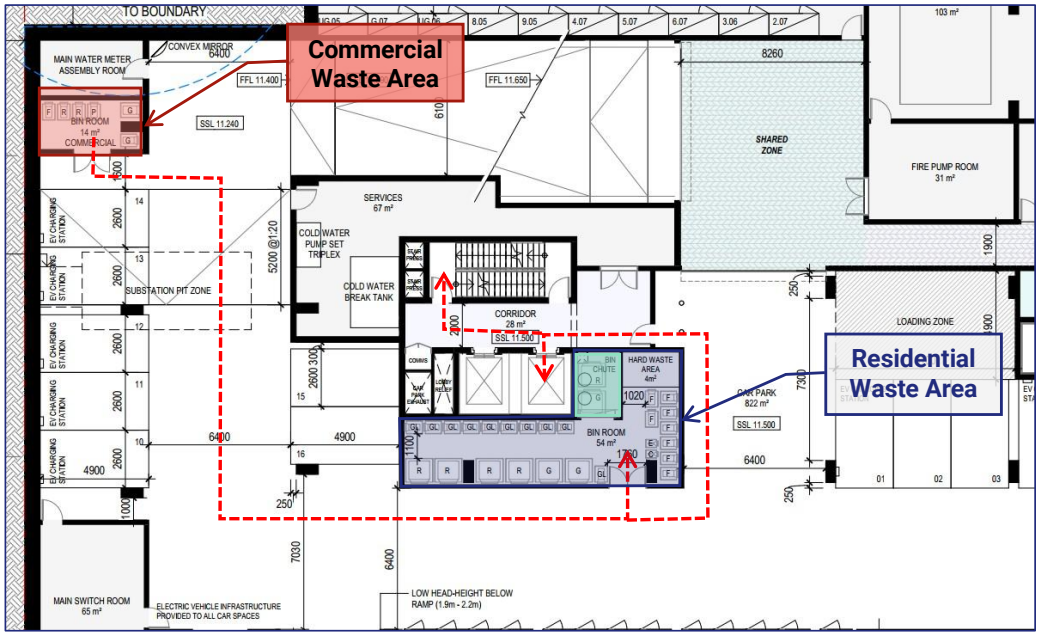


Figure 1: Proposed Waste Areas & Access Route

Table 6 details the waste area requirements based on the waste equipment proposed.

Table 6: Waste Area Requirements

Use	Waste Equipment	Net Area Note 1	Quantity	Net Waste Area Required	Waste Area Provided
Residential dwellings	240L	0.43m²	15	6.40m²	54m²
	1,100L	1.33m²	8	10.64m²	
	Hard waste	4m²			
Office	240L	0.43m²	2	0.86m²	14m²
	360L	0.58m²	1	0.58m²	
Community facility	240L	0.43m²	3	1.29m²	
Note 1. Net area required is calculated from the dimensions of the bins.					

Based on the above, sufficient space is provided for on-site waste storage for the residential dwellings and commercial tenancies.

3.5. Signage

Prior to moving in and during induction, residents would be advised on the waste disposal arrangement for the proposed development. Residents and the commercial tenancies will be

provided with information regarding the five waste streams and guides on separating waste at the source to help reduce waste and separate recycling.

Appropriate signage as illustrated in Figure 2 will be displayed on the bins and the waste areas to assist in guiding and encouraging residents and staff to dispose of waste correctly into the appropriate waste streams.



Figure 2: Waste Signage Examples

3.6. Waste Collection Arrangements and Vehicle Access

It is proposed that waste collection will occur onsite within the lower ground level. A private contractor will be engaged to collect the waste via a mini rear loader vehicle (typically 6.4m long with 2.2m headroom clearance along travel path).

The waste vehicle will prop within the loading area and transfer the bins to and from the waste area. Waste collection will be undertaken during off peak periods to minimise disruptions.

Traffix Group has provided advice to the project architect to accommodate vehicle access of the 6.4m long mini rear loader vehicle within the lower ground level. A minimum headroom clearance of 2.5m is provided within waste collection area to accommodate the rear lifting of the bins.

Swept path diagrams demonstrating vehicle access of the 6.4m long mini rear loader vehicle entering and exiting the site in a forward direction is attached at Appendix B.

4. Amenity Impacts

It is the responsibility of the property manager to carry out the ongoing maintenance of all waste areas to minimise the following amenity impacts:

Ventilation/Odour Prevention

For developments using forced ventilation or air-conditioning system, adequate ventilation will be provided within the waste areas in accordance with AS1668.2 to ensure waste-related odours are minimised.

Noise Reduction

The waste facilities will comply with BCA and AS2107 acoustic requirements. Private waste collection will follow Council's and EPA guidelines to ensure acoustic impact is minimised.

Collection days and times will be determined following the confirmation of a specific private waste collection contractor by the property manager. Waste collection times should comply with the requirements under the EPA Noise Control Guidelines (Publication 1254):

Domestic Waste Collection

- *Collections occurring once a week should be restricted to the hours 6am — 6pm Monday to Saturday,*
- *Collections occurring more than once a week should be restricted to the hours 7 am —6 pm Monday to Saturday*

Industrial Waste Collection

- *Collections occurring once a week should be restricted to the hours 6:30am — 8pm Monday to Saturday, 9am – 8pm Sunday and public holidays*
- *Collections occurring more than once a week should be restricted to the hours 7 am —8pm Monday to Saturday, 9am – 8pm Sunday and public holidays*

Vermin Prevention & Litter Management

Waste areas will be secured to prevent any unauthorised use. Waste areas will be monitored by the property manager to ensure that bins are not overfilled and any spillage resulting from waste collection is appropriately addressed. All access doors and bin lids will be kept closed at all times to prevent vermin access to the waste areas.

Washing Facilities and Stormwater Pollution

Appropriate washing facilities including water supply and hose will be provided for the regular washing of the bins and waste area by the property manager. Washing facility provided will be connected to the sewerage for drainage to prevent any stormwater pollution.

5. Ongoing Maintenance & Sustainability Initiatives

5.1. Maintenance Management

Further to the occupation of the proposed development, it is the responsibility of the property manager for the ongoing operation and maintenance of the Waste Management Plan.

The property manager will ensure that maintenance work and upgrades are carried out on the waste areas and components of the waste system. When required, the property manager will engage an appropriate contractor to conduct maintenance services, replacements or upgrades.

All ongoing costs are to be fully met by the owner(s) of the building.

5.2. Waste Reduction Strategies

The property manager will be responsible to encourage all users of the proposed development to reduce waste disposal and recycle materials based on the waste management hierarchy set out by Sustainability Victoria.

The hierarchy is detailed at Figure 3 below.

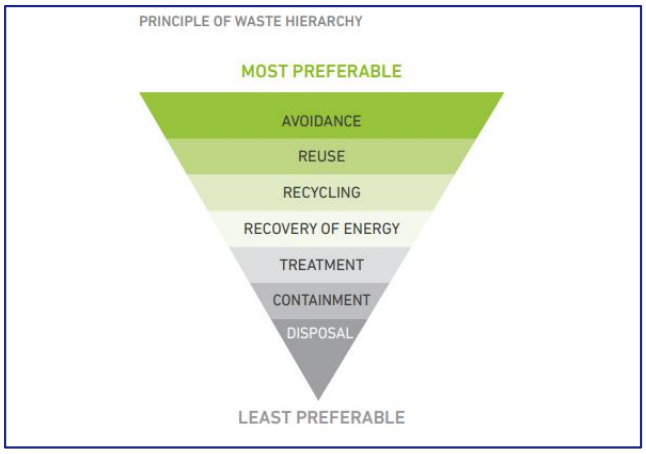


Figure 3: Sustainability Victoria's Waste Management Hierarchy

Additionally, the property manager can set targets and measures to reduce garbage going to landfill and increase recycling and choose to participate in Council's waste programs to promote sustainability initiatives.

5.3. Waste Management Rules

It will be the responsibility of the property manager to ensure all users are provided with the relevant information and materials regarding the waste management system and sustainability strategies of the proposed development.

Relevant information will be provided at the waste areas to ensure that all users will operate and maintain safe practice when utilising the waste facilities.

5.4. Monitoring and Review

This Waste Management Plan should be monitored and reviewed on a regular basis to ensure that it meets the regulatory requirements and the expected waste generation rates outlined in Section 3.1. The property manager will be responsible for monitoring the Waste Management Plan. Where required, the property manager should undertake a waste audit to identify any modifications and/or improvements to the waste management system.

5.5. Occupational Health and Safety Risk Assessment

Further to the occupation of the residential development, the property manager will ensure the waste collection arrangements comply with the relevant occupational health and safety (OH&S) guidelines including Worksafe Victoria's *Occupational Health and Safety Guidelines for the Collection, Transport and Unloading of Non-hazardous Waste and Recyclable Materials* (June 2003).

Additionally, the property manager will ensure the nominated private contractor completes a risk assessment, provides staff training and implements safety procedures to address the risks associated with waste management activities, including manual bin handling, bin transfers and cleaning of waste equipment.

6. Contact Information

Below is a list of common waste collection service contractors and waste equipment suppliers. The property manager is not obligated to procure goods/services from the following suppliers and reserves the right to choose their own preferred suppliers.

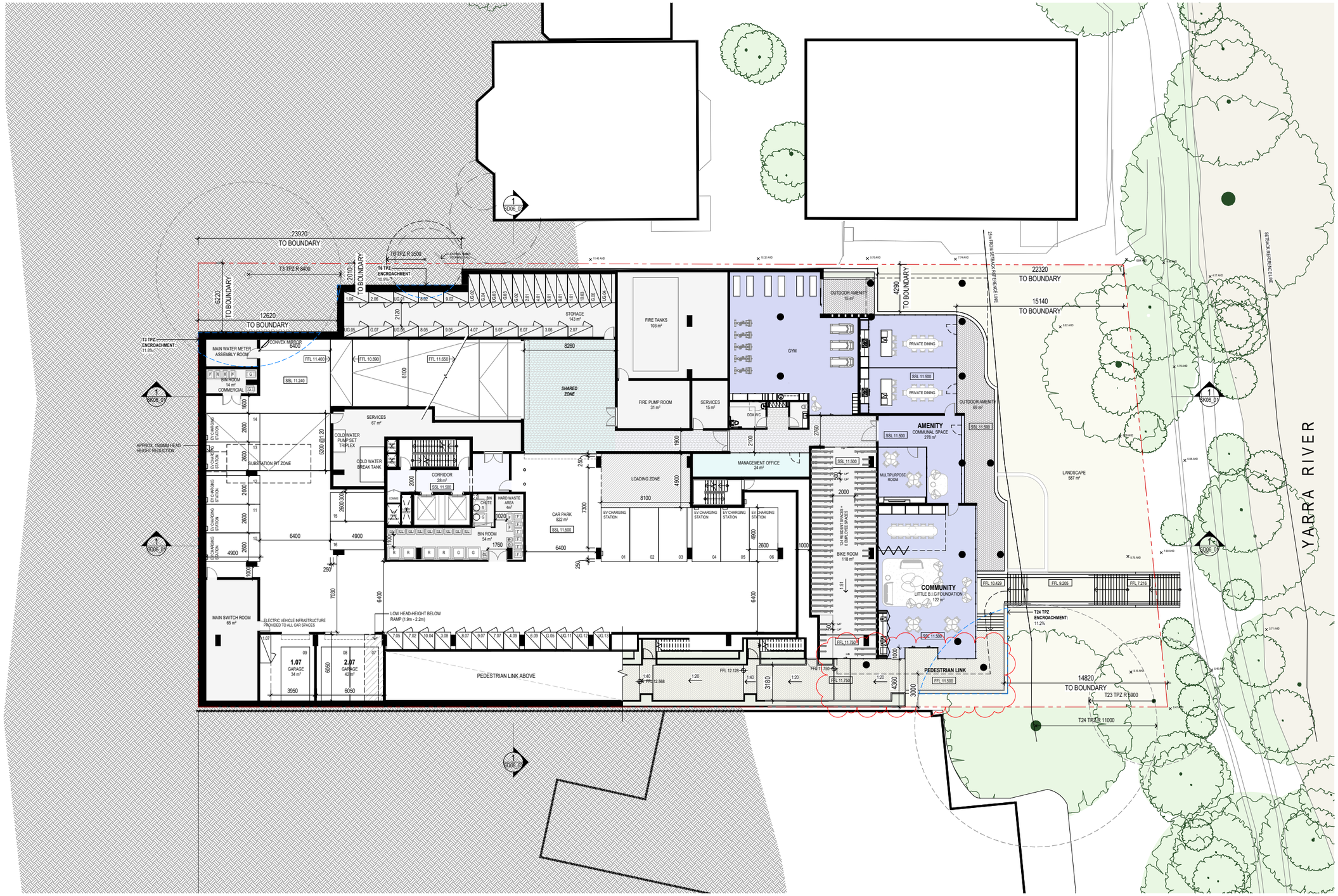
Traffix Group does not make representations for the goods/services provided by the suppliers listed below.

Table 7: Supplier Contact Information

Service Type	Business Name	Phone	Website
Private Waste Collectors	Citywide Waste	03 9261 5000	www.citywide.com.au
	Cleanaway	13 13 39	www.cleanaway.com.au
	Veolia	13 29 55	www.veolia.com/anz
	JJ Richards	03 9794 5722	www.jjrichards.com.au
	Waste Wise Environmental	1300 550 408	www.wastewise.com.au
	Kartaway	1300 362 362	www.kartaway.com.au
	iDump	1300 443 867	www.idump.com.au
	Waste Ninja	1300 648 088	www.wasteninja.com.au
E-Waste Collection	TechCollect	1300 229 837	www.techcollect.com.au
Equipment Supplier	Sulo Australian (bin supplier)	03 9357 7320	www.sulo.com.au
	Mr Wheelie Bin (bin supplier)	03 9912 2850	www.mrwheeliebin.com.au
	Electrodrive (tug supplier)	1300 934 471	www.electrodrive.com.au
	Warequip (tug supplier)	1800 337 711	www.warequip.com.au
	Wastech Engineering (compactors & chutes)	1800 465 465	www.wastech.com.au
	Elephants Foot (compactors & chutes)	1300 435 374	www.elephantsfoot.com.au
	ASI JD MacDonald (chutes)	1800 023 441	www.jdmacdonald.com.au
	Eco-safe Technologies (odour control system)	1300 135 039	www.eco-safe.com.au
Bin Washing Services	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au
	Kerbside Clean-A-Bin	03 9588 1944	www.kerbsidecleanabin.com.au

Appendix A

Development Plans



Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LOWER GROUND FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	14.03.2025	SD02_03	/ 2

SJB Architects
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Melbourne VIC
3000 Australia
T 61 3 9699 6688
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Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

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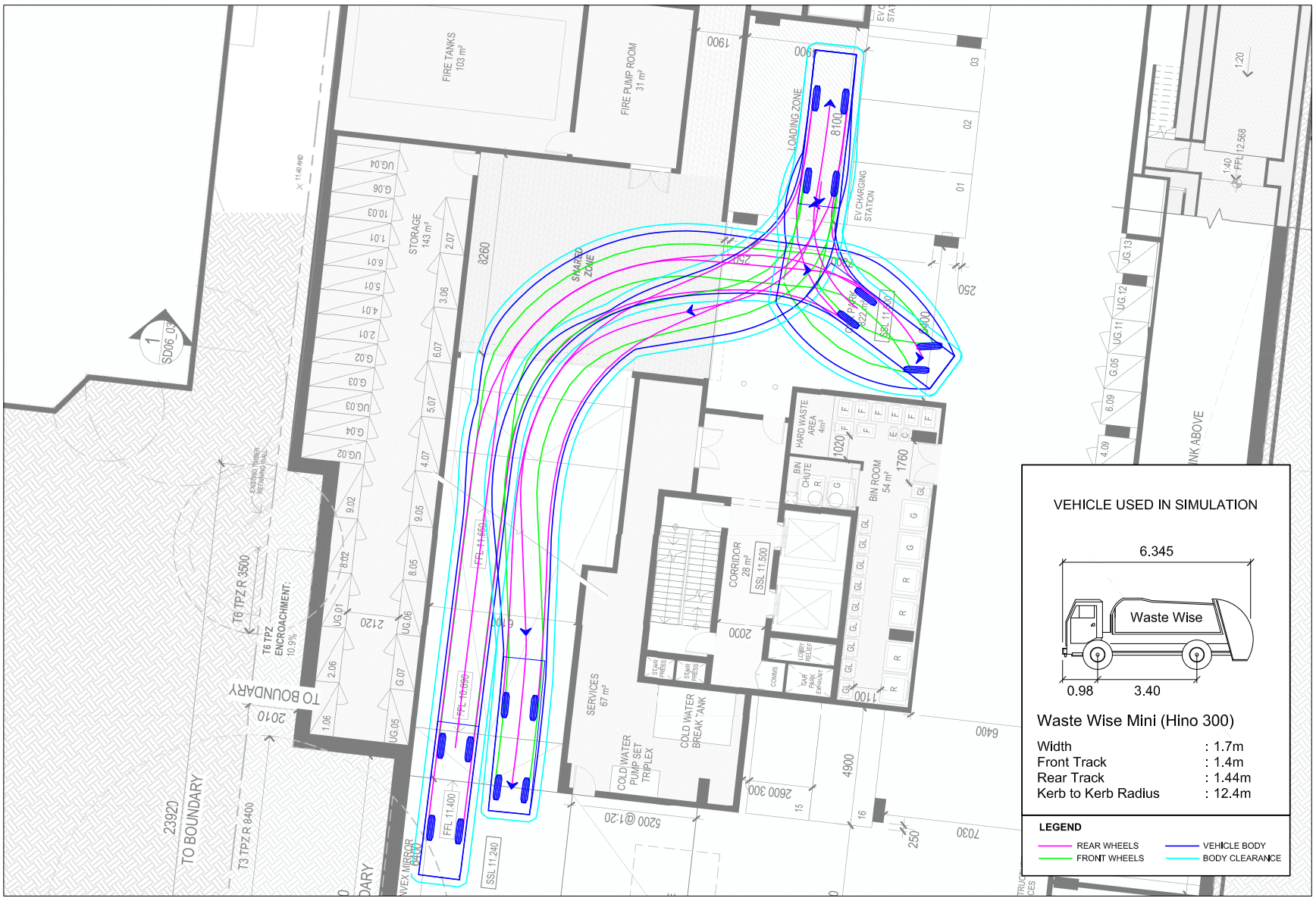
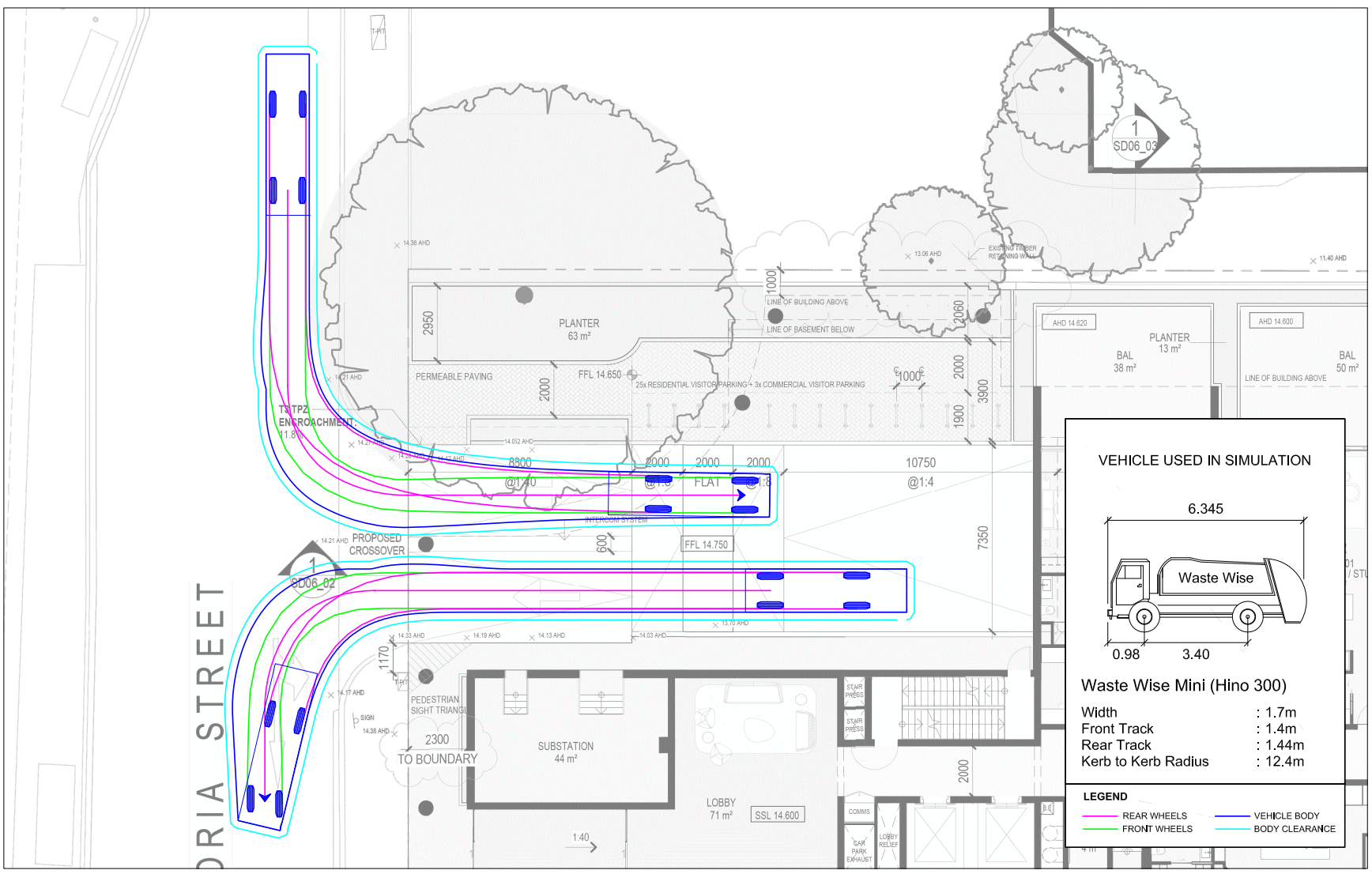
SJB Architects
L5, 18 Oliver Lane
Melbourne VIC
3000 Australia
T 61 3 9699 6688
www.sjb.com.au

Appendix B

Swept Path Diagrams

WASTE COLLECTION VEHICLE ACCESS





REV	DATE	NOTES	DESIGNED BY	CHECKED BY
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B	15/03/2023	RFI	J. COSSINS	C. MORELLO
C	22/10/2024	DFP	N. MCCAFFREY	C. MORELLO
D	21/03/2025	DFP COMMENTS	N. MCCAFFREY	J. COSSINS

675 VICTORIA STREET, ABBOTSFORD
PROPOSED MIXED USE DEVELOPMENT

GENERAL NOTES:
BASE INFORMATION FROM PLANS PREPARED BY SJB ARCHITECTS DATED MARCH 2025

FILE NAME: 31423
SHEET NO.: 02

SCALE: 1:200 (A3)

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Traffix Group

Traffic Engineering Assessment

Proposed Mixed Use Development

675 Victoria Street, Abbotsford

Prepared for
EG

March 2025

G31423R-03E

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Document Control

Our Reference: G31423R-03E

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C	DFP	25/10/24	N. McCaffrey	C. Morello
D	DFP Commentary	21/03/25	N. McCaffrey	J. Cossins
E	Final	24/03/25	N. McCaffrey	J. Cossins

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Appendix A Two-Tier Bicycle Parking Spec Sheet

Appendix B Swept Paths & Ground Clearance

1. Introduction

Traffix Group has been engaged by EG to undertake a Traffic Engineering Assessment for the Proposed Mixed Use Development at 675 Victoria Street, Abbotsford.

This report provides a detailed traffic engineering assessment of the parking and traffic issues associated with the proposed development.

In the course of undertaking this assessment, we inspected the subject site, reviewed development plans and background material, and assessed the car parking and traffic impacts of the proposal.

Following an application for redevelopment of the site to Council in 2022-2023, the applicant has now prepared amended documentation as part of an application through the Development Facilitation Program (DFP).

In March 2025, it is understood that the application received approval to apply for a planning permit under the DFP.

This report provides an overview of the amendment of plans dated March 2025, and also responds to comments received from Council and the Department of Transport and Planning (DTP).

Our assessment is as follows.

2. Existing Conditions

2.1. Subject Site

The subject site is located on the northern side of Victoria Street between Acacia Place (to the east) and Walmer Street (to the west). The site has a frontage to Victoria Street (at the south) of approximately 40.4 metres.

The subject site is improved by a commercial building possessing approximately 3,478m^2 of net leasable floor area.

There is a provision for 115 car spaces within a two-level car park and at grade car park the front of the site (on Victoria Street level).

Vehicle access to 675 Victoria Street is afforded via a double width crossover with Victoria Street located at the south-west corner of the site.

A locality plan and aerial photograph are provided at Figure 1 to Figure 2, respectively.

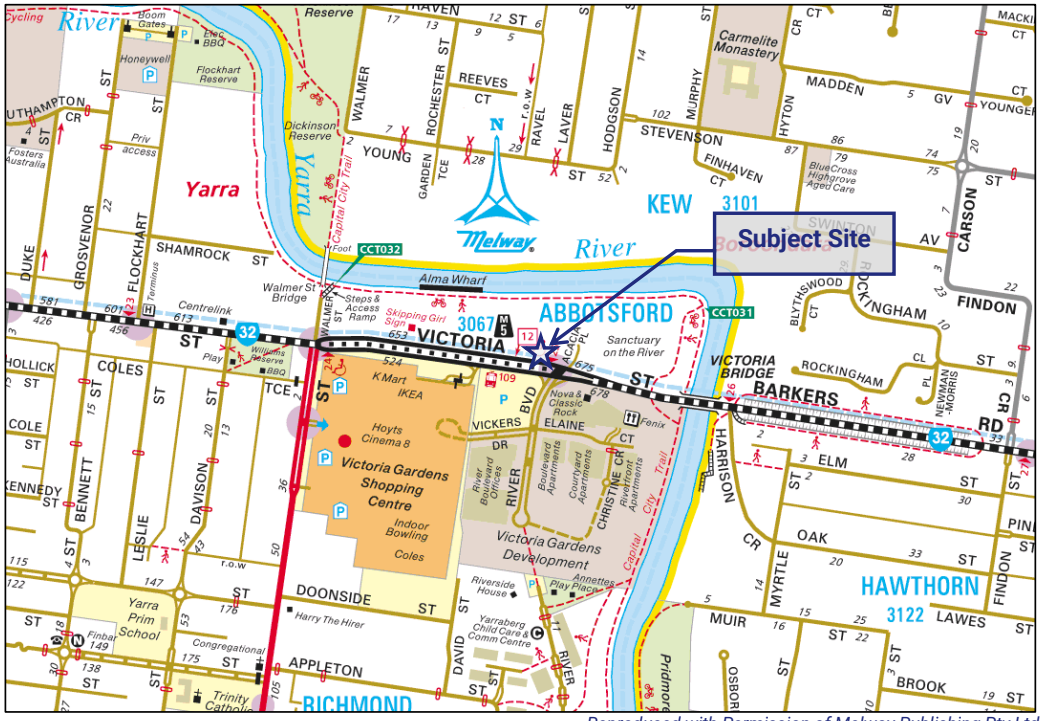


Figure 1: Locality Plan



Figure 2: Aerial Photograph *Source: Nearmap*

2.2. Planning Scheme Zones & Surrounding Uses

The subject site is zoned as 'Commercial 1 Zone (C1Z)' under the Yarra Planning Scheme. A planning zone map is provided at Figure 3.

Land uses in the immediate vicinity of the subject are generally mixed in nature with Public Park and Recreation uses immediately north of the site, commercial uses to the west, and residential uses to the east.

The Victoria Gardens Shopping Centre located approximately 70 metres south-west of the site.

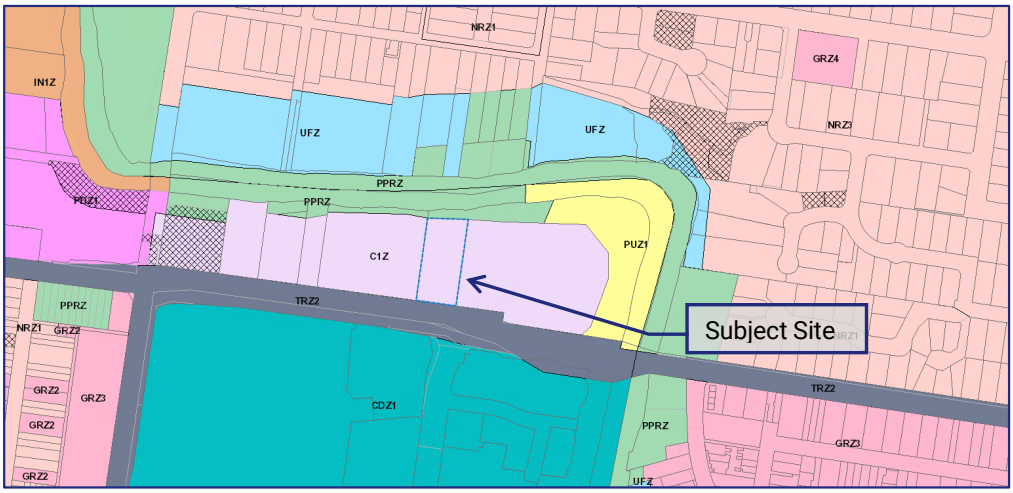


Figure 3: Planning Zone Map - Yarra *Source: Vicplan*

2.3. Road Network

Victoria Street is located within 'Transport Zone 2 – Principal Road Network (TRZ2)' zoning and is a State Arterial Road under the management of Department of Transport (DoT).

It is aligned in an east-west direction between Hoddle Street in the west, where it continues further west as Victoria Parade and the Yarra River to the east, where it continues further east as Barkers Road.

In the vicinity of the site, Victoria Street is divided by a tram reservation, with vehicle carriageways widths of approximately 9 metres and 10.1 metres on the northern and southern side, respectively. Three (3) traffic lanes are provided on the northern side and two (2) on the southern side of Victoria Street.

Narrow dedicated on-road bike lanes are provided in each direction along Victoria Parade.

To the immediate east of the site is the signalised intersection of Victoria Street/River Boulevard which provides for north-south signalised pedestrian crossings across Victoria Street.

A tram super stop is located opposite the site within the central tram fairway.

There are footpaths on both sides of Victoria Parade near the site.

Kerbside parking is restricted to 'No Stopping' restrictions and is not permitted on both sides of Victoria Street.

A signed speed limit of 60km/h applies to Victoria Street.

Figure 4 and Figure 5 provide views of Victoria Street to the east and west, respectively.



Figure 4: Victoria Street- View East



Figure 5: Victoria Street- View West

3. Proposal

3.1. The Development

The proposal seeks to redevelop the site as a mixed-use development, inclusive of an office (commercial tenancy), a community facility (Little B.I.G Foundation) and residential apartments.

The proposed development schedule is provided in Table 1.

Table 1: Proposed Development Schedule

Use		Current Scheme
Residential	1 bed dwellings	21 apartments
	2 bed dwellings	67 apartments
	3 bed dwellings	35 apartments
	Total	**123 apartments**
Office (Commercial)		287m^2
Community Facility (Little B.I.G Foundation)		122 m^2 (12 Patrons)

The proposal includes a number of ancillary uses including a gym, private dining rooms and amenity space to be used by residents of the development only.

3.2. Access

3.2.1. Pedestrian & Cyclist Access

Primary pedestrian and cyclist access is proposed via Victoria Street.

The on-site residential bike parking in the lower ground floor can be accessed via a DDA ramp from Victoria Street.

Visitor bike parking is located on the western boundary of the site, with access from Victoria Street.

The commercial tenancy will have direct access to Victoria Street via the front façade.

Secondary access will also be provided to/from the Yarra River Trail at the rear of the site, via stairs and a wheel ramp/ramped area.

3.2.2. Vehicle Access

Vehicle access is proposed via Victoria Street near the southwest corner of the site, via a two-way vehicle ramp to basement.

The access provisions are shown in Figure 6.

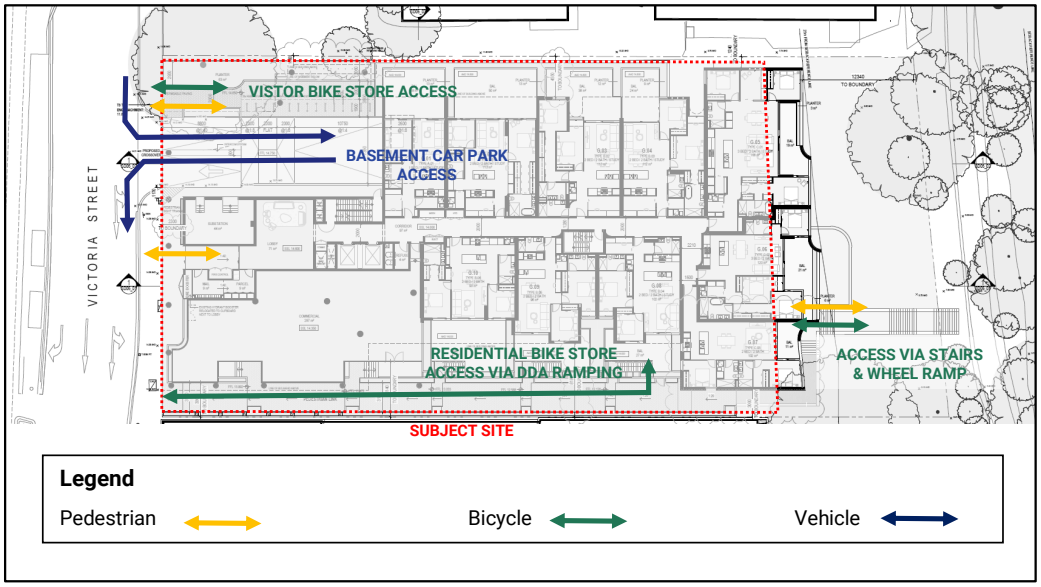


Figure 6: Proposed Access Arrangements

3.3. Parking

3.3.1. Bike & Motorcycle Parking

The application proposes the provision of 158 bicycle spaces comprising:

- 28 spaces located on the ground floor on the western boundary of the site;
  - Comprising of 25 Residential Visitor Spaces and 3 Commercial Visitor Spaces
  - 14 horizontal rails (28 spaces)
- 130 spaces located on the lower ground floor in the bike room;
  - Comprising of 124 Residential Spaces and 6 Commercial Staff Spaces
  - 10 vertical rails (10 spaces),
  - 60 two-tier rails (120 spaces),

26 motorcycle spaces are to be provided throughout the basement car park.

3.3.2. Car Parking

The proposed development includes 169 car spaces, allocated as follows:

- 167 spaces for Residential use,
- 1 space for the Commercial tenancy,
- 1 space for the Community Facility (Little B.I.G. Foundation).

3.3.3. Loading & Waste

A dedicated loading area is shown on the plans, in basement, intended to serve vans and passenger vehicles.

Waste collection is proposed to be undertaken on-site within the lower ground floor via private waste collection services from this location.

Further details regarding waste management and collection arrangements are outlined in the Waste Management Plan prepared by Traffix Group (ref. G31423R-04B, dated October 2024).

4. Car Parking Considerations

4.1. Statutory Requirements – Clause 52.06

The car parking requirements for the proposed development are outlined under Clause 52.06 of the Yarra Planning Scheme. The purpose of Clause 52.06 is:

- To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.
- To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
- To support sustainable transport alternatives to the motor car.
- To promote the efficient use of car parking spaces through the consolidation of car parking facilities.
- To ensure that car parking does not adversely affect the amenity of the locality.
- To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.

Clause 52.06-5 states that:

> *"Column B rates apply to a site if any part of the land is identified as being within the Principal Public Transport Network Area as shown on the Principal Public Transport Network Area Maps"*

An excerpt of the Principal Public Transport Network (PPTN) Area Map is provided at Figure 7.

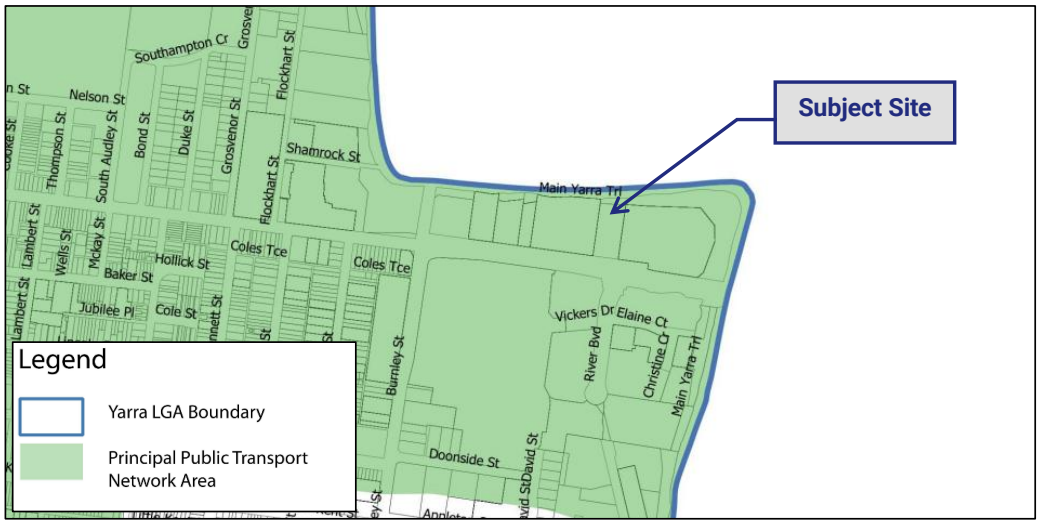


Figure 7: Yarra PPTN Area Map

The subject site falls within the PPTN area map and therefore Column B rates apply to the proposal.

For the purpose of the car parking assessment, the Community facility (Little BIG Foundation) is to be assessed as a Place of Assembly under the Planning Scheme.

It is noted that the site includes the provision of 22 two-bedroom dwellings with a separate study. The studies provided within these dwellings will include built in desks and will not be of a size suitable for the use of a bedroom. As such these two-bedroom dwellings with a study should be assessed as two bedroom dwellings not three-bedroom.

A statutory assessment of the proposal under Clause 52.06 is provided at Table 2.

Table 2: Statutory Car Parking Requirements (Clause 52.06)

Use	No / Size	Statutory Requirement	No of Spaces Required
Residential Apartments	21	1 car space to each 1-bed dwelling for tenants	21 spaces
	67	1 car space to each 2-bed dwelling for tenants	67 spaces
	35	2 car spaces to each 3-bed dwelling for tenants	70 spaces
	Total		***158 spaces***
Office	287 m^2	3.0 spaces to each 100 square metres	8 spaces
Place of Assembly	122 m^2 (12 Patrons)	0.3 spaces to each patron permitted	3 spaces
Total			**169 spaces**

Based on the table above, the development is statutorily required to provide 169 car spaces, inclusive of 158 spaces for residents, 8 spaces for office (commercial tenancy) and three spaces for the community facility (place of assembly).

There is no requirement to provide visitor parking and a permit is not required to provide parking above the statutory rates for residents.

The application proposes the provision of 167 residential spaces exceeding the statutory requirements for the residential use.

Importantly, a permit is not required to provide parking in excess of the statutory rates. That is, the additional residential parking is acceptable under Clause 52.06 and there is no mechanism to restrict residential parking.

The application proposes a single parking space for each of the commercial and community uses, therefore a waiver in the parking provisions is sought for the commercial and community uses.

Planning Practice Note specifies that the provisions draw a distinction between the assessment of likely demand for parking spaces, and whether it is appropriate to allow the supply of fewer spaces. These are two separate considerations, one technical while the other is more strategic. Different factors are taken into account in each consideration.

An assessment of the appropriateness of reducing the car parking provision below the statutory requirement is set out as follows.

4.2. Car Parking Demand Assessment

The Scheme requires the assessment of car parking demand likely to be generated by the proposed use to have regard for listed factors, as appropriate, including:

- *The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use*
- *The variation of car parking demand likely to be generated by the proposed use over time*
- *The short-stay and long-stay car parking demand likely to be generated by the proposed use.*
- *The availability of public transport in the locality of the land.*
- *The convenience of pedestrian and cyclist access to the land.*
- *The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.*
- *The anticipated car ownership rates of likely or proposed visitors or occupants (residents or employees) of the land.*
- *Any empirical assessment or case study.*

An assessment of the projected car parking demand for the proposed development, accounting for these factors follows.

4.2.1. Sustainable Modes of Transport

Walkability

The site has excellent access to sustainable transport modes and is well located with regard to retail and everyday essential services, thus promoting walking.

The site is located immediately adjacent the Victoria Gardens Shopping Centre, which is located on the southern side of Victoria Street, accessible by walking to the signals at Burnley Street or River Boulevard.

Victoria Gardens provides access to a wide range of everyday services such as banks, cafés, restaurants, entertainment and specialty shops.

Bicycle Access

The subject site has access to bicycle infrastructure including Shared Off-Road Paths along the Yarra Boulevard and On-Road Bike Routes along Victoria Street, as seen in the TravelSmart Map at Figure 8.

It has direct access to the Capital City Trail along the Yarra River at the rear and also other formal and information routes through Richmond to the south.

Public Transport

The site has excellent service by public transport with Tram Route 12 & 109 operating along Victoria Street, including a tram stop located along the site frontage.

Table 3 summarises the available services, whilst Figure 7 illustrates the nearby routes.

Table 3: Public Transport Services in the Vicinity of the Subject Site

Mode	Service	Route	Distance to Node
Tram	Route 109	Box Hill - Port Melbourne	Along the site frontage
	Route 12	Victoria Gardens - St Kilda	~270 metres

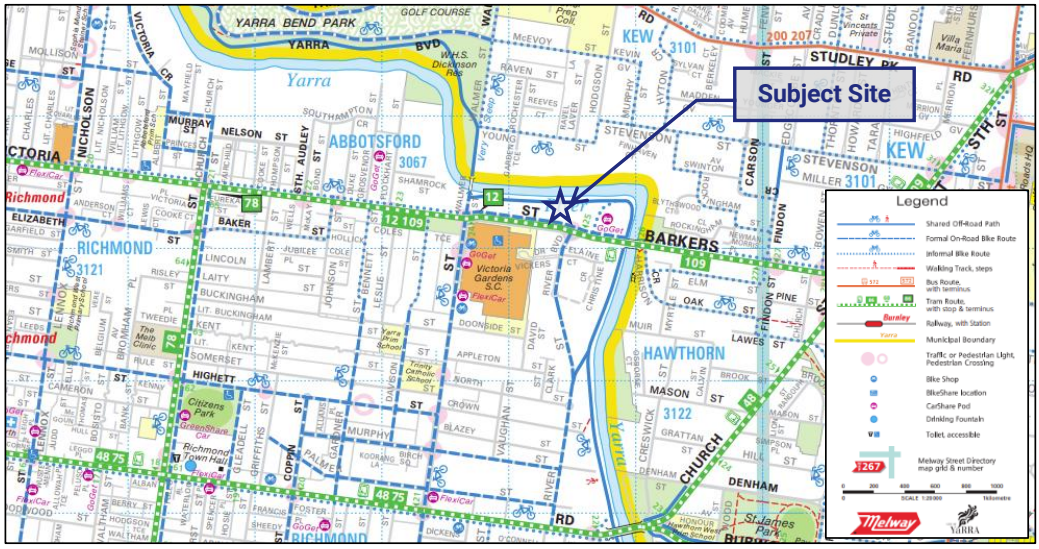
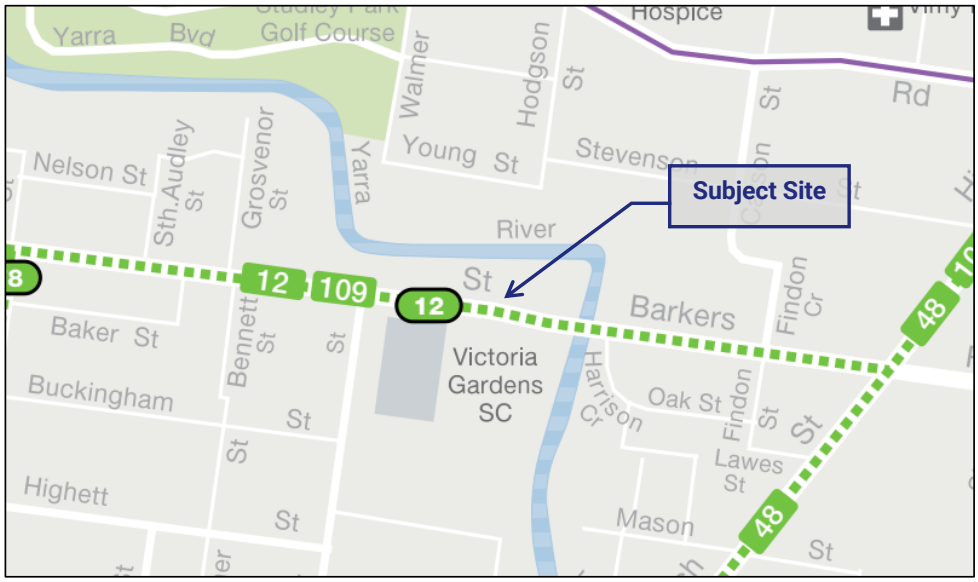


Figure 8: TravelSmart Map – Yarra



Source: Public Transport Victoria

Figure 9: PTV Public Transport Map - Yarra

4.2.2. Car Share

City of Yarra Council has an adopted car share policy (Car Share Policy 2019 to 2024). The policy actively encourages the Council's Sustainable Transport Strategy, which sets Council's broader vision for a connected and liveable city where residents, visitors and workers can live and travel car free by improving the convenience, safety, accessibility and range of sustainable travel choices across the municipality.

Car share schemes provide an alternative to owning a car and encourages the use of sustainable modes of transport for the majority of trips. Car share facilities offer personal and commercial or business memberships and can be more convenient for short trips as payment is generally on a per hour basis.

For staff, commercial or business car share memberships offer the benefit of being used as a fleet or pool car vehicle. This provides an alternative mode of transport for staff to use during the day (meetings, site inspections, etc.) if required, rather than driving a private vehicle to the site. This arrangement will assist in reducing the car parking demands of the proposed development.

A number of commercially operated car share pods are available proximate to the site as shown in, with both a FlexiCar and a GoGet share car located within walking distance in the vicinity of the site.

The nearest existing car share pods are shown in Figure 10.

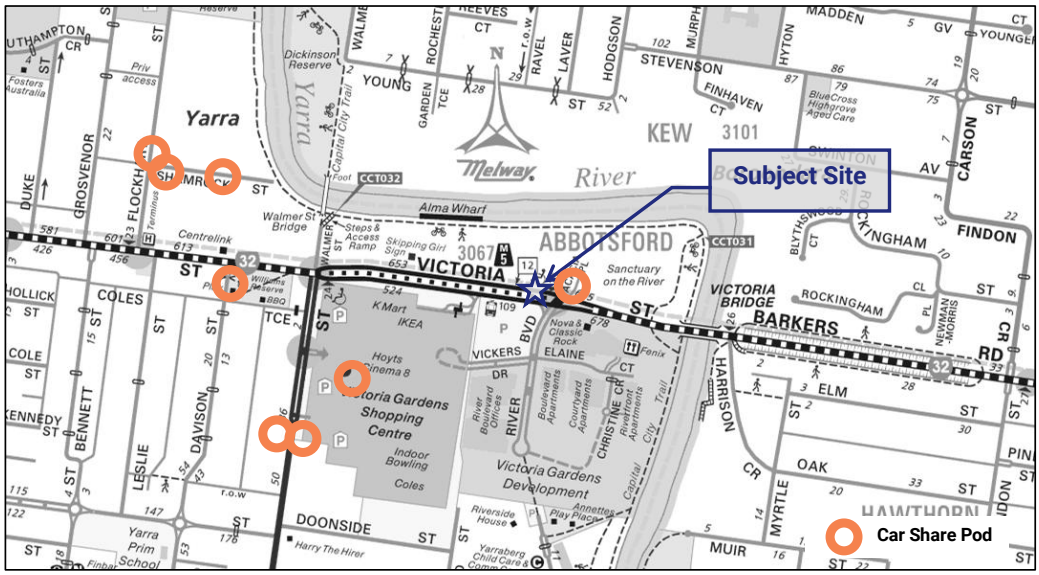


Figure 10: Proximate Car Share Pods

4.2.3. Anticipated Parking Demand

General Discussion

As demonstrated in the preceding sections, the site is extremely well located to take advantage of sustainable transport modes. This suggests that car parking demands are likely to be substantially lower than the state average and statutory rates under the Planning Scheme.

No dispensation has been proposed for the residential uses and therefore it has not been assessed.

Commercial Tenancy (Office)

The application allocates 1 parking space to commercial (office) staff and therefore seeks a dispensation of some 7 spaces.

A review of the ABS 'journey to work' data by place of employment from the 2011 and 2016 census identifies that a significant number of employees who work in the 'Abbotsford SA2' statistical area, which includes the subject site, are likely to use active or alternate transport modes to travel to work, rather than a car, as driver.

Notably, the shift to alternative transport mode choices (across all modes) has increased since the 2011 census, resulting in a decline in car usage for employees in this area. It is expected that this will be a continued trend.

This data reveals a high level of public transport, walking and bicycle trips for the Abbotsford SA2 area compared to Greater Melbourne average.

This data is summarised at Table 4.

Table 4: Journey to Work Data – Employees Working in South Abbotsford

Mode of Travel for 'journey to work' trips	Work within Abbotsford – SA2 (2011)	Work within Abbotsford – SA2 (2016)	Work within Greater Melbourne (2016)
Car as driver	64.7%	54.6%	59.8%
Public Transport	14.4%	23.7%	15.8%
Walking	2.9%	3.4%	3.1%
Cycling	3.2%	3.8%	1.4%
Other Mode of Travel [1]	14.8%	14.5%	19.9%
Note 1: Other mode of travel includes car as passenger, taxi, motorcycle, and other modes.			

This data highlights a lower reliance on private cars by office employees working in Abbotsford, which is supported by the high level of public transport access and ability to walk to the site and day to day services.

The application in effect is proposing travel demand management by suppressing car parking demands. That is, by not providing on-site car parking the applicant is encouraging the use of alternative transport modes by future staff to access the site.

Whilst there is existing on-street parking surrounding the site, it is limited and generally short-term parking and not practically able to be utilised by employees which require long term parking spaces.

Accordingly, future office employees will most likely seek alternative modes of transport to access the site, rather than utilise a motor vehicle, and consequently the employee parking demand will be dictated by the supply.

In our view, this is an appropriate approach to office developments with excellent public transport access, and accordingly a single parking space for commercial staff (waiver of 7 spaces) is considered appropriate.

Community/Multi-Purpose Use (Place of Assembly)

The ultimate use and operation of the community space is intended to be flexible to allow a range of different uses by the community and future residents of the site.

Given the size of the tenancy, it is our expectation that this component would not generate a significant car parking demand in its own right. This use is likely to contribute to the centre as a whole and service the needs of the immediately proximate neighbourhood and the building above.

Nevertheless, for the purpose of a conservative assessment the Planning Scheme requirement of 3 spaces will be conservatively adopted as representative of the parking demands for the community component.

The proposal includes a single space for staff or users of the space to utilise as part of their booking and/or the operation of the space. It is our expectation that this provision of parking will accommodate the long term staff demand of the use with the remaining 2 spaces associated with visitors.

Total

Based on the foregoing assessment, it is projected that the proposed development could generate an off-site parking demand for up to two visitor spaces during business hours, with no demand generated during evenings and on weekends.

4.3. Allowing Fewer Car Spaces

When considering if appropriate to provide fewer car parking spaces on-site, the responsible authority must consider as appropriate:

- *The Car Parking Demand Assessment*
- *The availability of alternative car parking in the locality of the land.*
- *Any car parking deficiency associated with the existing use of the land, including:*
  - *Efficiencies gained from the consolidation of shared car parking spaces.*
  - *Public car parks intended to serve the land.*
  - *On street parking in non residential zones.*
  - *Streets in residential zones specifically managed for non-residential parking.*

- *On street parking in residential zones in the locality of the land that is intended to be for residential use.*
- *The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.*
- *Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.*
- *The future growth and development of any nearby activity centre.*
- *Any car parking deficiency associated with the existing use of the land.*
- *Any credit that should be allowed for car parking spaces provided on common land or by a Special Charge Scheme or cash-in-lieu payment.*
- *Local traffic management in the locality of the land.*
- *The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.*
- *The need to create safe, functional and attractive parking areas.*
- *Access to or provision of alternative transport modes to and from the land.*
- *The equity of reducing the car parking requirement having regard to any historic contributions by existing businesses.*
- *The character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.*
- *Any other matter specified in a schedule to the Parking Overlay.*
- *Any other relevant consideration.*

A discussion of the relevant items follows.

4.3.1. Existing On-Street Parking

Parking in the area surrounding the site is predominantly controlled by short-medium term parking restrictions (i.e. 1P, 2P etc.) and Permit Zone restrictions with very limited (if any) long term parking available.

Parking is actively managed by Council to restrict long term (non permit) parking and protect existing residents who are eligible for permits. In this regard, it is highly likely that either by choice, or necessity staff will not drive to the site as they will not be able to park in the near vicinity of the site.

4.3.2. Relevant Policy

Yarra City Councils' *Strategic Transport Statement* 2022-32 includes a number of objectives that seek to achieve a number of key outcomes, related to sustainable transport use and reduced car use, including:

> ***01. Increased use of space efficient forms of transport in Yarra***
> ***04. Reduced car use for trips within, to, from or through Yarra***
> ***05.Increased use of environmentally sustainable forms of transport in response to the climate emergency.***

Key objectives are to:

> ***P6. Manage car parking in a way that supports the use of active and public transport and the role of cars in an urban environment***
>
> ***P9. Reduce traffic volumes, particularly where they are excessive relative to road function***
>
> ***P11. Encourage the use of shared transport***
>
> *Principle 14. Support and encourage households to use car share schemes.*

The Yarra Planning Scheme includes a number of key directions and statements that support sustainable transport outcomes and reduced car parking provisions, particularly for commuters and employees. This includes:

- Clause 02.03-3 Strategic Directions – *"Promoting land use and development that support a shift to sustainable modes of transport - walking, cycling and public transport"*
- Clause 02.07 Transport:
  - Facilitate connectivity and travel options that are environmentally sustainable, integrated and well-designed: Integrate land use and development planning with public and active transport infrastructure and services to create compact, walkable, pedestrian-oriented, mixed-use communities proximate to train stations and key public transport nodes.
  - Provide convenient access to public and active transport for all ages and abilities by:
    - Promoting compact and more diverse land use and development in major regeneration areas, major and neighbourhood activity centres as shown in clause 02.04 (Strategic Framework Plan) well served by public transport.
    - Creating a built environment with public spaces that promote social interaction and are connected to the transport network.
  - Encourage developments to promote and prioritise sustainable transport modes.
  - Encourage lower amounts of car parking and increased infrastructure for active transport in developments to encourage reduced use of private motor vehicles.
- Clause 18.01-3L Sustainable Transport:
  - To support a sustainable transport system that reduces the impact of private motor vehicle traffic and on-street parking.

- Encourage development to prioritise transport modes in order of the following transport hierarchy:
  - Walking.
  - Cycling.
  - Public transport.
  - Commercial vehicles serving businesses and institutions.
  - Subscription based vehicles such as car shares.
  - Private motor vehicles.
- Support development which reduces reliance on private cars.
- Encourage lower amounts of car parking within developments.
- Encourage increased infrastructure for active transport in developments (such as high levels of bicycle parking and end of trip facilities).
- Support the upgrade and establishment of paths and waterway crossings along the Yarra River, Merri Creek and Darebin Creek and to neighbouring municipalities as identified in Clause 02.04 (Strategic Framework Plan).

The proposal supports these strategies and objectives of Yarra City Council by providing reduced car parking given the site's proximity to sustainable modes of transport and nearby amenities.

City of Yarra has been enacting these policies to lower car usage and commercial (i.e. office/retail/food and drinks premises) staff parking particularly within inner metropolitan area.

4.3.3. Appropriateness of Sought Reduction

Based on the preceding assessment, we are satisfied there is strategic support for the proposed waiver in the statutory car parking requirement.

Ultimately, by limiting supply, and given the restrictions of on-street parking in the vicinity of the site, future staff will be actively encouraged to make more sustainable transport choices and the small demand for two visitor spaces can be accommodated within the surrounding area.

Based on the above assessment, the sought waiver of car parking is therefore justified, and it is appropriate for a permit to be issued for a reduction in the car parking requirement under Clause 52.06-7 of the Planning Scheme.

Furthermore, a permit is not required to provide parking in excess of the statutory rates. That is, the additional residential parking is acceptable under Clause 52.06 and there is no mechanism to restrict residential parking.

4.4. Car Parking Layout & Access Arrangements

The car park layout and access arrangements have been developed with design advice provided to the project architect (SJB Architects) and is considered to principally meet the relevant requirements of the Yarra Planning Scheme and where applicable, the Australian Standard for Off-Street Parking (AS2890.1:2004).

A review of the car park layout reveals:

General Car Parking Layout

- Car spaces have generally been designated with minimum dimensions of 2.6 metres width and 4.9 metres length, accessible from 6.4 metre wide aisles, meeting the Planning Scheme requirements.
- A portion of the residential parking is proposed within private enclosed garages. The garages are to be provided with minimum dimensions in accordance with the requirements of Clause 52.06-9 (Design Standard 2), accessible via an access aisle of at least 6.4 metre wide:
  - Single Garages are to be provided with minimum dimensions, of 4.9 metres width and 6 metres depth (between walls), in accordance with the Planning Scheme requirements,
  - Double Garages are to be provided with minimum dimensions, of 5.5 metres width and 6 metres depth (between walls), in accordance with the Planning Scheme requirements,
- Tandem spaces are proposed with an additional length of 500mm between spaces satisfying the requirements of Clause 52.06-9 (Design Standard 2). Each tandem pair will be allocated to an individual dwelling.
- Garages '1.09' and '2.09' will operate with two cars parked in tandem due to the layout of the spaces. The garage door opening, and spatial layout is acceptable.
- Car spaces adjacent to walls and structures have been appropriately widened to allow for satisfactory car door opening.
- Columns adjacent to car spaces are located within 0.25-1.25 metres from the aisle end of car spaces in accordance with the car parking envelope of Clause 52.06-9 (Design Standard 2).
- A minimum head clearance of 2.2 metres is provided within all trafficable areas of the car parking area, with the exception of space 52 and 53 at basement level 1 which will be provided with a head clearance of 2.0 metres. These spaces will be appropriately signed to manage the reduced clearances for these spaces.
- Parking spaces on a grade have been provided with a maximum grade of 1 in 20 perpendicular to the parking bays in accordance with the Planning Scheme.

Access & Ramps

- The site access has been designed with separate entry and exit lanes which are provided with a width of 3.6 metres, allowing for a 3 metre traffic lane and kerb along both sides in accordance with AS2890.1:2004.
- Vehicles can enter and exit the site in a forward direction in accordance with Clause 52.06-9 (Design Standard 1).

- The proposed main access ramps to both basement car parks are nominated with a minimum width of 7,350mm width (between walls).
- Internal ramps are provided as two-way ramps with a minimum width of 6.1 metres between walls as per AS2890.1:2004.
- A grade no steeper than 1 in 10 for the first 5 metres is proposed from the property boundary, satisfying the requirements of the Clause 52.06-9 (Design Standard 3).
- Ramps have been designed with a maximum grade of 1 in 5 and transitions of 1 in 8, satisfying the requirements of Clause 52.06-9 (Design Standard 3) for a residential accessway.
- A pedestrian sight triangle is provided on the exit side of the access to Victoria Street in accordance with Clause 52.06 of the Planning Scheme. This sight triangle includes an encroachment of a structural columns, however maintains a minimum 50% clear of visual obstruction in accordance with Clause 52.06-9 (Design Standard 1).

In this regard, the above access arrangements, grades, transitions and clearances have been assessed and, in our view, meet the intent of the relevant standards.

Based on the foregoing, the car park layout and access is considered satisfactory.

5. Traffic Considerations

5.1. Existing Traffic Volumes

Traffix Group commissioned turning movement counts of the intersection of Victoria Street and the site access, on Thursday 14th July 2022 between 7am and 7pm. This data is still considered relevant, despite the date it was collected.

The AM peak hour occurred at 8:30-9:30am, whilst the PM peak hour occurred at 5:15-6:15pm. A summary of the existing traffic volumes recorded during the survey are provided at Figure 11.

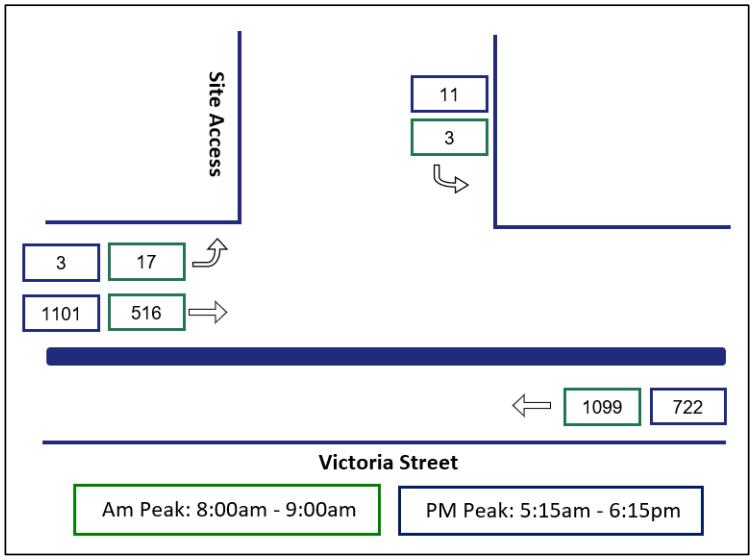


Figure 11: Existing Traffic Volumes

The volumes identify that the site is currently generating 20 vehicle movements in the morning and 14 vehicle movements in the afternoon.

5.2. Traffic Generation & Impact

Residential

Traffic generation rates of residential dwellings vary dependent on the size of the dwelling and proximity to everyday services and the location of nearby public and alternative transport modes.

In consideration of the location of the site, size of the dwellings and the parking allocations, a daily traffic generation rate of 3 vehicle movements per dwelling, inclusive of 0.3 movements per dwelling in peak hours has been adopted for this development. It is noted that case study data for similar residential developments suggests actual traffic generation rates of around 0.2 movements per dwelling in peak hours. The adopted rate of 0.3 movements per dwelling is therefore likely to be conservative for a residential development in this location and accounts for the additional parking allocated to residents.

Application of these rates to the proposed 123 dwellings equates to a projected peak hour traffic generation of 37 vehicle movements.

Assuming a typical AM peak traffic split of 20% arrivals and 80% departures and PM peak traffic split of 60% arrivals and 40% departures for the residential spaces it is projected the development will generate:

AM Peak: *7 arrivals and 30 departures*

PM Peak: *22 arrivals and 15 departures*

Commercial & Community Use

Our experience with staff parking is such that the staff spaces for the commercial and community uses will likely generate not more than a single movement in a peak hour, being 1 inbound in the AM and 1 outbound in the PM.

Total Traffic Generation

Importantly, when considering the surveyed traffic associated with the existing use, the proposal will result in only 19 additional vehicle movements in the AM peak and 25 additional movements in the PM peak generated to/from the road network over and above the existing conditions.

A summary of the future traffic generation and net change is provided in Table 5.

Table 5: Projected Future Traffic Generation

Use	AM Peak			PM Peak		
	In	Out	Total	In	Out	Total
Proposed Residential	7	30	37	22	15	37
Proposed Commercial	1	0	1	0	1	1
Proposed Community Use	1	0	1	0	1	1
Existing Use	17	3	20	3	11	14
Net Increase	**-8**	**+27**	**+19**	**+19**	**+6**	**+25**

This level of traffic generation is relatively low in traffic engineering terms, equivalent to an average of less than one additional vehicle movement being generated every 2 minutes during the peak hours.

Accordingly, we are of the view that the overall traffic generation of the proposal is considered low and will not have a material impact on the surrounding road network or intersections and that the proposal is acceptable from a traffic perspective.

6. Bicycle Considerations

Clause 52.34 of the Planning Scheme specifies the bicycle parking requirement for new developments.

It is noted that the office (commercial) premises is not large enough to trigger the statutory requirement for providing bicycle parking.

The relevant requirements are summarised in Table 6.

Table 6: Statutory Bicycle Parking Requirements

Use	Units	Statutory Requirement	No. Of Spaces Req.
Dwellings	123 dwellings	1 space per 5 dwellings for residents 1 space per 10 dwellings for visitors	25 resident spaces 12 visitor spaces
Community (Place of Assembly)	122m^2	1 to each 1,500m^2 of NFA for staff 2 + 1 to each 1,500m^2 of NFA for visitors	0 staff spaces 2 visitor spaces
Total			**25 residential spaces** **14 visitor spaces**

Based on the above assessment, the development is required to provide a total of 39 bicycle spaces, comprising 25 resident spaces and 14 residential visitor spaces.

The application proposes the provision of 158 bicycle spaces, inclusive of 124 residential spaces, 6 commercial staff spaces, 25 residential visitor spaces and 3 commercial visitor spaces.

These provisions exceed the minimum requirements under Clause 52.34 of the scheme.

Bicycle parking has been provided in accordance with AS2890.3-2015 with a mix of vertical and horizontal rails as follows:

- Wall mounted vertical rails are dimensioned at 1.2 metres deep spaces, 0.5 metres spacings, and are accessible from an aisle 1.5 metres wide;
- Horizontal rails are provided with dimensions of 1.8 metre length and spaced at 1.0 metre centres, accessible from a 1.5 metre aisle, and
- Two-tier horizontal rails are provided with dimensions of 1.86 metre length and spaced at 0.5 metre centres, accessible from a 2.0 metre aisle.

A copy of the two-tier bicycle parking system proposed for the site is provided at Appendix A.

7. Loading & Waste Considerations

7.1. Loading

Clause 65.01 of the Planning Scheme states that the responsible authority must consider a number of matters as appropriate including:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.*

The application includes a loading area within basement which is to be provided with a clearance of 2.5 metres. This loading area will be used to facilitate waste collection and loading activities for the office and residential uses.

Loading activities for residential dwellings associated with furniture movers/removalists when residents move in/out are anticipated to occur relatively infrequently. The loading area provided at lower ground will allow for loading activities by smaller vans and passenger vehicles and building management will ensure that tenants are aware of the limitations in vehicle size and access.

Loading activities associated with the office use are expected to be relatively infrequent and undertaken by smaller vans and couriers which can utilise the loading area provided at lower ground.

7.2. Waste

Waste collection will be undertaken in accordance with the Waste Management Plan prepared by Traffix Group (ref. G31423R-04B, dated October 2024).

Waste collection will be undertaken by private contractor using a 6.4 metre waste-wise collection vehicle within basement.

Vehicle accessibility has been demonstrated via swept paths attached at Appendix B.

Based on the preceding, we are satisfied that appropriate loading and waste provisions can be accommodated in accordance with the objectives of the Planning Scheme.

8. Responses to Initial Council Comments

The following table summarises and addresses Council RFI comments as they relate to parking and traffic, which were received during the Council application process.

Table 7: Responses to Council Comments

Council RFI Comments*	Traffix Response
Strategic Transport	
1. A reduction in car parking.	As noted in the report, a permit is not required to provide parking above the statutory minimums. The proposal seeks a waiver for staff (commercial) and community facility parking which is higher "by space" generator of traffic then residential use. The traffic impacts of the proposal will be minimal and other measures proposed on-site, including generous bike parking provisions and the site's location will encourage active transport use.
2. Removal of the "shared zone" at the crossover from Victoria Street.	This has been removed from the updated plans.
3. Install a raised threshold raised to footpath level for the driveway crossover at Victoria Street.	It is suggested this be addressed through Detailed Design and via Condition of Permit.
4. Install "Give way to pedestrians" signage for vehicles exiting the underground carpark onto Victoria Street.	It is suggested this be addressed through Detailed Design and via Condition of Permit.
5. Installation of a speed bump or speed cushion to slow vehicles exiting the underground carpark onto Victoria Street to 10km/h.	It is suggested this be addressed through Detailed Design and via Condition of Permit.
6. A minimum of four additional visitor bicycle parking spaces on the northern side of the site for people with bikes accessing the site from the Yarra Trail.	We understand that the current design has principal support from Parks Victoria and no further change is required.
7. The applicant to demonstrate how people with bicycles will access the bicycle parking from Victoria Street.	A diagram of the proposed bicycle access to the site is shown in Figure 6 showing how access is provided.
8. Consolidation of all employee and residential bicycle parking…	The bike room has been consolidated.
9. All resident and employee bicycle parking to be provided in a secure facility, in compliance with Clause 52.34 and AS2890.3.	The bike room has been consolidated and is now secure.
10. Replacement of all vertical hanging spaces with either horizontal on-ground hoops or two-tier parking systems.	This is not considered necessary as the current design complies with the requirements of AS2890.3 and Clause 52.34.

Council RFI Comments*	Traffix Response
11. At least 10% of car parking spaces to have 'Day 1' electric car charging points.	9 car parking spaces provide electric charging points.
12. Reference to a minimum 40A single phase electrical sub circuit should be installed to the car park areas for 'EV readiness'.	It is suggested that this can be prepared as a condition of Permit.
13. Signage and wayfinding information for bicycle facilities and pedestrians pursuant to Australian Standard AS2890.3.	It is suggested this be addressed through Detailed Design and via Condition of Permit.
14. Dimensions of all bicycle storage spaces, lifts, corridors and relevant access ways noted to demonstrate compliance with Australian Standard AS2890.3 or to the satisfaction of the Responsible Authority.	Dimensions are shown in the plans.
15. At least 10 electric bicycle charging points should be provided in the resident bicycle parking spaces adjacent to spaces suitable for electric bicycles to use.	We question the need for additional e-bike charging for residential developments. Batteries are easily removed, and residents will take the battery from their bikes and change in their apartments.' No further action is considered necessary.
16. An Amended Green Travel Plan should be provided with the information outlined previously.	The Green Travel Plan has been updated.
Engineering Requirements	
The applicant is to contact the Department of Infrastructure regarding the proposed vehicle crossing.	We understand that the DTP is supportive of the crossover location.
Re-check the 1 in 5 transition ramp at the base of the 1 in 5 ramp on the Basement 2 level.	This was previously a drafting error on plans. Transition ramp should read '2000 @ 1:8'
Dimension the width and depth of the loading zone.	The dimensions of the loading zone are shown on the updated plans.
Provide a vertical ground clearance assessment for a B99 design vehicle.	A vertical ground clearance assessment for B99 design vehicle has been prepared and attached at Appendix B
The alignment of the proposed crossover shall be amended to reflect the Council's standard (refer Yarra Standard Drawing: YSD 601).	Amended crossover adhering to Council's standard to be prepared as condition of Permit.

* A number of comments raised by the Council involve engineering concerns related to detailed design and drainage, which are not included in the table below since they do not relate to parking or traffic.

9. Conclusions

Having undertaken a detailed traffic engineering assessment of the proposed mixed use development at 675 Victoria Street, Abbotsford, we are of the opinion that:

a. the proposed development has a statutory car parking requirement of 168 car spaces under Clause 52.06-5 of the Planning Scheme, inclusive of 158 residential spaces, 8 commercial spaces and 3 community facility (place of assembly) spaces.

b. the provision of 167 Residential spaces, a single Commercial tenancy space and a single Community Use space results in a shortfall of 7 Commercial parking spaces and 2 community facility (place of assembly) spaces,

c. the required waiver in commercial parking under Clause 52.06-6 is supported on the following grounds:

   i) the site is well served by public transport and alternative transport modes,

   ii) for staff who do not wish to park within publicly available (but priced) car parking, they have the opportunity to make a mode shift to more sustainable transport to access the site,

   iii) the expected parking demand for 2 visitor spaces (associated with the Community Facility (Place of Assembly)) can be accommodated within on-street parking in the area, and

   iv) Council local policies support reduced car parking provisions in areas such as this.

d. the proposed parking layout and access arrangements accord with the requirements of the Planning Scheme, AS2890.1:2004 (where relevant) and current practice,

e. the level of traffic generated as a result of this proposal is acceptable and will not have a detrimental impact on the surrounding road network,

f. bicycle parking is provided in accordance the requirements set out at Clause 52.34 of the Planning Scheme,

g. the on-site loading area has been designed to meet the objectives of Clause 65.01 of the Planning Scheme, and

h. there are no traffic engineering reasons why a planning permit for the proposed mixed use development at 675 Victoria Street, Abbotsford, should be refused, subject to appropriate conditions.

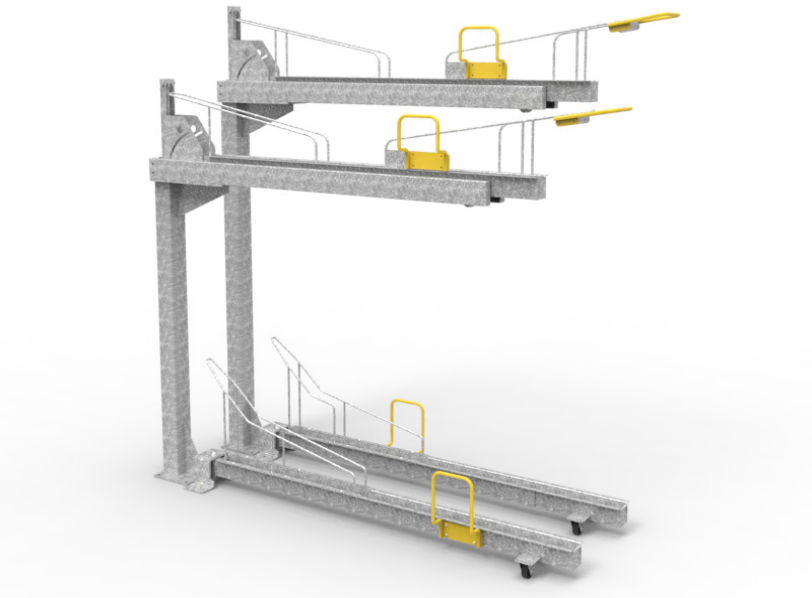
Appendix A
Two-Tier Bicycle Parking Spec Sheet

Traffix Group

G31423R-03E

CORA BIKE RACK

PRODUCT SPECIFICATION SHEET



E3DT SERIES

E3DT-GP
DYNAMIC UPPER TIER
DYNAMIC LOWER TIER

Australia's ONLY fully dynamic 2 tier system to provide reduced AS2890.3 compliant spacing of 400mm on both tiers. A Dynamic upper tier combined with a dynamic lower tier provides the maximum capacity possible. Upper tier includes gas assist lift for ease of use and is available in alternating heights. Lower tier uses the E3GP bike ground pivot rack that allows users to move the rack left or right for ease of access.

Capacity

- E3ST-H: 1 bike
- E3ST-L: 1 bike
- E3GP-F: 1 bike
- E3GP-B: 1 bike

Construction

- Heavy duty high quality steel

Fixings

M10 anchor bolts with security nuts

Finishes

- Galvanised with powder coated accents on handles
- Option - Colour Powder Coat (Cora standard colour range)

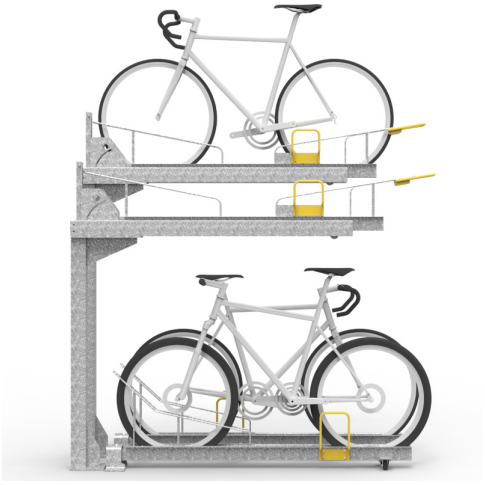
Assembly

- Supplied partially assembled for assembly and mounting on site

Compliance

- Rack is AS2890.3 (2015) compliant

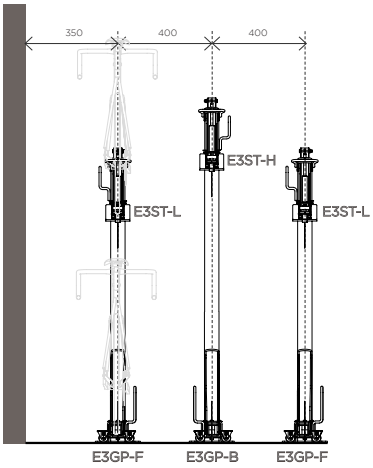




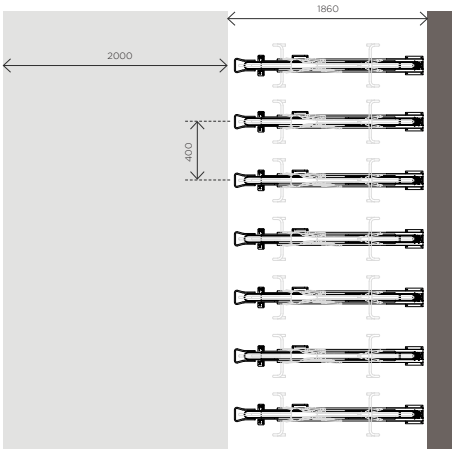
CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

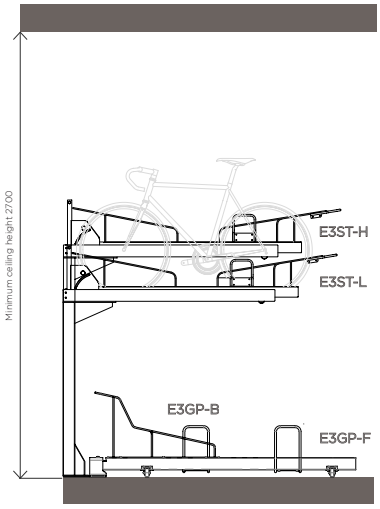
STAGGERED LAYOUT



Front view

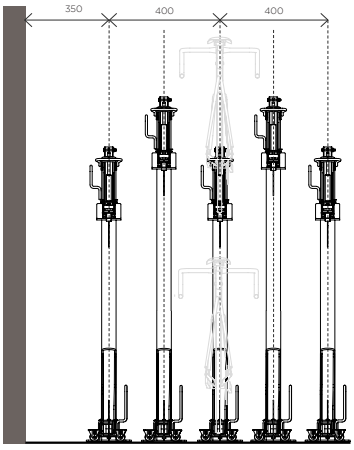


Top view

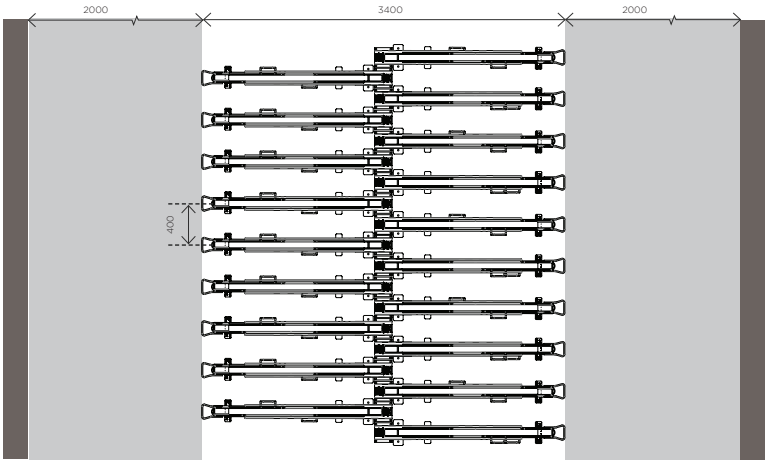


Side view

NESTED LAYOUT



Front view

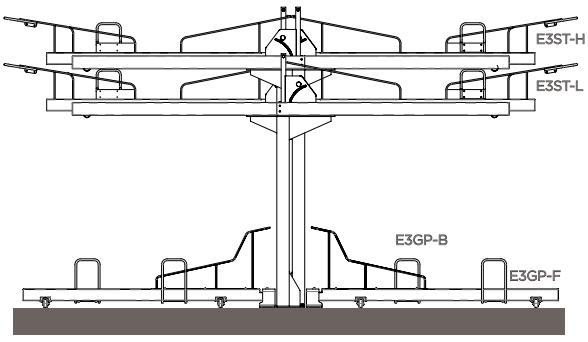


Top view

E3DT-GP DYNAMIC UPPER AND LOWER TIER LAYOUT GUIDE

For specific assembly and installation instructions relating to E3DT-GP series racks, please refer to individual instruction information sheets.

Racks should not be installed, based on the information on this sheet alone.

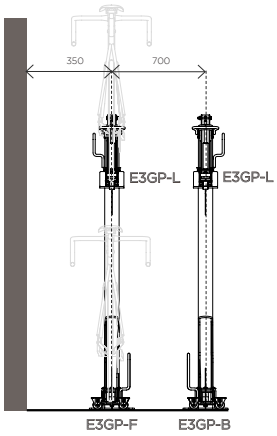


Side view

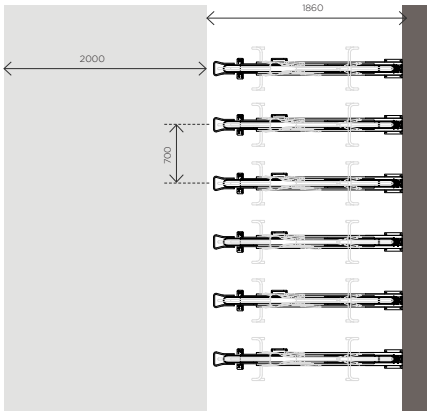
CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

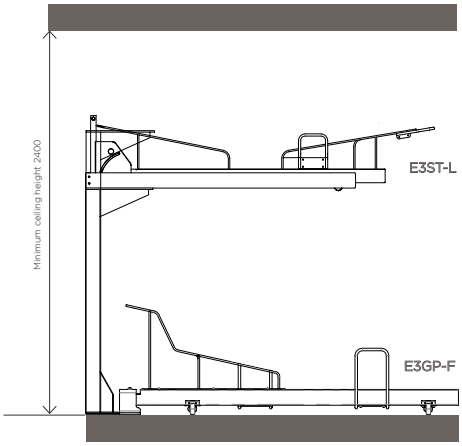
SINGLE LEVEL LAYOUT



Front view



Top view



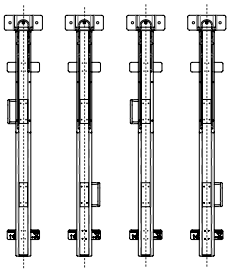
Side view

E3DT-GP DYNAMIC UPPER AND LOWER TIER LAYOUT GUIDE

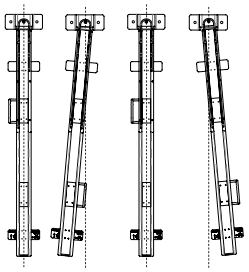
For specific assembly and installation instructions relating to E3DT-GP series racks, please refer to individual instruction information sheets.

Racks should not be installed, based on the information on this sheet alone.

Dynamic side to side movement of lower rack

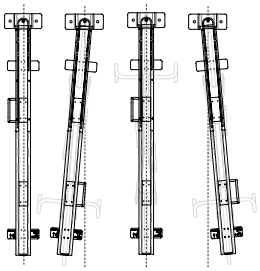


Racks in neutral position



Racks Pivoted

Racks either side of free rack, can be pivoted, to increase access for racking or removal



Bike placed in rack

Bike is wheeled in to rack, either front or rear wheel-in first depending on rack type

ecospecifier global verified
find it on ecospecifier.com.au

greenstar

STANDARDS AUSTRALIA
Certified Product
Australian Standard

CORA BIKERACK

PH 1800 249 878
sales@cora.com.au
www.cora.com.au

Appendix B
Swept Paths & Ground Clearance

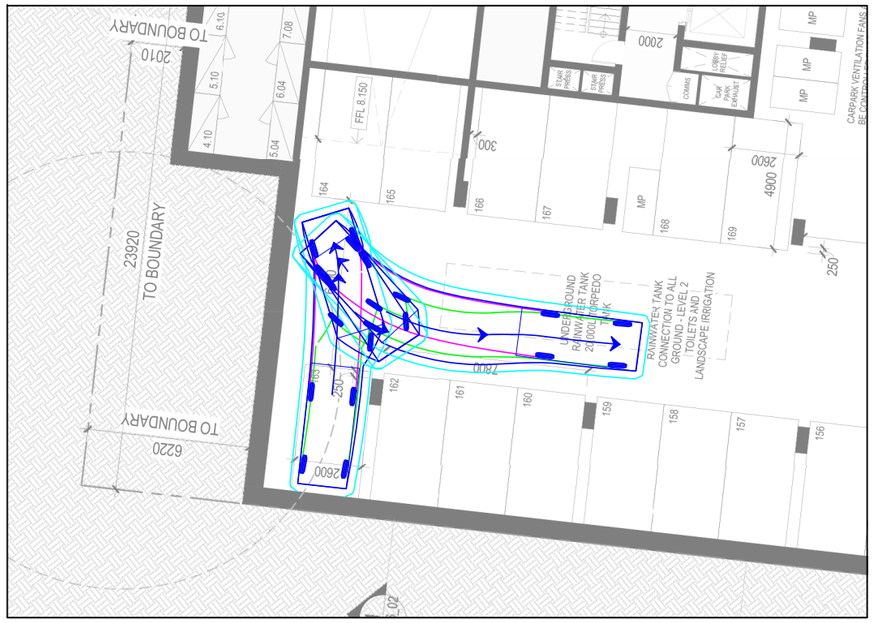
Traffix Group

G31423R-03E

CAR SPACE 01 - INGRESS

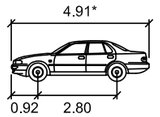


CAR SPACE 01 - EGRESS



VEHICLE PROFILE

VEHICLE USED IN SIMULATION



85th percentile
(AS/NZS 2890.1:2004)

Width	:	1.87m
Track	:	1.77m
Kerb to Kerb Radius	:	11.5m

* actual template based on "relevant longitudinal dimensions that affect swept path" as set out in Section B2.1 of AS/NZS 2890.1:2004

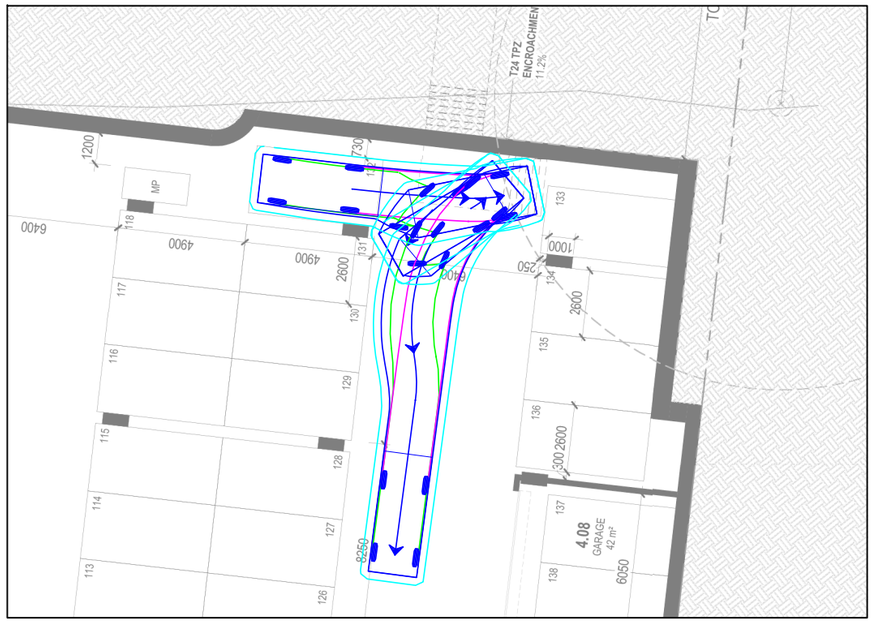
LEGEND

REAR WHEELS — VEHICLE BODY
FRONT WHEELS — BODY CLEARANCE

CAR SPACE 02 - INGRESS



CAR SPACE 02 - EGRESS



REV	DATE	NOTES	DESIGNED BY	CHECKED BY
A	19/09/2022	TOWN PLANNING	J. COSSINS	C. MORELLO
B	15/03/2023	RFI	J. COSSINS	C. MORELLO
C	22/10/2024	DFP	N. MCCAFFREY	C. MORELLO
D	21/03/2025	DFP COMMENTS	N. MCCAFFREY	J. COSSINS

675 VICTORIA STREET, ABBOTSFORD

PROPOSED MIXED USE DEVELOPMENT

GENERAL NOTES:

BASE INFORMATION FROM PLANS PREPARED BY SJB ARCHITECTS DATED MARCH 2025

FILE NAME: 31423
SHEET NO.: 01

N

SCALE: 1:200 (A3)
0 2 4

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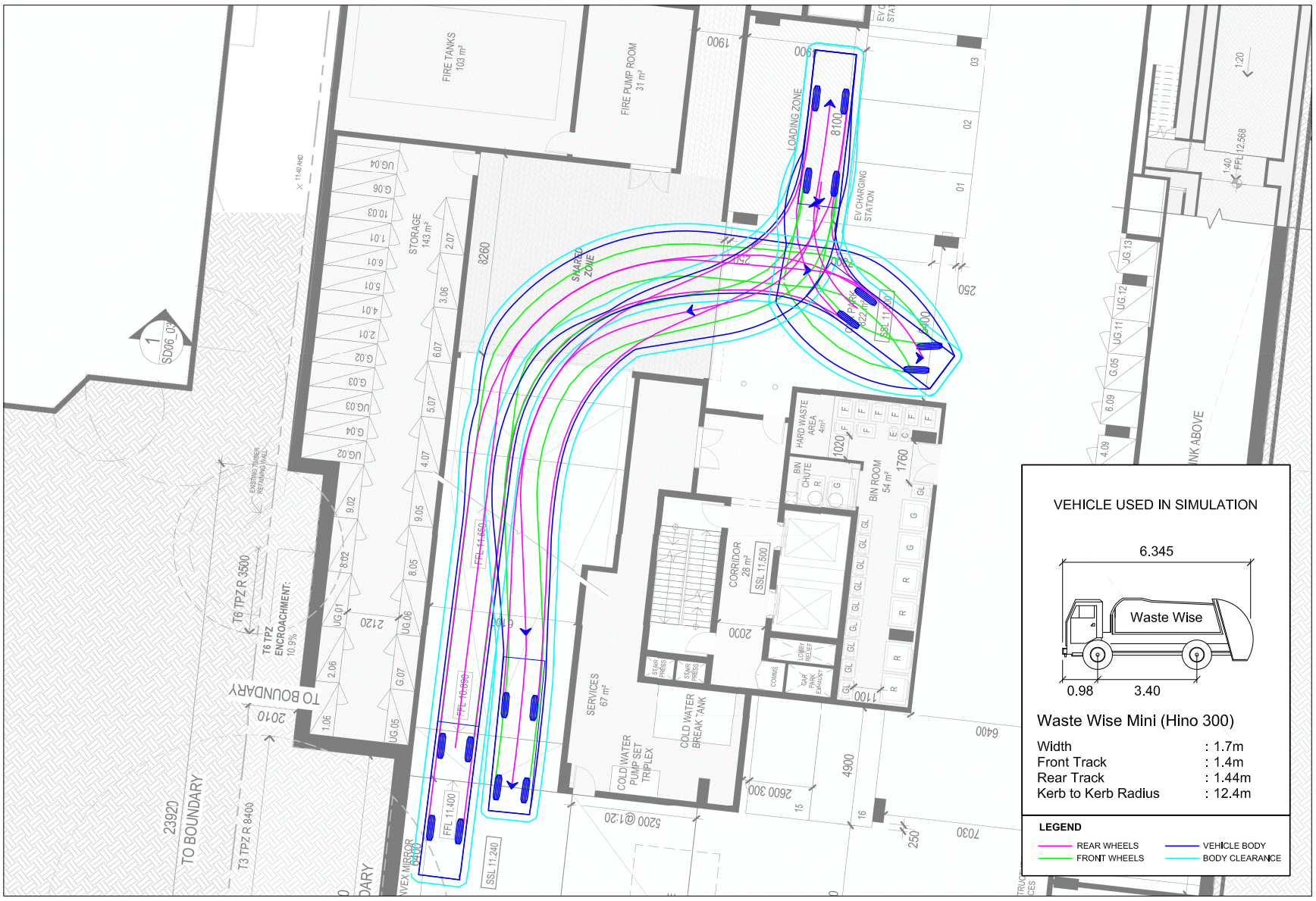
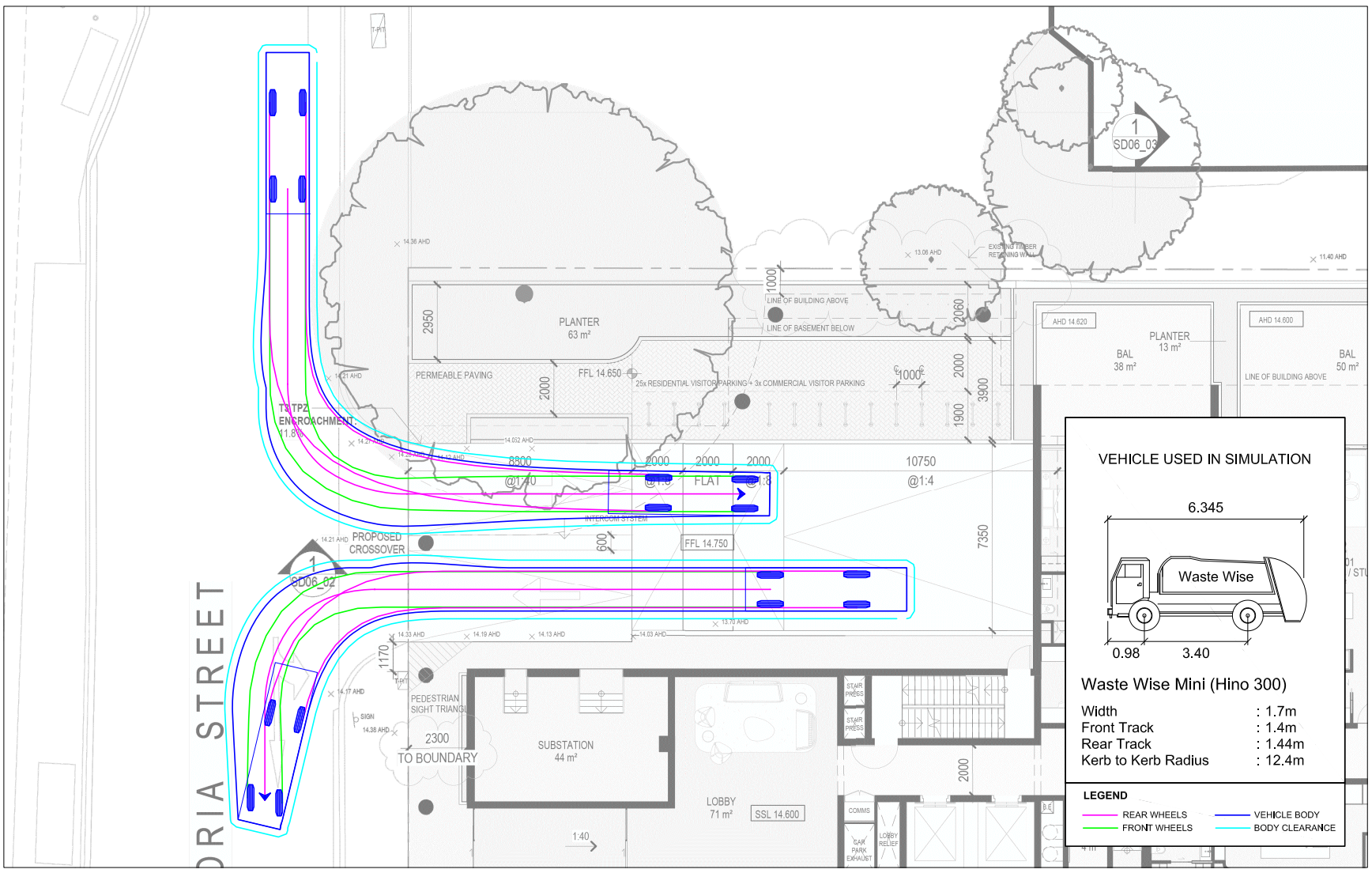
WASTE COLLECTION VEHICLE ACCESS





REV	DATE	NOTES	DESIGNED BY	CHECKED BY
A	19/09/2022	TOWN PLANNING	J. COSSINS	C. MORELLO
B	15/03/2023	RFI	J. COSSINS	C. MORELLO
C	22/10/2024	DFP	N. MCCAFFREY	C. MORELLO
D	21/03/2025	DFP COMMENTS	N. MCCAFFREY	J. COSSINS

675 VICTORIA STREET, ABBOTSFORD
PROPOSED MIXED USE DEVELOPMENT

GENERAL NOTES:
BASE INFORMATION FROM PLANS PREPARED BY SJB ARCHITECTS DATED MARCH 2025

FILE NAME: 31423
SHEET NO.: 02

SCALE: 1:200 (A3)

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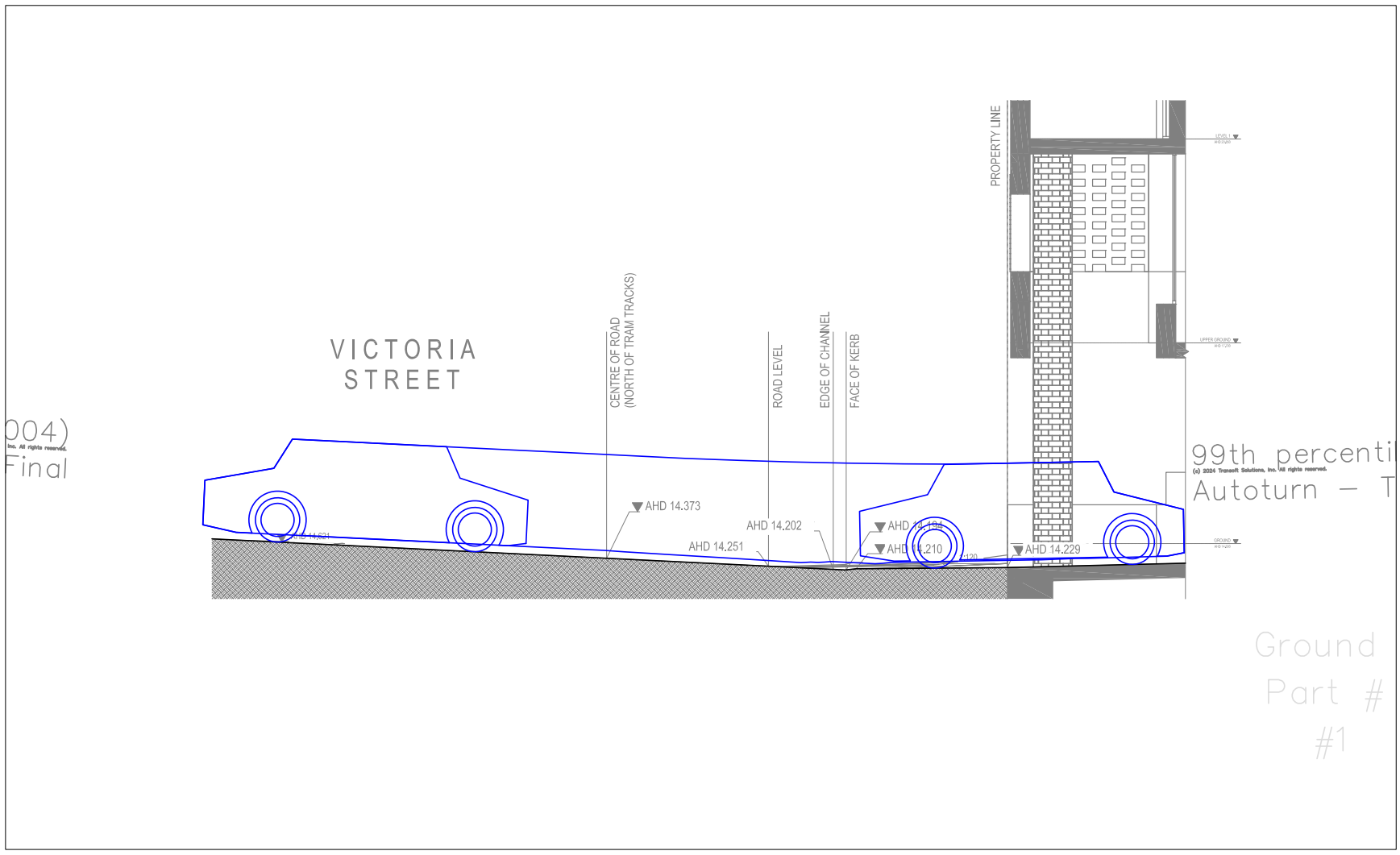
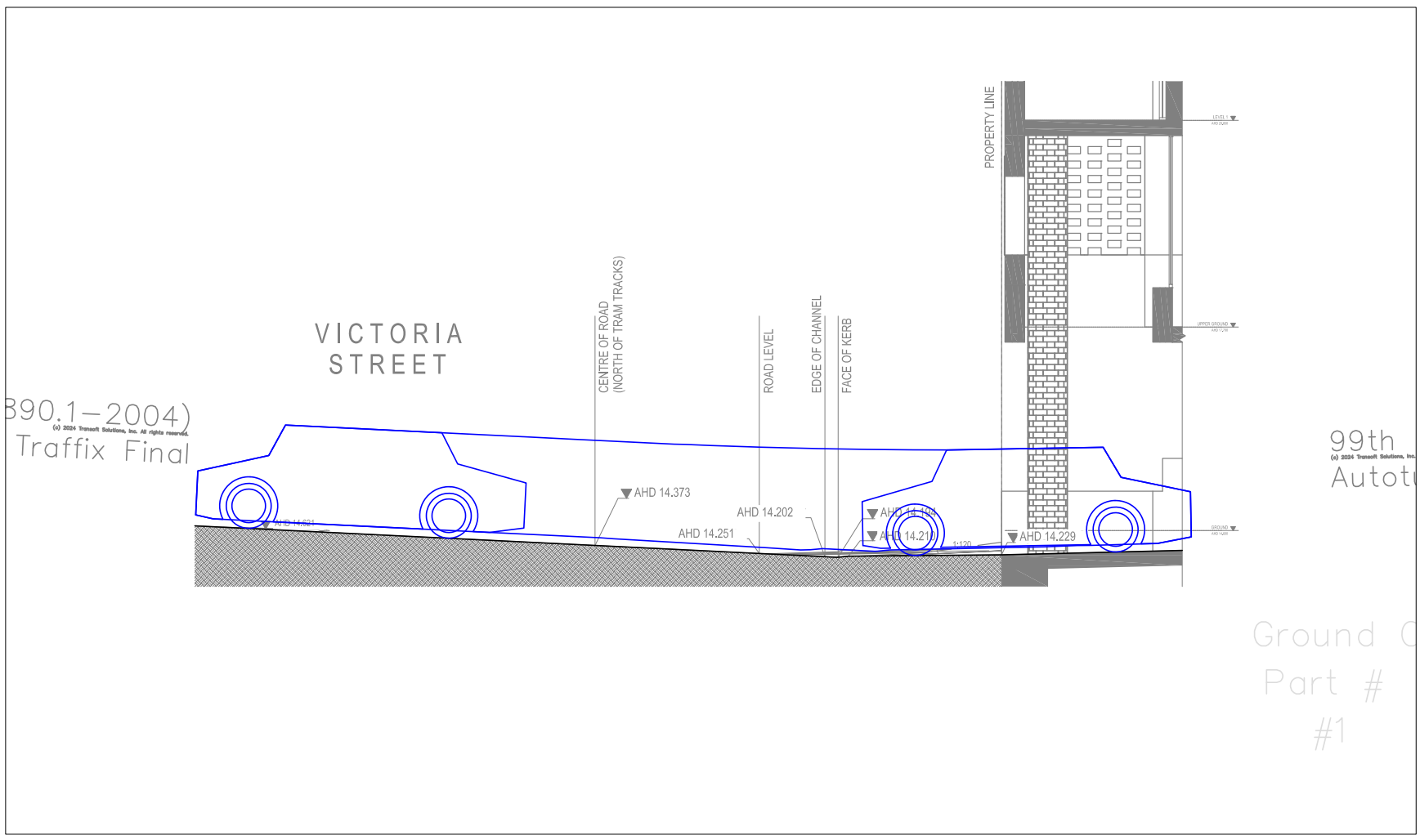
ENTRY B99 GROUND CLEARANCE



EXIT B99 GROUND CLEARANCE



REV	DATE	NOTES	DESIGNED BY	CHECKED BY
A	11/10/2024	DFP	N. MCCAFFREY	C. MORELLO
B	21/03/2025	DFP COMMENTS	N. MCCAFFREY	J. COSSINS

675 VICTORIA STREET, ABBOTSFORD
PROPOSED MIXED USE DEVELOPMENT

GENERAL NOTES:
BASE INFORMATION FROM PLANS PREPARED BY SJB ARCHITECTS DATED MARCH 2025

FILE NAME: 31423
SHEET NO.: 03

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SCALE:
1:80 (A3)

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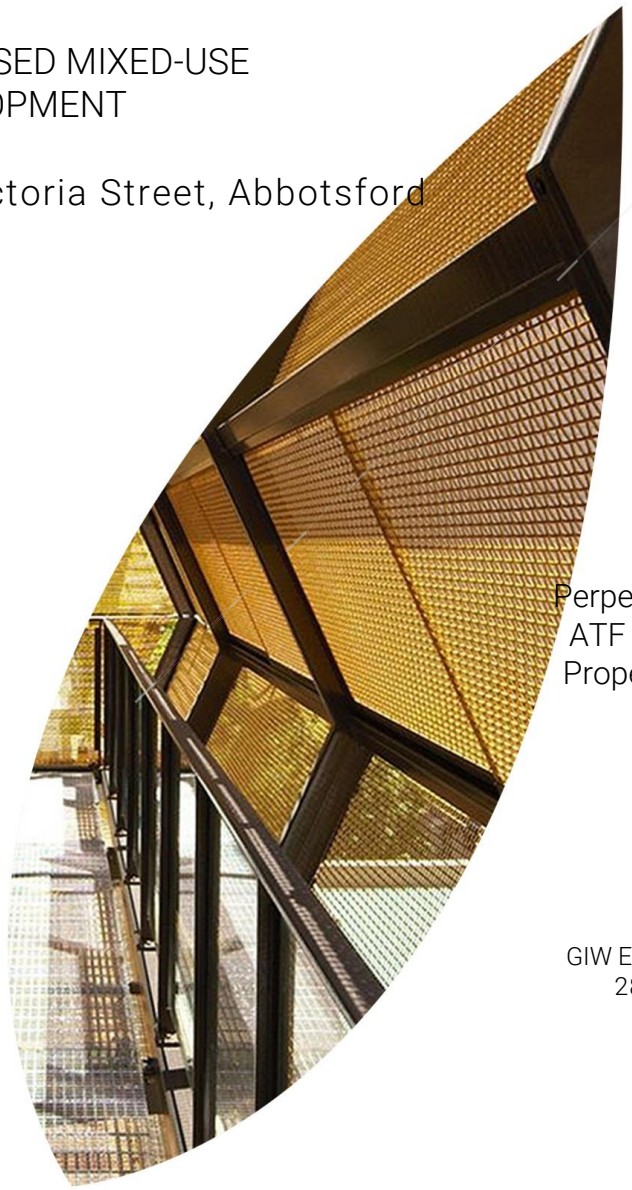
SUSTAINABLE MANAGEMENT PLAN

PROPOSED MIXED-USE DEVELOPMENT

675 Victoria Street, Abbotsford



GIW21149
Revision G

Prepared for:
Perpetual Corporate Trust Ltd
ATF Yield Plus Infrastructure
Property Fund No. 2 Trust 2B
Ownership Trust No. 5

7 April 2025

Prepared by:
GIW Environmental Solutions Pty Ltd
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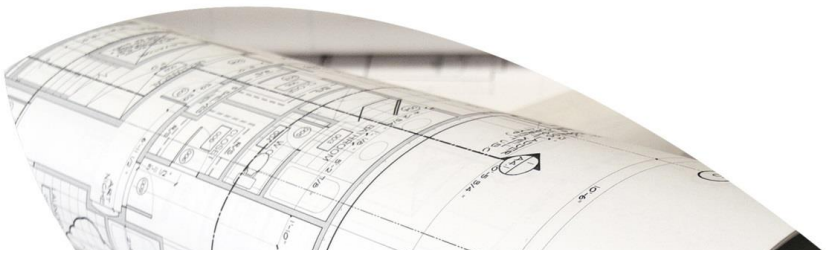
Victoria 3121, Australia
T +61 3 9044 5111
giw.com.au







Limitations

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Revision History

Revision Number	Date Issued	Author	Approved	Comments
A	08/09/2022	KE	IB	Draft
B	09/09/2022	KE	IB	Final
C	16/03/2023	KE	IB	Final
D	04/10/2024	MS	IB	Draft
E	07/10/2024	MS	IB	Final
F	18/10/2024	MS	IB	Final
G	07/04/2025	MS	IB	DTP Lodgement

Prepared by:
Project Consultant:



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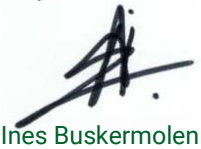
Senior ESD engineer
B.Eng (Mechanical)
M. (Energy Efficient and Sustainable Building)

Approved by:
Project Team Leader



Ines Buskermolen
Associate Director
B.Sc. (Science, Business and Innovation)
M.Sc. (Sustainable Development)

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1. Introduction

Project Information

GIW Environmental Solutions Pty Ltd ("GIW") has been engaged by Perpetual Corporate Trust Ltd ATF Yield Plus Infrastructure Property Fund No. 2 Trust 2B Ownership Trust No. 5 to provide Environmentally Sustainable Design (ESD) consulting services for the proposed mixed-use development at 675 Victoria Street, Abbotsford.

The proposed development will include 123 apartments, communal amenity spaces, community facility and commercial tenancy constructed over 14 levels plus basement carparking and will consist of the following:

- 21 x 1-bedroom apartments
- 67 x 2-bedroom apartments
- 35 x 3-bedroom apartments
- 278m^2 communal amenity spaces
- 122m^2 community facility
- 287m^2 commercial

The site located at 675 Victoria Street, Abbotsford has an approximate surface area of 3,459m^2 and is currently the location of a commercial building. Distance from the site to Melbourne CBD is approximately 5km.

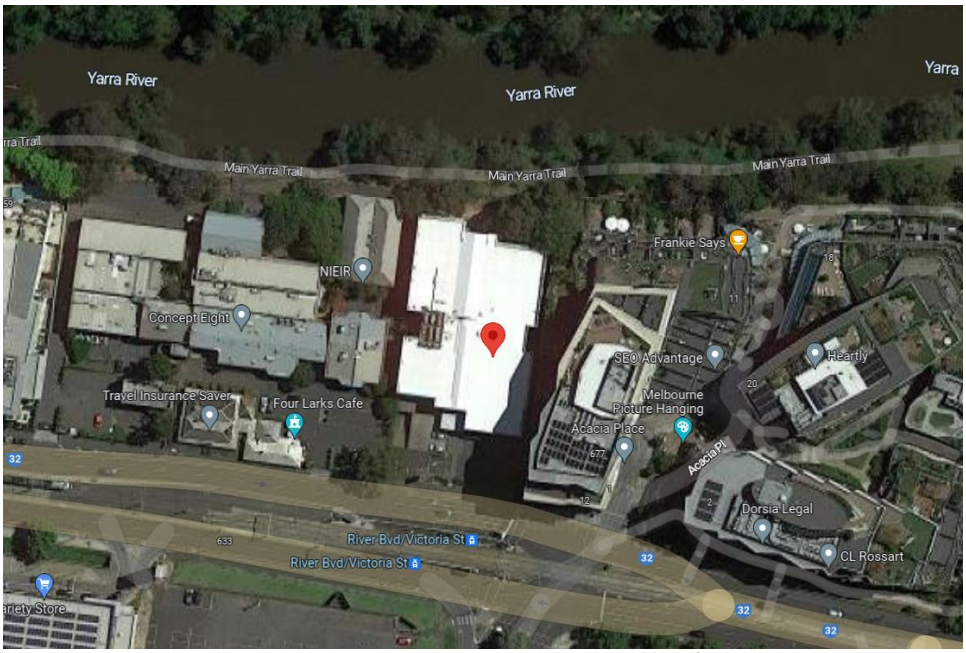


Figure 1 - Pre-existing sites at 675 Victoria Street, Abbotsford.

Statutory Requirements

This Sustainable Management Plan (SMP) has been prepared to inform the Department of Transport and Planning (DTP) of the proposed development's sustainability credentials and performance targets. The project team is committed to achieving a building solution which responds to City of Yarra Planning Scheme - Clause 15.01-2L-01 Environmentally Sustainable Development.

Development Type	Application Requirement	Example Tools
Development of 10 or more dwellings.	Sustainability Management Plan (SMP)	BESS Green Star MUSIC STORM

Built Environment Sustainability Scorecard (BESS)

The proposed mixed-use development will be assessed against the Built Environment Sustainability Scorecard (BESS) guidelines. The BESS tool addresses nine key environmental categories as follows:

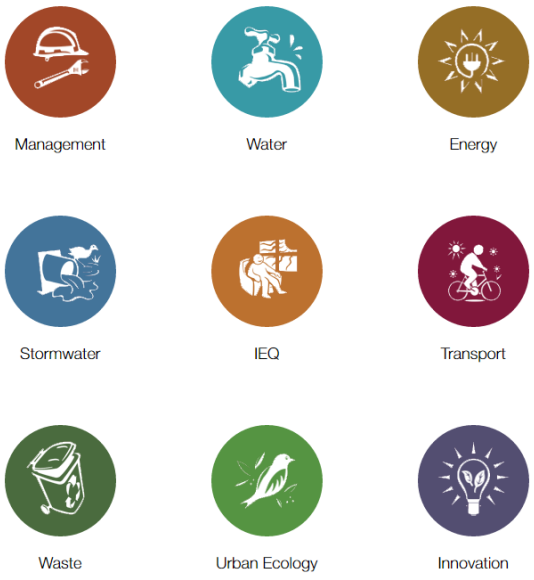


Figure 2 - BESS Environmental Categories (www.bess.net.au)

All ESD measures described under the nine key environmental categories are to be suitably incorporated into relevant project documentation at the appropriate project phase.

Responsibilities & Implementation

Perpetual Corporate Trust Ltd ATF Yield Plus Infrastructure Property Fund No. 2 Trust 2B Ownership Trust No. 5 will be responsible for the suitable implementation of the requirements of this report throughout the design and development phases. Should the development be sold the responsibility will pass to the new owner. At such time as a builder is novated or a building contract is put in place the builder will be responsible for implementation during the construction phase. At occupancy, the Owners Corporation and individual lot owners and or tenants will be responsible for the correct use of installed equipment and building systems in line with the provided Building User's Guide.

Sources of Information

The following 'Sources of Information' have been used to guide the design solutions:

- SJB Architects – Project No. 21582 – 675 Victoria Street, Abbotsford – DTP Lodgement (Dated: March 2025).
- Municipal Association of Victoria - SDAPP Explained; Building Design for a Sustainable Future
- Built Environment Sustainability Scorecard (BESS)
- CSIRO 1999, Urban Stormwater – Best Practise Environmental Management Guidelines

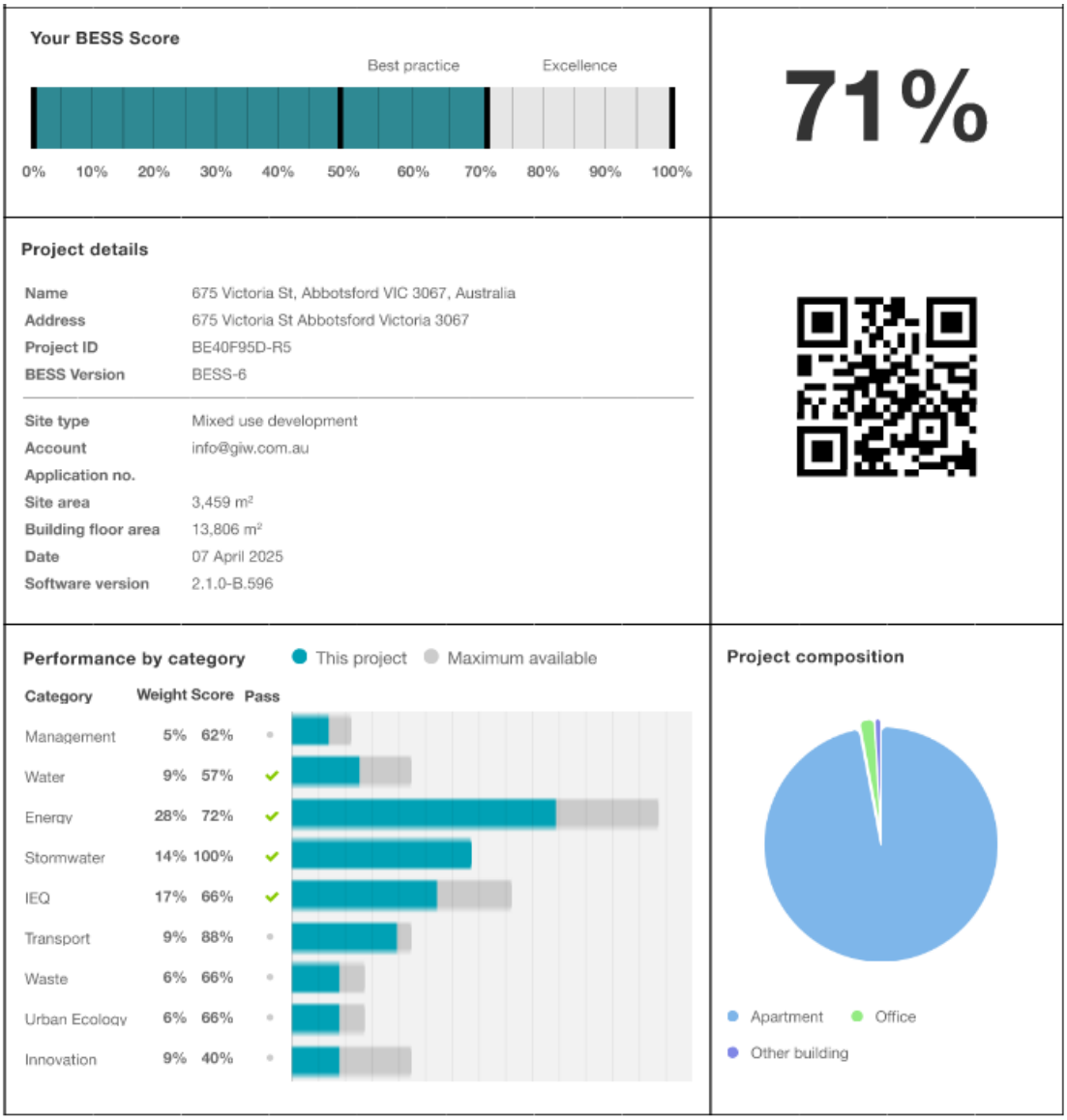
2. ESD Summary

The proposed mixed-use development at 675 Victoria Street, Abbotsford will implement the following ESD initiatives:

1. The project achieves a total BESS score of 71% with no mandatory category (IEQ, Energy, Water, Stormwater) below 50%.
2. 50% (62 out of 123) of the development's apartments are naturally cross-ventilated.
3. Daylight modelling has been conducted for a representative sample of apartments. The summary result is as follows:
    - 81% of living floor area achieves >90% above DF 1
    - 84% of bedroom floor area achieves >90% above DF0.5
4. The non-residential areas are targeting a 2% DF to 60% of the nominated area.
5. 33% (41 out of 123) of apartments achieve at least 3 hours of sunlight.
6. The development is provided with a comprehensive shading strategy.
7. The development is to achieve a 7.5 Star average NatHERS Energy Rating result.
8. The non-residential areas aim to reduce heating and cooling energy consumption 5% below the reference case (BCA Section J 2019).
9. The development is to utilise an electric heat pump hot water system with a minimum COP of 2.5.
10. A 30kW Solar PV system is to be located on the roof of the proposed development.
11. Individual cold and hot water, electricity meters will be provided to the apartments and communal areas.
12. Water efficient fittings and fixtures are applied throughout.
13. A 20,000-litre rainwater tank will harvest rainwater from all roof areas. The tank will be connected to all ground to level 2 toilets and landscape irrigation.
14. A Melbourne STORM rating of 101% is achieved.
15. Landscape irrigation demand will be connected to the rainwater tank only.
16. In total 124 bicycle spaces are to be provided for residents.
17. In total 25 bicycle spaces are to be provided for residential visitors.
18. In total 6 bicycle spaces are to be provided for employees & 3 bicycle spaces are to be provided for non-residential visitors.
19. All balconies or private open space have been provided with a tap and floor waste allowing residents to cultivate their own gardens.
20. 278m2 of communal space will be provided at lower ground.

3. BESS Performance

The project achieves a total BESS score of 71% with no mandatory category (IEQ, Energy, Water, Stormwater) below 50%. This figure represents a percentage improvement over a benchmark project. A score of 50% and higher equates to 'best practice' and is an effective pass of the BESS tool. A score of 70% and higher equates to BESS 'excellence' and exists as a higher benchmark in the tool.



4. ESD Assessment

Management

Council ESD objectives:

- To encourage a holistic and integrated design and construction process and ongoing high performance.

Council Best Practice Standard

Criteria		Construction and Building Management Actions
Pre-Application Meeting	To ensure appropriate sustainable design principles and strategies are considered from the preliminary design stage of each development.	GIW has been actively involved in the preliminary design stage but has not been involved in a pre-application meeting with Council or DTP.
Metering	To provide building users with information that allows monitoring of energy and water consumption	Electricity and cold-water metering is to be provided to each individual apartment and commercial tenancy. Lighting and general power to common areas is to be separately metered to quantify energy used for common areas spaces.
Building User's Guide	To encourage and recognise initiatives that will help building users to use the building more efficiently.	A Building User's Guide will be provided to all occupants explaining the correct use of installed equipment and building systems. This shall cover at a minimum: • Energy and Environmental Strategy • Options for purchasing a ≥3 Star Washing Machine • Monitoring and Targeting • Building Services • Transport Facilities • Materials and Waste Policy • Expansion/Re-fit Considerations • References and Further Information

Council Best Practice Standard

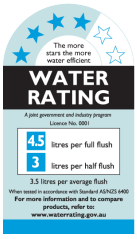
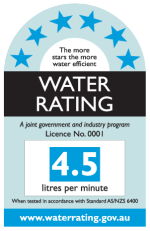
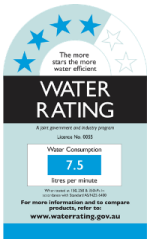
Criteria		Construction and Building Management Actions
Head Contractor	To encourage sustainable building practices.	Head Contractor having ISO 14001 accreditation in place will be positively weighted as part of the selection process. Nil mandatory requirement for selected Head Contractor to be ISO14001 accredited.
Building Tuning	To ensure systems operate efficiently to reduce energy consumption and increase cost savings.	A 12-month tuning commitment for all building services in accordance with the manufacturer's specifications will be undertaken.
Environmental Management Plan	To mitigate environmental impacts and ensure compliance with regulations throughout the construction process.	An Environmental Management Plan (EMP) will be implemented to Council guidelines prior to construction.

Water

Council ESD objectives:

- To ensure the efficient use of water
- To reduce total operating potable water use
- To encourage the collection and reuse of stormwater
- To encourage the appropriate use of alternative water sources (e.g. grey water)
- To minimize associated water costs

Council Best Practice Standard

Criteria		Development Provision
Potable Water Reduction	To reduce total potable water, use due through the use of efficient fixtures, appliances, and the use of rainwater.	WELS 4 Star - Toilets  WELS 6 Star - Taps  WELS 4 Star - Showerhead  WELS 5 Star - Dishwasher 
Rainwater Collection & Reuse		A 20,000-litre rainwater tank will harvest rainwater from all roof areas. The tank will be connected to all ground to level 2 toilets and landscape irrigation. It is estimated that this will save more than 278kL of potable water every year and meet 14.5% of the demand in these areas. Stormwater drainage mechanism is to be determined by the hydraulics services engineer at the design development phase. Refer Appendix A – WSUD Response
Landscape Irrigation	To ensure the efficient use of water and to reduce total operating potable water use through encouraging water efficient landscape design.	Landscape irrigation demand will be connected to the rainwater tank only.

Council Best Practice Standard

Criteria		Development Provision
Building System Water Use Reduction	Ensure the efficient use of water, to reduce total operating potable water use and to encourage the appropriate use of alternative water sources for cooling and fire testing systems.	>80% of fire test water (e.g. hydrant pump test water or SCV annubar test) is to be reused on site. The proposed development is to incorporate air-cooled HVAC systems for both the residential and non-residential areas within the development.

Energy

Council ESD objectives:

- To ensure the efficient use of energy
- To reduce total operating greenhouse emissions
- To reduce energy peak demand
- To reduce associated energy costs

Council Best Practice Standard

Criteria		Development Provision
Thermal Performance Rating - Residential	To reduce energy needed to achieve thermal comfort in summer and winter - improving comfort, reducing greenhouse gas emissions, energy consumption, and maintenance costs.	The National Construction Code (NCC) Class 2 – Sole Occupancy Unit(s) residential building component is to be designed in accordance with NCC Section J (2019) NatHERS requirements. The residential units must achieve an average 7.5 Star rating, with no unit achieving below 5 Stars. Further to this no dwelling is to exceed the maximum allowed cooling load of 30 MJ/m2 (Climate Zone 21 Melbourne RO) In accordance with BADS Standard B35. The apartments are currently achieving a 7.6 Star average. This represents > 10% reduction compared to minimum NCC compliance benchmarks. The below sample ratings demonstrate the developments' ability to achieve this average. Refer Appendix A for Preliminary FirstRate5 Certificates.

Apartment No.	ACE Total MJ/M2	ACE Heating	ACE Cooling	ACE NCFA	Star Rating
G.07	52.3	38.4	13.9	81.8	8.1
1.07	36.5	28.4	8.1	143.7	8.6
2.03	90.7	63	27.7	73.4	6.7
3.02	65.3	49.7	15.6	45.5	7.6
3.03	95.6	73	22.6	74.8	6.6
4.09	67.2	54.2	13	142.6	7.5
7.03	46.1	34.1	12	86.2	8.3
10.04	73.5	56.8	16.7	212.4	7.3
Average	**65.9**	**49.7**	**16.2**	**107.6**	**7.6**

*Apartments are assessed using FirstRate5 v5.3.2a

Construction assumptions for preliminary FirstRate5 ratings are listed below. Note, these assumptions are based on the sample

Council Best Practice Standard

Criteria	Development Provision

of apartments assessed and may vary throughout the development. These assumptions are not to be relied upon for any other purpose beyond Town Planning assessment.

Element	Material	Insulation Value
Floor – unconditioned /exposed below	Concrete	R2.35
External Walls	Concrete	R2.5
Internal Partition Walls	Lightweight plasterboard	R1.8
Concrete Slab – where exposed above	Concrete	R2.35
Roof	Concrete	R4.6
Sliding Doors	Aluminium framed, double glazed, argon filled, low-e, clear	Total System • U-Value ≤ 3.19 • SHGC: 0.48±5% • VLT: 0.55±5%
Fixed Windows	Aluminium framed, double glazed, argon filled, low-e, clear	Total System • U-Value ≤ 2.71 • SHGC: 0.58±5% • VLT: 0.62±5%
Awning Windows	Aluminium framed, double glazed, argon filled, low-e, clear	Total System • U-Value ≤ 4.42 • SHGC: 0.41±5% • VLT: 0.41±5%
Sliding Doors (L10 and L11 only)	Aluminium framed, double glazed, argon filled, low-e, spectrally selective	Total System • U-Value ≤ 2.79 • SHGC: 0.24±5% • VLT: 0.54±5%
Fixed Windows (L10 and L11 only)	Aluminium framed, double glazed,	Total System • U-Value ≤ 2.65

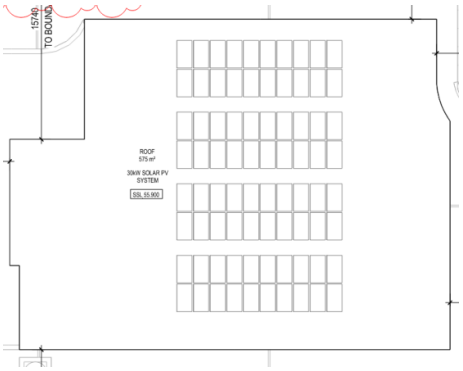
Council Best Practice Standard

Criteria		Development Provision		
			argon filled, low-e, spectrally selective	• SHGC: 0.25±5% • VLT: 0.54±5%
		Awning Windows (L10 and L11 only)	Aluminium framed, double glazed, argon filled, low-e, spectrally selective	Total System • U-Value ≤ 3.60 • SHGC: 0.19±5% • VLT: 0.47±5%
Thermal Performance Rating – Non-Residential	To reduce energy needed to achieve thermal comfort in summer and winter - improving comfort, reducing greenhouse gas emissions, energy consumption, and maintenance costs.	The non-residential areas aim to reduce heating and cooling energy consumption 5% below the reference case (BCA Section J 2019). Refer Appendix E for Preliminary Façade Calculation.		
Peak Energy Demand	To reduce demand on electrical infrastructure during peak cooling periods.	A high-performance thermal envelope in conjunction with high efficiency HVAC systems and lighting systems reduce energy demand at peak times.		
HVAC System	To ensure the efficient use of energy and to reduce consumption of electricity.	Inverter split systems are to be installed and sized to maintain conditions of the main living space of each apartment. The efficiency of the air conditioning system is to be within 1 star rating of best available under MEPS Post-October 2012 measurement standard. VRV / VRF systems with a COP of 3.4 are to be installed to the non-residential areas.		
Hot Water System	To ensure the efficient use of energy and to reduce consumption and greenhouse	The development is to utilise a centralised electric heat pump hot water system with a minimum COP of 2.5.		

Council Best Practice Standard

Criteria		Development Provision
	emissions from water heating.	
Car Park Ventilation	To ensure the efficient use of energy, reduce total operating greenhouse gas emissions and to reduce energy peak demand.	Carpark ventilation fans are driven by a VSD motor connected to CO sensors within the carpark. The inclusion of CO sensor control will allow the ventilation fans to ramp down when the car park is unoccupied. The system is to be designed in accordance with AS1668.2. The mechanical services engineer is responsible for the design and specification of the system. The contractor is to procure and install the specified system. Maintenance requirements of the CO sensor system are to be included in the O&M manual.
Clothes Drying	Ensure the efficient use of energy and to reduce energy consumption and greenhouse emissions associated with clothes drying	NIL
Internal Lighting - Residential	To ensure the efficient use of energy, to reduce energy consumption, greenhouse emissions associated with artificial lighting, and to reduce energy peak demand.	The maximum illumination power density (W/sqm) is at least 20% lower than NCC 2019 requirements. Lighting power density shall be as follows: • Dwellings: No greater than average 4W/m^2 • Common areas in a Class 2 Building: No greater than average 4.5W/m^2 • POS: No greater than average 4W/m^2 • Back of house and indoor car parks: No greater than average 5W/m^2 All common area, external and carpark lighting is to be controlled with daylight, motion sensors or timers (whichever is deemed appropriate).
Internal Lighting – Non-Residential	To ensure the efficient use of energy, to reduce energy consumption,	The maximum illumination power density (W/m2) in the non-residential areas meets the requirements of Table J6.2a of the NCC 2019 Section J. Lighting power density shall be as follows:

Council Best Practice Standard

Criteria		Development Provision
	greenhouse emissions associated with artificial lighting, and to reduce energy peak demand.	• Commercial/community facility: No greater than average 4.5W/m^2
Renewable Energy Systems - Solar	To encourage on-site renewable energy generation and reduce greenhouse emissions.	A 30kW Solar PV system is to be located on the roof of the proposed development. The system is expected to generate approximately 40,204kWh and will be provide 17% of common area lighting and power.  Location Solar PV System Refer Appendix C – Renewable Energy

Stormwater

Council ESD objectives:

- To reduce the impact of stormwater run-off
- To improve the water quality of stormwater run-off
- To achieve best practice stormwater quality outcomes
- To incorporate water sensitive urban design principles

Council Best Practice Standard

Criteria		Development Provision
Stormwater Treatment	To minimise negative environmental impacts of stormwater runoff and maximise onsite re-use of stormwater.	The Melbourne Water - Stormwater Treatment Objective Relative Measure (STORM) tool has been applied to determine performance relative to Best Practice Environmental Management Guidelines (Victoria Stormwater Committee, 1999). As per City of Yarra Planning Scheme - Clause 22.16 Stormwater Management (Water Sensitive Urban Design), the development is required to achieve a STORM rating of 100% or greater. A Melbourne STORM rating of 101% is achieved via the following: • Rainwater is to be collected from all roof areas and is to be directed into a 20,000-litre rainwater tank. All ground to level 2 toilets is to be connected to the rainwater tank and landscape irrigation. • Rainwater that is collected from L10, 3.06-3.08 and 1.07-1.09 terraces is to be directed into a ≥25m^2, minimum 950mm deep raingarden with 100mm of extended detention. Refer Appendix A – WSUD Response.

Indoor Environment Quality

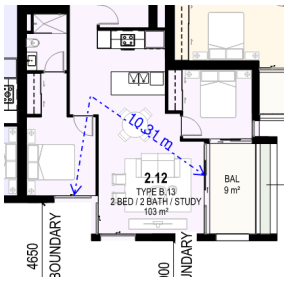
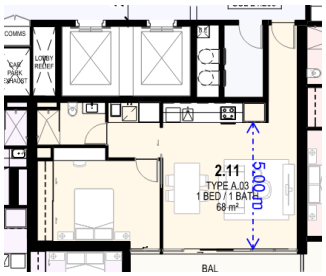
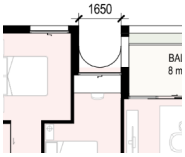
Council ESD objectives:

- to achieve a healthy indoor environment quality for the wellbeing of building occupants.
- to provide a naturally comfortable indoor environment will lower the need for building services, such as artificial lighting, mechanical ventilation and cooling and heating devices.

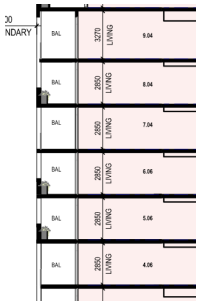
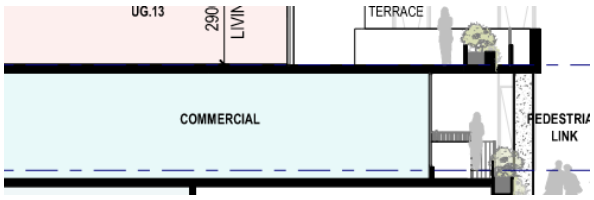
Council Best Practice Standard

Criteria		Development Provision
Daylight Access - Residential	To provide a high level of amenity and energy efficiency through design for natural light.	Daylight modelling has been conducted for a representative sample of apartments. The summary result is as follows: % of living floor area above DF 1.0: 81% % of bedroom floor area above DF 0.5: 84% Refer Appendix D - Daylight Modelling.
Winter Sunlight	To provide a high level of amenity and reduce need for artificial heating in winter.	33% (41 out of 123) of apartments achieve at least 3 hours of sunlight.
Daylight Access – Non-Residential	To provide a high level of amenity and energy efficiency through design for natural light.	The non-residential areas are targeting a 2% DF to 60% of the nominated area.
Minimal Internal Bedrooms	90% of bedrooms have an external window.	NIL internal bedrooms.
Effective Natural Ventilation	To provide fresh air and passive cooling opportunities.	50% (62 out of 123) of the development's apartments are naturally cross-ventilated. Apartments are provided with windows on opposite or adjacent facades or are effective single sided ventilated. Additionally, mechanically assisted natural ventilation is provided to min. 12 single aspect apartments across level 7-9 to meet the 60% natural ventilation threshold within BESS. The units to be provided with mechanically assisted natural ventilation include Type A06 (7.09, 8.09 & 9.09), Type B17 (7.03, 8.03 & 9.03), Type B18 (7.04, 8.04 & 9.04) and Type B19 (7.08, 8.08 & 9.08).

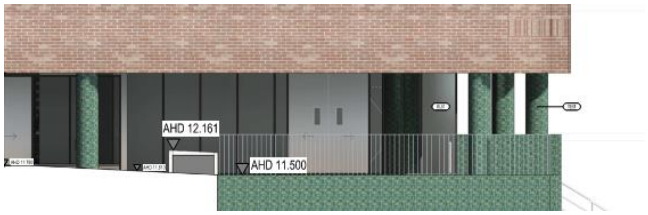
Council Best Practice Standard

Criteria		Development Provision
		 Typical natural cross-ventilated apartment  Typical single sided ventilated apartment
Ventilation – Non-Residential	To provide fresh air and passive cooling opportunities.	100% of the commercial area is effectively naturally ventilated. This is to be included in the mechanical design and specifications.
Thermal Comfort	To provide comfortable indoor spaces and reduce energy needed for heating and cooling.	The development is provided with a comprehensive shading strategy:  Majority of the eastern façade apartments are shaded by a combination of overhanging slab above and wing walls.  Western facing apartments on ground to level 3 are provided with brick walls for shading.  Hit & miss brickwork to several apartment balconies and windows at ground to level 2.  1,800mm wing walls provide shading for snorkel bedrooms throughout the development.

Council Best Practice Standard

Criteria		Development Provision
		 All north, west, and east recessed windows are shaded by the overhanging balcony or roof of the floor above.  West, and east bedroom windows have been sized to limit solar gains.  L10-L11 are provided with spectrally selective glazing to limit solar heat gains.
Thermal Comfort – Non-Residential	To provide comfortable indoor spaces and reduce energy needed for heating and cooling.	The development is provided with a comprehensive shading strategy:  Majority of the commercial windows are shaded by the overhanging slab of the level above.

Council Best Practice Standard

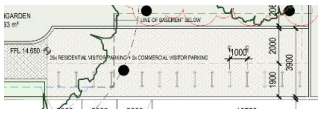
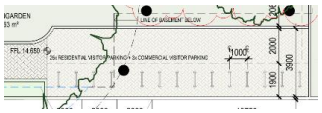
Criteria		Development Provision
		 All of the commercial community facility windows at LG are shaded by the overhanging slab of the level above.
Air Quality – Non-Residential	All paints and adhesives meet the maximum total indoor pollutant emission limits.	All internally applied paints adhesives and sealants are to have a low or ultra-low VOC content in line with Green Star Buildings V1 Credit 13 Exposure to Toxins.
	All carpet meets the maximum total indoor pollutant emission limits.	All internally applied carpets are to have a low VOC content in line with Green Star Buildings V1 Credit 13 Exposure to Toxins.
	All engineered wood meets the maximum total indoor pollutant emission limits.	All internally applied engineered wood products are to have low formaldehyde levels in line with Green Star Buildings V1 Credit 13 Exposure to Toxins.

Transport

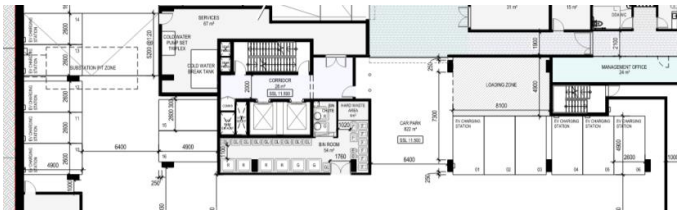
Council ESD objectives:

- To minimise car dependency.
- To ensure that the built environment is designed to promote the use of public transport, walking and cycling.

Council Best Practice Standard

Criteria		Development Provision	
Bicycle Parking – Residential & Residential Visitors	To encourage and recognise initiatives that facilitate cycling.	 In total 124 bicycle spaces are to be provided for residents. This will provide a ratio of approximately 1 resident bicycle space for every apartment.	 In total 25 bicycle spaces are to be provided for residential visitors. This will provide a ratio of approximately 1 visitor bicycle space for every 5 apartments.
Bicycle Parking – Non-Residential & Non-Residential Visitors	To encourage and recognise initiatives that facilitate cycling.	 In total 6 bicycle spaces are to be provided for employees.	 In total 3 bicycle spaces are to be provided for non-residential visitors.

Council Best Practice Standard

Criteria		Development Provision
End of Trip Facilities – Non-Residential	To minimise car dependency and to ensure that the built environment is designed to promote the use of public transport, walking, and cycling.	NIL
Electric Vehicle Infrastructure	To minimise car dependency and to ensure that the built environment is designed to promote the use of public transport, walking, and cycling.	In total 9 x charging point for electrical vehicles is integrated in the proposed development.  Location of electric charging point. Future infrastructure for electrical charging points is incorporated in the services design.
Car Share Scheme	To minimise car dependency and to ensure that the built environment is designed to promote the use of public transport, walking, and cycling.	NIL
Motorbikes / Mopeds	To minimise car dependency and to ensure that the built environment is designed to	The proposed development will incorporate 26 motorbike / moped spaces in the basement carpark. This represents ≥5% of the total carparking.

Council Best Practice Standard

Criteria	Development Provision
	promote the use of public transport, walking, and cycling.

Materials

ESD objectives:

- Use of low embodied energy materials.
- Encourage use of recycled and reusable materials in building construction and undertake adaptive reuse of buildings, where practical.

Council Best Practice Standard

Criteria		Development Provision
Embodied Energy	Limited use of high embodied energy metals and materials, especially in a design with intended high churn (e.g. retail)	The design will seek to limit the use of high embodied energy metal finishes. At least 40% of coarse aggregate in the concrete is crushed slag aggregate or other alternative materials (measured by mass across all concrete mixes in the project).
Structural and Reinforcing Steel	Commitment to source structural and reinforcing steel from a responsible steel maker	The building's steel (by mass) is to be sourced from a Responsible Steel Maker with: • a currently valid and certified ISO 14001 Environmental Management System (EMS) in place; and • is a member of the World Steel Association's (WSA) Climate Action Programme (CAP)
Sustainable Timber	Commitment to source timber from sustainably managed source, with proof of audit trail.	Where timber is to be used, such timbers are to accord with the GBCA's 'Essential' criteria for forest certification. This may include FSC and / or PEFC Certification which are both internationally recognised schemes ensuring that timber is sourced from sustainable sources. Alternatively, recycled timber will be used.
PVC	Commitment to source best practice PVC products	Permanent formwork, pipes, flooring, blinds and cables in the project will seek to comply with the following: • Meet the GBCA's Best Practice Guidelines for PVC. or; • The supplier holds a valid ISO140001 certification.
Sustainable Products	Commitment to source products that meet the transparency and sustainability requirements	The project will incorporate products that meet the transparency and sustainability requirements where deemed appropriate. This includes the following: reused products, recycled content products, environmental product declarations, third party certified and stewardship programs.

Council Best Practice Standard

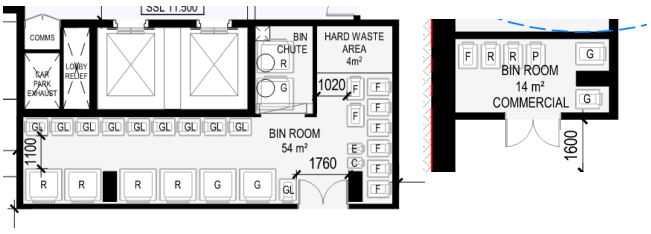
Criteria		Development Provision
Design for Disassembly	Commitment to minimise damage to recyclable materials by optimizing design and construction methods.	Consideration will be given to the use of materials and construction methods that cause limited damaged to recyclable materials.

Waste Management

Council ESD objectives:

- To ensure waste avoidance, reuse and recycling during the design, construction, and operation stages of development.
- To ensure long term reusability of building materials.
- To meet Councils' requirement that all multi-unit developments must provide a Waste Management Plan in accordance with the *Guide to Best Practice for Waste Management in Multi-unit Developments 2010*, published by Sustainability Victoria.

Council Best Practice Standard

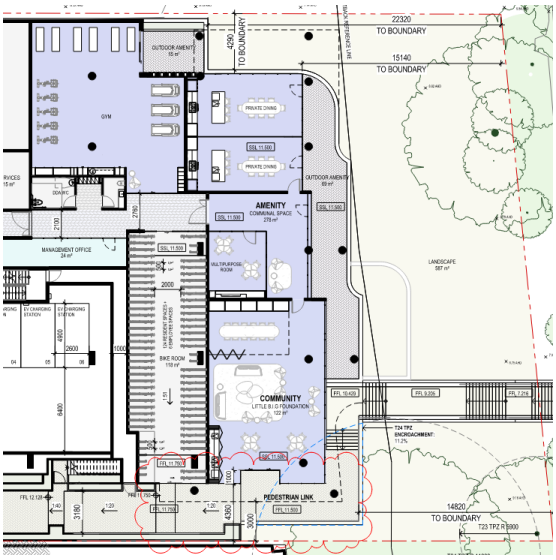
Criteria		Development Provision
Building Re-use	To ensure waste avoidance, reuse, and recycling during the design.	None of the existing structure is re-used.
Construction and Demolition Waste	To reduce construction waste going to landfill	At least 80% of the waste generated during construction and demolition has been diverted from landfill.
Food & Garden Waste	To ensure waste avoidance, reuse, and recycling during the operational life of the building.	Green waste storage is provided in the basement.
Convenience of Recycling	To ensure waste avoidance, reuse, and recycling during the operational life of the building.	 Separate general, glass and recycling waste storage will be provided at basement.

Urban Ecology

Council ESD objectives:

- To protect and enhance biodiversity.
- To provide sustainable landscaping.
- To protect and manage all remnant indigenous plant communities.
- To encourage the planting of indigenous vegetation.

Council Best Practice Standard

Criteria		Development Provision
Communal Space	To encourage and recognise initiatives that facilitate interaction between building occupants.	278m^2 of communal space will be provided at lower ground. Communal space will include the following amenities: Landscaped outdoor areas, terraces, multipurpose rooms, gym and private dining spaces. Additionally, 672m^2 of outdoor amenity is provided.  Communal space will be provided at lower ground.
Vegetation	To encourage and recognise the use of vegetation and landscaping within and	Planter boxes are to be located at ground level within communal areas and will be located within apartments sporadically throughout the development. Landscaped area is provided at lower ground adjacent to the Yarra River.

Council Best Practice Standard

Criteria		Development Provision
	around developments.	The total area of vegetation is 36% of the site area.
Green Walls / Roof	To encourage the appropriate use of green roofs, walls, and facades to mitigate the impact of the urban heat island effect.	NIL
Private Open Space - Balcony / Courtyard Ecology	To encourage plants in a healthy ecological context to be grown on balconies and in courtyards.	All balconies or private open space have been provided with a tap and floor waste allowing residents to cultivate their own gardens.
Food Production - Residential	To encourage the production of fresh food on-site.	NIL
Heat Island Effect	To reduce the contribution of the project site to the 'heat island effect	Roof are to have a three year SRI of minimum 80. Unshaded hard-scaping elements are to have a three year SRI of minimum 40.

Innovation

Council ESD objectives:

- To encourage innovative technology, design, and processes in all development, which positively influence the sustainability of buildings.

Council Best Practice Standard

Criteria		Development Provision
Carbon Neutral Commitment	To reduce greenhouse gas emissions produced by the development and its occupants.	NIL gas connection for the apartments and all electric services. Targeting a min. 7 Star average energy rating result. The proposed development will be established with a carbon neutral power agreement between developer, owner's corporation, and electrical retailer to provide GreenPower for all energy consumed by building (including communal areas, apartments and commercial tenancies). It is the intent to maintain this agreement for a minimum of 10 years. Additionally, the development is committed to provide on-site renewable energy generation to meet minimum of 5% of electricity consumed by residents at the site per the Embedded Networks Review.
ESD Verification	To ensure all ESD initiatives committed to within the town planning process are applied to the development.	An ESD professional will be engaged throughout the design and construction process. The ESD professional will perform a minimum of 2 site inspections during the construction phase to ensure suitable implementation of the ESD initiatives. Any deficiencies compared to the endorsed SMP will be escalated to the project manager and resolved.
Social Innovation	To enhance social health and wellbeing within the development for its occupants and wider community.	The development will seek to implement a community portal and activity schedule to enhance the social interactions of its occupants within the building's communal spaces.

Appendices

Appendix A: WSUD Response

Site layout Plan

The following architectural mark-up illustrates the rainwater collection and impervious areas of the proposed development site.

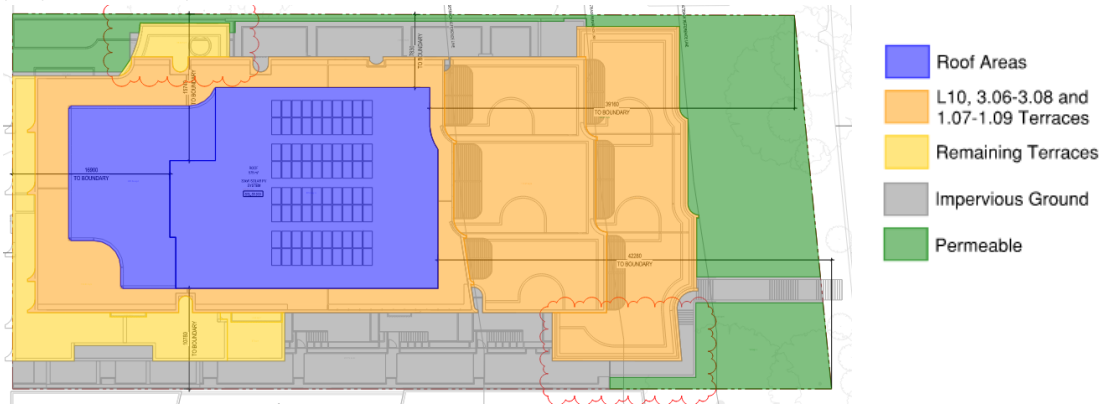


Figure 3 - Markup of water catchment and impervious areas.

STORM Rating Report

A STORM rating of ≥100% can be achieved by implementing the following initiatives:

- Rainwater is to be collected from all roof areas and is to be directed into a 20,000-litre rainwater tank. All ground to level 2 toilets is to be connected to the rainwater tank and landscape irrigation.
- Rainwater that is collected from L10, 3.06-3.08 and 1.07-1.09 terraces is to be directed into a ≥25m^2, minimum 950mm deep raingarden with 100mm of extended detention.

Melbourne Water has developed the Stormwater Treatment Objective- Relative Measure (STORM) Calculator as a method of simplifying the analysis of stormwater treatment methods. The STORM Calculator displays the amount of treatment that is required to meet best practice targets, using WSUD treatment measures.

The best practice standards have been set out in the Urban Stormwater Best Practice Environmental Management Guidelines (Victoria Stormwater Committee, 1999) for reduction in total suspended solids (TSS), total phosphorus (TP) and total nitrogen (TN) loads.

The STORM Result is provided below:

Melbourne Water **STORM Rating Report**

TransactionID:	0
Municipality:	YARRA
Rainfall Station:	YARRA
Address:	675 Victoria Street
	Abbotsford
	VIC 3067
Assessor:	GIW
Development Type:	Residential - Mixed Use
Allotment Site (m2):	3,459.00
STORM Rating %:	101

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Roof Areas	797.00	Rainwater Tank	20,000.00	100	164.00	80.00
L10, 3.06-3.08 and 1. 07-1.09 Terraces	1,210.00	Raingarden 100mm	25.00	0	128.40	0.00
Remaining Terraces	239.00	None	0.00	0	0.00	0.00
Impervious Ground	578.00	None	0.00	0	0.00	0.00

WSUD Strategy

The development will include the provision of a 20,000-litre rainwater tank and associated pump in the basement garage. The rainwater tank is to be connected to all ground to level 2 toilets and landscape irrigation.

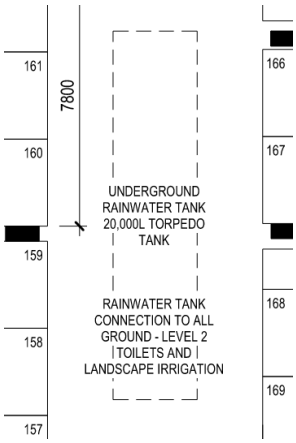


Figure 4 – Location Rainwater Tank

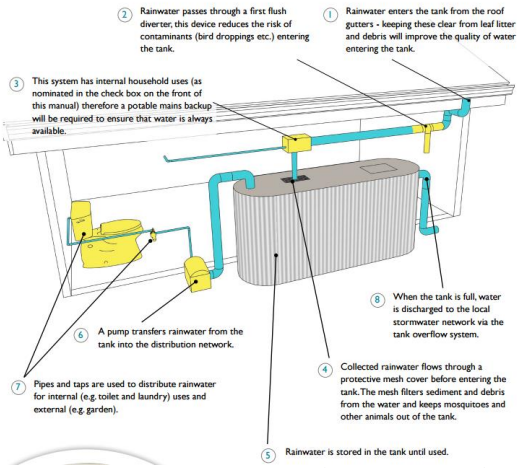


Figure 5 – Cross-section Tank (City of Port Phillip)

Furthermore, a ≥25m^2 minimum 950mm deep raingarden with 100mm of extended detention is to be provided. Rainwater collected from L10, 3.06-3.08 and 1.07-1.09 terraces is to be directed into the raingarden for treatment prior to discharge into the stormwater system.

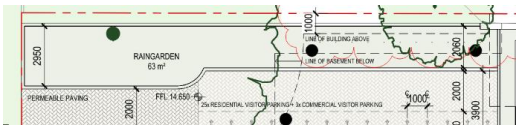


Figure 6 – Location Raingarden

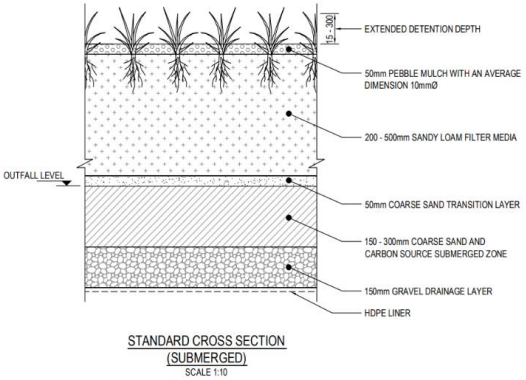


Figure 7 – Cross-section Raingarden (City of Moreland)

Rainwater Reuse

Inputs

Catchment Area	797 sqm
Number of Occupants	100
Bin Washout	No
Irrigation Area	1228 sqm
Tank Capacity	20,000 Litre

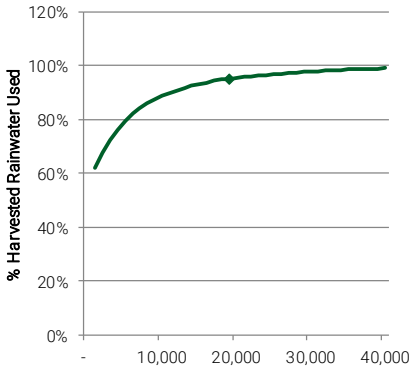
Outputs

% Served by Rainwater	14.5%
% Harvested Rainwater Used	95.4%
Total Potable Water Saved	277,729 Litre

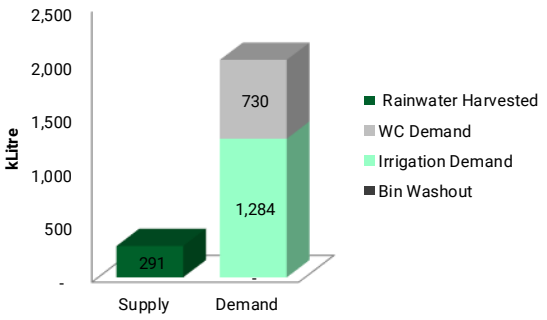
Rainwater Balance (Monthly Averages)

Month	Rainwater Harvested (L)	Irrigation Demand (L)	WC Demand (L)	Bin Washout (L)
Jan	18,606	189,994	62,000	0
Feb	23,945	172,111	56,000	0
Mar	21,728	88,287	62,000	0
Apr	26,251	84,519	60,000	0
May	22,127	87,210	62,000	0
Jun	24,299	39,741	60,000	0
Jul	17,771	40,491	62,000	0
Aug	22,987	40,491	62,000	0
Sep	24,261	116,165	60,000	0
Oct	26,570	118,357	62,000	0
Nov	36,700	115,434	60,000	0
Dec	25,724	191,464	62,000	0
Total	290,969	1,284,264	730,000	0
Equivalent STORM tool		176		0

Tank Sizing



Supply-Demand



Site Management Statement

Prevention of litter, sediments and pollution entering the stormwater system in the construction phase is to be addressed through introduction of the following initiatives:

- Buffer strips to pervert stormwater runoff.
- Gravel sausage filters at stormwater inlets to prevent silt, mud, or any other site contaminant from entering the stormwater system.
- Silt fences under grates at surface entry inlets to prevent sediment from entering the stormwater system.
- Temporary rumble grids to vibrate mud and dirt off vehicles prior to leaving the site.
- The site is to be kept clean from any loose rubbish or rubble.
- Introduction of offsite construction for building elements where deemed appropriate.

The builder is to include these initiatives in the construction management plan and address these during site induction of relevant contractors.

Maintenance Program

The following maintenance requirements are to be programmed to ensure the rainwater tank operates effectively:

Item	Description	Maintenance Interval
Gutters and downpipes	Eave and box gutters are to be inspected and cleaned to prevent large debris from being washed into rainwater tank.	3 monthly
First flush system (as applicable)	Inspect and clean excess sediment from diverter chamber to prevent blockages.	3 monthly
Tank contents	Siphon the tank to inspect contents. If sludge is present, a plumber will be required to drain tank contents and clean the tank.	2 to 3 years
Tank structure	Inspect tank externally for leaks	Yearly
Pump system	Inspect pump wiring, plumbing and check for smooth operation.	6 monthly
Plumbing	Plumbing and fixtures connected to the rainwater tank is to be inspected for leaks.	Yearly

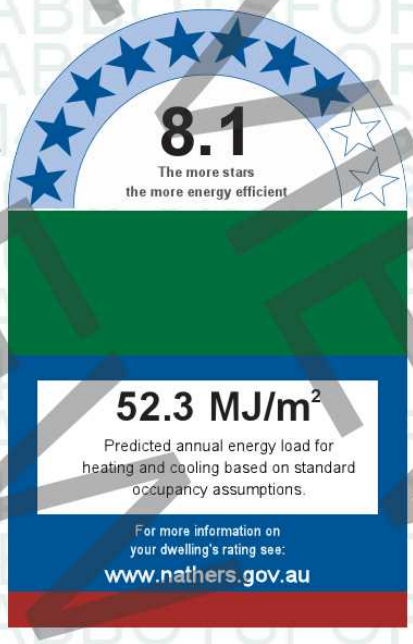
The following maintenance requirements are to be programmed to ensure the raingarden operates effectively:

Item	Description	Maintenance Interval
Kerbing and paved area	Remove rubbish, leaves and other debris from the surrounding drainage area.	3 monthly
Ponding area	Clear inflow points of built-up sediment, rubbish and leaves. Check for erosion or gouging – repair if necessary.	3 monthly
Mulch layer (bark, pebbles, etc.)	Remove rubbish, leaves and other debris. After storm events mulch may need to be redistributed or added around inflow points.	3 monthly
Plants	Water establishing plants monthly during extended dry periods. Check plant health and replace dead plants as necessary. Use native species to suit garden conditions (e.g., full sun or shaded). Remove weeds – do not use herbicides, pesticides and fertilisers as these chemicals will pollute the stormwater runoff.	3 monthly
Rain garden soil mix	Check soil level is below surrounding hard surface level and overflow grate. Use drainage test to check soil is free draining.	Annually
Underdrain system	Use inspection well (if present) to check underdrain is working properly. Check rain garden draining freely using drainage test.	Annually

Appendix B: Preliminary FirstRate5 Certificates

Nationwide House Energy Rating Scheme
NatHERS Certificate

Generated on 7 Apr 2025 using FirstRate5: 5.3.2b (3.21)



Property

Address	G.07, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*	
Conditioned*	81.8
Unconditioned*	2503.1
Total	2584.9
Garage	-

Exposure type
suburban

NatHERS climate zone
21 Melbourne RO

Thermal performance

Heating	Cooling
38.4 MJ/m²	13.9 MJ/m²

About the rating
NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-051-06 A	Capral 35 Awning in 400 Frame DG 6EA/12Ar/6	4.42	0.41	0.39	0.43
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living 1	CAP-051-06 A	Opening 15	3000	890	awning	60.0	S	No
Kitchen/Living 1	CAP-057-13 A	Opening 12	3000	3700	sliding	20.0	N	No

* Refer to glossary.

Bedroom 3	CAP-051-06 A	Opening 7	3000	1100	awning	60.0	S	No
Bedroom 1	CAP-051-06 A	Opening 8	3000	945	awning	60.0	N	No
Bedroom 1	CAP-055-52 A	Opening 14	3000	2000	fixed	0.0	N	No
Bedroom 1	CAP-057-13 A	Opening 13	3000	2500	sliding	45.0	W	No

Roof window *type and performance value*

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria Street - Ext. Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.057 density = 7 kg/m3) (R1.3)	No
2	FR5 - Earth Retaining Wall	0.5	Medium		No
3	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No
4	675 Victoria Street - Ext. Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No

* Refer to glossary.

5	675 Victoria Street - Ext. Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Carpark	1	3000	991	N	0	Yes
Carpark	1	3000	24952	W	0	Yes
Carpark	1	3000	3172	N	0	Yes
Carpark	1	3000	1786	W	0	No
Carpark	2	3000	21281	W	0	No
Carpark	2	3000	5641	S	0	No
Carpark	2	3000	12747	W	0	No
Carpark	2	3000	32200	S	0	No
Carpark	2	3000	48483	E	0	No
Carpark	1	3000	12287	E	0	Yes
Ammenity area	1	2400	10400	E	0	Yes
Ammenity area	1	2400	34218	N	0	No
Ammenity area	1	2400	9400	W	0	Yes
Kitchen/Living 1	3	3000	5341	S	0	No
Kitchen/Living 1	4	3000	1076	S	4041	Yes
Kitchen/Living 1	4	3000	1757	S	0	Yes
Kitchen/Living 1	5	3000	4145	N	2689	Yes
Kitchen/Living 1	3	3000	8908	W	0	No
Kitchen/Living 1	3	3000	4068	N	0	No
Kitchen/Living 1	3	3000	1465	W	0	No
Bedroom 3	5	3000	2955	S	0	Yes
Bedroom 3	5	3000	3538	E	0	Yes
Bathroom	5	3000	2330	E	0	Yes
Ensuite	5	3000	1507	E	0	Yes
Bedroom 1	5	3000	5457	E	0	Yes
Bedroom 1	5	3000	3036	N	0	No
Bedroom 1	5	3000	2559	W	0	Yes

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	139.1	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Carpark	FR5 - 200mm concrete slab	2160	Enclosed	R0.0	none

* Refer to glossary.

Ammenity area	FR5 - Timber	338.6	Enclosed	R0.0	Timber (Mountain ash)
Kitchen/Living 1	FR5 - 200mm concrete slab	29.4	Enclosed	R2.4	Timber
Kitchen/Living 1	FR5 - 200mm concrete slab	19.1	Enclosed	R2.4	Timber
Bedroom 3	FR5 - 200mm concrete slab	10.6	Enclosed	R2.4	Carpet
Bathroom	FR5 - 200mm concrete slab	7	Enclosed	R2.4	Timber
Ensuite	FR5 - 200mm concrete slab	4.5	Enclosed	R2.4	Timber
Bedroom 1	FR5 - 200mm concrete slab	16	Enclosed	R2.4	Carpet

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Carpark	FR5 - 200mm concrete slab	R2.4	No
Carpark	Plasterboard	R0.0	No
Ammenity area	FR5 - 200mm concrete slab	R2.4	No
Ammenity area	Plasterboard	R0.0	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living 1	21	Downlights	80	Sealed
Kitchen/Living 1	1	Exhaust Fans	200	Sealed
Bedroom 3	4	Downlights	80	Sealed
Bathroom	2	Downlights	80	Sealed
Bathroom	1	Exhaust Fans	200	Sealed
Ensuite	2	Downlights	80	Sealed
Ensuite	1	Exhaust Fans	200	Sealed
Bedroom 1	8	Downlights	80	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	0.5	Medium
Disc:Attic-Discontinuous	0.0	0.5	Medium

* Refer to glossary.

Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERSAdministrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

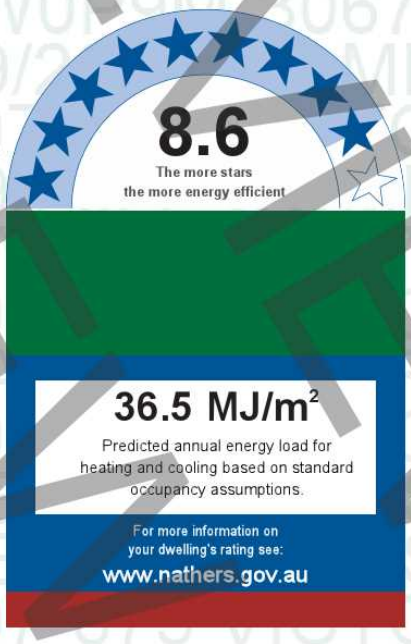
* Refer to glossary.

National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

PREVIEW PREVIEW PREVIEW

Nationwide House Energy Rating Scheme
NatHERS Certificate No. QQMM5W0P9M

Generated on 9 Sep 2022 using FirstRate5: 5.3.2b (3.21)



Property

Address	1.07, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*	
Conditioned*	143.7
Unconditioned*	5.4
Total	149.1
Garage	-

Exposure type
suburban

NatHERS climate zone
21 Melbourne RO

Thermal performance

Heating	Cooling
28.4 MJ/m²	8.1 MJ/m²

About the rating
NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

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State and territory variations and additions to the NCC may also apply.

* Refer to glossary.

PREVIEW

QQMM5W0P9M NatHERS Certificate **8.6 Star Rating** as of 9 Sep 2022

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-051-06 A	Capral 35 Awning in 400 Frame DG 6EA/12Ar/6	4.42	0.41	0.39	0.43
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Bed 1	CAP-057-13 A	Opening 11	1900	1415	awning	60.0	W	No
Bedroom 2	CAP-057-13 A	Opening 10	1900	1422	awning	60.0	W	No

* Refer to glossary.

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Bedroom 3	CAP-051-06 A	Opening 9	3000	1606	sliding	45.0	W	No
Bedroom 3	CAP-055-52 A	Opening 14	3000	1304	fixed	0.0	W	No
Kitchen/Living	CAP-055-52 A	Opening 12	3000	920	fixed	0.0	N	No
Kitchen/Living	CAP-051-06 A	Opening 13	3000	3059	sliding	45.0	N	No
Kitchen/Living	CAP-055-52 A	Opening 15	3000	920	fixed	0.0	N	No
Kitchen/Living	CAP-055-52 A	Opening 16	3000	920	fixed	0.0	N	No

Roof window *type and performance value*

Default* roof windows

			Substitution tolerance ranges	
Window ID	Window description	Maximum U-value* SHGC*	SHGC lower limit	SHGC upper limit
No Data Available				

Custom* roof windows

			Substitution tolerance ranges	
Window ID	Window description	Maximum U-value* SHGC*	SHGC lower limit	SHGC upper limit
No Data Available				

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria st - Ext concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
2	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No

* Refer to glossary.

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External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bed 1	1	3000	1555	S	0	Yes
Bed 1	1	3000	4207	W	0	No
Bedroom 2	1	3000	695	S	9319	Yes
Bedroom 2	1	3000	1701	W	0	Yes
Laundry	2	3000	3176	E	0	No
Laundry	2	3000	322	ENE	0	No
Laundry	2	3000	260	NE	0	No
Laundry	2	3000	263	NE	0	No
Laundry	2	3000	1968	N	0	No
Ensuite	2	3000	2569	S	0	No
Ensuite	2	3000	3103	E	0	No
WIR	2	3000	3240	S	0	No
Bedroom 3	2	3000	4513	S	0	No
Bedroom 3	1	3000	3064	W	2319	Yes
Hall	2	3000	1638	E	0	No
Hall	2	3000	1670	E	0	No
Hall	2	3000	2277	N	0	No
Kitchen/Living	2	3000	5939	E	0	No
Kitchen/Living	1	3000	7883	N	2727	Yes
Kitchen/Living	1	3000	6831	W	0	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	147.4	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bed 1	FR5 - 250mm concrete slab	12.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 250mm concrete slab	12.1	Enclosed	R0.0	Carpet
Powder	FR5 - 250mm concrete slab	5.4	Enclosed	R0.0	Tiles
Pantry	FR5 - 250mm concrete slab	7.2	Enclosed	R0.0	Timber
Laundry	FR5 - 250mm concrete slab	9.5	Enclosed	R0.0	Tiles
Ensuite	FR5 - 250mm concrete slab	8	Enclosed	R0.0	Tiles
WIR	FR5 - 250mm concrete slab	8.4	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 250mm concrete slab	13.8	Enclosed	R0.0	Carpet
Hall	FR5 - 250mm concrete slab	21.9	Enclosed	R0.0	Timber
Kitchen/Living	FR5 - 250mm concrete slab	49.9	Enclosed	R0.0	Timber

* Refer to glossary.

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Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
No Data Available			

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Bed 1	5	Downlights	80	Sealed
Bedroom 2	5	Downlights	80	Sealed
Powder	2	Downlights	80	Sealed
Powder	1	Exhaust Fans	200	Sealed
Pantry	3	Downlights	80	Sealed
Laundry	4	Downlights	80	Sealed
Ensuite	3	Downlights	80	Sealed
Ensuite	1	Exhaust Fans	200	Sealed
WIR	3	Downlights	80	Sealed
Bedroom 3	5	Downlights	80	Sealed
Hall	8	Downlights	80	Sealed
Kitchen/Living	20	Downlights	80	Sealed
Kitchen/Living	1	Exhaust Fans	200	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

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Explanatory Notes

About this report

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Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

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Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
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Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

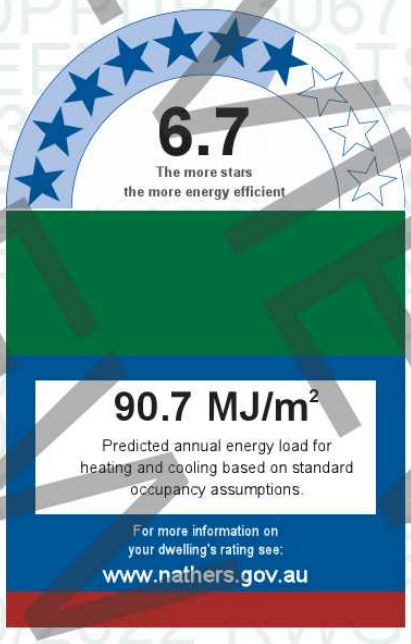
PREVIEW

National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

PREVIEW PREVIEW PREVIEW

Nationwide House Energy Rating Scheme
NatHERS Certificate No. RWGRH0PPUP

Generated on 9 Sep 2022 using FirstRate5: 5.3.2b (3.21)



Property

Address	2.03, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*	
Conditioned*	73.4
Unconditioned*	1.2
Total	74.6
Garage	-

Exposure type
suburban

NatHERS climate zone
21 Melbourne RO

Thermal performance

Heating	Cooling
63 MJ/m²	27.7 MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living 1	CAP-055-52 A	Opening 12	3000	958	fixed	0.0	S	No
Kitchen/Living 1	CAP-057-13 A	Opening 13	3000	2682	sliding	45.0	S	No
Kitchen/Living 1	CAP-055-52 A	Opening 14	3000	3837	fixed	0.0	S	No

* Refer to glossary.

Kitchen/Living 1	CAP-055-52 A	Opening 11	1900	1555	fixed	0.0	W	No
Bedroom 2	CAP-057-13 A	Opening 10	3000	2350	sliding	45.0	W	No
Bedroom 1	CAP-057-13 A	Opening 9	3000	2323	sliding	45.0	W	No

Roof window *type and performance value*

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria st - Ext concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
2	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)

* Refer to glossary.

Kitchen/Living 1	1	3100	7566	S	2205	Yes
Kitchen/Living 1	2	3100	5533	E	0	No
Kitchen/Living 1	1	3100	3655	W	1322	Yes
Bedroom 2	1	3100	3385	W	2847	Yes
Bedroom 1	2	3100	4166	N	0	No
Bedroom 1	2	3100	593	W	0	Yes
Bedroom 1	1	3100	2331	W	5064	Yes
Ensuite	2	3100	1777	E	0	No
Ensuite	2	3100	3276	N	0	No
Bathroom	2	3100	2656	E	0	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	75	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living 1	FR5 - 250mm concrete slab	36.9	Enclosed	R0.0	Timber
Bedroom 2	FR5 - 250mm concrete slab	12.5	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 250mm concrete slab	14.2	Enclosed	R0.0	Carpet
Ensuite	FR5 - 250mm concrete slab	5.8	Enclosed	R0.0	Tiles
Bathroom	FR5 - 250mm concrete slab	4	Enclosed	R0.0	Tiles
Laundry	FR5 - 250mm concrete slab	1.2	Enclosed	R0.0	Timber

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
No Data Available			

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living 1	15	Downlights	80	Sealed
Kitchen/Living 1	1	Exhaust Fans	200	Sealed
Bedroom 2	4	Downlights	80	Sealed
Bedroom 1	6	Downlights	80	Sealed
Ensuite	2	Downlights	80	Sealed
Ensuite	1	Exhaust Fans	200	Sealed
Bathroom	2	Downlights	80	Sealed
Bathroom	1	Exhaust Fans	200	Sealed
Laundry	1	Downlights	80	Sealed

Ceiling *fans*

* Refer to glossary.

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

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Explanatory Notes

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Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
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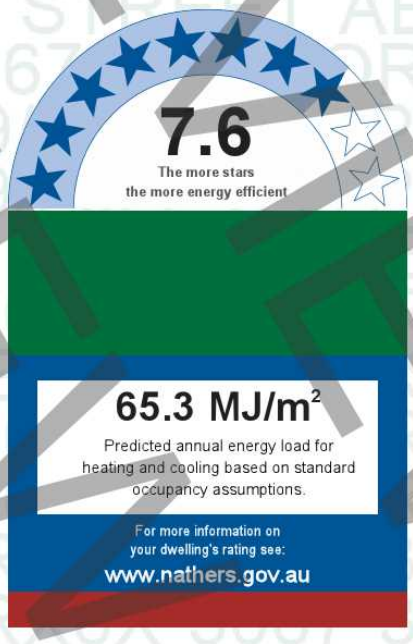
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

PREVIEW PREVIEW PREVIEW

Nationwide House Energy Rating Scheme
NatHERS Certificate No. S4YP0ARX6X

Generated on 9 Sep 2022 using FirstRate5: 5.3.2b (3.21)



Property

Address	3.02, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*		**Exposure type**
Conditioned*	45.5	open
Unconditioned*	5.2	**NatHERS climate zone**
Total	50.7	21 Melbourne RO
Garage	-	

Thermal performance

Heating	Cooling
49.7 MJ/m²	15.6 MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-051-06 A	Capral 35 Awning in 400 Frame DG 6EA/12Ar/6	4.42	0.41	0.39	0.43

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	CAP-055-52 A	Opening 5	3000	581	fixed	0.0	S	No
Kitchen/Living	CAP-057-13 A	Opening 7	3000	2540	sliding	30.0	S	No

* Refer to glossary.

Bedroom	CAP-057-13 A	Opening 7	3000	1920	sliding	30.0	S	No
Bedroom	CAP-051-06 A	Opening 8	3000	924	awning	60.0	S	No

Roof window *type and performance value*

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria Street - Ext. Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
2	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen/Living	1	3000	3266	S	2197	Yes

* Refer to glossary.

Kitchen/Living	2	3000	1573	E	0	No
Kitchen/Living	2	3000	4527	N	0	No
Kitchen/Living	2	3000	7565	W	0	No
Bedroom	1	3000	2990	S	1097	Yes
Bedroom	1	3000	1489	E	4388	Yes
Bedroom	2	3000	2558	E	0	No
Bedroom	1	3000	1153	W	3165	Yes
Bathroom	2	3000	2882	E	0	No
Bathroom	2	3000	1789	N	0	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	31.5	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living	FR5 - 200mm concrete slab	33.4	Enclosed	R0.0	Timber
Bedroom	FR5 - 200mm concrete slab	12	Enclosed	R0.0	Carpet
Bathroom	FR5 - 200mm concrete slab	5.2	Enclosed	R0.0	Tiles

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
No Data Available			

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	13	Downlights	80	Sealed
Kitchen/Living	1	Exhaust Fans	200	Sealed
Bedroom	5	Downlights	80	Sealed
Bathroom	2	Downlights	80	Sealed
Bathroom	1	Exhaust Fans	200	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	0.5	Medium

* Refer to glossary.

Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

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Disclaimer

The format of the NatHERS Certificate was developed by the NatHERSAdministrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

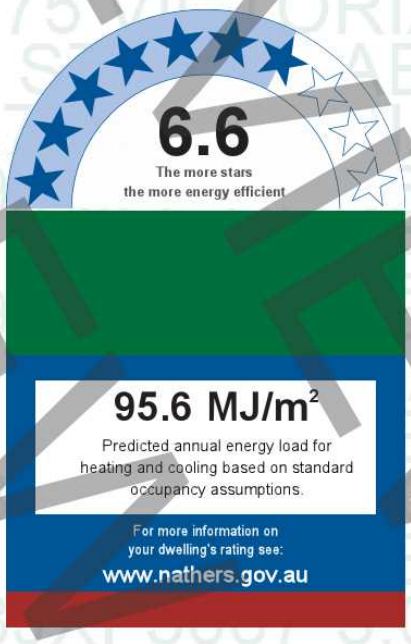
Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans, pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

PREVIEW PREVIEW PREVIEW

Nationwide House Energy Rating Scheme
NatHERS Certificate No. HHN6888JXI

Generated on 9 Sep 2022 using FirstRate5: 5.3.2b (3.21)



Property

Address	3.03, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*	
Conditioned*	74.8
Unconditioned*	1.1
Total	75.9
Garage	-

Exposure type
suburban

NatHERS climate zone
21 Melbourne RO

Thermal performance

Heating	Cooling
73 MJ/m²	22.6 MJ/m²

About the rating
NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-051-06 A	Capral 35 Awning in 400 Frame DG 6EA/12Ar/6	4.42	0.41	0.39	0.43

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living 1	CAP-055-52 A	Opening 12	3000	959	fixed	0.0	S	No
Kitchen/Living 1	CAP-057-13 A	Opening 13	3000	2684	sliding	45.0	S	No

* Refer to glossary.

Kitchen/Living 1	CAP-055-52 A	Opening 14	3000	3840	fixed	0.0	S	No
Kitchen/Living 1	CAP-055-52 A	Opening 11	1900	1556	fixed	0.0	W	No
Bedroom 2	CAP-051-06 A	Opening 10	3000	2350	awning	30.0	W	No
Bedroom 1	CAP-057-13 A	Opening 9	3000	2325	sliding	45.0	W	No

Roof window *type and performance value*

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria st - Ext concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No
2	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No

External wall *schedule*

* Refer to glossary.

HHN6888JXI NatHERS Certificate 6.6 Star Rating as of 9 Sep 2022

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen/Living 1	1	3000	7573	S	2207	Yes
Kitchen/Living 1	2	3000	5538	E	0	No
Kitchen/Living 1	1	3000	3699	W	4730	Yes
Bedroom 2	1	3000	3388	W	4739	Yes
Bedroom 1	2	3000	4272	N	0	No
Bedroom 1	1	3000	594	W	0	Yes
Bedroom 1	1	3000	2368	W	4708	Yes
Ensuite	2	3000	1778	E	0	No
Ensuite	2	3000	3279	N	0	No
Bathroom	2	3000	2693	E	0	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	72.5	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living 1	FR5 - 250mm concrete slab	37.4	Enclosed	R0.0	Timber
Bedroom 2	FR5 - 250mm concrete slab	12.5	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 250mm concrete slab	14.7	Enclosed	R0.0	Carpet
Ensuite	FR5 - 250mm concrete slab	5.9	Enclosed	R0.0	Tiles
Bathroom	FR5 - 250mm concrete slab	4.4	Enclosed	R0.0	Tiles
Laundry	FR5 - 250mm concrete slab	1.1	Enclosed	R0.0	Timber

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
No Data Available			

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living 1	15	Downlights	80	Sealed
Kitchen/Living 1	1	Exhaust Fans	200	Sealed
Bedroom 2	4	Downlights	80	Sealed
Bedroom 1	6	Downlights	80	Sealed
Ensuite	2	Downlights	80	Sealed
Ensuite	1	Exhaust Fans	200	Sealed
Bathroom	2	Downlights	80	Sealed
Bathroom	1	Exhaust Fans	200	Sealed
Laundry	1	Downlights	80	Sealed

* Refer to glossary.

Generated on 9 Sep 2022 using FirstRate5: 5.3.2b (3.21) for 3.03, 675 Victoria Street, Abbotsford,

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

PREVIEW PREVIEW PREVIEW

Explanatory Notes

About this report

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Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

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The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

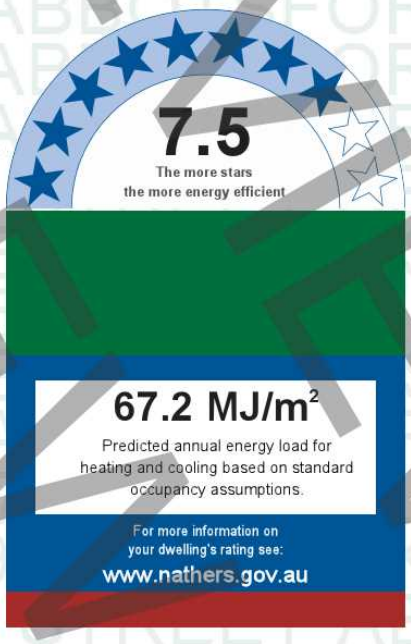
Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

PREVIEW PREVIEW PREVIEW

Nationwide House Energy Rating Scheme
NatHERS Certificate No. PLIYKV17W4

Generated on 9 Sep 2022 using FirstRate5: 5.3.2b (3.21)



Property

Address	4.09, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*	
Conditioned*	142.6
Unconditioned*	0
Total	142.6
Garage	-

Exposure type
open

NatHERS climate zone
21 Melbourne RO

Thermal performance

Heating	Cooling
54.2 MJ/m²	13 MJ/m²

About the rating
NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary.

PREVIEW

PLIYKV17W4 NatHERS Certificate 7.5 **Star Rating** as of 9 Sep 2022

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-051-06 A	Capral 35 Awning in 400 Frame DG 6EA/12Ar/6	4.42	0.41	0.39	0.43
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	CAP-051-06 A	Opening 15	3000	1225	awning	60.0	E	No
Kitchen/Living	CAP-055-52 A	Opening 13	3000	660	fixed	0.0	N	No

* Refer to glossary.

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Kitchen/Living	CAP-057-13 A	Opening 14	3000	1961	sliding	45.0	N	No
Kitchen/Living	CAP-055-52 A	Opening 10	3000	914	fixed	0.0	N	No
Kitchen/Living	CAP-057-13 A	Opening 11	3000	3103	sliding	45.0	N	No
Kitchen/Living	CAP-055-52 A	Opening 12	3000	901	fixed	0.0	N	No
Study	CAP-055-52 A	Opening 29	3000	1129	fixed	0.0	E	No
Study	CAP-051-06 A	Opening 30	3000	1260	awning	60.0	E	No
Bedroom 1	CAP-051-06 A	Opening 17	3000	1218	awning	60.0	E	No
Bedroom 2	CAP-051-06 A	Opening 19	3000	1218	awning	60.0	E	No
Bedroom 3	CAP-051-06 A	Opening 18	3000	1218	awning	60.0	E	No

Roof window *type and performance value*

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria Street - Ext. Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No

* Refer to glossary.

2	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No
3	FR5 - Brick Veneer	0.5	Medium		No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen/Living	1	3000	2788	E	0	Yes
Kitchen/Living	1	3000	2839	N	3930	Yes
Kitchen/Living	1	3000	5101	N	3930	Yes
Kitchen/Living	2	3000	8858	W	0	No
Study	1	3000	2935	E	0	Yes
Bedroom 1	1	3000	3627	E	0	Yes
Bedroom 2	1	3000	3581	E	0	Yes
Bedroom 3	2	3000	2213	S	0	No
Bedroom 3	1	3000	2253	S	0	No
Bedroom 3	1	3000	2916	E	0	Yes
WIR	2	3000	2442	S	0	No
Ensuite	2	3000	3590	S	0	No
Ensuite	2	3000	2408	W	0	No
Powder	2	3000	877	W	0	No
Powder	3	3000	591	N	0	Yes
Laundry	2	3000	2722	N	0	No
Laundry	2	3000	2399	W	0	No
Hall	2	3000	673	S	0	No
Hall	2	3000	1403	W	0	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	158.8	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living	FR5 - 250mm concrete slab	51.7	Enclosed	R0.0	Timber
Study	FR5 - 250mm concrete slab	8.3	Enclosed	R0.0	Timber
Bedroom 1	FR5 - 250mm concrete slab	10.7	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 250mm concrete slab	10.7	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 250mm concrete slab	13	Enclosed	R0.0	Carpet
WIR	FR5 - 250mm concrete slab	5.9	Enclosed	R0.0	Carpet
Ensuite	FR5 - 250mm concrete slab	8.7	Enclosed	R0.0	Tiles
Powder	FR5 - 250mm concrete slab	5.2	Enclosed	R0.0	Tiles

* Refer to glossary.

Laundry	FR5 - 250mm concrete slab	6.5	Enclosed	R0.0	Tiles
Pantry	FR5 - 250mm concrete slab	6.4	Enclosed	R0.0	Timber
Hall	FR5 - 250mm concrete slab	15.5	Enclosed	R0.0	Timber

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
No Data Available			

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	16	Downlights	80	Sealed
Kitchen/Living	1	Exhaust Fans	200	Sealed
Study	3	Downlights	80	Sealed
Bedroom 1	4	Downlights	80	Sealed
Bedroom 2	4	Downlights	80	Sealed
Bedroom 3	5	Downlights	80	Sealed
WIR	2	Downlights	80	Sealed
Ensuite	3	Downlights	80	Sealed
Ensuite	1	Exhaust Fans	200	Sealed
Powder	2	Downlights	80	Sealed
Powder	1	Exhaust Fans	200	Sealed
Laundry	3	Downlights	80	Sealed
Laundry	1	Exhaust Fans	200	Sealed
Pantry	2	Downlights	80	Sealed
Hall	6	Downlights	80	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

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* Refer to glossary.

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Explanatory Notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

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The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

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Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
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Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
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Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
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Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

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Nationwide House Energy Rating Scheme
NatHERS Certificate No. FDTMEJJJTI

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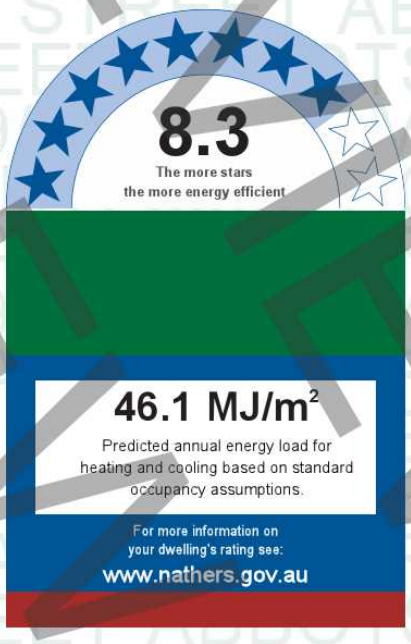

Property

Address	7.03, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*		**Exposure type**
Conditioned*	86.2	open
Unconditioned*	4.1	**NatHERS climate zone**
Total	90.3	21 Melbourne RO
Garage	-	

Thermal performance

Heating	Cooling
34.1 MJ/m²	12 MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

PREVIEW

* Refer to glossary.

PREVIEW

FDTMEJJJTI NatHERS Certificate **8.3 Star Rating** as of 9 Sep 2022

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-055-52 A	Capral 419 Flushline Fixed Window DG 6/12Ar/6EA	2.71	0.58	0.55	0.61
CAP-057-13 A	Capral 900 Sliding Door DG 6EA/12Ar/6	3.19	0.48	0.46	0.5
CAP-051-06 A	Capral 35 Awning in 400 Frame DG 6EA/12Ar/6	4.42	0.41	0.39	0.43

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	CAP-055-52 A	Opening 5	3000	1061	fixed	0.0	W	No
Kitchen/Living	CAP-057-13 A	Opening 6	3000	2663	sliding	45.0	W	No

* Refer to glossary.

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Bedroom 2	CAP-051-06 A	Opening 7	1900	1570	awning	30.0	W	No
Bedroom 1	CAP-051-06 A	Opening 8	3000	1424	awning	30.0	W	No

Roof window *type and performance value*

Default* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No
2	FR5 - Internal Plasterboard Stud Wall	0.5	Medium		No
3	675 Victoria Street - Ext. Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)

Kitchen/Living	1	3000	11060	S	0	No
Kitchen/Living	1	2400	1146	E	0	No
Kitchen/Living	1	2400	697	E	0	No
Kitchen/Living	2	2400	131	N	0	Yes
Kitchen/Living	3	3000	3925	W	2700	Yes
Bedroom 2	3	3000	936	S	3952	Yes
Bedroom 2	3	3000	1853	W	0	Yes
Bedroom 1	3	3000	1661	S	0	Yes
Bedroom 1	1	3000	7998	N	0	No
Bedroom 1	3	3000	2978	W	0	No
Ensuite	1	3000	2690	E	0	No
Bathroom	1	3000	2492	E	0	No
Bathroom	1	3000	2517	N	0	No
Ensuite	1	2400	1559	E	0	No
Ensuite	1	2400	2616	N	0	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	82	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Kitchen/Living	FR5 - 200mm concrete slab	44.1	Enclosed	R0.0	Timber
Bedroom 2	FR5 - 200mm concrete slab	14.3	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 200mm concrete slab	17.1	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab	4.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 200mm concrete slab	6.3	Enclosed	R0.0	Tiles
Ensuite	FR5 - 200mm concrete slab	4.1	Enclosed	R0.0	Tiles

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
No Data Available			

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	17	Downlights	80	Sealed
Kitchen/Living	1	Exhaust Fans	200	Sealed
Bedroom 2	6	Downlights	80	Sealed
Bedroom 1	9	Downlights	80	Sealed
Ensuite	2	Downlights	80	Sealed
Ensuite	1	Exhaust Fans	200	Sealed

* Refer to glossary.

Bathroom	3	Downlights	80	Sealed
Bathroom	1	Exhaust Fans	200	Sealed
Ensuite	1	Downlights	80	Sealed
Ensuite	1	Exhaust Fans	200	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	0.5	Medium

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Explanatory Notes

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While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

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Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

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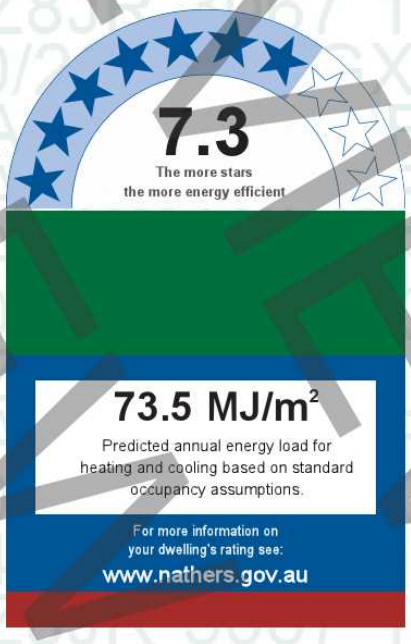
Nationwide House Energy Rating Scheme
NatHERS Certificate

Generated on 7 Oct 2024 using FirstRate5: 5.3.2b (3.21)



Property

Address	10.04, 675 Victoria Street, Abbotsford, VIC, 3067
Lot/DP	-
NCC Class*	Class 2
Type	New Home

Plans

Main plan	-
Prepared by	-

Construction and environment

Assessed floor area (m²)*		**Exposure type**
Conditioned*	212.4	exposed
Unconditioned*	3.6	**NatHERS climate zone**
Total	216	21 Melbourne RO
Garage	-	

Thermal performance

Heating	Cooling
56.8 MJ/m²	16.7 MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Accredited assessor

Name	Gary Wertheimer
Business name	GIW Environmental Solutions
Email	gary@giw.com.au
Phone	0390445111
Accreditation No.	DMN/10/2024
Assessor Accrediting Organisation	Design Matters National
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit When using either link, ensure you are visiting www.FR5.com.au.

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

* Refer to glossary.

Certificate Check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional Notes

Window and glazed door *type and performance*

Default* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
CAP-055-109 A	Capral 419 Flushline Fixed Window DG 021_AGG MAX Clr 6_12_6	2.65	0.25	0.24	0.26
CAP-034-34 A	Urban 582 Awning Window DG 015_AGG MAX Clr 6_8_4	3.32	0.23	0.22	0.24
CAP-127-32 A	Capral : Urban 584 Sliding Door DG 015_AGG MAX Clr 6_8_4	2.79	0.24	0.23	0.25

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Study	CAP-055-109 A	Opening 32	2550	1000	fixed	0.0	W	No

* Refer to glossary.

Study	CAP-034-34 A	Opening 34	2550	990	awning	60.0	W	No
Kitchen/Living 2	CAP-127-32 A	Opening 45	2850	3000	sliding	45.0	N	No
Kitchen/Living 2	CAP-034-34 A	Opening 46	2850	990	awning	60.0	N	No
Kitchen/Living 2	CAP-055-109 A	Opening 43	2850	1031	fixed	0.0	N	No
Kitchen/Living 2	CAP-034-34 A	Opening 42	2850	727	awning	60.0	N	No
Kitchen/Living 2	CAP-055-109 A	Opening 41	2850	3852	fixed	0.0	N	No
Kitchen/Living 2	CAP-055-109 A	Opening 36	2850	1000	fixed	0.0	W	No
Kitchen/Living 2	CAP-034-34 A	Opening 37	2850	990	awning	60.0	W	No
Kitchen/Living 2	CAP-127-32 A	Opening 38	2850	3000	sliding	45.0	W	No
Kitchen/Living 2	CAP-034-34 A	Opening 39	2850	990	awning	60.0	W	No
Kitchen/Living 2	CAP-055-109 A	Opening 40	2850	726	fixed	0.0	W	No
Bedroom 1	CAP-055-109 A	Opening 48	2550	1000	fixed	0.0	W	No
Bedroom 1	CAP-034-34 A	Opening 49	2550	990	awning	60.0	W	No
Bedroom 2	CAP-055-109 A	Opening 50	2550	1000	fixed	0.0	W	No
Bedroom 2	CAP-034-34 A	Opening 51	2550	990	awning	60.0	W	No
Bedroom 3	CAP-034-34 A	Opening 54	2550	990	awning	60.0	W	No
Bedroom 3	CAP-055-109 A	Opening 55	2550	1000	fixed	0.0	W	No
Living	CAP-055-109 A	Opening 56	2850	1000	fixed	0.0	W	No
Living	CAP-034-34 A	Opening 57	2850	990	awning	60.0	W	No
Living	CAP-055-109 A	Opening 58	2850	1000	fixed	0.0	W	No

Roof window *type and performance value*

Default* roof windows

				Substitution tolerance ranges	
Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

				Substitution tolerance ranges	
Window ID	Window description	Maximum U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

Skylight *type and performance*

Skylight ID	Skylight description
No Data Available	

Skylight *schedule*

* Refer to glossary.

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²)	Orient-ation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
No Data Available				

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	675 Victoria Street - Int. Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R1.8)	No
2	675 Victoria Street - Ext. Concrete Wall	0.5	Medium	Glass fibre batt (k = 0.044 density = 12 kg/m3) (R2.5)	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Study	1	2550	2945	S	0	No
Study	2	2550	2923	W	0	Yes
Kitchen/Living 2	1	2850	5857	E	0	No
Kitchen/Living 2	2	2850	5211	N	0	Yes
Kitchen/Living 2	2	2850	944	NNW	0	Yes
Kitchen/Living 2	2	2850	1055	N	0	Yes
Kitchen/Living 2	2	2850	749	N	0	Yes
Kitchen/Living 2	2	2850	3912	N	0	Yes
Kitchen/Living 2	2	2850	7326	W	0	Yes
Cellar	1	2550	1661	S	0	No
Pantry	1	2550	1854	S	0	No
Pantry	1	2550	2964	E	0	No
Entrance hall	1	2550	4660	S	0	No
Entrance hall	1	2550	2416	E	0	No
Bedroom 1	1	2550	4918	S	0	No
Bedroom 1	2	2550	2901	W	0	No
Bedroom 2	2	2550	3014	W	0	No
WIR 1	1	2550	2727	E	0	No
WIR 1	1	2550	2298	S	0	No
Bedroom 3	2	2550	3028	W	0	No
Ensuite 1	1	2550	2321	S	0	No
Ensuite 1	1	2550	4679	E	0	No
Hall	1	2550	3767	N	0	No
Laundry	1	2550	2753	E	0	No

* Refer to glossary.

Laundry	1	2550	2346	N	0	No
Living	1	2850	1543	E	0	No
Living	1	2850	3358	N	0	No
Living	2	2850	3652	W	0	No
Stairs	1	2550	3869	S	0	No
Stairs	1	2550	1043	E	0	No
Stairs	1	2550	3869	N	0	No

Internal wall *type*

Wall ID	Wall type	Area (m²)	Bulk insulation
1	FR5 - Internal Plasterboard Stud Wall	186	

Floor *type*

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Study	FR5 - 250mm concrete slab	5.3	Enclosed	R0.0	Timber
Study	FR5 - 250mm concrete slab	3.3	Enclosed	R0.0	Timber
Kitchen/Living 2	FR5 - 250mm concrete slab	85	Enclosed	R0.0	Timber
Cellar	FR5 - 250mm concrete slab	3	Enclosed	R0.0	Timber
Cellar	FR5 - 250mm concrete slab	1.8	Enclosed	R0.0	Timber
Powder	FR5 - 250mm concrete slab	3.6	Enclosed	R0.0	Tiles
Pantry	FR5 - 250mm concrete slab	7	Enclosed	R0.0	Timber
Entrance hall	FR5 - 250mm concrete slab	6.9	Enclosed	R0.0	Timber
Entrance hall	FR5 - 250mm concrete slab	2.5	Enclosed	R0.0	Timber
Bedroom 1	FR5 - 250mm concrete slab	14.3	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 250mm concrete slab	12.9	Enclosed	R0.0	Carpet
Ensuite 2	FR5 - 250mm concrete slab	3.7	Enclosed	R0.0	Tiles
WIR 1	FR5 - 250mm concrete slab	8.5	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - 250mm concrete slab	13	Enclosed	R0.0	Carpet
Ensuite 2	FR5 - 250mm concrete slab	3.6	Enclosed	R0.0	Tiles
Ensuite 1	FR5 - 250mm concrete slab	10.3	Enclosed	R0.0	Tiles
Hall	FR5 - 250mm concrete slab	11.8	Enclosed	R0.0	Timber
Laundry	FR5 - 250mm concrete slab	6.5	Enclosed	R0.0	Tiles
Living	FR5 - 250mm concrete slab	3.8	Enclosed	R0.0	Timber
Living	FR5 - 250mm concrete slab	8.5	Enclosed	R0.0	Timber
Stairs	FR5 - 250mm concrete slab	4.1	Enclosed	R0.0	Timber

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Study	FR5 - 250mm concrete slab	R0.0	No
Cellar	FR5 - 250mm concrete slab	R0.0	No
Entrance hall	FR5 - 250mm concrete slab	R0.0	No

* Refer to glossary.

Bedroom 1	Plasterboard		R4.6	No
Bedroom 2	Plasterboard		R4.6	No
Ensuite 2	Plasterboard		R4.6	No
WIR 1	Plasterboard		R4.6	No
Bedroom 3	Plasterboard		R4.6	No
Ensuite 2	Plasterboard		R4.6	No
Ensuite 1	Plasterboard		R4.6	No
Hall	Plasterboard		R4.6	No
Laundry	Plasterboard		R4.6	No
Living	Plasterboard		R4.6	No
Living	Plasterboard		R4.6	No
Stairs	Plasterboard		R4.6	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Study	3	Downlights	80	Sealed
Kitchen/Living 2	1	Exhaust Fans	200	Sealed
Kitchen/Living 2	32	Downlights	80	Sealed
Cellar	2	Downlights	80	Sealed
Powder	1	Exhaust Fans	200	Sealed
Powder	1	Downlights	80	Sealed
Pantry	2	Downlights	80	Sealed
Entrance hall	4	Downlights	80	Sealed
Bedroom 1	6	Downlights	80	Sealed
Bedroom 2	5	Downlights	80	Sealed
Ensuite 2	1	Exhaust Fans	200	Sealed
Ensuite 2	2	Downlights	80	Sealed
WIR 1	3	Downlights	80	Sealed
Bedroom 3	5	Downlights	80	Sealed
Ensuite 2	1	Exhaust Fans	200	Sealed
Ensuite 2	2	Downlights	80	Sealed
Ensuite 1	1	Exhaust Fans	200	Sealed
Ensuite 1	4	Downlights	80	Sealed
Hall	5	Downlights	80	Sealed
Laundry	1	Exhaust Fans	200	Sealed
Laundry	2	Downlights	80	Sealed
Living	5	Downlights	80	Sealed
Stairs	2	Downlights	80	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

* Refer to glossary.

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Slab:Slab - Suspended Slab : 250mm: 250mm Suspended Slab	0.0	0.5	Medium

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Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category - exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category - open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.

National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening Percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).

PREVIEW PREVIEW PREVIEW

Appendix C: Renewable Energy

Inputs Solar PV

Peak Wattage of System	30.0 kWp
Azimuth	0 degrees
Inclination	10 degrees

Outputs Solar PV

Electricity Produced per Year	40,204 kWh
No. Panels Required	75
Total Roof Area Required	179 sqm
Annual Carbon Savings	45,029 kg CO2

Economic Output

Cost of System	45,000 $
Annual Savings	8,041 $
Simple Payback	6 Years

Annual Common Area Demand

Annual Demand Class 2 Non-Residential Are	85,821	kWh/year
Annual Demand Carpark / Services	151,972	kWh/year
Total Annual Demand	237,793	kWh/year

Demand / Supply

Contribution Solar PV to Communal Area Power	17%

Appendix D: Daylight Modelling

Scope of Modelling

We have undertaken daylight modelling for 675 Victoria Street, Abbotsford assessing both living and bedroom areas for a sample of apartments. 15 apartments have been selected with consideration of internal layout, inherent and adjacent building shading features and in response to the Council RFI dated: 17/07/2023. These apartments reflect a worst-case scenario with all other units anticipated to achieve the BESS performance requirements.

The development has been modelled with the adjacent existing developments in place:

- 661 Victoria Street South: existing building (due to restricted development potential adjacent to heritage building)
- 661 Victoria Street North: existing heritage building
- 677 Victoria Street: existing Acacia Place apartment building

Methodology

The daylight levels in apartments are benchmarked against the best practice requirements as set out under the Built Environment Sustainability Scorecard (BESS) tool: Indoor Environment Quality (IEQ) – Daylight Access Living Areas and Bedrooms. These levels are as follows:

> *"Dwellings should achieve the following daylight factors (DF)*
> - *80% of the total number of living rooms achieve a daylight factor greater than 1% to 90% of the floor area of each living area, including kitchens.*
> - *80% of the total number of bedrooms achieve a daylight factor greater than 0.5% to 90% of the floor area in each room."*

The daylight modelling has been completed using the Radiance software suite, an accurate computing program used to predict light levels in a space prior to construction. Scene geometric data and material properties are interfaced into the Radiance software using DesignBuilder.

Daylight Factor has been calculated using a CIE uniform cloudy sky.

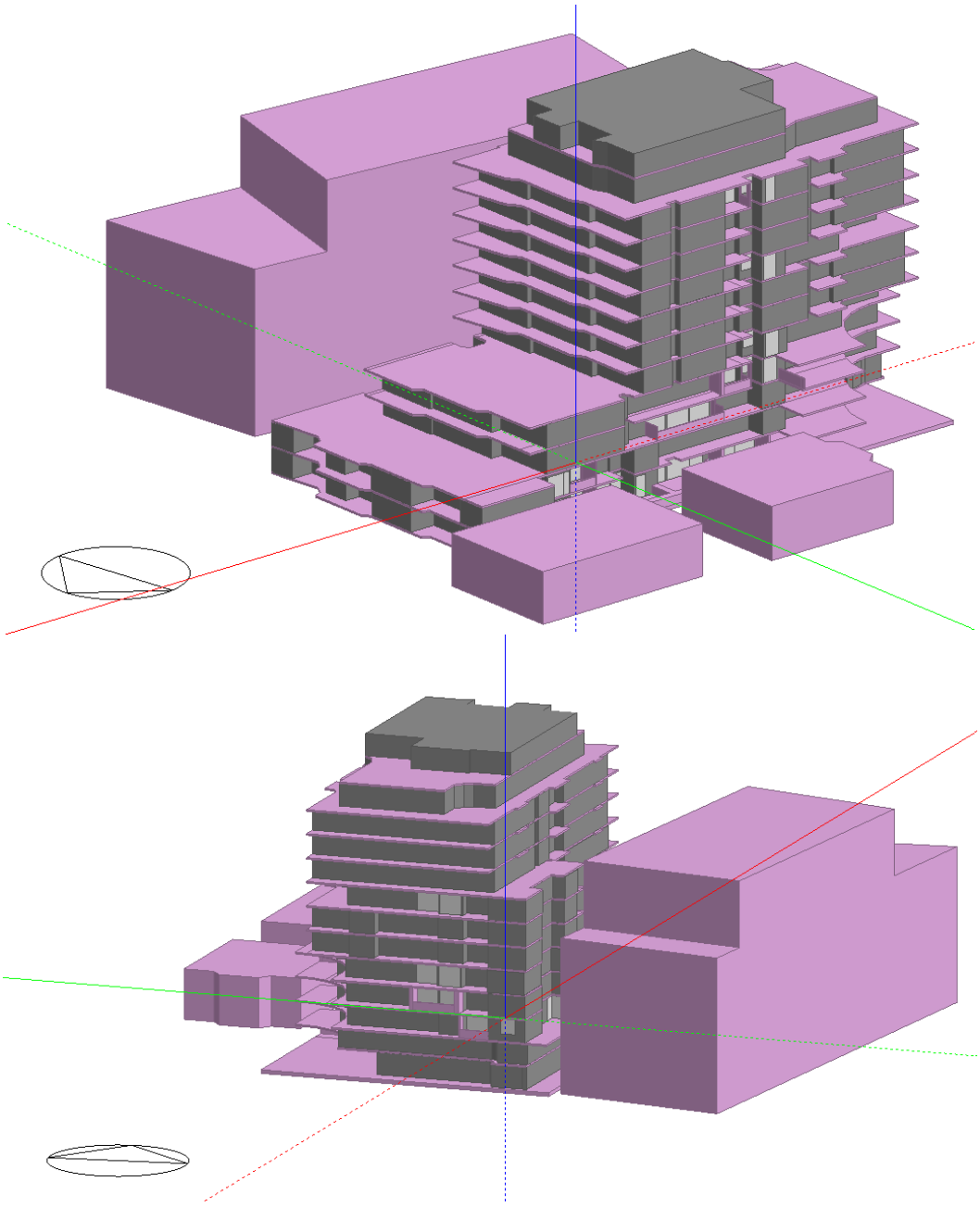


Figure 8 – DesignBuilder model of the proposed development and adjacent existing buildings.

Modelling Assumptions

The following assumptions have been made with respect to the modelling:

- Modelled window dimensions and shading structures are as depicted on the Architectural drawings.
- The glazing performance used for external windows is as follows:
  - Windows: double glazed, low-e, clear window with a total system VLT of 0.61.
- The reflectance of all materials is in accordance with the below:
  - Floors: 0.5
  - Internal Walls: 0.8
  - Ceilings: 0.8
- Transient and unoccupied spaces such as corridors and wardrobes have been excluded from the modelled area.
- The reflectance of external buildings is assumed to be 0.4 and external structures are assumed to be 0.6.

Daylight Results – Numerical

The daylight results for living areas of 675 Victoria Street, Abbotsford can be summarised as follows:

Area	Floor Area (m2)	Floor Area above DF1 (m2)	% of floor area above DF1	Status
G.01 Living	28.9	20.5	70.9	Non-compliant
G.02 Living	30.7	16.1	52.4	Non-compliant
G.03 Living	30.9	30.4	98.5	Compliant
G.04 Living	29.5	27.8	94.4	Compliant
G.09 Living	27.7	13.0	46.9	Non-compliant
UG06 Living	30.7	29.3	95.3	Compliant
UG10 Living	29.0	7.3	25.0	Non-compliant
1.01 Living	32.4	29.9	92.2	Compliant
1.06 Living	27.6	25.7	93.0	Compliant
1.11 Living	28.2	7.7	27.2	Non-compliant
1.12 Living	30.1	18.9	63.0	Non-compliant
2.02 Living	24.3	24.2	99.4	Compliant
2.05 Living	30.2	29.6	97.9	Compliant
2.11 Living	28.0	11.6	41.5	Non-compliant
3.09 Living	28.5	9.4	32.9	Non-compliant
9.04 Living	28.46	28.27	99.33	Compliant

The daylight results for bedrooms of 675 Victoria Street, Abbotsford can be summarised as follows:

Area	Floor Area (m2)	Floor Area above DF0.5 (m2)	% of floor area above DF0.5	Status
G.01 Bedroom 1	11.2	11.2	100.0	Compliant
G.02 Bedroom 1	13.5	13.3	98.4	Compliant
G.02 Bedroom 2	8.7	8.7	100.0	Compliant
G.03 Bedroom 1	10.5	10.5	100.0	Compliant
G.03 Bedroom 2	13.2	13.2	100.0	Compliant
G.04 Bedroom 1	14.6	7.9	54.2	Non-compliant
G.04 Bedroom 2	9.7	9.7	100.0	Compliant
G.09 Bedroom 1	13.3	8.8	66.0	Non-compliant

Area	Floor Area (m2)	Floor Area above DF0.5 (m2)	% of floor area above DF0.5	Status
G.09 Bedroom 2	10.5	10.5	100.0	Compliant
UG.06 Bedroom 1	9.9	9.9	100.0	Compliant
UG.06 Bedroom 2	14.7	10.6	72.4	Non-compliant
UG.10 Bedroom 1	9.0	9.0	100.0	Compliant
UG.10 Bedroom 2	14.6	14.1	96.2	Compliant
1.01 Bedroom 1	13.4	13.4	100.0	Compliant
1.01 Bedroom 2	8.9	1.7	19.6	Non-compliant
1.01 Bedroom 3	8.4	8.4	100.0	Compliant
1.06 Bedroom 1	14.5	14.5	100.0	Compliant
1.06 Bedroom 2	9.3	9.3	100.0	Compliant
1.11 Bedroom 1	12.6	1.1	8.8	Non-compliant
1.12 Bedroom 1	9.9	9.7	97.8	Compliant
1.12 Bedroom 2	8.7	8.7	100.0	Compliant
2.02 Bedroom 1	9.3	9.3	100.0	Compliant
2.05 Bedroom 1	10.5	10.5	100.0	Compliant
2.05 Bedroom 2	11.1	11.1	99.9	Compliant
2.11 Bedroom 1	10.5	10.5	100.0	Compliant
3.09 Bedroom 1	13.6	1.7	12.8	Non-compliant
9.04 Bedroom 1	12.36	12.34	99.84	Compliant
9.04 Bedroom 2	10.88	10.84	99.63	Compliant

Daylight Results – Visual

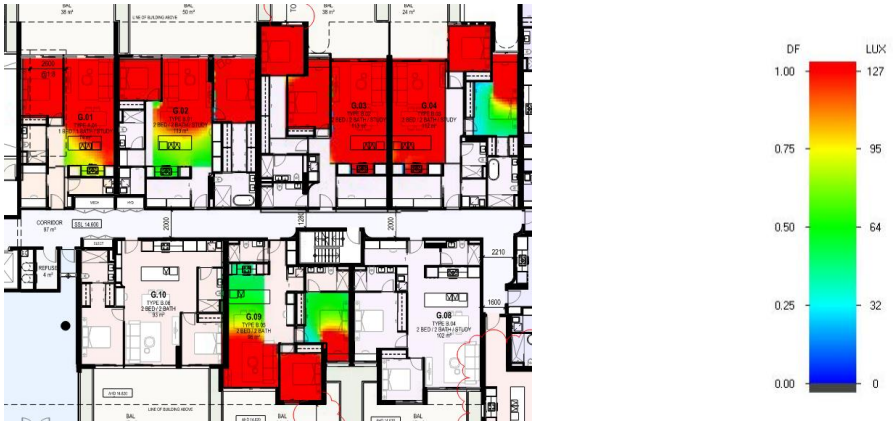


Figure 9 - Daylight Map – Ground Floor

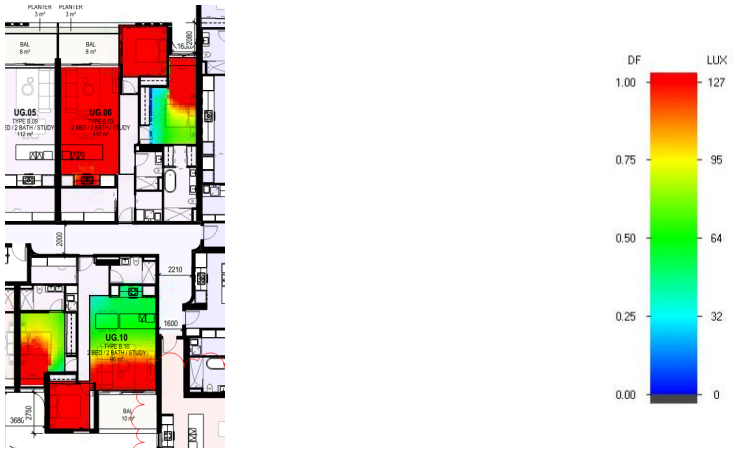


Figure 10 - Daylight Map – Upper Ground Floor



Figure 11 - Daylight Map – Level 1

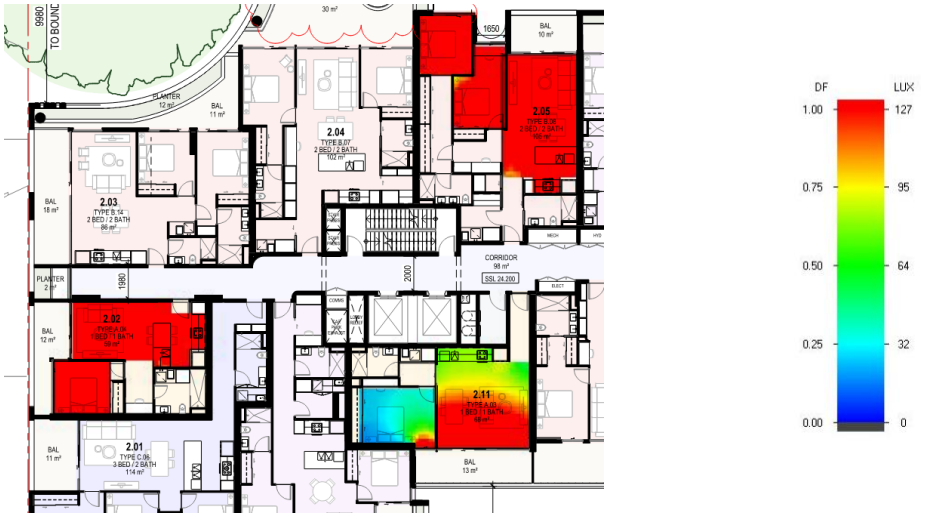


Figure 12 - Daylight Map – Level 2



Figure 13 - Daylight Map – Level 3



Figure 14 - Daylight Map – Level 9

Overall Building Results

Apartment No.	Total Living Areas	Living Areas Compliant	Total Bedrooms	Bedrooms Compliant
G.01	1	0	1	1
G.02	1	0	2	2
G.03	1	1	2	2
G.04	1	1	2	1
G.05	1	1	3	2
G.06	1	1	3	2
G.07	1	1	2	1
G.08	1	0	2	1
G.09	1	0	2	1
G.10	1	0	2	2
UG.01	1	1	1	1
UG.02	1	0	2	2
UG.03	1	1	2	0
UG.04	1	0	2	2
UG.05	1	0	2	1
UG.06	1	1	2	1
UG.07	1	1	3	2
UG.08	1	1	3	2
UG.09	1	1	2	1
UG.10	1	0	2	1
UG.11	1	0	2	1
UG.12	1	0	2	2
UG.13	1	0	1	0
1.01	1	1	3	2
1.02	1	1	1	1
1.03	1	1	2	0
1.04	1	0	2	2
1.05	1	1	2	0
1.06	1	1	2	2
1.07	1	1	3	1

Apartment No.	Total Living Areas	Living Areas Compliant	Total Bedrooms	Bedrooms Compliant
1.08	1	1	2	2
1.09	1	1	3	2
1.10	1	0	2	1
1.11	1	0	1	0
1.12	1	0	2	2
2.01	1	1	3	2
2.02	1	1	1	1
2.03	1	1	2	2
2.04	1	0	2	2
2.05	1	1	2	2
2.06	1	1	2	2
2.07	1	1	3	1
2.08	1	1	2	2
2.09	1	1	3	2
2.10	1	0	2	1
2.11	1	0	1	0
2.12	1	0	2	2
3.01	1	1	3	2
3.02	1	1	1	1
3.03	1	1	2	2
3.04	1	1	2	2
3.05	1	1	2	2
3.06	1	1	3	3
3.07	1	1	2	2
3.08	1	1	3	2
3.09	1	0	1	0
3.10	1	1	2	2
4.01	1	1	3	2
4.02	1	1	1	1
4.03	1	1	1	1
4.04	1	1	2	2

Apartment No.	Total Living Areas	Living Areas Compliant	Total Bedrooms	Bedrooms Compliant
4.05	1	1	2	2
4.06	1	1	2	2
4.07	1	1	3	3
4.08	1	1	2	2
4.09	1	1	3	3
4.10	1	0	1	0
4.11	1	1	2	2
5.01	1	1	3	2
5.02	1	1	1	1
5.03	1	1	1	1
5.04	1	1	2	2
5.05	1	1	2	2
5.06	1	1	2	2
5.07	1	1	3	3
5.08	1	1	2	2
5.09	1	1	3	3
5.10	1	0	1	0
5.11	1	1	2	2
6.01	1	1	3	2
6.02	1	1	1	1
6.03	1	1	1	1
6.04	1	1	2	2
6.05	1	1	2	2
6.06	1	1	2	2
6.07	1	1	3	3
6.08	1	1	2	2
6.09	1	1	3	3
6.10	1	1	1	0
6.11	1	1	2	2
7.01	1	1	2	2
7.02	1	1	3	3

Apartment No.	Total Living Areas	Living Areas Compliant	Total Bedrooms	Bedrooms Compliant
7.03	1	1	2	2
7.04	1	1	2	2
7.05	1	1	3	3
7.06	1	1	2	2
7.07	1	1	3	3
7.08	1	1	2	1
7.09	1	0	1	1
8.01	1	1	2	2
8.02	1	1	3	3
8.03	1	1	2	2
8.04	1	1	2	2
8.05	1	1	3	3
8.06	1	1	2	2
8.07	1	1	3	3
8.08	1	1	2	2
8.09	1	1	1	1
9.01	1	1	2	2
9.02	1	1	3	3
9.03	1	1	2	2
9.04	1	1	2	2
9.05	1	1	3	3
9.06	1	1	2	2
9.07	1	1	3	3
9.08	1	1	2	2
9.09	1	1	1	1
10.01	1	1	2	2
10.02	1	1	2	2
10.03	2	2	3	3
10.04	2	2	3	3
10.05	2	2	3	3
10.06	2	2	3	3

Apartment No.	Total Living Areas	Living Areas Compliant	Total Bedrooms	Bedrooms Compliant
TOTAL	127	103	260	218
Percentage	81%		84%	

Conclusion

The development has been assessed and it has been determined that 81% of living areas and 84% of bedrooms will achieve the daylight factors as prescribed under BESS and therefore the development will meet the BESS IEQ guidelines for daylight.

Appendix E: Preliminary Façade Calculation

J1.5 Façade Calculator

Address	675 Victoria St
Climate Zone	6
Building Classification	Class 6
Level	Ground

	North	East	South	West	Internal
Façade area (m2)	46.1	155.7	123.4	37.1	226.5

Number of Rows 6

		Dimensions			Shading (m)	
Window No.	Orientation	Height (m)	Width (m)	Area (m2)	P	H
Courtyard Window	North	3.2	10.2	32.64	0	3.2
Courtyard Window Sha	North	3.2	4.2	13.44	2.1	3.2
W01	South	6.1	3.6	21.96	1	6.6
W02	West	6.1	0.5	3.05	18	6.6
W03	West	6.1	2	12.2	2.8	6.6
W04	South	6.1	1.5	9.15	2.8	6.6
W05	South	6.1	2.1	12.81	2.8	6.6
W06	South	6.1	2.1	12.81	2.8	6.6
W07	South	6.6	2.1	13.86	2.9	6.6
W08	South	6.1	1	6.1	2.8	6.6

RESULTS

Method 1	U-Value	SHGC	Min. Wall R-values
North	2.00	0.15	1
East	7.50	0.87	1.4
South	2.61	0.25	1
West	3.43	0.47	1
Internal	7.50		1.4

	U-Value	SHGC
Method 2	6.06	0.23

Appendix F: BESS Assessment

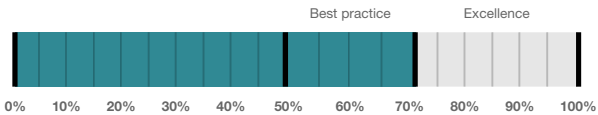
BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 675 Victoria St Abbotsford Victoria 3067. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Yarra City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score

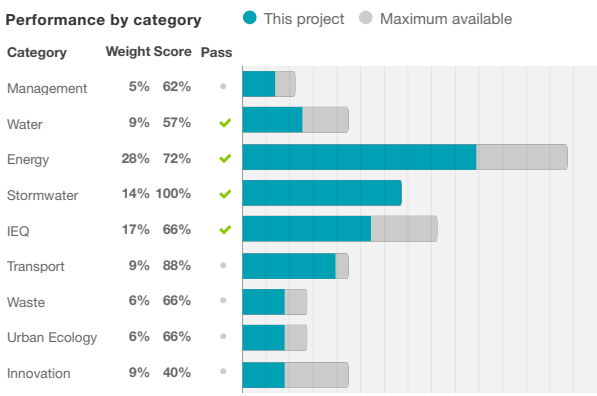


71%

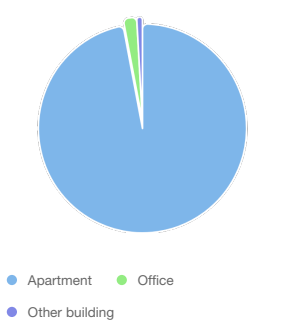
Project details

Name	675 Victoria St, Abbotsford VIC 3067, Australia
Address	675 Victoria St Abbotsford Victoria 3067
Project ID	BE40F95D-R5
BESS Version	BESS-6
Site type	Mixed use development
Account	info@giw.com.au
Application no.	
Site area	3,459 m²
Building floor area	13,806 m²
Date	07 April 2025
Software version	2.1.0-B.596

Performance by category



Project composition



The Built Environment Sustainability Scorecard is an initiative of the Council Alliance for a Sustainable Built Environment (CASBE).
For more details see **www.bess.net.au**

Buildings

Name	Height	Footprint	% of total footprint
675 Victoria St	14	21,031 m²	100%

Dwellings & Non Res Spaces

Dwellings

Name	Quantity	Area	Building	% of total area
Apartment				
3.05, 4.05-4.06, 5.05-5.06, 6.05-6.06, 7.03-7.04, 8.03-8.04, 9.03-9.04	13	104 m²	675 Victoria St	9%
3.08, 4.09, 5.09, 6.09, 7.07, 8.07, 9.07	7	167 m²	675 Victoria St	8%
3.06, 4.07, 5.07, 6.07, 7.05, 8.05, 9.05	7	124 m²	675 Victoria St	6%
3.07, 4.08, 5.08, 6.08, 7.06, 8.06, 9.06	7	98.0 m²	675 Victoria St	4%
3.01, 4.01, 5.01, 6.01	4	114 m²	675 Victoria St	3%
G.03-G.04, UG.05-UG.06	4	112 m²	675 Victoria St	3%
G.02, UG.04, 1.06, 2.06	4	111 m²	675 Victoria St	3%
1.09, 2.09	2	197 m²	675 Victoria St	2%
1.07, 2.07	2	177 m²	675 Victoria St	2%
3.10, 4.11, 5.11, 6.11	4	103 m²	675 Victoria St	2%
3.02, 4.02, 4.03, 5.02, 5.03, 6.02, 6.03	7	58.0 m²	675 Victoria St	2%
UG.03, 1.05, 2.05	3	102 m²	675 Victoria St	2%
UG.02, 1.04, 2.04	3	102 m²	675 Victoria St	2%
G.10, UG.12, 1.10, 2.10	4	93.0 m²	675 Victoria St	2%
G.08-G.09, UG.10-UG.11	4	96.0 m²	675 Victoria St	2%
G.05, UG.07	2	168 m²	675 Victoria St	2%
1.08, 2.08	2	99.0 m²	675 Victoria St	1%
10.05	1	213 m²	675 Victoria St	1%
10.04	1	255 m²	675 Victoria St	1%
10.03	1	246 m²	675 Victoria St	1%
8.08, 9.08	2	89.0 m²	675 Victoria St	1%
8.02, 9.02	2	112 m²	675 Victoria St	1%
8.01, 9.01	2	76.0 m²	675 Victoria St	1%
4.04, 5.04, 6.04	3	87.0 m²	675 Victoria St	1%
3.09, 4.10, 5.10, 6.10	4	67.0 m²	675 Victoria St	1%
1.12, 2.12	2	103 m²	675 Victoria St	1%
10.06	1	243 m²	675 Victoria St	1%
1.03, 2.03	2	86.0 m²	675 Victoria St	1%
1.01, 2.01	2	114 m²	675 Victoria St	1%
UG.13, 1.11, 2.11	3	66.0 m²	675 Victoria St	1%
G.07, UG.09	2	121 m²	675 Victoria St	1%
G.06, UG.08	2	120 m²	675 Victoria St	1%
10.02	1	107 m²	675 Victoria St	< 1%
10.01	1	98.0 m²	675 Victoria St	< 1%
8.09, 9.09	2	69.0 m²	675 Victoria St	< 1%
7.09	1	78.0 m²	675 Victoria St	< 1%
7.08	1	88.0 m²	675 Victoria St	< 1%

7.02	1	133 m²	675 Victoria St	< 1%
7.01	1	87.0 m²	675 Victoria St	< 1%
3.04	1	102 m²	675 Victoria St	< 1%
3.03	1	86.0 m²	675 Victoria St	< 1%
1.02, 2.02	2	58.0 m²	675 Victoria St	< 1%
UG.01	1	70.0 m²	675 Victoria St	< 1%
G.01	1	74.0 m²	675 Victoria St	< 1%
Total	**123**	**13,394 m²**	**97%**	

Non-Res Spaces

Name	Quantity	Area	Building	% of total area
Office				
Commercial	1	287 m²	675 Victoria St	2%
Total	**1**	**287 m²**	**2%**	
Other building				
Community Facility	1	125 m²	675 Victoria St	< 1%
Total	**1**	**125 m²**	**< 1%**	

Supporting Evidence

Shown on Floor Plans

Credit	Requirement	Response	Status
Management 3.1	Individual utility meters annotated		-
Management 3.2	Individual utility meters annotated		-
Management 3.3	Common area submeters annotated		-
Water 3.1	Water efficient garden annotated		-
Energy 3.1	Carpark with natural ventilation or CO monitoring system		-
Energy 4.2	Floor plans showing location of photovoltaic panels as described.		-
Stormwater 1.1	Location of any stormwater management systems used in STORM or MUSIC modelling (e.g. Rainwater tanks, raingarden, buffer strips)		-
IEQ 1.1	If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.		-
IEQ 1.2	If using BESS daylight calculator, references to floorplans and elevations showing window sizes and sky angles.		-
IEQ 1.5	Floor plans with compliant bedrooms marked		-
IEQ 2.1	Dwellings meeting the requirements for being 'naturally ventilated'		-
Transport 1.1	All nominated residential bicycle parking spaces		-
Transport 1.2	All nominated residential visitor bicycle parking spaces		-
Transport 1.3	Residential bicycle parking spaces at ground level		-
Transport 1.4	All nominated non-residential bicycle parking spaces		-
Transport 1.5	All nominated non-residential visitor bicycle parking spaces		-
Transport 2.1	Location of electric vehicle charging infrastructure		-
Transport 2.3	All nominated motorbicycle parking spaces		-
Waste 2.1	Location of food and garden waste facilities		-
Waste 2.2	Location of recycling facilities		-
Urban Ecology 1.1	Size and location of communal spaces		-
Urban Ecology 2.1	Vegetated areas		-
Urban Ecology 2.4	Taps and floor waste on balconies / courtyards		-

Supporting Documentation

Credit	Requirement	Response	Status
Management 2.2	Preliminary NatHERS assessments		-
Management 2.3a	Section J glazing assessment		-
Energy 1.1	Energy Report showing calculations of reference case and proposed buildings		-
Energy 3.1	Provide a written explanation of either the fully natural carpark ventilation or carbon monxide monitoring, describing how these systems will work, what systems are required for them to be fully integrated and who will be responsible for their implementation throughout the design, procurement and operational phases of the building life.		-
Energy 3.6	Provide a written description of the average lighting power density to be installed in the development and specify the lighting type(s) to be used.		-
Energy 3.7	Provide a written description of the average lighting power density to be installed in the development and specify the lighting type(s) to be used.		-
Energy 4.2	Specifications of the solar photovoltaic system(s).		-
Stormwater 1.1	STORM report or MUSIC model		-
IEQ 1.1	If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.		-
IEQ 1.2	If using an alternative daylight modelling program, a short report detailing assumptions used and results achieved.		-
IEQ 1.4	A short report detailing assumptions used and results achieved.		-
IEQ 1.5	A list of compliant bedrooms		-
IEQ 2.1	A list of naturally ventilated dwellings		-

Credit summary

Management Overall contribution 4.5%

62%

1.1 Pre-Application Meeting	0%
2.2 Thermal Performance Modelling - Multi-Dwelling Residential	100%
2.3 Thermal Performance Modelling - Non-Residential	34%
3.1 Metering - Residential	100%
3.2 Metering - Non-Residential	100%
3.3 Metering - Common Areas	100%
4.1 Building Users Guide	100%

Water Overall contribution 9.0%

Minimum required 50% **57%** ✔ **Pass**

1.1 Potable water use reduction	40%
3.1 Water Efficient Landscaping	100%
4.1 Building Systems Water Use Reduction	100%

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Energy Overall contribution 27.5%

	Minimum required 50%	72%	✔ Pass
1.1 Thermal Performance Rating - Non-Residential		12%	
1.2 Thermal Performance Rating - Residential		66%	
2.1 Greenhouse Gas Emissions		100%	
2.2 Peak Demand		0%	
2.3 Electricity Consumption		100%	
2.4 Gas Consumption		N/A	Scoped Out
			No gas connection in use
3.1 Carpark Ventilation		100%	
3.2 Hot Water		100%	
3.4 Clothes Drying		0%	
3.6 Internal Lighting - Residential Multiple Dwellings		100%	
3.7 Internal Lighting - Non-Residential		100%	
4.1 Combined Heat and Power (cogeneration / trigeneration)		N/A	Scoped Out
			No cogeneration or trigeneration system in use.
4.2 Renewable Energy Systems - Solar		97%	
4.4 Renewable Energy Systems - Other		0%	Disabled
			No other (non-solar PV) renewable energy is in use.

Stormwater Overall contribution 13.5%

	Minimum required 100%	100%	✔ Pass
1.1 Stormwater Treatment		100%	

IEQ Overall contribution 16.5%

	Minimum required 50%	66%	✔ Pass
1.1 Daylight Access - Living Areas		66%	
1.2 Daylight Access - Bedrooms		66%	
1.3 Winter Sunlight		0%	
1.4 Daylight Access - Non-Residential		60%	Achieved
1.5 Daylight Access - Minimal Internal Bedrooms		100%	
2.1 Effective Natural Ventilation		66%	
2.3 Ventilation - Non-Residential		34%	Achieved
3.4 Thermal comfort - Shading - Non-residential		86%	
3.5 Thermal Comfort - Ceiling Fans - Non-Residential		0%	
4.1 Air Quality - Non-Residential		100%	

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Transport Overall contribution 9.0%

88%

1.1 Bicycle Parking - Residential	100%
1.2 Bicycle Parking - Residential Visitor	100%
1.3 Bicycle Parking - Convenience Residential	100%
1.4 Bicycle Parking - Non-Residential	100%
1.5 Bicycle Parking - Non-Residential Visitor	100%
1.6 End of Trip Facilities - Non-Residential	0%
2.1 Electric Vehicle Infrastructure	100%
2.2 Car Share Scheme	0%
2.3 Motorbikes / Mopeds	100%

Waste Overall contribution 5.5%

66%

1.1 - Construction Waste - Building Re-Use	0%
2.1 - Operational Waste - Food & Garden Waste	100%
2.2 - Operational Waste - Convenience of Recycling	100%

Urban Ecology Overall contribution 5.5%

66%

1.1 Communal Spaces	97%
2.1 Vegetation	100%
2.2 Green Roofs	0%
2.3 Green Walls and Facades	0%
2.4 Private Open Space - Balcony / Courtyard Ecology	100%
3.1 Food Production - Residential	0%
3.2 Food Production - Non-Residential	0%

Innovation Overall contribution 9.0%

40%

1.1 Innovation	40%

Credit breakdown

Management Overall contribution 4.5%

62%

1.1 Pre-Application Meeting		0%
Score Contribution	This credit contributes 37.5% towards the category score.	
Criteria	Has an ESD professional been engaged to provide sustainability advice from schematic design to construction? AND Has the ESD professional been involved in a pre-application meeting with Council?	
Question	Criteria Achieved ?	
Project	No	
2.2 Thermal Performance Modelling - Multi-Dwelling Residential		100%
Score Contribution	This credit contributes 24.3% towards the category score.	
Criteria	Have preliminary NatHERS ratings been undertaken for all thermally unique dwellings?	
Question	Criteria Achieved ?	
Apartment	Yes	
2.3 Thermal Performance Modelling - Non-Residential		34%
Score Contribution	This credit contributes 0.7% towards the category score.	
Criteria	Has a preliminary facade assessment been undertaken in accordance with NCC2019 Section J1.5?	
Question	Criteria Achieved ?	
Office	Yes	
Other building	No	
Criteria	Has preliminary modelling been undertaken in accordance with either NCC2019 Section J (Energy Efficiency), NABERS or Green Star?	
Question	Criteria Achieved ?	
Office	No	
Other building	No	
3.1 Metering - Residential		100%
Score Contribution	This credit contributes 12.1% towards the category score.	
Criteria	Have utility meters been provided for all individual dwellings?	
Question	Criteria Achieved ?	
Apartment	Yes	
3.2 Metering - Non-Residential		100%

Score Contribution	This credit contributes 0.4% towards the category score.
Criteria	Have utility meters been provided for all individual commercial tenants?
Question	Criteria Achieved ?
Office	Yes
Other building	Yes

3.3 Metering - Common Areas	100%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Have all major common area services been separately submetered?
Question	Criteria Achieved ?
Apartment	Yes
Office	Yes
Other building	Yes

4.1 Building Users Guide	100%

Score Contribution	This credit contributes 12.5% towards the category score.
Criteria	Will a building users guide be produced and issued to occupants?
Question	Criteria Achieved ?
Project	Yes

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Water Overall contribution 9.0%

	Minimum required 50%	57%	✔ Pass

Water Approach	
What approach do you want to use for Water?:	Use the built in calculation tools
Do you have a reticulated third pipe or an on-site water recycling system?:	No
Are you installing a swimming pool?:	No
Are you installing a rainwater tank?:	Yes
Fixtures, fittings & connections profile	

Showerhead:	
G.01	4 Star WELS (>= 6.0 but <= 7.5)
G.02, UG.04, 1.06, 2.06	
G.03-G.04, UG.05-UG.06	
G.05, UG.07	
G.06, UG.08	
G.07, UG.09	
G.08-G.09, UG.10-UG.11	
G.10, UG.12, 1.10, 2.10	
UG.13, 1.11, 2.11	
UG.01	
UG.02, 1.04, 2.04	
UG.03, 1.05, 2.05	
1.01, 2.01	
1.02, 2.02	
1.03, 2.03	
10.06	
3.06, 4.07, 5.07, 6.07, 7.05, 8.05, 9.05	
3.02, 4.02, 4.03, 5.02, 5.03, 6.02, 6.03	
1.12, 2.12	
3.01, 4.01, 5.01, 6.01	
3.03	
3.04	
3.05, 4.05-4.06, 5.05-5.06, 6.05-6.06, 7.03-7.04, 8.03-8.04, 9.03-9.04	
3.07, 4.08, 5.08, 6.08, 7.06, 8.06, 9.06	
3.08, 4.09, 5.09, 6.09, 7.07, 8.07, 9.07	
3.09, 4.10, 5.10, 6.10	
3.10, 4.11, 5.11, 6.11	
4.04, 5.04, 6.04	
7.01	
8.01, 9.01	
7.02	
8.02, 9.02	
7.08	
7.09	
8.08, 9.08	
8.09, 9.09	
10.01	
10.02	
10.03	
10.04	
10.05	
1.07, 2.07	
1.08, 2.08	
1.09, 2.09	
Commercial Community Facility	Scope out
Bath: All	Scope out
Kitchen Taps: All	>= 6 Star WELS rating
Bathroom Taps: All	>= 6 Star WELS rating
Dishwashers: All	>= 5 Star WELS rating

WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency:	
G.01	Occupant to Install
G.02, UG.04, 1.06, 2.06	
G.03-G.04, UG.05-UG.06	
G.05, UG.07	
G.06, UG.08	
G.07, UG.09	
G.08-G.09, UG.10-UG.11	
G.10, UG.12, 1.10, 2.10	
UG.13, 1.11, 2.11	
UG.01	
UG.02, 1.04, 2.04	
UG.03, 1.05, 2.05	
1.01, 2.01	
1.02, 2.02	
1.03, 2.03	
10.06	
3.06, 4.07, 5.07, 6.07, 7.05, 8.05, 9.05	
3.02, 4.02, 4.03, 5.02, 5.03, 6.02, 6.03	
1.12, 2.12	
3.01, 4.01, 5.01, 6.01	
3.03	
3.04	
3.05, 4.05-4.06, 5.05-5.06, 6.05-6.06, 7.03-7.04, 8.03-8.04, 9.03-9.04	
3.07, 4.08, 5.08, 6.08, 7.06, 8.06, 9.06	
3.08, 4.09, 5.09, 6.09, 7.07, 8.07, 9.07	
3.09, 4.10, 5.10, 6.10	
3.10, 4.11, 5.11, 6.11	
4.04, 5.04, 6.04	
7.01	
8.01, 9.01	
7.02	
8.02, 9.02	
7.08	
7.09	
8.08, 9.08	
8.09, 9.09	
10.01	
10.02	
10.03	
10.04	
10.05	
1.07, 2.07	
1.08, 2.08	
1.09, 2.09	
Community Facility	
Commercial	Scope out

Which non-potable water source is the dwelling/space connected to?:	
G.01	Tank 1
G.02, UG.04, 1.06, 2.06	
G.03-G.04, UG.05-UG.06	
G.05, UG.07	
G.06, UG.08	
G.07, UG.09	
G.08-G.09, UG.10-UG.11	
G.10, UG.12, 1.10, 2.10	
UG.13, 1.11, 2.11	
UG.01	
UG.02, 1.04, 2.04	
UG.03, 1.05, 2.05	
1.01, 2.01	
1.02, 2.02	
1.03, 2.03	
1.12, 2.12	
Commercial	
1.07, 2.07	
1.08, 2.08	
1.09, 2.09	
Community Facility	
10.06	-1
3.06, 4.07, 5.07, 6.07, 7.05, 8.05, 9.05	
3.02, 4.02, 4.03, 5.02, 5.03, 6.02, 6.03	
3.01, 4.01, 5.01, 6.01	
3.03	
3.04	
3.05, 4.05-4.06, 5.05-5.06, 6.05-6.06, 7.03-7.04, 8.03-8.04, 9.03-9.04	
3.07, 4.08, 5.08, 6.08, 7.06, 8.06, 9.06	
3.08, 4.09, 5.09, 6.09, 7.07, 8.07, 9.07	
3.09, 4.10, 5.10, 6.10	
3.10, 4.11, 5.11, 6.11	
4.04, 5.04, 6.04	
7.01	
8.01, 9.01	
7.02	
8.02, 9.02	
7.08	
7.09	
8.08, 9.08	
8.09, 9.09	
10.01	
10.02	
10.03	
10.04	
10.05	

Non-potable water source connected to Toilets:	
G.01 G.02, UG.04, 1.06, 2.06 G.03-G.04, UG.05-UG.06 G.05, UG.07 G.06, UG.08 G.07, UG.09 G.08-G.09, UG.10-UG.11 G.10, UG.12, 1.10, 2.10 UG.13, 1.11, 2.11 UG.01 UG.02, 1.04, 2.04 UG.03, 1.05, 2.05 1.01, 2.01 1.02, 2.02 1.03, 2.03 1.12, 2.12 Commercial 1.07, 2.07 1.08, 2.08 1.09, 2.09 Community Facility	Yes
10.06 3.06, 4.07, 5.07, 6.07, 7.05, 8.05, 9.05 3.02, 4.02, 4.03, 5.02, 5.03, 6.02, 6.03 3.01, 4.01, 5.01, 6.01 3.03 3.04 3.05, 4.05-4.06, 5.05-5.06, 6.05-6.06, 7.03-7.04, 8.03-8.04, 9.03-9.04 3.07, 4.08, 5.08, 6.08, 7.06, 8.06, 9.06 3.08, 4.09, 5.09, 6.09, 7.07, 8.07, 9.07 3.09, 4.10, 5.10, 6.10 3.10, 4.11, 5.11, 6.11 4.04, 5.04, 6.04 7.01 8.01, 9.01 7.02 8.02, 9.02 7.08 7.09 8.08, 9.08 8.09, 9.09 10.01 10.02 10.03 10.04 10.05	No
Non-potable water source connected to Laundry (washing machine): All	No
Non-potable water source connected to Hot Water System: All	No

Rainwater tank profile	
What is the total roof area connected to the rainwater tank?: Tank 1	797 m²
Tank Size: Tank 1	20,000 Litres
Irrigation area connected to tank: Tank 1	1,228 m²
Is connected irrigation area a water efficient garden?: Tank 1	Yes
Other external water demand connected to tank?: Tank 1	0.0 Litres/Day

1.1 Potable water use reduction	40%
Score Contribution	This credit contributes 71.4% towards the category score.
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances, rainwater use and recycled water use? To achieve points in this credit there must be >25% potable water reduction.
Output	Reference
Project	19248 kL
Output	Proposed (excluding rainwater and recycled water use)
Project	14457 kL
Output	Proposed (including rainwater and recycled water use)
Project	13975 kL
Output	% Reduction in Potable Water Consumption
Project	27 %
Output	% of connected demand met by rainwater
Project	34 %
Output	How often does the tank overflow?
Project	Never / Rarely
Output	Opportunity for additional rainwater connection
Project	7820 kL

3.1 Water Efficient Landscaping	100%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Will water efficient landscaping be installed?
Question	Criteria Achieved ?
Project	Yes

4.1 Building Systems Water Use Reduction	100%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Where applicable, have measures been taken to reduce potable water consumption by >80% in the buildings air-conditioning chillers and when testing fire safety systems?
Question	Criteria Achieved ?
Project	Yes

Energy **Overall contribution 27.5%**

		Minimum required 50%	**72%**	✔ **Pass**

Use the BESS Deem to Satisfy (DtS) method for Non-residential spaces?:	No
Dwellings Energy Approach	
What approach do you want to use for Dwellings?:	Use the built in calculation tools
Are you installing any solar photovoltaic (PV) system(s)?:	Yes
Are you installing any other renewable energy system(s)?:	No
Gas supplied into building:	No gas connection
Dwelling Energy Profiles	
Building: All	675 Victoria St
Below the floor is: All	Another Occupancy

Above the ceiling is:	
G.01	Another Occupancy
G.02, UG.04, 1.06, 2.06	
G.03-G.04, UG.05-UG.06	
G.05, UG.07	
G.06, UG.08	
G.07, UG.09	
G.08-G.09, UG.10-UG.11	
G.10, UG.12, 1.10, 2.10	
UG.13, 1.11, 2.11	
UG.01	
UG.02, 1.04, 2.04	
UG.03, 1.05, 2.05	
1.01, 2.01	
1.02, 2.02	
1.03, 2.03	
3.06, 4.07, 5.07, 6.07, 7.05, 8.05, 9.05	
3.02, 4.02, 4.03, 5.02, 5.03, 6.02, 6.03	
1.12, 2.12	
3.01, 4.01, 5.01, 6.01	
3.03	
3.04	
3.05, 4.05-4.06, 5.05-5.06, 6.05-6.06, 7.03-7.04, 8.03-8.04, 9.03-9.04	
3.07, 4.08, 5.08, 6.08, 7.06, 8.06, 9.06	
3.08, 4.09, 5.09, 6.09, 7.07, 8.07, 9.07	
3.09, 4.10, 5.10, 6.10	
3.10, 4.11, 5.11, 6.11	
4.04, 5.04, 6.04	
7.01	
8.01, 9.01	
7.02	
8.02, 9.02	
7.08	
7.09	
8.08, 9.08	
8.09, 9.09	
1.07, 2.07	
1.08, 2.08	
1.09, 2.09	
10.06	Outside
10.01	
10.02	
10.03	
10.04	
10.05	
Exposed sides: All	2
NatHERS Annual Energy Loads - Heat: All	49.7 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	16.2 MJ/sqm
NatHERS star rating: All	7.5
Type of Heating System: All	D Reverse cycle space

Heating System Efficiency: All	3 Star
Type of Cooling System: All	Refrigerative space
Cooling System Efficiency: All	3 Stars
Type of Hot Water System: All	C Electric Heat Pump
Is the hot water system shared by multiple dwellings?: All	Yes
% Contribution from solar hot water system: All	0 %
Clothes Line: All	A No drying facilities
Clothes Dryer: All	Occupant to Install

Non-residential buildings profile

Heating, Cooling & Comfort Ventilation - Electricity - reference fabric and reference services:	1,000 kWh
Heating, Cooling & Comfort Ventilation - Electricity - proposed fabric and reference services:	1,000 kWh
Heating, Cooling & Comfort Ventilation - Electricity - proposed fabric and proposed services:	1,000 kWh
Heating - Wood - reference fabric and reference services:	-
Heating - Wood - proposed fabric and reference services:	-
Heating - Wood - proposed fabric and proposed services:	-
Hot Water - Electricity - Baseline:	1,000 kWh
Hot Water - Electricity - Proposed:	899 kWh
Lighting - Baseline:	1,000 kWh
Lighting - Proposed:	1,000 kWh
Peak Thermal Cooling Load - Baseline:	-
Peak Thermal Cooling Load - Proposed:	-

Solar Photovoltaic system profile

System Size (lesser of inverter and panel capacity): PV 1	30.0 kW peak
Orientation (which way is the system facing)?: PV 1	North
Inclination (angle from horizontal): PV 1	10.0 Angle (degrees)
Which Building Class does this apply to?: PV 1	Apartment

1.1 Thermal Performance Rating - Non-Residential 12%

Score Contribution	This credit contributes 1.3% towards the category score.
Criteria	What is the % reduction in heating and cooling energy consumption against the reference case (NCC 2019 Section J)?
Output	Total Improvement
Office	0 %
Other building	0 %

1.2 Thermal Performance Rating - Residential 66%

Score Contribution	This credit contributes 30.6% towards the category score.
Criteria	What is the average NatHERS rating?
Output	Average NATHERS Rating (Weighted)
Apartment	7.5 Stars

2.1 Greenhouse Gas Emissions 100%

Score Contribution	This credit contributes 10.5% towards the category score.
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?
Output	Reference Building with Reference Services (BCA only)
Apartment	955,254 kg CO2
Office	42.4 kg CO2
Other building	18.5 kg CO2
Output	Proposed Building with Proposed Services (Actual Building)
Apartment	330,557 kg CO2
Office	40.3 kg CO2
Other building	17.5 kg CO2
Output	% Reduction in GHG Emissions
Apartment	65 %
Office	5 %
Other building	5 %

2.2 Peak Demand 0%

Score Contribution	This credit contributes 5.3% towards the category score.
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?
Output	Peak Thermal Cooling Load - Baseline
Apartment	1,550 kW
Output	Peak Thermal Cooling Load - Proposed
Apartment	1,422 kW
Output	Peak Thermal Cooling Load - % Reduction
Apartment	8 %

2.3 Electricity Consumption 100%

Score Contribution	This credit contributes 10.5% towards the category score.
Criteria	What is the % reduction in annual electricity consumption against the benchmark?
Output	Reference
Apartment	936,524 kWh
Office	41.6 kWh
Other building	18.1 kWh
Output	Proposed
Apartment	324,075 kWh
Office	39.5 kWh
Other building	17.2 kWh
Output	Improvement
Apartment	65 %
Office	5 %
Other building	5 %

2.4 Gas Consumption N/A Scoped Out

No gas connection in use

This credit was scoped out	No gas connection in use
3.1 Carpark Ventilation	100%
Score Contribution	This credit contributes 10.5% towards the category score.
Criteria	If you have an enclosed carpark, is it: (a) fully naturally ventilated (no mechanical ventilation system) or (b) 40 car spaces or less with Carbon Monoxide monitoring to control the operation and speed of the ventilation fans?
Question	Criteria Achieved ?
Project	Yes
3.2 Hot Water	100%
Score Contribution	This credit contributes 5.3% towards the category score.
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?
Output	Reference
Apartment	1,387,313 MJ
Office	74.8 MJ
Other building	32.6 MJ
Output	Proposed
Apartment	511,414 MJ
Office	67.3 MJ
Other building	29.3 MJ
Output	Improvement
Apartment	63 %
Office	10 %
Other building	10 %
3.4 Clothes Drying	0%
Score Contribution	This credit contributes 5.1% towards the category score.
Criteria	What is the % reduction in annual energy consumption (gas and electricity) from a combination of clothes lines and efficient driers against the benchmark?
Output	Reference
Apartment	69,432 kWh
Output	Proposed
Apartment	69,432 kWh
Output	Improvement
Apartment	0 %
3.6 Internal Lighting - Residential Multiple Dwellings	100%
Score Contribution	This credit contributes 10.2% towards the category score.
Criteria	Is the maximum illumination power density (W/m2) in at least 90% of the relevant building class at least 20% lower than required by Table J6.2a of the NCC 2019 Vol 1 (Class 2-9) and Clause 3.12.5.5 NCC 2019 Vol 2 (Class 1 & 10)?
Question	Criteria Achieved ?
Apartment	Yes

3.7 Internal Lighting - Non-Residential		100%
Score Contribution	This credit contributes 0.3% towards the category score.	
Criteria	Does the maximum illumination power density (W/m2) in at least 90% of the area of the relevant building class meet the requirements in Table J6.2a of the NCC 2019 Vol 1?	
Question	Criteria Achieved ?	
Office	Yes	
Other building	Yes	
4.1 Combined Heat and Power (cogeneration / trigeneration)		N/A ◇ Scoped Out
		No cogeneration or trigeneration system in use.
This credit was scoped out	No cogeneration or trigeneration system in use.	
4.2 Renewable Energy Systems - Solar		97%
Score Contribution	This credit contributes 5.3% towards the category score.	
Criteria	What % of the estimated energy consumption of the building class it supplies does the solar power system provide?	
Output	Solar Power - Energy Generation per year	
Apartment	36,355 kWh	
Output	% of Building's Energy	
Apartment	11 %	
4.4 Renewable Energy Systems - Other		0% ⊘ Disabled
		No other (non-solar PV) renewable energy is in use.
This credit is disabled	No other (non-solar PV) renewable energy is in use.	

Stormwater Overall contribution 13.5%

	Minimum required 100%	**100%** ✔ **Pass**

Which stormwater modelling are you using?:	Melbourne Water STORM tool	
1.1 Stormwater Treatment		100%
Score Contribution	This credit contributes 100% towards the category score.	
Criteria	Has best practice stormwater management been demonstrated?	
Question	STORM score achieved	
Project	101	
Output	Min STORM Score	
Project	100	

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IEQ Overall contribution 16.5%

	Minimum required 50%	66%	✔ Pass

Use the BESS Deemed to Satisfy (DtS) method for daylight to Dwellings?:	No
What approach do you want to use for daylight to Dwellings?:	Provide our own calculations

1.1 Daylight Access - Living Areas		66%
Score Contribution	This credit contributes 23% towards the category score.	
Criteria	What % of living areas achieve a daylight factor greater than 1%	
Question	Percentage Achieved ?	
Apartment	81 %	
1.2 Daylight Access - Bedrooms		66%
Score Contribution	This credit contributes 23% towards the category score.	
Criteria	What % of bedrooms achieve a daylight factor greater than 0.5%	
Question	Percentage Achieved ?	
Apartment	84 %	
1.3 Winter Sunlight		0%
Score Contribution	This credit contributes 7% towards the category score.	
Criteria	Do 70% of dwellings receive at least 3 hours of direct sunlight in all Living areas between 9am and 3pm in mid-winter?	
Question	Criteria Achieved ?	
Apartment	No	
1.4 Daylight Access - Non-Residential		60% ✔ Achieved
Score Contribution	This credit contributes 1.5% towards the category score.	
Criteria	What % of the nominated floor area has at least 2% daylight factor?	
Question	Percentage Achieved?	
Office	60 %	
Other building	60 %	
1.5 Daylight Access - Minimal Internal Bedrooms		100%
Score Contribution	This credit contributes 7% towards the category score.	
Criteria	Do at least 90% of dwellings have an external window in all bedrooms?	
Question	Criteria Achieved ?	
Apartment	Yes	
2.1 Effective Natural Ventilation		66%
Score Contribution	This credit contributes 23% towards the category score.	
Criteria	What % of dwellings are effectively naturally ventilated?	
Question	Percentage Achieved?	
Apartment	60 %	
2.3 Ventilation - Non-Residential		34% ✔ Achieved

Score Contribution	This credit contributes 1.5% towards the category score.

Criteria	What % of the regular use areas are effectively naturally ventilated?
Question	Percentage Achieved?
Office	100 %
Other building	0 %

Criteria	What increase in outdoor air is available to regular use areas compared to the minimum required by AS 1668.2:2012?
Question	Percentage Achieved?
Office	-
Other building	-

Criteria	What CO2 concentrations are the ventilation systems designed to achieve, to monitor and to maintain?
Question	Value
Office	-
Other building	-

3.4 Thermal comfort - Shading - Non-residential	86%
Score Contribution	This credit contributes 0.7% towards the category score.

Criteria	What percentage of east, north and west glazing to regular use areas is effectively shaded?
Question	Percentage Achieved?
Office	70 %
Other building	100 %

3.5 Thermal Comfort - Ceiling Fans - Non-Residential	0%
Score Contribution	This credit contributes 0.2% towards the category score.
Criteria	What percentage of regular use areas in tenancies have ceiling fans?
Question	Percentage Achieved?
Office	0 %
Other building	0 %

4.1 Air Quality - Non-Residential	100%
Score Contribution	This credit contributes 8.2% towards the category score.

Criteria	Do all paints, sealants and adhesives meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Project	Yes

Criteria	Does all carpet meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Project	Yes

Criteria	Does all engineered wood meet the maximum total indoor pollutant emission limits?
Question	Criteria Achieved ?
Project	Yes

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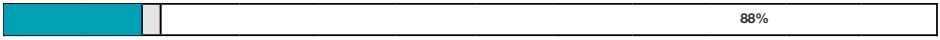
Transport Overall contribution 9.0%



1.1 Bicycle Parking - Residential	100%
Score Contribution	This credit contributes 21.6% towards the category score.
Criteria	How many secure and undercover bicycle spaces are there per dwelling for residents?
Question	Bicycle Spaces Provided ?
Apartment	124
Output	Min Bicycle Spaces Required
Apartment	123
1.2 Bicycle Parking - Residential Visitor	100%
Score Contribution	This credit contributes 21.6% towards the category score.
Criteria	How many secure bicycle spaces are there per 5 dwellings for visitors?
Question	Visitor Bicycle Spaces Provided ?
Apartment	25
Output	Min Visitor Bicycle Spaces Required
Apartment	25
1.3 Bicycle Parking - Convenience Residential	100%
Score Contribution	This credit contributes 10.8% towards the category score.
Criteria	Are bike parking facilities for residents located at ground or entry level?
Question	Criteria Achieved ?
Apartment	Yes
1.4 Bicycle Parking - Non-Residential	100%
Score Contribution	This credit contributes 0.7% towards the category score.
Criteria	Have the planning scheme requirements for employee bicycle parking been exceeded by at least 50% (or a minimum of 2 where there is no planning scheme requirement)?
Question	Criteria Achieved ?
Office	Yes
Other building	Yes
Question	Bicycle Spaces Provided ?
Office	3
Other building	3
1.5 Bicycle Parking - Non-Residential Visitor	100%

Score Contribution	This credit contributes 0.3% towards the category score.
Criteria	Have the planning scheme requirements for visitor bicycle parking been exceeded by at least 50% (or a minimum of 1 where there is no planning scheme requirement)?
Question	Criteria Achieved ?
Office	Yes
Other building	Yes
Question	Bicycle Spaces Provided ?
Office	2
Other building	1

1.6 End of Trip Facilities - Non-Residential	0%

Score Contribution	This credit contributes 0.3% towards the category score.
Criteria	Where adequate bicycle parking has been provided. Is there also: * 1 shower for the first 5 employee bicycle spaces plus 1 to each 10 employee bicycles spaces thereafter, * changing facilities adjacent to showers, and * one secure locker per employee bicycle space in the vicinity of the changing / shower facilities?
Question	Number of showers provided ?
Office	0
Other building	0
Question	Number of lockers provided ?
Office	0
Other building	0
Output	Min Showers Required
Office	1
Other building	1
Output	Min Lockers Required
Office	3
Other building	3

2.1 Electric Vehicle Infrastructure	100%

Score Contribution	This credit contributes 22.3% towards the category score.
Criteria	Are facilities provided for the charging of electric vehicles?
Question	Criteria Achieved ?
Project	Yes

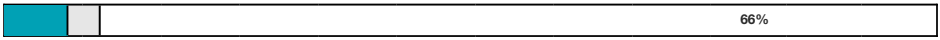
2.2 Car Share Scheme	0%

Score Contribution	This credit contributes 11.1% towards the category score.
Criteria	Has a formal car sharing scheme been integrated into the development?
Question	Criteria Achieved ?
Project	No

2.3 Motorbikes / Mopeds	100%

Score Contribution	This credit contributes 11.1% towards the category score.
Criteria	Are a minimum of 5% of vehicle parking spaces designed and labelled for motorbikes (must be at least 5 motorbike spaces)?
Question	Criteria Achieved ?
Project	Yes

Waste **Overall contribution 5.5%**



1.1 - Construction Waste - Building Re-Use	0%
Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	If the development is on a site that has been previously developed, has at least 30% of the existing building been re-used?
Question	Criteria Achieved ?
Project	No

2.1 - Operational Waste - Food & Garden Waste	100%
Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	Are facilities provided for on-site management of food and garden waste?
Question	Criteria Achieved ?
Project	Yes

2.2 - Operational Waste - Convenience of Recycling	100%
Score Contribution	This credit contributes 33.3% towards the category score.
Criteria	Are the recycling facilities at least as convenient for occupants as facilities for general waste?
Question	Criteria Achieved ?
Project	Yes

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Urban Ecology Overall contribution 5.5%

66%

1.1 Communal Spaces		97%
Score Contribution	This credit contributes 11.1% towards the category score.	
Criteria	Is there at least the following amount of common space measured in square meters : * 1m² for each of the first 50 occupants * Additional 0.5m² for each occupant between 51 and 250 * Additional 0.25m² for each occupant above 251?	
Question	Common space provided	
Apartment	950 m²	
Office	-	
Other building	-	
Output	Minimum Common Space Required	
Apartment	212 m²	
Office	22 m²	
Other building	6 m²	
2.1 Vegetation		100%
Score Contribution	This credit contributes 44.6% towards the category score.	
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area?	
Question	Percentage Achieved ?	
Project	36 %	
2.2 Green Roofs		0%
Score Contribution	This credit contributes 11.1% towards the category score.	
Criteria	Does the development incorporate a green roof?	
Question	Criteria Achieved ?	
Project	No	
2.3 Green Walls and Facades		0%
Score Contribution	This credit contributes 11.1% towards the category score.	
Criteria	Does the development incorporate a green wall or green façade?	
Question	Criteria Achieved ?	
Project	No	
2.4 Private Open Space - Balcony / Courtyard Ecology		100%
Score Contribution	This credit contributes 10.8% towards the category score.	
Criteria	Is there a tap and floor waste on every balcony / in every courtyard?	
Question	Criteria Achieved ?	
Apartment	Yes	
3.1 Food Production - Residential		0%

Score Contribution	This credit contributes 10.8% towards the category score.
Criteria	What area of space per resident is dedicated to food production?
Question	Food Production Area
Apartment	0.0 m²
Output	Min Food Production Area
Apartment	76 m²

3.2 Food Production - Non-Residential	0%

Score Contribution	This credit contributes 0.3% towards the category score.
Criteria	What area of space per occupant is dedicated to food production?
Question	Food Production Area
Office	-
Other building	-
Output	Min Food Production Area
Office	6 m²
Other building	2 m²

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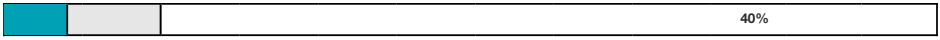
Innovation Overall contribution 9.0%



Innovations	
Description:	
Carbon Neutral Committment	NIL gas connection and all electric services. Targeting a min. 7 Star average energy rating result. The proposed development will be established with a carbon neutral power agreement between developer, owner's corporation, and electrical retailer to provide GreenPower for all energy consumed by building (including communal areas, apartments and retail tenancies). It is the intent to maintain this agreement for a minimum of 10 years. Additionally, the development is committed to provide on-site renewable energy generation to meet minimum of 5% of electricity consumed by residents at the site per the Embedded Networks Review.
ESD Verification	An ESD professional will be engaged throughout the design and construction process. The ESD professional will perform a minimum of 2 site inspections during the construction phase to ensure suitable implementation of the ESD initiatives. Any deficiencies compared to the endorsed SMP will be escalated to the project manager and resolved.
Social Innovation	The development will seek to implement a community portal and activity schedule to enhance the social interactions of its occupants within the buildings communal spaces.
Points Targeted:	
Carbon Neutral Committment	2
ESD Verification	1
Social Innovation	1

1.1 Innovation	40%
Score Contribution	This credit contributes 100% towards the category score.
Criteria	What percentage of the Innovation points have been claimed (10 points maximum)?

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Planning Report

675 Victoria Street, Abbotsford

Prepared for EG Funds Management

Tract

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Southbank, VIC 3006

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www.tract.com.au

8 April 2025

Overview

Background

Applicant / Owner	EG Funds Management
Address	675 Victoria Street, Abbotsford
Lot Description	Lot 1 on Title Plan 222160; 63B\PP2796

Relevant Planning Provisions

Municipal Planning Strategy	Clause 02.01 – Context Clause 02.02 – Vision Clause 02.03 – Strategic Directions Clause 02.04 – Strategic Framework Plan
Planning Policy Framework	Clause 11 – Settlement Clause 12 – Environmental and Landscape Values Clause 13 – Environmental Risks and Amenity Clause 15 – Built Environment and Heritage Clause 16 – Housing Clause 17 – Economic Development Clause 18 – Transport Clause 19 – Infrastructure
Zone	Commercial 1 Zone (C1Z) Public Park and Recreation Zone (PPRZ)
Overlays	Significant Landscape Overlay – Schedule 1 (SLO1) Design and Development Overlay – Schedule 1 (DDO1) Design and Development Overlay – Schedule 2 (DDO2) Land Subject to Inundation Overlay (LSIO) Development Contributions Plan Overlay – Schedule 1 (DCPO1)
Particular Provisions	Clause 52.06 – Car Parking Clause 52.29 – Land Adjacent to the Principal Road Network Clause 52.34 – Bicycle Facilities Clause 53.23 – Significant Residential Development with Affordable Housing Clause 53.18 – Stormwater Management in Urban Development Clause 58 – Apartment Developments

Strategic Planning Documents	Plan Melbourne 2017-2050 Victoria's Housing Statement: The Decade Ahead: 2024-2034

Permit Application Details

Description of Proposal	Use and development of the land for a mixed-use building, removal of vegetation (under SLO1), waiver of statutory car parking (office use) and alteration of access to a road in a Transport Zone 2.
Permit Requirement	• Clause 34.01-1 – Use of land for dwellings and community facility (place of assembly) • Clause 34.01-4 – Buildings and works • Clause 42.03-2 – Buildings and works • Clause 42.03-2 – Removal of vegetation • Clause 43.02-2 – Buildings and works • Clause 44.04-2 – Buildings and works • Clause 52.06-3 – Reduction in car parking • Clause 52.29-2 – Alter access to a road in a TRZ2
Conclusion	This application demonstrates strong alignment with the *Yarra Planning Scheme* and is recommended for approval.

Quality Assurance

Planning Report

Planning Report
675 Victoria Street, Abbotsford

Project Number
322-0093-00-P-02-RP01

Revisions

Issue	Date	Description	Prepared By	Reviewed By	Project Principal
00	08/04/2025	Lodgement with DTP	CL	EH	LC

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1 Introduction

1.1 Purpose

This report has been prepared by Tract Consultants Pty Ltd upon the instructions of **EG Funds Management** to accompany a planning permit application for the use and development of the land for a multi-storey mixed use building at 675 Victoria Street, Abbotsford ('the Site').

The proposal involves the construction of a building that comprises:

- Ground floor commercial (office) space (287sqm);
- 123 dwellings comprising various one-, two- and three-bedroom apartment typologies;
- Two basement levels comprising 169 car parking spaces; and
- Substantial public benefits including:
    - Pedestrian link between Victoria Street and Yarra River corridor;
    - Community facility (122sqm) housing Little B.I.G. Foundation; and
    - Affordable housing contribution comprising a cash contribution of 3% of the cost of development (residential component only).

The construction of the pedestrian link path is also proposed on the adjacent reserve, being formally recognised as 63B\PP2796.

Pursuant to the *Yarra Planning Scheme*, a planning permit is required for:

- Clause 34.01-1 – Use of land for dwellings and community facility (place of assembly)
- Clause 34.01-4 – Buildings and works
- Clause 42.03-2 – Buildings and works
- Clause 42.03-2 – Removal of vegetation
- Clause 43.02-2 – Buildings and works
- Clause 44.04-2 – Buildings and works
- Clause 52.06-3 – Reduction in car parking
- Clause 52.29-2 – Alter access to a road in a TRZ2

The proposal also seeks approval for a building which incorporates the following key modifications from the previous application considered and advertised by Yarra City Council:

- A reduction to the maximum building height by 3.4 metres;
- A reduction in the built form envelope of the top two levels, and associated redesign;
- Relocation of the publicly accessible pedestrian link from the western to the eastern edge of the Site;
- Reprogramming of the ground floor level to provide direct access to the residential lobby from Victoria Street; and
- Further retention of vegetation within the site frontage.

Having considered the proposal in the context of the *Yarra Planning Scheme*, it is the conclusion of the report that the proposal is consistent with all relevant state and local planning policy. It follows as the recommendation that the Minister for Planning, under delegation, should issue a planning permit for the proposed development.

1.2 Project Team

The project team assembled by EG includes:

- SJB – Architecture
- Tract – Planning
- Vipac – Wind Tunnel Test
- Webber – Structural Engineering

- Tract – Landscape Architecture
- GIW Environmental Consulting – ESD
- Traffix Group – Traffic and Waste
- Wrap – Building Services
- Stone Heritage – Cultural Heritage
- Acoustic Logic – Acoustic Engineering

1.3 Project History

Planning Application PLN22/0732

On 21 September 2022, planning permit application PLN22/0732 was lodged with Yarra City Council ('Council') for the use and development of the land for a 16-storey mixed-use building. Lodgement of the application followed early engagement with Council, where officers commended the design response and quality, and invited the project team to submit further documentation demonstrating alignment with the objectives of the Yarra River environs planning controls.

Throughout the application process, feedback was received from Council's internal departments, as well as Melbourne Water, DEECA (Parks Victoria) and Transport for Victoria as recommending and determining referral authorities. Transport for Victoria supported the proposal, and Melbourne Water and DEECA did not support the proposal.

The application was placed on public notice on 11 July 2023. 186 objections were received, with the main themes being:

- Amenity impacts (114 counts)
- Building height (113 counts)
- Traffic (102 counts)
- Car Parking (70 counts)
- Environmental impacts (56 counts)
- Neighbourhood Character (31 counts).

Following the completion of the notice period and upon receipt of authority feedback, Council officers expressed that changes to the design were required to obtain Council officer support. Changes requested were predominantly relating to urban design matters, and included a reduction to the height of the building and the relocation of the pedestrian link.

While the project team were reviewing options available to address Council officer and authority concerns, the Victorian State Government released *Victoria's Housing Statement: The Decade Ahead: 2024-2034* (the 'Housing Statement'), which introduced a new planning pathway at Clause 53.23- Significant Residential Development with Affordable Housing. It was identified that the project would be suitable for this pathway as it met all eligibility criteria, and EG Funds Management ('EG') expressed a willingness to provide an affordable housing contribution as part of the proposal.

Following engagement with the Development Facilitation Program ('DFP') team, where in principle support to advance a modified proposal under the Clause 53.23 pathway was received, planning permit application PLN22/0732 was withdrawn in March 2024.

Development Facilitation Program

As noted above, engagement was undertaken with the DFP team to ensure that the project would be eligible to be lodged under the Clause 53.23 pathway.

During this time, the project team actively engaged with Melbourne Water and Parks Victoria to ensure that the scheme ultimately lodged addressed concerns raised during the Council application process. This included the submission of a Flood Impact Assessment and redesign of the ground floor plane to relocate the pedestrian link along the eastern site boundary. The scheme has also been rigorously tested and refined to respond to feedback received from the DFP team, Council's internal departments and the community. This included a reduction in building height and redesign of the upper levels to reduce the footprint and alter the materiality to reduce visual impact.

This iterative process demonstrates a genuine commitment to deliver a significant residential development which provides a contextually appropriate, site responsive, high-quality design offering substantial public benefits that extend beyond the site boundaries and that appropriately responds to its diverse interfaces.



Figure 1: Council application scheme (September 2022)



Figure 2: Proposed scheme (March 2025)

On 3 March 2025, DFP and Invest Victoria confirmed that the project was eligible for the Clause 53.23 pathway. Alongside this confirmation, a number of recommended further information items were outlined. These recommendations are outlined in the following table, with the relevant responses provided in turn.

Table 1 - DFP Further Information Recommendations

Requirement	Action
a) Letter from CEO Invest Victoria confirming project eligibility.	Provided within lodgement package.
b) Current MPL Certificate (noting ex-gratia relief will be provided up to $97,500 as per the correspondence from the Minister for Planning dated 15 January 2025).	Provided within lodgement package.
c) The Town Planning Report and Car Parking Impact Assessment amended to address the Little B.I.G Foundation community facility as a place of assembly use rather than an innominate use;	This Planning Report and the accompanying Car Parking Impact Assessment now refer to the Little B.I.G Foundation community facility as being a 'place of assembly' use.
d) The architectural plans amended to provide:	The Architectural Plans have been updated accordingly.

i. A 1 metre setback to the western boundary wall associated with apartments U.G.02, 1.04, 2.04, and 3.04; ii. Apartment G.07 and U.G.09 to be set back 3 metres from the eastern boundary in accordance with the without prejudice plans dated 21 February 2025; iii. The southern, eastern and western setbacks to be dimensioned on the ground floor plan; iv. Updated detail apartment plans for apartments G.07 and UG.09 as specified on the without prejudice plans dated 21 February 2025; v. Screening to ensure overlooking to the eastern neighbouring dwellings is minimised in accordance with Standard D14 of Clause 58.04-1 (Building setback objectives).	With respect to screening, we note that the recent gazettal of updated Rescode standards, bedrooms are no longer required to be screened. Further, the windows facing eastern neighbouring dwellings are secondary outlooks from living rooms. As such, no screening is considered necessary.
e) The Car Parking Impact Assessment amended to correctly identify the parking requirement of the two bedroom + study dwellings (two car spaces rather than one) and the revised layouts of apartments G.07 and U.G.07 specified on the without prejudice plans dated 21 February 2025;	The Traffic Impact Assessment has been updated to clarify that all two bedroom + study dwellings have been counted as "two bedroom", given that the studies in question have a fixed desk and are not the appropriate dimensions to be transformed into a bedroom.
f) The Landscape Plan amended to confirm planting species, numbers, and locations;	It is respectfully request that, given the amount of work associated with the production of detailed Landscape Plans, this be dealt with as a condition on permit.
g) The Architectural Plans and the Tree Impact Assessment are not consistent in their identification of tree removal permit requirements. The plans will need to be amended to address this inconsistency.	The Tree Impact Assessment has been updated to ensure clarity with respect to the trees requiring a permit for removal.
h) Clarification whether the existing commercial buildings at 661 Victoria Street will overlook the proposed lower-level balconies and terraces on the western side of the proposal. Demonstration of compliance with Clause 13.07-1L-01 (Interfaces and amenity) is required.	Drawing SD06_03 within the Architectural Plans demonstrates that there is no overlooking from 661 Victoria Street. Clause 13.07-1L-01 (Interfaces and amenity) has been addressed in sections 4.2.3 and 5.7 of this report.
i) The Clause 58 assessment and architectural plans to be amended to include further demonstration of compliance with Clause 58.04-2 (Internal views objective). There appears to be overlooking between a number of apartments.	The Clause 58 diagrams contained within the Architectural Plans have been updated accordingly, along with the Clause 58 assessment contained at Appendix A of this Planning Report.
j) A 3-D model of the proposed development. Details on how to submit the model can be found here https://www.planning.vic.gov.au/guides-and-resources/councilresources/planning-in-3d	Provided within lodgement package. Note: the site model *(250317_Victoria St_675_APP_Site)* has been included too as it is linked to the main file and includes the topography and adjoining buildings.

Further to the above, the following additional changes to the material previously reviewed by DFP have been made prior to lodgement to DTP:

- Addition of 1m setback to Little B.I.G. tenancy area in accordance with the Wind Tunnel Test.
- Updating of all consultant documents for consistency.

1.4 Report Structure

This report describes the Site and its context (Chapter 2), details the proposal (Chapter 3), identifies relevant planning policy and provisions (Chapter 4), and assesses the proposal against this planning framework (Chapter 5) to form its conclusions and recommendations (Chapter 6).

2 Site & Surrounds

The Site is located at 675 Victoria Street, Abbotsford, comprising one parcel formally known as Lot 1 on Title Plan 222160B.

A copy of the Certificate of Title is enclosed within the application material. The title plan does not contain any easements (refer Figure 1 below).

The Certificate of Title identifies that the Site is not affected by any restrictive covenants or Section 173 agreements however the Site is subject to Caveat R513238 which applies two easements for carriageway and powerline purposes to the benefit of the State Electricity Commission of Victoria.

Refer to Figure 3 – Extract of Certificate of Title.

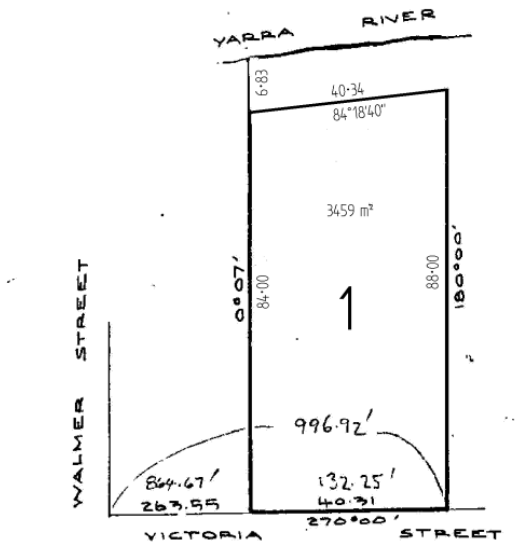

Figure 3: - Extract of Certificate of Title

Works associated with the pedestrian link are also proposed in the parcel immediately north of the land (formally known as 63B\PP2796), and as such this parcel forms part of the planning unit.

2.1 Site Analysis

The Site is rectangular in shape, with an area of approximately 3,495sqm.

It has a primary frontage to Victoria Street of 40.5m and a rear interface to the Yarra River of 41m.

In terms of topography, the land slopes down towards the northern boundary of the Site, with an average slope of approximately 7.27%.

The existing built form at the Site presents as a three-storey building stepped back in three tiers from Victoria Street. At the rear, the building includes a paved area leading towards the Yarra River interface. The building is currently used as an office building, with a number of separate car parking areas within the front setback and at ground level undercover.

The land known as 63B\PP2796 which is located immediately north of the subject Site is approximately 8,734sqm in area, running along the Yarra River corridor.

Refer to Figure 4 – Aerial Plan.



Figure 4 - Aerial Plan



2.2 Site Surrounds

The Site interfaces with the following:

- To the **north**: Yarra River corridor and environs. Refer to Chapter 2.5 for a detailed analysis of the character of the Yarra River corridor. On the opposite side of the river is a number of residential properties with extensive rear yards located within Kew.





- To the **east**: 9 Acacia Place, Abbotsford. This development comprises three separate buildings with commercial tenancies at ground floor and residential development above. The buildings are up to11 storeys in height.



- To the **south**: Victoria Street, a 20m road located within the Transport 2 Zone. Victoria Street accommodates 5-6 lanes of traffic, bike lanes, pedestrian paths and a separated tramline and tram stop in its median. On the opposite side of the street lies a carpark associated with the Victoria Gardens Shopping Centre, as well as River Boulevard, a continuation of Acacia Place. It is noted that the Victoria Gardens precinct has recently obtained planning approval for an expansion of the shopping centre and residential precinct, which will comprise a series of mixed-use buildings ranging between 7 and 17 storeys.



- To the **west**: 661-663 Victoria Street, Abbotsford, a large site comprised of a number of individual buildings housing various offices and coworking spaces. Directly adjacent to the subject Site is a 2-3 storey brick building (towards the south) and a two-storey heritage building. The site is broadly covered by the Heritage Overlay – Schedule 65 relating to the 'Former Alma Woolworks Complex'.





2.3 Site Context

The Site is located within the City of Yarra and is situated approximately 3.7 kilometres east of Melbourne's CBD.

The Site forms part of the Victoria Street Activity Centre which has continued to undergo extensive private-sector redevelopment, particularly of previously industrial sites. Land use in the vicinity of the Site is predominantly mixed use with various retail, commercial, office, education and open space functions, including:

- Open space – Yarra River Corridor including Capital City Trail.
- Education – Yarra Primary School, Melbourne Girls College, Richmond High School, Collingwood College, Xavier College, Trinity Grammar School, Methodist Ladies College.
- Services – Victoria Gardens Shopping Centre, Yarra Medical Richmond.
- Entertainment and Dining – The National Hotel, Terminus Hotel Abbotsford.

The Site is well-serviced by numerous public transport connections, including:

- Victoria Street which is serviced by the Route 109 tram, connecting the Site to the CBD, Port Melbourne and Box Hill. The nearest tram stop is located directly in front of the Site.
- Hawthorn Station situated approximately 1.45km south-east of the Site which connects the CBD to the Alamein, Lilydale and Belgrave train lines.
- North Richmond Station situated approximately 1.8km west of the Site which connects the CBD to the Hurstbridge and Mernda train lines.

Refer to **Figure 5 – Context Plan**.

Tract
Town Planners
Landscape Architects
Urban Designers

MAP EXPORT
MAP EXPORT - CREATED ON 21-09-2022



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Figure 5 - Context Plan

2.4 Victoria Street Character

The Site's principal frontage is to Victoria Street, which extends from the Yarra River through to Hoddle Street before continuing as Victoria Parade to the northern perimeter of Melbourne's CBD.

Victoria Street serves as an important east-west transit corridor connecting the eastern suburbs with Melbourne's CBD and amenities of Richmond and Abbotsford.

In contrast to the fine-grain activity centre surrounding Church Street, Lennox Street and North Richmond Station, the eastern extent of Victoria Street exhibits an emerging urban renewal character, featuring many high-density contemporary commercial and residential buildings. This built form character is reflective of the subdivision patterns of the commercial and industrial activity that took place along the Yarra River historically, as well as the proximity of this precinct to public transport, open space and other amenities which makes it suitable for development of the emerging scale.

New buildings fronting Victoria Street typically do not provide a street setback and establish a sheer street wall condition with minor setbacks provided to upper-level forms. Commercial uses are located at ground floor of some buildings to provide for activation and to service residents of the new buildings.

Viewlines are preserved to the Skipping Girl sign as protected by the *Yarra Planning Scheme*.

The southern side of Victoria Street features Victoria Gardens Shopping Centre which provides for a range of retail and recreational businesses. Pedestrian connectivity between Victoria Street and Victoria Gardens Shopping Centre is poor and there is a need to improve the pedestrian experience within this precinct which will be assisted by future development proposals including this application.

2.5 Yarra River Environs

The Site forms part of the Yarra River Environs with a direct interface to the shared path that runs along the river's south bank. The river-interface character of the Yarra River Environs evolves along the course of the waterway, with the Site forming part of the Lower Yarra River and noted to be of 'current and ex-industrial' character within the Lower Yarra River Corridor Study (2016).

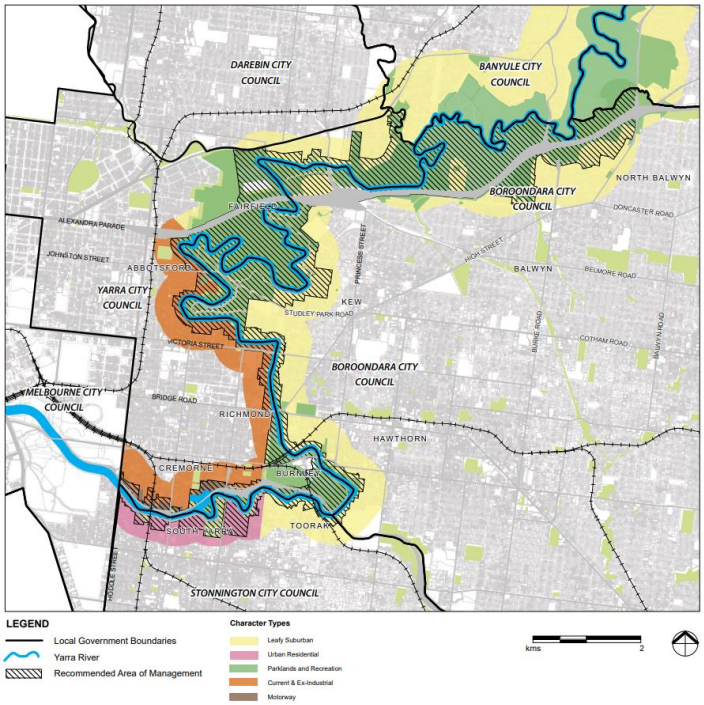

Figure 6: Extract from Yarra River Corridor Study (2016)

The key character features of this context include:

- Established industrial, commercial and residential buildings along the crestline of the river corridor.
- Mature trees and understorey planting along the river bank in many locations which contribute to a vegetated character and compliment the opposite banks. A high level of vegetation cover on the riverbank screens views to buildings from the river in many locations.
- A mix of building styles, scales and heights, including many higher scale buildings constructed close to the river's edge.
- The Capital City Trail providing access and viewing along the river's edge with a mix of public and private access to the river.

As identified in the Lower Yarra River Corridor Study (2016) there are ongoing proposals for development of a higher scale to occur on the southern bank of the river where new buildings can provide a high degree of amenity and outlook for residents.

There is a need to ensure that new development does not result in the over-development of the river in these locations and DDO1 and SLO1 of the *Yarra Planning Scheme* have been implemented to ensure a balanced outcome is achieved. New built form must be appropriately set-back from the river, with an emphasis on the landscape interface between new buildings and the river.

Taller buildings must be designed to prevent unacceptable visual impact to the river corridor as well as preventing overshadowing.

A number of newly constructed (and under-construction) residential buildings have emerged in the Site's immediate context that together establish a new high-density residential character that provides a sensitive interface with the river, high-quality architecture and active community lifestyle for residents.

3 Proposal

3.1 Overview

This section of the report should be read in conjunction with the Architectural Plans prepared by SJB issued March 2025.

The application seeks planning approval for the use and development of a 14-storey mixed-use building, removal of vegetation, a reduction in car parking and alteration of access to a road in a transport zone.

In summary, the building will comprise:

- Ground floor commercial tenancy (287sqm);
- Community facility (122sqm) to be operated and managed by Little B.I.G. Foundation (refer Chapter 3.7);
- 123 dwellings comprising one-, two- and three-bedroom apartments with a genuine mix of typologies; and
- Two basement levels and a lower ground level comprising 169 car parking spaces, 158 bicycle spaces, 26 motorcycle spaces and 123 storage cages.

The design approach employed by SJB is summarised as "responding to the unique geology and character of the area". Elements of natural inspiration have been incorporated into the design process, including geological stratification, sculpture by water flow and palette of local colours and textures.

The building incorporates the gradation of brick work which provides a neutral and sympathetic design response to the river, as well as paying rich and meaningful homage to the distinctive character of Abbotsford.

On Victoria Street, the façade is sculpted around the existing canopy tree. The existing tree is not treated as an encumbrance but rather is built into the design to provide a distinctive sense of entry to the Site and soften the visual connection with Victoria Street.

A pedestrian connection between Victoria Street and the Capital City Trail is provided along the eastern boundary of the Site, providing direct access from the pedestrian crossing along Victoria Street to the south. The design strengthens connectivity with the river corridor as well as ensuring an improved pedestrian experience through textures, planting and passive surveillance. The result is a connection to the river that is significantly more legible and accessible than current conditions and complements the link provided in neighbouring Acacia Place.

Care has been taken in designing a rhythm and grading of ramps, steps and landings to respond to site topography while encouraging ease of use and accessibility to the community facility from Victoria Street.



Figure 7: Proposed development from Victoria Street



Figure 8- Render of pedestrian link.

3.2 Design Approach and Response

3.2.1 Massing

The development has been carefully crafted in response to the river interface and setback envelope of DDO1.

The building has a maximum height of 41.3m when measured from Victoria Street and 43.84m at its tallest point.

In the first instance, the building mass has been roughly shaped by these constraints, however through careful articulation and smooth sculpting, the building presents as a much more organic and sympathetic form taking design cues from the river context itself.

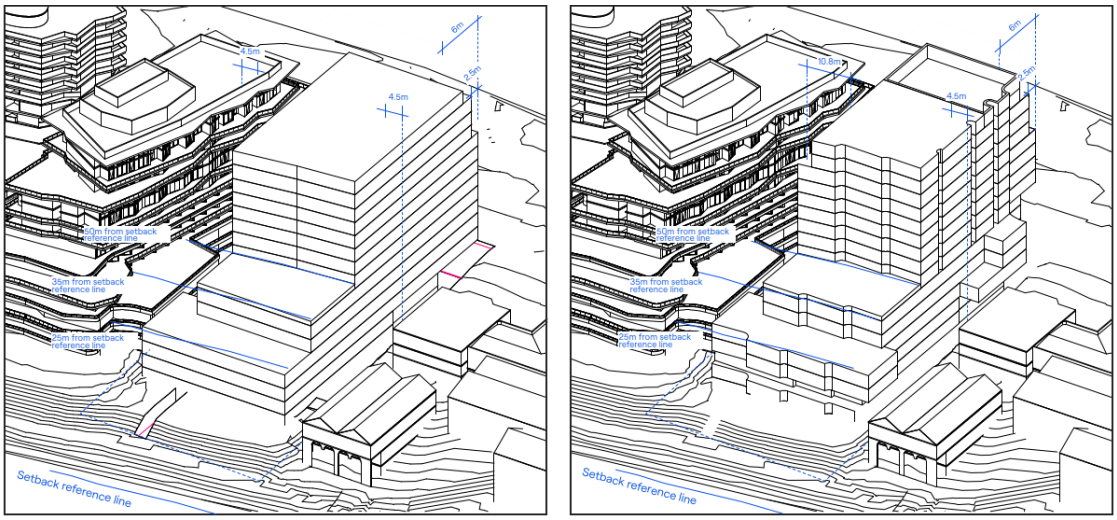

Figure 9- Massing diagrams

The building achieves a comfortable silhouette within the Victoria Street context, with its slender proportion helping to maintain vertical breaks between buildings along the streetscape.

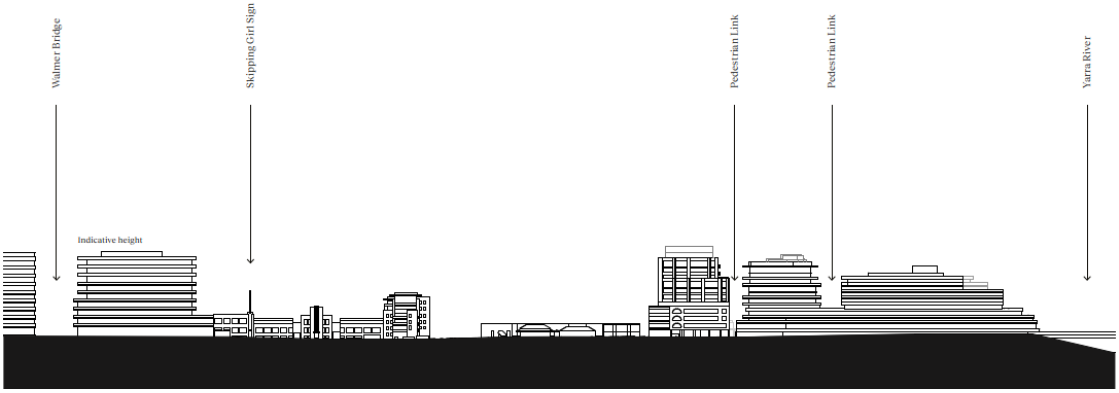

Figure 10- Indicative Victoria Street streetscape

3.3 Apartment Typologies

The building provides a genuine mix of apartment layouts and typologies ranging from 1 -3 bedrooms with a total of 49 apartment layouts, including:

- 7 x 1 bedroom layouts including with and without study.
- 23 x 2 bedroom layouts including with and without study.
- 19 x 3 bedroom layouts with and without study.

The apartment mix provides for a high degree of variation including many apartments with large private open spaces and functional layouts far exceeding the minimum requirement of Clause 58. Accordingly, the project delivers a diversity of designs to suit the diverse needs of future residents.

3.4 Sculpting

The following natural inspiration has been adopted by SJB to sculpt the building:



Geological Stratification

"Stratification is the layering that occurs in most sedimentary rocks due to the changes in texture or composition during deposition. The varying series of colour changes observed reflect the differences in the mineral composition of the earth's

surface or the distinct planes of parting layers. The use of graded coloured bricks resembles the geological stratification of the surrounding area.

Sculpted by Water Flow

"The integration of the building's robust architectural forms and gestures draws upon the Yarra River flow and Dights Falls."

Palette of Local Colours and Textures

"The project's palette and materiality is driven by the Abbotsford's natural features and built heritage to deepen the connection with the areas rich history. The use of warm tones embody the mature gum trees present in the surrounding landscape."

3.5 River Corridor Interface

The project's greatest strength lies in its interface with the Yarra River corridor. As demonstrated above, natural elements of the river and surrounds have shaped the massing and articulation of the building. The provision of a clearly legible and accessible pedestrian link also helps to connect the river corridor with Victoria Street.

Communal facilities within the building, and the community facility, have purposely been positioned at the interface with the river to create activation for users of the Capital City Trail, as well as allowing residents to spend meaningful time within the lush surroundings.

Other than the stairs associated with the proposed pedestrian link, the area between the proposed building and the river is entirely landscaped, both through a mix of the retention of existing vegetation and the provision of additional complementary vegetation, comprising species that are well suited to the river corridor.



Figure 11- River interface (trees removed for render purposes)

3.6 Materiality

The material palette has been informed by design references and principles described in Chapter 3.3, with the Yarra River corridor informing the selection of brick and masonry finishes that graduate in tone with the building height.

The investment into material quality will ensure that the proposed building will respectfully integrate with the surrounding context and is complemented by the landscape strategy.

3.7 Landscaping

Site-responsive landscaping is recognised as a key feature of the project. Tract has prepared a Landscape Concept Report which describes the vision, process and design of the proposed landscaping.

The landscape vision is:

> *"**Reclaimed by nature** – The redevelopment of 675 Victoria Street presents an opportunity to provide a nature-based development, with enhanced biodiversity connecting the river corridor to the more urban Victoria Street precinct. Generous planting to the ground plane and integrated into the built form will provide an enhanced environment benefitting the local ecology, residents and the wider community.*
>
> *The landscape design aims to:*
>
> - *Increase Yarra's unique biodiversity.*
> - *Provide an environment that contributes to the health and wellbeing of its human inhabitants.*
> - *Visually integrate the built form into this scenic location and provide a unique sense of place that reflects the character of the river locale.*
> - *Provide opportunities for recreation, relaxation and social interaction for the residents and the wider community."*

Three of the main features of the landscaping concept are the Entry / Arbour Walk, River Connection Stair and Revegetated Riverbank.



Figure 12- Landscape concept

The retention and incorporation of the significant tree on the Victoria Street frontage, along with the highly considered riverfront landscape scheme demonstrates that the project is shaped by its landscape surroundings, and that the landscape values of the Site are at the very core of the building design.

3.8 Little B.I.G. Foundation (Community Facility)

The proposal includes a partnership with the Little B.I.G. Foundation which is a charitable organisation set up to tackle loneliness in Australia by developing places, programs and events for social connection.

The Little B.I.G. Foundation will manage and operate a 122 square metre community facility (place of assembly) located on the river-fronting side of the building which sits adjacent to the residential amenities, and which will provide an events program for residents and the surrounding community.

The community space can also be booked through Little B.I.G. Foundation for use by residents and the broader community, with the space having a strong connection to the Yarra River Corridor.

Further information can be found at www.littlebigfoundation.org.

3.9 Affordable Housing Contribution

On top of the substantial community benefits provided by the development, it is proposed to provide a cash contribution for affordable housing, to the Social Housing Growth Fund.

Given the cost of construction for a development of this scale, a 3% contribution to the total residential development cost will enable a meaningful contribution to assist in providing housing for Victoria's most vulnerable populations.

Therefore, whilst adding 123 apartments to housing supply, providing a public space for community members to gather and interact, and providing improved connection to the Yarra River corridor, this project will support the provision and delivery of social and/or affordable housing in Victoria.

3.10 Car and Bicycle Parking and Access

3.10.1 Car Parking

The proposal generates a statutory requirement for 168 car parking spaces, comprising 160 spaces for residents and 8 spaces for office use. There is no requirement to provide visitor parking as the Site is within the Principal Public Transport Network.

Whilst the use of land for the community facility does not fit cleanly within an existing land use, it is being treated as a 'place of assembly'.

Table 2: Statutory Car Parking Requirements (Clause 52.06)

Use	No / Size	Statutory Requirement	No of Spaces Required
Residential Apartments	21	1 car space to each 1-bed dwelling for tenants	21 spaces
	67	1 car space to each 2-bed dwelling for tenants	67 spaces
	35	2 car spaces to each 3-bed dwelling for tenants	70 spaces
	Total		***158 spaces***
Office	287 m^2	3.0 spaces to each 100 square metres	8 spaces
Place of Assembly	122 m^2 (12 Patrons)	0.3 spaces to each patron permitted	3 spaces
Total			**169 spaces**

Figure 13 - Excerpt from Traffic Engineering Assessment

This application seeks to provide a total of 167 car parking spaces for the building's residents, exceeding the statutory requirement of 158 spaces by 9 spaces.

The application provides one car parking space for the office use and one car parking space for the community facility (place of assembly). Therefore, a statutory reduction of 9 spaces is sought.

3.10.2 Bicycle Parking

The proposal provides for a total of 158 bicycle spaces comprising:

- 124 residential spaces
- 6 commercial staff spaces
- 28 visitor spaces

The proposal generates a statutory demand for 25 resident spaces and 12 visitor spaces based on 120 apartments.

As there is less-than 1,000sqm of office floor area there is no statutory demand for office bicycle parking.

The use of land for a 'place of assembly' generates a statutory requirement for 2 spaces, which is easily accommodated within the available visitor parking on site.

Accordingly, the proposal satisfies the statutory demand for bicycle spaces and provides more-than one space per dwelling.

3.10.3 Access

Primary pedestrian access is proposed from Victoria Street via a dedicated pedestrian entrance to the lobby. Primary resident and employee cyclist access to the Site is proposed via the pedestrian link (bicycle ramp) to the on-site bike parking in the lower ground area. This access links into the public pedestrian through-link to the Yarra River which provides secondary access via the Capital City Trail.

Primary visitor bicycle parking is proposed via the dedicated paved Victoria Street bicycle parking area located on the west of the site.

The commercial tenancy will have direct access from Victoria Street.

The proposal utilises a crossover to Victoria Street to provide access to the Basement and Lower Ground carparks via a two-way vehicle ramp.

3.11 Environmentally Sustainable Design

A holistic and transparent approach to ESD performance has been adopted for the proposal, with a focus on indoor environment quality, energy efficiency, water efficiencies and stormwater management.

The Sustainable Management Plan prepared by GIW Environmental Solutions (dated October 2024) provides full detail of the sustainability measures integrated into the design and construction of the proposed development, including a BESS score of 71% and a STORM calculation of 101 %.

The following ESD initiatives are also implemented through the development:

- 50% (62 out of 123) of the development's apartments are naturally cross-ventilated.
- Daylight modelling has been conducted for a representative sample of apartments. The summary result is as follows:
    - 81% of living floor area achieves >90% above DF 1
    - 84% of bedroom floor area achieves >90% above DF0.5
- The non-residential areas are targeting a 2% DF to 60% of the nominated area.
- The development is provided with a comprehensive shading strategy.
- The development is to achieve a 7.5 Star average NatHERS Energy Rating result.
- The non-residential areas aim to reduce heating and cooling energy consumption 5% below the reference case (BCA Section J 2019).
- The development is to utilise an electric heat pump hot water system with a minimum COP of 2.5.
- A 30kW Solar PV system is to be located on the roof of the proposed development.
- Individual cold and hot water, electricity meters will be provided to the apartments and communal areas.
- Water efficient fittings and fixtures are applied throughout.
- A 20,000-litre rainwater tank will harvest rainwater from all roof areas. The tank will be connected to all ground to level 2 toilets and landscape irrigation.
- Landscape irrigation demand will be connected to the rainwater tank only.
- In total 124 bicycle spaces are to be provided for residents.
- In total 25 bicycle spaces are to be provided for residential visitors.
- In total 6 bicycle spaces are to be provided for employees & 3 bicycle spaces are to be provided for non-residential visitors.
- All balconies or private open space have been provided with a tap and floor waste allowing residents to cultivate their own gardens.
- 278m2 of communal space will be provided at lower ground.

Please refer to the attached Sustainability Management Plan for full details on ESD measures implemented into the development.

3.12 Waste Collection

The proposed land uses have been assessed against the waste generation rates specified under the Sustainability Victoria guidelines.

Residential use will have access to four waste streams and office use three streams with all collections managed privately. Residential and commercial waste areas are separated and provided at lower ground level.

Please see the below table which provides further detail:

Table 3: Waste Bins and Collection Frequencies

Waste Source	Waste Stream	Waste Volume (L/week)	Bin Capacity	No. of Bins Required	Collection Frequency (per week)
Residential Component	Garbage	8,304L	1,100L	3	3
	Recycling	8,943L	1,100L	5	2
	FOGO	4,471L	240L	7	3
	Glass	3,833L	240L	8	2
Office	Garbage	144L	360L	1	1
	Recycling	72L	240L	1	1
	Paper & cardboard	72L	240L	1	1
Community facility	Garbage	60L	240L	1	On Demand
	Recycling	85L	240L	1	On Demand
	FOGO	26L	240L	1	On Demand

Figure 14 - Excerpt from Waste Management Plan (Traffix Group)

Please refer to the accompanying Waste Management Plan prepared by Traffix Group for further details.

3.13 Vegetation Retention and Removal

The proposal seeks the removal of vegetation, with the strategy for retention and removal informed by arboricultural advice on the species, health and condition of each tree. Emphasis has also been placed on the retention of existing canopy trees toward the river corridor interface where feasible.

Low value vegetation is proposed to be removed and replaced with enhanced landscape zones, as documented in the submitted landscape plan.

The Tree Management Plan located at Drawing No. SD01_04 in the Architectural Plans identifies the retention and removal strategy for all trees on Site. In summary:

- Seven (7) trees are to be removed, with a permit required under SLO1 for removal (T1, T8, T9, T12, T17, T21, T22).
- Ten (10) trees are to be removed, with no permit required for removal (T2, T4, T5, T7, T10, T11, T13, T14, T15, T16).
- Eight (8) trees are to be retained, including trees on adjoining land (T3, T6, T18, T19, T20, T23, T24, T25).

The accompanying Tree Assessment prepared by Joe Kellett Arboriculture outlines the existing condition of all trees and outlines appropriate replacement trees.

An assessment against the relevant decisions guidelines of SLO1 is provided in Chapter 5.

4 Planning Provisions

This section identifies the relevant sections of the Municipal Planning Strategy (MPS), Planning Policy Framework (PPF), the zone, overlays and particular provisions of the Scheme as applicable to the proposed development.

4.1 Municipal Planning Strategy

4.1.1 Clause 02.02 – Vision

The Yarra 2036 Community Vision statement is:

> *Yarra is a vibrant safe and inclusive environment. We celebrate and embrace our diversity and connection to each other and the land. Our community is empowered to work together and support one another with respect and trust.*

The *Yarra Planning Scheme* forms the spatial response to the council's vision.

The spatial vision for the municipality is:

> *Yarra will be one of Melbourne's most attractive inner-city municipalities, with a strong sense of history, a diverse population and a dynamic economy. The city's prominent retail strips will attract visitors from across Melbourne and beyond, who are drawn to a vibrant range of shops, artistic and cultural offers and a popular night-time economy. The local economy will include important health and education precincts, businesses seeking to locate in popular activity centres and employment precincts, and a growing number of creative industries and niche manufacturers. Yarra's historic neighbourhoods and heritage assets will be conserved, with development revitalising areas with capacity for change. New housing will provide homes in a range of sizes to meet the needs of the population, and be supported by the necessary community facilities and infrastructure. High quality urban design will respect the city's heritage and built form character, provide new public and open spaces, and improved connections for walking and cycling. Landscape and natural assets will be well managed, with enhanced connections to the waterway corridors and their surrounding parks and recreation areas. Through environmentally sustainable development the municipality will reduce its carbon footprint and become resilient to climate change. Yarra will be a city proud of its history and prepared for the future.*

4.1.2 Clause 02.03 – Strategic Directions

The following strategic directions are relevant to the proposal:

- Clause 02.03-1 (Settlement)
- Clause 02.03-2 (Environmental and landscape values)
- Clause 02.03-3 (Environmental risks and amenity)
- Clause 02.03-4 (Built environment and heritage
- Clause 02.03-5 (Housing)
- Clause 02.03-7 (Transport)
- Clause 02.03-8 (Infrastructure)

4.1.3 Clause 02.04 – Strategic Framework Plan

The Strategic Framework Plan identifies the Site as being within a Major Activity Centre.

4.2 Planning Policy Framework

The provisions of the PPF that are most relevant to this proposal have been summarised below.

4.2.1 Clause 11 – Settlement

This clause recognises, inter alia, that *"planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure"*.

The Clause outlines a number of policies related to this clause, including:

- Clause 11.03-1L (Activity Centres) which seeks to *"manage a sustainable network of activity centres that facilitate appropriate economic and housing growth and provide attractive places for social and community interaction"*.

  'Victoria Street, Abbotsford / Richmond' is listed as a major activity centre, and the Site is identified as being within this. The following strategies are outlined specific to this major activity centre [underline added for emphasis] (inter alia):

  - Capitalise on future opportunities such as provision of open space and links to the Yarra River, provided by commercial and industrial areas in Abbotsford, including the Carlton and United Brewery site.
  - Reinforce the concentration of height, density and mixed uses east of Burnley Street, to provide a visual mark to the east end of Victoria Street.
  - Allow for mid-rise development elsewhere in the activity centre that responds to the mix of heritage forms.
  - Protect primary views to the Skipping Girl sign as defined in clause 15.01-2L-01 (Landmarks).
- Clause 11.03-6L (Victoria Street East Precinct) which seeks [underline added for emphasis]:
  - To capitalise on the northerly aspect of the Yarra River environs, while protecting and maintaining the environmental qualities and recreational use of the river corridor.
  - To provide for adequate access to, from and within redevelopment sites that contributes to an integrated pedestrian and cycling network within the precinct.
  - To ensure priority is given to tram services in Victoria Street.
  - To facilitate the development of the Victoria Street East Precinct with a high density mix of land uses.
  - To maximise opportunities for new development on former industrial sites and other disused sites, while protecting the amenity of the surrounding area and enhancing the landscape character of the Yarra River corridor.
  - To create new local employment opportunities and protect existing ones, especially in the nearby CUB precinct.
  - To encourage high quality urban design and architecture throughout the precinct that contributes to the public realm, including the Yarra River environs and streetscapes.
  - To facilitate an integrated network of pedestrian and cycling access within the precinct.

  The Victoria Street East Precinct Framework Plan also designates the Site for 'links to river corridor'.

4.2.2 Clause 12 – Environmental and Landscape Values

This clause recognises, inter alia, that *"planning should protect, restore and enhance sites and features of nature conservation, biodiversity, geological or landscape value"*.

The Clause outlines a number of related policies, including:

- Clause 12.01-1L (Biodiversity) which seeks to *"protect and enhance the natural environment and seek to increase the quality and quantity of the city's biodiversity"*.
- Clause 12.03-1L (Yarra River, Darebin and Merri Creek corridors) which seeks to *"recognise the strategic importance of the Yarra River and Darebin and Merri Creek corridors as multi-functional open spaces and protecting and enhancing their environments"*.

4.2.3 Clause 13 – Environmental Risks and Amenity

This clause recognises, inter alia, that "*planning should strengthen the resilience and safety of communities by adopting a best practice environmental management and risk management approach*".

This clause outlines the following relevant policy:

- Clause 13.07-1L-01 (Interfaces and amenity) which seeks to:
  - To protect the operation of business and industrial activities from new residential use and development.
  - To provide a reasonable level of amenity to new residential development within or adjacent to land in commercial and industrial zones.
  - To support the growth and operation of surrounding non-residential development and uses.

  It outlines a number of relevant strategies including:
  - Ensure new residential use and development includes design measures to minimise the impact of the normal operation of existing commercial and industrial operations on the amenity of the dwelling, such as:
    - Locating noise-sensitive rooms (in particular, bedrooms) and private open space away from existing and potential noise sources, and where appropriate, incorporate other measures such as acoustic fencing, landscaping, acoustic glazing to balconies and windows and building setbacks.
    - Providing for air ventilation that avoids compromising acoustic amenity when windows are closed.
  - Incorporate measures to protect residents from unreasonable fumes or air emissions, light spillage, vibration and other likely disturbances from nearby business or industrial operations, including through appropriate orientation of windows, habitable rooms, balconies and ventilation systems.
  - Minimise the potential for overlooking from existing business or industrial premises into habitable room windows and private open space areas, through appropriate siting, setbacks, articulation, screening and landscaping.

4.2.4 Clause 15 – Built Environment and Heritage

Aims to "*ensure all new land use and development appropriately responds to its landscape, valued built form and cultural context.*" The Clause outlines a number of policies related to this clause, including:

- Clause 15.01-1L (Urban Design) which outlines a number of strategies, the most relevant being:
  - Support development that creates new public spaces to serve the needs of residents, workers, traders and visitors.
  - Minimise the potential for development, particularly taller buildings, to create adverse wind conditions in the public realm at street level through building siting and design.
  - Support development that provides weather protection of the public realm (including footpaths and plazas).
  - Ensure development provides a transition from any adjoining building with an individually significant or contributory heritage grading, having regard to height, street wall height, setbacks, building form and siting.
- Clause 15.01-2L (Building design) which outlines a number of strategies, with the most relevant being:
  - Building form
  - Building heights
  - Building setbacks
  - Internal amenity
  - Impact of development on adjoining properties
  - Landscaping
  - Pedestrian access
  - Frontages
- Clause 15.01-2L-01 (Environmentally sustainable development) which seeks to "*achieve best practice in environmentally sustainable development from the design stage through to construction and operation*".
- Clause 15.01-2L-02 (Landmarks) which seeks to "*maintain the visual prominence of and protect primary views to Yarra's valued landmarks*".

- Clause 15.03-2S (Aboriginal cultural heritage) aims to *"ensure the protection and conservation of places of Aboriginal cultural heritage significance"*.

4.2.5 Clause 16 – Housing

Provides that *"planning should provide for housing diversity, and ensure the efficient provision of supporting infrastructure"* and *"ensure the long term sustainability of new housing, including access to services, walkability to activity centres, public transport, schools and open space"*.

The Clause outlines a number of policies related to this clause, including:

- Clause 16.01-1S (Housing supply) aims to *"facilitate well-located, integrated and diverse housing that meets community needs"*.
- Clause 16.01-1R (Housing supply – Metropolitan Melbourne) aims to *"manage the supply of new housing to meet population growth and create a sustainable city by developing housing and mixed use development opportunities in locations that are... major activity centres"*.
- Clause 16.01-1L (Location of residential development) which seeks:
    - To encourage new housing development to locations in a major or neighbourhood activity centre or major regeneration area as shown in clause 02.04 (Strategic Framework Plan).
    - To maintain the character and scale of established residential areas.

  The 'Strategic housing framework plan – Abbotsford' identifies the Site as being within a 'high change area'.
- Clause 16.01-1L-01 (Housing diversity) seeks to support well designed apartment development in high and moderate change areas.
- Clause 16.01-2S (Housing affordability) which seeks to "*deliver more affordable housing closer to jobs, transport and services*".
- Clause 16.01-2L (Housing affordability) which seeks to "*facilitate the provision of affordable housing and social housing (public and affordable community housing), including new social housing and upgrades to existing social housing*".

4.2.6 Clause 17 – Economic Development

Identifies that *"planning is to provide for a strong and innovative economy, where all sectors are critical to economic prosperity"*.

The Clause outlines a number of policies related to this clause, including:

- Clause 17.02-1S (Business) which aims to "*encourage development that meets the community's needs for retail, entertainment, office and other commercial services*".

4.2.7 Clause 18 – Transport

Provides that planning *"should ensure a safe, integrated and sustainable transport system that...provides access to social and economic opportunities to support individual and community wellbeing"*.

The Clause outlines a number of policies related to this clause, including:

- Clause 18.01-3L (Sustainable transport) which seeks to "*support a sustainable transport system that reduces the impact of private motor vehicle traffic and on-street parking*".
- Clause 18.02-1L (Walking) which seeks to "*improve the walking network and create high-quality pedestrian environments*".
- Clause 18.02-2L (Cycling) which seeks to "*improve cycling infrastructure and encourage cycling as an alternative mode of transport for people of all ages and abilities*".
- Clause 18.02-4L-01 (Car parking) which seeks to "*ensure car parking is supplied and managed consistent with promoting travel by sustainable modes*".

4.3 Zoning

The Site is located within the Commercial 1 Zone (C1Z).

The purpose of the C1Z is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To create vibrant mixed use commercial centres for retail, office, business, entertainment and community uses.*
- *To provide for residential uses at densities complementary to the role and scale of the commercial centre.*

The provisions of the C1Z most relevant to the proposal are:

- Clause 34.01-1 (Table of uses)
  - The use of land for Office is Section 1 – permit not required.
  - Use of land for dwellings (Accommodation) is Section 1 – Permit not required, provided that the proposal meets the condition that any frontage at ground level associated with the use of land for accommodation does not exceed 2 metres. Given that the proposal includes a frontage greater than 2 metres associated with the residential component of the building, **a permit is required**.
  - The use of land for the proposed community facility is an innominate use, and as such is considered a 'Section 2' use. As such, **a permit is required** for the community facility.
- Clause 34.01-4 (Buildings and works)
  - **A permit is required** to construct a building or construct or carry out works.

Zoning of Parcel 63B\PP2796

The construction of the pedestrian link path is proposed on this parcel, which is located within the Public Park and Recreation Zone (PPRZ).

The purpose of the PPRZ is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To recognise areas for public recreation and open space.*
- *To protect and conserve areas of significance where appropriate.*
- *To provide for commercial uses where appropriate.*

A permit is required to construct a building or construct or carry our works, however this does not apply to pathways and trails, and as such a planning permit is not required for buildings and works under the PPRZ.

Refer to **Figure 7 – Zone Plan**.

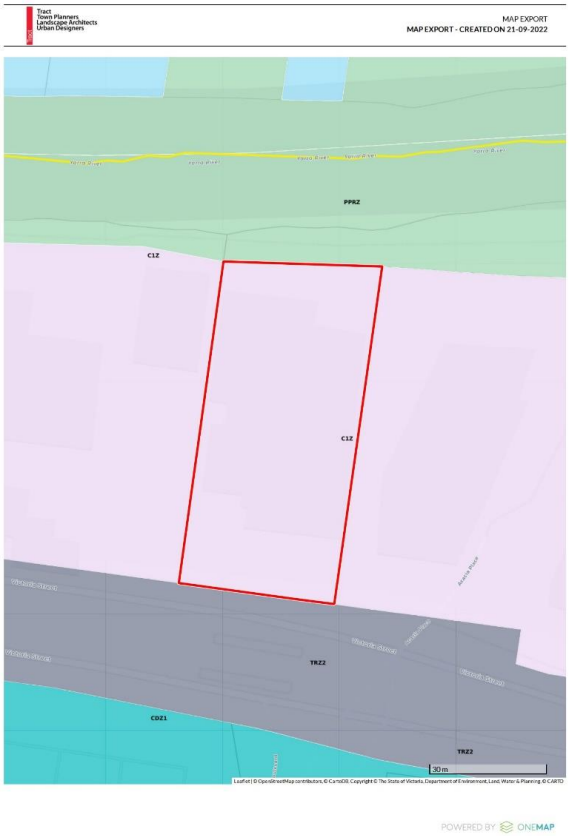

Figure 15 - Zone Plan

4.4 Overlays

The Site is affected by the following overlays.

4.4.1 Significant Landscape Overlay (SLO) – Schedule 1 (SLO1)

The purpose of the SLO is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To identify significant landscapes.*
- *To conserve and enhance the character of significant landscapes.*

Pursuant to Clause 42.03-2, a permit is required to construct a building or construct or carry out works and for the removal of vegetation.

SLO1 refers to 'Yarra (Birrarung) River Corridor Environs".

The landscape character objectives to be achieved are:

- *To retain vegetation that contributes to landscape character, heritage values or neighbourhood character.*
- *To maintain and protect linear public open space and provide for secluded areas of public open space with access to the river where appropriate.*
- *To encourage the co-location or clustering of buildings, jetties and mooring facilities on public land.*

- *To encourage bicycle and shared paths that are safe, well located and require minimal earthworks and vegetation removal.*
- *To ensure fencing within close proximity to the Yarra River is low in scale, visually permeable and does not contrast with the natural landscape character.*

4.4.2 Design and Development Overlay (DDO) – Schedule 1 (DDO1) and Schedule 2 (DDO2)

The purpose of the DDO is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To identify areas which are affected by specific requirements relating to the design and built form of new development.*

Pursuant to Clause 43.02-2, a permit is required to construct a building or construct or carry out works.

Schedule 1 (DDO1)

DDO1 relates to 'Yarra (Birrarung) River Corridor'.

The design objectives are:

- *To ensure new buildings, tennis courts, swimming pools and other structures are appropriately set back from the banks of the Yarra River and adjacent public open space.*
- *To ensure buildings are presented at a variety of heights, avoid visual bulk, are stepped back from the frontage of the Yarra River and adjacent public open space and use colours and finishes which do not contrast with the natural landscape setting.*
- *To avoid additional light spill and overshadowing from buildings on the banks and water of the Yarra River, its adjacent public open space, pedestrian and bicycle paths.*
- *To ensure sufficient space is provided between buildings to maintain views to the Yarra River and allow for the planting and growth of vegetation, including large canopy trees.*
- *To minimise impervious surfaces to allow for the filtration of water and retention and establishment of vegetation and canopy trees.*

The Site falls within Area G, for which the following built form requirements are stipulated:

Setbacks

- New buildings (including basements and projections) must be set back 25 metres from the Setback Reference Line.

Building height

- New buildings must not exceed the mandatory maximum building heights within the following setback zones:
  - 0m to 10m from setback line – 11 metres
  - 10m to 25m from setback line – 18 metres (19 metres when considering the slope of the land)
- Buildings should not exceed the discretionary maximum building height of 19 metres further than 25m from the setback line.

Materiality

- Building materials should utilise non-reflective colours and finishes that blend with the natural landscape.

Schedule 2 (DDO2)

DDO2 relates to 'Main Roads and Boulevards'.

The design objectives include:

- *To recognise the importance of main roads to the image of the City.*
- *To retain existing streetscapes and places of cultural heritage significance and encourage retention of historic buildings and features which contribute to their identity.*
- *To reinforce and enhance the distinctive heritage qualities of main roads and boulevards.*

- *To recognise and reinforce the pattern of development and the character of the street, including traditional lot width, in building design.*
- *To encourage high quality contemporary architecture.*
- *To encourage urban design that provides for a high level of community safety and comfort.*
- *To limit visual clutter.*
- *To maintain and where needed, create, a high level of amenity to adjacent residential uses through the design, height and form of proposed development.*

4.4.3 Land Subject to Inundation Overlay (LSIO)

The northern portion of the land is within the LSIO.

The purpose of the LSIO is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To identify flood prone land in a riverine or coastal area affected by the 1 in 100 (1 per cent Annual Exceedance Probability) year flood or any other area determined by the floodplain management authority.*
- *To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, responds to the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.*
- *To minimise the potential flood risk to life, health and safety associated with development.*
- *To reflect a declaration under Division 4 of Part 10 of the Water Act, 1989.*
- *To protect water quality and waterways as natural resources by managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater.*
- *To ensure that development maintains or improves river, marine, coastal and wetland health, waterway protection and floodplain health.*

Pursuant to Clause 44.04-2, a permit is required to construct a building or construct or carry out works.

An application must be referred to the relevant floodplain management authority under Section 55 of the Act unless in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and the floodplain management authority.

It is acknowledged that ongoing engagement has occurred with Melbourne Water as a part of the previous planning permit application, and their feedback has been incorporated into the current iteration of this application.

Refer to Figure 16 – Overlay Plan – LSIO.



Figure 16 - Overlay Plan (LSIO)

4.4.4 Development Contributions Plan Overlay – Schedule 1 (DCPO1)

The Site is affected by the Development Contributions Plan Overlay (DCPO) – Schedule 1 (DCPO1).

The purpose of the DCPO is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To identify areas which require the preparation of a development contributions plan for the purpose of levying contributions for the provision of works, services and facilities before development can commence.*

The DCPO1 is titled 'Yarra Development Contributions Plan' and a contribution is required for new residential and commercial land uses.

4.5 Particular Provisions

4.5.1 Clause 52.06 – Car Parking

The purpose of Clause 52.06 is:

- *To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.*

- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not adversely affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

The provisions of Clause 52.06 most relevant to the proposal are:

- Clause 52.06-3 (Permit requirement)
  - A permit is required to reduce the number of car parking spaces required under Clause 52.06-5.
- Clause 52.06-5 (Number of car parking spaces required under Table 1)
  - Given that the Site falls within the Principal Public Transport Network (PPTN) area, the proposal enjoys a reduced statutory car parking requirement and is not required to provide visitor car parking. Pursuant to Table 1, the following land uses generate the following rates:

Use	Rate	Measure
Dwelling	1	To each one or two bedroom dwelling
	2	To each three or more bedroom dwelling (with studies or studios that are separate rooms counted as a bedrooms)
	0	For visitors
Office	3	To each 100sqm of net floor area
Place of Assembly	0.3	To each patron permitted

  - As such, the development generates the following car parking requirements:

Use	Amount or number of units	Car parking requirement
Dwelling (one bedroom)	21	21
Dwelling (two bedroom)	67	67
Dwelling (three bedroom)	35	70
Office	287sqm	8
Place of Assembly	12 patrons	3
TOTAL		169

  - The proposal provides 167 car parking spaces for residents of the building, thus exceeding the residential requirement. The proposal provides one car parking space for the commercial use and one car parking space for the community facility (place of assembly), and therefore a waiver of 9 spaces is required for the commercial and community uses.

4.5.2 Clause 52.29 – Land Adjacent to the Principal Road Network

The purpose of Clause 52.29 is:

- *To ensure appropriate access to the Principal Road Network or land planned to form part of the Principal Road Network.*
- *To ensure appropriate subdivision of land adjacent to Principal Road Network or land planned to form part of the Principal Road Network.*

The provisions of Clause 52.29 most relevant to the proposal are:

- Clause 52.29-2 (Permit requirement)
  - A permit is required to create or alter access to a road in a Transport Zone 2.
  - Victoria Street is in a Transport Zone 2, and the proposal alters access to Victoria Street. As such, a permit is required.

4.5.3 Clause 52.34 – Bicycle Facilities

The purpose of Clause 52.34 is:

- *To encourage cycling as a mode of transport.*
- *To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.*

The provisions of Clause 52.34 most relevant to the proposal are:

- Clause 52.34-1 (Provision of bicycle facilities)
  - A new use must not commence or the floor area of an existing use must not be increased until the required bicycle facilities and associated signage has been provided on the land.
- Clause 52.34-5 (Required bicycle facilities)
  - Table 1 to Clause 52.34-5 specifies the required number of bicycle spaces.
  - Use of land for Dwellings generates the following rate:
    - In developments of four or more storeys, 1 bicycle space to each 5 dwellings for residents.
    - In developments of four or more storeys, 1 bicycle space to each 10 dwellings for visitors.

    As such, the residential component generates a bicycle parking requirement of 37 spaces, being 25 for residents and 12 for visitors.
  - Use of land for an Office premises generates the following rate:
    - 1 to each 300 sqm of leasable floor area for employees if the net floor area exceeds 1000sqm
    - 1 to each 1000 sqm of leasable floor area for visitors if the net floor area exceeds 1000sqm

    Given that the Office component is smaller than 1000sqm, no statutory bicycle parking requirement is generated.
  - Use of land for a Place of assembly generates the following rate:
    - 1 to each 1500 sq m of net floor area for employees
    - 2 plus 1 to each 1500 sq m of net floor area for visitors

    Given that the Place of assembly component is smaller than 1500sqm, a statutory bicycle parking rate of 2 spaces is generated.
  - Therefore, it is understood that a statutory requirement for a total of 39 bicycle spaces is generated under Clause 52.34-5. The development provides 158 bicycle spaces, and as such no dispensation is sought.

For further details with respect to bicycle facilities please refer to the attached Traffic Impact Assessment prepared by Traffix Group.

4.5.4 Clause 53.18 – Stormwater Management in Urban Development

The purpose of Clause 53.18 is:

- *To ensure that stormwater in urban development, including retention and reuse, is managed to mitigate the impacts of stormwater on the environment, property and public safety, and to provide cooling, local habitat and amenity benefits.*

The provisions of Clause 53.18 most relevant to the proposal are:

- Clause 53.18-3 (Requirements)
  - An application to construct a building or construct or carry out works:
    - Must meet all of the objectives of Clauses 53.18-5 and 53.18-6.
    - Should meet all of the standards of Clauses 53.18-5 and 53.18-6.
  - An application must be accompanied by details of the proposed stormwater management system, including drainage works and retention, detention and discharges of stormwater to the drainage system.
- Clause 53.18-5 (Stormwater management objectives for buildings and works)
  - This clause outlines a number of objectives, as well as the details of Standard W2.
- Clause 53.18-6 (Site management objectives)
  - This clause outlines a number of objectives, as well as the details of Standard W3.

Please refer to the attached Sustainability Management Plan prepared by GIW.

4.5.5 Clause 53.23 – Significant Residential Development with Affordable Housing

The purpose of Clause 53.23 is:

- *To facilitate residential development that includes affordable housing to meet existing and future needs.*
- *To facilitate the redevelopment and renewal of public housing stock to meet existing and future needs.*
- *To facilitate residential development carried out by the State of Victoria or jointly or in partnership with the private sector, including via innovative funding, investment and partnership approaches.*
- *To facilitate residential development with high quality urban design, architecture and landscape architecture.*
- *To provide opportunities for non-residential use and development in association with residential development.*

This application will be formally lodged through the Clause 53.23 (Category 1) pathway, noting the project meets the following requirements:

- The estimated cost of the development greatly exceeds the $50 million threshold.
- An affordable housing cash contribution of 3% of the residential development cost will be provided.
- Written advice from the Chief Executive Officer, Invest Victoria confirming the likely financial feasibility of the proposal will likely be obtained (based on advice from the DFP team).

4.5.6 Clause 58 – Apartment Developments

The purpose of Clause 58 is:

- *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
- *To encourage apartment development that provides reasonable standards of amenity for existing and new residents.*
- *To encourage apartment development that is responsive to the site and the surrounding area.*

Subject to this clause, a proposal for an apartment development in the Commercial 1 Zone must meet all the objectives of this clause and should meet all the standards.

An assessment of the proposal against Clause 58 Objectives and Standards is included as part of the application material.

4.6 Other Considerations

4.6.1 Plan for Victoria

Plan for Victoria (PfV) was released in the first week of March and is now the guiding strategy for the development of housing, transport infrastructure and employment land for both Melbourne and the regions (replacing Plan Melbourne: 2017 – 2050).

Built on five key pillars, PfV ties together many of the Government's recently announced planning initiatives, including the Activity Centre Program and Local Government Housing Targets, into an overarching strategic framework and action plan.

The five key pillars outlined within PfV are:

Pillar 1: Housing for all Victorians

Pillar 2: Accessible Jobs and Services

Pillar 3: Great Places, Suburbs and Towns

Pillar 4: Sustainable Environments

Pillar 5: Self Determination and caring for Country

Each of these pillars are supported by a series of actions, which detail short term milestones, expected outcomes, delivery responsibility and implementation measures.

Pillar 1 seeks to provide all Victorians with a choice of a well-designed home at an affordable price and close to daily needs. In particular, the Activity Centre Program identifies 60 locations for activity centres, which have been prioritised based on their ability to accommodate additional housing, taking into consideration market readiness, transport capacity, access to jobs and services, and environmental constraints. Importantly, the City of Yarra is identified as one of these activity centres.

4.6.2 Victoria's Housing Statement 2024-2034

In September 2023, the Victorian State Government released *Victoria's Housing Statement: The Decade Ahead: 2024-2034* ('Housing Statement') which sets a target to build 800,000 homes in Victoria over the next decade through a suite of initiatives including:

- Amendments to the planning scheme in favour of residential development and affordable housing provision.
- Expansion of the Development Facilitation Program to assist with fast-tracking decision making through State Government.
- Introduction of new planning controls to deliver an additional 60,000 new homes around 10 key activity centres across Melbourne.
- Integration of housing delivery together with improvements to the public transport network.
- Incentivising the delivery of additional social and affordable homes across metropolitan and regional Victoria.
- Preparation of a new plan for Victoria which will act as a long-term housing plan, with updates to Plan Melbourne – the Victorian Government's current metropolitan planning strategy spanning 2017-2050 – and expansion of the plan to cover the whole state.

The planning pathway available at Clause 53.23 being utilised by this application is a direct result of the release of the Housing Statement.

4.6.3 Aboriginal Cultural Heritage

The Site is located within 200 metres of the Yarra River (Birrarung) and therefore falls within an area identified as having the potential for Aboriginal cultural heritage.

A detailed assessment has been prepared by Dr. Tim Stone to determine whether significant ground disturbance has occurred in the Site's history that may inform whether a Cultural Heritage Management Plan is required.

The results of the assessment confirm that significant ground disturbance has occurred across 100% of the Site area over more than 167 years of occupation for industrial, commercial and residential activity.

Accordingly, it is the finding of the assessment that a Cultural Heritage Management Plan is not required under Section 46 of the *Aboriginal Heritage Act 2006*.

Please refer to the accompanying report for further detail.

5 Planning Assessment

This chapter provides an assessment of the planning permit application against the relevant considerations of the *Yarra Planning Scheme*, as well as identifying and assessing the proposal against a number of key considerations guided by the objectives and strategies contained within the planning policy framework.

As the *Yarra Planning Scheme* applies layered policy and provisions relating to the Yarra River Corridor environs a consolidated assessment against these design and decision guidelines in provided in Chapter 5.1.

The following considerations are also relevant to the assessment of this application and are addressed from Chapter 5.2 through 5.9:

- *Is the proposal consistent with the purposes and policy of the Commercial 1 Zone?*
- *Is the proposal consistent with the policy of Significant Landscape Overlay – Schedule 1?*
- *Is the proposal consistent with the policy of Design and Development Overlay – Schedule 1?*
- *Is the proposal consistent with the policy of Design and Development Overlay – Schedule 2?*
- *Does the proposal provide a satisfactory transport response?*
- *Does the planning permit application create any unreasonable amenity impacts?*
- *Does the proposal provide for an adequate level of on-site amenity for future occupants?*
- *Does the proposal respond to the relevant feedback received during the previous planning permit application?*

5.1 Response to the Yarra River (Birrarung) Corridor

The Site's interface with the Yarra River Corridor requires a layered planning assessment that addresses the various natural and cultural values of this context.

Throughout the *Yarra Planning Scheme*, reference is made to the significance of the Yarra River Corridor, with common themes including:

- Enhancing the public realm of the river corridor by improving accessibility and amenity of the space.
- Protecting the ecological values and landscape character of the river corridor.
- Maintaining the aesthetic and scenic qualities of the river corridor.
- Protecting the river from stormwater impacts.

To assist DTP in its assessment of this application a consolidated assessment is provided against each of themes, including a visual impact assessment as sought by SLO1 and DDO1.

5.1.1 Enhancing the public realm of the river corridor by improving accessibility and amenity of the space.

The development improves passive surveillance to the Yarra River corridor more directly by facing habitable room windows and private open spaces of upper floor dwellings north. Further, the provision of communal indoor and outdoor open spaces at ground floor provides both passive surveillance and direct interaction with the river corridor.

A central component of the development is its provision of a pedestrian link between Victoria Street and the Yarra River corridor. This publicly accessible link provides a visual connection with the Yarra River from Victoria Street and allows convenient and safe access for pedestrians travelling between Victoria Street and the River. Passive surveillance is provided via habitable room windows, and the aesthetic experience is enhanced through rich brick detail and thoughtful landscaping.

This represents a vast improvement from the current river interface on the Site, which includes at-grade car parking. The proposed scheme aims to provide connection between residents and the river, and allows the public utilising the river corridor to experience the activity of the carefully landscaped building interface.

The interface improves safety and comfort of the pedestrian and cycling experience along the river, by providing activation which is respectful and informed by its unique surrounds.

Speaking directly to the various policies and objectives within the *Yarra Planning Scheme*, the development:

- Enhances the recreation value of this portion of the river corridor.
- Ensures linkages and public access to the river and its parklands are enhanced and with a highly appropriate new link created.
- Avoids overshadowing of the river, its banks and adjacent public open space to ensure that the amenity of the public realm is maintained year-round. This is demonstrated via the submitted shadow diagrams to the extent required by DDO1 and SLO1.
- Applies an upper-level setback arrangement that is consistent with DDO1 and results in a recessive built form that is deeply set back from the river frontage, maintaining the amenity of the river.
- Creates strong public links to the Yarra River and improves the accessibility and amenity of the river corridor as a significant public open space.
- Improves natural surveillance, general safety and public accessibility of public space within the river corridor while maintaining the environmental qualities or the corridor.

5.1.2 Protecting the ecological values and landscape character of the river corridor.

The valuable flora, fauna, geological and geomorphological assets of the Yarra River are acknowledged and celebrated through the proposed development.

In particular, it is acknowledged that:

> *"This segment of the Yarra River flows through the traditional land of the Wurundjeri Woi Wurrung people. The waterway, its natural landscape and key features have social, cultural and spiritual significance, with areas such as the river flats and billabongs being important gathering spots."*

The massing of the building is consistent with the setbacks required by DDO1, which provides a significant distance between the building and the river. The considered and refined articulation and carving of the massing has further reduced any built form impact on the river. In particular, the recession of the top levels allow the building to fade in prominence as it rises, which further allows a reduction in the perceived built form massing.

Importantly, the setbacks are respectful of the river environs and its rich landscape assets, which is further strengthened by the submitted landscape concept which maintains areas of deep soil and established canopy trees whilst supplementing the native landscape along the Capital City Trail. The landscape design incorporates indigenous plant species to support the valuable ecosystem of the river corridor.

Landscaping across this interface helps to blend and incorporate the building into the environs in a respectful and informed manner.

Speaking directly to the various policies and objectives within the *Yarra Planning Scheme*, the proposed landscaping:

- Protects the river's riparian vegetation, natural riverbank topography and flood management capacity.
- Protects and enhances both terrestrial and aquatic habitats and their linkages along the river corridor.
- Retains a dominant and consistent tree canopy along the river corridor and in its broader landscape setting.
- Ensures that the appearance of development is subordinate to the local landscape setting, with any views of development being filtered through vegetation.

5.1.3 Maintaining the aesthetic and scenic qualities of the river corridor.

As discussed above, through the employment of appropriate setbacks and generous landscaping, the development demonstrates a deep respect for the significance of the river environs. Similarly, the setbacks and landscaping assist with the maintenance of the aesthetic and scenic qualities of the river corridor and establish that the building itself is subordinate to the prominent Yarra River corridor.

Further, the materials and colour palette selected assist in blending the development into the environs. Brick has been used as both a homage to the Abbotsford character, and as a way to texture the building. The sophisticated gradation of the bricks assists to draw down the focus of the building to its podium, weighting it to the banks of the river. The

extensive landscaping clings to the brick and helps to give the development a feeling of being "overgrown" by the river's vegetation.

Green tiling has also been included at ground floor to further blend the building into the environs and provide a high quality finish. Levels 10 and 11, which are significantly recessed, comprise mostly clear glazing glass, spandrel glazing glass and medium bronze powdercoat finish metal panels, which further allow the form to blend into the surroundings with neutrality.

The soft curvature of the building that includes gentle concave and convex formations is inspired by the sculpting of rocks by water flows. This level of crafting and detail ensures that the building presents an organic form consistent with the rounded and textured elements of the river environs.

Speaking directly to the various policies and objectives within the *Yarra Planning Scheme*, the proposed development:

- Retains a dominant and consistent tree canopy along the river corridor and in its broader landscape setting, including through the retention of deep soil and canopy trees within the river setback.
- Ensures that the appearance of development is subordinate to the local landscape setting, with any views of development being filtered through vegetation.
- Minimises the visual intrusion of development when viewed from major roads, bridge crossings, public open space, recreation trails and the river itself.
- Ensures that the siting and design of the building avoids conflicting with the local natural landscape and environmental character.
- Uses a combination of setbacks and vegetation screening to protect and enhance the landscape qualities of the corridor as a vegetation-dominated corridor, particularly in views from roads, paths and rail corridors and areas of public open space adjacent to the corridor or on the opposite bank.
- Adopts a muted and earthy material palette that lightens with graduating height and draws reference from the sedimentary stone of the river corridor.

5.1.4 Protecting the river from stormwater impacts.

The development incorporates a thoroughly considered Water Sensitive Urban Design (WSUD) strategy and STORM rating of 101%.

The provision of a 20,000 litre rainwater tank will help to capture rainwater and divert it into toilets and irrigation. A 25sqm raingarden is also proposed to capture rainwater collected from upper-level terraces.

The general landscaping and inclusion of permeable surfaces throughout the development help to minimise stormwater impacts to the river, in particular through the retention of large deep soil areas and established canopy tree cover toward the river interface, complemented by a well-considered landscape strategy.

Accordingly the proposal presents an improved outcome with respect to stormwater management than the existing site condition.

5.1.5 Visual Impact Assessment

In addition to the detailed design and landscape considerations outlined above, the decision guidelines of DDO1 and SLO1 require a visual impact assessment to demonstrate that the building height and setback arrangement maintains the scenic quality of the river corridor. This is particularly relevant as the proposal seeks to exceed the preferred building height of 19 metres.

The key considerations relevant to the visual impact assessment include:

- The impact of the proposed buildings and works from public viewing points within the Yarra River corridor, as determined by the Responsible Authority.
- Buildings and works must not cast an additional shadow across the Setback Reference Line (the closest parallel property boundary aligned to the banks of the river) between 11am and 2pm on 22 June.
- Whether any additional overshadowing of public open spaces can be avoided by redesigning or relocating a proposed building or part of it.
- Whether the location, bulk, outline and appearance of the building is in keeping with or enhances the natural landscape character an appearance of the Yarra River.

- The appropriateness of the proposed materials and finishes in reducing contrast.

The architectural plans demonstrate how the building would be visually perceived from key locations within the surrounding area, including the Capital City Trail, the Yarra River, Victoria Street and Walmer Bridge.

The comparison between the existing and proposed view from Walmer Bridge demonstrates that the development is almost totally obscured by canopy cover and sits comfortably within the high-density residential context of the Victoria Street east precinct due to its deeply recessed upper-level form and generous setbacks from the river, in alignment with DDO1.

The only views from the Capital City Trail will be those available immediately to the north of the Site, as there is no publicly accessible path along the northern edge of the river. As such, views of the building from the trail will be filtered through layered vegetation, and will be partially obscured due to the steep embankment at the northern edge of the Site.

The visual analysis also emphasises the investment made into landscape and material selection which helps to integrate the building with the Yarra River corridor, minimising contrast and allowing the building to blend with its surrounds.

The submitted shadow diagrams demonstrate that there is no additional shadow cast to the Yarra River corridor as a result of the proposal, noting that the development is located to the south of the river.

Accordingly, whilst the preferred maximum building height is proposed to be exceeded, the building has been designed in a manner which provides an appropriate visual outcome to the Yarra River corridor.

The visual analysis demonstrates a strong alignment with the objectives, strategies and decision guidelines of all relevant policy and provisions, including SLO1 and DDO1 with respect to the buildings height and setback arrangements.

Please refer to the submitted Architectural Plans prepared by SJB for further detail.

5.2 Is the proposal consistent with the purposes and policy of the Commercial 1 Zone?

The proposal is consistent with the purposes of the Commercial 1 Zone in the following ways:

- Its mixed-use function contributes to the commercial centre by providing a commercial offering at ground level facing the primary street, and a community facility fronting the Yarra River.
- It provides residential development at upper levels, which helps maintain the mixed-use function of the area. This directly supports the role and function of the Victoria Street East precinct, as well as the broader objectives of the planning policy framework.

Refer to the following table for an assessment against the decision guidelines of the Commercial 1 Zone:

Decision guidelines	Assessment
General	
The Municipal Planning Strategy and the Planning Policy Framework.	The proposal will provide a high-density mixed-use building to a major activity centre in a part of the activity centre where the planning policy framework contemplates the greatest level of growth. The proposal provides activation to Victoria Street through commercial uses at ground floor, direct access to the pedestrian lobby and through integrating the design of the vehicle entrance with the design of the building, appearing as a secondary element. The land use mix will generate employment opportunities to an activity centre while providing community benefits through the provision of a pedestrian link and community facility fronting the Yarra River.
The interface with adjoining zones, especially the relationship with residential areas.	The Site does not directly interface with a residential zone.
Use	

The effect that existing uses may have on the proposed use.	There are no surrounding uses that would have an unreasonable impact on the proposal.
The drainage of the land.	Please see the attached Sustainability Management Plan.
The availability of and connection to services.	The Site is located within an established urban area and as such services are widely available and already connected.
The effect of traffic to be generated on roads.	The Traffic Impact Assessment prepared by Traffix Group finds the traffic impacts of the proposal to be satisfactory. Please see the accompanying Traffic Impact Assessment for further detail.
The interim use of those parts of the land not required for the proposed use.	N/A
Building and works	
The movement of pedestrians and cyclists, and vehicles providing for supplies, waste removal, emergency services and public transport.	The proposal provides for a safe and clear access arrangement for pedestrians and vehicles. Refer to the submitted plans and Traffic Impact Assessment for further detail.
The provision of car parking.	The Traffic Impact Assessment (Traffix Group) finds there to be strategic support to support a reduction in car parking below the statutory requirement. Please see Chapter 5.6.1 for a detailed discussion on car parking.
The streetscape, including the conservation of buildings, the design of verandahs, access from the street front, protecting active frontages to pedestrian areas, the treatment of the fronts and backs of buildings and their appurtenances, illumination of buildings or their immediate spaces and the landscaping of land adjoining a road.	As demonstrated throughout this report, this proposed development has been sited and designed to respond to the existing streetscape character and provide activation to the frontages of the Site.
The storage of rubbish and materials for recycling.	Please see the attached Waste Management Plan prepared by Traffix Group for a detail on the storage of rubbish and materials for recycling.
Defining the responsibility for the maintenance of buildings, landscaping and paved areas.	The building will be maintained by Owners Corporation.
Consideration of the overlooking and overshadowing as a result of building or works affecting adjoining land in a General Residential Zone, Neighbourhood Residential Zone, Residential Growth Zone or Township Zone.	N/A
The impact of overshadowing on existing rooftop solar energy systems on dwellings on adjoining lots in a General Residential Zone, Mixed Use Zone,	N/A

Neighbourhood Residential Zone, Residential Growth Zone or Township Zone.	
The availability of and connection to services.	The Site is located within an established urban area and as such services are widely available and already connected.
The design of buildings to provide for solar access.	The building has been designed to minimise off-site overshadowing.
The objectives, standards and decision guidelines of Clause 54 and Clause 55. This does not apply to an apartment development.	N/A
For an apartment development, the objectives, standards and decision guidelines of Clause 58.	Please see Appendix A – Clause 58 Assessment for a full assessment against the objectives and standards of Clause 58.

Accordingly, the proposal is consistent with the objectives and decision guidelines of the Commercial 1 Zone.

5.3 Is the proposal consistent with the policy of Significant Landscape Overlay – Schedule 1?

The proposal seeks to celebrate and enhance the character of the Yarra River corridor, thus directly addressing the purpose of the overlay.

Refer to the following table for an assessment against the decision guidelines of the Significant Landscape Overlay – Schedule 1:

Decision guideline	Assessment
Significant Landscape Overlay (general)	
The Municipal Planning Strategy and the Planning Policy Framework.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
The statement of the nature and key elements of the landscape and the landscape character objective contained in a schedule to this overlay.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
The conservation and enhancement of the landscape values of the area.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
The need to remove, destroy or lop vegetation to create a defendable space to reduce the risk of bushfire to life and property.	N/A – The Site is not within a bushfire prone area.
The impact of the proposed buildings and works on the landscape due to height, bulk, colour, general appearance or the need to remove vegetation.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
The extent to which the buildings and works are designed to enhance or promote the landscape character objectives of the area.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.

The impact of buildings and works on significant views.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Any other matters specified in a schedule to this overlay.	Refer to assessment below.
Significant Landscape Overlay – Schedule 1	
Removal of vegetation	
The reasons for removing vegetation and whether there are alternative options.	The trees marked for removal are generally of low retention value and do not greatly contribute to the wider landscape. A significant proportion of trees are exotic species or native but not indigenous to the local area, with compromised health. These trees will be replaced with better quality vegetation as a part of the overall landscape concept for the Site. On balance it is expected that the supplementary native planting proposed by the landscape plan will lead to an improved interface with the Yarra River Corridor, as well as providing important pedestrian access.
The effect of the removal of vegetation on the natural landscape character, habitat protection, wildlife movement and long-term viability of remnant and revegetated areas.	The vegetation marked for removal is generally of low retention value and is being replaced with higher quality vegetation – thus having a net positive benefit on landscape character and long-term viability of the vegetated areas.
Whether sufficient vegetation and canopy trees of appropriate species are to be planted to replace the removal of the existing vegetation and mature canopy trees.	The accompanying Tree Assessment and the Landscape Concept Plan demonstrate that the proposed replacement planting is more than sufficient.
Whether mature, dead and dying native vegetation should be maintained as habitat for native fauna or removed to avoid a risk or safety hazard.	Poor quality vegetation is being replaced by higher quality vegetation.
Buildings and works	
Whether the location and extent of the buildings or works encroaches into the tree protection zone of mature canopy trees.	Refer to the accompanying Arboricultural Report. Commendably, the design incorporates the large tree within the Victoria Street frontage into the design. It is treated as a design opportunity rather than a constraint. The development also helps to frame the prominent canopy trees along its river corridor interface.
The ability for proposed vegetation species to be matched to the local plant communities.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether any proposed earthworks and changes in the topography of the river corridor will detrimentally impact its local natural landscape character and environmental values.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.

Whether the proposed fencing allows for the free movement of wildlife, minimises visual intrusion and limits impact on the natural flood and watercourse characteristics.	No fencing is proposed.
Whether buildings and works are sufficiently set back from the banks of the Yarra River to ensure that: - **The river's natural flood and water course characteristics are not impacted.** - **The topography of the river and its banks are maintained as the dominant feature in the public views of the river corridor.** - **The existing riparian vegetation is protected and enhanced.** - **That views of development from the Yarra River and adjacent public open space, bicycle and shared paths and bridge crossings are minimised.**	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
The need for litter or gross pollutant traps at entry points to drains that serve large developments known to generate litter and sediment.	Refer to the accompanying Sustainability Management Plan prepared by GIW Environmental Solutions.
Whether the design and location of boating infrastructure is consistent with the Melbourne Water's Guidelines for Approval of Jetties (Melbourne Water, 2011) and with any requirements, plans or guidelines prepared by Parks Victoria or other public land managers.	N/A – No boating infrastructure is proposed.
Whether the design and location of shared pathways is consistent with Shared Pathway Guidelines (Melbourne Water, 2009) and with any requirements, plans or guidelines prepared by Parks Victoria or other public land managers.	The proposed pedestrian link has been designed in consultation with Parks Victoria, following a number of meetings and ongoing engagement. A key part of this process was ensuring that the pathway, and the way it linked to the existing Capital City Trail, was compliant with the Shared Pathway Guidelines. This includes the relevant clearances from the end of perpendicular handrail endings and appropriate widths of paths.
Whether private development results in the loss of, or creates inappropriate access to, the Yarra River and its parklands.	The proposed development provides access to the Yarra River in a manner that is strategically envisioned within the *Yarra Planning Scheme*. The access provided is publicly accessible. Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether opportunities exist to co-locate new buildings with existing buildings on public land, particularly at the banks of the Yarra River.	N/A
Whether buildings will protrude above the predominant tree canopy within a given area.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.

The impact of any overshadowing by development: - on the banks and waterway of the Yarra River between 11:00am and 2:00pm on 22 June; and - on any public open space between 11:00am and 2:00pm on 22 September.	No shadow is cast to the Yarra River Corridor on 22 June from 9am to 3pm, as confirmed in Section 2.6 of the Architectural Plans.
Whether the scale, form, siting and design of new buildings, including materials, colours and finishes, are sensitively integrated with the natural landscape setting of the river corridor.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether the spacing between buildings allows for the planting of appropriate vegetation and canopy trees to filter views of the development.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether the existing and proposed vegetation fronting the Yarra River will filter the majority of views of the proposed development.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.

5.4 Is the proposal consistent with the policy of Design and Development Overlay – Schedule 1?

Please see the following table for an assessment against the relevant decision guidelines outlined in DDO1.

Decision guideline	Assessment
The views of Melbourne Water as a recommending referral authority in accordance with section 55 of the Act for all applications within 100 metres of the Yarra River, unless in the opinion of the responsible authority the proposal satisfies requirements or conditions previously agreed to in writing between the responsible authority and Melbourne Water.	Engagement has occurred with Melbourne Water following the receipt of initial feedback. This included the production of a Flood Impact Assessment and ongoing meetings to ensure that all outstanding matters were resolved. Melbourne Water has agreed that the required minimum flood levels have been provided and that afflux matters have been resolved.
Landscape protection	
The visibility of any proposed buildings and works when viewed from the Yarra River and adjacent public open space, pedestrian and bicycle paths and bridge crossings.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether sufficient space is provided between buildings to maintain views of the Yarra River and allow for the planting and growth of vegetation, including large canopy trees.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether the siting of buildings and works avoids the removal of existing riparian vegetation. Whether any earthworks will affect public views of the river corridor.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.

The need for additional landscaping or new vegetation screening to filter views of proposed buildings and works.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Siting and design	
Whether any additional overshadowing of public open space can be avoided by redesigning or relocating a proposed building or parts of it.	The development does not cause overshadowing of public open space.
Whether siting of proposed buildings impacts the river's natural flood and watercourse characteristics.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether any proposed garages and outbuildings ancillary to a dwelling are integrated into the overall design to minimise the appearance of built form impacting public views of the river corridor.	N/A – No garages or outbuildings proposed.
Whether the location, bulk, outline and appearance of any proposed building or works are in keeping with or enhance the natural landscape character and appearance of the Yarra River.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
The appropriateness of proposed materials and finishes for any proposed buildings and works in reducing contrast.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Site coverage and permeability	
The need to minimise impervious surfaces to allow for filtration of water and retention and establishment of indigenous vegetation and canopy trees.	The development provides a significant increase in permeable surfaces when compared to the existing site conditions. Refer to the accompanying Sustainability Management Plan and the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
The need to limit areas, (including tennis courts and swimming pools) and other impervious surfaces within the minimum setback distance specified in a table to this schedule to allow for replanting and vegetation growth.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.
Whether adequate spacing is provided between buildings to maintain and create views to the Yarra River and its corridor.	Refer to the assessment at Chapter 5.1 – Response to the Yarra River Corridor.

5.4.1 Variation in building height

The proposal seeks to vary the preferred maximum building height for the Site of 19 metres.

As outlined in Chapter 5.1, the development provides an excellent response to the Yarra River Corridor with appropriate setbacks, ample landscaping, careful articulation and selection of materials, and the provision of a publicly accessible link.

Variation to the preferred maximum building height is contemplated by DDO1 and the proposal demonstrates a strong alignment with the decision guidelines that inform the acceptability of the building's height, most importantly through the visual impact assessment discussed at Chapter 5.1.5.

This proposal seeks to reduce the maximum height of the building from the previously advertised application by 3.4 metres while also reducing the envelope of the top two levels (levels 10 and 11) by recessing the building from the lower level form, allowing these levels to appear as a secondary element. These levels have been set back 6m from the front boundary, and the corners of these levels have been tapered in to match the curvature of the building. As a result of these design moves, the top levels will be largely imperceptible from ground level. Further, the use of light and neutral materiality, being predominately glazing, helps to further recess this portion and keep it as distinct from (and secondary to) the majority of the building. The massing of the building has been continually refined and is slim in comparison to many other buildings along the southern side of the Yarra River. This further helps to decrease the proportionate perceived bulk, particularly when considered within a landscaped context.

It is therefore considered that the proposed building height successfully responds to the sensitive Yarra River environs through a thoughtfully curated design response, which also acknowledges its location with a major activity centre identified to accommodate higher density development and suitable to meaningfully contribute to housing supply within the municipality.

5.4.2 Compliance with setbacks

DDO1 applies a 'Mandatory Minimum Setback Line', being 25m from the Setback Reference Line located at the river's edge. The proposal is compliant with the mandatory setback line with no relevant building elements projecting beyond this setback line.

All other setbacks are inferred by the mandatory maximum building height controls of DDO1 which progressively step back from the river interface. Building height must comply with these envelopes.

In response to feedback from the City of Yarra's planning officers all architectural features have been designed to be contained within the building height envelopes of the DDO1. It is acknowledged that while balustrades on Level 1 slightly exceed the height limit within this area, they are setback 500m from the edge of the building. As such, they do not form the parapet and will not be perceived as additional height from any relevant viewing points.

Accordingly the building has been demonstrated to align with the mandatory building height and setback requirements of DDO1.

5.5 Is the proposal consistent with the policy of Design and Development Overlay – Schedule 2?

DDO2 provides design guidance for main roads and boulevards, in this instance applying to Victoria Street.

The proposal is found to be in alignment with the design objectives and guidelines on the following basis:

- The proposal provides for a high-quality built form outcome with a prominent street wall to Victoria Street.
- The proposal provides for a softened ground floor interface including the retention of an existing canopy tree and recessed pedestrian access area for safety and weather protection.
- The proposal makes significant investment into material quality and architecture in a manner that reduces visual clutter and makes a positive contribution to the emerging high-density built form context of Victoria Street east.
- Whilst the proposal will be the tallest building in the Victoria Street east precinct, the proposed height provides a subtle undulation in the streetscape and has been designed in a manner that preserves visual breaks between buildings and provides a strong connection to the Yarra River corridor.
- The proposal will not result in unreasonable off-site amenity impacts along Victoria Street, in particular from a wind and solar access perspective.

Accordingly, the proposal is found to be consistent with the decision guidelines of DDO2.

5.6 Does the proposal provide a satisfactory transport response?

5.6.1 Car Parking Demand Assessment

This application seeks to provide a total of 167 car parking spaces for the building's residents, exceeding the statutory requirement of 158 spaces by 9 spaces. One car parking space is proposed for the office use and one car parking space is provided for the community facility (place of assembly), and therefore a statutory reduction of 9 spaces is sought.

A car parking demand assessment is provided at Chapter 4.2 of the report and finds the waiver of 9 spaces to be appropriate on the basis of the following factors:

- The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use
- The variation of car parking demand likely to be generated by the proposed use over time
- The short-stay and long-stay car parking demand likely to be generated by the proposed use.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.
- The anticipated car ownership rates of likely or proposed visitors or occupants (residents or employees) of the land.
- Empirical assessment and case study.

The following factors have informed the proposed waiver of office car parking:

- The site is well served by public transport and alternative transport modes,
- For staff who do not wish to park within publicly available (but priced) car parking, they have the opportunity to make a mode shift to more sustainable transport to access the site,
- The expected parking demand for 2 visitor spaces (associated with the Community Facility (Place of Assembly)) can be accommodated within on-street parking in the area, and
- Council local policies support reduced car parking provisions in areas such as this.

For further detail please refer to the submitted Traffic Engineering Assessment prepared by Traffix Group.

5.6.2 Alteration to access to the Principal Road Network

Pursuant to Clause 52.29 a permit is required to alter access to a road in a Transport Zone 2, inclusive of Victoria Street.

We refer to the Traffic Engineering Assessment prepared by Traffix Group which provides as assessment of the proposed access arrangements and traffic impacts at Chapter 5 of the report.

The report finds that the overall traffic generation of the proposal is low and will not have a material impact on the surrounding road network or intersections and that the proposal is acceptable from a traffic perspective.

5.6.3 Bicycle facilities

The proposal provides for a total of 158 bicycle spaces comprising:

- 124 residential spaces
- 6 commercial staff spaces
- 28 visitor spaces

The proposal generates a statutory demand for 25 resident spaces and 12 visitor spaces based on 123 apartments.

As there is less-than 1000sqm of office floor area there is no statutory demand for office bicycle parking.

The use of land for the community facility (place of assembly) generates a bicycle parking requirement of 2 spaces.

Accordingly the proposal satisfies the statutory demand for bicycle spaces and provides more-than one space per dwelling, which is known to be an informal benchmark for the promotion of active transport use in the City of Yarra.

5.7 Does the planning permit application create any unreasonable amenity impacts?

The development responds to its environs with appropriate setbacks, which respect the significant river interface to the north, heritage building to the west and residential development to the east.

To the east, whilst located in a commercial zone in a major activity centre, careful consideration of amenity impacts has been provided to Acacia Place given the number of apartments which face the Site. It is acknowledged however that amenity considerations for these residents must be balanced with the benefit of being located within a major activity centre.

To respond to these interface considerations, the majority of the upper-level form is setback a minimum of 8.18 metres from the eastern boundary, creating a generous separation distance between Acacia Place and the proposed building, in particular when viewed from the river due to the angular nature of Acacia Place. At its closest point, within the southern portion of the Site, the building is set back a minimum of 8.99 metres from the nearest habitable room window, and in this location only a secondary window to a living room is proposed. This separation distance increases to a minimum of 14.07 metres at level 8 and above. These setbacks are considered appropriate as:

- Opportunities for overlooking are mitigated through building design;
- No apartments have a primary orientation toward the east at the building's closest point to Acacia Place;
- The eastern facade is highly articulated both through materiality and through a stepping of form, ensuring that a positive outlook is achieved both for residents of Acacia Place and residents of the future development; and
- Shadow impacts to the east are reasonable when considering the context of the Site, with shadows largely cast to the south-western portion of Acacia Place in the afternoon and the balance of the eastern building remaining free of shadows cast by the proposed development.

With respect to the western interface with 661 Victoria Street, and in line with the relevant policies of Clause 13.07-1L-01, the following is noted:

- The commercial uses at 661 Victoria Street are not understood to be sources of fumes, air emissions, light disturbance or vibrations.
- There are no overlooking impacts from 661 Victoria Street to the subject site, as confirmed by Drawing SD06_03 of the Architectural Plans.

With respect to off-site amenity impacts to the broader area, the following is highlighted:

- The Wind Tunnel Test prepared by Vipac confirms that wind conditions within the public realm achieve comfortable conditions for pedestrians; and
- The southern footpath of Victoria Street remains largely free of shadow between 10am and 3pm at the equinox, ensuring high levels of solar access are maintained.

For these reasons, it is considered that no unreasonable amenity impacts are borne by the proposal.

5.8 Does the proposal provide for an adequate level of on-site amenity for future occupants?

With respect to internal amenity and the quality of life for future occupants of the development, the design response has had regard to the objectives of Clause 58 of the *Yarra Planning Scheme*. For a full copy of this assessment, please refer to Appendix A of this report. In summary, we note that the proposal achieves an excellent level of amenity for future occupants as:

- A clear and identifiable access entry point to the residential component of the building is provided along the accessway from Victoria Street.
- All dwellings are provided with a generous amount of open space both in the form of private terraces and an extensive landscaped area to the north of the building.
- All dwellings generally meet, and in some cases exceed, the standards related to functional layout, with generous living rooms and bedrooms.
- All dwellings are provided with an excellent level of internal and external storage which will comfortably accommodate storage needs.

It is also acknowledged that the development proposes the provision of communal open space that greatly exceeds that required by the *Yarra Planning Scheme*, with high levels of internal amenity provided to these spaces due to their location fronting the Yarra River. The wellbeing benefits provided to residents by virtue of these communal spaces is intangible, and is testament to EG's commitment to creating spaces that leave a lasting legacy and have the needs of residents in mind from conception.

For these reasons, it is clear that the development provides high-quality apartments with excellent amenity for future residents, as described in further detail in Appendix A.

5.9 Does the proposal respond to the relevant feedback received during the previous planning permit application?

As expressed in earlier sections, the proposal has incorporated substantial design changes to respond to feedback received during the previous planning permit application. In particular, the application proposes, among others:

- A reduction to the maximum building height (as previously advertised by Council) by 3.4 metres;
- A reduction in the built form envelope of the top two levels (levels 10 and 11), and associated redesign;
- Relocation of the publicly accessible pedestrian link from the western to the eastern edge of the Site;
- A reduction of eleven (11) dwellings and twenty-five (25) car parking spaces;
- Reprogramming of the ground floor level to provide direct access to the residential lobby from Victoria Street; and
- Further retention of vegetation within the river frontage.

These changes have been the result of extensive engagement and continued scheme refinement with key stakeholders over the past 12 months, and are testament to a genuine commitment by EG to deliver increased housing supply to the activity centre in a manner which also meaningfully considers and responds to feedback received, as and where relevant.

Please find below demonstration that the proposal incorporates and responds to this feedback:

DEECA (Parks Victoria)

DEECA was notified as part of the original Council application and did not support the proposal. Key grounds included:

- *Parks Victoria had not been consulted regarding works proposed in public land.*
- *Concept plans depict uniform plantings across both public and private land, with true extent of works on public land unclear.*
- *Unclear how intersection with Main Yarra Trail has been designed with respect to user safety and DDA compliance.*
- *Sufficient rationale has not been provided demonstrating need for direct access from site to the Main Yarra Trail, with Acacia Place provide linkage sought by local policy.*
- *The removal of native vegetation from public land is contrary to objectives of SLO and DDO1.*
- *There is no tenure over the crown land adjacent to enable construction or ongoing management of the access structure. Applicant is also silent on how the public accessway is proposed to be managed in the future.*

In order to resolve these matters, meetings were held in January and February 2024 between the project team, Parks Victoria and Council representatives. These meetings resulted in the following design changes and commitments:

- Relocation of the pedestrian link to the eastern edge of the Site.
- Retention of vegetation within crown land.
- Works within crown land designed with the appropriate clearances and standards in line with Parks Victoria's requirements.
- Confirmation that the link could be managed with via a Section 173 agreement, as part of a later approval process.

Following this meeting, in principle support for the revised link arrangement was provided by Parks Victoria and Council.

Melbourne Water

Melbourne Water was also notified as a part of the original application and provided an objection to the proposal on the following grounds:

- *The development is inconsistent with State Planning Policy relating to floodplain management, particularly Clause 13.03-1S – Floodplain Management as the development will impact on the natural flood carrying capacity and flood storage function of the adjacent waterway which could intensify the impact of flooding on adjacent properties.*
- *The proposed development is inconsistent with the purpose and decision guidelines set out in the Land Subject to Inundation Overlay (LSIO) within the Yarra City Council Planning Scheme.*
- *The proposed development is inconsistent with the 'Guidelines for Development in Flood Affected Areas' (DELWP 2019) in relation to freeboard, flow conveyance, flood storage and flood safety.*

In order to resolve these matters, the project team commenced engagement with Melbourne Water in July 2024 following the appointment of a flood technician who carried out modelling for the Site. Meetings were held with Melbourne Water representatives in July and August 2024, where the modelling and analysis was presented to representatives which demonstrated that the grounds of objection had been addressed on the basis minor adjustments to the building footprint at the western edge of the Site were incorporated into the design.

Melbourne Water has confirmed in principle support for the proposal on the basis the recommendations of the Flood Impact Assessment, prepared by HARC, are incorporated into the design. The plans prepared by SJB Architecture dated March 2025 incorporate these changes.

City of Yarra

The previous application was referred to a number of internal departments and external consultants acting on behalf of Council. The project team has carefully reviewed the feedback received during the Council permit application process, and incorporated changes where required and appropriate.

Community

The updated proposal has also considered the feedback received during public notification of the application in July 2023. The table below provides a response to each of the themes raised in these objections, which have all been covered previously within this report:

Theme	Response
Amenity impacts	The proposal is not considered to result in unreasonable off-site amenity impacts, particularly when considering the context of the Site and strategic objectives for activity centres in delivering greater housing supply as directed by the planning policy framework and Victoria's Housing Statement. Off-site amenity impacts are discussed at Section 5.7.
Building height	The proposal seeks a reduction to the building height from the previously advertised scheme of 3.4 metres and a reduction in the envelope of levels 10 and 11. Building height is further discussed at Section 5.4.1.
Traffic	The proposal will not result in unreasonable traffic impacts. Traffic and car parking considerations are discussed at Section 5.6.
Car parking	The proposal provides car parking that is commensurate with the anticipated demand generated for this project when considering the mix of uses. It is highlighted that the

	proposal now provides one employee car parking space for each non-residential use. Traffic and car parking considerations are discussed at Section 5.6.
Environmental impacts	The proposal is not considered to result in environmental impacts to the Yarra River corridor. The proposal's response to the considerations of the Yarra River corridor is provided at Section 5.1.
Neighbourhood character	The proposal successfully strikes a balance between responding to its diversity of interfaces, acknowledging its presence within the robust and evolving Victoria Street East precinct and its location along the Yarra River. Design considerations in response to each context is provided at Section 5.1 and Section 5.5.

6 Conclusion

This report provides an overview and planning assessment for the proposed use and development of the land for a 14-storey mixed-use building at 675 Victoria Street, Abbotsford.

The proposal demonstrates strong alignment with the planning policy framework of the *Yarra Planning Scheme*, helping to achieve urban consolidation objectives through the delivery of a genuinely mixed-use building that successfully strikes the balance between responding to the sensitive Yarra River corridor environs and the robust activity centre interface along Victoria Street. The carefully considered, high-quality design response will result in a landmark building within the precinct that will be celebrated for generations to come.

The proposal looks beyond the site boundaries and provides substantial public benefits to the broader community, including the delivery of a publicly accessible pedestrian link, a community facility operated by the not-for-profit organisation Little B.I.G. and an affordable housing contribution.

Importantly, the proposal will be providing 123 high-quality, high-amenity dwellings which meaningfully contribute to housing supply within Victoria through the delivery of a building that has been iteratively tested and refined to ensure an appropriate design response is achieved and the architectural integrity of the building is maintained. The project team has listened to and considered all feedback received during the previous application to ensure that the proposal demonstrates a commitment to delivering an outcome which contemplates the needs of future residents, the broader community and the surrounding environment.

It follows as the recommendation of this report that the Minister for Planning should support a planning permit for the proposed use and development of the Site.

Appendices

Appendix A Clause 58 Assessment

Appendix A Clause 58 Assessment

Tract

Clause 58 Better Apartment Design Standards

1.1 Purpose

- To implement the Municipal Planning Strategy and Planning Policy Framework.
- To encourage apartment development that provides reasonable standards of amenity for existing and new residents.
- To encourage apartment development that is responsive to the site and the surrounding area

1.2 Requirements

A development:

- Must meet all of the objectives of this clause.
- Should meet all of the standards of this clause.

If a zone or a schedule to a zone, or a schedule to an overlay specifies a requirement different from a requirement of a standard set out in Clause 58 (excluding Clause 58.04-1), the requirement in Clause 58 applies.

For Clause 58.04-1 (Building setback):

- If a zone or a schedule to a zone specifies a building setback requirement different from a requirement set out in Clause 58.04-1, the building setback requirement in the zone or a schedule to the zone applies.
- If the land is included in an overlay and a schedule to the overlay specifies a building setback requirement different from the requirement set out Clause 58.04-1 or a requirement set out in the zone or a schedule to the zone, the requirement for building setback in the overlay applies.

1.3 Definition

An Apartment is defined in Clause 73.01 as:

- A dwelling located above the ceiling level or below the floor level of another dwelling and is part of a building containing two or more dwellings.

Clause 58.02 – Neighbourhood Character and Infrastructure

Clause 58.02-1 – Urban Context Objectives

Objectives	To ensure that the design responds to the existing urban context or contributes to the preferred future development of the area. To ensure that development responds to the features of the site and the surrounding area.
	Achieved
Standard D1	The design response must be appropriate to the urban context and the site. The proposed design must respect the existing or preferred urban context and respond to the features of the site.
	Complies with the standard

Clause 58.02-1 – Urban Context Objectives Assessment

Refer to detailed discussion in Planning Report.

Clause 58.02-2 – Residential Policy Objectives

Objectives	To ensure that residential development is provided in accordance with any policy for housing in the Municipal Planning Strategy and the Planning Policy Framework. To support higher density residential development where development can take advantage of public and community infrastructure and services.
	Achieved
Standard D2	An application must be accompanied by a written statement to the satisfaction of the responsible authority that describes how the development is consistent with any relevant policy for housing in the Municipal Planning Strategy and the Planning Policy Framework.
	Complies with the standard

Clause 58.02-2 – Residential Policy Objectives Assessment

Refer to detailed discussion in Planning Report.

Clause 58.02-3 – Dwelling Diversity Objectives

Objectives	To encourage a range of dwelling sizes and types in developments of ten or more dwellings.
	Achieved
Standard D3	Developments of ten or more dwellings should provide a range of dwelling sizes and types, including dwellings with a different number of bedrooms.
	Complies with the standard

Clause 58.02-3 – Dwelling Diversity Objectives Assessment

The proposal provides 123 dwellings. A range of apartment typologies are provided including one-, two- and three-bedroom apartments, with some including studios. The various layouts are appropriate for different household structures.

Clause 58.02-4 – Infrastructure Objectives

Objectives	To ensure development is provided with appropriate utility services and infrastructure. To ensure development does not unreasonably overload the capacity of utility services and infrastructure.
	Achieved
Standard D4	Development should be connected to reticulated services, including reticulated sewerage, drainage and electricity, if available. Connection to a reticulated gas service is optional. Development should not unreasonably exceed the capacity of utility services and infrastructure, including reticulated services and roads. In areas where utility services or infrastructure have little or no spare capacity, developments should provide for the upgrading of or mitigation of the impact on services or infrastructure.
	Complies with the standard

Clause 58.02-4 – Infrastructure Objectives Assessment

The proposed development is appropriately serviced and is in an already established and well-connected area.

Clause 58.02-5 – Integration with the Street Objectives

Objectives	To integrate the layout of development with the street. To support development that activates street frontage.
	Achieved
Standard D5	Development should be oriented to front existing and proposed streets. Along street frontage, development should: • Incorporate pedestrian entries, windows, balconies or other active spaces. • Limit blank walls. • Limit high front fencing, unless consistent with the existing urban context. • Provide low and visually permeable front fences, where proposed. • Conceal car parking and internal waste collection areas from the street. Development next to existing public open space should be designed to complement the open space and facilitate passive surveillance.
	Complies with the standard

Clause 58.02-5 – Integration with the Street Objectives Assessment

The proposal has been oriented to front Victoria Street. Whilst vehicular access is provided via this interface, it has been designed to be discreet and is not visually intrusive. Commercial space at ground floor and the proposed pedestrian link provide a high quality pedestrian environment with passive surveillance and activation. At the rear, the development provides an excellent response to the Yarra River interface, with passive surveillance and activation also achieved through the placement of communal areas and connection via the pedestrian link.

Clause 58.03 – Site Layout

Clause 58.03-1 – Energy Efficiency Objectives

Objectives	To achieve and protect energy efficient dwellings and buildings. To ensure the orientation and layout of development reduce fossil fuel energy use and make appropriate use of daylight and solar energy. To ensure dwellings achieve adequate thermal efficiency.
	Achieved
Standard D6	Buildings should be: • Oriented to make appropriate use of solar energy. • Sited and designed to ensure that the energy efficiency of existing dwellings on adjoining lots is not unreasonably reduced. Living areas and private open space should be located on the north side of the development, if practicable. Developments should be designed so that solar access to north-facing windows is optimised. A dwelling located in a climate zone identified in Table D1 should not exceed the specified maximum NatHERS annual cooling load specified in the following table

NatHERS Climate Zone	NatHERS Maximum Cooling Load (MJ/M² per annum)
Climate Zone 21 Melbourne	30
Climate Zone 22 East Sale	22
Climate Zone 27 Mildura	69
Climate Zone 60 Tullamarine	22
Climate Zone 62 Moorabbin	21
Climate Zone 63 Warrnambool	21
Climate Zone 64 Cape Otway	19
Climate Zone 66 Ballarat	23

Table B4 Cooling Load
Refer to NatHERS zone map, Nationwide House Energy Rating Scheme (Commonwealth Department of Environment and Energy

Complies with the standard

Clause 58.03-1 – Energy Efficiency Objectives Assessment

Refer to accompanying Sustainability Management Plan prepared by GIW Environmental Solutions, which confirms that no dwelling exceeds the maximum cooling load of 30 MJ/m2.

Clause 58.03-2 – Communal Open Space Objective

Objectives	To provide communal open space that meets the recreation and amenity needs of residents. To ensure that communal open space is accessible, practical, attractive, easily maintained. To ensure that communal open space is integrated with the layout of the development and enhances resident amenity.
	Achieved

Standard D7	A development of 10 or more dwellings should provide a minimum area of communal outdoor open space of 30 square metres.
	If a development contains 13 or more dwellings, the development should also provide an additional minimum area of communal open space of 2.5 square metres per dwelling or 220 square metres, whichever is the lesser. This additional area may be indoors or outdoors and may consist of multiple separate areas of communal open space.
	Each area of communal open space should be:
	• Accessible to all residents.
	• A useable size, shape and dimension.
	• Capable of efficient management
	• Located to:
	  ◦ Provide passive surveillance opportunities, where appropriate.
	  ◦ Provide outlook for as many dwellings as practicable.
	  ◦ Avoid overlooking into habitable rooms and private open space of new dwellings.
	  ◦ Minimise noise impacts to new and existing dwellings.
	Any area of communal outdoor open space should be landscaped and include canopy cover and trees

	Complies with the standard

Clause 58.03-2 – Communal Open Space Objective Assessment

The proposed development provides multiple communal areas, including:

- Indoor communal space (280sqm) comprising:
  - Multipurpose room
  - Gym
  - Two private dining rooms
- Outdoor amenity area (84sqm)

The proposal also includes an additional outdoor landscaped area of 587sqm, which will be accessible only to residents.
The communal spaces are generous in size and proportion, ensuring they are useable.
They do not overlook any dwellings and are located appropriately on lower ground floor to ensure no noise impacts to residents.
The location of the communal areas on lower ground floor at the Yarra River interface provides ample passive surveillance opportunities, improving the pedestrian and cycling experience along the river.

Clause 58.03-3 – Solar Access to Communal Outdoor Open Space Objective

Objectives	To allow solar access into communal outdoor open space.
	Achieved
Standard D8	The communal outdoor open space should be located on the north side of a building, if appropriate. At least 50 per cent or 125 square metres, whichever is the lesser, of the primary communal outdoor open space should receive a minimum of two hours of sunlight between 9am and 3pm on 21 June.
	Complies with the standard

Clause 58.03-3 – Solar Access to Communal Outdoor Open Space Objective Assessment

The proposal provides communal outdoor space on the northern side of the building, ensuring excellent solar access.

Clause 58.03-4 – Safety Objective

Objectives	To ensure the layout of development provides for the safety and security of residents and property.
	Achieved
Standard D9	Entrances to dwellings should not be obscured or isolated from the street and internal accessways. Planting which creates unsafe spaces along streets and accessways should be avoided. Developments should be designed to provide good lighting, visibility and surveillance of car parks and internal accessways. Private spaces within developments should be protected from inappropriate use as public thoroughfares.
	Complies with the standard

Clause 58.03-4 – Safety Objective Assessment

The proposal provides excellent safety for both residents and the public. Primary pedestrian access to the building is from Victoria Street, in a highly visible location. Further, passive surveillance along the length of the pedestrian link and along the river interface (from both dwellings and communal areas) significantly improve the public realm experience and safety of pedestrians and cyclists travelling around or through the area.

Clause 58.03-5 – Landscaping Objectives

Objectives	To provide landscaping that supports the existing or preferred urban context of the area and reduces the visual impact of buildings on the streetscape. To preserve existing canopy cover and support the provision of new canopy cover. To ensure landscaping is climate responsive, supports biodiversity, wellbeing and amenity and reduces urban heat.
	Achieved

Standard D10	Development should retain existing trees and canopy cover
	Development should provide for the replacement of any significant trees that have been removed in the 12 months prior to the application being made.
	
	Development should:
	• Provide the canopy cover and deep soil areas specified in Table D2. Existing trees can be used to meet the canopy cover requirements of Table D2.
	• Provide canopy cover through canopy trees that are:
	  ◦ Located in an area of deep soil specified in Table D3. Where deep soil cannot be provided trees should be provided in planters specified in Table D3.
	  ◦ Consistent with the canopy diameter and height at maturity specified in Table D4.
	  ◦ Located in communal outdoor open space or common areas or street frontages.
	• Comprise smaller trees, shrubs and ground cover, including flowering native species.
	• Include landscaping, such as climbing plants or smaller plants in planters, in the street frontage and in outdoor areas, including communal outdoor open space.
	• Shade outdoor areas exposed to summer sun through landscaping or shade structures and use paving and surface materials that lower surface temperatures and reduce heat absorption.
	• Be supported by irrigation systems which utilise alternative water sources such as rainwater, stormwater and recycled water.
	• Protect any predominant landscape features of the area.
	• Take into account the soil type and drainage patterns of the site.
	• Provide a safe, attractive and functional environment for residents.
	• Specify landscape themes, vegetation (location and species), irrigation systems, paving and lighting.

Site Area	Canopy cover	Deep soil
1000 square meters or less	5% of site area Include at least 1 Type A tree	5% of site area or 12 square metres whichever is the greater
1001 – 1500 square meters	50 square metres plus 20% of site area above1,000 square metres Include at least 1 Type B tree	7.5% of site area
1501 – 2500 square meters	150 square metres plus 20% of site area above1,500 square metres Include at least 2 Type B trees or 1 Type C tree	10% of site area

2500 square meters or more	350 square metres plus 20% of site area above 2,500 square metres Include at least 2 Type B trees or 1 Type C tree	15% of site area

Table D2 Canopy cover and deep soil requirements

Tree Type	Tree in deep soil Area in deep soil	Tree in planter Volume of planter soil	Depth of planter soil
A	12 square meters (min. plan dimension 2.5 metres)	12 cubic meters (min. plan dimension of 2.5 metres)	0.8 metre
B	49 square meters (min. plan dimension 4.5 metres)	28 cubic meters (min. plan dimension of 4.5 metres)	1 metre
C	121 square meters (min. plan dimension 6.5 metres)	64 cubic meters (min. plan dimension of 6.5 metres)	1.5 metre

Table D3 Soil requirements for trees

Note: Where multiple trees share the same section of soil the total required amount of soil can be reduced by 5% for every additional tree, up to a maximum reduction of 25%

Tree Type	Minimum canopy diameter at maturity	Minimum height at maturity
A	4 metres	6 metres
B	8 metres	8 metres
C	12 metres	12 metres

Table D4 Tree types

Complies with the standard

Clause 58.03-5 – Landscaping Objectives Assessment

The proposal generates a requirement of 542sqm of canopy cover, 519sqm of deep soil area, and two Type B trees or 1 Type C tree.
The proposal greatly exceeds these requirements by providing:

- 538sqm of deep soil area
- 977sqm canopy cover
- 15 x Type A trees
- 18 x Type B trees
- 4 x Type C trees

Therefore, the proposal provides an exceptional landscaping outcome.
Refer to accompanying Landscape Concept Report for further details.

Clause 58.03-6 – Access Objective

Objectives	To ensure that vehicle crossovers are designed and located to provide safe access for pedestrians, cyclists and other vehicles. To ensure the vehicle crossovers are designed and located to minimise visual impact.
	Achieved
Standard D11	Vehicle crossovers should be minimised. Car parking entries should be consolidated, minimised in size, integrated with the façade and where practicable located at the side or rear of the building. Pedestrian and cyclist access should be clearly delineated from vehicle access. The location of crossovers should maximise pedestrian safety and the retention of on-street car parking spaces and street trees. Developments must provide for access for service, emergency and delivery vehicles.
	Complies with the standard

Clause 58.03-6 – Access Objective Assessment

A single crossover is proposed to Victoria Street, which is consistent with the existing conditions on site. The vehicle entry has been designed to be discreet and is setback behind the building façade, therefore decreasing its prominence.

Pedestrian and cyclist access is clearly differentiated from vehicular access, as it is via the prominent pedestrian link accessway which provides a high-quality public realm experience.

Clause 58.03-7 – Parking Location Objectives

Objectives	To provide convenient parking for resident and visitor vehicles. To protect residents from vehicular noise within developments.
	Achieved
Standard D12	Car parking facilities should: • Be reasonably close and convenient to dwellings. • Be secure. • Be well ventilated if enclosed. Shared accessways or car parks of other dwellings should be located at least 1.5 metres from the windows of habitable rooms. This setback may be reduced to 1 metre where there is a fence at least 1.5 metres high or where window sills are at least 1.4 metres above the accessway.
	Complies with the standard

Clause 58.03-7 – Parking Location Objectives Assessment

Car parking for residents is provided in the basement car park, which ensure security and convenience, whilst protecting dwellings from any potential amenity impacts associated with the car park.

Clause 58.03-8 – Integrated Water and Stormwater Management Objectives

Objectives	To encourage the use of alternative water sources such as rainwater, stormwater and recycled water. To facilitate stormwater collection, utilisation and infiltration within the development. To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site.
	Achieved
Standard D13	Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use. Buildings should be connected to a non-potable dual pipe reticulated water supply, where available from the water authority. The stormwater management system should be: • Designed to meet the current best practice performance objectives for stormwater quality as contained in the *Urban Stormwater – Best Practice Environmental Management Guidelines* (Victorian Stormwater Committee 1999) as amended. • Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.
	Complies with the standard

Clause 58.03-8 – Integrated Water and Stormwater Management Objectives Assessment

A 20,000 litre rainwater tank will harvest rainwater from all roof areas. The tank will be connected to all ground to Level 2 toilets and landscape irrigation at lower ground and ground level.
The proposed development achieves a STORM rating of 101%. For further details, please refer to the Sustainability Management Plan prepared by GIW.

Clause 58.04 – Amenity Impacts

Clause 58.04-1 – Building Setback Objectives

Objectives	To ensure the setback of a building from a boundary appropriately responds to the existing urban context or contributes to the preferred future development of the area. To allow adequate daylight into new dwellings. To limit views into habitable room windows and private open space of new and existing dwellings. To provide a reasonable outlook from new dwellings. To ensure the building setbacks provide appropriate internal amenity to meet the needs of residents.
	Achieved
Standard D14	The built form of the development must respect the existing or preferred urban context and respond to the features of the site. Buildings should be set back from side and rear boundaries, and other buildings within the site to: • Ensure adequate daylight into new habitable room windows. • Avoid direct views into habitable room windows and private open space of new and existing dwellings. Developments should avoid relying on screening to reduce views. • Provide an outlook from dwellings that creates a reasonable visual connection to the external environment. • Ensure the dwellings are designed to meet the objectives of Clause 58.
	Complies with the standard

Clause 58.04-1 – Building Setback Objectives Assessment

A detailed assessment of the proposed building setbacks against the requirements of the DDO1, and when considering its interfaces, is found in Section 5 of the Planning Report.
Further, it is noted that Drawing SD06_07 of the Architectural Plans demonstrates compliance with this standard.

Clause 58.04-2 – Internal Views Objective

Objectives	To limit views into the private open space and habitable room windows of dwellings within a development.
	Achieved
Standard D15	Windows and balconies should be designed to prevent overlooking of more than 50 per cent of the private open space of a lower-level dwelling directly below and within the same development.
	Complies with the standard

Clause 58.04-2 – Internal Views Objective Assessment

The building has been designed so that private open spaces are either stacked or distant enough from other POS within the development so that where any internal overlooking exists, it is minimal. Specifically, Drawings SD06_05 and SD06_06 of the Architectural Plans demonstrate that the maximum amount of internal overlooking relates to Apartment 10.05, at only 10.6%.

Clause 58.04-3 – Noise Impacts

Objectives	To contain noise sources in developments that may affect existing dwellings. To protect residents from external and internal noise sources.
	Achieved
Standard D16	Noise sources, such as mechanical plants should not be located near bedrooms of immediately adjacent existing dwellings. The layout of new dwellings and buildings should minimise noise transmission within the site. Noise sensitive rooms (such as living areas and bedrooms) should be located to avoid noise impacts from mechanical plants, lifts, building services, non-residential uses, car parking, communal areas and other dwellings. New dwellings should be designed and constructed to include acoustic attenuation measures to reduce noise levels from off-site noise sources. Buildings within a noise influence area specified in Table D3 should be designed and constructed to achieve the following noise levels: • Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am. • Not greater than 40dB(A) for living areas, assessed LAeq,16h from 6am to 10pm. Buildings, or part of a building screened from a noise source by an existing solid structure, or the natural topography of the land, do not need to meet the specified noise level requirements. Noise levels should be assessed in unfurnished rooms with a finished floor and the windows closed. **Note:** The noise influence area should be measured from the closest part of the building to the noise source.

Noise Source	Noise Influence Area
Zone Interface	
Industry	300 metres from the Industrial 1, 2 and 3 zone boundary
Roads	
Freeways, tollways and other roads carrying 40,000 Annual Average Daily Traffic Volume	300 metres from the nearest trafficable lane
Railways	
Railway servicing passengers in Victoria	80 metres from the centre of the nearest track
Railway servicing freight outside Metropolitan Melbourne	80 metres from the centre of the nearest track
Railway servicing freight in Metropolitan Melbourne	135 metres from the centre of the nearest track

Table D3 Noise Influence Area

Complies with the standard

Clause 58.04-3 – Noise Impacts Assessment

Habitable rooms are oriented so that they are not proximate to the lift shaft or any services rooms. There are no nearby uses that will likely cause noise pollution. No operations within the building will likely cause any noise pollution.

Clause 58.04-4 – Wind Impacts Objective

Objectives	To ensure the built form, design and layout of development does not generate unacceptable wind impacts within the site or on surrounding land.
	Achieved
Standard D17	Development of five or more storeys, excluding a basement should: • not cause unsafe wind conditions specified in Table D6 in public land, publicly accessible areas on private land, private open space and communal open space; and • achieve comfortable wind conditions specified in Table D6 in public land and publicly accessible areas on private land within a distance of half the greatest length of the building, or half the total height of the building measured outwards on the horizontal plane from the ground floor building façade, whichever is greater. Trees and landscaping should not be used to mitigate wind impacts. This does not apply to sitting areas, where trees and landscaping may be used to supplement fixed wind mitigation elements. Wind mitigation elements, such as awnings and screens should be located within the site boundary, unless consistent with the existing urban context or preferred future development of the area.

Unsafe	Comfortable
Annual maximum 3 second gust wind speed exceeding 20 metres per second with a probability of exceedance of 0.1% considering at least 16 wind directions.	Hourly mean wind speed or gust equivalent mean speed (3 second gust wind speed divided by 1.85), from all wind directions combined with probability of exceedance less than 20% of the time, equal to or less than: • 3 metres per second for sitting areas, • 4 metres per second for standing areas, • 5 metres per second for walking areas

Table D6 Wind Conditions

Complies with the standard

Clause 58.04-4 – Wind Impacts Objective Assessment

Refer to accompanying Wind Tunnel Test which confirms that the proposal does not generate unacceptable wind impacts.

Clause 58.05 – On Site Amenity and Facilities

Clause 58.05-1 – Accessibility Objective

Objectives	To ensure the design of dwellings meets the needs of people with limited mobility.
	Achieved
Standard D18	At least 50 per cent of dwellings should have: • A clear opening width of at least 850mm at the entrance to the dwelling and main bedroom. • A clear path with a minimum width of 1.2 metres that connects the dwelling entrance to the main bedroom, an adaptable bathroom and the living area. • A main bedroom with access to an adaptable bathroom. • At least one adaptable bathroom that meets all of the requirements of either Design A or Design B specified in Table D7.

	Design option A	Design Option B
Door Opening	A clear 850mm wide door opening	A clear 820mm wide door opening located opposite the shower
Door Design	Either: • A slide door, or • A door that opens outwards, or • A door that opens inwards that is clear of the circulation area and has readily removable hinges	Either: • A slide door, or • A door that opens outwards, or • A door that opens inwards and has readily removable hinges
Circulation Area	A clear circulation area that is: • A minimum area of 1.2 meters by 1.2 meters • Located in front of the shower and the toilet • Clear of the toilet, basin and the door swing The circulation area for the toilet and shower can overlap	A clear circulation area that is: • A minimum width of 1 meter • The full length of the bathroom and a minimum length of 2.7 meters • Clear of the toilet and basin The circulation area can include a shower area
Path to Circulation Area	A clear path with a minimum width of 900mm from the door opening to the circulation area	Not applicable
Shower	A hobless (step-free) shower	A hobless (step-free) shower that has a removable shower screen and is located on the furthest wall from the door opening
Toilet	A toilet located in the corner of the room	A toilet located closest to the door opening and clear of the circulation area

Table D7 Bathroom Design

Complies with the standard

Clause 58.05-1 – Accessibility Objective Assessment

59% of dwellings comply with the entry door and internal circulation standard, and 86% of dwellings comply with the adaptable bathroom standard.

Clause 58.05-2 – Building Entry and Circulation Objectives

Objectives	To provide each dwelling and building with its own sense of identity. To ensure the internal layout of buildings provide for the safe, functional and efficient movement of residents. To ensure internal communal areas provide adequate access to daylight and natural ventilation.
	Achieved

Standard D19	Entries to dwellings and buildings should:
	• Be visible and easily identifiable.
	• Provide shelter, a sense of personal address and a transitional space around the entry.
	The layout and design of buildings should:
	• Clearly distinguish entrances to residential and non-residential areas.
	• Provide windows to building entrances and lift areas.
	• Provide visible, safe and attractive stairs from the entry level to encourage use by residents.
	• Provide common areas and corridors that:
	  ◦ Include at least one source of natural light and natural ventilation.
	  ◦ Avoid obstruction from building services.
	  ◦ Maintain clear sight lines.

	Complies with the standard

Clause 58.05-2 – Dwelling Entry Objectives Assessment

All dwellings have a clear entrance from within the building. The ground floor lobby provides shelter and a sense of entry.

Clause 58.05-3 – Private Open Space Objective

Objectives	To provide adequate private open space for the reasonable recreation and service needs of residents.
	Achieved
Standard D20	A dwelling should have private open space consisting of at least one of the following: • An area at ground level of at least 25 square metres, with a minimum dimension of 3 metres and convenient access from a living room. • A balcony with at least the area and dimensions specified in Table D8 and convenient access from a living room. • An area on a podium or other similar base of at least 15 square metres, with a minimum dimension of 3 metres and convenient access from a living room. • An area on a roof of 10 square metres, with a minimum dimension of 2 metres and convenient access from a living room. If a cooling or heating unit is located on a balcony, the minimum balcony area specified in Table D8 should be increased by at least 1.5 square metres. If the finished floor level of a dwelling is 40 metres or more above ground level, the requirements of Table D8 do not apply if at least the area specified in Table D9 is provided as living area or bedroom area in addition to the minimum area specified in Table D11 or Table D12 in Standard D25.

Orientation of dwelling	Dwelling Type	Minimum Area	Minimum Dimension
North (between north 20 degrees west to north 30 degrees east)	All	8 square metres	1.7 metres
South (between south 30 degrees west to south 20 degrees east)	All	8 square metres	1.2 metres
Any other orientation	Studio or 1 bedroom dwelling	8 square metres	1.8 metres
	2 bedroom dwelling	8 square metres	2 metres
	3 or more bedroom dwelling	12 square metres	2.4 metres

Table D8 Balcony Size

Dwelling Type	Additional area
Studio or 1 bedroom dwelling	8 square metres
2 bedroom dwelling	8 square metres
3 or more bedroom dwelling	12 square metres

Table D9 Additional living area or bedroom area

	Complies with the standard

Clause 58.05-3 – Private Open Space Objective Assessment

All dwellings meet the standard, with the exception of the following types:

- A04- At 12sqm, the total balcony area exceeds the minimum required (8sqm), however the balcony width is not 1.8m for its entirety. This is considered acceptable as the balcony is still highly functional and provides for the needs of residents.
- C07- At 15sqm, the total balcony area exceeds the minimum required (12sqm), however the balcony width is only 1.96m. Given the area is greatly exceeded, and the shape of the balcony allows for high levels of functionality, this variation is considered acceptable.

Clause 58.05-4 – Storage Objective

Objectives	To provide adequate storage facilities for each dwelling.
	Achieved
Standard D21	Each dwelling should have convenient access to usable and secure storage space. The total minimum storage space (including kitchen, bathroom and bedroom storage) should meet the requirements specified in Table D10.

Dwelling Type	Total Minimum Storage Volume	Minimum Storage Volume within the Dwelling
Studio	8 cubic metres	5 cubic metres
1 bedroom dwelling	10 cubic metres	6 cubic metres
2 bedroom dwelling	14 cubic metres	9 cubic metres
3 or more bedroom dwelling	18 cubic metres	12 cubic metres

Table D10 Storage

Complies with the standard

Clause 58.05-4 – Storage Objective Assessment

All dwellings meet the standard.

Clause 58.06 – Detailed Design

Clause 58.06-1 – Common Property Objectives

Objectives	To ensure that communal open space, car parking, access areas and site facilities are practical, attractive and easily maintained. To avoid future management difficulties in areas of common ownership.
	Achieved
Standard D22	Developments should clearly delineate public, communal and private areas. Common property, where provided, should be functional and capable of efficient management.
	Complies with the standard

Clause 58.06-1 – Common Property Objectives Assessment

The proposed development includes the following communal areas: car and bicycle parking (basement levels), entry lobby, internal hallways and internal communal multipurpose room, gym and outdoor communal open space. All areas are clearly delineated from the dwellings and public realm.

Clause 58.06-2 – Site Services Objectives

Objectives	To ensure that site services are accessible and can be installed and maintained. To ensure that site services and facilities are visually integrated into the building design or landscape.
	Achieved
Standard D23	Development should provide adequate space (including easements where required) for site services to be installed and maintained efficiently and economically. Meters and utility services should be designed as an integrated component of the building or landscape. Mailboxes and other site facilities should be adequate in size, durable, water-protected, located for convenient access and integrated into the overall design of the development.
	Complies with the standard

Clause 58.06-2 – Site Services Objectives Assessment

Site services have been integrated into the design of the proposal, with the booster cabinet designed to visually blend into the façade and the substation to be obscured from public view.
Service rooms are concealed within the basement levels.
Service cabinets have been located within the entry airlock and providing convenient access to the development's mail room.
Mailboxes are located in the mail room connected to the lobby, protected from weather and secure.

Clause 58.06-3 – Waste and Recycling Objectives

Objectives	To ensure dwellings are designed to encourage waste recycling. To ensure that waste and recycling facilities are accessible, adequate and attractive. To ensure that waste and recycling facilities are designed and managed to minimise impacts on residential amenity, health and the public realm.
	Achieved

Standard D24	Developments should include dedicated areas for:
	• Waste and recycling enclosures which are:
	  ○ Adequate in size, durable, waterproof and blend in with the development.
	  ○ Adequately ventilated.
	  ○ Located and designed for convenient access by residents and made easily accessible to people with limited mobility.
	• Adequate facilities for bin washing. These areas should be adequately ventilated.
	• Collection, separation and storage of waste and recyclables, including where appropriate opportunities for on-site management of food waste through composting or other waste recovery as appropriate.
	• Collection, storage and reuse of garden waste, including opportunities for on-site treatment, where appropriate, or off-site removal for reprocessing.
	• Adequate circulation to allow waste and recycling collection vehicles to enter and leave the site without reversing.
	• Adequate internal storage space within each dwelling to enable the separation of waste, recyclables and food waste where appropriate.
	Waste and recycling management facilities should be designed and managed in accordance with a Waste Management Plan approved by the responsible authority and:
	• Be designed to meet the better practice design options specified in *Waste Management and Recycling in Multi-unit Developments* (Sustainability Victoria, 2019).
	• Protect public health and amenity of residents and adjoining premises from the impacts of odour, noise and hazards associated with waste collection vehicle movements.

	Complies with the standard

Clause 58.06-3 – Waste and Recycling Objectives Assessment

Refer to accompanying Waste Management Plan prepared by Traffix Group.

Clause 58.06-4 – External Walls and Materials Objectives

Objectives	To ensure external walls use materials appropriate to the existing urban context or preferred future development of the area. To ensure external walls endure and retain their attractiveness.
	Achieved
Standard D25	External walls should be finished with materials that: • Do not easily deteriorate or stain. • Weather well over time. • Are resilient to the wear and tear from their intended use. External wall design should facilitate safe and convenient access for maintenance
	Complies with the standard

Clause 58.06-4 – External Walls and Materials Objectives Assessment

An assessment of proposed materiality is included within Section 5 of the Planning Report.

Clause 58.07 – Internal Amenity

Clause 58.07-1 – Functional Layout Objective

Objectives	To ensure dwellings provide functional areas that meet the needs of residents.
	Achieved
Standard D26	Bedrooms should: • Meet the minimum internal room dimensions specified in Table D11. • Provide an area in addition to the minimum internal room dimensions to accommodate a wardrobe.

Dwelling Type	Minimum Width	Minimum Depth
Main bedroom	3 metres	3.4 metres
All other bedrooms	3 metres	3 metres

Table D11 Bedroom Dimensions

Living areas (excluding dining and kitchen areas) should meet the minimum internal room dimensions specified in Table D12.

Dwelling Type	Minimum Width	Minimum Area
Studio and 1 bedroom dwelling	3.3 metres	10 square metres
2 or more bedroom dwelling	3.6 metres	12 square metres

Table D12 Living Area Dimensions

Complies with the standard

Clause 58.07-1 – Functional Layout Objective Assessment

All dwellings meet or exceed the standard.

Clause 58.07-2 – Room Depth Objective

Objectives	To allow adequate daylight into single aspect habitable rooms.
	Achieved
Standard D27	Single aspect habitable rooms should not exceed a room depth of 2.5 times the ceiling height. The depth of a single aspect, open plan, habitable room may be increased to 9 metres if all the following requirements are met: • The room combines the living area, dining area and kitchen. • The kitchen is located furthest from the window. • The ceiling height is at least 2.7 metres measured from finished floor level to finished ceiling level. This excludes where services are provided above the kitchen. The room depth should be measured from the external surface of the habitable room window to the rear wall of the room.
	Complies with the standard

Clause 58.07-2 – Room Depth Objective Assessment

All dwellings meet the standard.

Clause 58.07-3 – Windows Objective

Objectives	To allow adequate daylight into new habitable room windows.
	Achieved
Standard D28	Habitable rooms should have a window in an external wall of the building. A window may provide daylight to a bedroom from a smaller secondary area within the bedroom where the window is clear to the sky. The secondary area should be: • A minimum width of 1.2 metres. • A maximum depth of 1.5 times the width, measured from the external surface of the window.
	Complies with the standard

Clause 58.07-3 – Windows Objective Assessment

All habitable rooms have a window in an external wall of the building.

Clause 58.07-4 – Natural Ventilation Objectives

Objectives	To encourage natural ventilation of dwellings. To allow occupants to effectively manage natural ventilation of dwellings.
	Achieved
Standard D29	The design and layout of dwellings should maximise openable windows, doors or other ventilation devices in external walls of the building, where appropriate. At least 40 per cent of dwellings should provide effective cross ventilation that has: • A maximum breeze path through the dwelling of 18 metres. • A minimum breeze path through the dwelling of 5 metres. • Ventilation openings with approximately the same area. The breeze path is measured between the ventilation openings on different orientations of the dwelling.
	Complies with the standard

Clause 58.07-4 – Natural Ventilation Objectives Assessment

A total of 41% of dwellings provide effective natural cross ventilation in accordance with Standard B29.



675 Victoria Street, Abbotsford

Landscape Concept Design

Prepared for EG

322.0102.00.L.01.RP01

Tract

Level 6, 6 Riverside Quay,
Southbank VIC 3006

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www.tract.com.au

Issued
23 October 2024

Quality Assurance

Project Number
322.0102.00.L.01

Revision (see below)
[03]

Prepared By
LZ

Reviewed By
JF

Project Principal
JF

Issued
11 October 2024

Revisions

Rev	Issued	Details	Prepared By	Reviewed By	Project Principal
[01]	01 September 2022	TP Submission	LZ	JF	JF
[02]	16 March 2023	TP Submission	LZ	JF	JF
[03]	11 October 2024	TP Submission	LZ	JF	JF
[04]	23 October 2024	TP Submission	LZ	JF	JF

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1 Context & Site Analysis

1.1 Context & Locality

The site sits in Wurundjeri Woi Wurrung country between the Yarra River and Victoria Street, in a rapidly developing residential and commercial strip. The Yarra River to the north provides the site with visual amenity and easy access to the Main Yarra Trail. The site is highly visible from the neighbouring suburb of Kew across the river.

Directly to the east of the site is the Acacia Place development which provides a landscape precedent with public access to the river trails and a landscape palette that takes its cues from the river environment with natural materials and native planting.

Victoria Street runs along the south of the site and is a busy conduit for cars and trams. Victoria Street is lined with residential buildings of various heights, heritage buildings of brick and bluestone like the one adjacent to the western boundary and the Victoria Gardens shopping centre to the south.















1. Yarra River
2. Acacia Place
3. Victoria Street
4. Victoria Gardens
5. 663 Victoria Street
6. Adjacent Residential Development Under Construction

1.2 Site Analysis

The site is ideally orientated with north facing views to the river. The northern interface to the river includes a steep embankment vegetated mostly with exotic grasses and scattered native trees. Within the site, there are two Corymbia maculata (Spotted Gums) worthy of retention. The trees are approximately 20 metres high and with 10 metre canopies and will assist with the visual integration of the proposed development.

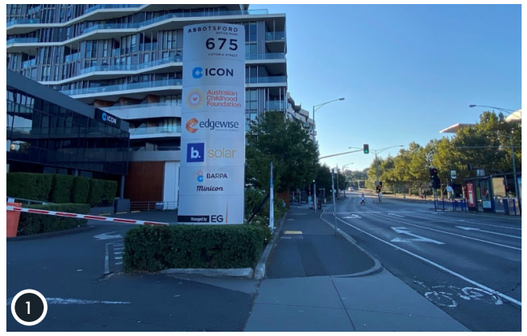
The western boundary interfaces with the brick and bluestone heritage building at 663 Victoria Street. The development is hard up against the boundary. Level differences between the two sites will require a low retaining wall.

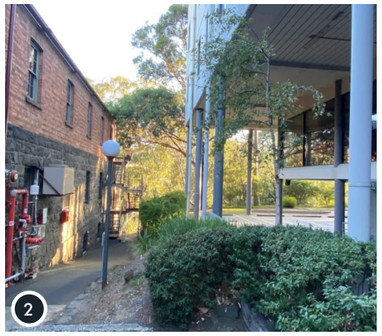
The eastern boundary harbours the pedestrian link and is offset from the Eden apartment building in the Acacia Place precinct.

Victoria Street is a busy traffic conduit with a simple asphalt footpath and no street trees. A Eucalyptus camaldulensis (River Red Gum) at 19 x 14 metres is located in the south-west corner of the site and will be retained.

The pre 1750 Ecological Vegetation Classes within the site include Riparian Woodland and Plains Grassy Woodland.

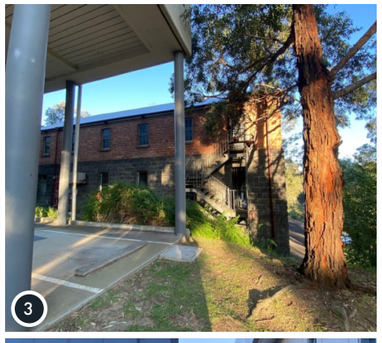


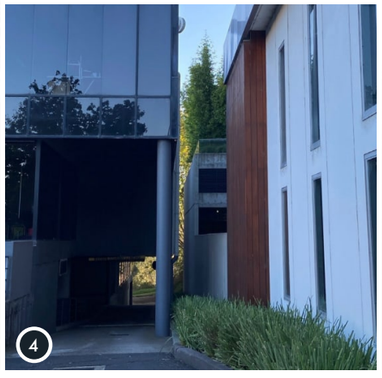














1. Victoria Street
2. Western interface with heritage building
3. Western interface with heritage building
4. Eastern interface with Acacia Place

T19. Corymbia maculata

T3. Eucalyptus camaldulensis

T23. Corymbia maculata

2 Landscape Response

2.1 Landscape Vision

Reclaimed by nature

The redevelopment of 675 Victoria Street presents an opportunity to provide a nature-based development, with enhanced biodiversity connecting the river corridor to the more urban Victoria Street precinct. Generous planting to the ground plane and integrated into the built form will provide an enhanced environment benefiting the local ecology, residents and the wider community.

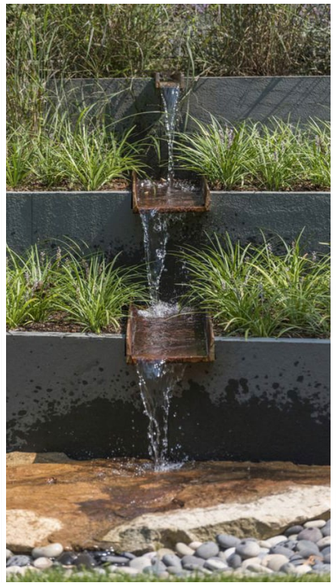
The landscape design aims to:

- Increase Yarra's unique biodiversity.
- Provide an environment that contributes to the health and wellbeing of its human inhabitants.
- Visually integrate the built form into this scenic location and provide a unique sense of place that reflects the character of the river locale.
- Provide opportunities for recreation, relaxation and social interaction for the residents and the wider community.

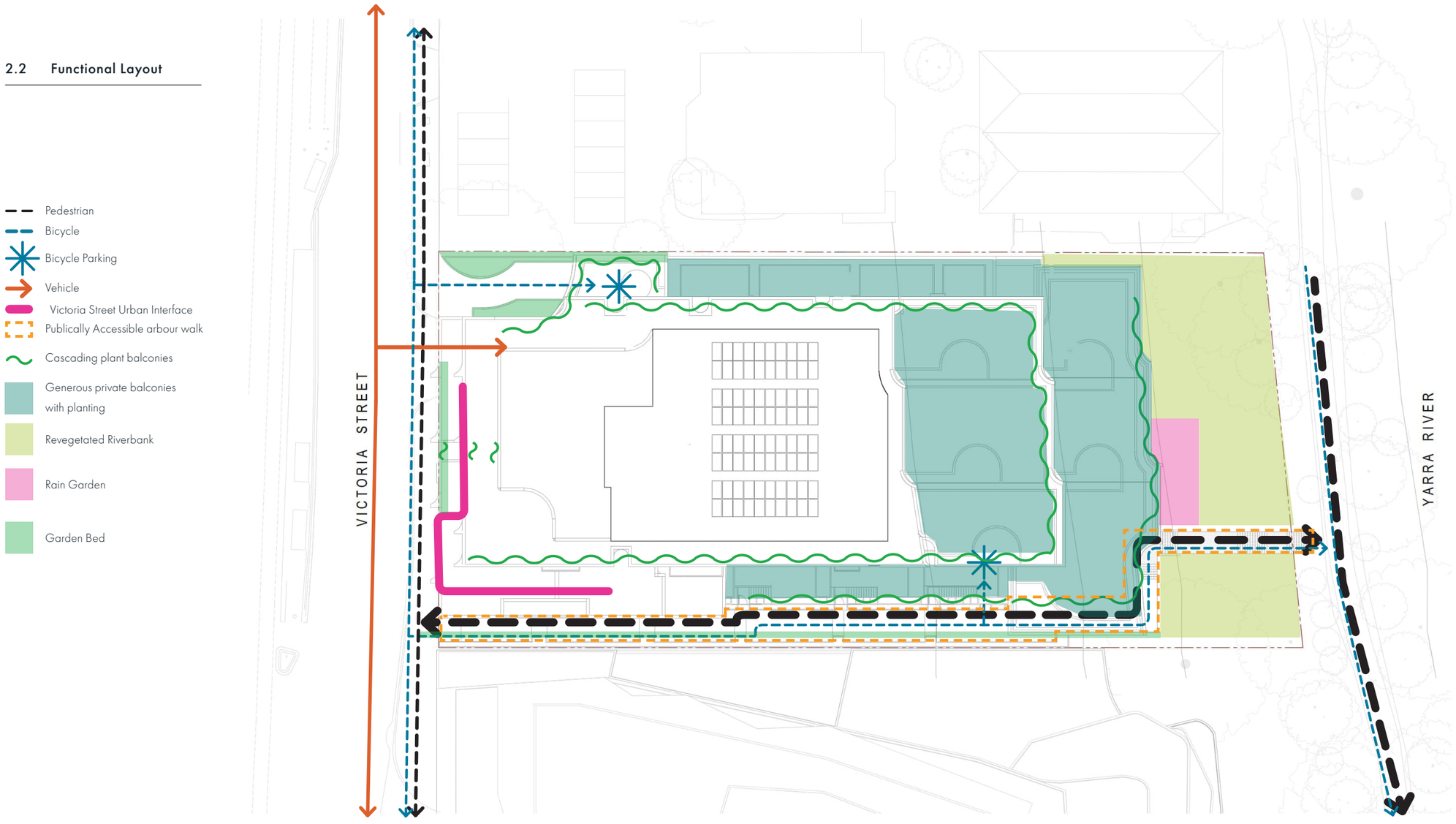








2.2 Functional Layout



3 Landscape Concept

3.1 Ground Floor & Public Realm

3.1.1 Entry / Arbour Walk

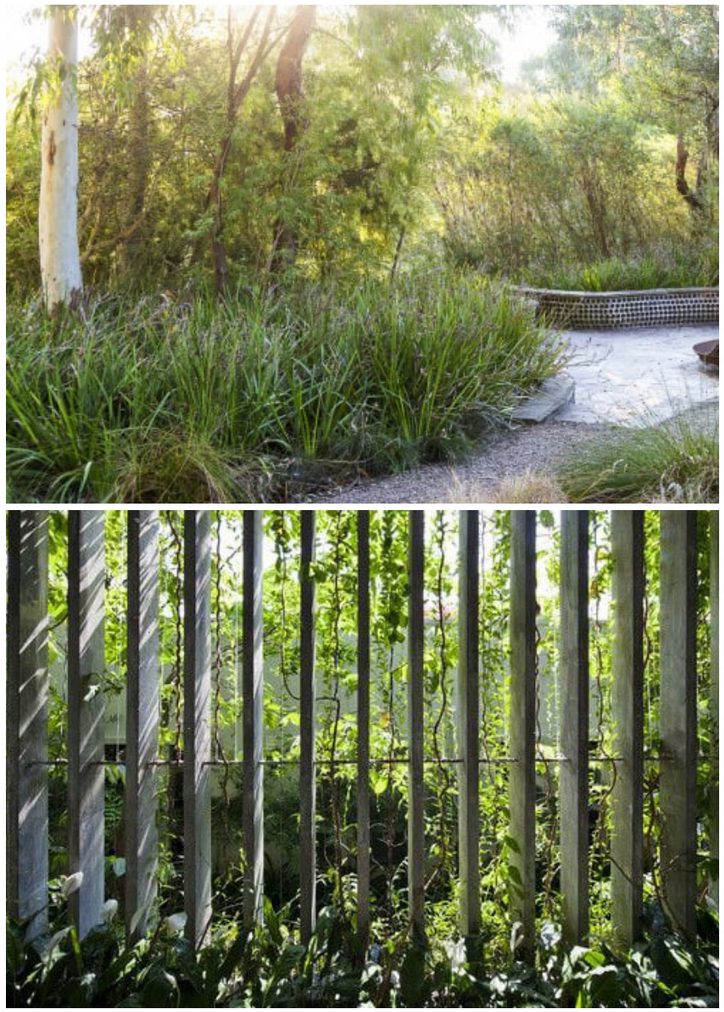
The retention of the mature River Red Gum will provide an ideal entry statement to this new residential building, welcoming residents home and drawing in the wider community by highlighting the cohesion of nature and built form. The River Red Gum will be framed by the curved form of the building behind. An integrated arbour walk on the Eastern boundary will continue the theme of framing nature by drawing views towards the riverbank. Climbing and shade tolerant planting will ensure a continuous green pathway to the length of the development.

3.1.2 River Connection Stair

The river stairway will play a vital role in connecting the existing river trails with Victoria Street and the new building. A simplistic stair connection design ensures that minimal impact is placed on the surrounding embankment. The stairs have been designed with safety in mind, designed with minimal need of retaining walls, user visibility to the trail and passive surveillance has been placed as a high priority. The bottom landing and connection to the Main Yarra Trail has been considered by terminating as early as possible to ensure no handrails extrude out into the trail path, whilst also supplying users of the connection enough space to join the trail path safely . An integrated bike channel will allow easy transport of bicycles connecting Victoria Street, the river path and the bike storage room on lower ground level.

3.1.3 Revegetated Riverbank

The northern interface holds many existing trees of great importance to the site. To minimise all works in this area, it will be revegetated with native species in keeping with the Yarra environs. There will also be an integrated Rain garden within this space to deal with the sites needs.





LEGEND

- Site Boundary
- Brick paving to pedestrian zones
- Bluestone setts to shared zone
- Raised planter
- Arbour with climbers
- Concrete retaining wall with climbers
- Stairs to Yarra trail
- Fence
- Rain garden
- Proposed Tree
- Bike hoops
- Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Public and Communal Spaces - Ground and Lower Ground Level	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3

3.2 Ground to level 10

3.2.1 Private Terraces

Generous private terraces on lower levels will allow for multiple uses and include large areas of planting for small trees and cascading plants.











Site Boundary

Terrace paving

Bluestone setts to shared zone

Raised planter

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Lower Ground + Ground Level	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

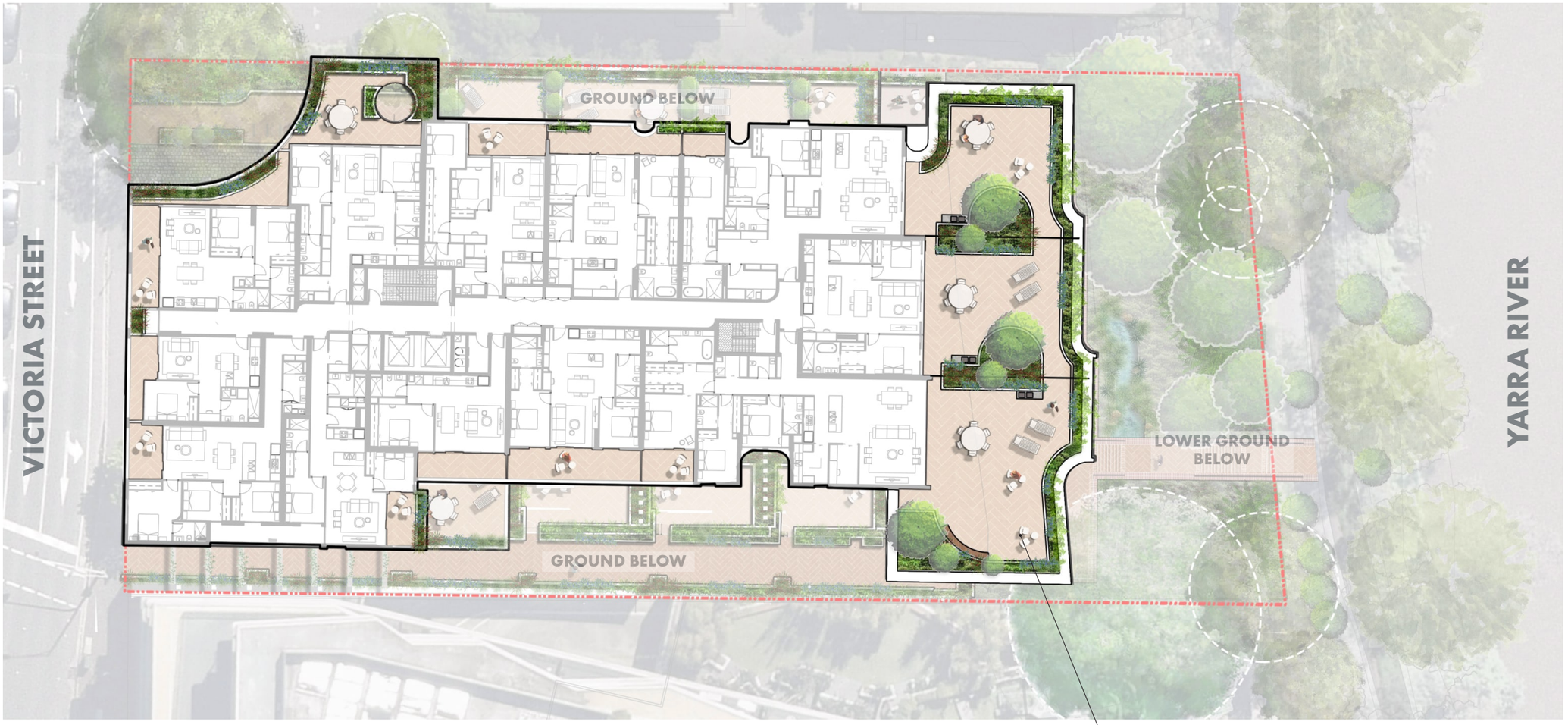
Terrace paving

Raised planter

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Upper Ground Level	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

Terrace paving

Seating

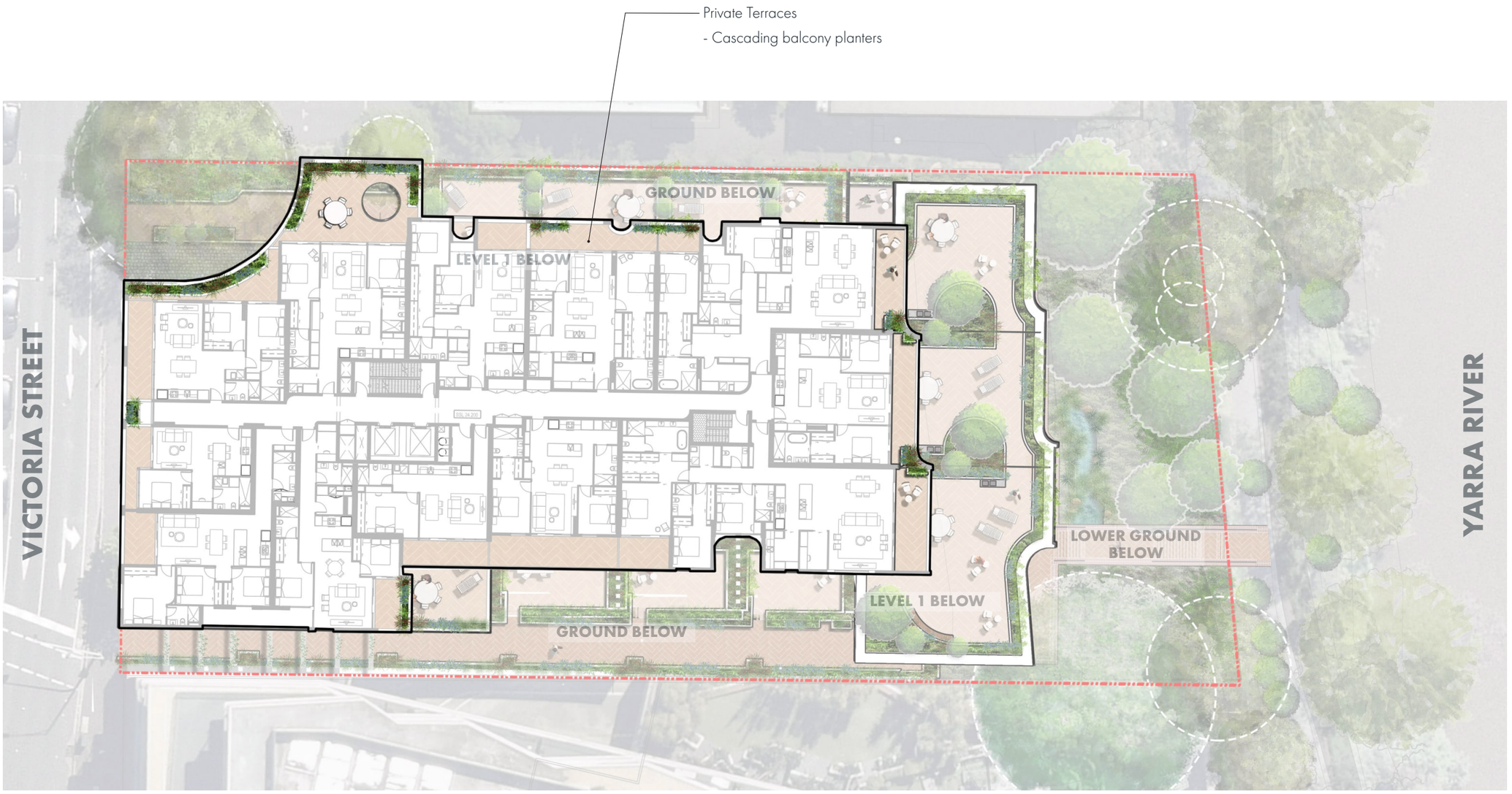
Raised planter

Barbecue

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Level 1	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

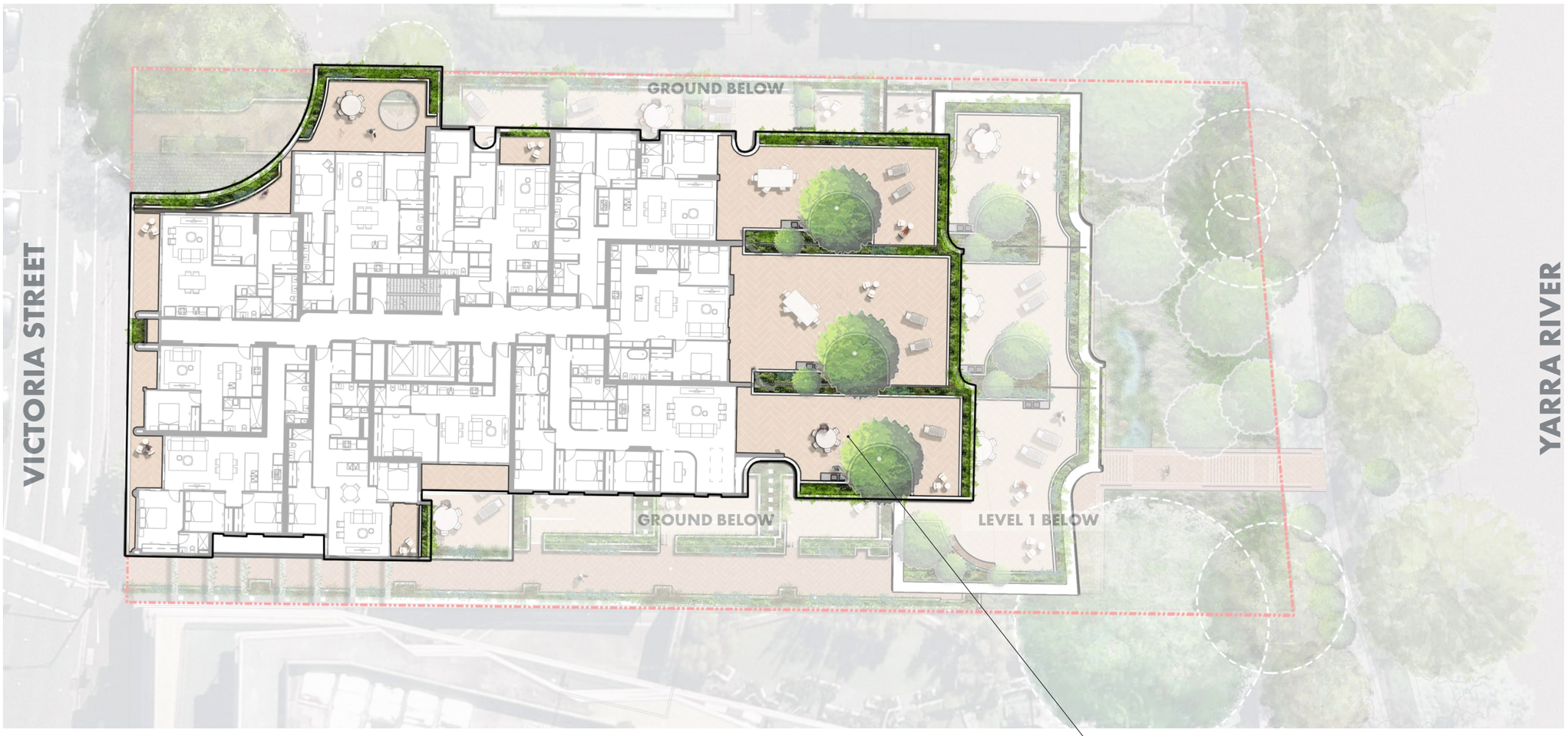
Terrace paving

Raised planter

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Level 2	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

Terrace paving

Raised planter

Barbecue

Proposed Tree

Existing tree to be retained

Private Terraces
- Cascading balcony planters
- Small trees in raised planters
- BBQ & entertaining area

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Level 3	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

Terrace paving

Raised planter

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan Typical - Level 4,5 & 6	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

Terrace paving

Raised planter

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Level 7	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

Terrace paving

Raised planter

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan Typical - Level 8 & 9	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Site Boundary

Terrace paving

Raised planter

Proposed Tree

Existing tree to be retained

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Level 10	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3



Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept Plan - Section 1	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:250 @ A3



Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept - Section 2	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:250 @ A3

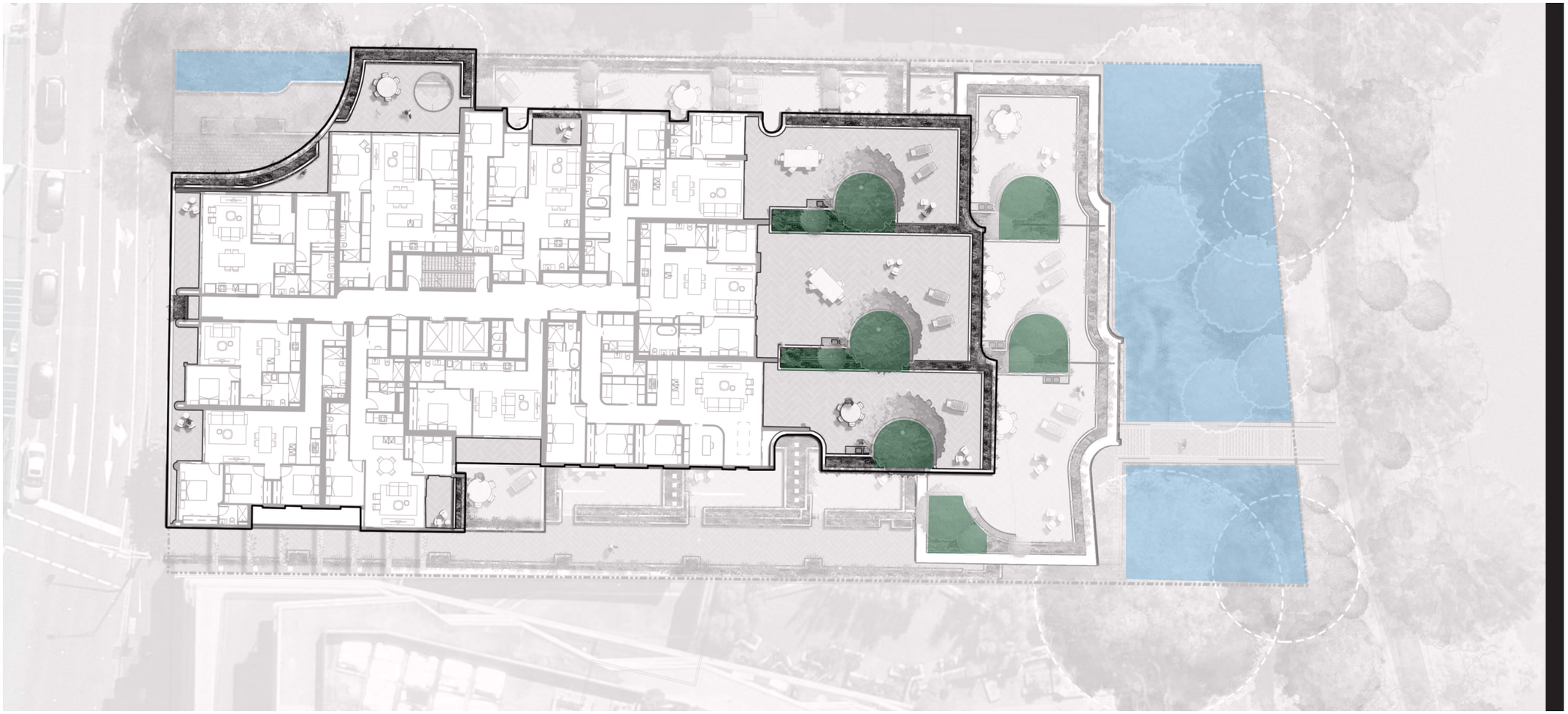




Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept - Section 3	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:100 @ A3



Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Landscape Concept - Section 4	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:250 @ A3



Natural Ground Soils

1m Deep Soils for Trees on Balconies

Drawing Title	Project Name	Drawing No.	Revision	Date	Drawn	Checked	Project Principal	Scale
Deep Soil Plan	675 Victoria Street, Abbotsford	0322-0102-00-L-01 01. RP01	04	23.10.2024	L.Z	J.F	J.F	1:300 @ A3

4 Planting Design

4.1 Design Intent

The planting palette will contribute to Yarra's unique biodiversity by introducing generous planting from a diverse palette of native species. Where possible, species that are indigenous to the local area will be used to reinforce the high environmental value of the Yarra corridor. This planting will provide habitat as well as a strong sense of place for the development. Many of the plants have local cultural value to the Wurundjeri Woi Wurrung people. The pre 1750 Ecological Vegetation Classes within the site include Riparian Woodland and Plains Grassy Woodland. These have formed the basis of the planting palette with the addition of other species to promote biodiversity and withstand future climate challenges.

One purpose of the planting intent is to assist with visual integration of the built form within the riparian corridor, particularly when viewed from the north. This will be achieved by tall trees to the northern interface (both retained and proposed), cascading planting from lower balconies, and climbers on walls.

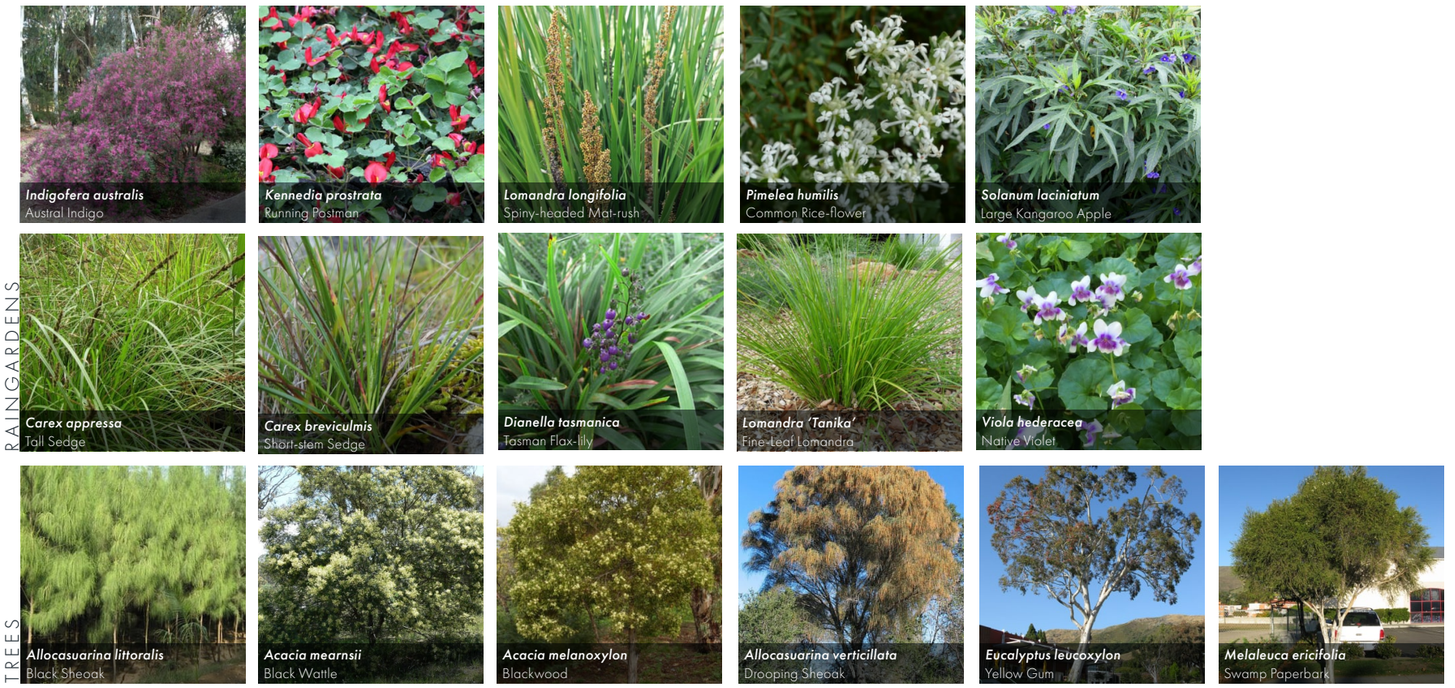
Note:

Riverbank planting will be sourced from 70% local seed. 20% from hotter and drier climates and 10% from a wetter, cooler climate.

GROUND LEVEL

RAINGARDENS





TREES

SHRUBS + GROUND COVERS


Anigozanthos flavidus
Kangaroo Paw


Banksia spinulosa 'Cherry Candles'
Banksia


Correa alba
White Correa


Dianella revoluta
Black Anther Flax Lily


Lomandra 'Tanika'
Fine-Leaf Lomandra


Plectranthus argentatus
Silver Spurflower

BALCONY


Dianella tasmanica
Tasman Flax-lily


Enchylaena tomentosa
Ruby Saltbush


Plectranthus argentatus
Silver Spurflower


Myoporum parvifolium 'Yareena'
Myoporum Yareena


Dichondra argentea 'Silver Falls'
Dichondra Silver Falls

UPPER LEVEL TERRACES


Cissus antarctica
Kangaroo Vine


Casuarina glauca 'Cousin It'
Cousin It

TREES


Cupaniopsis anacardioides
Tuckeroo


Eucalyptus caesia 'Silver Princess'
Silver Princess

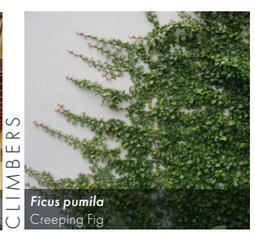

Geijera parviflora
Wilga


Corymbia citriodora 'Scentuous'
Dwarf Lemon Scented Gum


Allocasuarina littoralis
Black Sheoak


Tristaniopsis laurina 'Luscious'
Water Gum

CLIMBERS


Ficus pumila
Creeping Fig

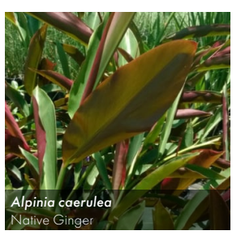

Hardenbergia violacea
Purple Coral Pea


Pandorea jasminoides
Bower of Beauty


Pandorea pandorana
Wonga Wonga Vine

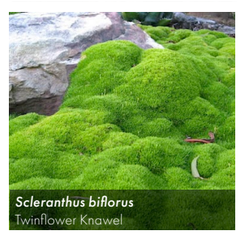
UNDERCROFT

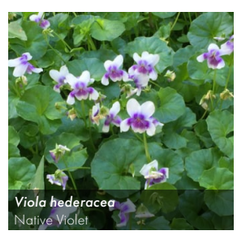

Ajuga australis
Austral Bugle


Alpinia caerulea
Native Ginger


Asplenium australasicum
Bird's Nest Fern


Cyathea australis
Rough Tree Fern


Scleranthus biflorus
Twinflower Knawel


Viola hederacea
Native Violet

5 Planting Schedule

GROUND / LOWER GROUND / RIVERBANK

Botanic Name	Common Name	Mature (H x W)	Shade Tolerance	Origin*	Install Size
Shrubs + Ground covers					
Acaena novae-zelandiae	Bidgee-widgee	Spreading x 4m	Full sun to full shade	L	150mm
Austrostipa rudis	Veined Spear-grass	0.4 x 1.3m	Full sun	L	150mm
Bossiaea prostrata	Creeping Bossiaea	0.5 x 1.5m	Full sun to full shade	L	150mm
Brachyscome multifida	Cut Leaf Daisy	0.2 x 0.5m	light shade	V	150mm
Carex breviculmis	Short-stem Sedge	0.3 x 0.3m	Sun / part shade	L	150mm
Chrysocephalum apiculatum	Common Everlasting	0.3 x 0.3m	Sun	V	150mm
Correa alba	White Correa	1 x 1.5m	Sun/part shade	V	200mm
Craspedia paludicola	Common Billy Buttons	0.2m x 0,3m	Sun / light shade	V	150mm
Dianella revoluta	Black Ansther Flax-Lily	0.8 x 1.5m	Sun / part shade	L	150mm
Dianella tasmanica	Tasman Flax-lily	0.6 x 0.5m	Semi shade/full shade	L	150mm
Dichondra repens	Kidney Weed	Spreading to 2m	Part shade/ shade	L	150mm
Enchylaena tomentosa	Ruby Saltbush	0.5 x 0.7m	Sun / light shade	L	150mm
Gahnia radula	Thatch Saw-sedge	2 x 2m	Full sun / semi shade	L	150mm
Goodenia ovata	Hop Goodenia	1 x 1m	Semi shade	L	200mm
Hypericum gramineum	Small St John's Wort	0.4 x 0.2m	Full sun / semi shade	L	150mm
Kennedia prostrata	Running Postman	0.1 x 1m	Sun/part shade	L	150mm
Lachnagrotis filiformis var. filiformis	Common Blown-grass	0.25 x 0.80m	Full sun / semi shade	L	150mm
Lomandra filiformis	Wattle Mat-rush	0.2 x 0.2m	Sun / part shade	L	150mm
Lomandra longifolia	Spiny-headed Mat-rush	0.8 x 0.8m	Sun/ part shade	L	150mm
Mentha australis	River Mint	0.5 x 0.6m	Sun to heavy shade	L	150mm
Microlaena stipodes var. stipoides	Weeping Grass	0.2 x 0.2m	Sun / part shade	L	150mm
Myoporum parvifolium	Creeping Boobialla	spreading/trailing	Full sun/part shade	V	150mm
Oxalis perennans	Yellow Wood-sorrel	Spreading x 0.30m	Full sun / semi shade	L	150mm
Pelargonium australe	Austral Storks Bill	0.4 x 0.4m	Light shade	L	150mm
Pimelea humilis	Rice flower	0.5 x 0.5m	Sun / light shade	L	150mm
Poa labillardierei	Common Tussock Grass	0.6 x 0.5m	Sun / part shade	L	150mm
Poranthera microphylla	Small Poranthera	0.1 x 0.1m	Sun / light shade	L	150mm
Rubus parvifolius	Smal;l-leaf Bramble	1 x 2m	Semi shade	L	150mm
Rumex brownii	Slender Dock	0.3 x 1m	Sun / part shade	L	150mm
Schoenus apogon	Common Bog-sedge	0.3 x 0.15m	Full sun / semi shade	L	150mm

GROUND / LOWER GROUND / RIVERBANK

Botanic Name	Common Name	Mature (H x W)	Shade Tolerance	Origin*	Install Size
Shrubs + Ground covers					
Senecio minimus	Shrubby Fireweed	Spreading x 1.5m	Semi shade	L	150mm
Themeda triandra	Kangaroo Grass	0.4 x 0.7m	Sun / part shade	L	150mm
Wahlenbergia communis	Tufted Bluebell	0.3 x 1m	Sun/part shade	L	150mm
Wahlenbergia gracilis	Sprawling Bluebell	0.2 x 1m	Sun / part shade	L	150mm

GROUND / LOWER GROUND / RIVERBANK

Botanic Name	Common Name	Mature (H x W)	Shade Tolerance	Origin*	Install Size
Shrubs					
Bursaria spinosa ssp. Spinosa	Sweet Bursaria	2 x 2m	Sun / light shade	L	200mm
Callistemon sieberi	River Bottlebrush	2.5 x 2.5m	Sun / light shade	L	200mm
Correa glabra	Rock Correa	1.5 x 3m	Sun / part shade	L	200mm
Gynatrix pulchella	Hemp Bush	4 x 3m	Shade	L	200mm
Hymenanthera dentata	Tree Violet	4 x 2.5m	Sun / part shade	L	200mm
Indigofera australis	Austral Indigo	1.5 x 1.5m	Sun / part shade	L	200mm
Kunzea ericoides	Snowman	3 x 3m	Sun	L	200mm
Melaleuca ericifolia	Swamp Paperbark	6 x 4m	Sun /part shade	L	200mm
Solanum laciniatum	Large Kangaroo Apple	2 x 2m	Part shade	L	200mm
Raingardens					
Carex appressa	Sedge	0.8 x 0.8m	Sun / part shade	L	150mm
Carex breviculmis	Short-stem Sedge	0.3 x 0.3m	Sun / part shade	L	150mm
Dianella tasmanica	Tasman Flax-lily	0.6 x 0.5m	Semi shade/full shade	L	150mm
Lomandra filiformis	Wattle Mat-rush	0.2 x 0.2m	Sun / part shade	L	150mm
Isolepis nodosa	Knobby Club-rush	1 x 1m	Sun / part shade	L	150mm

GROUND / LOWER GROUND / RIVERBANK

Botanic Name	Common Name	Mature (H x W)	Shade Tolerance	Origin*	Install Size
Small Canopy Trees (Type A)					
Allocasuarina littoralis	Black Sheoak	10 x 5m	Sun / light shade	L	100L
Melaleuca ericifolia	Swamp Paperbark	10 x 4m	Full sun / part shade	L	100L

GROUND / LOWER GROUND / RIVERBANK

Botanic Name	Common Name	Mature (H x W)	Shade Tolerance	Origin*	Install Size
Medium Canopy Trees (Type B)					
Acacia mearnsii	Black Wattle	10 x 8m	Sun / Part shade	L	100L
Acacia melanoxylon	Blackwood	12 x 9m	Sun / Part shade	L	100L
Allocasuarina verticillata	Drooping Sheoak	10 x 8m	Sun	L	100L
Eucalyptus leucoxylon ssp connata	Yellow Gum	15 x 12m	Sun / light shade	L	100L
Eucalyptus viminalis ssp. viminalis	Manna Gum	10 x 8m	Sun / light shade	L	100L
Upper Ground Climbers to Pergola					
Clematis microphylla	Small Leaved Clematis	Climbing	sun / part shade	L	150mm
Ficus pumila	Climbing Fig	Climbing	Part shade	E	150mm
Hardenbergia violacea	Hardenbergia	Climbing	Sun / light shade	L	150mm
Pandorea jasminoides	Bower of Beauty	Climbing	Part shade	V	150mm
Pandorea pandorana	Wonga Vine	Climbing	Part shade	V	150mm
Upper Ground Undercroft Planting					
Ajuga ausralis	Australian Bugle	0.4 x 1m	Sun / light shade	A	150mm
Alpinia caerulea	Native Ginger	2 x 1m	Light/full shade	A	150mm
Asplenium australasicum	Birds Nest Fern	1 x 1m	Part shade/ Shade	A	150mm
Asplenium flabellifolium	Necklace Fern	Prostrate x spreading	Semi shade	A	150mm
Blechnum cartilagineum	Gristle Fern	1.5 x 1m	Semi shade	A	150mm
Blechnum fluviatile	Ray Water-fern	0.2 x 1m	Semi shade/full shade	A	150mm
Blechnum nudum	Fishbone Water-fern	1 x 1m	Semi shade	A	150mm
Blechnum wattsii	Hard Water Fern	1m x spreading	Semi shade/full shade	A	150mm
Cyathea australis	Rough Tree Fern	5-15 x 5m	Light/Full Shade	V	100L
Dianella tasmanica	Tasman Flax-lily	0.6 x 0.5m	Semi shade/full shade	L	150mm
Dicksonia antarctica	Soft Tree Fern	1.5-15 x 2m	Light/Half/Heavy Shade	V	100L
Helmholtzia glaberrima	Stream Lily	1 x 1m	Part shade	A	150mm
Lomandra tanika	Matt Rush	0.8m x 0.8m	Full sun	A	150mm
Polystichum proliferum	Mother Shield Ferm	1.5 x 1.5m	Semi shade	A	150mm
Pteridium esculentum	Austral Bracken	2.5m x indefinite	Full Sun / semi shade	A	150mm
Rumohra adiantiformis	Leathery Shield-fern	1.5 x 1.5m	Semi shade/full shade	A	150mm
Scleranthus biflorus	Cushion Bush	0.05 x 0.6m	Full sun	A	150mm
Viola hederacea	Native Violet	Spreading to 1m	Part shade	V	150mm

UPPER LEVEL TERRACES

Botanic Name	Common Name	Mature (H x W)	Shade Tolerance	Origin*	Install Size
Shrubs + Ground covers					
Anigothanthos flavidus	Kangaroo Paw	0.6 x 0.6m	Full sun	A	150mm
Banksia spinulosa 'Cherry Candles'	Banksia	0.5 x 0.5m	Sun / part shade	A	150mm
Brachyscome multifida	Cut-leaf Daisy	0.4 x 1m	Full sun / semi shade	A	150mm
Casuarina glauca 'Counsin It'	Cousin It	Spreading/trailing	Full sun	A	150mm
Chrysocephalum apiculatum	Yellow Buttons	0.3 x 1m	Full sun	A	150mm
Craspedia paludicola	Swamp Billy Buttons	1 x 0.3m	Full sun / semi shade	V	150mm
Correa alba	White Correa	1 x 1.5m	Sun/part shade	V	200mm
Correa glabra	Rock Correa	2 x 2m	Full sun / semi shade	V	150mm
Dianella revoluta	Black Ansther Flax-Lily	0.8 x 1.5m	Sun / part shade	L	150mm
Dianella tasmanica	Tasman FLax-Lily	1.5 x 2m	Full sun / semi shade	L	150mm
Dichondra repens	Kidney Weed	0.15 x 1m	Full sun / semi shade	A	150mm
Enchylaena tomentosa	Ruby Saltbush	0.3 x 1m	Full sun / semi shade	A	150mm
Lomandra tanika	Matt Rush	0.8m x 0.8m	Full sun	A	150mm
Plectranthus argentatus	Silver Plectranthus	1 x 1.5m	Full sun/light shade	A	150mm

UPPER LEVEL TERRACES

Botanic Name	Common Name	Mature (H x W)	Shade Tolerance	Origin*	Install Size
Balcony / Cascading Plants					
Casuarina glauca 'Counsin It'	Cousin It	spreading/trailing	Full sun	A	150mm
Cissus antarctica	Kangaroo Vine	spreading/trailing	Part shade	A	150mm
Dichondra argentea 'Siver Falls'	Silver Falls	spreading/trailing	Part shade	A	150mm
Hardenbergia violacea	Purple Coral Pea	spreading/trailing	Full sun	L	150mm
Myoporum parvifolium	Creeping Boobialla	spreading/trailing	Full sun/part shade	V	150mm
Small Canopy Trees (Type A)					
Cupaniopsis anacardioides	Tuckeroo	7 x 6m	Sun / part shade	A	100L
Eucalyptus caesia 'Silver Princess'	Silver Princess	6 x 4m	Full sun	A	100L
Geijera parvifolia	Wilga	7 x 7m	Sun / part shade	A	100L
Corymbia citridora 'Scentuous'	Dwarf Scented Gum	7 x 5m	Sun	A	100L
Allocasuarina littoralis	Black Sheoak	10 x 5m	Sun / light shade	L	100L
Tristaniopsis laurina 'Luscious'	Kanooka	8 x 6m	Full sun / part shade	A	100L

6 Deep Soil Planting, Canopy Cover, Maintenance, Irrigation & Typical Planter Detail

6.1 Deep Soil Planting

Opportunities for deep soil planting exist on the northern setback of the site. In addition to this, the landscape design includes extensive areas of raised planting to ground level, level 3, level 10 and level 13. In determining the extent of planting, the landscape design has considered the requirement to provide usable and functional areas of communal open space. Most planters will have a minimum 800mm depth to allow for small and medium tree planting.

Pergolas are provided at ground level to provide a growing frame for climbing plants and to increase canopy coverage.

Significant balcony planting is also provided to soften the façades of the apartment buildings.

TOTAL SITE AREA	**3459m2**
Total planting area (less than 800mm soil depth)	644 m2
Total deep planting area (more than 800mm soil depth and including natural deep soil)	662m2
TOTAL PLANTING AREA	**1306m2**
	(% of site area)
Deep soil percentage of site area	37.7%

6.2 Canopy Cover

Five large existing trees will be retained. These will be supplemented with additional trees at ground and upper levels.

Number of A type trees (6m height x 4m spread)	6
Number of B type trees (8m height x 8m spread with minimum 28 m3 soil volume)	6
Number of C type trees (12m height x 12m spread)	3
Canopy cover from existing trees	336m2 Retained
Canopy cover from proposed trees	470m2
Canopy cover from pergolas with climbers	10m2
TOTAL CANOPY COVER	806m2

BADS requirement

	Requirement	Site Production
Number Of Trees	Min 2 x 8m Trees or 1 x 12m Tree	6 new Type A 6 new Type B
m2 Of Canopy Cover	542 m2	806m2
Area Of Deep Soil	519 m2	662

6.3 Irrigation

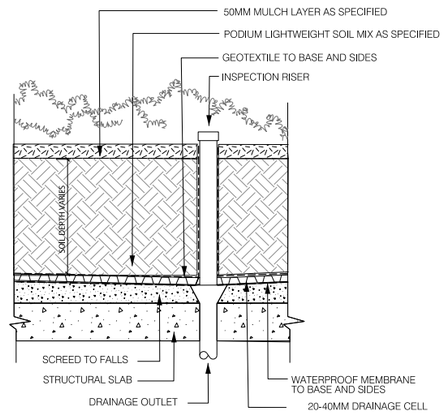
All proposed planting within the site will be serviced by an automatic drip irrigation system with moisture sensors, (to be specified within the Landscape Specification). All landscape irrigation will endeavour to be sourced from an on-site rain water harvesting system, topped up with mains water when required.

6.4 Maintenance

The maintenance of the landscape will be paramount to its establishment and ongoing ability to thrive. The species selected are known performers in situations where soil depth and light levels are limited,however a rigorous continuous maintenance regime will ensure the garden installation flourishes and presents well throughout the year.

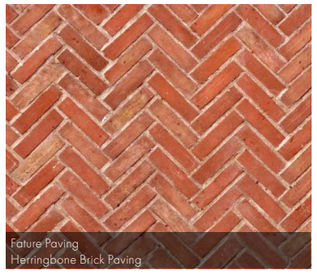
Maintenance activities undertaken, during and post establishment, will include; weeding; tip pruning; fertilizer application; herbicide spray (if appropriate), replenishment of mulch; and monitoring of plant health and performance and the implementation of other appropriate horticultural measures to ensure optimal growth at all times.

6.5 Typical On Structure Planter Profile



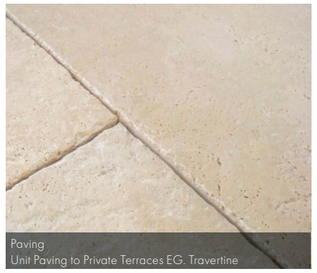
7 Materials

PAVING TYPES


Fature Paving
Herringbone Brick Paving


Paving
Brick Stairs


Paving
Stone Setts to Shared Zone

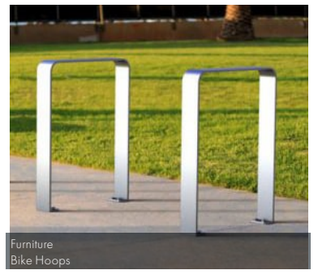

Paving
Unit Paving to Private Terraces EG. Travertine

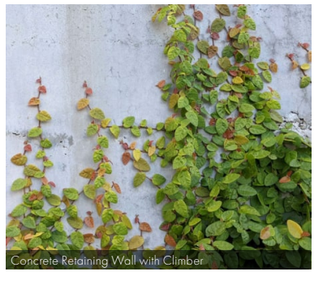
FURNITURE

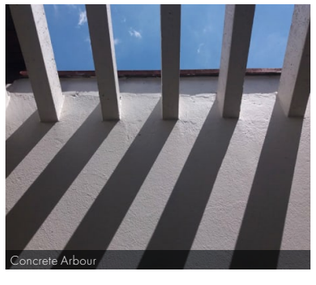

Furniture
Timber Bench


Furniture
Concrete Outdoor Setting


Furniture
BBQ Concrete Top


Furniture
Bike Hoops


Concrete Retaining Wall with Climber


Concrete Arbour


Stainless Steel Cable


Bike Channel to Stairs



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Traffix Group

Green Travel Plan

Proposed Mixed Use Development

675 Victoria Street, Abbotsford

Prepared for
EG

April 2025

G31423G-02D

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D	DFP	04/04/25	N. McCaffrey	J. Cossins (RPE11767)

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Appendix A Bicycle Parking Locations

1. Introduction

Traffix Group has been engaged by EG to undertake a Green Travel Plan for the Proposed Mixed Use Development at 675 Victoria Street, Abbotsford.

This GTP is a management tool designed to reduce the reliance on motor vehicles, minimise the negative impacts of transport on the environment, manage car parking demands associated with the development, improve opportunities for those without access to a car and maximise the benefits associated with 'green travel' i.e. health and financial benefits.

This plan sets out a range of actions to be implemented by the Developer, Owners Corporation and Tenants to encourage sustainable travel choices and reduce car dependency by prospective residents, staff, visitors and customers and outlines an implementation program as well as the requirements for monitoring and review of the plan.

It is based on plans dated March 2025 prepared by SJB Architects.

2. Objectives and Methodology

The objectives of this GTP are to:

- promote travel alternatives such as public transport, cycling, and walking;
- reduce car dependency and greenhouse gas emissions;
- manage car parking demands;
- improve information and opportunities for those without access to a car; and
- benefit the community by minimising the traffic impacts of the development.

The methodology adopted in developing the GTP is as follows:

- review existing documentation and transport conditions;
- establish a management strategy;
- identify appropriate GTP actions for the site; and
- develop an implementation plan and monitoring regime.

The Owners Corporation/Commercial Building Manager(s) will be responsible for the implementation of the GTP and the annual reporting of Travel Demand Patterns to the relevant stakeholders.

3. The Development

3.1. The Development

The proposal seeks to redevelop the site as a mixed-use development, inclusive of an office (commercial tenancy), a community facility (Little B.I.G Foundation) and residential apartments.

The proposed development schedule is provided in Table 1.

Table 1: Proposed Development Schedule

Use		Current Scheme
Residential	1 bed dwellings	21 apartments
	2 bed dwellings	67 apartments
	3 bed dwellings	35 apartments
	Total	**123 apartments**
Office (Commercial)		287m^2
Community Facility (Little B.I.G Foundation)		122m^2

The proposal includes a number of ancillary uses including a gym, private dining rooms and amenity space to be used by residents of the development only.

3.2. Access

3.2.1. Pedestrian & Cyclist Access

Primary pedestrian and cyclist access is proposed via Victoria Street.

The on-site residential bike parking in the lower ground floor can be accessed via a DDA ramp from Victoria Street.

Visitor bike parking is located on the western boundary of the site, with access from Victoria Street.

The commercial tenancy will have direct access to Victoria Street via the front façade.

Secondary access will also be provided to/from the Yarra River Trail at the rear of the site, via stairs and a wheel ramp/ramped area.

3.2.2. Vehicle Access

Vehicle access is proposed via Victoria Street near the southwest corner of the site, via a two-way vehicle ramp to basement.

The access provisions are shown in Figure 1.

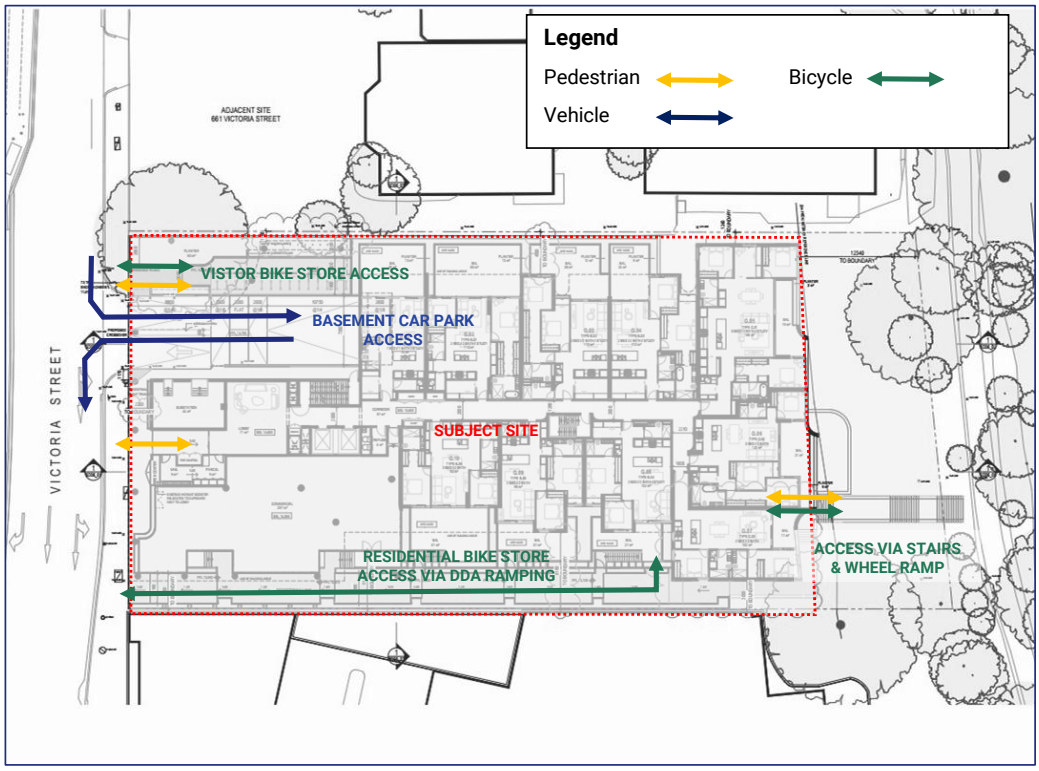


Figure 1: Proposed Access Arrangements

3.3. Parking

3.3.1. Bike & Motorcycle Parking

The application proposes the provision of 158 bicycle spaces comprising:

- 28 spaces located on the ground floor on the western boundary of the site;
  - Comprising of 25 Residential Visitor Spaces and 3 Commercial Visitor Spaces
  - 14 horizontal rails (28 spaces)
- 130 spaces located on the lower ground floor in the bike room;
  - Comprising of 124 Residential Spaces and 6 Commercial Staff Spaces
  - 10 vertical rails (10 spaces),
  - 60 two-tier rails (120 spaces),

26 motorcycle spaces are to be provided throughout the basement car park.

3.3.2. Car Parking

The proposed development includes 169 car spaces, allocated as follows:

- 167 spaces for Residential use,
- 1 space for the Commercial tenancy,
- 1 space for the Community Facility (Little B.I.G. Foundation).

3.3.3. Loading & Waste

A dedicated loading area is shown on the plans, in basement, intended to serve vans and passenger vehicles.

Waste collection is proposed to be undertaken on-site within the lower ground floor via private waste collection services from this location.

Further details regarding waste management and collection arrangements are outlined in the Waste Management Plan prepared by Traffix Group (ref. G31423R-04C, dated April 2025).

4. Sustainable Transport Opportunities

4.1. Information for Residents & Staff

The provision of information is essential to ensuring that residents, staff and visitors are aware of the opportunities that they may have to access the site in a form other than a private car.

This is important, particularly for those residents with multiple cars, in establishing non car-based travel behaviours in the early stages of occupation.

Accordingly, and following discussion with the applicant, we understand that to implement the GTP and provide residents and tenants with associated information, resident welcome packs will be distributed to all new tenants.

A notice board is to be provided within one (or more) of the public areas (i.e. entry lobby and/or lifts), which will provide basic Green Travel information (maps/timetables).

The Owners' Corporation may also choose to include relevant information (including a copy of this plan) electronically via the Owners' Corporation intranet or webpage.

It is recommended that this includes a copy of the TravelSMART map in the vicinity of the subject site and any other relevant bicycle and walking maps. An excerpt of the TravelSMART map for the City of Yarra is shown at Figure 2 below, and identifies the currently available bicycle and pedestrian infrastructure in the vicinity of the site.

A description of these facilities and opportunities for the site to take advantage of them is provided in the following sections.

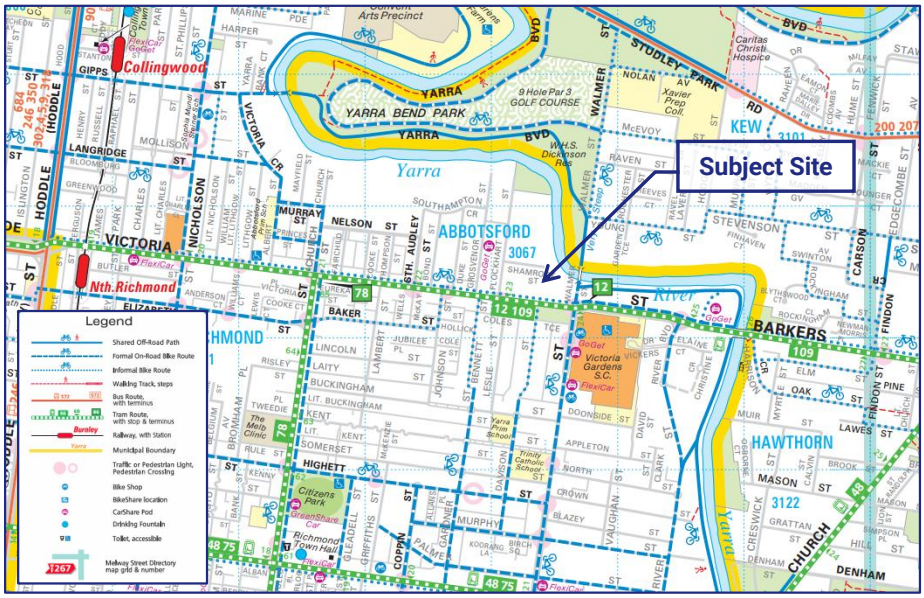


Figure 2: Excerpt of Yarra TravelSMART Map

4.2. Reduced Car Parking Provisions

The application proposes a single parking space for Commercial use, therefore a dispensation is proposed as part of the development associated with the Commercial Use.

The application proposes a single parking space for Community Use (Little B.I.G Foundation). Since the parking rate for Community Use is not included in Clause 52.06, the provision will be determined to the satisfaction of the responsible authority.

The reduced provision of on-site car parking for the commercial use will actively encourage staff to utilise alternative transport modes to access the site as they may not be allocated an on-site car parking space. Similarly, members of the community attending the Little B.I.G Foundation will be encouraged to utilise alternative transport modes.

4.3. Walking & Accessibility

The site has excellent access to sustainable transport modes and is well located with regard to retail and everyday essential services, thus promoting walking.

The site is located immediately adjacent the Victoria Gardens Shopping Centre, which is located on the southern side of Victoria Street, accessible by walking to the signals at Burnley Street or River Boulevard.

Victoria Gardens provides access to a wide range of everyday services such as banks, cafés, restaurants, entertainment and specialty shops.

4.4. Taxi & Ride Share Accessibility

The site is accessible by taxi, UBER and other ride share services which can provide mobility for residents, employees and guests when they require transport to/from off-site locations. Residents and staff should be provided with information regarding these services.

4.5. Public Transport Accessibility

4.5.1. Access to Services

The site has excellent service by public transport with Tram Route 12 & 109 operating along Victoria Street, including a tram stop located along the site frontage.

The Route 109 tram is a premium service and operate at 8-10 minute frequencies during the peak hours.

A summary of these services provided in the vicinity of the site are presented at Table 2 and Figure 3 below.

Table 2: Public Transport in the Vicinity of the Subject Site

Mode	Service	Route	Distance to Node
Tram	Route 109	Box Hill - Port Melbourne	Along the site frontage
	Route 12	Victoria Gardens - St Kilda	~270 metres

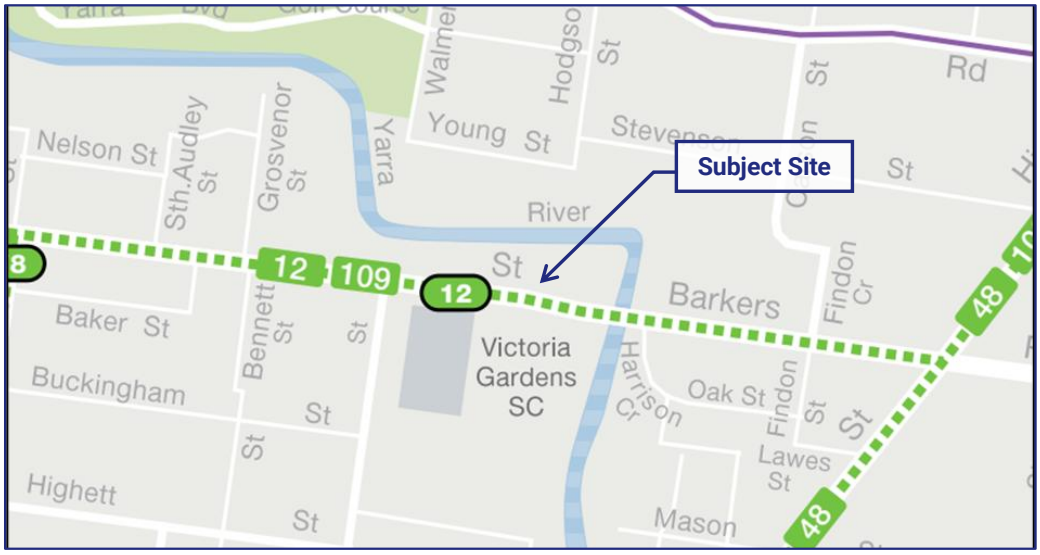


Figure 3: Public Transport Victoria Map - Yarra

4.5.2. Journey Planning

Staff and residents should be encouraged to utilise the "PTV Journey Planner" available online at the PTV website and via Smartphone Applications.

Additional information on public transport facilities and service times can be obtained from Public Transport Victoria (Ph: 1800 800 007, ptv.vic.gov.au).

4.5.3. Myki Offers

Residential Introductory Offer

As an incentive to encourage the use of public transport for new residents from "Day 1", the Residential Owners Corporation could include the issue of a new myki card to each new resident as part of a welcome pack.

The myki card will include a nominal amount of start-up credit. Residents would be responsible for 'topping-up' credit once the start-up credit was consumed.

Myki Commuter Club

PTV offers businesses and organisations the opportunity to participate in the myki Commuter Club. This program allows organisations (and their staff) to purchase discounted 365 day myki passes for travel in Zone 1 and 2 or Zone 2.

The commercial tenant could consider registering as part of the Myki Commuter Club to purchase discounted myki tickets on behalf of staff.

4.6. Bicycle Network Accessibility

The City of Yarra is well served by the Principal Bicycle Network (PBN) with both on-road and off-road bicycle facilities directly linking the site with the surrounding municipalities and the CBD. The subject site has access to bicycle infrastructure including Shared Off-Road Paths along the Yarra River (Capital City Trail) and On-Road Bike Routes along Victoria Street and Burnley Street.

An excerpt from the Principal Bicycle Network is provided at Figure 4, illustrating the surrounding bicycle priority network.

The provision of on-site bicycle parking will actively encourage residents, staff, community members, visitors/customers to access the site using a bicycle, thereby reducing motor-vehicle trips.

The site should also consider the provision of a bike repair facility and with suitable repair and bike servicing tools and kits.

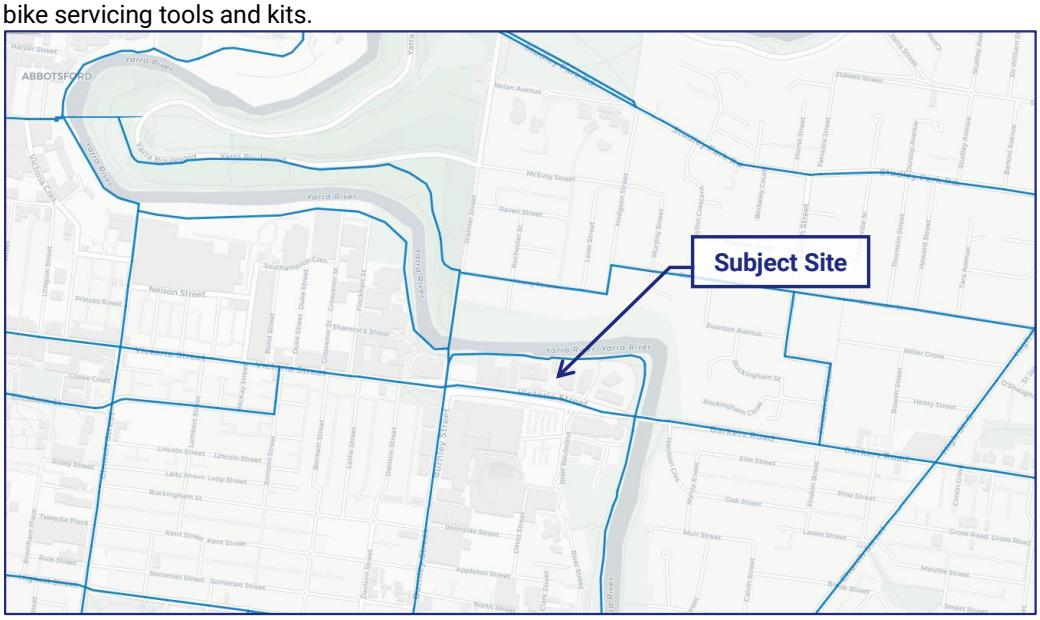


Figure 4: PBN Map

4.7. Car Pooling

The Owners Corporation and commercial tenants should consider encouraging car pooling for residents and staff, to actively reduce the number of single occupant car trips. This could be managed through the Owners Corporation/tenant or via an online subscription to an existing online car pooling website (such as coseats.com or shareurride.com.au).

4.8. Car Share

Car sharing schemes have been operating in Melbourne since 2003 with a number of inner metropolitan Councils actively supporting their use by allocating public spaces throughout their municipalities for the purposes of accommodating 'car share' cars[1].

City of Yarra Council has an adopted car share policy (Car Share Policy 2019 to 2024). The policy actively encourages the Council's Sustainable Transport Strategy, which sets Council's broader vision for a connected and liveable city where residents, visitors and workers can live and travel car free by improving the convenience, safety, accessibility and range of sustainable travel choices across the municipality.

Car share schemes provide an alternative to owning a car and encourages the use of sustainable modes of transport for the majority of trips. Car share facilities offer personal and commercial or business memberships and can be more convenient for short trips as payment is generally on a per hour basis.

For staff, commercial or business car share memberships offer the benefit of being used as a fleet or pool car vehicle. This provides an alternative mode of transport for staff to use during the day (meetings, site inspections, etc.) if required, rather than driving a private vehicle to the site. This arrangement will assist in reducing the car parking demands of the proposed development.

A number of commercially operated car share pods are available proximate to the site as shown in, with both a FlexiCar and a GoGet share car located within walking distance in the vicinity of the site.

The nearest existing car share pods are shown in Figure 5.

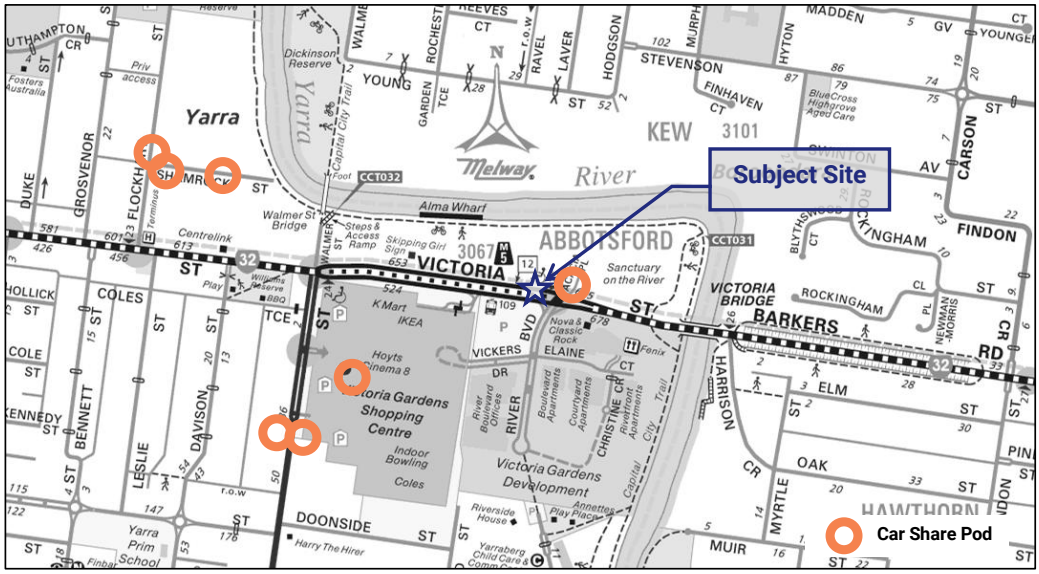


Figure 5: Proximate Car Share Pods

[1] The three main schemes supported by these Councils are Flexicar (www.flexicar.com.au), Go Get Car Share (www.goget.com.au) and Green Share Car (www.greensharecar.com.au).

4.9. Electric Car Charging

The proposal includes the provision of dedicated on-site electric vehicle charging provisions.

It is noted that the proposal has been designed 'future proofed' to provide for additional electric vehicle charging bays in the future should there be a demand.

The provision of electric vehicle charging spaces will contribute to a reduction in Carbon Emissions by reducing the number of oil-fuel based vehicles.

5. Actions

The Green Travel Plan aims to reduce the number of single occupant vehicle trips undertaken by any residents, tenants, community members and visitors of the proposed development.

The following actions aim to improve the overall accessibility of the site and foster sustainable travel behaviour. In general, the Owners Corporation and building management will be responsible for the ongoing implementation of the actions identified within the Green Travel Plan.

A representative/s should be nominated to 'Champion' and oversee the implementation of the Green Travel Plan and to discuss the opportunities available to the site with individual tenants and/or identify areas for improvement.

A summary of the responsible party for each action within the Green Travel Plan and the stage of implementation, has been provided at Table 3.

Table 3: Green Travel Plan Initiatives and Responsible Party

Action	Responsibility	Implementation
Information and Promotion		
Display information regarding alternate sustainable travel modes within a public area, i.e. notice boards in entry lobby and/or lift, or alternately provide relevant information via an Owners Corporation webpage or intranet. Minimum information required includes: - Map(s) indicating the location of the most proximate train, tram and bus stops to the facility, bicycle facilities and car share facilities (e.g. TravelSMART Map of Yarra, available from https://www.yarracity.vic.gov.au/the-area/getting-around. - Information on public transport fares and nearby outlets selling public transport tickets. Information is available from Public Transport Victoria (Ph: 1800 800 007, ptv.vic.gov.au). - Provision of train, tram, and bus timetable information (or relevant links). - The board/webpage should display an overview of frequencies and service times, and provide relevant phone numbers and web links to Public Transport Victoria and Yarra Trams timetabling services. - Contact details for car share schemes and online carpooling websites to encourage reduced single occupant car trips. - Details for taxi, UBER and ride share schemes to facilitate access to/from the site for staff, residents, visitors and customers.	Owners Corporation	On-going

Action	Responsibility	Implementation
Provide each apartment/tenancy with a relevant Green Travel Welcome Pack. The welcome pack should include: - Train, tram and bus timetables of the key routes in the nearby area. - Map(s) indicating the location of the most proximate train, tram and bus stops to the facility, bicycle infrastructure, car share facilities and pedestrian walking paths (e.g. Travel Smart Map of Yarra, available from https://www.yarracity.vic.gov.au/the-area/getting-around. - Map(s) indicating the location of both on-site and off-site bicycle parking facilities. - Contact details for car share schemes and online carpooling websites to encourage reduced single occupant car trips.	Owners Corporation	On-going
Promote state and national sustainable events such as Walk to Work day, Ride to Work day and World Environment Day (via email and intranet). The dates for these events and for other environmental events can be found at http://www.environment.gov.au/topics/about-us/media-centre/events.	Owners Corporation	On-going
Provide directional signage on the site for nearby public transport services, taxi services, bicycle paths, and bicycle parking areas.	Builder/ Developer	Owners Corporation
Public Transport		
A new myki card could be provided to each new resident as part of a welcome pack.	Builder/ Developer	Prior to Occupation
Commercial Tenants could register under the myki Commuter Club Scheme and offer staff discounted myki cards at the reduced cost	Tenants	Ongoing
Cycling		
Bicycle facilities should be secure, easily accessible and clearly visible to residents and visitors to assist in promoting this mode. The location and details of access to the bicycle parking should be detailed to residents as part of the welcome pack.	Builder/ Developer	Development Stage

Action	Responsibility	Implementation
Provide an on-site bicycle repair toolkit available for staff and residents within the secure bicycle parking area. Toolkit could include puncture repair equipment, bicycle pump, spanner, hex-keys etc.	Owners Corporation	On-going
Encourage meetings between Green Travel Champions to assist with the management and coordination of bicycle user needs. For example, the Champion may investigate or advocate for: - Group activities/rides - Additional bicycle parking (if there is a demand) through the reallocation of space within the car parking areas, including any underutilised car parking (as available).	Owners Corporation/ Tenants	Owners Corporation/ Tenants
Parking		
Parking spaces on-site should be secure and controlled. Residents need to be aware of the allocation of parking spaces.	Builder/ Developer	Development Stage
Provide an electric charging space on-site in the resident parking areas.	Builder/ Developer	Prior to Occupation
Provide infrastructure for future electric charging spaces should there be a demand	Builder/ Developer	Development Stage
Car Pooling		
Encourage car-pooling between residents and staff.	Owner Corporation	On-going
Car Share Schemes		
As an added incentive to encourage the use of car share schemes the Owners Corporation could investigate/negotiate with existing operators in the area to provide discounted introductory memberships for new residents and staff.	Owners Corporation	Prior to occupation

6. Monitoring & Review

This Green Travel Plan should be monitored and reviewed on a regular basis to ensure that it meets its objectives and has the intended impacts on car use and transport choice.

The Owners Corporation and nominated champion will be responsible for monitoring the Green Travel Plan in accordance with the monitoring program set out in Table 4 below.

The monitoring program should be undertaken annually over a three year period, with the first review of the program being conducted 12 months after occupation of the building.

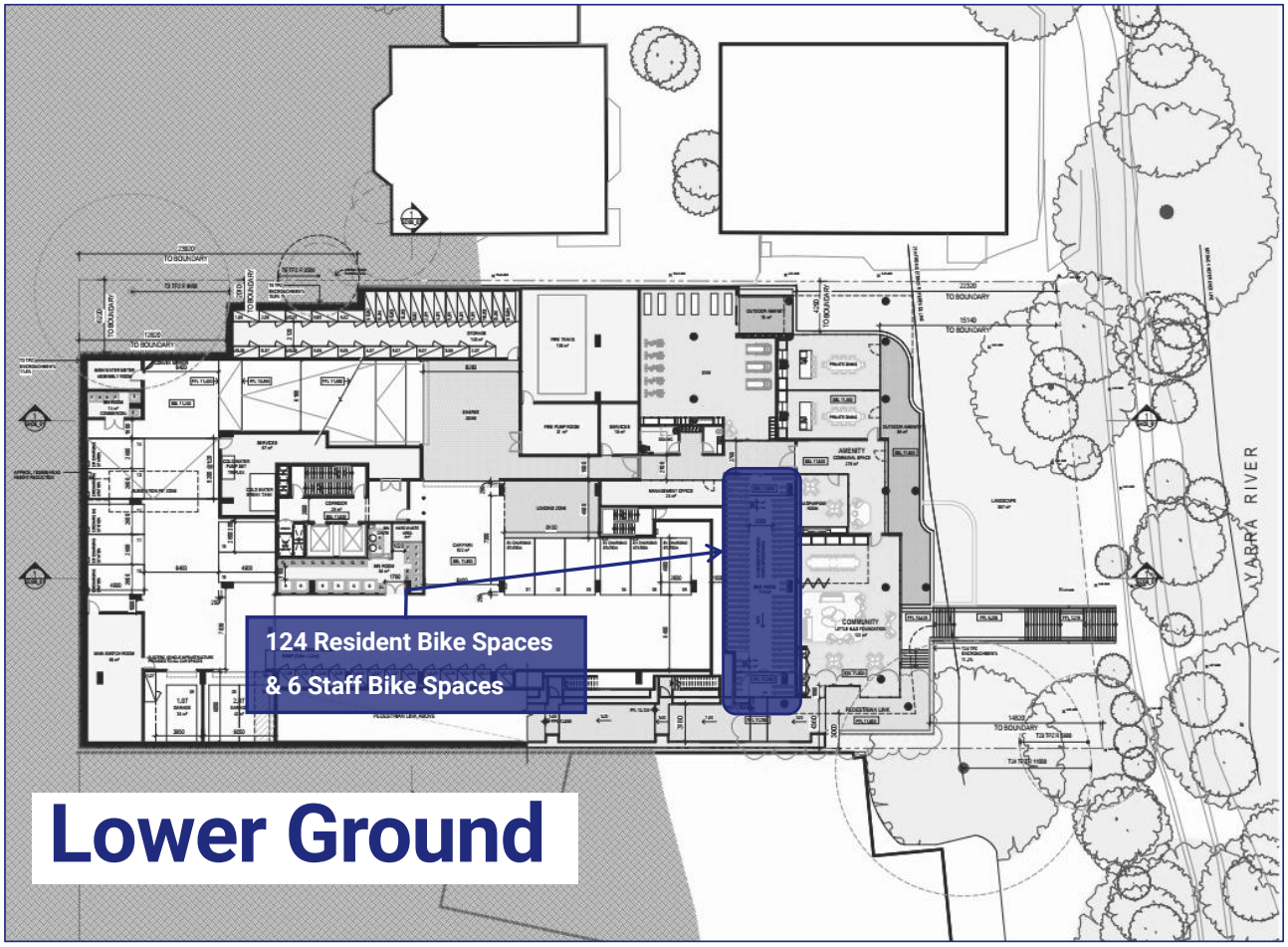
It should be monitored a minimum of 5 yearly from that point forwards.

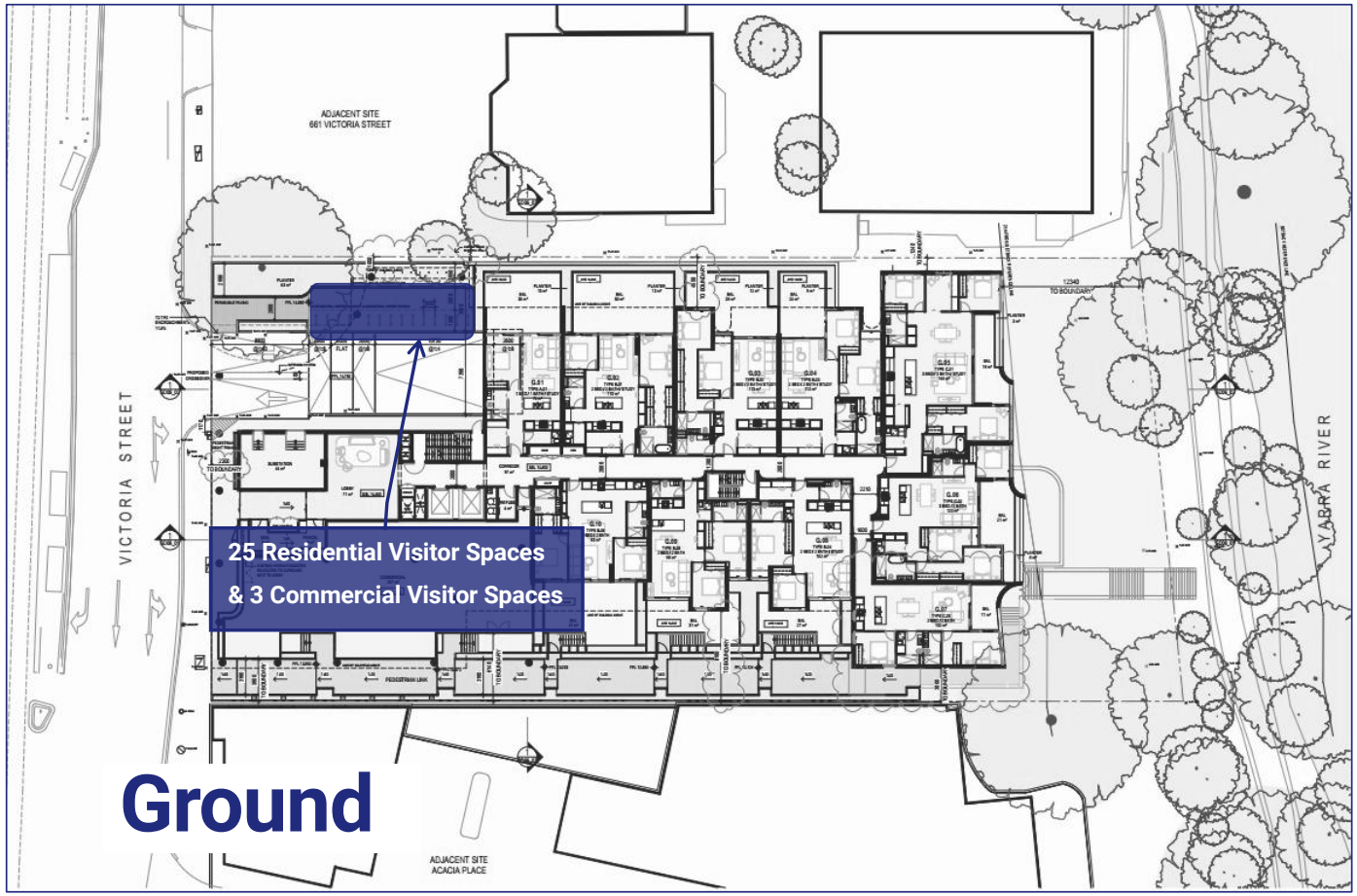
Table 4: Monitoring and Review Program

Monitoring/Review Action	Purpose
Undertake an occupancy survey of the car and bicycle parking provided on the site.	Gauge the level of use of car and bicycle parking facilities. If the bicycle parking usage is high, and there is demand for additional bicycle parking identified, then the Owners Corporation should investigate the potential to reallocate car parking for bicycles.
Undertake an Audit of the actions listed in Section 5 of this document and compile supporting evidence of actions implemented (i.e. notices, photos, etc).	To document the progress of the plan and ensure viability of the plan.
Review the plan/actions and identify any modifications and/or improvements.	To 'fine tune' the plan and ensure viability of the plan.
Undertake a questionnaire survey of residents and staff.	To determine the modal split of trips and determine progress and compliance of the plan.

Appendix A
Bicycle Parking Locations

Traffix Group


124 Resident Bike Spaces
& 6 Staff Bike Spaces
Lower Ground
YARRA RIVER


ADJACENT SITE
661 VICTORIA STREET
VICTORIA STREET
YARRA RIVER
25 Residential Visitor Spaces
& 3 Commercial Visitor Spaces
Ground
ADJACENT SITE
ACACIA PLACE

MATTHEW PALAVIDIS
VICTOR FATTORETTO
MATTHEW SHIELDS

675 Victoria Street, Abbotsford

Town Planning Assessment

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Attention To	Perpetual Corporate Trust Ltd ATF Yield Plus

Revision	Date	Document Reference	Prepared By	Checked By	Approved By
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1	8/03/2023	20221396.1/0803A/R1/TH	TH		TH
2	16/10/2024	20221396.1/1610A/R2/SG	SG		SG

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1 INTRODUCTION

Acoustic Logic (AL) have been engaged to undertake an acoustic assessment of the proposed mixed-use development located at 675 Victoria Street, Abbotsford. This report addresses noise intrusion from surrounding noise sources into the proposed development as well as operation noise emission from site.

The following documentation have been referenced in the acoustic assessment.

Table 1 – Referenced Documents

Company	Document	Reference	Date
SJB Architects	EG Abbotsford 675 Victoria Street Abbotsford	SD02 Floor Plans	4 October 2024
Victorian Planning Provisions	Clause 58.04-3	-	2017
Victoria Department of Environment, Land Water and Planning	Planning Practice Note 83		August 2017
-	Australian Standard AS/NZS 2107:2016	-	2016
EPA Victoria	Noise Limit and Assessment Protocol (Noise Protocol)	Publication 1826.4	2021

2 SITE DESCRIPTION

The proposed development is located at 675 Victoria Street, Abbotsford. The development consists of 2 basement levels of carparking, common residential amenities, approximately 287m^2 cold shell commercial space with 13 levels of residential apartments and private terrace/balconies. The existing commercial office development at site is proposed to be demolished.

The site is bounded by Victoria Street to the south which has an annual average daily traffic (AADT) volume of 23,000[1] vehicles and carries the No. 109 and 12 tram routes. The latter of which terminates at this location.

Bounding the project site to the east is the Haven residential development; Acacia being the nearest of 3 buildings. Across Victoria Street and to the south lies Victoria Gardens Shopping Centre and future residences at 10 and 20 River Boulevard.

Figure 1 below shows the subject site, surrounds and noise monitoring locations.

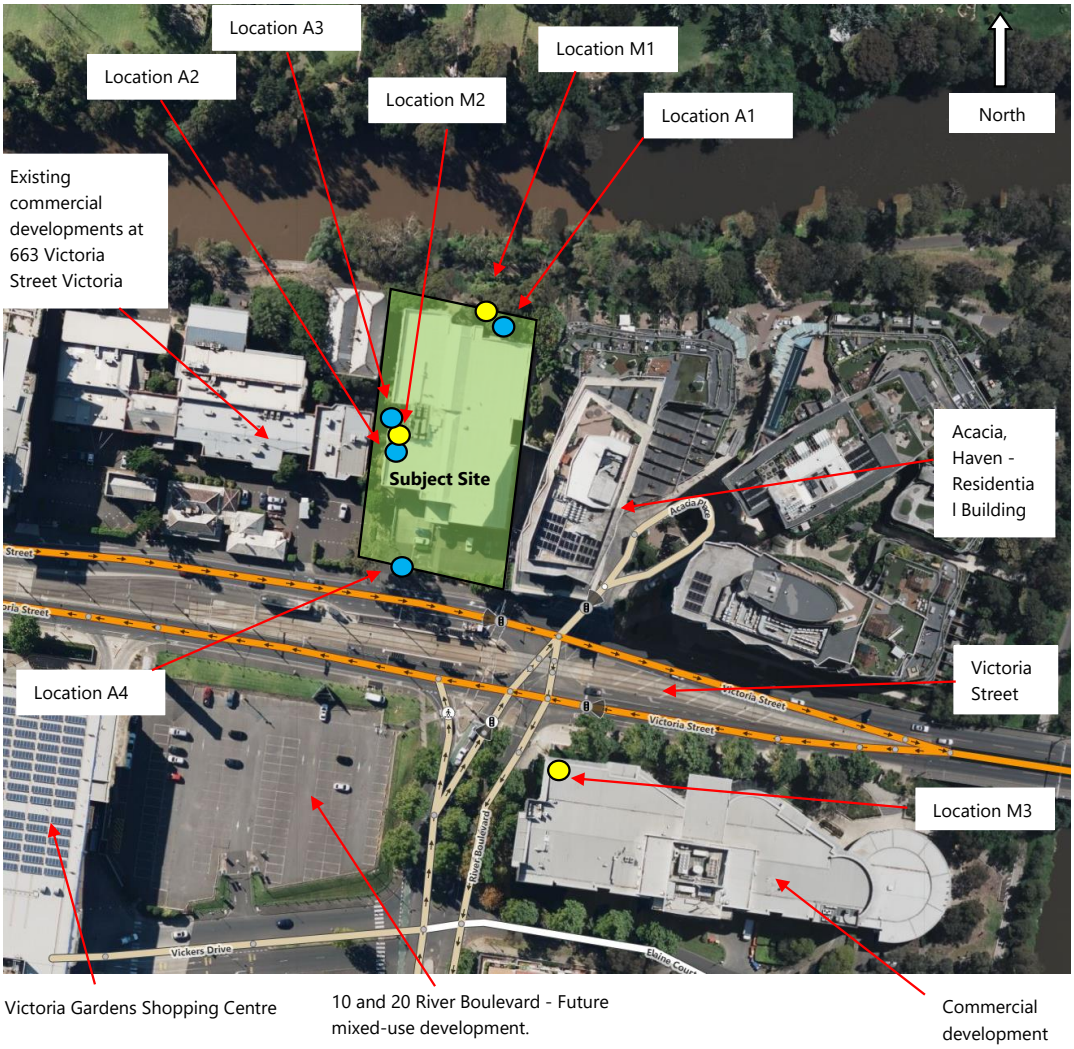


Figure 1: Site Map and surrounding area (Source: Bing Maps™)

[1] Source Department of Transport Open Data Hub

2.1 LOCAL NOISE SOURCES

At the time of the site inspection, the following was noted;

1. Noise from road traffic and tram movements along Victoria Street dominated the ambient noise environment.
2. Rooftop plant associated with 663 Victoria Street commercial developments was not audible from the western most boundary.

3 ENVIRONMENTAL NOISE DESCRIPTORS

Environmental noise constantly varies in level, due to fluctuations in local noise sources including road traffic. Accordingly, a 15-minute measurement interval is normally utilised. Over this period, noise levels are monitored on a continuous basis and statistical and integrating techniques are used to determine noise description parameters.

In the case of environmental noise, three principal measurement parameters are used, namely L_{10}, L_{90} and L_{eq}.

The L_{10} and L_{90} measurement parameters are statistical levels that represent the average maximum and average minimum noise levels respectively, over the measurement intervals.

The L_{10} parameter is commonly used to measure noise produced by a particular intrusive noise source since it represents the average of the loudest noise levels produced by the source.

Conversely, the L_{90} level (which is commonly referred to as the background noise level) represents the noise level heard in the quieter periods during a measurement interval. The L_{90} parameter is used to set the allowable noise level for new, potentially intrusive noise sources since the disturbance caused by the new source depends on how audible it is above the pre-existing noise environment, particularly during quiet periods, as represented by the L_{90} level.

The L_{eq} parameter represents the average noise energy during a measurement period. This parameter is derived by integrating the noise levels measured over the measurement period. L_{eq} is important in the assessment of traffic noise impact as it closely corresponds with human perception of a changing noise environment; such is the character of industrial noise.

4 NOISE LEVEL MEASUREMENTS

4.1 MEASUREMENT LOCATION

Traffic noise level measurements were conducted in the following locations:

- ***Location M1 –*** Unattended noise monitoring location at approximately 1.5m above grade to the rear of site. This monitor was screened from view of Victoria Street and was installed away from mechanical plant. This monitor is representative of the lowest ambient noise at the site.
- ***Location M2 –*** Unattended noise monitoring location at roof level at the western ridge line. This monitor had partial view of Victoria Street and overlooked mechanical plant associated with 663 Victoria Street commercial developments. Noise levels during the day were generally impacted by mechanical plant serving the existing 675 development.
- ***Location M3*** – Unattended noise monitoring previously undertaken by this office. The monitor was installed at on top of existing commercial building located at 678 Victoria Street. The noise monitor was approximately 1m from the edge of the building as indicated in Figure 1.
- ***Location A1*** – Attended noise measurements were conducted at 1.5m above grade at the location of noise monitor M1.
- ***Location A2*** – Attended noise measurements were conducted at rooftop level in line with the noise monitor M2. Measurement conditions are consistent with those described for the unattended monitor.
- ***Location A3*** – Attended noise measurements were conducted externally at level 1 of the western façade of the current development. The handheld noise monitor had partial view of 633 rooftop plant and was shielded from 675 Victoria Street rooftop plant. The ambient noise environment was dominated by road traffic noise from Victoria Street.
- ***Location A4*** – Attended traffic noise measurements were conducted at approximately 1.5m above grade and 4.5m from the roadside curb. This handheld noise monitor had 180-degree view of Victoria Street.

In all cases, measurements were conducted in free field conditions.

4.1.1 Measurement Date, Time and Equipment

Noise measurements presented below were undertaken in the following manner:

- Attended noise level measurements were conducted using a Norsonic N-140 Type 1 sound level meter. Measurements were taken on "A" frequency weighting and fast time response.
    - Measurements at locations A1 to A4 were conducted between 12:30pm-1:30pm on 22nd November 2022.
    - Measurements were undertaken at location A4 between 5:30pm-6:30pm on 30th November 2022 during a representative peak hour of traffic.
    - Additional measurements were undertaken at location A4 between 4:15pm and 5:30pm on 15th October 2024 and between 7:45am and 8:30am on 17th October 2024.
- Unattended noise monitoring at locations M1 and M2 were conducted with Rion NL42 noise monitors between 22nd November to 28th November 2022.
- Previous unattended noise monitoring was undertaken at location M3 using An Acoustic Research Laboratories Pty Ltd Ngara noise monitor between 14th December to 21st December 2016.

Equipment was calibrated at the beginning and end of the measurements using a Rion NC-74 calibrator; no significant drift was detected.

4.1.2 Measured Traffic/Train Noise Levels

The tables below detail the measured traffic noise levels.

Table 2 – Measured Traffic Noise Levels (Attended Measurements)

Measurement Location	Date and Time of Measurements	Measured Noise Levels dB(A) $L_{eq,15min}$
Location A4[1]	22/11/2022 (1:00pm – 1:30pm)	67
	30/11/2022 (5:00pm – 5:30pm)	69
	15/05/2024 (4:15pm – 4:30pm)	68
	15/05/2024 (4:30pm – 4:45pm)	68
	15/05/2024 (4:45pm – 5:00pm)	67
	15/05/2024 (5:00pm – 5:15pm)	68
	15/05/2024 (5:15pm – 5:30pm)	70
	17/05/2024 (7:45am – 8:00am)	70
	17/05/2024 (8:00am – 8:15am)	67
	17/05/2024 (8:15am – 8:30am)	67

Table 3 – Measured Traffic Noise Levels (Unattended Monitoring)

Measurement Location	Measurement Date	Measurement Period	Measured Noise Levels dB(A)
Location M3[1]	14/11/2016 – 21/11/2016	Day (6:00am – 10:00pm)	65 L_{eq16hr} 67 $L_{eq\ 1hr}$
		Night (10:00pm – 6:00am)	61 L_{eq8hr} 65 $L_{eq\ 1hr}$

Table 4 – Measured Tram Max Noise Levels (Attended Measurements)

Measurement Location	Date of Measurements	Tram Direction	Measured Noise Levels dB(A) L_{Max}
Location A4[1]	30/11/2022 (5:00pm – 5:30pm)	West	67
		East	70
		East	70
		East	65

Note 1 – Refer Figure 1 for measurement locations.

4.1.3 Measured Background Noise Levels

Background noise measurements were undertaken at Location M1 (refer to Figure 1).

Unattended noise monitoring was conducted using Rion NL42 noise monitors. The noise monitor was programmed to store 15-minute statistical noise levels through the monitoring period. Equipment was calibrated at the beginning and the end of the measurements using a Rion NC-74 calibrator; no significant drift was detected. All measurements were taken on fast response mode.

Table 5 – Measured Ambient Noise Levels

Period	Time	Measured Background $L_{90,Period}$ dB(A)
Day	7am – 6pm (Mon – Sat)	42
Evening	6pm – 10pm (Mon – Sat) 7am – 10pm (Sun)	38
Night	10pm – 7am	36

Background noise levels determined at this location are considered conservative given the screened location of the installed monitor. These noise levels are representative of the quietest locations for site and surrounds.

4.2 PLANT EQUIPMENT NOISE MEASUREMENTS

Noise measurements were taken on the roof top of the existing 675 Victoria Street development to determine mechanical plant equipment noise from adjacent 663 commercial tenancies.

Attended measurements were conducted on the 22 November 2022 between 12:30pm – 1:30pm at locations A2 & A3, whilst unattended noise monitoring was undertaken in location M2 (refer to Figure 1 & Section 4). It was observed during this time:

- *Surrounding plant on the 663 Victoria Street buildings comprised primarily of PAC units and smaller condensing units.*
- *Mechanical plant was generally in operation during this time.*

4.2.1 Measurement Results

Measured plant equipment noise levels are detailed below.

Table 6 – Plant Equipment Measured Noise Levels

Location	Measured Noise Level dB(A)L_{eq}	Comments
A2 – Western façade, roof top 675 Victoria Street	64	• *663 Victoria Street commercial **plant inaudible.*** • *Dominant noise source noted as existing CUs serving 675 Victoria Street commercial tenancies.*

Location	Measured Noise Level dB(A)L_{eq}	Comments
A3 – Western façade, level 1 675 Victoria Street	54	• *663 Victoria Street commercial **plant inaudible.*** • *Dominant noise source noted as road traffic from Victoria Street.*
M2 - Western façade, roof top 675 Victoria Street	Day - 64 Evening - 55 Night - 55	Daytime noise levels dominated by existing 675 Victoria Street commercial CUs.

5 ASSESSMENT CRITERIA

5.1 STANDARD D16 AT CLAUSE 58.04-3

Standard D16 of Clause 58.04-3 of the Planning Scheme notes the following which reflects the requirements of the Better Apartment Design Standards:

> ***Standard D16***
>
> *Noise sources, such as mechanical plants should not be located near bedrooms of immediately adjacent existing dwellings.*
>
> *The layout of new dwellings and buildings should minimise noise transmission within the site.*
>
> *Noise sensitive rooms (such as living areas and bedrooms) should be located to avoid noise impacts from mechanical plants, lifts, building services, non-residential uses, car parking, communal areas and other dwellings.*
>
> *New dwellings should be designed and constructed to include acoustic attenuation measures to reduce noise levels from off-site noise sources.*
>
> *Buildings within a noise influence area specified in Table D3 should be designed and constructed to achieve the following noise levels:*
>
> - *Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am.*
> - *Not greater than 40dB(A) for living areas, assessed LAeq,16h from 6am to 10pm.*
>
> *Buildings, or part of a building screened from a noise source by an existing solid structure, or the natural topography of the land, do not need to meet the specified noise level requirements.*
>
> *Noise levels should be assessed in unfurnished rooms with a finished floor and the windows closed.*

Table D3 Noise influence area

Noise Source	***Noise influence area***
Zone interface	
Industry	*300 metres from the industrial 1, 2 and 3 zone boundaries*
Roads	
Freeways, tollways and other roads carrying 40,000 Annual Average Daily Traffic Volume	*300 metres from the nearest trafficable lane*
Railways	
Railway servicing passengers in Victoria	*80 metres from the centre of the nearest track*
Railway servicing freight outside Metropolitan Melbourne	*80 metres from the centre of the nearest track*
Railway servicing freight in Metropolitan Melbourne	*135 metres from the centre of the nearest track*

Note: The noise influence area should be measured from the closest part of the building to the noise source.

Decision guidelines

Before deciding on an application, the responsible authority must consider:

- *The design response.*
- *Whether it can be demonstrated that the design treatment incorporated into the development meets the specified noise levels or an acoustic report by a suitably qualified consultant submitted with the application.*
- *Whether the impact of potential noise sources within a development have been mitigated through design, location and siting.*
- *Whether the layout of rooms within a dwelling mitigates noise transfer within and between dwellings.*
- *Whether an alternative design meets the relevant objectives having regard to the amenity of the dwelling and the site context.*

Based on these conditions, the subject site has been reviewed as follows:

1. *The development is not within 300m of an industrial zone.*
2. *The development is not within 300m of a freeway or road carrying an AADT >40,000.*
    - *Victoria Street has an AADT volume of approximately 12,000 vehicles according to Vic Roads.*
3. *The development is not within 80m of railway servicing passengers.*
4. *The development not within 80m of nearest rail track.*

Based on the above, the noise levels specified in Standard D16 at Clause 58.04-3 is not applicable.

5.2 TRAFFIC NOISE CRITERIA

Traffic noise associated with vehicle and tram movements along Victoria Street will be assessed to internal noise criteria based on AS2107:2016 requirements.

Internal noise level criteria for external noise intrusion from traffic has been developed in accordance with *Australian Standard AS/NZS 2107:2016 "Recommended Design Sound Levels and Reverberation Times for Building Interiors"*. AS/NZS 2107:2016 sets out recommended design sound levels for residential developments depending on locality to minor or major roads. Table 7 below details the criteria adopted for the proposed development located on Victoria Street, which is defined as an arterial road.

Table 7 – Internal Noise Level Criteria from Traffic

Location	Design Internal Noise Level[2]	
	Day dB(A) $L_{eq,1hr}$ (7am – 10pm)	**Night dB(A) $L_{eq,1hr}$ (10pm – 7am)**
Bedrooms	45[1]	40
Living rooms	45	N/A

Note 1: Bedrooms are assessed as living areas outside the night-time period of 10pm to 7am.
Note 2: Assessment is based on apartments suitably furnished ready for occupation with façade (external windows and doors) closed.

5.3 PLANT EQUIPMENT - NOISE INTRUSION

Noise from surrounding mechanical plant on existing developments is assessed to the following criteria, which is based on the Design Sound Level requirements of AS2107 with windows closed.

Given that noise from plant is more likely to generate occupant complaint than traffic noise, the lower range of AS2107 has been adopted as a conservative measure

Table 8 – Internal Noise Level Criteria from Warehouse Developments

Location	Design Internal Noise Level[2]	
	Day dB(A) $L_{eq,1hr}$ (7am – 10pm)	Night dB(A) $L_{eq,1hr}$ (10pm – 7am)
Bedrooms	35[1]	30
Living rooms	35	N/A

Note 1: Bedrooms are assessed as living areas outside the night-time period of 10pm to 7am.
Note 2: Assessment is based on apartments suitably furnished ready for occupation with façade (external windows and doors) closed.

5.4 PLANT EQUIPMENT - NOISE EMISSIONS

To ensure that noise emissions from the site do not impact adversely on the amenity of the proposed development residents and surrounding noise sensitive areas, the proposed development should be designed to comply with the EPA Noise Protocol – Part 1.

5.4.1 Zoning Level

The 'Zoning' level is determined by the Influencing Factor (IF) and is calculated by the formula and the 'Zoning Level versus Influencing Factor' graph nominated in Section 1.1 of the EPA Noise Protocol and VicPlan Mapping. The IF is calculated from the proportion of industrial and commercial land around noise sensitive areas. Review of the surrounding area indicates an IF of approximately 0.28 which results in the zoning limits detailed in Table 9 below.

Table 9 - Zoning Levels

Period	Zoning Level dB(A)
Day	55
Evening	49
Night	44

5.4.2 EPA Noise Protocol – Part 1

Table 10 below details the assessment criteria based on both the zoning levels and the measured background noise levels.

Table 10 – Noise Limits

Period	Background dB(A) $L_{90,Period}$	Zoning limit	Classification	Project Noise Limits dB(A) L_{eq}
Day Monday – Saturday (7am – 6pm)	42	55	Low	**53**
Evening Monday – Saturday (6pm – 10pm) Sunday (7am – 10pm)	38	49	Low	**46**
Night Monday – Friday (10pm – 7am)	36	44	Neutral	**44**

5.4.3 Fixed domestic plant

Part 1 of the EPA Noise Control Guidelines (Publication 1254, October 2008) require the following for noise associated from domestic air conditioning units impacting on adjoining residents of another SOU:

1. *Fixed Domestic Plant and Home Occupation Noise*

(such as domestic air conditioners, swimming pool equipment, spas, ducted heating, internal vacuum systems and home occupation noise)

Night operation

Noise from any fixed domestic plant must not be audible within a habitable room of any other residence (regardless of whether any door or window giving access to the room is open) during prohibited hours prescribed by the Environment Protection (Residential Noise) Regulations 2008.

The following prohibited hours apply to air conditioners, swimming pool and spa pumps, ducted heating systems and the like:

- *10 pm - 7 am Monday-Friday.*
- *10 pm - 9 am weekends & public holidays.*

Day/evening operation (non-prohibited times)

Where noise from any fixed domestic plant is audible beyond the boundary of the residential premises on which the plant is situated, the intrusive noise shall not exceed the background noise level by more than 5 dB at the measurement position.

Noise assessment must be made in accordance with noise assessment techniques listed in section 17 of these guidelines. Adjustment for tonality and/or impulsiveness must be included if applicable.

The criteria for noise emission from domestic plant has been summarized in the Table 11 below.

Table 11 – EPA criteria for Fixed Domestic Plant

Noise Source	Period	Criteria
Domestic air conditioning unit including apartment condenser units located on balconies	Daytime/Evening	43 L_{eq} dB(A)[1]
	Night	Inaudible within adjoining residence. This may require air-conditioning units to be switched off.

Note 1 – Background noise level as determined in section 4.1.3 +5dB(A).

6 EVALUATION OF EXTERNAL NOISE INTRUSION

6.1 EXTERNAL MECHANICAL PLANT NOISE

For roof top mechanical plant servicing the adjacent 663 Victoria Street commercial tenancies, we note:

- Analysis of unattended noise monitoring data obtained from then M2 rooftop location indicates that rooftop **mechanical plant does not contribute** to the overall ambient noise level outside of normal business hours (i.e. 9am-5pm)
- The treatments required at this facade to comply with internal traffic noise criteria will adequately address what is required to mitigate mechanical plant noise.

For mechanical plant serving the Acacia, Haven residential development (to the east), we make the following comments:

- No major plant or exhaust louvre locations are observed at the western building façade during site visits for monitor installation and retrieval.
- Individual occupancy condensing units are located on residential balconies facing the proposed development. At the time of monitor installation, noise from residential CUs was inaudible at the eastern most roof location.
- Major exhaust plant servicing the Acacia building is located at roof level. This is determined based on aerial map views and tender stage drawings of the development available to us.
- Access to the Acacia building has been requested through building management to measure and quantify plant noise levels at this location. At the time of preparing this report, no access has been granted to AL.
- As such, a desktop assessment of likely plant noise has been undertaken.

6.1.1 Mechanical Plant Assessment - Acacia, Haven

Mechanical plant noise levels emitted from the adjacent development are assessed based on tender stage layouts and selections made available to this office. From this it is determined

- Individual residential condensing units located on balconies facing the proposed development are typically Daikin RMXS 160 EV1A. These units are 53dB(A) sound pressure level measured at 1m horizontal distance in an anechoic chamber.
- Major rooftop plant is limited to the following:
- Main Corridor Pressurisation Fan (1CSF – R/1) – Fantech AP0804CA9/28 – Inlet SPL 73dB(A) at 3m
- Smoke Exhaust Fan (1SEF-R/1) – Fantech AP0502AA5/18 – Exhaust SPL 73dB(A) at 3m
- Stair Pressurisation Fan (1SPF-R/1) – Fantech AP0805GA6/23 – Inlet SPL 69dB(A) at 3m
- Garbage Room Exhaust Fans (1EF-R/1 & R/2) – AP0312AA5/10 – Exhaust SPL 61 dB(A) at 3m

It is assumed:

- 1CSF-R/1 and garbage room exhaust fans are in use during in normal operation mode, lined ductwork is as indicated on drawings and is minimum 50mm thick perforated foil faced insulation.
- 1SEF-R/1 and 1SPF-R/1 are only used in emergency fire mode only.

Based on the above information, plant noise levels from normal mode have been calculated at the potentially worst affected areas across the 675 Victoria Street development façade. Noise levels have been adjusted for attenuation over distance, directivity and barrier screening as applicable.

Calculated ***cumulative noise levels at potentially worst affected receiver locations are 46dB(A)L_{eq}***. Noise emissions comply during the day and evening period. less than the applicable zoning limit during typical peak plant operation. This level is expected to be lower during the night-time period (44 dB(A) project noise limit) as given the reduced load capacity and demand during this period. In any case, internal noise levels with windows and doors closed are predicted to be less than 25 dB(A) based on the proposed façade build-ups and those required to comply with traffic noise criteria. As such, plant noise levels are considered **acceptable for future residents within the development**.

6.2 EXTERNAL TRAFFIC NOISE

6.2.1 SoundPLAN™ model

The measurements detailed in section 4.1.2 were used to create a SoundPLAN™ model to calculate noise levels from road traffic and tram movements to areas across the development façade.

Noise levels at the receiver façades have been predicted using the above model implementing the ISO 9613-2:1996 "*Acoustics – Attenuation of Sound During Propagation Outdoors – Part 2: General Method of Calculation*" noise propagation standard.

The predicted noise levels at the façade is presented in Appendix 2: SoundPLAN Façade Noise Maps.

6.3 RECOMMENDED ACOUSTIC TREATMENT

Internal noise levels will primarily be as a result of noise transfer through the windows, doors and roof as these are relatively light building elements that offer less resistance to the transmission of sound. Walls that are proposed to be heavy masonry elements will not require upgrading. The predicted noise levels through the windows, doors and roof are discussed below. The predicted noise levels have been based on the expected level and spectral characteristics of the external noise, the area of building elements exposed to external noise, the absorption characteristics of the rooms and the noise reduction performance of the building elements.

Glazing / façade treatment was determined based on the following:

- Traffic noise levels measured around the subject site.
- Transmission loss of façade element.
- Noise correction based on the distance between the noise source and the nearest façade of subject development.

The constructions set out below are necessary for the satisfactory control of external noise and to achieve compliance with the internal noise level criteria set out in Section 5.2.

6.3.1 Façade Glazing

The glass thicknesses shown in the schedule do not take into account thermal, structural, safety or any other requirements other than acoustic requirements and thus may require upgrading in some instances. In these instances, increasing the glass thickness beyond the acoustic requirement will be acceptable. Where the glazing thickness has not been specified, standard glazing will be acceptable.

The table below details the minimum performance requirements for the glazing assembly installed. Where open-able windows or sliding glass doors are installed, the total R_w performance of the system shall not be lower than the values listed. It is noted that the system supplied shall meet the overall minimum R_w ratings nominated. If an alternative system is proposed the system shall be reviewed and will require approval by a

suitably qualified acoustic consultant to ensure that the proposed system is acceptable and will ensure compliance with the nominated internal noise design criteria.

Table 12 - Minimum External Glazing Requirements / Performance

Location	Glazing Construction[1]	Minimum R_w of Installed System	Acoustic Seals
Refer to *Appendix 1 – Acoustic Markup*	6mm or 6/12/6mm IGU	29	Yes
	6.38mm laminated or 6/12/6.38mm IGU	31	Yes
	10.38mm laminated or 6/12/10.38mm IGU	35	Yes

Notes 1 - Or alternative as approved by a suitably qualified acoustic consultant

6.3.2 Roof/Ceiling

Concrete roof construction does not require further upgrade acoustically. Any lightweight element shall be reviewed by a suitably qualified acoustic consultant to ensure compliance with the established internal noise level criteria is achieved.

Penetrations in ceilings (such as for light fittings etc.) must be sealed gap free with a flexible sealant. Any ventilation openings in the ceilings would need to be acoustically treated to maintain the acoustic performance of the ceiling construction.

6.3.3 External Walls

Concrete or masonry external walls will not require upgrading acoustically. Any lightweight element shall be reviewed by a suitably qualified acoustic consultant to ensure compliance with the established internal noise level criteria is achieved during the detailed design stage of the project.

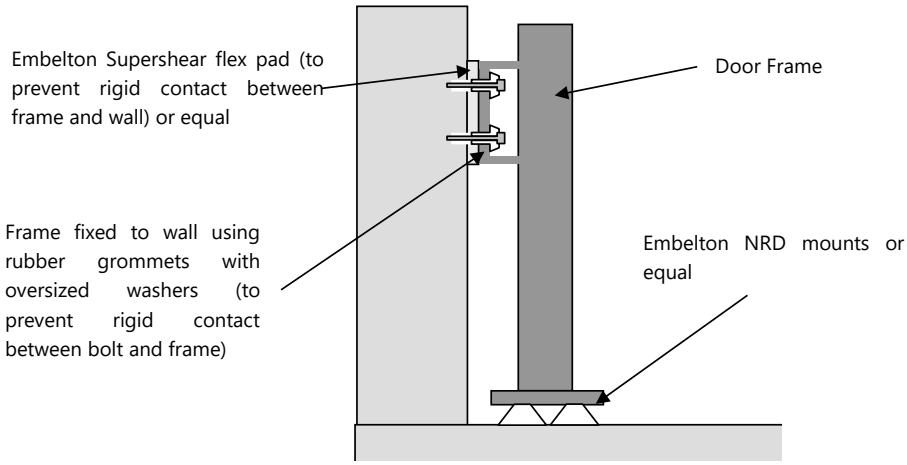
Penetrations in walls must be sealed gap free with a flexible sealant. Any ventilation openings in the walls would need to be acoustically treated to maintain the acoustic performance of the wall construction.

7 VEHICULAR ACCESS DOORS

The following recommendations are provided to address carpark entry and exit:

1. It is recommended that the noise levels from the entry gate/door to not exceed 65 dB(A) L_{max} outside openable windows of bedrooms to the apartments above.
2. Loading dock entry doors shall be vibration isolated from the building generally in accordance with the details below.
3. Doors shall be quiet in operation.
4. Loading bay entry and exit access doors are to be imperforate, and closed outside the hours of 7am-10pm
5. Teflon guides shall be installed in all rails.
6. Ensure that door panels do not rattle, and the operation of any door guides, rollers, etc. is smooth.
7. Door guides should be fitted with vibration isolated fixings where required. Refer below.
8. Door motors shall be fitted with a soft start/stop controller to minimise noise.
9. The door shall be stopped approximately 5mm from the slab/ground to ensure the base of the door does not contact the concrete surface.
10. Operation of the door shall comply with Noise Protocol – Part 1.

Isolation of the door structure is shown in the schematic below -



8 MECHANICAL PLANT AND EQUIPMENT SERVING PROPOSED DEVELOPMENT

It is noted that plant and equipment selections/design have not yet been finalised. To ensure amenity for future residents and nearby noise sensitive receivers is preserved, mechanical plant and equipment shall be designed to comply with the EPA Noise Protocol – Part 1 and reviewed during the detail design stage by a suitable qualified acoustic consultant. This will be achieved through standard acoustic treatment such as internally lined ductwork, acoustic louvres, acoustic attenuators, variable speed drives, and vibration isolation mounts.

Notwithstanding the above, it is recommended that a solid imperforate screen be installed to at least the height of the plant and equipment located in the roof top plant room above level 13 as indicated in the figure below. Suitable screen materials include minimum 6mm FC sheet, 0.8mm sheet metal or alternative as approved and confirmed during the detailed design stage of the development by a suitably qualified acoustic consultant.

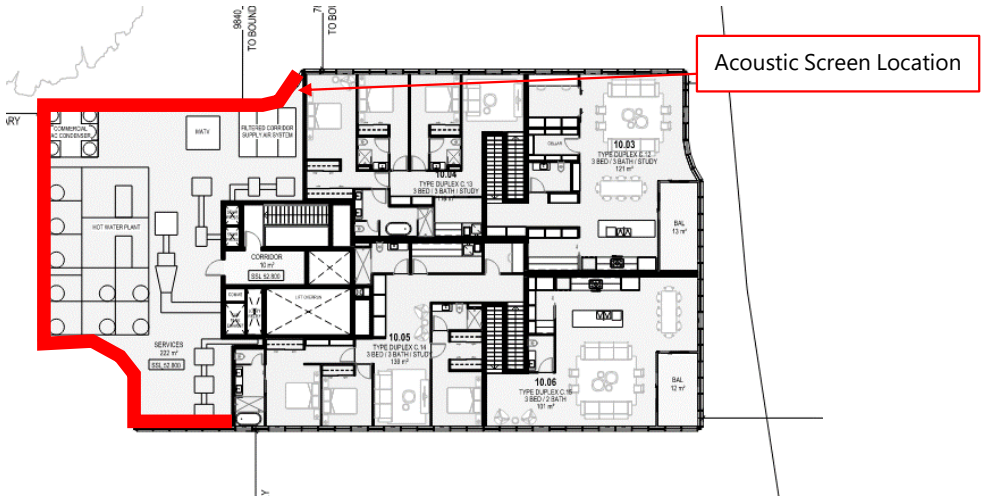


Figure 2 - Indicative location of acoustic screen

9 COLD-SHELL COMMERICAL/OFFICE TENANCY

The ground floor commercial tenancy is to be cold shell fit out for future office tenant occupation. The specific nature of the operation is, at this stage, unknown. The following general requirements are to be adhered to:

- Any amplified music associated with the tenancies will be limited by the operator to ensure that they comply with the EPA Noise Protocol – Part 2 requirements.
- All mechanical plant and equipment associated with future tenants must comply with the EPA Noise Protocol – Part 1.
- The collection of waste and recycling must only occur during the hours of garbage collection for the remainder of the development.
- Acoustic advice from an appropriately qualified person must be sought prior to the installation of any of any plant that is either located externally or ducted to an external louvre not specifically addressed in this report. This would include, but may not necessarily be limited to:
    - Exhaust Fans (as they are ducted to external areas).
    - Air-conditioning condensers.
    - Refrigeration plant (if external).

Any acoustic treatment must take into account:

- The location of noise sensitive properties
- Ambient noise levels at the nearest potentially affected property (determined by on-site measurement).
- The noise level from the plant item proposed to be installed (based on acoustic data sheets from manufacturer).
- The proposed time at which the plant will be used/operational.
- Allowable noise level based on typical Council acoustic requirements and/or conditions of consent.

Written advice regarding what acoustic treatments, if any must be provided. This advice must be sought prior to the installation of any plant.

10 LITTLE B.I.G FOUNDATION

The lower ground floor Little B.I.G. Foundation tenancy is to be used as a community facility that will be accessible by the public and residents within the development. The following general requirements are to be adhered to:

- Any amplified music associated with the tenancy will be limited to background level music and controlled by the operator to ensure that they comply with the EPA Noise Protocol – Part 2 requirements. No music is to be played externally.
- Speakers isolated are to be on vibration isolation mounts equal to Embelton NRD mounts.
- All mechanical plant and equipment associated with future tenants must comply with the EPA Noise Protocol – Part 1.
- The collection of waste and recycling must only occur during the hours of garbage collection for the remainder of the development.
- External doors are to be kept closed during events or when in use.
- The facility shall be managed by the operator to ensure that noise generated is controlled so that adjoining resident's amenity is maintained.
- It is recommended hours of use be limited to between 7am to 10pm.
- The ceiling to the space is to be constructed from 2 layers of 13mm plasterboard installed on resilient mounts equal to Rondo STSU mounts with 75mm thick 11kg/m3 glasswool insulation within cavity.

11 GYMNASIUM

Review of the development indicates that the gymnasium has been located above the carpark to improve acoustic amenity for surrounding residents. In addition, the following recommendations are provided to improve amenity for future residents:

1. Hours of use of the gymnasium be limited to 7am to 10pm.

2. The floor separating the gym from adjoining residential apartments should be designed to ensure compliance with the Building Code of Australia for acoustic separation. As a minimum the floor shall be designed to provide a minimum airborne separation rating of Rw + Ctr 50.

3. Equipment and activities held within the gym shall be limited to non-impact activities such as rowing machines, and exercise bikes. Exercise equipment installed within the room (e.g. exercise bikes/rowing machines etc) shall be installed on individual vibration isolation pads/mounts.

4. Music played within the gymnasium shall be limited by use of a headphones or played through sound reinforcement system at normal conversation level only.

5. The floor finish generally within the gymnasium shall be carpet, Regupol Everoll or similar.

6. Free weights or machine weights should not be used within the gymnasium.

7. Signs shall be installed at the entry and exit to the gymnasium reminding people to minimise noise at all times.

8. The entry door into the gym shall be fitted with a soft closer if incorporating a hinged door.

12 CONCLUSION

This report details an acoustic assessment for external noise intrusion to the proposed development at 675 Victoria Street, Abbotsford as well as and noise emitted from the use of site. Provided the acoustic treatment recommendations detailed in this report are implemented, compliance with the established criteria will be achieved.

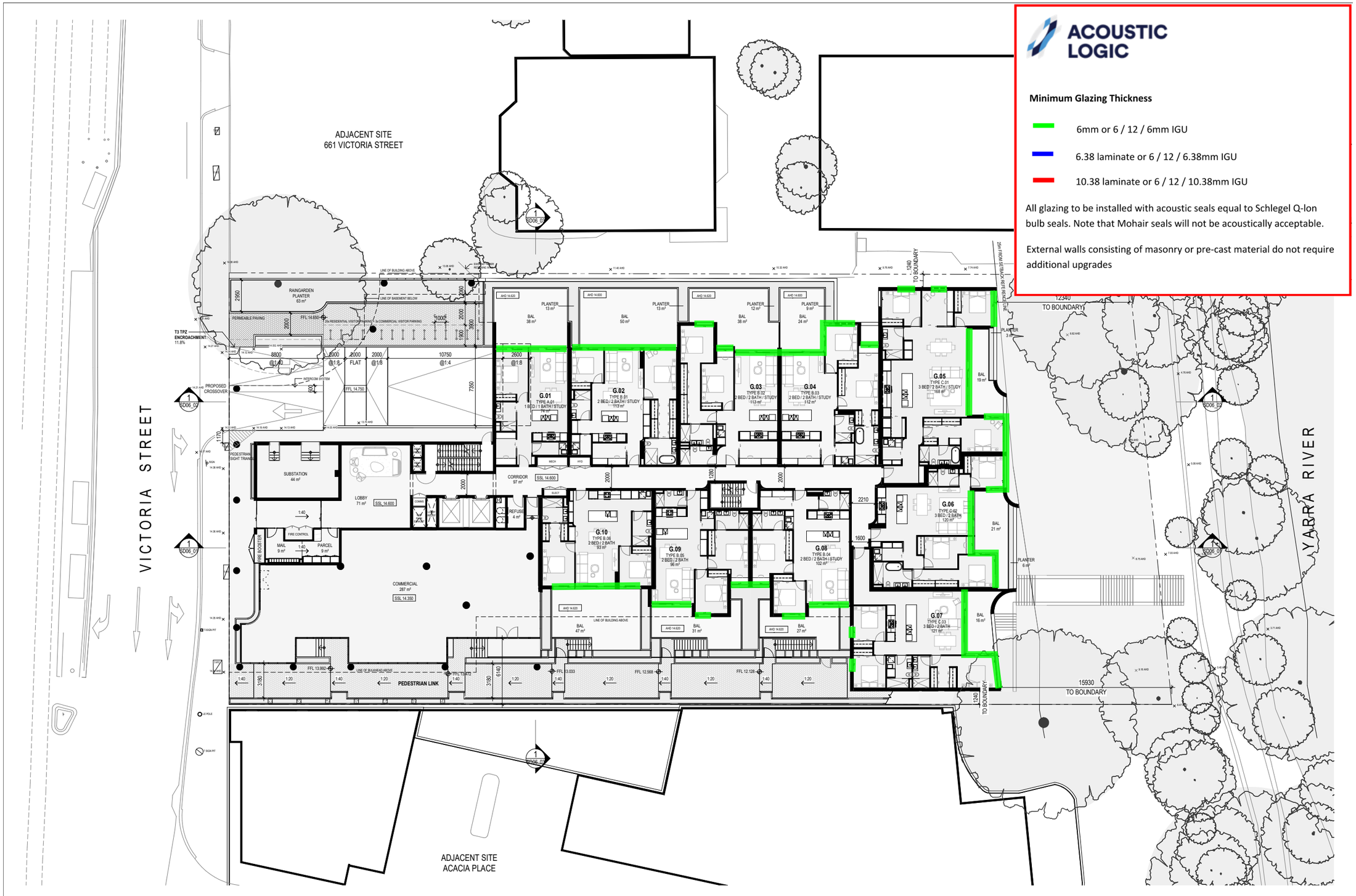
We trust this information is satisfactory. Please contact us should you have any further queries.

Yours faithfully,



Acoustic Logic Pty Ltd
Sotirios Giannikopoulos

APPENDIX 1 – FAÇADE MARKUP



ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades

Client: EG

Project: EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing: GROUND FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
21582	1 : 150	04.10.2024	SD02_04	/ 1

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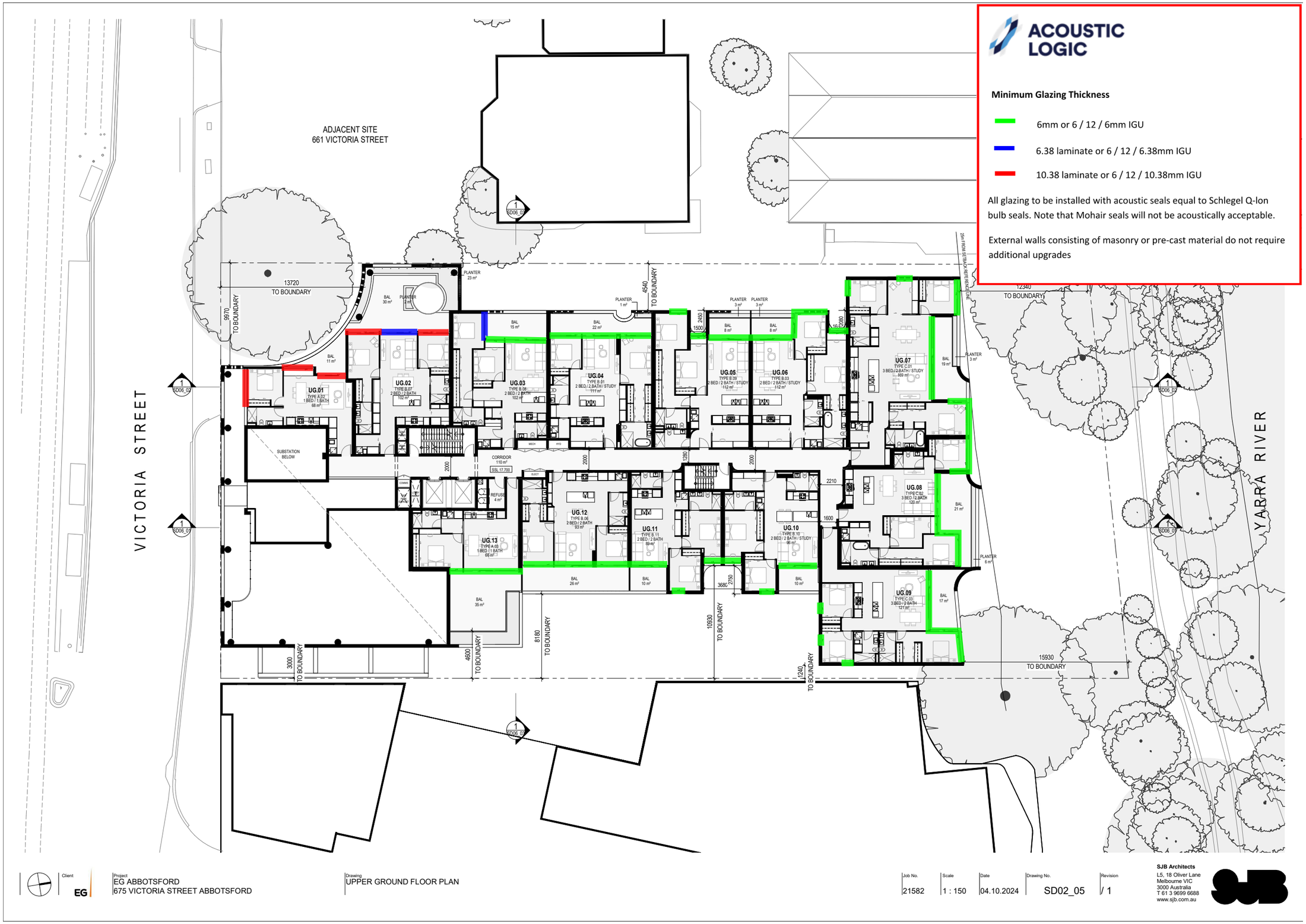
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Minimum Glazing Thickness
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6.38 laminate or 6 / 12 / 6.38mm IGU
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All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.
External walls consisting of masonry or pre-cast material do not require additional upgrades
ADJACENT SITE
661 VICTORIA STREET
VICTORIA STREET
YARRA RIVER
13720 TO BOUNDARY
9970 TO BOUNDARY
4540 TO BOUNDARY
12340 TO BOUNDARY
15930 TO BOUNDARY
10930 TO BOUNDARY
8180 TO BOUNDARY
4600 TO BOUNDARY
3000 TO BOUNDARY
1240 TO BOUNDARY
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SUBSTATION BELOW
CORRIDOR
REFUSE
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ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

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External walls consisting of masonry or pre-cast material do not require additional upgrades

ADJACENT SITE
661 VICTORIA STREET

VICTORIA STREET

YARRA RIVER

13720 TO BOUNDARY
9990 TO BOUNDARY
4540 TO BOUNDARY
1240 TO BOUNDARY
25030 TO BOUNDARY
26740 TO BOUNDARY
16090 TO BOUNDARY
8180 TO BOUNDARY
3000 TO BOUNDARY
4650 SETBACK TO H. WINDOW TO BOUNDARY
5990

1.01 TYPE C.06 3 BED / 2 BATH 114 m²
1.02 TYPE A.04 1 BED / 1 BATH 58 m²
1.03 TYPE B.11 2 BED / 2 BATH 86 m²
1.04 TYPE B.07 2 BED / 2 BATH 99 m²
1.05 TYPE B.08 2 BED / 2 BATH 102 m²
1.06 TYPE B.01 2 BED / 2 BATH / STUDY 111 m²
1.07 TYPE C.04 3 BED / 2 BATH 177 m²
1.08 TYPE B.12 2 BED / 2 BATH 99 m²
1.09 TYPE C.05 3 BED / 3 BATH / STUDY 193 m²
1.10 TYPE B.06 2 BED / 2 BATH 97 m²
1.11 TYPE A.03 1 BED / 1 BATH 56 m²
1.12 TYPE B.03 2 BED / 2 BATH / STUDY 103 m²

1.07-1.09 TERRACES TO BE DIRECTED INTO THE VISITOR BIKE PARKING RAINGARDEN PLANTER

SEE DWGS SD07_01 & SD07_02 FOR SECTIONS

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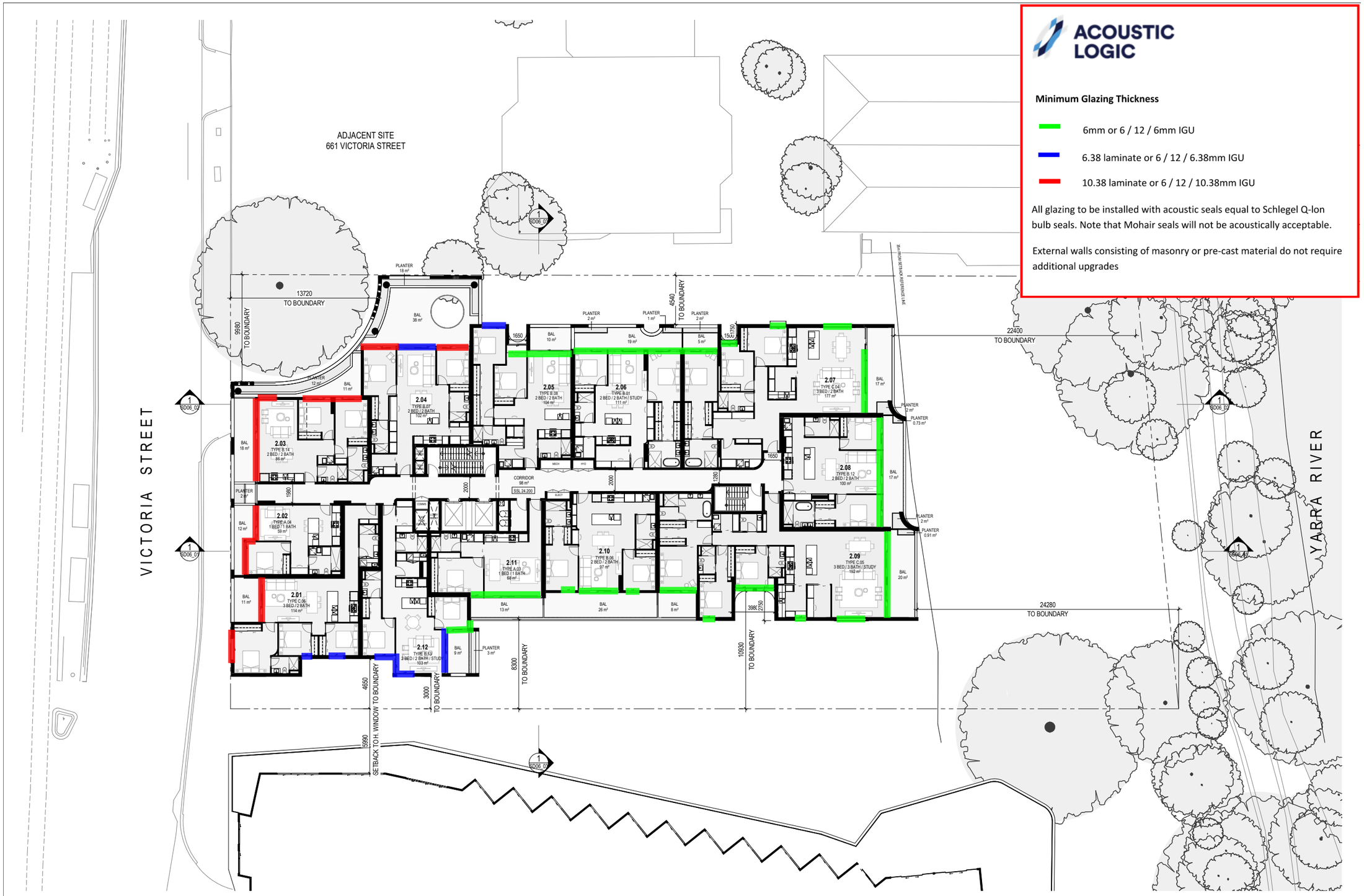
ACOUSTIC LOGIC
Minimum Glazing Thickness
6mm or 6 / 12 / 6mm IGU
6.38 laminate or 6 / 12 / 6.38mm IGU
10.38 laminate or 6 / 12 / 10.38mm IGU
All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.
External walls consisting of masonry or pre-cast material do not require additional upgrades
ADJACENT SITE
661 VICTORIA STREET
VICTORIA STREET
YARRA RIVER
13720
TO BOUNDARY
9980
TO BOUNDARY
4540
TO BOUNDARY
22400
TO BOUNDARY
24280
TO BOUNDARY
10930
TO BOUNDARY
8300
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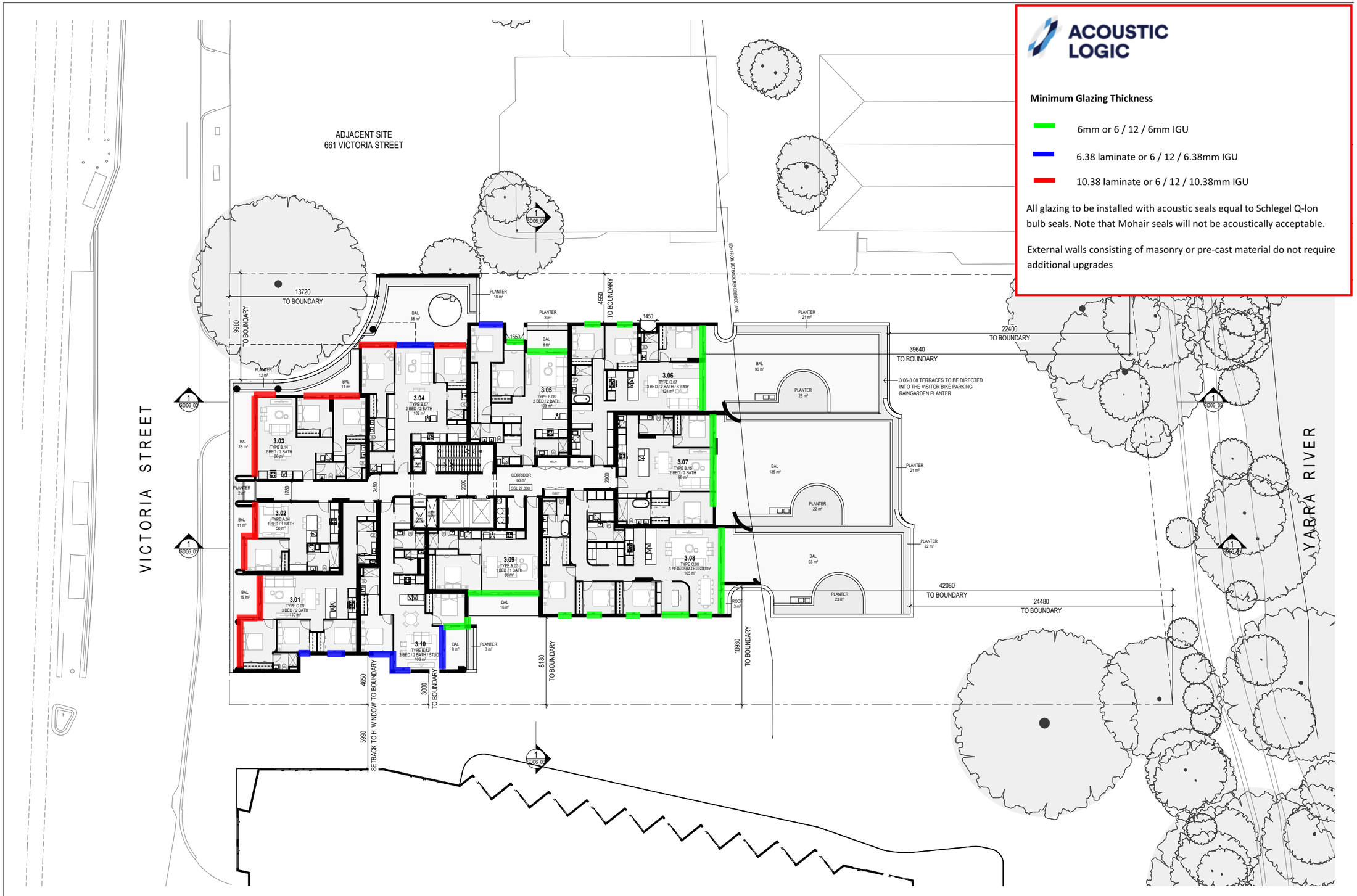

ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades

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Drawing: LEVEL 3 FLOOR PLAN

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ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

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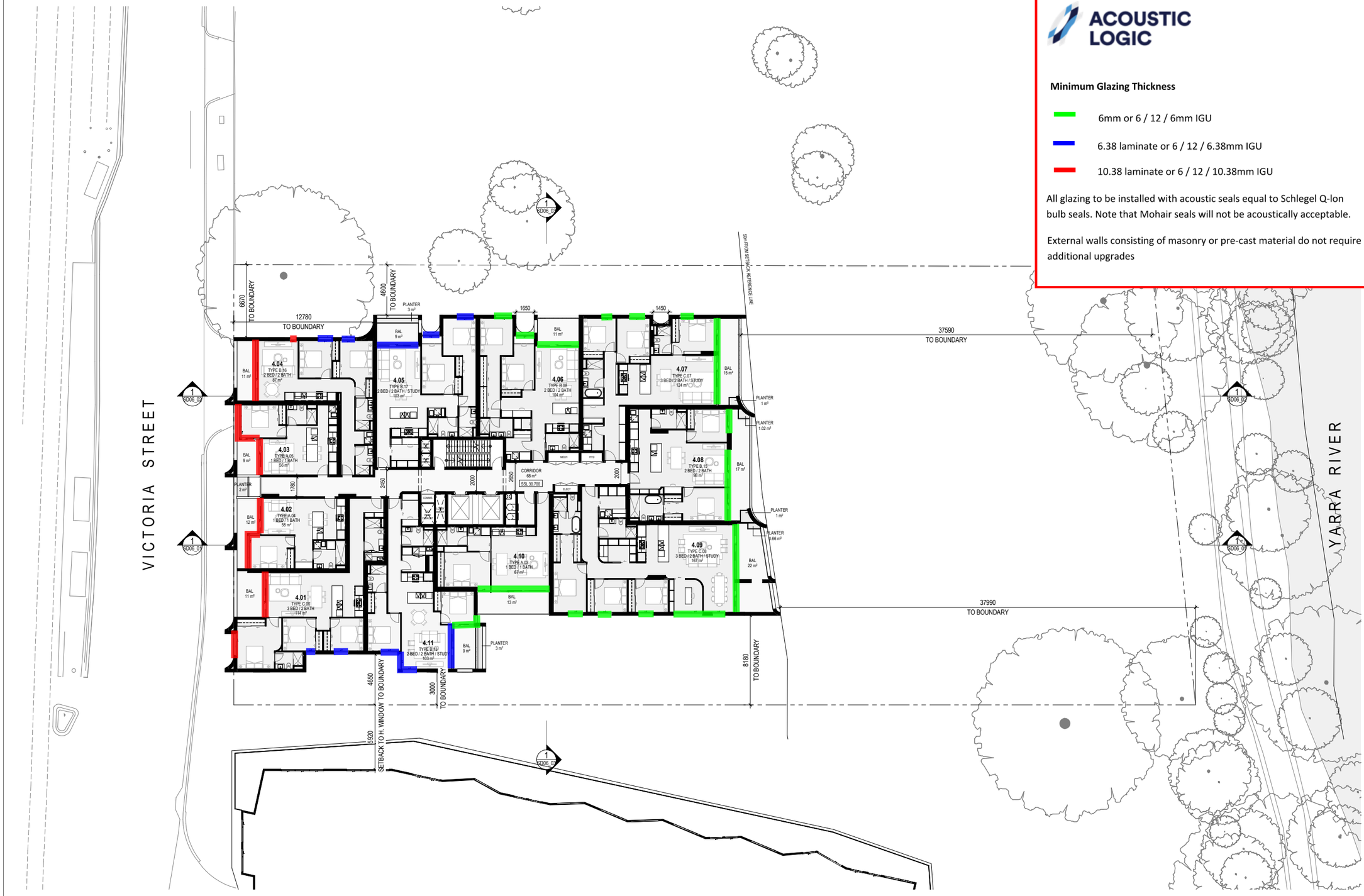

Client EG

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LEVEL 4 FLOOR PLAN

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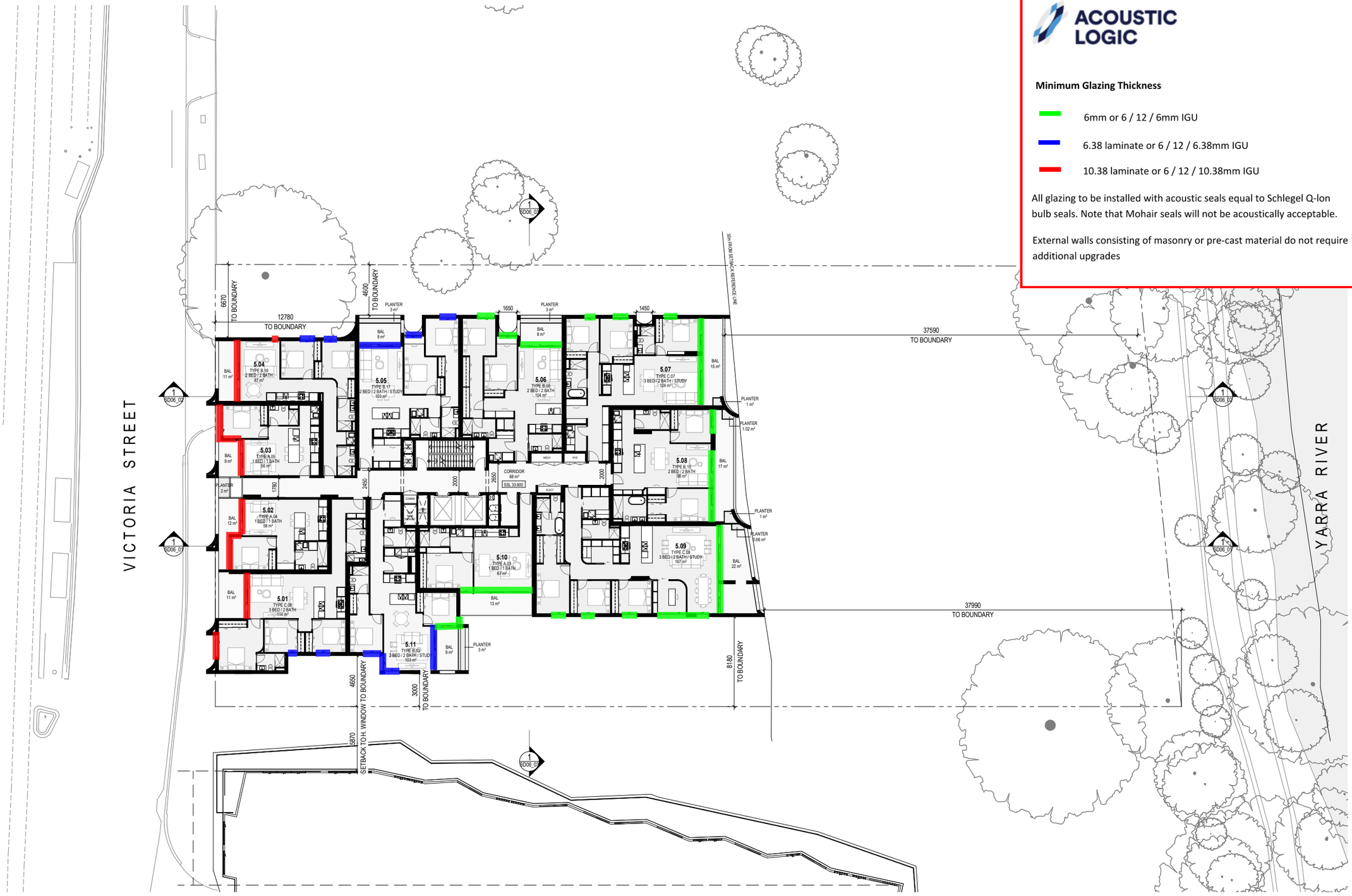
ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades



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LEVEL 5 FLOOR PLAN

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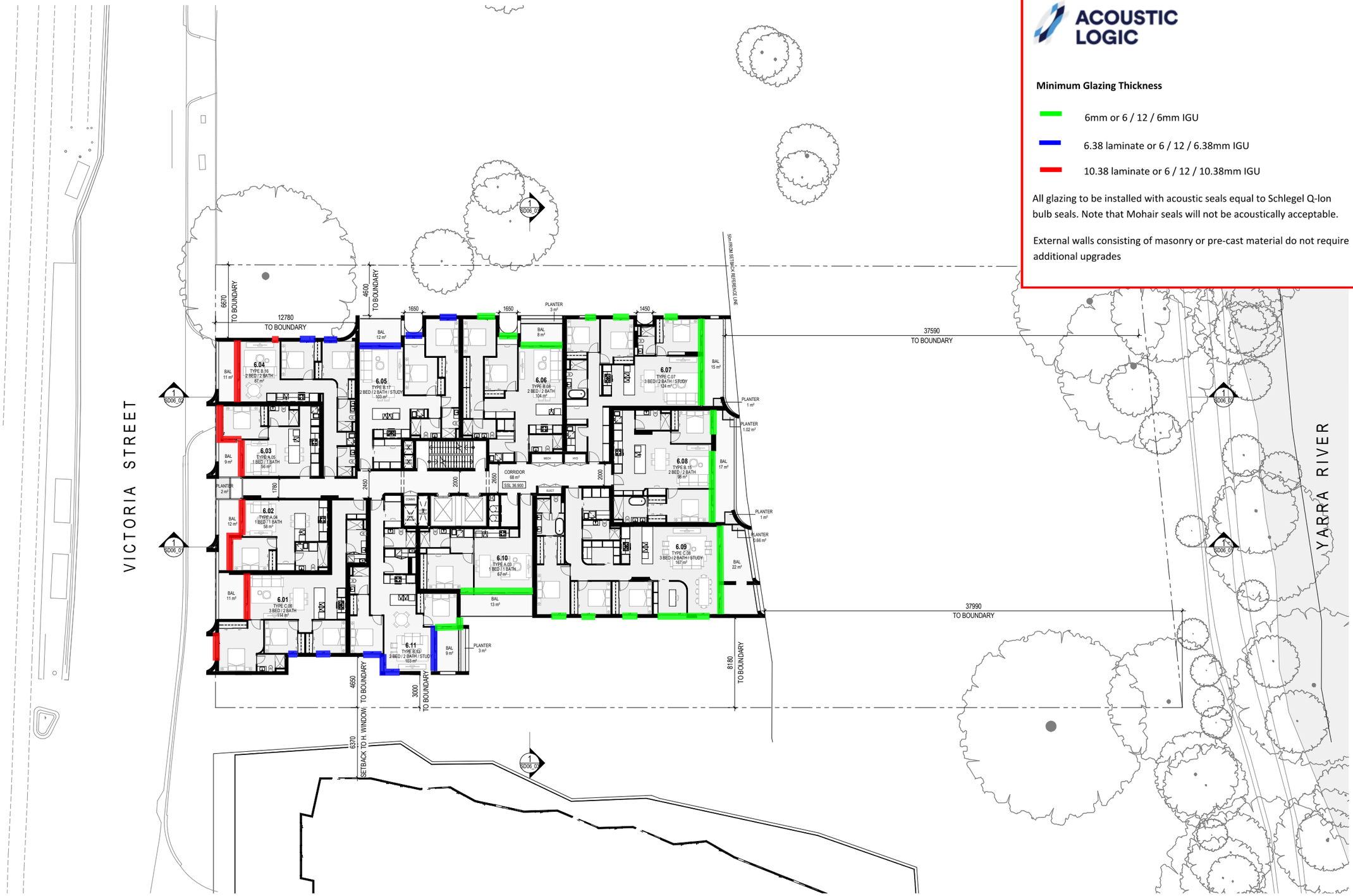
ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades



Client EG

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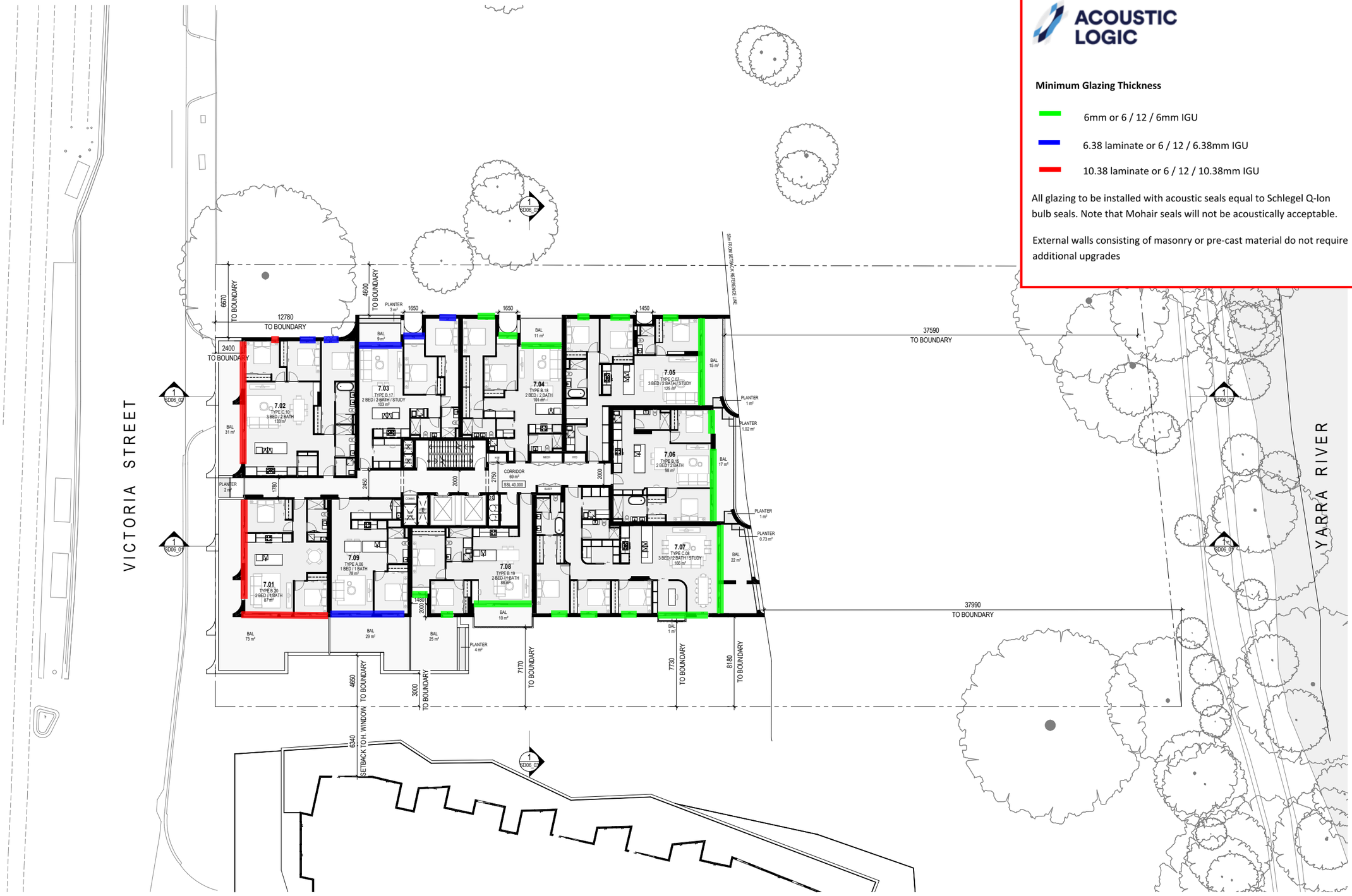
ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades



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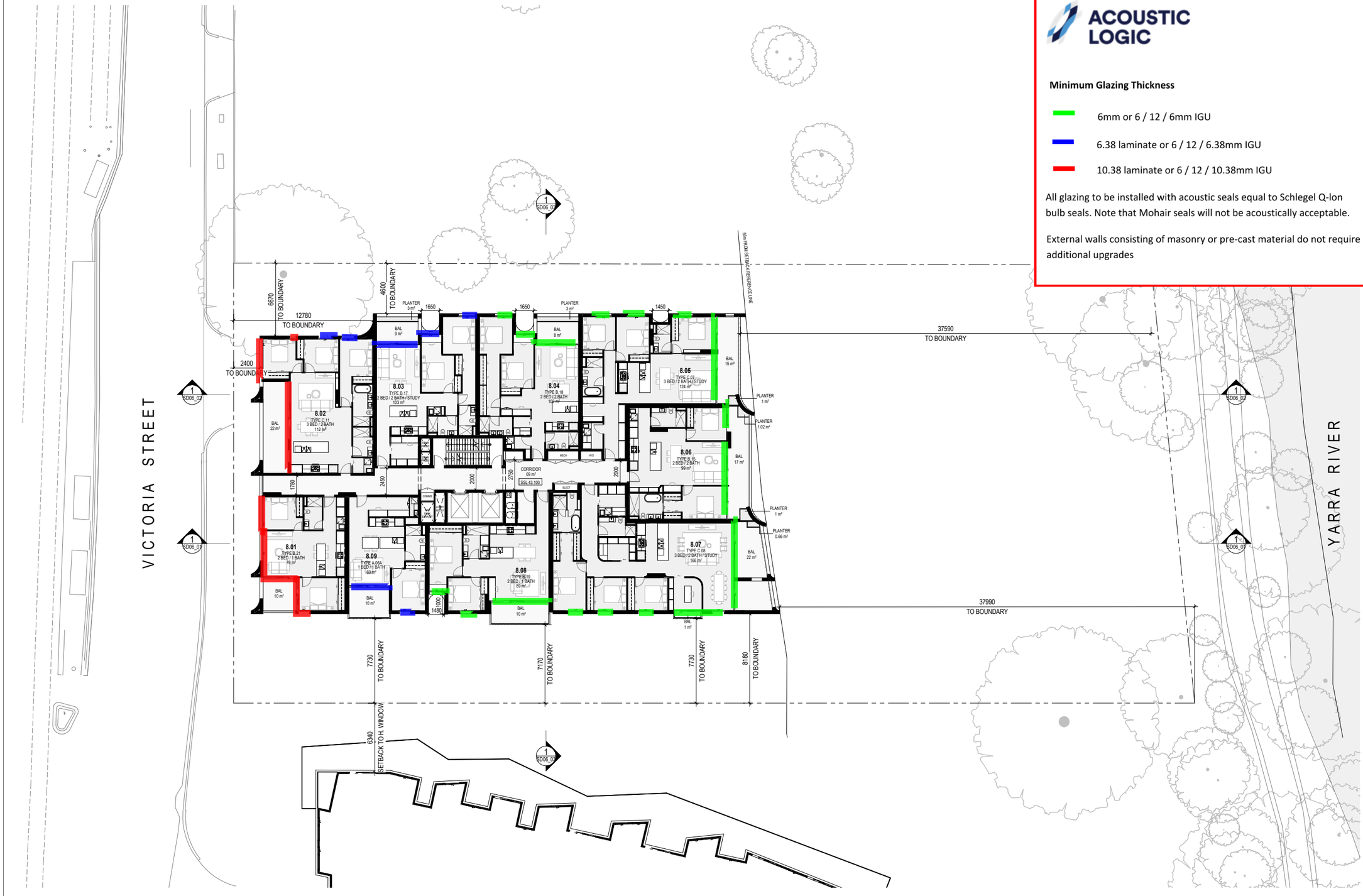
ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades



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Project
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675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 8 FLOOR PLAN

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ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

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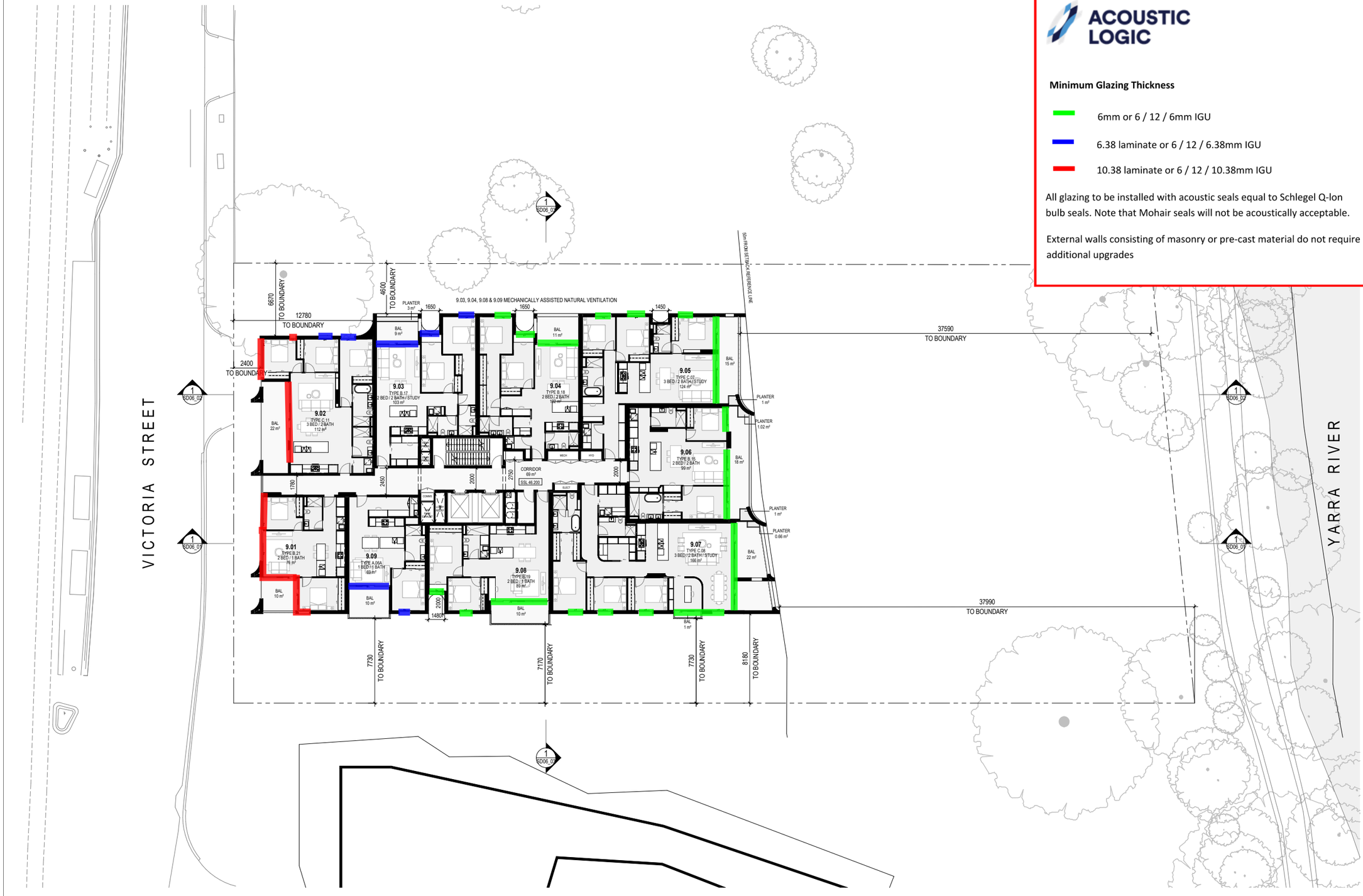

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Drawing
LEVEL 9 FLOOR PLAN

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ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades

VICTORIA STREET

YARRA RIVER

9860 TO BOUNDARY

7870 TO BOUNDARY

2400 TO BOUNDARY

6000 TO BOUNDARY

37590 TO BOUNDARY

37990 TO BOUNDARY

8180 TO BOUNDARY

10780 TO BOUNDARY

2600

50m FROM SETBACK REFERENCE LINE

LEVEL 10 TERRACES TO BE DIRECTED INTO THE VISITOR BIKE PARKING RAINGARDEN PLANTER

PLANTER 5 m²

PLANTER 12 m²

PLANTER 9 m²

PLANTER 15 m²

BAL 41 m²

BAL 49 m²

BAL 90 m²

BAL 94 m²

BAL 28 m²

BAL 47 m²

10.01 TYPE B.23 2 BED / 2 BATH 98 m²

10.02 TYPE B.22 2 BED / 2 BATH 107 m²

10.03 TYPE DUPLEX C.12 3 BED / 3 BATH / STUDY 128 m²

10.04 TYPE DUPLEX C.13 3 BED / 3 BATH / STUDY 134 m²

10.05 TYPE DUPLEX C.14 3 BED / 3 BATH / STUDY 111 m²

10.06 TYPE DUPLEX C.15 3 BED / 2 BATH 104 m²

CORRIDOR 45 m²

SSL 49.700

NATURAL LIGHT TO CORRIDOR VIA SKYLIGHT ABOVE

SKYLIGHT ABOVE

1 SD06_02

1 SD06_01

Client EG

Project
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675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 10 FLOOR PLAN

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ACOUSTIC LOGIC

Minimum Glazing Thickness

- 6mm or 6 / 12 / 6mm IGU
- 6.38 laminate or 6 / 12 / 6.38mm IGU
- 10.38 laminate or 6 / 12 / 10.38mm IGU

All glazing to be installed with acoustic seals equal to Schlegel Q-lon bulb seals. Note that Mohair seals will not be acoustically acceptable.

External walls consisting of masonry or pre-cast material do not require additional upgrades

VICTORIA STREET

YARRA RIVER

9940 TO BOUNDARY

7080 TO BOUNDARY

6000 TO BOUNDARY

39160 TO BOUNDARY

42280 TO BOUNDARY

10780 TO BOUNDARY

50m FROM SETBACK REFERENCE LINE

COMMERCIAL AC CONDENSER

MATV

FILTERED CORRIDOR SUPPLY AIR SYSTEM

HOT WATER PLANT

SERVICES 222 m²

SSL 52.800

CORRIDOR 10 m²

LIFT OVERRUN

CELLAR

10.03 TYPE DUPLEX C.12 3 BED / 3 BATH / STUDY 121 m²

10.04 TYPE DUPLEX C.13 3 BED / 3 BATH / STUDY 118 m²

10.05 TYPE DUPLEX C.14 3 BED / 3 BATH / STUDY 139 m²

10.06 TYPE DUPLEX C.15 3 BED / 2 BATH 101 m²

BAL 13 m²

BAL 12 m²

1 SD06_02

Client EG

Project
EG ABBOTSFORD
675 VICTORIA STREET ABBOTSFORD

Drawing
LEVEL 11 FLOOR PLAN

Job No.	Scale	Date	Drawing No.	Revision
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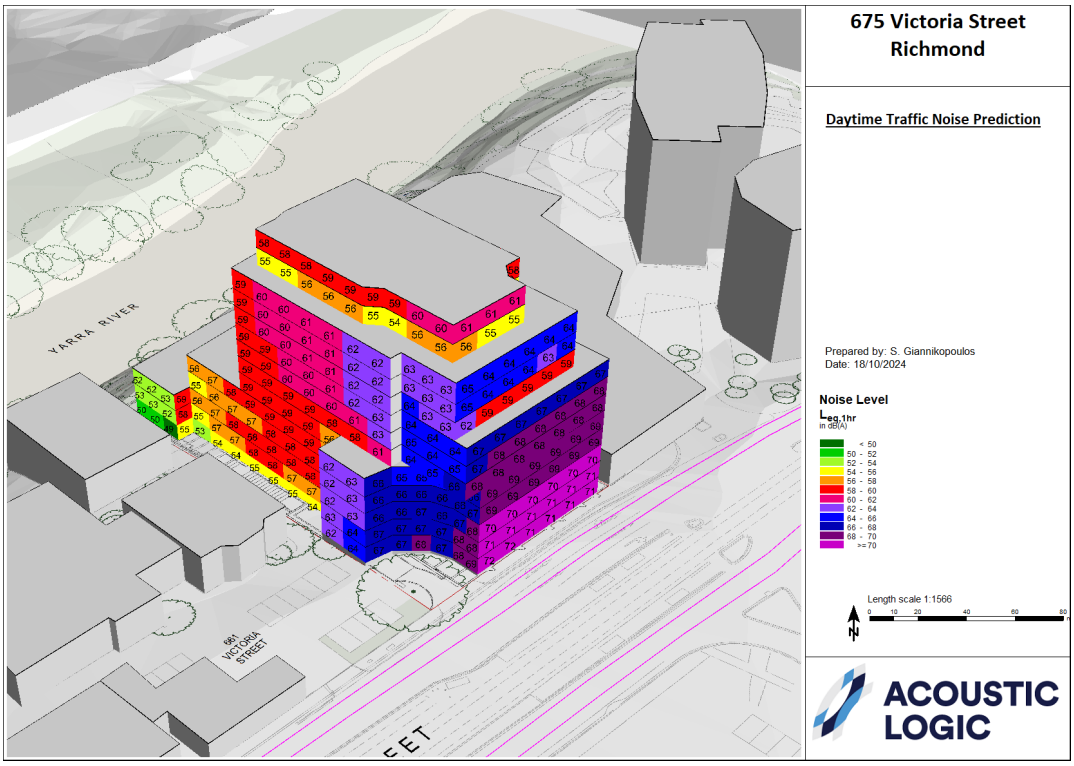
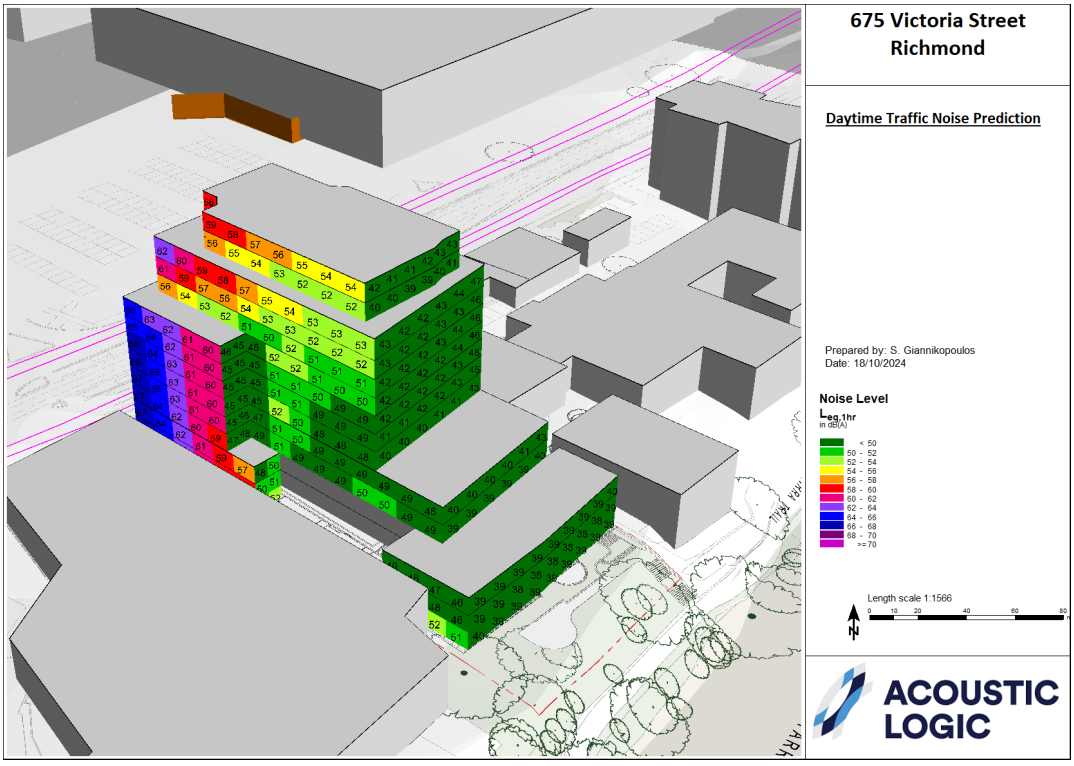
APPENDIX 2 – SOUNDPLAN FAÇADE NOISE MAPS





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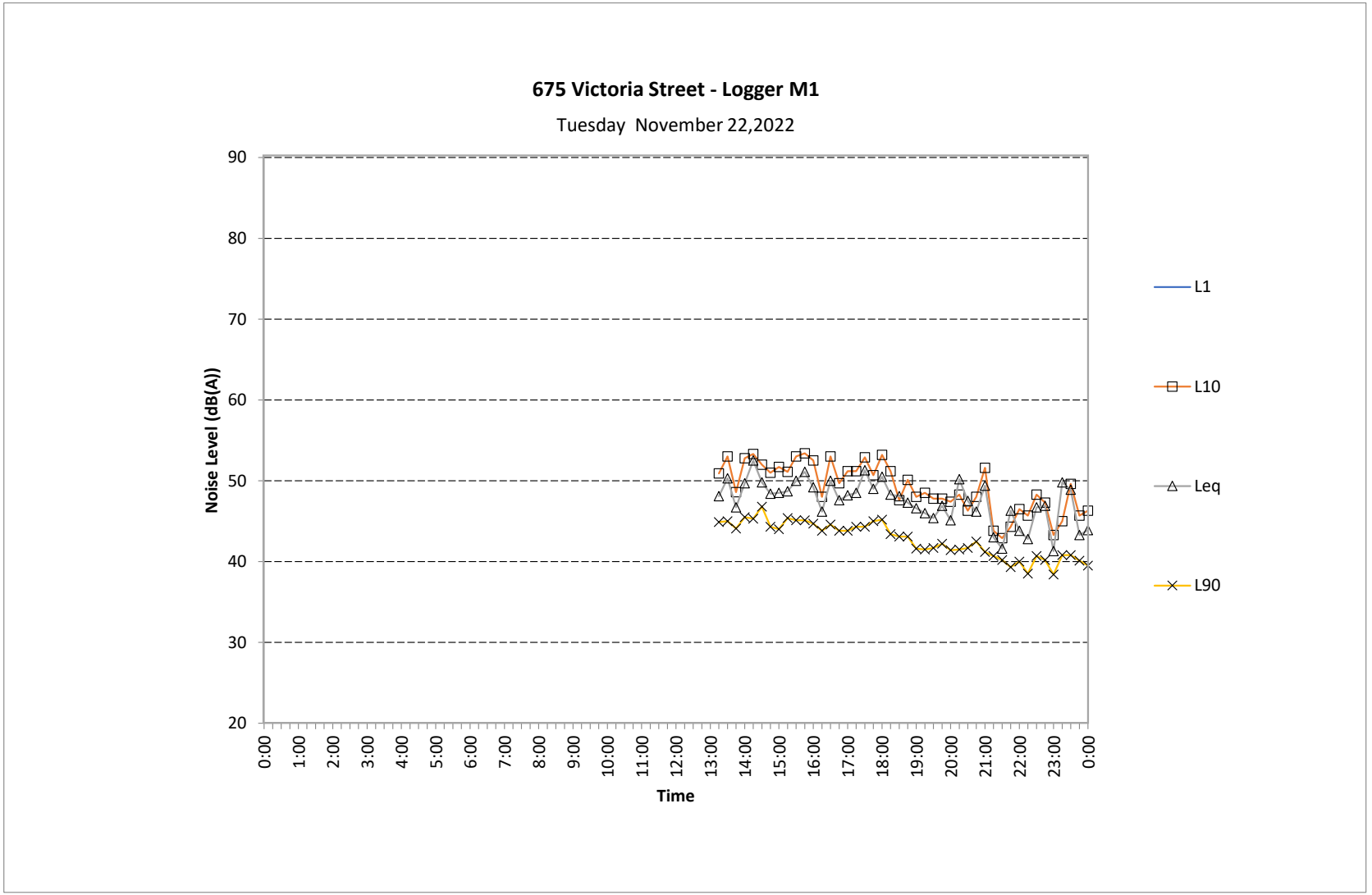

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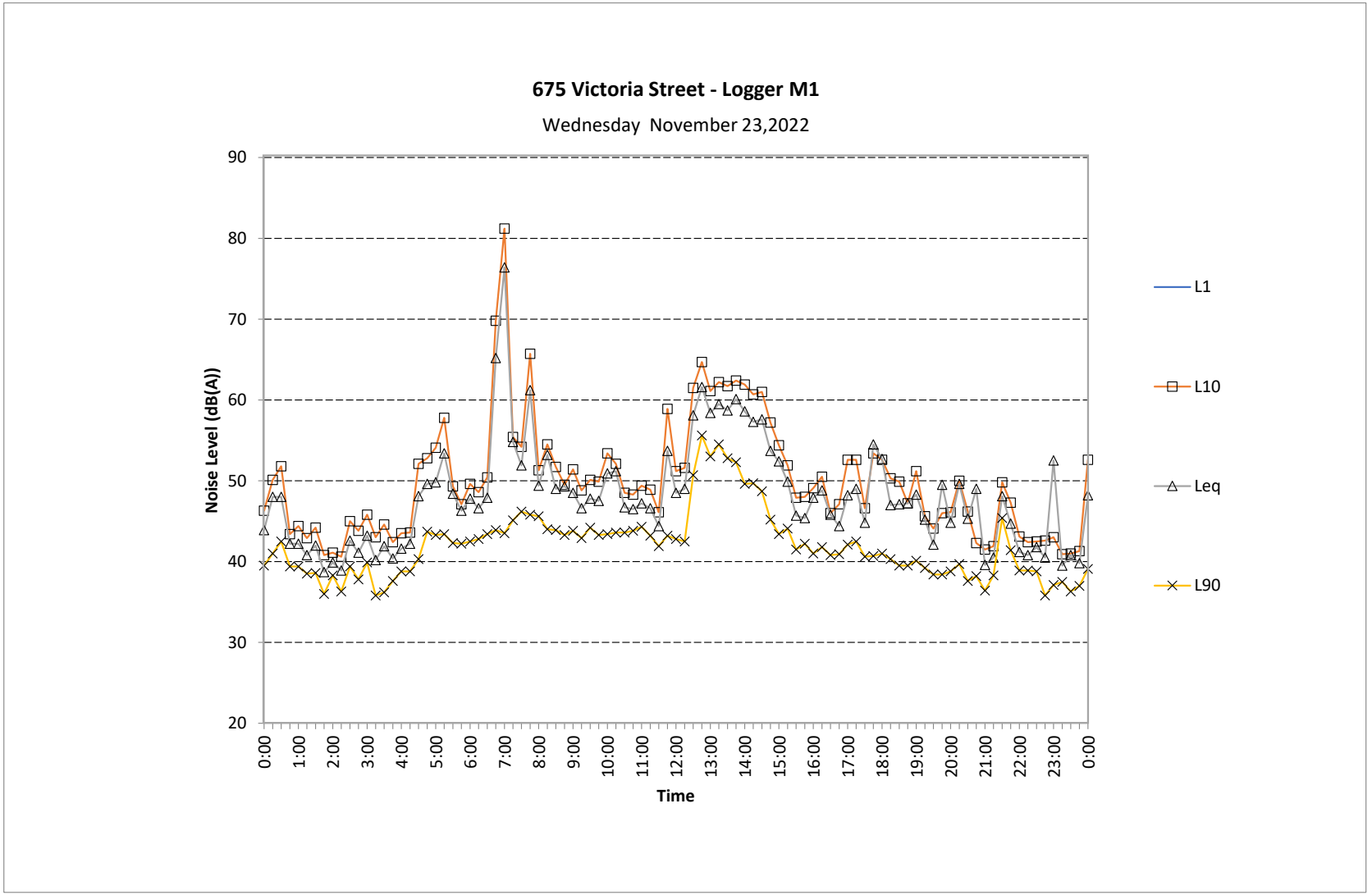

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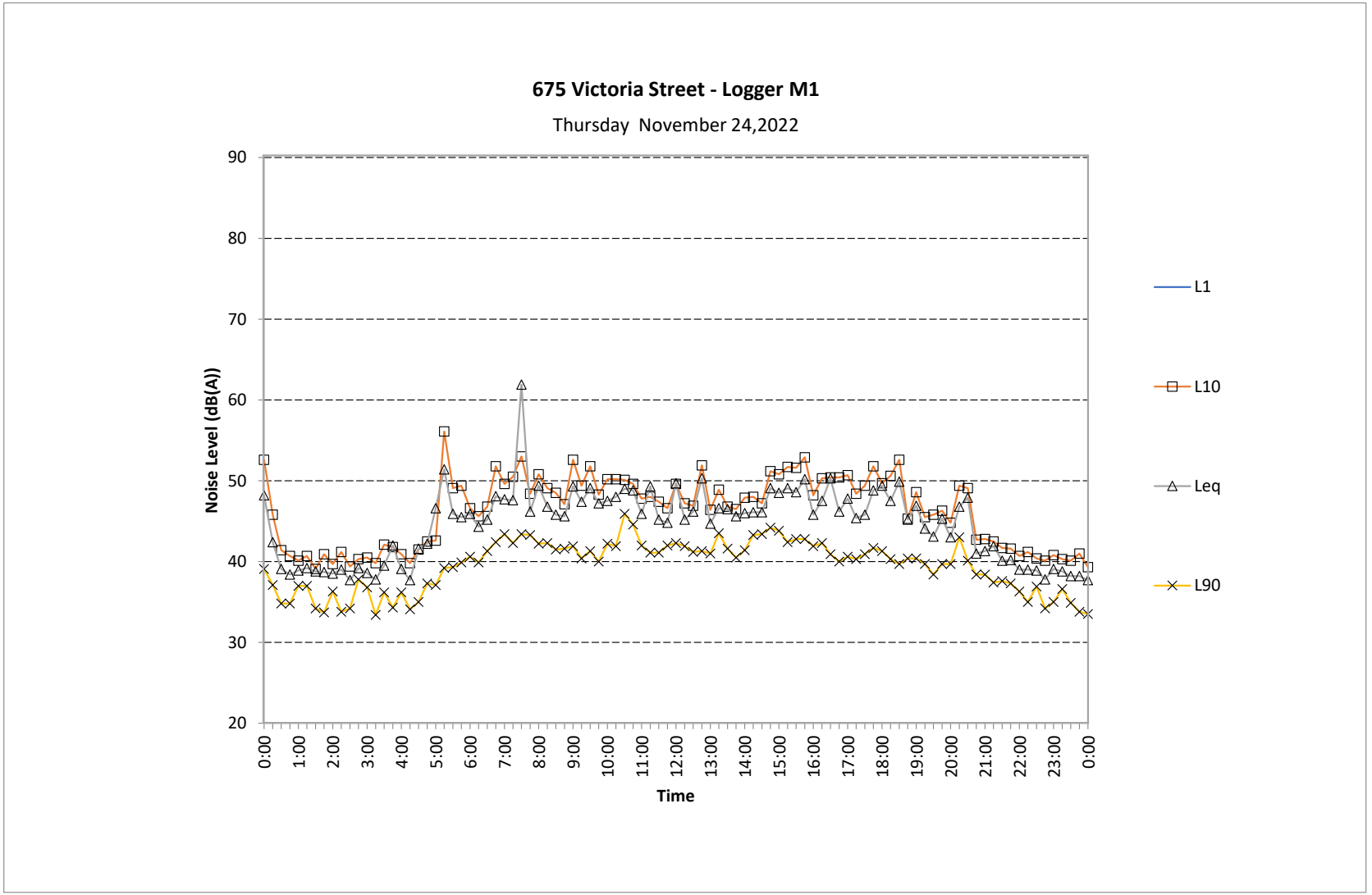

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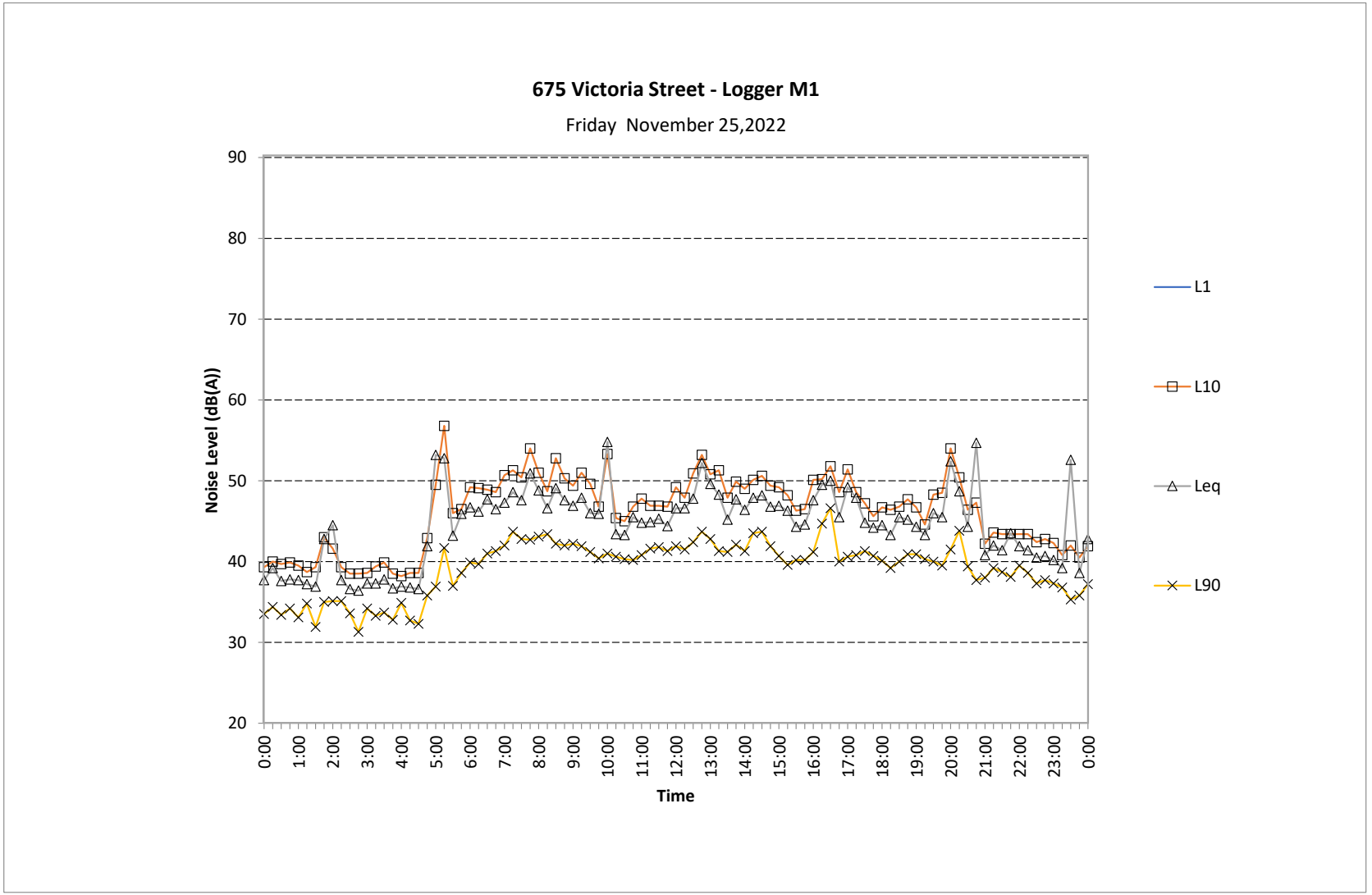

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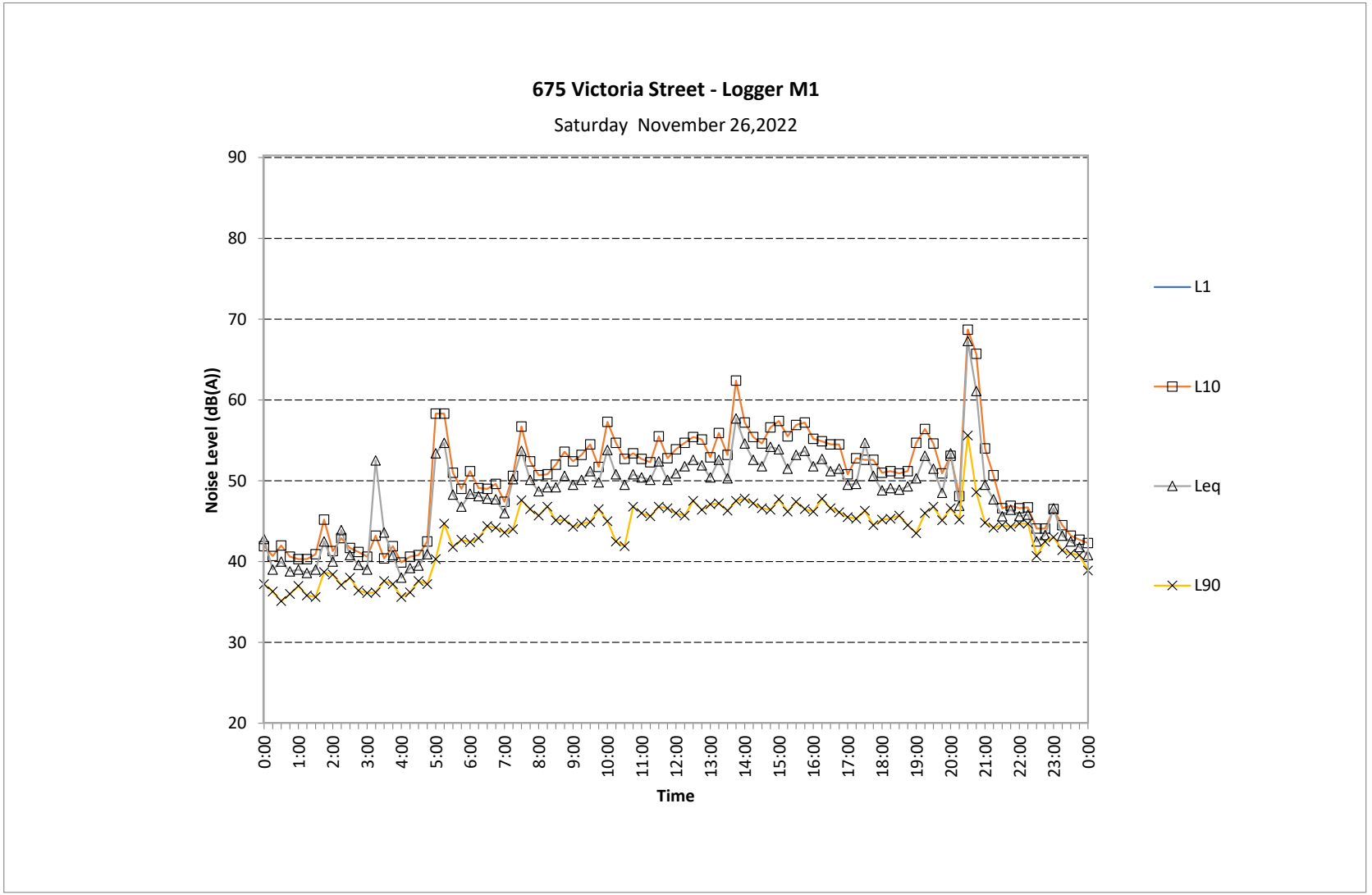

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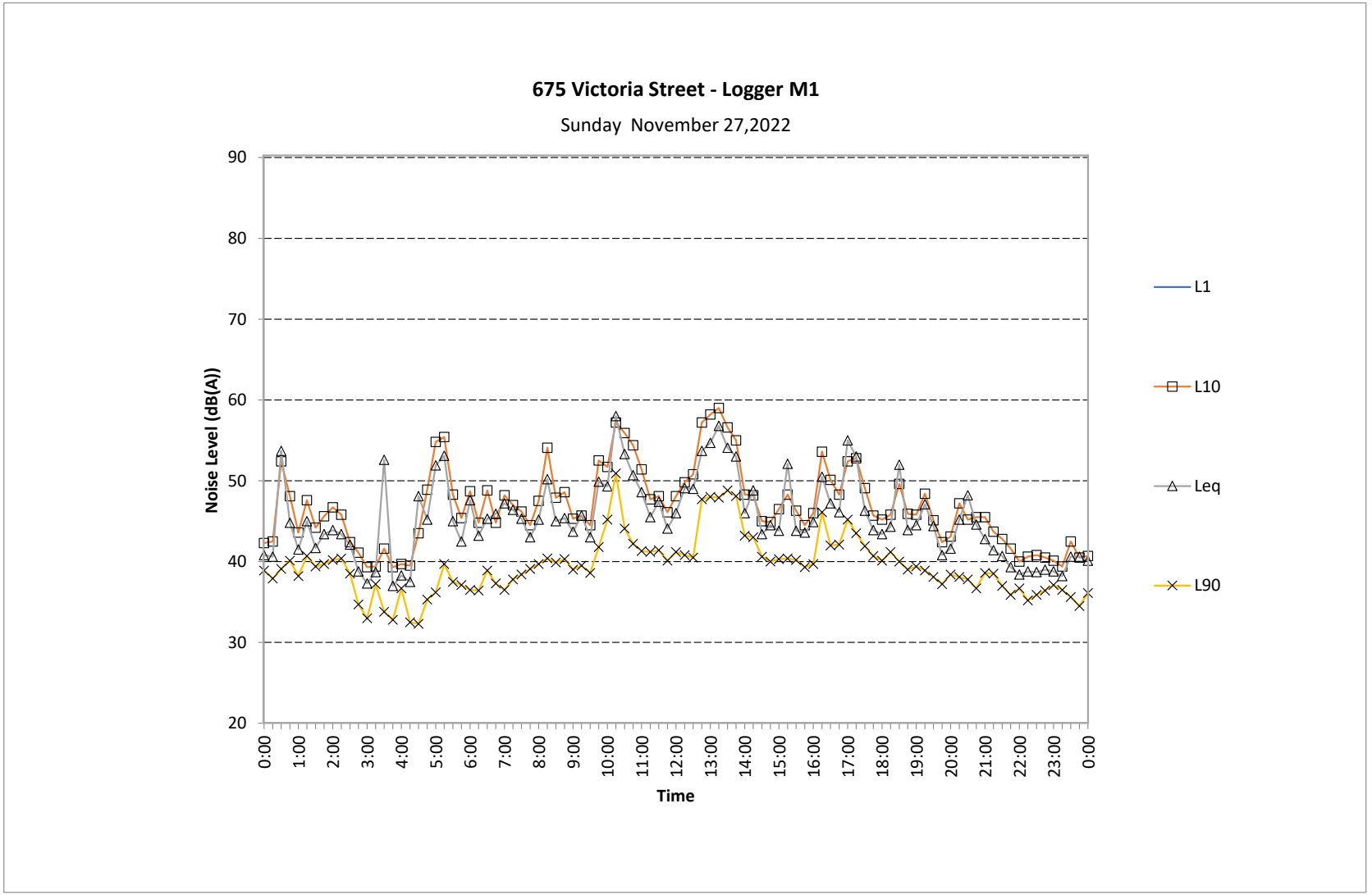

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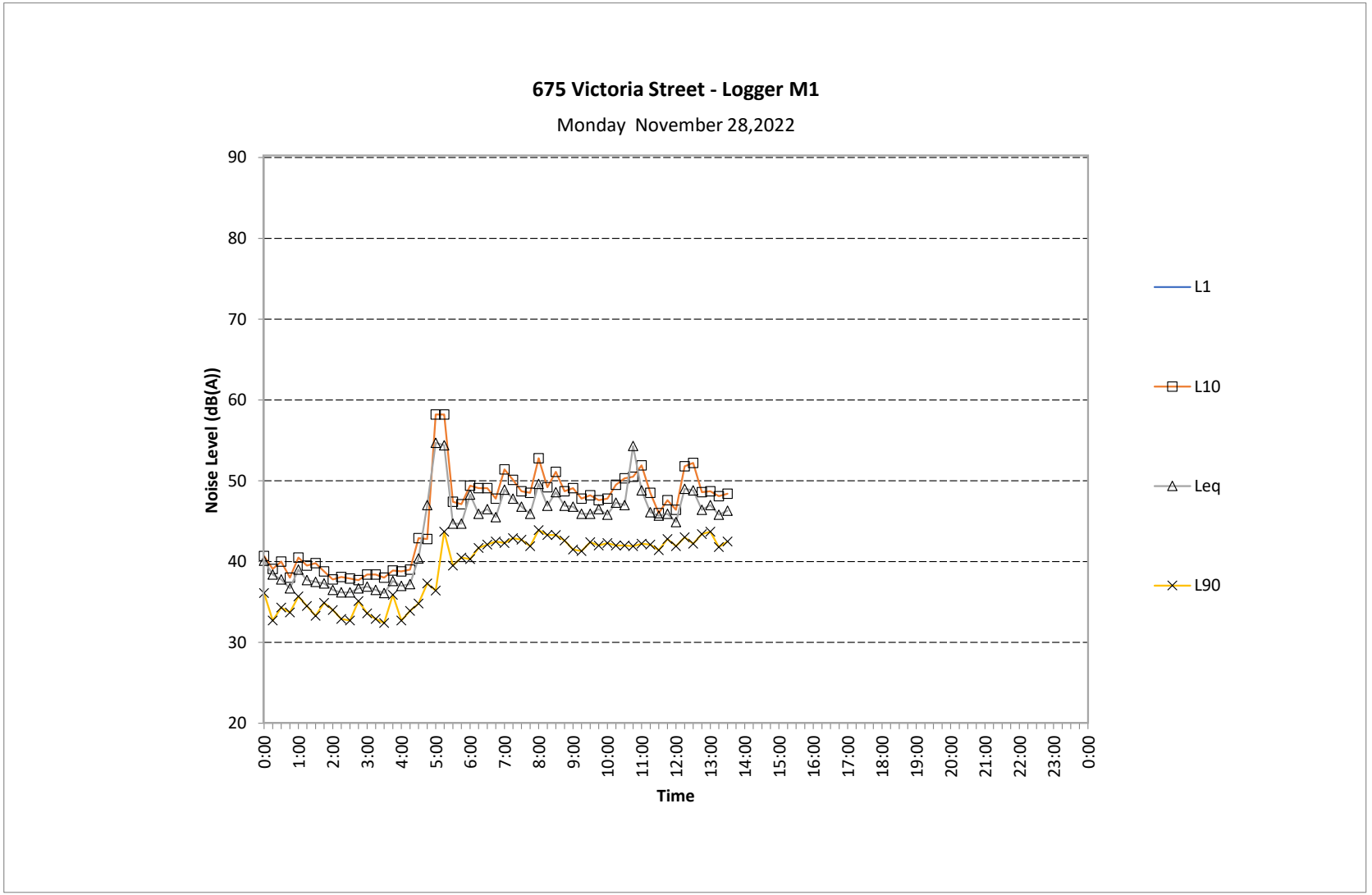

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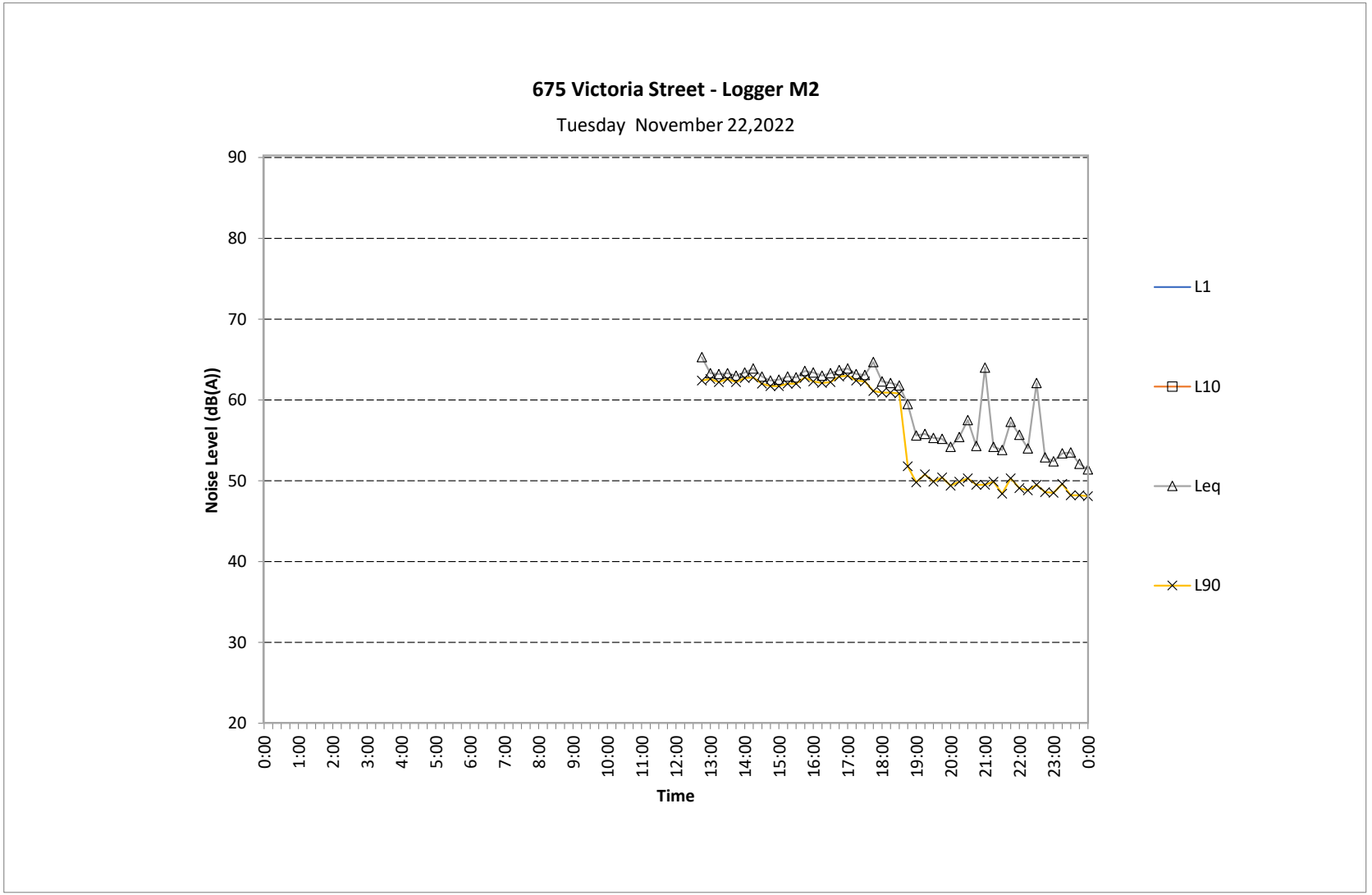

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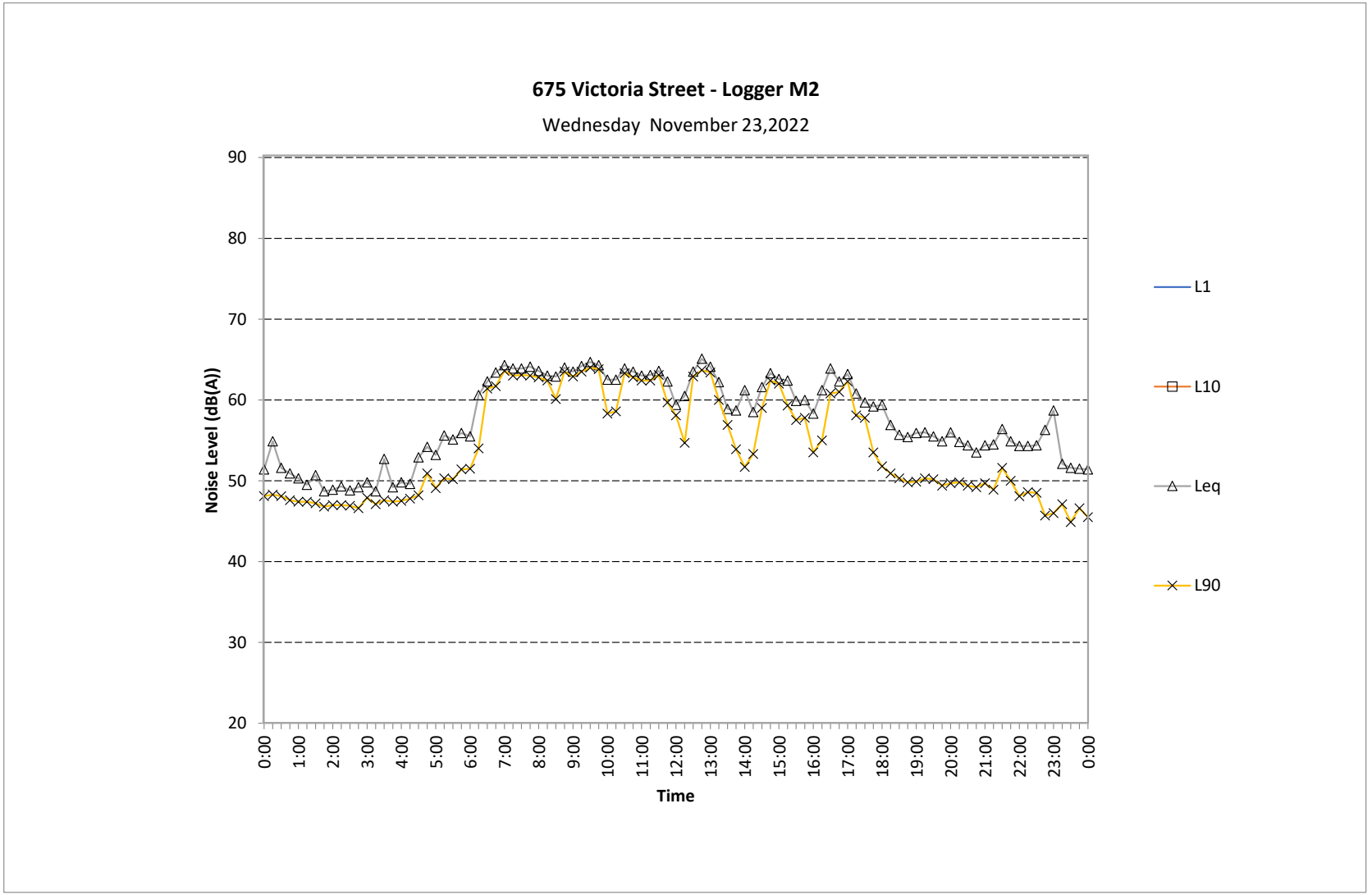

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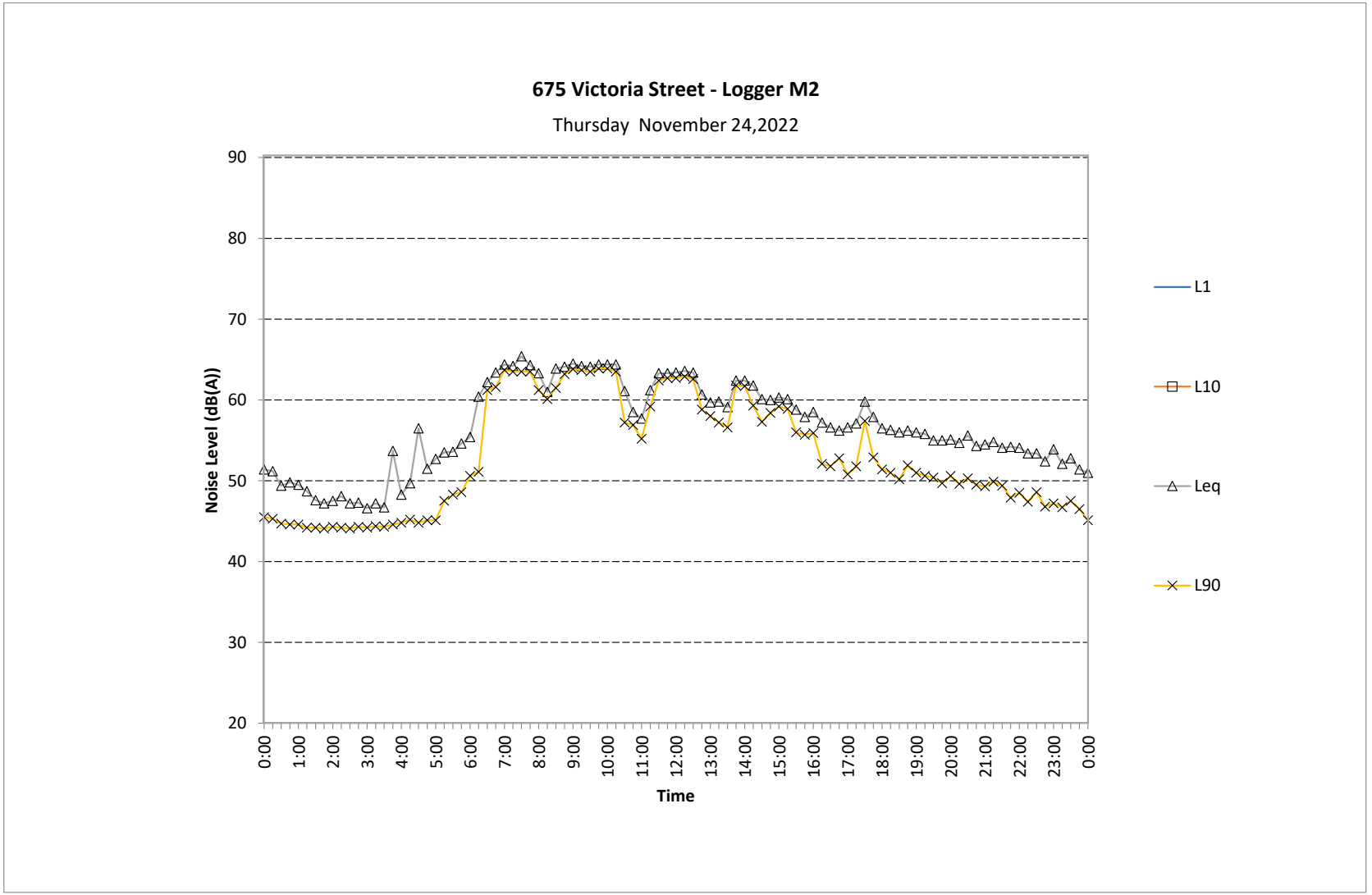

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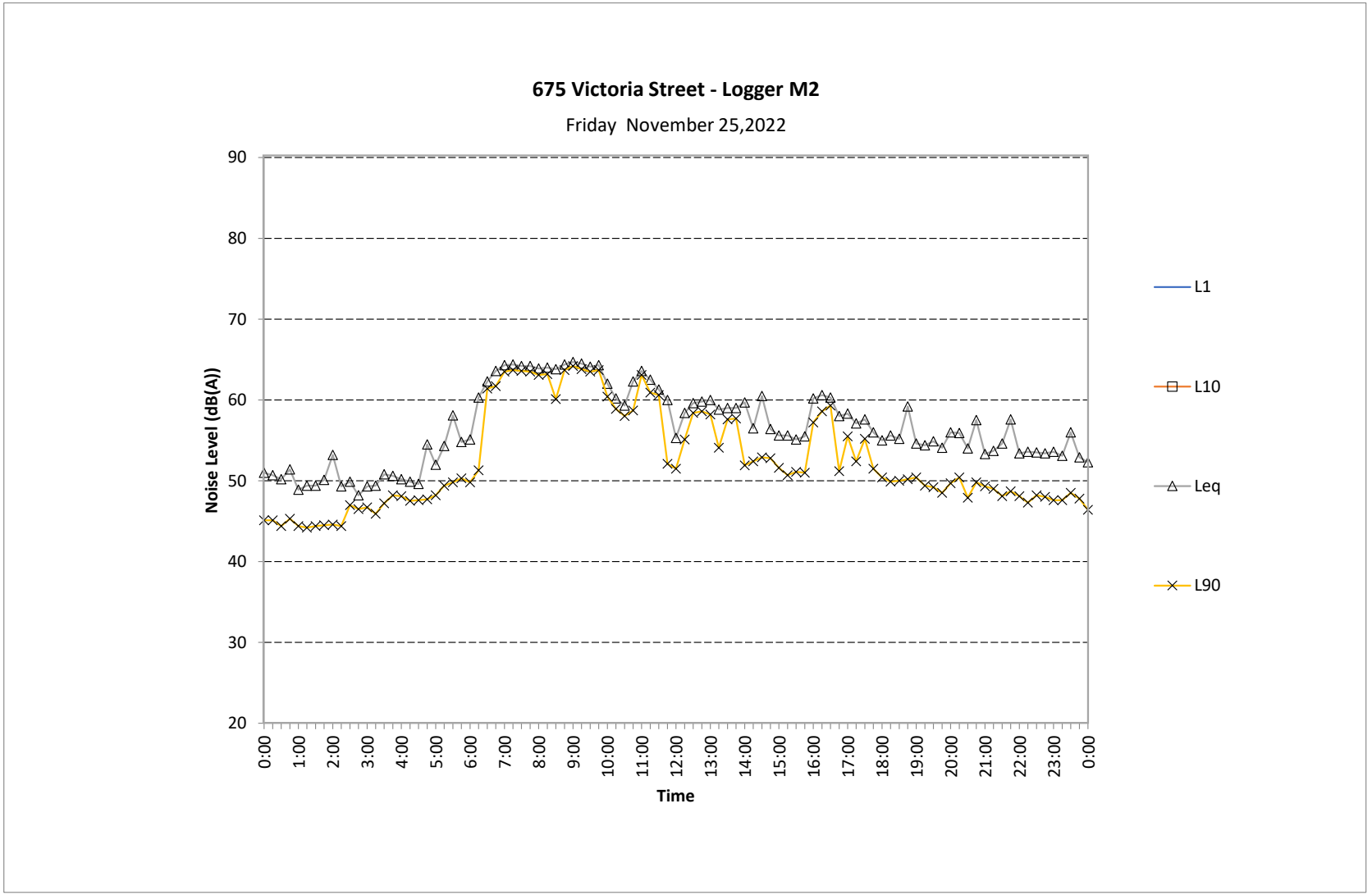

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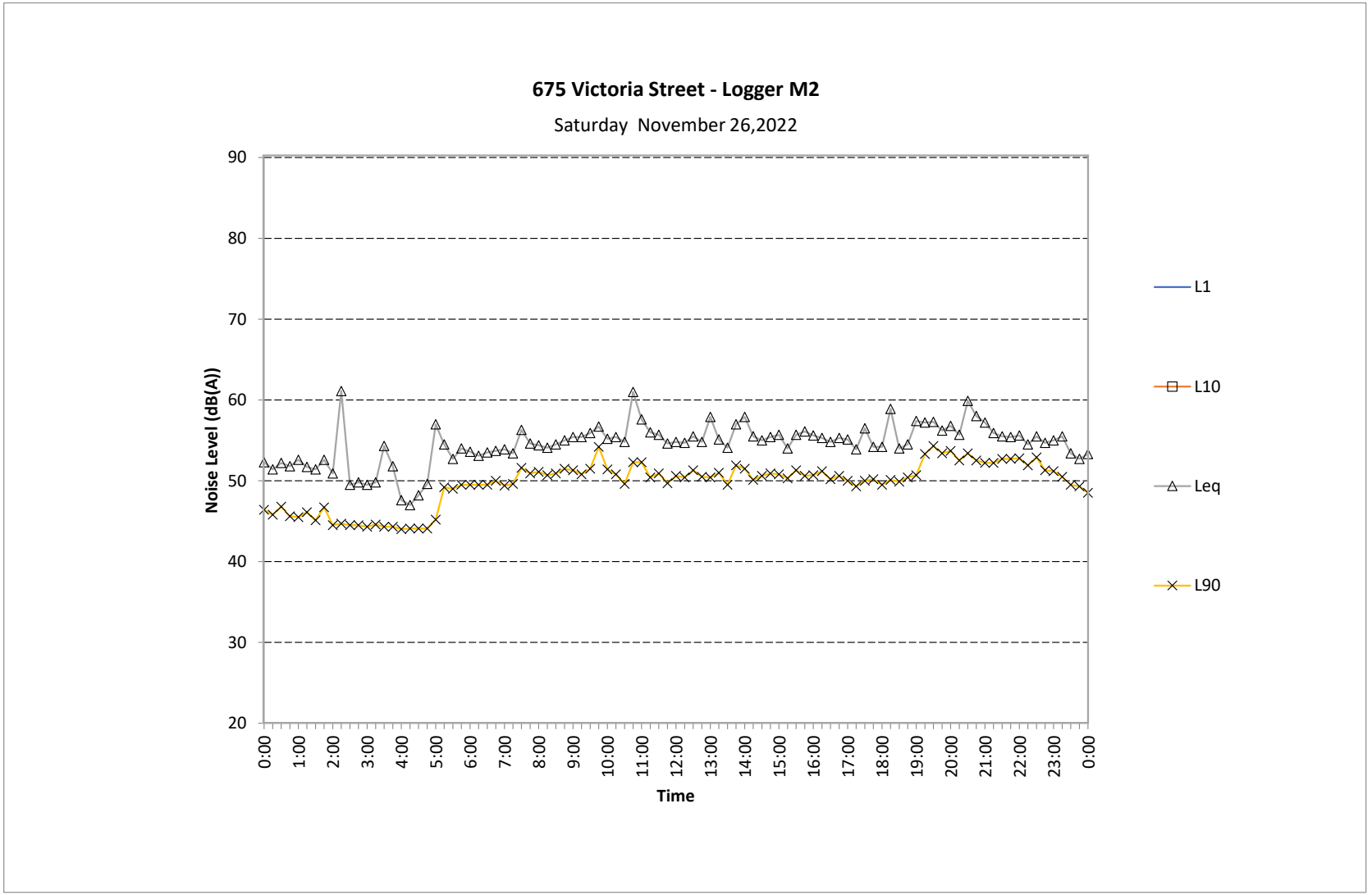

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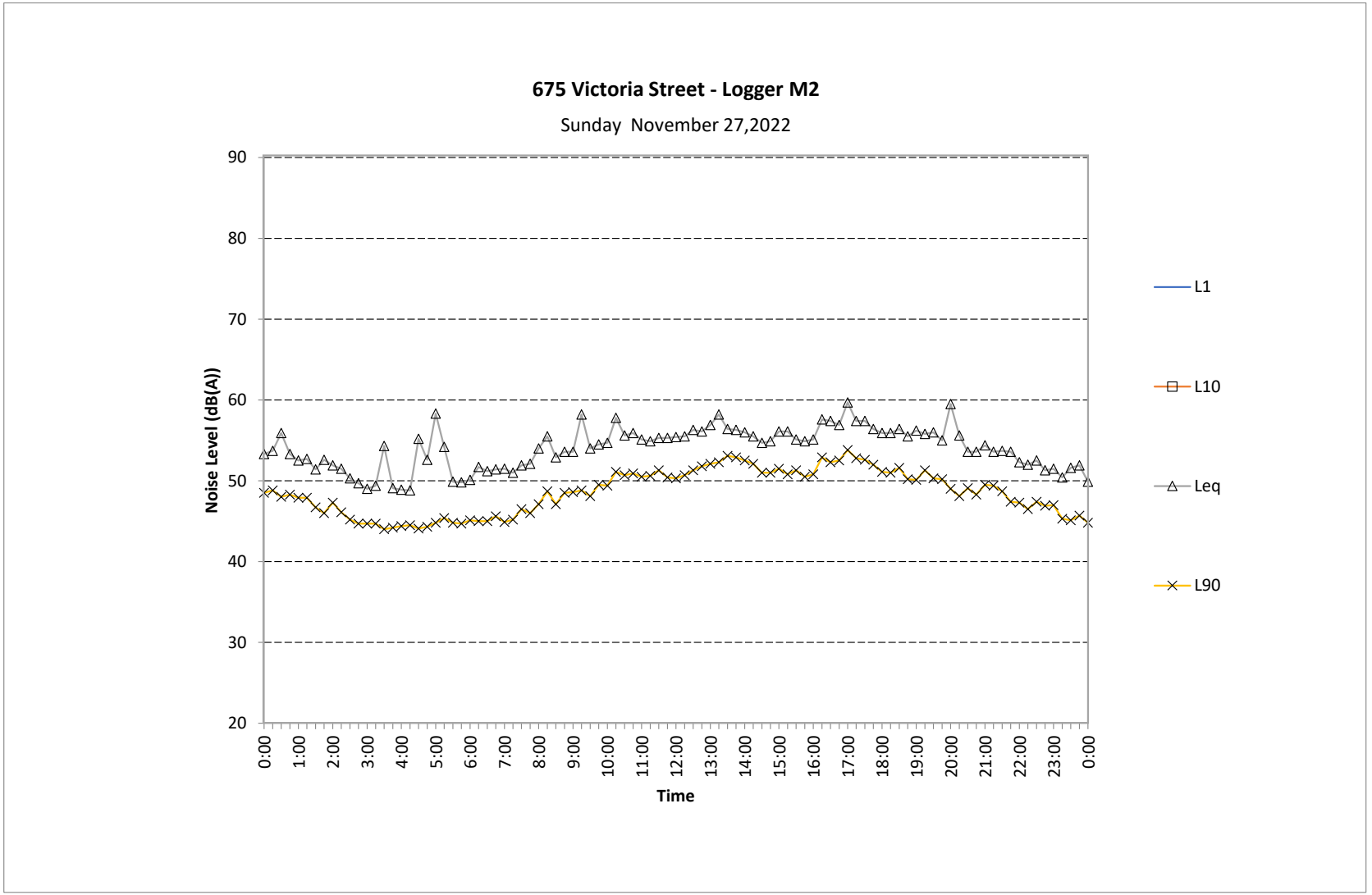

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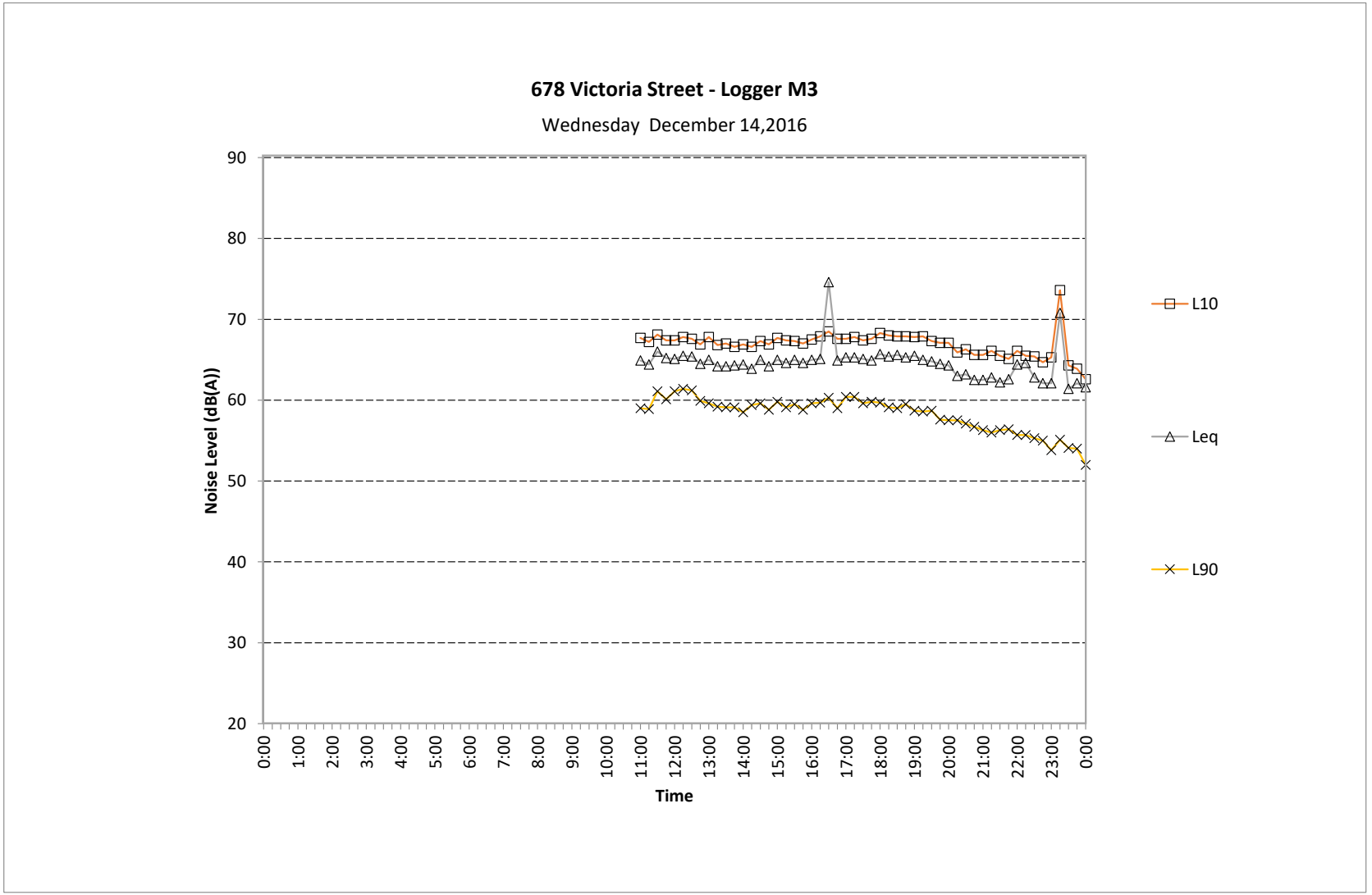

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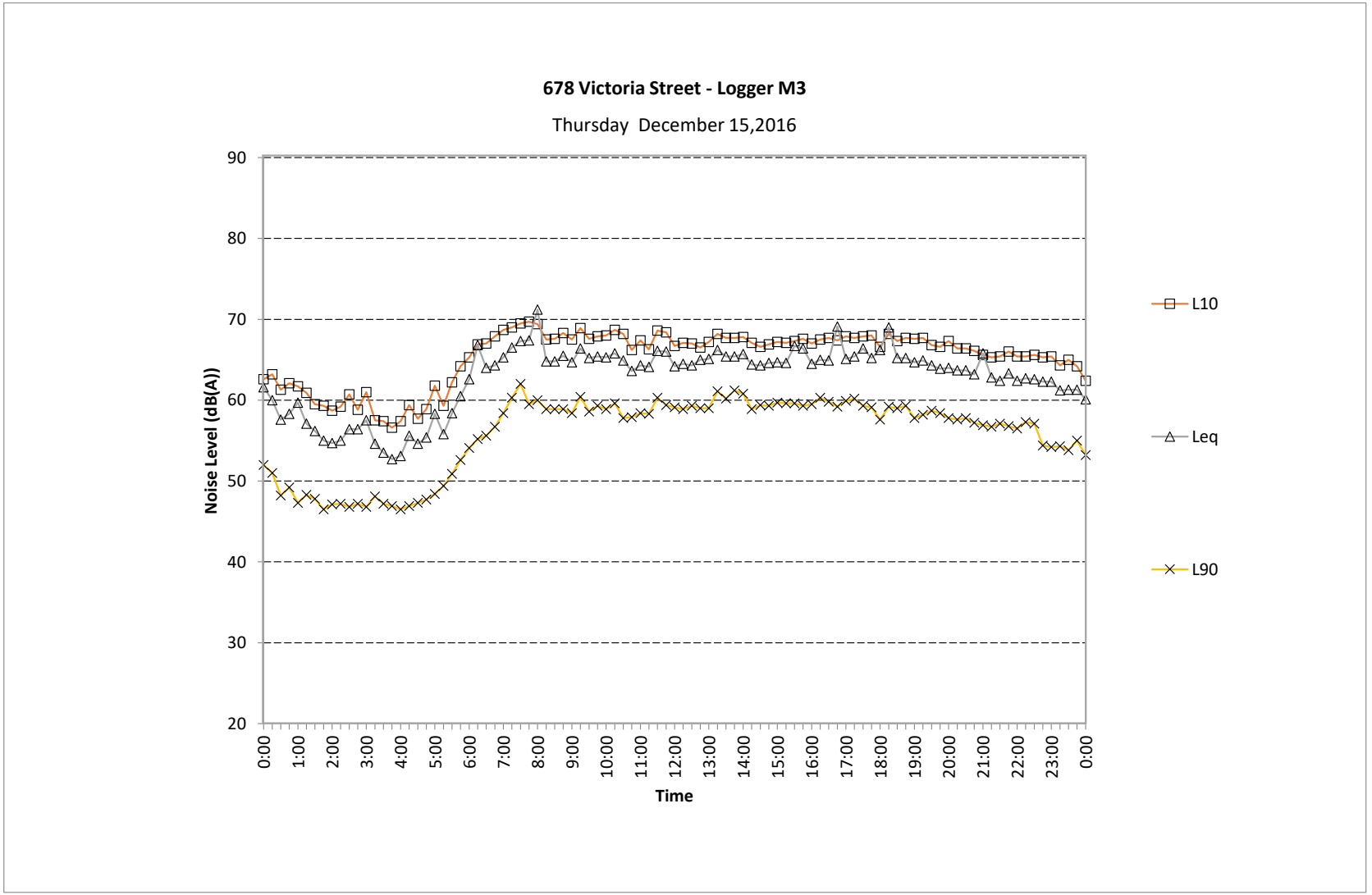

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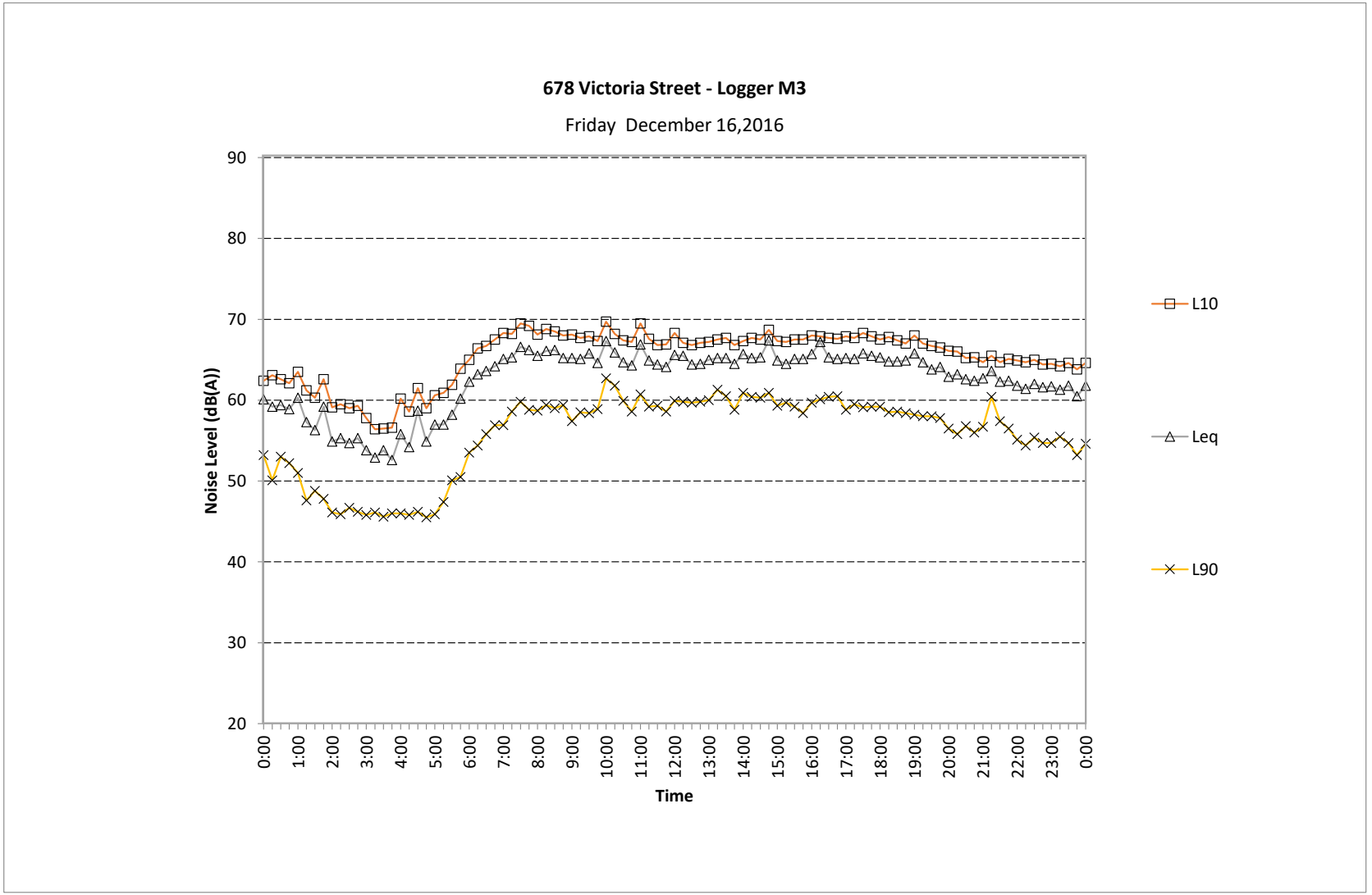

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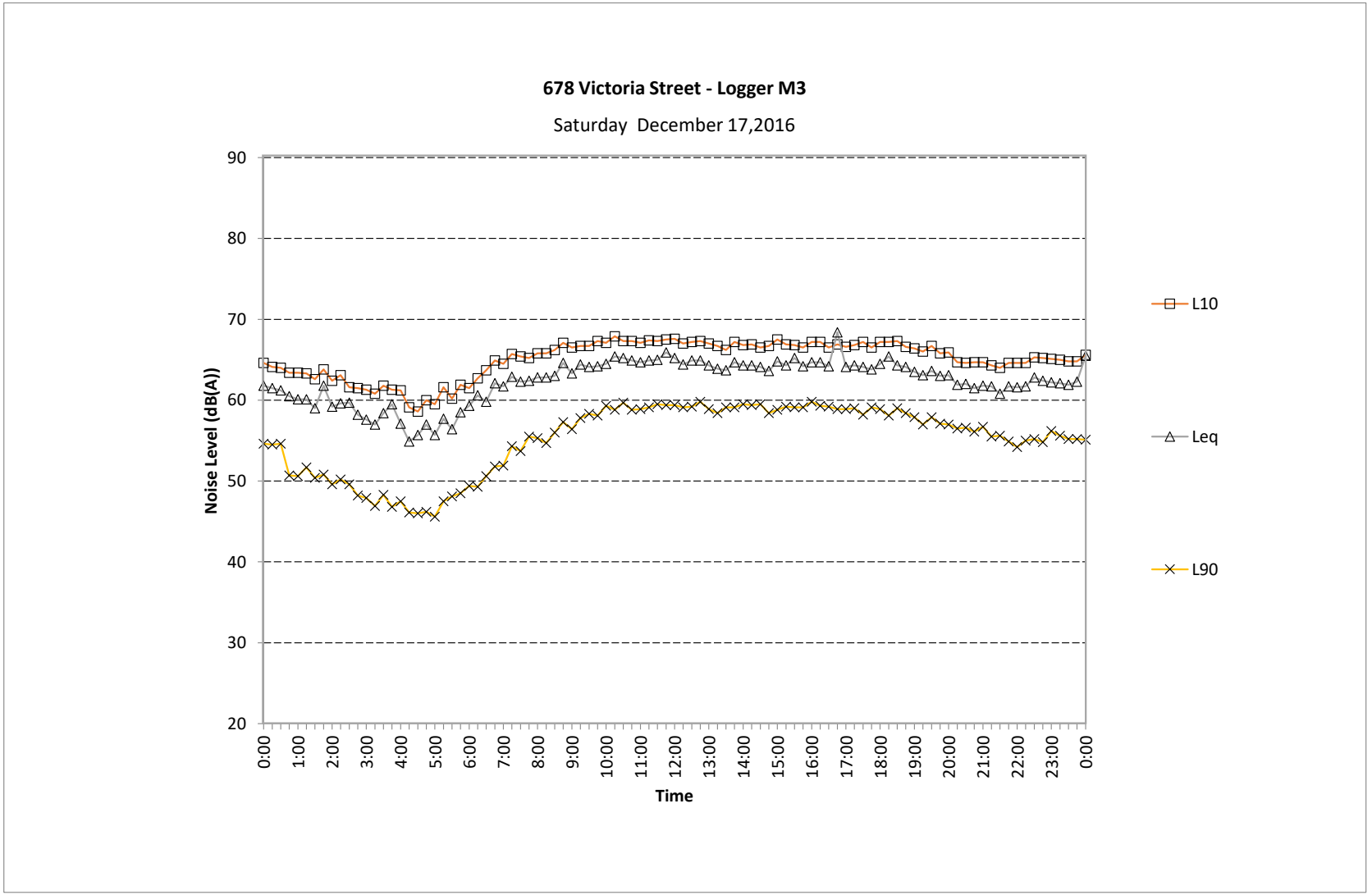

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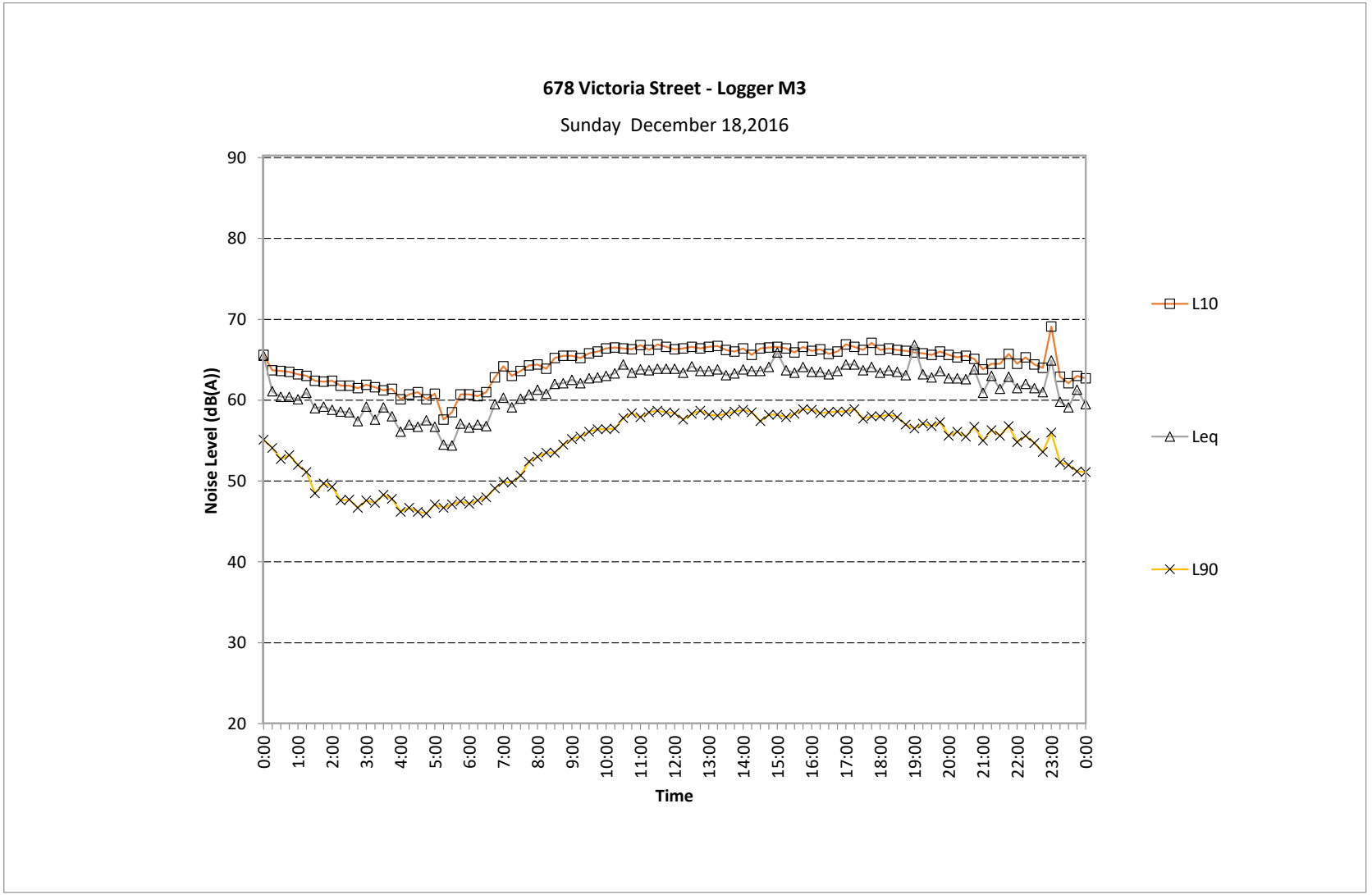

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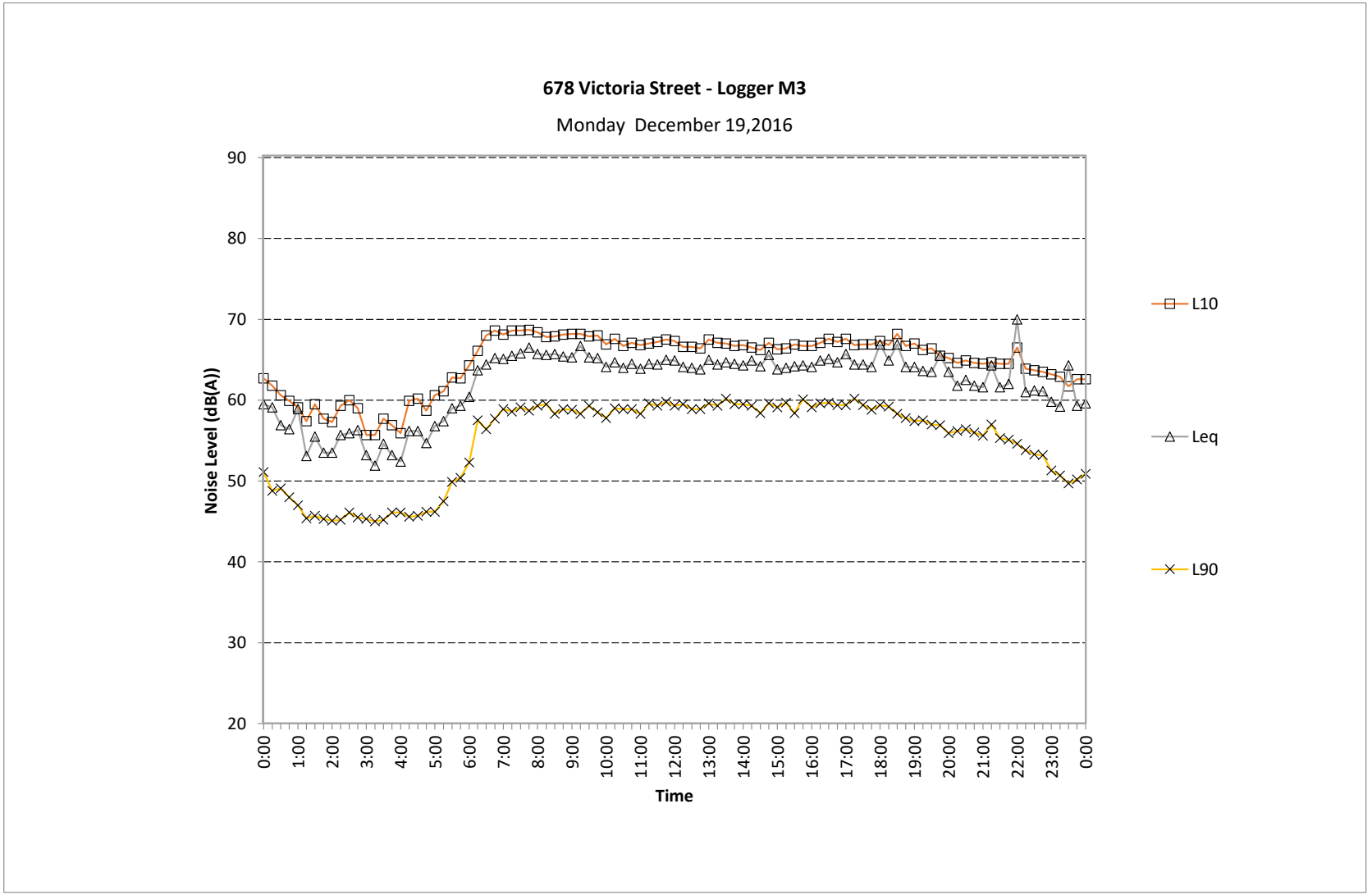

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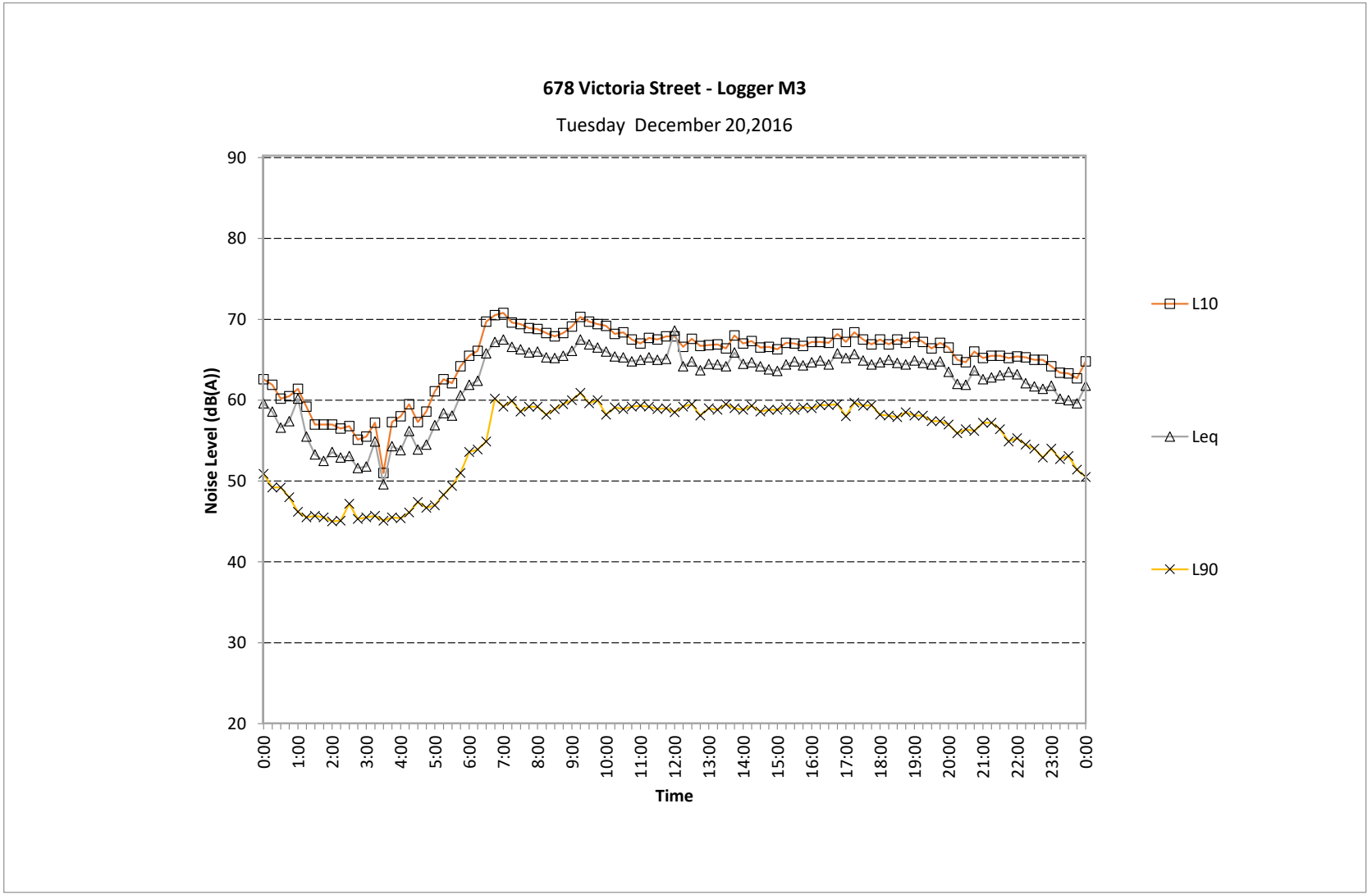

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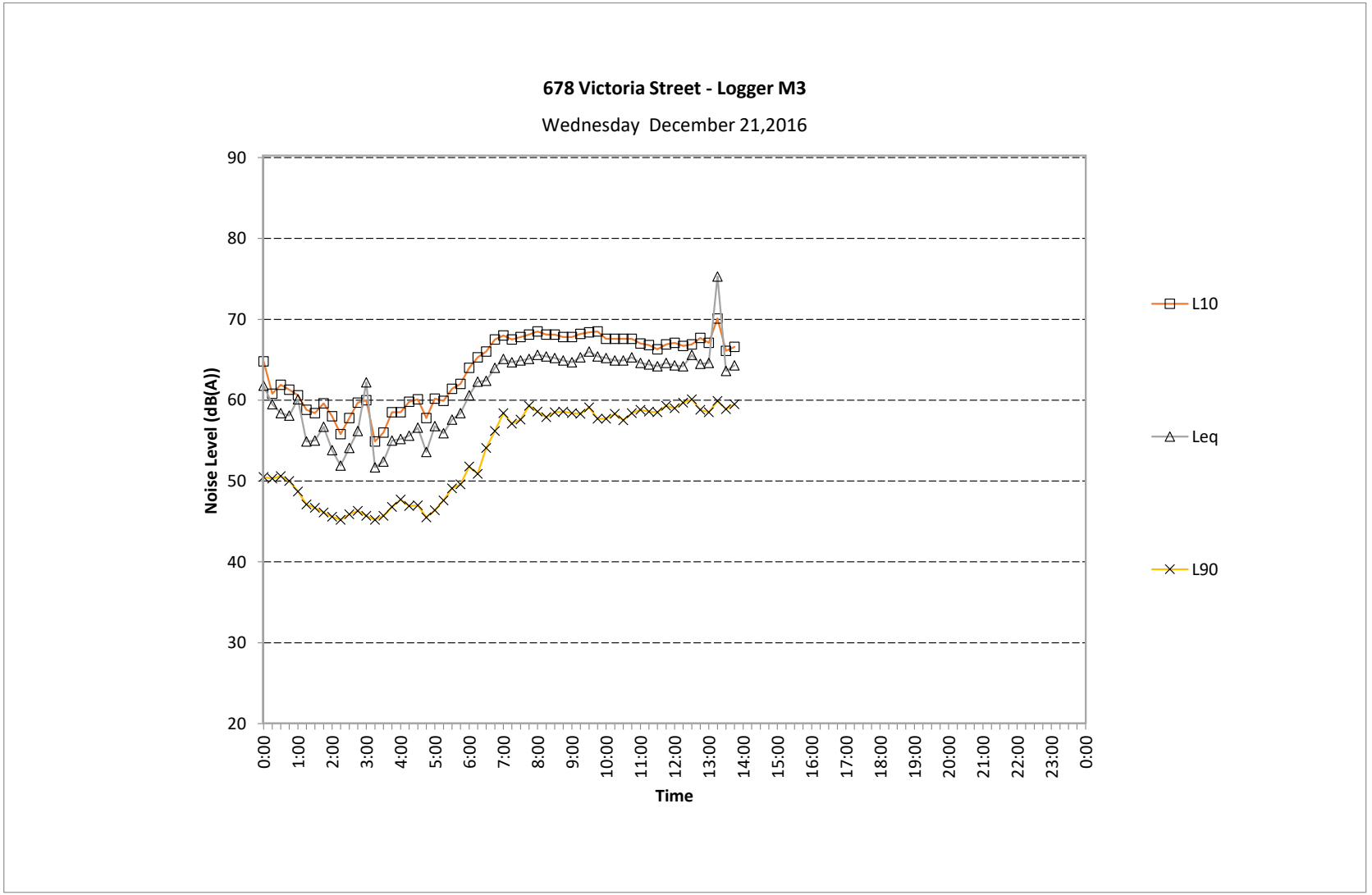

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675 Victoria Street, Abbotsford

Flood Impact Analysis

24 October 2024

675 Victoria Street, Abbotsford

Document status

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Project	675 Victoria Street, Abbotsford
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Project manager	Carolyn Tsioulos
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1. Introduction

HARC was engaged to undertake flood modelling and impact assessment and to provide advice in relation to a proposed development at 675 Victoria Street, Abbotsford. The aim of the analysis is to undertake flood modelling to determine flood impacts associated with the Yarra River and overland stormwater flow in Victoria Street, across the site under existing and proposed developed conditions. This information will be used to assess whether the proposed redevelopment meets the requirements of the State Planning Policy and the Land Subject to Inundation Overlay (LSIO) decision guidelines, as well as Melbourne Water's and the City Of Yarra's requirements.

1.1 Site Location

The site is located at 675 Victoria Street, Abbotsford, as shown in Figure 1-1. It is zoned Commercial 1 and is affected by a number of overlays. In particular, the site is within an LSIO associated with the Yarra River, as per the Yarra Planning Scheme. The current flood extent can be seen in Figure 1-2.



Figure 1-1: Site Location (site outlined in red)



Figure 1-2: LSIO extent

1.2 Flood Information

Flood level information provided by Melbourne Water in their letter of 28 July 2023, indicated an applicable flood level at the site of 10.9m AHD

Correspondence from Yarra City Council indicated that there were concerns regarding overland stormwater flow in Victoria Street and its potential to enter the proposed site via the crossover. Council have noted that the height difference between the invert of the roadside channel and the apex of the driveway is limited. As such, Council requested that flood modelling be undertaken to determine the potential overland flow levels, so that crossover levels could be determined. This is discussed further in Section 2

1.3 Previous Melbourne Water advice and correspondence

The correspondence with Melbourne Water and Council regarding the flood conditions on the site are summarised below:

Melbourne Water 28 July 2023: Melbourne Water letter to City of Yarra stating an objection under Section 56 (1) of the Planning & Environment Act to the proposed development citing as the ground of objection:

1. The development is inconsistent with State Planning Policy relating to floodplain management, particularly Clause 13.03-1S – Floodplain Management as the development

will impact on the natural flood carrying capacity and flood storage function of the adjacent waterway which could intensify the impact of flooding on adjacent properties.

2. The proposed development is inconsistent with the purpose and decision guidelines set out in the Land Subject to Inundation Overlay (LSIO) within the Yarra City Council Planning Scheme.

3. The proposed development is inconsistent with the 'Guidelines for Development in Flood Affected Areas' (DELWP 2019) in relation to freeboard, flow conveyance, flood storage and flood safety.

This report details the flood impact assessment and flood modelling for the proposed development that demonstrates compliance with the criteria in Melbourne Water's grounds of objection.

City of Yarra Development Engineering Formal Referral Response, 17 July 2023: Council requested a flood analysis to determine the peak flood level at the crossover location. Council requested that the applicant provide the marked-out catchment area, as well as:

- Cross sectional drawings showing the peak water level
  - Existing and design ground level
  - The grading across these sections
  - The apex

- Provide the relevant flood data from Melbourne Water. The design ground levels and floor levels within the proposed drawing may need to be updated based on the recommendation.

Phone correspondence with the City of Yarra and a subsequent email dated 22 March 2024, reiterated City of Yarra's information requirements. It also provided pipe and pit information for local overland stormwater flow modelling purposes in Victoria Street. Pit invert levels were supplied to enable modelling.

1.4 Proposed redevelopment

The site currently contains a commercial development, known as the 'Icon' building, used primarily for business/commercial. It is proposed to redevelop the site as mixed use with a basement car park. The Yarra River is located to the north of the proposed development, as shown in the layout in Figure 1-3.

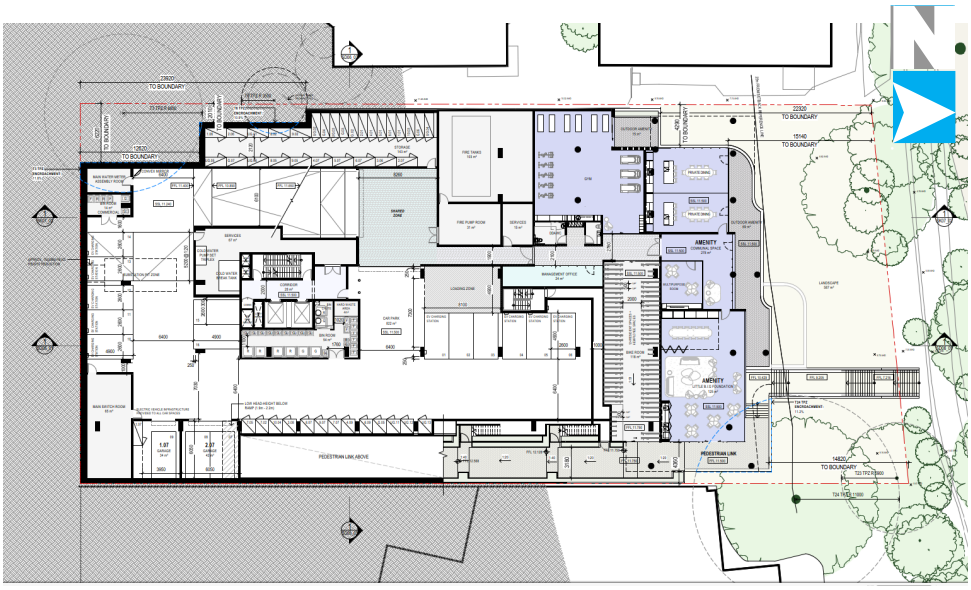

Figure 1-3: Proposed development lower ground floor layout

The proposed finished floor level of the lower ground floor building is 11.50m AHD as illustrated in Figure 1-4 below. This provides a freeboard of 600 mm above the applicable flood level.

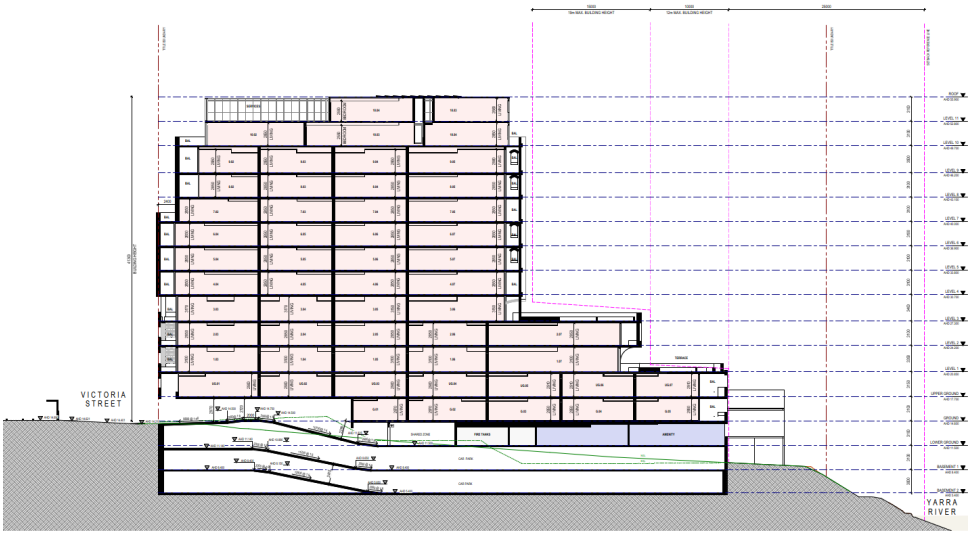

Figure 1-4: Proposed building elevation profile (South)

The development proposes a pedestrian access link from Victoria Street to the Yarra River Trail. The pedestrian access on Victoria Street is safe and above flood level and provides a safe evacuation route in times of Yarra River flood. The pedestrian link to the Yarra River Trail steps down gradually with safe platform refuges and can be closed off in times of flood.

The basement car park has no points of ingress for floodwaters (i.e. no openings below 11.5m AHD) and the entry point to the basement car park is located on Victoria Street, outside the Yarra River floodplain.

The apex of the entry ramp to the basement car park is currently at 14.75m AHD as shown in Figure 1-5 below. This provides appropriate freeboard for a Yarra River flood as it is above the minimum required 600mm and local flooding in Victoria Street.

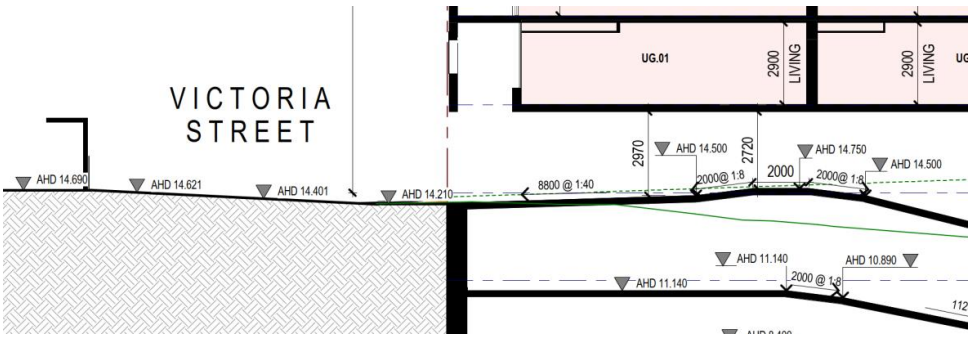

Figure 1-5: Proposed car park basement entry elevation section plan

The car park entry ramp on Victoria St, is the only point of vehicular access/egress into the basement. Access to the building from the basement is internal via stairs and a lift as demonstrated in Figure 1-6. There is external access to the lower ground floor that is set above flood level at 11.5m AHD. As such and as stated above, there are no other ingress points (i.e. no openings below 11.5m AHD) through which floodwaters could enter the basement or building.

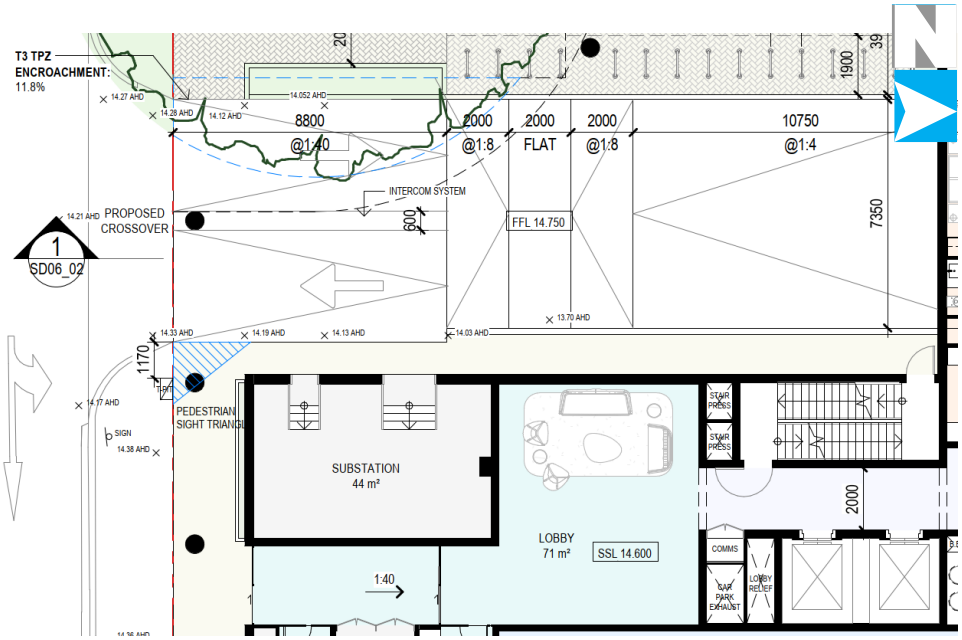

Figure 1-6: Proposed basement car park egress points

2. Flood modelling of local overland flow

As a part of their request for further information on the proposed development, Council have requested flood modelling for the local overland stormwater flows in Victoria Street. It is understood that there has been no previous modelling of this area and information is limited.

2.1 Modelling Inputs

In order for HARC to undertake flood modelling of this area, City of Yarra provided pipe size and pit invert levels. The information provided is shown in Figure 2-1.

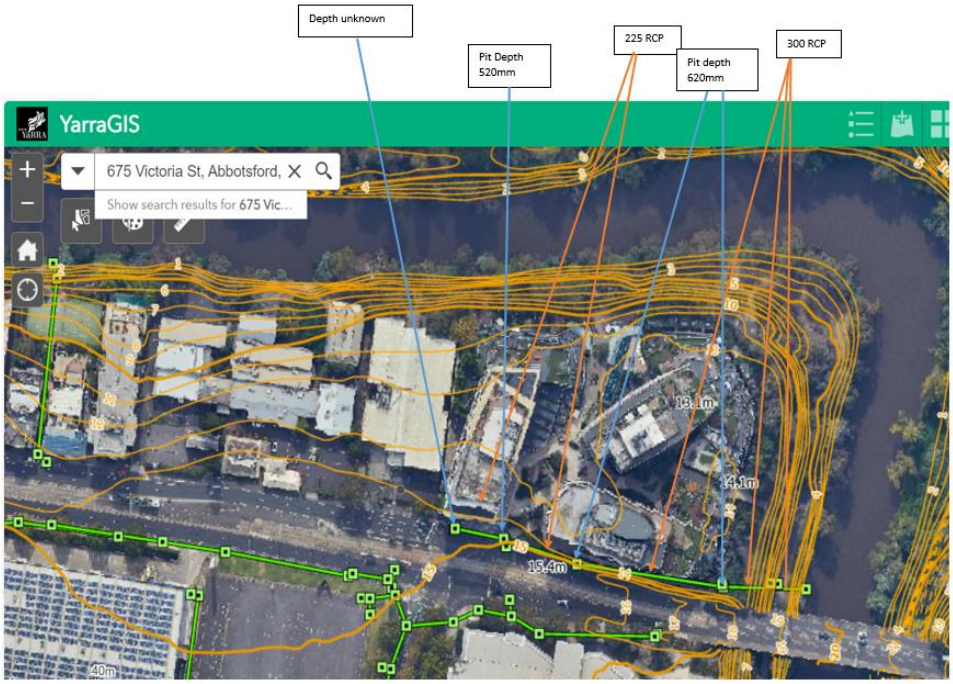

Figure 2-1: City of Yarra stormwater pipe and pit information

LiDAR data was obtained for the site and can be seen in Figure 2-2 below.

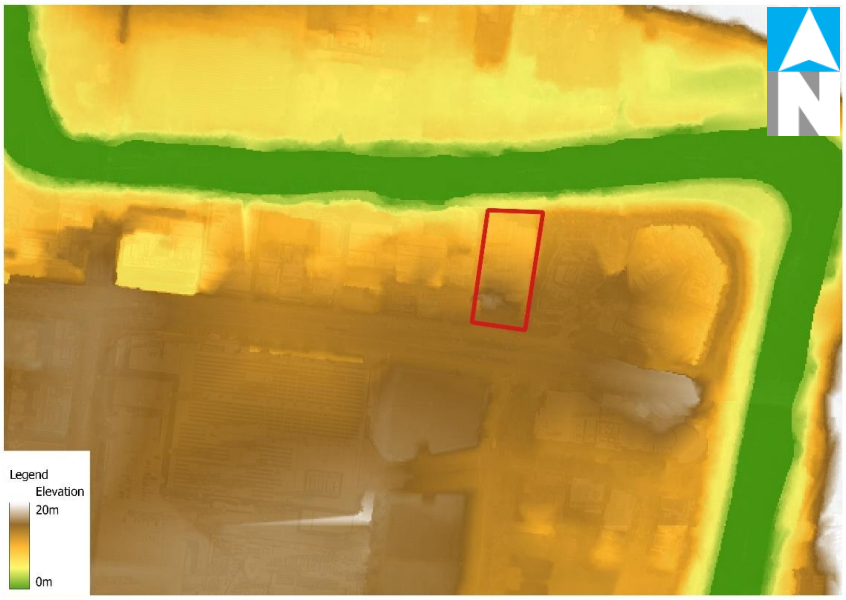

Figure 2-2: Elevation (LiDAR data)

The catchment for the modelling can be seen in Figure 2-3 below. The catchment was determined based on the elevation data and the location of the underground drainage network. The path of flow is from west to east and the underground drain outfalls to the Yarra River.



Figure 2-3: Model catchment

2.2 Modelling methodology

TUFLOW was selected as the appropriate method for modelling the local overland stormwater flow. The inflow boundary for the TUFLOW model was set as direct rainfall over the entire model extent. A 15-minute design rainfall with median temporal pattern was selected as the basis for modelling the overland flow and potential ponding on Victoria Street, at the frontage of the proposed development. Figure 2-1 is georeferenced to locate the 1D pits and pipes network. The 2D local drainage model outflow boundaries were set on the west and south side of the model domain.

2.3 Results

The result of the modelling for the 1 in 10-year Average Recurrence Interval (ARI) flood, also known as the 10% Annual Exceedance Probability (AEP) flood, is shown below in Figure 2-4. The modelling result for the 100-year ARI (1% AEP) flood is shown in Figure 2-5.

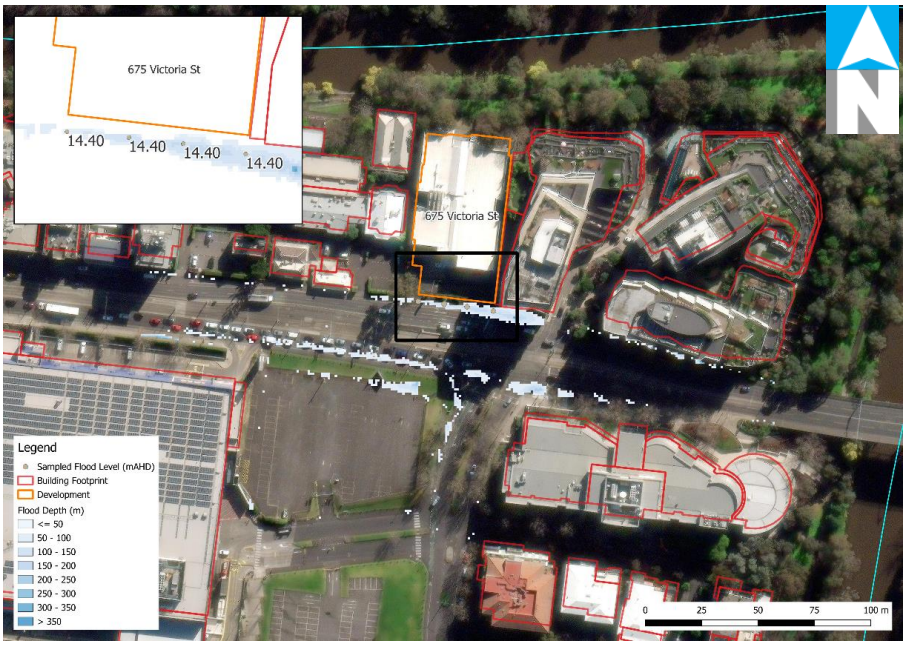

Figure 2-4: 1 in 10 year ARI flood extent

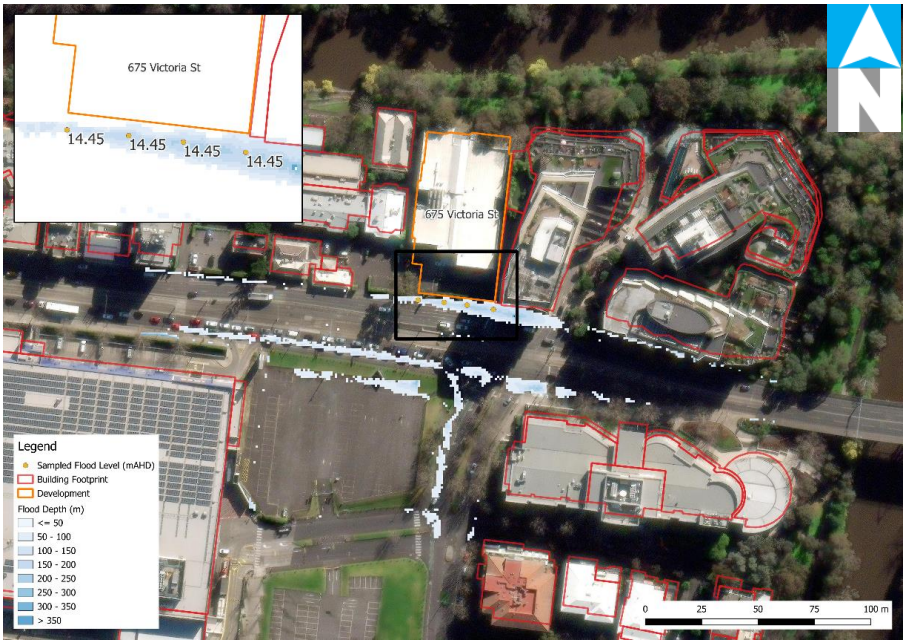

Figure 2-5: 1 in 100 year ARI flood extent

The results of the modelling indicate that the applicable flood levels for the local overland stormwater flows are:

- 1 in 10 ARI year flood level: 14.4m AHD (10 % AEP)
- 1 in 100 ARI year flood level: 14.45m AHD (1% AEP)

It can be seen from the modelling that the stormwater runoff ponds in Victoria Street in large flood events out the front of the property, with the greatest depth of flooding out the front of the adjacent property at 677 Victoria Street. The ponding occurs because the invert level of the stormwater pit appears to be higher than the level of the road in that location. This has not been confirmed by site inspection.

The modelled flood extent is generally consistent with the information released from Councils most recent flood modelling and mapping project shown in Figure 2-6 below.



Figure 2-6: Council Flood mapping (extract from Yarra City website)

3. Yarra River Hydraulic Modelling

To assess the potential impact of the development on the Yarra River floodplain, a TUFLOW 2D hydrodynamic model of the site and its surrounds was set up. TUFLOW implements an implicit matrix solution to solve the two-dimensional, depth-averaged momentum and continuity equations for free surface flow. The package includes fully dynamic 1D/2D linking with the one-dimensional solver ESTRY. The model was built and run using TUFLOW HPC version 2023-03-AE-iSP.

The TUFLOW model was developed using the following information sources:

- 1m resolution LiDAR aerial survey data;
- Architectural drawings of the proposed development by SJB Architects;
- Flood level contour information for the Yarra River immediately upstream and downstream of the site.

3.1 Baseline Model Setup

The hydraulic model covers that part of the Yarra River shown in Figure 3-1: Model Schematics – existing case. A cell size of 1m x 1m was applied over the whole model domain. This is the finest resolution that can be adopted while using a 1m LiDAR topographic data.



Figure 3-1: Model Schematics – existing case

3.1.1 Existing conditions

The existing building extends all of the way to the Design and Development overlay setback line within the Yarra Planning Scheme. However, there is an under-building car park located in the rear northern half of the building, that is currently subject to flooding and is considered flood storage. The existing layout can be seen in Figure 3-2 below.

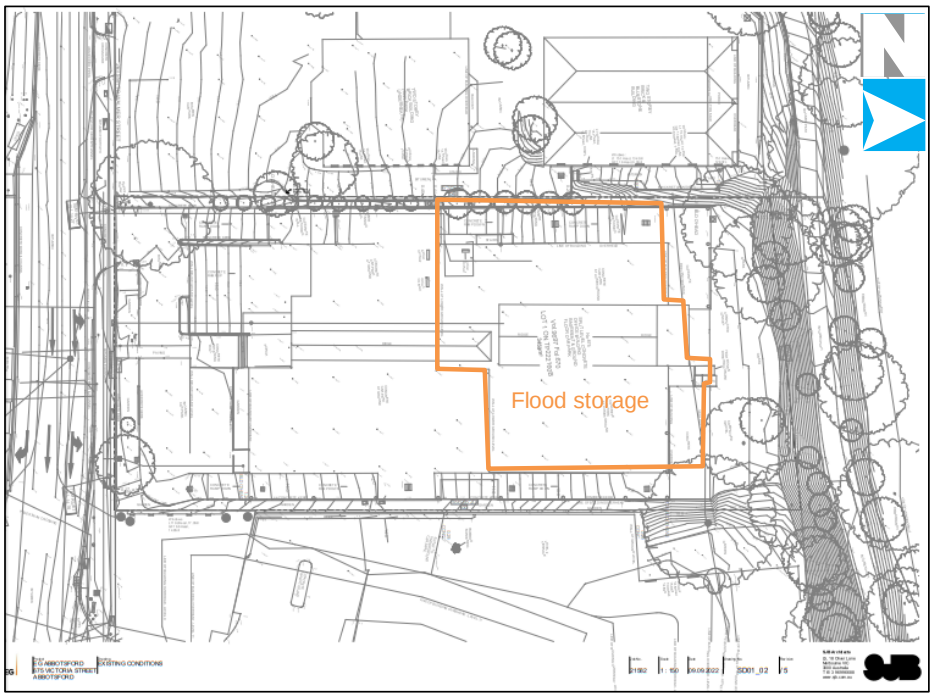

Figure 3-2: Existing conditions

3.1.2 Boundary Conditions

The inflow boundary for the TUFLOW model was set approximately 1000m upstream of the property. The 1% AEP flood contours for the Yarra River are illustrated below (Figure 3-3).

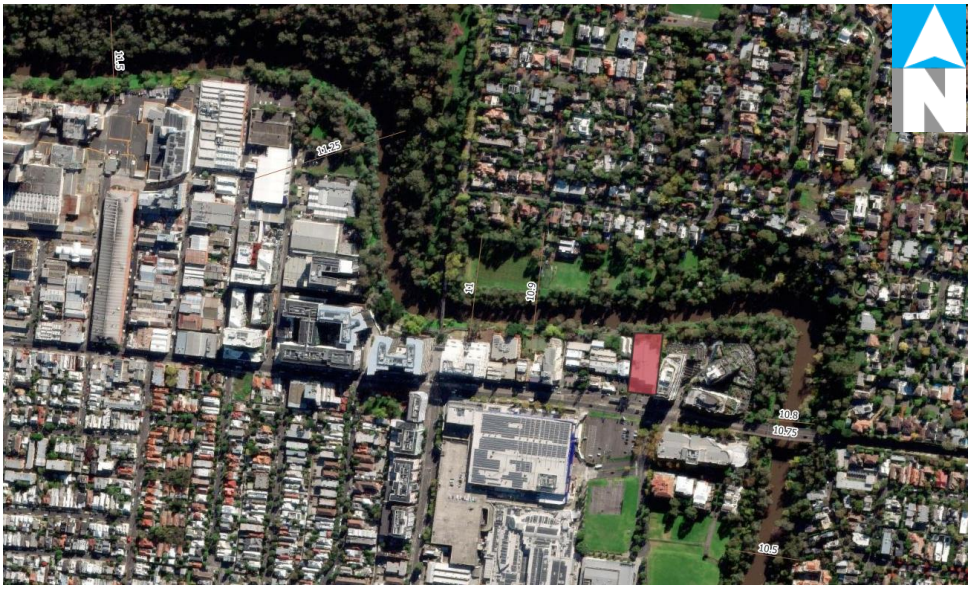

Figure 3-3: 1% AEP flood contours for the Yarra River

The downstream boundary for the model was set about 460m downstream of the property where the overland flow paths join with the main channel of the Yarra River. A steady water level of 10.5m AHD was applied at this boundary, corresponding to the 1% AEP0 water level.

3.1.3 Manning's Roughness

Manning's roughness values for the model domain were determined by assessing aerial imagery against relevant Manning's roughness land use types. Table: 3-1 and Figure 3-4 illustrate the Manning's roughness values that were assigned to the TUFLOW model.

Table: 3-1: Manning's Roughness Values Assigned to the TUFLOW Model

Land Use Description	Manning's n
Paved Roads and car parks	0.025
Gravelled surfaces	0.035
Parks and lawns	0.050
Treed landscapes	0.060
Overland flow	0.080

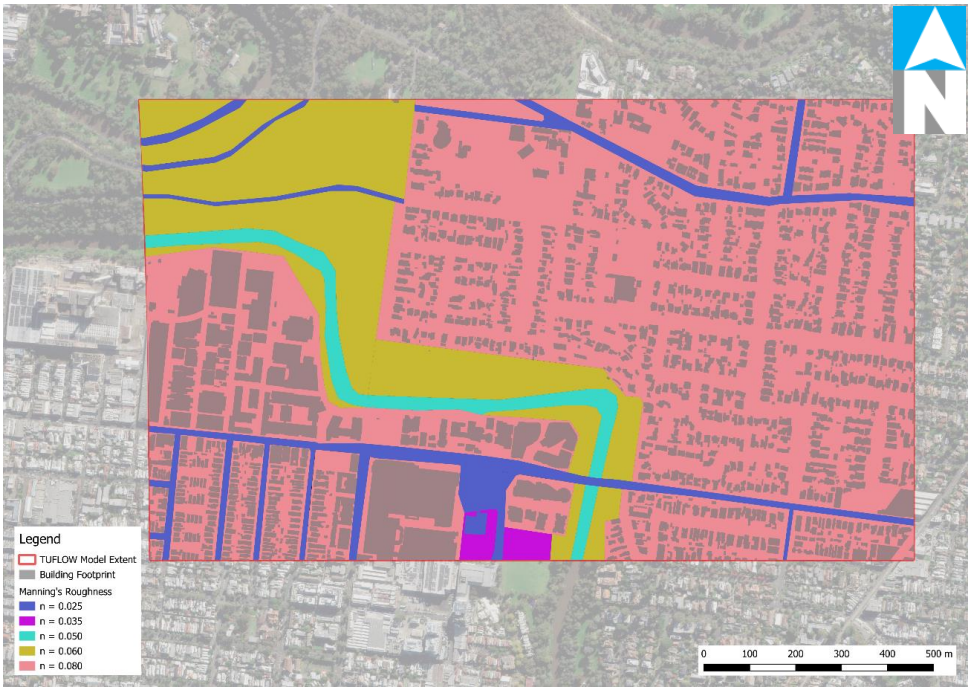

Figure 3-4: Adopted Manning's coefficients for bed roughness

3.2 Developed-Case Model Setup

The baseline model (as set out in Section 3.1) was modified to include the proposed building envelope. The lower ground floor level was modelled as a form of flow obstruction as show in Figure 3-5, noting that the existing conditions indicate that the underground car park is subject to flooding and is therefore viewed as flood storage.

The lower ground level footprint of the building was reduced in the north west corner to remove constrictions that were causing minor impacts on flood behaviour. The footprint provided in this model and report is the revised version.



Figure 3-5: Model Schematisation – proposed building and works

4. Model Results

Figure 4-1 shows the flood depths under existing conditions including the flooding that occurs in the car park beneath the building.

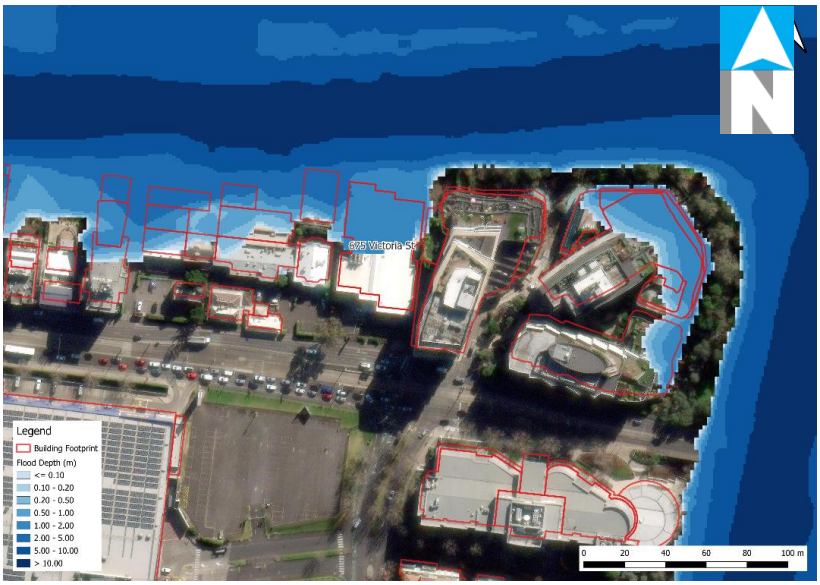

Figure 4-1: Flood depths near the existing building – existing conditions

Figure 4-3 shows the difference in flood depths from existing conditions to developed conditions. It can be seen that the change in flood levels associated with this development is negligible.

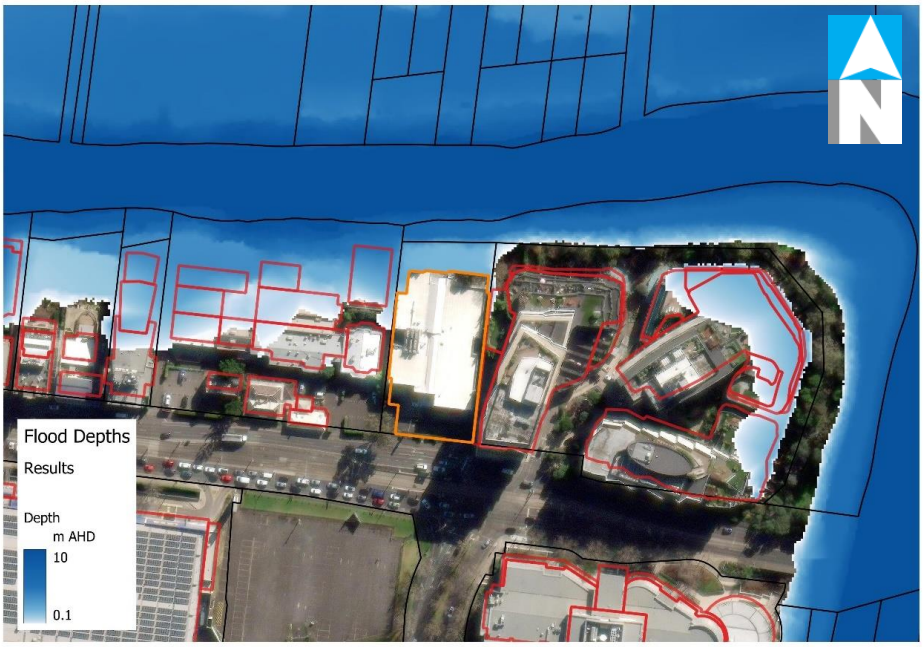

Figure 4-2: Flood depths near the proposed development – future conditions

It can be seen in Figure 4-3 below that the model shows there is no change in flood depth or off-site impacts as a result of the proposed development. The model numbers itself demonstrated no change within the limitation and bounds of TUFLOW.

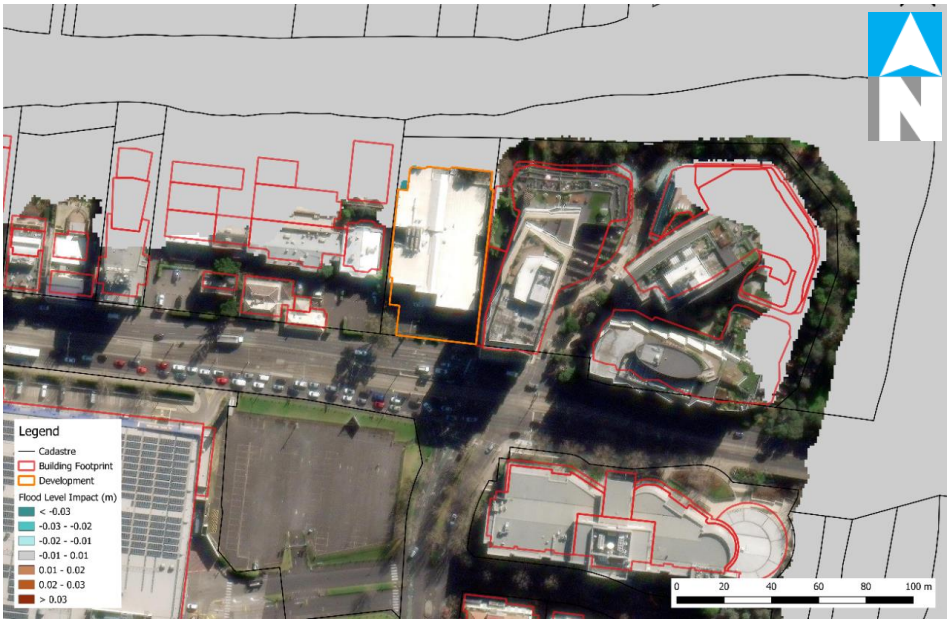

Figure 4-3: Depth difference between the proposed development and existing conditions

Figure 4-4 shows the existing flood hazard classes at and in the vicinity of the property, while Figure 4-5 shows the expected flood hazard classes under proposed development conditions. These figures demonstrate that there is no change in flood hazard on surrounding properties as a result of the proposed development.

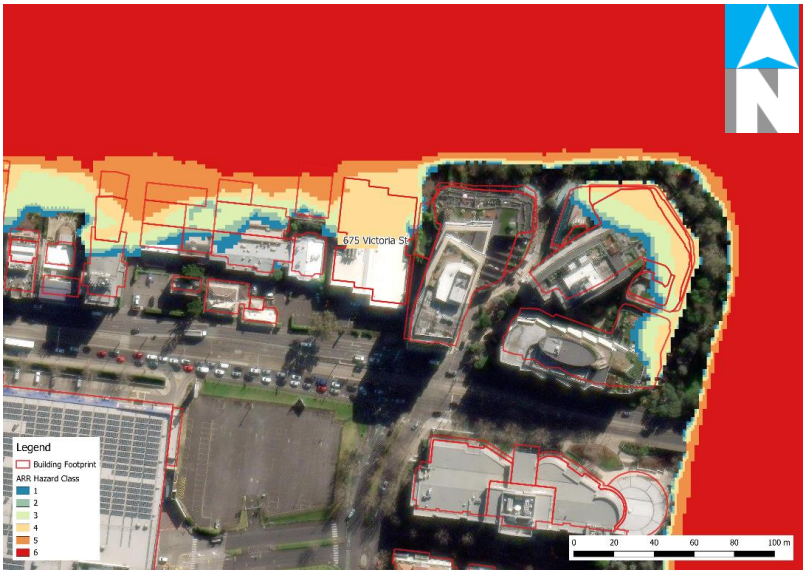

Figure 4-4: Hazard class under existing conditions

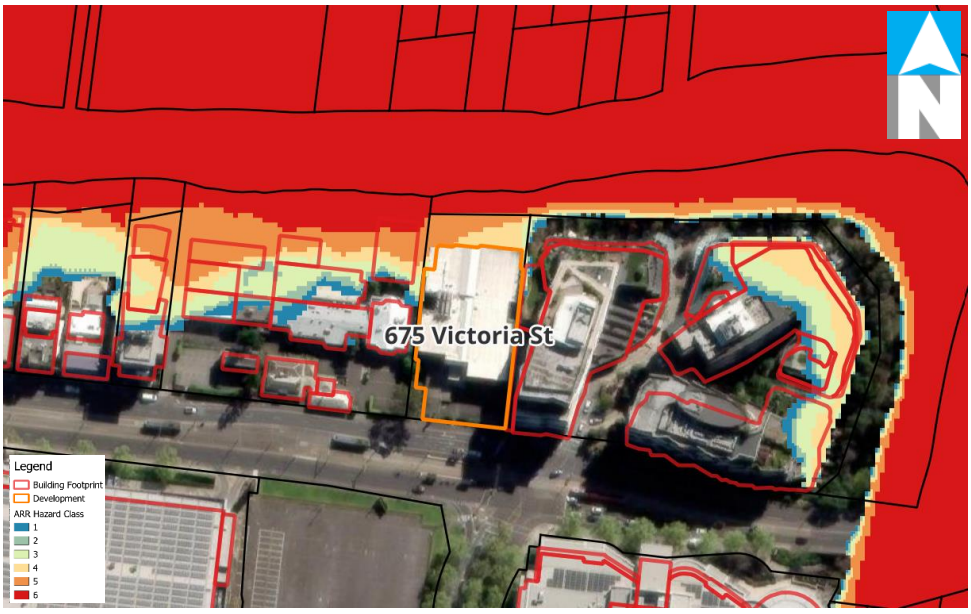

Figure 4-5: Hazard class for proposed development conditions

4.1 Model Assumptions

With respect to the modelling approach, it should be noted that:

- The buildings are considered impervious to the flows as this is the most conservative approach.
- Only the Yarra River was modelled as part of this assessment. No local drainage or overland flow (from Victoria Street) has been assumed as a part of the Yarra River model.

4.2 Model Output Discussion

The results of the modelling have shown that the impacts of the proposed development *on surrounding properties* are negligible. Negligible is considered to be less than 10mm. However, close analysis of the flood hazard mapping indicated a minor change in flood hazard extent (rating 5) *on the site,* as shown in Figure 4-5 above. This is due to a small change (i.e. increase) in velocity adjacent to the rear of the development. The total velocities are no more than 0.5m/s with no change in flood level at this location; thus, only a minor change in the flood hazard rating. This change at this location is considered insignificant.

5. Response to Council Development Engineering Referral

Council requested a flood analysis to determine the peak flood level at the crossover location.

The results of the local overland stormwater flow modelling described in Section 2 indicate that the 1% AEP flood level (100-year ARI) for the local overland flows at the crossover is a maximum of 14.45m AHD and the 10% AEP flood level (10-year ARI) is 14.4m AHD:

As such, it is recommended that the apex of the crossover and basement car park entrance is no lower than 300mm above the applicable local flood level at 14.75m AHD, or as agreed with Council.

Council requested that the applicant provide the marked-out catchment area. This can be seen in Figure 2-3. Council also requested:

- Cross sectional drawings showing the peak water level
    - Existing and design ground level
    - The grading across these sections
    - The apex

The drawings will be provided by the applicant.

6. Melbourne Water Grounds of Objection:

Melbourne Water's letter of objection stated that:

1. The development is inconsistent with State Planning Policy relating to floodplain management, particularly Clause 13.03-1 – Floodplain Management as the development will impact on the natural flood carrying capacity and flood storage function of the adjacent waterway which could intensify the impact of flooding on adjacent properties.

2. The proposed development is inconsistent with the purpose and decision guidelines set out in the Land Subject to Inundation Overlay (LSIO) within the Yarra City Council Planning Scheme.

3. The proposed development is inconsistent with the 'Guidelines for Development in Flood Affected Areas' (DELWP 2019) in relation to freeboard, flow conveyance, flood storage and flood safety.

6.1 Melbourne Water assessment against the Guidelines (2019)

The following assessment is the basis of the objection by Melbourne Water to the development.

A) Freeboard

Freeboard is the difference between the floor level of a building and the 100-year buildings, their contents and the people in them are safely above the 100-year flood level. Melbourne Water requires any new buildings (including the lower levels/ basements carparking) to be constructed with finished floor levels set a minimum of 600mm above the applicable flood level.

B) Flood impacts - Flow conveyance & Storage

The Guidelines state that the natural function of floodplains and overland flow paths to convey and store floodwater must not be compromised, such that new development should not divert floodwaters to the detriment of adjacent properties or increase flood levels/velocities on adjacent properties. Large buildings (relative to the size of the floodplain or overland flow path) reduce flood storage, as does landfill.

The current proposed building extends into the floodplain which presents an impact to the current flood storage capacity and impacting the flow conveyance within the subject site.

C) Flood Safety

The property is subject to high flood risk, Melbourne Water does not support parts of the development where the depth and flow of floodwater affecting access and egress to a property is hazardous. Need to ensure that people moving about on a property or accessing within the property during a flood event are not endangered by deep or fast flowing water.

7. Response to Melbourne Water Grounds of Objection:

7.1 Freeboard

The proposed finished floor level of the lower ground floor has been set at 11.5m AHD. This provides a freeboard of 600mm from the applicable flood level of 10.5m AHD and thus achieves the nominated flood protection level (NFPL). Below this level are the basement car parks that are fully protected from flooding from the Yarra River. There are no points of flood ingress to the basement, with no vents, stairwells, doors or entry point located below flood level. The vehicular entry point to the car park is located off Victoria Street (outside the floodplain) and the apex for the access point must be set no lower than 14.75m AHD to ensure adequate protection from local ponding of overland stormwater flows in Victoria Street. The property street frontage is located above the Yarra River 1% AEP flood level.

This satisfies the criteria against which Melbourne Water's assessment was made:

- ***State Planning Policy:*** Aims to assist the protection of life, property and community infrastructure from flood hazard, including coastal inundation, riverine and overland flows.

  Response: This is achieved by ensuring that property and infrastructure is either out of the floodplain or by raising floor levels a minimum of 600mm above the flood level. Finished floor levels meet this requirement. Further, the basement car park is protected by an apex on the entry ramp that is above the 1% AEP flood level plus freeboard. There are no points of flood ingress below the 1% AEP flood level.

- ***LSIO Decision Guidelines:*** These guidelines require consideration of the existing use and development of the land and also the susceptibility of the development to flooding and flood damage.

  Response: The location of the proposed development is in the same location as the existing development. The building extent into the floodplain is limited by a Design and Development Overlay (DDO1) that sets a minimum setback line. The design complies with this setback. The car park associated with the existing development is located underneath the building and is currently subject to flooding during a 1% AEP flood event. The proposed development removes this risk of damage to cars and property by creating a basement car park free from flooding. Furthermore, and as outlined above, finished floor levels are minimum of 600mm above the flood level.

- ***DELWP 2019 Guidelines criteria for Flood Damages****: The guidelines* aim to minimise flood damage to property and associated infrastructure by setting floor level requirements as a condition of permit.

  Response: The NFPL is the Nominal Flood Protection Level and is flood level plus freeboard. In this case the NFPL is 11.5m AHD (10.9m AHD flood level plus 600mm

freeboard). The lower ground floor of the development meets this criterion. Further, the entry/access to the underground car park also achieves the NFPL.

7.2 Flood impacts - Flow conveyance & Storage

The building footprint in the north west corner of the proposed building has been reduced to remove constriction of flood waters. The revised flood modelling demonstrates no impacts on flood levels. The modelling demonstrates that there is no change in flow conveyance and flood hazard on surrounding properties as a result of the proposed development. The flood hazard classes have remained unchanged off site.

This proposed development satisfies the criteria against which Melbourne Water's assessment was made:

- ***State Planning Policy***: This aims to preserve the natural flood carrying capacity of rivers, streams and floodways and the flood storage function of floodplains and waterways.

  Response: The Yarra River floodplain is a large floodplain and covers a great deal of land in the Melbourne area. Flood modelling has demonstrated no impacts on flood storage.

- ***LSIO Decision Guidelines:*** These consider the effect of the development on redirecting or obstructing floodwater, stormwater or drainage water and the effect of the development on reducing flood storage and increasing flood levels and flow velocities.

  Response: The flood modelling undertaken has indicated no increase on flood levels as a result of negligible changes in flood storage. There are no offsite impacts or changes in flood hazard.

- ***DELWP 2019 Guidelines****:* The guidelines aim to maintain the free passage (i.e. conveyance) and temporary storage of floodwaters. Assessment criteria include ensuring there is no diversion of floodwaters onto adjoining properties, no increase in velocities on adjoining properties and no increase in flood levels on adjoining properties.

  Response: The flood modelling undertaken has indicated no impacts on flood levels associated with changes in flood storage. Flood extents are not impacted and flows are not diverted onto other properties. There are no offsite impacts for flood levels or velocities and no off-site changes in flood hazard.

7.3 Flood Safety:

The proposed development is located in the same location as the existing building and does not encroach further into the active flood path of the Yarra River floodplain. The design complies with the minimum setback line in the Yarra River Corridor as required by the Design and Development Overlay (DDO1) of the Yarra Planning Scheme. The existing building's car park underneath the building is currently subject to flooding during a 1% AEP flood event. The proposed development removes this safety risk to people by creating a basement car park free

from flooding. The proposed development provides flood free access and egress for pedestrian and vehicles to and from both the site and the basement car park. The finished floor level of the lower ground floor is at the NFPL.

The proposed development satisfies the criteria against which Melbourne Water's assessment was made:

- ***State Planning policy:*** *A*ims to protect life from flood hazard, including coastal inundation, riverine and overland flows.

  Response: The proposed development is located in the same location as the existing building. It improves the safety on the site by removing the flood hazard associated with the car park underneath the building. The proposed underground car park can only be accessed via Victoria Street, with the entry located out of the Yarra River floodplain and well above flood level.

- ***LSIO Decision Guidelines:*** Considers the frequency, duration, extent, depth and velocity of flooding of the site and accessway and the danger to occupants of the development, other floodplain residents and emergency personnel if the site or accessway is flooded. It also considers whether the proposed use or development could be located on flood-free land or land with a lesser flood hazard outside this overlay

  Response: The proposed development is located in the same location as the existing building. It does not change the level of flood hazard. It's current use and location imply an existing use right. The proposed development improves the safety on the site by removing the flood hazard associated with the car park underneath the building and provided safe (flood free) pedestrian ad vehicular access from the site. There will be no increase in danger to residents because safe access is provided to and from the site and there is no change in the needs for emergency services personnel.

- ***DELWP 2019 Guidelines****:* The guidelines criteria aim to protect human life and health and provide safety from flood hazard. Site access requirements for children is a maximum depth of 0.5m (with a maximum velocity of 3m/s and VxD product of 0.4m^2/s) and for small vehicles 0.3m (with a maximum velocity of 3m/s and a VxD product of 0.3m^2/s).

  Response: The proposed development achieves the safety criteria by providing flood free access for pedestrian and vehicles via Victoria Street and ensuring that the proposed basement car park has flood protection from the Yarra River. All floors from the lower ground level and upwards (above the basement car park) are set a minimum of 600mm above the applicable flood level.

Table 7-1: Response to DELWP 2019 Guidelines Objectives and Criteria

DELWP Objectives	Criteria	Development Response	Met
Site Safety	Development and access should be located on land with the lowest overall hazard ▪ Depth< 0.3m ▪ Velocity < 2.0m/s ▪ VxD < 0.3m3/s	▪ The development is located in the same building envelope as the current building. ▪ The existing underground car park that is currently subject to flooding will be removed resulting in improved site safety and a reduction in potential damage. ▪ The development has pedestrian access and vehicular access to Victoria Street that is located outside the Yarra River floodplain.	✓ ✓
Flood Damage	Freeboard must be 600m above 1% AEP	▪ The finished floor levels of the development are a minimum of 600mm above the applicable 1% AEP flood level. ▪ The apex of the entry to the basement car park is a minimum of 600mm above the Yarra River 1% AEP flood level ▪ There are no points of ingress for floodwaters into the basement.	✓
Flood Impacts	▪ Development should not increase flood levels on any adjoining properties. ▪ Development (including earthworks) should not increase the flood velocity on any adjoining property ▪ Development (including earthworks) should not divert floodwaters to the detriment of any adjoining property.	▪ The proposed development has been modelled and demonstrates no impact on flood levels and flood hazard on adjacent properties with no detriment to those properties.	✓

8. Conclusion

The proposed commercial and residential development has undergone assessment against State Planning Policy, the Decision Guidelines for the Land Subject to Inundation Overlay and the DELWP Guidelines for Development in Flood Affected Area (2019).

Flood modelling was undertaken to determine the potential impacts of the proposed development on flood storage and conveyance within the adjacent Yarra River corridor and floodplain. The modelling demonstrates no off-site flooding impacts with no change in flood hazard, no change in flood depths and no detrimental impact on surrounding properties.

The lower ground floor has a floor level that is set at the nominal flood protection levels for the site. The basement access and pedestrian access is located outside the Yarra River floodplain on Victoria Street. This both minimises flood damages and ensure the safety of people and community.

Flood modelling to determine localised overland stormwater flows in Victoria Street has identified ponding that occurs in the street and suggests that the crossover to be set at a minimum level of 14.75m AHD (or as specified by Council) to protect the basement car park from local stormwater flows.

The proposed development satisfies all requirements outlined in Melbourne Water's 'Grounds of objection' in their letter dated 28 July 2023. It also meets the requirements for Council with regards to local overland stormwater flows within Victoria Street.

As a final point, the proposed development achieves a reduction in existing flood risk and potential flood damage through two mechanisms: viz, the setting of finished floor levels for the lower ground floor that are no lower than the 1%AEP flood level plus freeboard and construction of a basement car park that has no openings below the 1%AEP flood level plus freeboard.