1.2 Planning Permit History

Planning Permit Application

The original application was lodged with Melbourne City Council in 2016 for the demolition, alterations and additions to a heritage building, the construction of a 22-level mixed use building comprising retail, commercial and 181 apartments, reduction of car parking requirements and alteration of access to a road in a Road Zone, Category 1.

Yarra Bank Developments Pty Ltd lodged an application with the Tribunal under section 79 of the *Planning and Environment Act* 1987 ('Act') as Council failed to grant a permit in the prescribed time (Proceeding P2608/2016).

Application for Review

The Victorian Civil and Administrative Tribunal ('VCAT') considered the matter between 23 – 26 May 2017 (VCAT Reference No. P2608/2016).

On 29 June 2017, the Tribunal directed the issue of planning approval subject to conditions. It is noted that the Tribunal required the deletion of level 13 and 14, resulting in the approval of a 20-storey building.

Planning Permit TP-2016-722 was formally granted on 29 June 2017.

First Extension of Time

On 22 June 2020, at the request of the applicant, Council extended the Planning Permit expiry date to allow the following:

- Construction to commence by 29 June 2022; and
- Construction to be completed by 29 June 2025.

Section 72 Amendment Application & Second Extension of Time

An amendment application under Section 72 of the Act was submitted on 12 February 2021. A broad summary of the amendments sought and approved is as follows:

- Internal layout changes resulting in an increase of 17 dwellings and changes to the dwelling mix resulting in198 dwellings;
- Internal layout changes resulting in an increase in the size of retail tenancies from 97sqm and 131sqm to 132sqm and 162sqm respectively;
- Minor refinements to building's core location and layout;
- Reconfiguration of basement layout resulting in:
    - A reduction of 46 car parking spaces resulting in a total number of car parking spaces of 69;
    - An increase of 50 bicycle parking spaces resulting in a total number of bicycle parking spaces of 126;
- The introduction of car stackers and 2x car lifts; and
- Rearrangement of storage locations.

Council approved the request on 19 October 2021.

Concurrent with the amendment request, a request was made under s69 of the Act for a further extension of time to the permit. This request was approved and allowed:

- Construction to commence by 29 June 2024; and
- Construction to be completed by 29 June 2027.

Third Extension of Time

Condition 18 of the Planning permit required the approval of a Construction and Demolition Management Plan (CDMP) prior to commencement of works, including demolition. A copy of the required document was submitted for approval on 14 March 2024.

Due to changes to Council's internal CDMP assessment processes, it transpired that the approval of the CDMP prior to 29 June 2024 was not achievable. Due to this unforeseeable issue, the applicant requested a further extension of 6 months to the planning permit.

This request was approved on 25 May 2024, and the permit will now expire unless the following is met:

- Construction to commence by 29 December 2024; and
- Construction to be completed by 29 December 2027.

Current Status of the Project

From a town planning perspective, all "prior to commencement" conditions have now been satisfied. This includes complying with the following conditions:

- Condition 2 – Façade Strategy
- Condition 3 – External Finishes and Material Schedule
- Condition 4 – Amended plans, inclusive of VicRoads' requirements
- Condition 9 – Heritage Management Plan
- Condition 10 – Structural Engineering Report relating to heritage building retention strategy
- Condition 11 – confirmation that substantial progress has been made towards the necessary building permit
- Condition 18 – Construction and Demolition Management Plan
- Condition 19 – Waste Management Plan
- Condition 20 – Sustainability Management Plan
- Condition 22 – Wind assessment
- Condition 23 – The Preliminary Risk Screen Assessment (PRSA) has been completed and a copy filed with Council.

The permit holder has undertaken significant steps to commence works on-site. These include:

- All previous tenants vacated the Site on 30th of May 2024
- Electricity, gas and telecommunications have been abolished across all properties
- Hazmat Removal completed in July 2024
- Application for a Demolition Permit under other legislations made with approval expected by mid-October 2024
- Formal demolition contracts expected to be executed in October 2024
- ECI Agreement for main works to be executed by mid-October 2024
- Demolition is scheduled to commence in late-November to early December 2024

2 Urban Context

2.1 The Site

The Site is commonly referred to as 405-421 Spencer Street, West Melbourne and comprises a number of lots contained within two certificates of title as follows:

- Volume 10617 Folio 020, which comprises:
  - Lot 1 on TP802337
  - Lot 2 on TP802337
- Volume 02641 Folio 129, which comprises:
  - Lot 1 on TP529829
  - Lot 2 on TP529829

The Site is of an irregular shape with a total area of approximately 1,683 square metres. It is not encumbered by any restrictions that may impact the proposed development. Please refer to the Certificates of Title at **Appendix A** for further details.

The Site is located on the north-west corner the Spencer Street and Batman Street intersection. The Site frontage to Spencer Street of 38.34 metres, and an abuttal to Batman Street of 40.295 metres. The L-shaped Middleton Place forms the Site's northern boundary.

The Site is currently improved by a number of commercial buildings, which are now vacant.



Figure 1 - Site Overview (source: Extract of Urban Context Plan)

2.2 Site Context

West Melbourne has undergone significant redevelopment in recent years. This is particularly noted in the Site's immediate environs. A detailed analysis of the current Site and surround context is provided within the package of architectural drawings prepared by *Plus Architecture.*

Current key features include:

- 5 residential towers (up to 15 storeys) generally bounded by Dudley, Adderley and Rosslyn Streets;

- 38 storey development on the south-eastern corner of Dudley Street and Spencer Street intersection (420-434 Spencer Street, to the north-east of the Site);
- 18 storey development on the north-east corner of Bateman and Spencer Street intersection (404-418 Spencer Street, to the east of the Site);
- 16 storey development at 386-390 Spencer Street; and
- 2 residential towers (between 22 and 31 storeys) at 371 & 389 Batman Street (to the south of the Site).

There are a number of other approvals for higher density developments in the surrounding area. These are clearly illustrated on Sheet 1.03 (Local Context) of the accompanying plans prepared by *Plus Architecture*.

It is noted that there are no changes to the Site's immediate interfaces.

3 Proposed Amendments

This section should be read in conjunction with the suite of supporting documents submitted as part of this request.

A summary of the key amendments is provided below.

3.1 Build to Rent Model

Yarra Bank Developments now wishes to develop the land for a Built-to-Rent ('BTR') housing model within a similar footprint of the approved development. Although this results in no changes to land use definition pursuant to Clause 73 of the Planning Scheme, it does necessitate changes to dwelling mix, internal layout and communal facility.

Overall, the changes from a Built-to-Sell to a BTR model will bring about greater benefit to the community through providing greater diversity in housing choice, as well as creating certainty and longevity in lease arrangements.

Key features of the proposed BTR model include:

- Increase in dwelling diversity in response to dynamic market demand;
- Amended dwelling layout in response to contemporary living standards and expectations; and
- Improved communal facilities through a reconfigured footprint.

3.2 Proposed Changes

Updated plans have been prepared by *Plus Architecture Pty Ltd*, dated 7 October 2024. A summary of the key amendments is provided below.

The amended development generally sits within the currently approved building envelope, and it will continue to retain the existing heritage building at 405 Spencer Street. The revised architectural language adopts a more traditional podium and tower form that is commonly found in the Site's environs. The revised architectural design takes cues from recently completed developments nearby. It also resolves structural engineering challenges associated with the currently approved development.

Critically and in response to the current planning context, the gross floor area of the amended development does not exceed the currently approved development as verified on plans 4.01 to 4.10. In terms of built form, the approved building footprint is illustrated on applicable floor and elevation plans via red dotted lines. It confirms that, on average, the boundary setbacks have increased, and the maximum building height has been reduced.



Figure 2 - Approved Development



Figure 3 - Proposed Development

Table 1 - Summary of Proposed Changes

Endorsed Plans	Proposed Amendment
Total number of storeys: • Total number of storeys above ground – 20; • **N**umber of storeys in podium (where applicable) – 2 storeys	Total number of storeys: • Total number of storeys above ground – 20; • Number of storeys in podium – 2 storeys
Maximum building height – AHD +81.8	Maximum building height – AHD +81.6
Gross Floor Area[1] – 17,894 sqm	Gross Floor Area[2] – 17,893 sqm
Number of dwellings – 198	Number of dwellings – 190
Dwelling mix: • Studio – 0 • 1-bedroom – 76 • 1 bedroom, study – 81 • 2 bedroom, 1 bathroom – 17 • 2 bedroom, 2 bathroom – 24 • 2 bedroom, 2 bathroom, study – 0 • 3 bedroom – 0 • 4 bedroom – 0	Dwelling mix: • Studio – 44 • 1-bedroom – 22 • 1 bedroom, study – 33 • 2 bedroom, 1 bathroom – 23 • 2 bedroom, 2 bathroom – 19 • 2 bedroom, 2 bathroom, study – 34 • 3 bedroom – 14 • 4 bedroom – 1
Internal common area – 187sqm	Internal common area – 381sqm
External common area – 0sqm	External common area – 359sqm

[1] as defined under DDO33
[2] As defined under DDO33

Total commercial/retail leasable floor area – 982sqm	Total commercial/retail leasable floor area – 1,014sqm;
Basement – 3 levels	Basement – 2 levels
Lobby entries • Spencer Street (north of 405 Spencer Street); and • Bateman Street (west of 405 Spencer Street)	Lobby entry via Bateman Street only, by utilising an existing gate within 405 Spencer Street.
Car parking – 69 spaces including car stackers	Car parking – 44 spaces, with no car stackers
Vehicle access: • Basement via Middleton Place and 2x car lifts • Loading / waste access via Middleton Place;	Vehicle access: • Basement access via Bateman Street; and • Loading /waste access via Middleton Place
Bicycle parking – 126 spaces	Bicycle parking – 126 spaces
Heritage building (405 Spencer Street) – retained	Heritage building (405 Spencer Street) – retained

3.3 Proposed Changes to the Planning Permit

Given the nature of the proposed changes, only minor changes that are administrative in nature are required to the Planning Permit. They include:

- Changes to permit preamble to reflect changes to permit triggers under the current planning controls; and
- Changes to permit conditions to correctly reference the updated architectural plans.

Proposed changes are tracked in the draft amended Planning Permit at **Appendix A**.

4 Revised Permit Triggers

Since the issue of the Planning Permit, there has been a number of changes to the Melbourne Planning Scheme ('MPS"). A summary of the relevant changes and permit triggers is provided in Table 1 below.

Table 2 - Changes to Planning Controls

Planning Controls and Permit Triggers as of 29 June 2017	Planning Controls and Permit Triggers as of 7 October 2024
Clause 32.04 - Mixed Use Zone • Pursuant to Clause 32.04-2, dwelling was a Section 1 (no permit required) use. • Pursuant to Clause 32.04-2, a permit was required for use as a food and drink premises or shop as the leasable floor area exceeded 150 square metres. • Pursuant to Clause 32.04-2, a permit was required to use the land for an office as the leasable floor area exceeded 250 square metres. • Pursuant to Clause 32.04-6, a permit is required to construct two or more dwellings[3] on a lot. • Pursuant to Clause 32.04-8, a permit is required to construct a building or construct or carry out works for a use in Section 2 of Clause 32.04-2.	Clause 37.1 – Special Use Zone – Schedule 6 Pursuant to Section 1.0 of SUZ6: • Dwelling is a Section 1 use. The maximum dwelling number does not apply in this instance as it accords with an existing Planning Permit approved before the approval date of Amendment C385melb. • Office is a Section 1 use; • Shop is a Section 1 use provided its leasable floor area does not exceed 150sqm. • Food and Drink premises is a Section 1 use provided its leasable floor area does not exceed 150sqm. Pursuant to Clause 37.01-4, a permit is required to construct a building. A detailed discussion against the requirements of the SUZ6 is discussed in Section 5.
Clause 43.01 – HO779 (405 Spencer Street, West Melbourne) Pursuant to Clause 43.01-1, a permit is required to demolish a building, and to construct a building or constructt and carry out works.	No change
Clause 43.02 - Design and Development Overlay, Schedule 12 - Noise Attenuation Area (DDO12) Pursuant to Clause 43.02-2 and further refined at Schedule 12, a permit was required for buildings and works associated with new noise sensitive uses.	No change
Clause 43.02 Design and Development Overlay, Schedule 33 - CBD Fringe (DDO33) Pursuant to Clause 43.02-2 a permit was required to construct a building. The DDO33 did not any mandatory maximum building height, podium height or minimum building setback requirements.	Clause 43.02 Design and Development Overlay, Schedule 33 - CBD Fringe (DDO33) This planning control continues to apply to the Site. Although the content of the control has been updated. Pursuant to Clause 43.02-2, a permit is required to construct a building.

[3] The proposal was lodged prior to the gazettal of VC136. As such, the proposal was not require to be assessed against Clause 58 (Apartment Developments).

	A detailed discussion against the requirements of the DDO33 is discussed in Section 5.
	Parking Overlay – Schedule 14 Pursuant to PO14, a permit is required to exceed the following parking ratios: • Dwelling – 0.3 space per 1 bedroom dwelling; 0.45 space per 2 bedroom dwelling; 0.6 space per 3 bedroom dwelling. • All other uses – 0.5 space per 100sqm net floor area. A permit is not required for the amended development.
Clause 52.06 – Car Parking Pursuant to Clause 52.06-3, a permit was required to reduce the following statutory parking rates specified under Clause 52.06-5: • Dwelling - 1 space to each one or two bedroom dwelling, 2 spaces to each three bedroom dwelling and 1 visitor space to every 5 dwellings • Food and drink premises and shop – 4 spaces to each 100 square metres of leasable floor area • Office – 3.5 spaces to each 100 square metres of net floor area	Clause 52.06 – Car Parking No permit is triggered based on the requirements of PO14. However, the design standards at Clause 52.06-9 continue to be relevant.
Clause 52.07 – Loading and Unloading of Vehicles Pursuant to Clause 52.07, no building or works may be constructed for the sales of goods or materials without an appropriate loading bay. This statutory requirement was met.	This statutory requirement no longer exists
Clause 52.29 – Land adjacent to a Road Zone, Category 1 or a Public Acquisition Overlay for a Category 1 Road Pursuant to Clause 52.29, an application to alter access to Spencer Street triggers a Planning Permit.	Clause 52.29 – Land adjacent to the Principal Road Network No changes are proposed to the approved widening of Middleton Place, a permit continues to be required under this provision.
Clause 52.34 – Bicycle Facilities Pursuant to Clause 52.34-2, a permit is required to reduce or waive any requirements of clause 52.34-3 and 52.34-4. This required was met on-Site. Therefore, no permit is triggered.	Clause 52.34 – Bicycle Facilities This required continues to be met on-Site. Therefore, no permit is triggered.

5 Planning Assessment

The proposed amendment is generally consistent with the approved building envelope of the currently approved plans. There are no increases to the approved GFA nor the maximum building height. The key changes relate to updated floor layouts to account for changes in dwelling mix and designing for a BTR model with a number of communal spaces. The proposal includes updated façade design, removal of a basement level and amended vehicle access location.

Given the nature of this request, the relevant planning considerations are:

1. Is the proposed amended permitted under the current planning Controls?

2. Does the amended development respond appropriately to the current planning controls and policies?

3. Does the amended design continue to provide an acceptable heritage response?

4. Does the amended development provide an appropriate level of internal amenity outcome?

5. Is the revised vehicle access arrangement appropriate and is the revised car parking layout acceptable?

5.1 Permissibility of the Proposed Amendment

As outlined in Section 4, there have been changes to the planning controls applying to the Site. Most relevantly, DDO33 now imposes the following requirements for an application to construct a building:

> *An application to construct a building or carry out works must not exceed a Floor Area Ratio of 6:1 excluding Additional Floor Area.*
>
> *A permit cannot be granted or amended to vary this requirement, unless in the case of an amendment to a permit, the amendment does not increase the extent of non-compliance.*
>
> (our emphasis underlined)

Pursuant to DDO33, Floor Area Ratio means:

> *The gross floor area above ground of all buildings on a site, divided by the area of the site. For the purposes of this calculation,*
> - *Gross floor area includes all enclosed area, services, lifts, car stackers and covered balconies.*
> - *Gross floor area excludes Additional Floor Area.*
> - *The area of the site includes all contiguous titles in the same ownership that form part of the development.*

Additional Floor Area means:

> *50 percent of the pre-demolition gross floor area of a Special Character Building that is Successfully Retained.*

A Special Character Building is defined as (as relevant):
- 405-407 Spencer Street, West Melbourne (single storey brick building); and
- 419-421 Spencer Street, West Melbourne.

Of the three inputs required to calculate floor area ratio, the only element that is changing with respect to the proposed amendment is the gross floor area (GFA). The following elements remain constant:

- The extent of demolition at 419-421 Spencer has not been altered from the approved plans. The building as-a-whole is to be demolished;
- The extent of retention of 405-407 Spencer Street (as visible from the street) has not been altered; and
- The size of the Site has not changed.

Having regard to the above, the proposed amendment is not a prohibited proposal provided that the proposed development's GFA does not exceed the approved GFA. The approved development achieves a GFA of 17,894sqm. The proposed development achieves a GFA of 17,893sq. On Plans 4.01 to 4.10, a floor-by-floor GFA calculation has been prepared to confirm that the appropriate areas have been included in determining the GFA.

For the above reason, the Floor Area Ratio of the amended proposal would not exceed the Floor Area Ratio of the approved development. The amended proposal can therefore be considered under DDO33.

5.2 Planning Policy and Controls Response

The Site's suitability to accommodate an intensive mixed-use development has already been established through the existing planning approval. Planning policies at both State and local government levels continue to encourage and support sensitively designed higher density outcomes at strategic locations such as this.

Since the granting of the Planning Permit, Victoria's housing shortage has become more acute. The current housing crises has resulted in the Victorian State Government releasing a bold vision for the delivery of an additional 800,000 dwellings over the next decade as part of *Victoria's Housing statement*[4]. This follows a draft target of achieving 2.24 million new homes by 2051 to meet the State's significant projected population growth. For the City of Melbourne, the draft housing target is 134,000, which is 122% of the existing housing stock of 110,100 dwellings[5].

Within this planning context, the amended proposal is a shovel ready project that is poised to make a meaningful contribution to the draft housing targets by contributing 190 dwellings of varying types and sizes to the long-term rental market.

In *GFM Investment Management Limited ATFGFM Home Trust II Subtrust No 9 v Port Phillip CC* [2024] VCAT 458, the Tribunal considered an 18 storey BTR development at 6-9 Queens Road, Melbourne. It found that BTR plays an important role in addressing the current housing crises. The most relevant comments include:

> 9. *In considering the proposal that is before us, we need to be cognisant that this BTR proposal is a form of development that will bring substantial benefits to those experiencing housing stress, as well as those currently locked out of the housing market, due to the existing limited supply of rental housing. This is a weighty benefit associated with the proposed development of the review site.*
>
> 10. *We are also of the view that this form of housing represents an important step to providing an alternative to the "home ownership" model that is becoming increasingly out of reach for many Australians. By providing a very high standard of communal support within an all rental environment, it demonstrates that a rental option need not be a "second class" approach to obtaining stable housing.*
>
> 11. *The second element that we are conscious of is that the objectives of planning in Victoria, as set out at s4(1) of the Planning and Environment Act 1987, include the following:*
>
> *(f) to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e);*

[4] currently a State policy that that underpins the urgent need to the Victoria Planning Provisions in response to Victoria's housing needs.
[5] As of 2023.

(fa) to facilitate the provision of affordable housing in Victoria;

(g) to balance the present and future interests of all Victorians.

12. *It is this objective of the planning system in Victoria to facilitate development, not at all costs, but rather development that achieves the outcomes set out elsewhere in s4(1) of the Planning and Environment Act 1987. We find this objective to facilitate development to be particularly relevant in this context where a proposal will address a social need, such as accessibility to rental accommodation.*
13. *It is this guidance from the Planning and Environment Act 1987 and the Port Phillip Planning Scheme, along with the recognition that this proposal will achieve a community benefit in the form of providing a substantial amount of much needed rental accommodation at a time of great need, that influences the assessment that follows.*

This amendment will facilitate 190 dwellings of a varied typology that will contribute to the much-needed rental housing stock encouraged by the Planning Scheme and highlighted in *GFM Investment Management.*

In addition to the above, it is also relevant to consider whether the proposal responds to the purpose of SUZ6 and relevant design objectives of DDO33.

5.2.1 Special Use Zone Schedule 6

The purpose of the SUZ6 is:

- *To implement the West Melbourne Structure Plan 2018 and support the development of West Melbourne as a vibrant, mixed use inner city neighbourhood with a genuine mix of retail, commercial, education and residential uses and affordable housing.*
- *To retain and increase employment and facilitate an increase in jobs in West Melbourne.*
- *To encourage a less car dependent transport system by facilitating the adoption of sustainable transport alternatives, and ensuring that opportunities to adapt and repurpose car parks are protected.*
- *To encourage the provision of new public open spaces throughout West Melbourne to meet the different needs of the growing community.*
- *To develop Spencer Street (between Dudley and Hawke Streets) as a local activity centre with a mix of commercial, retail, residential and community uses.*

The proposal continues to support the above through:

- Continued provision of a genuine mixture of land uses on-Site;
- The total non-residential floor area has increased by 32 sqm, achieving a total of 1,014 sqm;
- The Shop and Food and Drink Premises tenancies at the ground floor have been adjusted to provide flexible spaces to suit a range of Shop / Food and Drink Premises uses. These tenancies will have improved connection to back of house facilities to supports their ongoing operation; and
- Car parking provision has been adjusted to suit the likely future demands of a BTR development, which generally has a lower empirical car parking demand.

5.2.2 Design and Development Schedule 33

DDO33's design objectives are:

- *To create a precinct with variable building heights generally between six and sixteen storeys with a lower scale of development to Laneways, activated Laneway interfaces, and a clear differentiation from the Hoddle Grid.*
- *To ensure development does not impact on the amenity of Flagstaff Gardens and St James Old Cathedral, outlook from Flagstaff Gardens and outlook to St James Old Cathedral.*

- *To reference the industrial history of the precinct by supporting the adaptive reuse of Special Character Buildings and encourage contemporary use of common industrial materials.*
- *To increase permeability and connectivity for pedestrians and cyclists, and ensure that development supports the provision of Laneways and frames them as positive additions to the public realm.*
- *To ensure that development responds to the characteristic hierarchy of Main Streets, Streets and Laneways through the arrangement of fronts and backs.*

The amended development responds to the above design objectives by offering a high standard of architecture and urban design which is reflective of the existing diverse and robust built form environment of the Flagstaff Precinct within which the Site is located.

The overall scale of the development was considered at length in *Yarra Bank Developments Pty Ltd v Melbourne* CC [2017] VCAT 888. At Paragraphs 109 and 110, the Tribunal made the following findings:

> *109. With regard to the proposed development's height, we are persuaded that the existing and approved heights of nearby buildings show the tolerance for variations in height that Mr Biasci describes. We acknowledge Ms Hodyl's massing studies and agree that buildings of 40-50 metres in height have a different visual impact than those of 70 metres, yet we are not persuaded that the proposed development's height offends DDO33's design objectives. Rather, we accept that it will be viewed as part of a 'field' of higher buildings on this part of Spencer Street as the applicant suggests.*
>
> *110. Despite this general finding, we are influenced by the tribunal's findings in* Melbourne CC v Minister for Planning*, which place weight on the size of that site compared to those around it. We recognise the urban design principle that larger sites can accommodate higher buildings as greater setbacks can be provided and the impact of a building's scale can be reduced. We find this sense of proportion applies here, and are not satisfied that the proposed development should exceed the height of the closest of the towers on that site. Given that this tower has a 20-storey maximum height, we will require two levels of the proposed development to be removed, so that it is, and reads as, a smaller building than its neighbour.*

The above finding was made at a time when some of the significant surrounding developments were not yet "out of ground". The urban context of the Site has evolved in the past 7 years and become more robust. Nevertheless, no increases have been made to the overall building height as part of the amendment application.

In addition to overall height, the proposal continues to provide a high-quality design response by:

- Maintaining an active interface to both Spencer and Batman Streets;
- Retaining the same 2-storey "podium" height, which is driven by the heritage building at 405 Spencer Street;
- The tower setbacks are generally consistent with the approved envelope. To the south, the setback from the heritage façade has mostly increased from level 6 and above;
- The most notable built form change is located in the south-western corner of the Site, with the relocation of the basement car park entry;
- The amended design takes cues from the heritage and special character buildings on the Site and provides a podium of a similar scale;
- The tower has been designed to continue to be read as 2 vertical forms from both Spencer and Batman Streets;
- The revised pedestrian and vehicle entries continue to respond to the road and laneway hierarchy.

The Façade Strategy has been updated by *Plus Architecture* to provide the level of detail required under Condition 2 of the Planning Permit.

5.3 Heritage

It is submitted that the proposal provides an appropriate response to the Site's heritage significance. The accompanying Heritage Impact Assessment prepared by Bryce Raworth Pty Ltd provides a detailed assessment of the proposed amendment. Importantly, it found that:

- The most significant elements of the historical place, as identified in the statement of significance will continue to be retained. Conservation works (as required under condition 9) will return the historical structure to a good state of repair, as well as reinstating features, such as fenestration and decorative elements that have been altered or lost.
- The new podium form to the west of the heritage buildings is of a scale that is directly responsive to the heritage building. Its angled parapet is an appropriate contemporary interpretation of the traditional pitched roof form.
- A shallow recess separates the heritage building and new podium envelope at the ground floor level, while at the first-floor level, the recess extends to almost the full depth of the west elevation. The recess will continue to provide view lines to the heritage building. Further, the heritage building can be appreciated via the skylights above the adjoining shop/food and drink premises, and from the communal pool room to the west.
- Immediately above the heritage building, levels 2- 4 are designed and sited to provide appropriate visual separation between the heritage buildings and the new built form.
- In many instances, the tower setback from the heritage façade on Batman Street has increased.
- Mass of the south elevation is broken up by a vertical recess that divides the whole into two, with further differentiation provided by a staggering of the volumes and tonal changes to the materials.
- Due to structural engineering reasons, it is proposed to demolish but reconstruct a small and rear section of the western wall associated with the heritage building. This section of the building is of lesser visibility, being sited away from the street boundary. The reconstruction will ensure that the character and appearance of the heritage building will be maintained when viewed from the public realm.

Overall, the amendments will continue to result in a positive heritage outcome that will both greatly improve the presentation of the place as well as ensuring the preservation of the buildings into the future.

5.4 Amenity Considerations

The amended development will provide a genuine mix of dwelling types peppered throughout the building. All dwelling layouts have a strong focus on functionality, storage and environmentally sustainable features.

Key features of the amended development include:

- The development comprises a more diverse mixture of dwelling diversity in response to the varying housing demands;
- Each dwelling will have access to its private open space in the form of a balcony/terrace or winter-garden. Additionally, all residents will have access to the range of high quality communal open space located at levels 1, 2 and 19 of the development. The facilities will comprise multi-functional communal spaces, including a roof top terrace, pool and dog park;
- Heating and cooling is now being consolidated, which removes the need to accommodate individual AC units on the balcony, improving the functionality of the balconies;
- Where possible, northerly aspect is maximised for all habitable spaces and private open spaces.
- All habitable spaces will have access to natural daylight and ventilation;
- Internal storage solutions are built into each dwelling commensurate with the dwelling size;
- More efficient and convenient vehicle access is now provided via Batman Street;
- Secure bike parking is available at the ground floor level, accessed via Middleton Place; and
- Back of house access, including waste management, is now segregated from day-to-day resident basement access.

Overall, the amended development will provide a superior level of amenity to future residents.

5.5 Traffic Engineering Considerations.

Ratio Consultants Pty Ltd has undertaken a detailed review of the relevant traffic engineering matters relating to the proposed amendment. It found that the proposal is appropriate from a traffic engineering perspective.

5.5.1 Statutory Car Parking Requirement

The proposal has a maximum statutory car parking provision of 76 spaces. A total of 44 parking spaces are proposed on-site, which is less than the maximum car parking provision permitted on-site. As such no permit is required with respect to car parking provision.

It is noted that all car spaces are proposed to be allocated to residents of the development with no parking provided for any staff of the retail and office tenancies or visitors of the development.

5.5.2 Vehicle Access and Car Parking Layout

The changes to basement access via a conventional ramp and via Batman Street is a key feature of the amended development. Loading and waste management access will continue to be provided via Middleton Place. The separation of the different types of access is an improved traffic engineering outcome. It offers enhanced safety and operational benefits with no adverse impacts on the local street network. It is noted that the additional traffic generation on Batman Street is expected to be a total of 9 vehicles during the AM and PM peak hour periods, which is considered to be very low.

A detailed analysis has been completed against the relevant design standards of Clause 52.06. All applicable standards are met. Additionally, swept path analysis has been completed and it confirms that the vehicle access arrangements, car parking layout and loading/waste arrangements have been designed appropriately and in accordance with requirements of the Planning Scheme and/or AS2890.1:2004.

5.5.3 Bicycle Parking

The amended proposal has a total statutory bicycle parking requirement of 60 spaces, comprising 38 residents spaces, 2 staff spaces and 20 visitor spaces. A total of 126 spaces will be provided on ground floor. This includes:

- Dedicated lockable bicycle parking room:
    - 102x horizontal bicycle spaces for residents;
    - 2x horizontal bicycle spaces for staff.
- External to the lockable bicycle parking room:
    - 9x horizontal bicycle spaces provided for visitors.
    - 1x horizontal bicycle space provide for staff.
- Along Middleton Place setback:
    - 12x horizontal bicycle spaces provided for visitors.

The proposed bicycle parking generously exceeds the requirements of the Planning Scheme and is consistent with the currently approved development.

5.5.4 Loading and Waste Arrangements

A loading bay of 8.4m by 6.08m, with a clearance of 3.5m is provided at the rear of the Site, accessible via Middleton Place. This will be sufficient to cater for vehicles up to a Small Rigid Vehicle, which is the largest type of vehicle expected to access the Site.

Waste will be privately collected using a mini rear loader waste truck, in accordance with the currently endorsed Waste Management Plan. An updated Waste Management Plan has been prepared by *Leigh Design Pty Ltd* and forms part of this request.

Use of the loading bay will be managed via a booking system to coordinate loading and waste collection activities. This will ensure that there are no vehicle conflicts along Middleton Place with the doubling up of loading vehicles.

5.6 Other Matters

5.6.1 Environmentally Sustainable Design

A Sustainability Management Plan (SMP) has been prepared by *ADP Consulting: Engineering Pty Ltd*, and it forms part of this request.

The Sustainability Management Plan details that the amendments still produce a 5-star Green Star result. Further, the revised development will achieve an average 7 stars NatHERS rating as per the requirements outlined by the Building Code of Australia. Overall, the core total Green Star score is 69.3, which is higher than the current score of 60.

Rooftop solar array is introduced, providing an renewable source of energy to the development.

High performance glazing will ensure a reduction in thermal loads, which will be assisted by appropriate ratios of glazing fenestration to façade areas on the exterior of the building.

Sustainable transport modes such as walking and cycling will be promoted through the appropriate provision of bicycle spaces, while car use is discouraged through the applicable PO14 reduced parking requirements. The site's proximity to services and amenities will assist building users in choosing active transport modes and it is noted that the amended design still scores well on 'Walk Score,' achieving a rating of 92 – 'Walker's Paradise.'

The development incorporates more rainwater storage for re-use within the development for toilet flushing and also irrigation of various landscaped areas, this will reduce the reliance on mains water.

5.6.2 Wind Assessment

Vicpac Engineers and Scientists Ltd has undertaken a wind tunnel assessment to determine the likely pedestrian level wind conditions for the proposed amendment.

It found that the design has not changed in a way that would significantly or adversely affect the adjacent wind environment.

A copy of its advice forms part of this request.

5.6.3 Acoustic Assessment

In response to Condition 17 of the Planning Permit, an Acoustic Town Planning Report has been prepared by *Acoustic Logic Pty Ltd*.

To achieve the required acoustic outcomes, it recommends specific glazing weights with acoustic seals. Any lightweight wall elements will be designed to ensure compliance with the nominated criteria. These have been adopted in the façade design.

5.6.4 Tree Protection

A Tree Protection Plan has been updated by *Tree Department Pty Ltd* in response to Condition 27 of the Planning Permit in response to the amended development. A copy forms part of this request.

Of most relevance is the potential impact on Tree 1 as a result of the revised crossover location. It was identified that the works will encroach into the Tree Protection Zone by 6.5%, with some kerbing works occurring withing the structural root zone. Arborist supervision is required to supervise the removal and reinstatement of kerb to ensure structural roots are not damaged by works.

It is also noted that under the Construction and Demolition Management Plan, a significant bond has been paid for the protection of all adjoining street trees, including Tree 1.

6 Conclusion

The amended proposal continues to respond to the Site's built form and planning context. It will result in an improved amenity for future occupants with additional shared spaces whilst continuing to positively respond to the heritage context and significance of the Site.

The amendment will not result in any unreasonable impacts on the amenity of adjoining properties, or the public realm as has been established by the previous application.

This report and the accompanying technical assessments have identified the key considerations relevant to considering and approving the amendment application and have addressed the requirements of the Planning Scheme. On this basis, the amended proposal is worthy of support.

Appendix A
Amended Permit (with tracked changes)

AMENDED PLANNING PERMIT

CITY OF MELBOURNE

GPO Box 1603
Melbourne VIC 3001
Phone 61 3 9658 9658
Email planning@melbourne.vic.gov.au
www.melbourne.vic.gov.au

PERMIT NO.	**TP-2016-722/A**
PLANNING SCHEME	Melbourne Planning Scheme
RESPONSIBLE AUTHORITY	Melbourne City Council
ADDRESS OF THE LAND	405-421 Spencer Street, WEST MELBOURNE VIC 3003
THE PERMIT ALLOWS	• Use of land for a food and drink premises, shop, ~~and for offices~~, in the ~~Mixed~~ Special Use Zone Schedule 6; • ~~To construct two or more dwellings on a lot in the Mixed Use Zone;~~ • To construct a building in the Special Use Zone Schedule 6; • Demolition, alterations and additions to a building in Heritage Overlay 779; • To construct a building and carry out works for noise sensitive uses in Design and Development Overlay Schedule 12; • To construct a building and carry out works in Design and Development Overlay Schedule 33; • ~~To reduce the required number of car parking spaces; and~~ • To alter an existing access to a road in a Road Zone Category 1 in accordance with the endorsed plans.

THE FOLLOWING CONDITIONS APPLY TO THIS PERMIT:

Amended plans

1 Deleted.

2 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, a Facade Strategy must be submitted to and be to the satisfaction of the Responsible Authority. When approved this will form part of the endorsed plans. All materials, finishes and colours must be in conformity with the approved Façade Strategy to the satisfaction of the Responsible Authority. The Facade Strategy for the development must be generally in accordance with architectural plans prepared by Plus Architecture, ~~Drawing No's TP090, TP091, TP097 to TP122,TP200 to TP203, TP210 to TP214~~ plot dated ~~3 September 2021~~7 October 2024 and detail:

a A concise description by the architect of the building design concept and how the façade works to achieve this;

b Elevation details generally at a scale of 1:50 illustrating typical podium details, entries and doors, and utilities, typical tower detail, and any special features which are important to the building's presentation;

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 

c Elevation details of the relationship between the heritage façade and contemporary elements within the podium, including depth, materials and finishes;

d Cross sections or other method of demonstrating the façade systems, including fixing details indicating junctions between materials and significant changes in form and/or material;

e Information about how the façade will be accessed and maintained and cleaned, including planting where proposed; and

f Example prototypes and/or precedents that demonstrate the intended design outcome as indicated on plans and perspective images, to produce a high quality built, durable outcome in accordance with the design concept.

3 A schedule and samples of all external materials, colours and finishes must be submitted to the satisfaction of the Responsible Authority prior to the commencement of the development, excluding demolition. The schedule must show the materials, colours and finishes of all external walls, roof, fascias, window frames, glazing types, doors, balustrades, fences and paving, (including car park surfacing), outbuildings and structures. When approved, the schedule will be endorsed and will then form part of the permit. All finishes and surfaces of all external buildings and works, including materials and colours, must be in conformity with the approved schedule to the satisfaction of the Responsible Authority.

VicRoads conditions

~~4~~ Delete (all requirements have been satisfied) ~~Before the development starts, amended plans must be submitted to and approved by the Responsible Authority and the Roads Corporation. When approved by the Responsible Authority and the Roads Corporation, the plans may be endorsed by the Responsible Authority and will then form part of the permit. The plans must be drawn to scale with dimensions and two copies must be provided. The plans must be generally in accordance with Drawing Numbers TP097 to TP213, dated 24 August 2016 but modified to show:~~

~~a A canopy clearance height of at least 5m along Middleton Place;~~

~~b The installation of left in only sign at entrance to right of way facing west bound traffic on Dudley Street;~~

~~c The installation of a No Right Turn sign facing east bound traffic on Dudley Street at entrance to right of way;~~

~~d The installation of a No Left Turn sign within the site (car park) boundary prohibiting left turn vehicular movements onto the right of way;~~

~~e A southbound arrow to be painted on the surface of the right of way between Dudley Street at 437 Spencer Street rear property access;~~

~~f No entry signs facing north bound traffic on the laneway to Dudley Street at the southern boundary of 437 Spencer Street property;~~

~~g The installation of two way signage for the remainder of the right of way including Middleton Lane;~~

~~h~~4 ~~To provide continuous median line marking on Dudley Street for an approximate distance of 10 metres in vicinity of the laneway;~~

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

~~i Physical island on central median along Spencer Street to be extended approximately 10 metres north in vicinity of Middleton Lane towards Dudley Street;~~

~~j Installation of appropriate signage within the central median on Spencer Street facing Middleton Lane directing left turn movements onto Spencer Street; and~~

~~k Installation of left turn sign at Middleton Lane where it meets Spencer Street facing traffic exiting Middleton Lane.~~

5 A loading management plan to be provided to the satisfaction of the Responsible Authority to ensure on site waste collection does not obstruct or interfere with vehicular access to the basement and the operation of Dudley Street and Spencer Street.

6 The widening of Middleton Place where it intersects with Spencer Street is to be constructed to the satisfaction of the Roads Corporation and or the Responsible Authority at no cost to the Roads Corporation prior to the commencement of the use hereby approved.

Layout Not Altered and Satisfactory Completion

7 The development as shown on the endorsed plans must not be altered or modified without the prior written consent of the Responsible Authority.

8 Once the development has started it must be continued and completed to the satisfaction of the Responsible Authority.

Heritage Management Plan

9 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, a Heritage Management Plan prepared by a suitably qualified heritage consultant must be submitted to and approved by the Responsible Authority. The Heritage Management Plan must include:

a Details of the retained portions of the building(s) and how they are going to be supported during demolition, excavation and construction works;

b Details of the conservation of the retained portions of the building(s) including (but not limited to) repairs and restoration and stabilization works to the chimneys; the existence and retention of the first floor west facing delivery doorway (now a window over the former side laneway); reinstatement of missing or damaged cement render mouldings; retention and restoration of signage; retention and restoration of external plumbing and storm water drainage; window and door repairs and restoration; external paint colours; possible reinstatement of original shopfront windows, other windows and entrance doors (thereby providing a greater retail presence to the ground floor food and drink premises); and resolution of internal floor levels to accommodate the meaningful retention of existing door openings;

c Retention of the whole of the fabric of the ovens insitu;

d Reconstruction of the gable roof slopes to the original Bakehouse (that is, the Bakehouse that contains the ovens) to match the existing;

e Reconstruction of the southern Residence/shop hipped roof slopes to match the existing; and

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

f Preparation of an interpretive display and/or an interpretive strategy possibly using alternatives to physical display.

When approved, the Heritage Management Plan will be endorsed and form part of the permit. Works to the heritage building that are approved under this permit must be undertaken in accordance with the Heritage Management Plan to the satisfaction of the Council.

Demolition

10 Prior to the commencement of the development, including demolition, a report prepared by a suitably qualified Structural Engineer, or equivalent, must be submitted to the Responsible Authority, demonstrating the means by which the retained portions of building will be supported during demolition and construction works to ensure their retention, to the satisfaction of the Responsible Authority. The recommendations contained within this report must be implemented at no cost to City of Melbourne and be to the satisfaction of the Responsible Authority.

11 Demolition pursuant to this permit must not commence unless the Responsible Authority is satisfied that the permit holder has made substantial progress toward obtaining the necessary building permits for the development of the land generally in accordance with the development proposed under this permit and the permit holder has entered into a bona fide contract for the construction of the development, or otherwise agreed with the Responsible Authority.

Retention of Architectural Firm

12 Except with the consent of the Responsible Authority, Plus Architecture must be retained to complete and provide architectural oversight during construction of the detailed design as shown in the endorsed plans, façade strategy and the endorsed schedule of materials and finishes to the satisfaction of Responsible Authority.

Building Appurtenance

13 Glazing materials used on all external walls must be of a type that does not reflect more than 15% of visible light, when measured at an angle of 90 degrees to the glass surface, to the satisfaction of the Responsible Authority.

14 All building plant and equipment on the roofs are to be concealed or screened to the satisfaction of the Responsible Authority. The construction of any additional plant machinery equipment, including but not limited to air-conditioning equipment, ducts, flues, all exhausts including car parking and communications equipment, shall be to the satisfaction of the Responsible Authority.

15 Any satellite dishes, antennae or similar structures associated with the development must be designed and located at a single point in the development to the satisfaction of the Responsible Authority, unless otherwise approved to the satisfaction of the Responsible Authority.

16 All service pipes, apart from roof down pipes, must be concealed from the view of a person at ground level within common areas, public thoroughfares and adjoining properties, unless these form part of the Heritage Management Plan.

Noise Attenuation

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

17 Prior to the commencement of the development, excluding demolition and bulk excavation, a report from a qualified acoustic engineer must be submitted to the satisfaction of the Responsible Authority certifying that:

a the development will achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium; and

b the external glazing and doors and the air conditioning or ventilation is designed to achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium.

Construction Management Plan

18 Prior to the commencement of the development, including demolition or bulk excavation, a detailed Construction and Demolition Management Plan must be submitted to and be approved by the Responsible Authority. This construction management plan is to be prepared in accordance with the City of Melbourne - Construction Management Plan Guidelines and is to consider the following:

a Public safety, amenity and site security;

b Operating hours, noise and vibration controls;

c Air and dust management;

d Stormwater and sediment control;

e Waste and materials reuse; and

f Traffic management.

Waste Management

19 The waste storage and collection arrangements must be in accordance with the Waste Management Plan (WMP) prepared by Leigh Design dated 31 January 2021.

The submitted WMP must not be altered without prior consent of the City of Melbourne – Waste and Recycling.

Environmentally Sustainable Design Statement Implementation

20 Concurrent with the submission of plans for endorsement under condition 1, an Environmentally Sustainable Design (ESD) Statement shall be prepared by a suitably qualified professional and submitted to the satisfaction of the Responsible Authority. The ESD Statement must demonstrate that the building has the preliminary design potential to achieve the relevant policy objectives of Clause 22.19-2 and the policy requirements of Clause 22.19-3 of the Melbourne Planning Scheme.

21 The performance outcomes specified in the Environmentally Sustainable Design (ESD) Statement required by condition 20 must be implemented prior to occupancy at no cost to the City of Melbourne and be to the satisfaction of the Responsible Authority. Any change during detailed design, which affects the approach of the endorsed ESD Statement, must be assessed by an accredited professional. The revised statement must be endorsed by the Responsible Authority prior to the commencement of construction.

Wind Test Modelling

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

22 ~~Concurrent with the submission of plans for endorsement under Condition 1,~~ Ww~~w~~ind tests carried out by a suitably qualified consultant, must be carried out on a model of the approved building. A report detailing the outcome of the testing must be submitted to and be to the satisfaction of the Responsible Authority. The report must also recommend any modifications which must be made to the design of the building to reduce any adverse wind conditions in areas used by pedestrians, to the satisfaction of the Responsible Authority. The recommendations of the report must be implemented at no cost to the Responsible Authority and must not include reliance on street trees.

Potentially Contaminated Land

23 Prior to the commencement of the development (excluding any works necessary to undertake the assessment), a Preliminary Risk Screen Assessment (PRSA) of the site must be conducted by a suitably qualified environmental auditor. The PRSA statement and report must be submitted to the Responsible Authority in accordance with section 205 of the Environment Protection Act 2017 and respond to the matters contained in Part 8.3, Division 2 of the Environment Protection Act 2017 to the satisfaction of the Responsible Authority.

24 If the PRSA requires an Environmental Audit be undertaken, then prior to the commencement of the development (excluding any works necessary to undertake the audit), an Environmental Audit of the site must be carried out by a suitably qualified environmental auditor. On completion of the Environmental Audit, an Environmental Audit Statement (EAS) and report must be submitted to the Responsible Authority in accordance with section 210 of the Environment Protection Act 2017 responding to the matters contained in Part 8.3, Division 3 of the Environment Protection Act 2017 to the satisfaction of the Responsible Authority. The EAS must either:

- state the site is suitable for the use and development allowed by this permit; or
- state the site is suitable for the use and development allowed by this permit if the recommendations contained within the EAS are complied with.

25 All the recommendations of the Environmental Audit Statement (EAS) must be complied with to the satisfaction of the Responsible Authority for the full duration of any buildings and works remaining on the land in accordance with the development hereby approved, and must be fully satisfied prior to the occupation of the development. Written confirmation of compliance must be provided by a suitably qualified environmental auditor in accordance with any requirements in the EAS.

26 If any of the conditions of the EAS require ongoing maintenance or monitoring, prior to the commencement of the use and prior to the issue of a statement of compliance under the Subdivision Act 1988 the owner of the land must enter into an agreement with the Responsible Authority under section 173 of the Planning and Environment Act 1987 to the satisfaction of the Responsible Authority to the effect that all conditions of the EAS issued in respect of the land will be complied with.

Tree Protection

27 Prior to the commencement of the development including any demolition, bulk excavation, construction or carrying out of works, a Tree Protection Plan must be prepared by a suitably qualified and experienced Arborist generally in accordance with AS 4970-2009. The Tree Protection Plan must include recommendations to ensure the viability of the Council or Exceptional trees adjacent to the site before, during and after construction to the satisfaction of the Responsible Authority – Urban Landscapes. This report must be to the satisfaction of the Responsible Authority and when approved will form part of the permit.

Municipal Requirements

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

28 Prior to the commencement of the development (excluding demolition and excavation), a stormwater drainage system incorporating integrated water management design principles must be submitted to, and approved, by the Responsible Authority - Engineering Services. This system must be constructed prior to the occupation of the development and provision made to connect this system to the City of Melbourne's stormwater drainage system.

29 All projections over the street alignment should be drained to a legal point of discharge in accordance with the plans and specifications first approved by Responsible Authority - Engineering Services.

30 The title boundaries for the property may not exactly agree with the road alignments of the abutting Council lane(s). The approved works must not result in structures that encroach onto any Council lane.

31 All pedestrian paths and access lanes shown on the endorsed plans must be constructed and maintained to the satisfaction of the Responsible Authority - Engineering Services.

32 Prior to the commencement of the use/occupation of the development, all necessary vehicle crossings must be constructed and all unnecessary vehicle crossings must be demolished and the footpath, kerb and channel reconstructed, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

33 The road adjoining the site along Middleton Place must be reconstructed together with associated works including provision of new public lighting, reconstruction or relocation of services as necessary at the cost of the developer, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

34 The footpath(s) adjoining the site along Spencer Street and Batman Street must be reconstructed together with associated works including the reconstruction or relocation of kerb and channel and/or services as necessary at the cost of the developer, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

35 Existing street levels in Spencer Street, Batman Street & Middleton Place must not be altered for the purpose of constructing new vehicle crossings or pedestrian entrances without first obtaining approval from the Responsible Authority – Engineering Services

36 Existing public street lighting must not be altered without first obtaining the written approval of the Responsible Authority – Engineering Services.

37 Existing street furniture must not be removed or relocated without first obtaining the written approval of the Responsible Authority – Engineering Services.

38 All pedestrian ramps must be designed and constructed in accordance with AS 1428:2009 Design for Access and Mobility and should be fitted with ground surface tactile indicators (TGSI's). Details of the TGSI's must be submitted to and approved by City of Melbourne – Engineering Services prior to their installation.

39 All street furniture such as street litter bins recycling bins, seats, bicycle rails and bus shelter must be supplied and installed on footpaths outside the proposed building to plans and specifications first approved by the Responsible Authority – Engineering Services.

Public Transport Victoria conditions

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

40 The permit holder must take all reasonable steps to ensure that disruption to the bus operations along Spencer Street are kept to a minimum during the construction of the development. Foreseen disruptions to bus operations and mitigation measures must be communicated to Public Transport Victoria fourteen days (14) prior.

41 The existing bus stop and associated infrastructure on Spencer Street must not be altered without the prior consent of Public Transport Victoria. Any alterations including temporary works or damage during construction must be rectified to the satisfaction of Public Transport Victoria and at the cost of the permit holder

42 If a temporary bus stop in an alternative location is required during construction, the temporary bus stop must be provided in consultation with, and to the satisfaction of Public Transport Victoria. Once the new stop is deemed suitable for operation, the temporary stop must be removed in consultation with Public Transport Victoria. All works associated with the temporary bus stop must be provided at no cost to Public Transport Victoria.

43 Public Transport Victoria requires notice of the relocation of the existing bus stop and all associated infrastructure two weeks prior to relocation.

Expiry

44 This permit will expire if one of the following circumstances applies:

a The development is not started within seven years of the issued date of this permit.

b The development is not completed within ten years of the issued date of this permit.

In accordance with Section 69 of the *Planning and Environment Act* 1987, an application may be submitted to the Responsible Authority for an extension of the periods referred to in this condition.

- End of conditions –

THIS PERMIT HAS BEEN AMENDED AS FOLLOWS:

Date of Amendment: 19 October 2021

Details of Amendment:

Permit preamble
Amended to include the use of land for a shop.

Permit conditions
Condition 1 deleted, which required the following:

1 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, the applicant must submit to the Responsible Authority three copies of plans drawn to scale generally in accordance with the plans TP090, TP091, TP097 to TP122, TP200 to TP203, TP210 to TP214 plot dated 28 September 2016 and prepared by Plus Architecture but amended to show:

a Deletion of levels 13 and 14 from the building and any consequential changes;

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

b Clear retention of all chimneys, including on Drawing No. TP091 Rev 1 and Drawing No. TP200;

c Redesign of the two outward opening doors projecting into Batman Street such that they do not project beyond the street alignment when open, when closed or when being opened or closed;

d Any changes required by the Heritage Management Plan required by condition 9, including:

- Retention of the whole of the fabric of the ovens insitu, including the consequent deletion of two car parking spaces on each basement level;
- Reconstruction of the gable roof slopes to the original Bakehouse (that is, the Bakehouse that contains the ovens), and a new north gable end to match the existing;
- Reconstruction of the Residence/shop hipped roof slopes to match the existing;
- Reconstruction of return walls to a length of approximately 2.2 metres at the original courtyard entry;
- Construction of a solid wall immediately below the western end of the southern Residence/shop hipped roof slopes; and
- Works to the bridge over the entry to the original courtyard to ensure that the façade reads as having built form behind it.

e Detailed design resolution including plans, elevations and sections at a scale of 1:100 with detailed façade segments at 1:50 scale that show:

- The ground floor treatment for Batman Street, Spencer Street and Middleton Place; and
- The glazed wind canopy structure over the pedestrian entry to the dwellings.

f Relocation of structural columns to avoid any columns in the space occupied by the ovens;

g Inclusion of windows of the residents' lounge in site plans TP101 and TP102;

h Inclusion of a retractable security gate at the pedestrian entry to the dwellings in accordance with the Sketch Plans Ground Floor Plan (Gate Study) and TP201 South Elevation (Gate Study) dated 31 March 2017;

i Lowering the height of the parapet containing the ballast roof at ground floor level on the northern elevation adjacent to the private lane from 23.6AHD to 20.7AHD in accordance with the Sketch Plans Level 01 Plan (Dropped Roof) and Section B (Dropped Roof) dated 2 May 2017;

j Any changes as required by the Waste Management Plan required by condition 19;

k Any changes as required by the Environmentally Sustainable Design Statement required by condition 20;

l Any changes as required by the wind tunnel modelling report required by condition 22; and

m Provision of a landscape plan for planting proposed on levels 2, 3 and 4 common area and terraces with details of planting to be provided to the satisfaction of the Responsible Authority.

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

These amended plans must be to the satisfaction of the Responsible Authority and when approved shall be the endorsed plans of this permit.

Existing Condition 2 updated to reflect plot date of amended plans;

Existing Waste Management Condition 19 deleted and replaced with updated condition to reflect amended Waste Management Plan;

Existing Environmental Assessment Condition 23 deleted and replaced with updated condition to reflect changes in requirements for Potentially Contaminated Land; and

Existing Expiry Condition 44 amended to reflect extension of time.

Date Issued: 29 June 2017	**Signature of the Responsible Authority** 
Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.	

Client
Yarra Banks Developments Pty Ltd
ATF The Paul Lofitis Unit Trust No.2

Date
2 September 2024

Transport Engineering

Mixed-Use Development

405-421 Spencer Street, West Melbourne

Planning
Transport
Urban Design
Waste

ratio:

ratio.com.au

Project
405-421 Spencer Street, West Melbourne

Prepared for
Yarra Banks Developments Pty Ltd ATF The Paul Lofitis Unit Trust No.2

Our reference
21570T

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Version	Date	Issue	Prepared by	Checked by
D01	09/08/2024	Draft Issue	C. Deng S. Dangol	B. Young
F01	04/09/2024	Final Issue	C. Deng S. Dangol	B. Young

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Acknowledgement of Country

We acknowledge the Traditional Owners of the land we work, live and travel on, and appreciate the rich cultures of the Aboriginal and Torres Strait Islander Peoples and their enduring connection to country.

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1. Introduction

1.1. Approved Development

The land at 405-421 Spencer Street in West Melbourne has previously been approved (Permit No. TP-2016-722/A) for the construction of a mixed-use development comprising the following:

A total of 198 residential apartments, including:

— 157 x one-bedroom apartments; and

— 41 x two-bedroom apartments.

Other commercial/retail land uses totalling 982sqm consisting of the following:

— 545sqm of retail use, located on the ground floor;

— 437sqm of office use, located on the first floor;

— A total of 69 car parking spaces were proposed to be provided on ground floor and within two levels of basement car parking accessed via a car lift;

— A total of 126 bicycle spaces are proposed, located within secure bicycle rooms on the ground floor and within the basement.

— Vehicle access was proposed to be to/from Middleton Place with a building setback allowing for two-way vehicle movements and a proposed widened crossover along Spencer Street to accommodating for left-in left-out movements;

Given that the site proposed to use Middleton Place (rear ROW) as the primary access point to the site, as part of Permit No. TP-2016-722/A, Part 4 of the conditions outlined the VicRoads conditions as reproduced below:

" VicRoads conditions

4. Before the development starts, amended plans must be submitted to and approved by the Responsible Authority and the Roads Corporation. When approved by the Responsible Authority and the Roads Corporation, the plans may be endorsed by the Responsible Authority and will then form part of the permit. The plans must be drawn to scale with dimensions and two copies must be provided. The plans must be generally in accordance with Drawing Numbers TP097 to TP213, dated 24 August 2016 but modified to show:

a) A canopy clearance height of at least 5m along Middleton Place;

b) The installation of left in only sign at entrance to right of way facing west bound traffic on Dudley Street;

c) The installation of a No Right Turn sign facing east bound traffic on Dudley Street at entrance to right of way;

d) The installation of a No Left Turn sign within the site (car park) boundary prohibiting left turn vehicular movements onto the right of way;

e) A southbound arrow to be painted on the surface of the right of way between Dudley Street at 437 Spencer Street rear property access;

f) No entry signs facing north bound traffic on the laneway to Dudley Street at the southern boundary of 437 Spencer Street property;

g) The installation of two way signage for the remainder of the right of way including Middleton Lane;

h) To provide continuous median line marking on Dudley Street for an approximate distance of 10 metres in vicinity of the laneway;

i) Physical island on central median along Spencer Street to be extended approximately 10 metres north in vicinity of Middleton Lane towards Dudley Street;

j) Installation of appropriate signage within the central median on Spencer Street facing Middleton Lane directing left turn movements onto Spencer Street; and

k) Installation of left turn sign at Middleton Lane where it meets Spencer Street facing traffic exiting Middleton Lane.

5. A loading management plan to be provided to the satisfaction of the Responsible Authority to ensure on site waste collection does not obstruct or interfere with vehicular access to the basement and the operation of Dudley Street and Spencer Street.

6. The widening of Middleton Place where it intersects with Spencer Street is to be constructed to the satisfaction of the Roads Corporation and or the Responsible Authority at no cost to the Roads Corporation prior to the commencement of the use hereby approved."

— Loading was proposed to be undertaken via loading bay provided on ground level accessed from Middleton Place by vans and smaller vehicles. Larger vehicles would need to use the on-street Loading Zones surrounding the site.

— Waste was proposed to be collected via a mini-rear loader accessing the loading bay via Middleton Place from Spencer Street.

1.2. Proposal

Ratio Consultants was commissioned by Yarra Banks Developments Pty Ltd ATF The Paul Lofitis Unit Trust No.2 to assess the traffic and parking implications of the proposed mixed-use development at 405-421 Spencer Street in West Melbourne.

It is proposed to construct a 20-storey mixed-used building, predominately residential apartments (Built To Rent – BTR) with ground and first floor retail and office tenancies on the land at 405-407 Spencer Street in West Melbourne. More specifically, the development will include the following:

Development Summary

— A total of 190 apartments over Levels 1 to 19 consisting of:

- 44 x studio apartments;
- 55 x one-bedroom apartments;
- 76 x two-bedroom apartments;
- 14 x three-bedroom apartments; and
- 1 x four-bedroom apartment.

— Several retail tenancies on ground floor with a total of 581sqm;

— Office tenancy on first floor with a total of 433sqm;

— A total of 44 car parking spaces over two basement car parking levels consisting of:

- 19 at-grade parking spaces on Basement Level 1; and
- 25 at-grade parking spaces on Basement Level 2.

— A total of 126 bicycle parking spaces consisting of the following:

- 52 two-tier horizontal bicycle rails providing 104 spaces within a secure bicycle parking room on ground floor for staff and residents;
- 5 two-tier horizontal bicycle rails providing 10 spaces external to the bicycle parking room on ground floor for staff and visitors; and
- 6 horizontal bicycle rails providing 12 spaces along Middleton Place for visitors;

Loading and Waste

A loading bay is provided at the rear of the site accessed from Middleton Place which will cater for all the loading and waste collection activities associated with the proposal up to the size of a 6.4-metre Small Rigid Vehicle (SRV) for loading and by a 6.4-metre mini-rear loader waste collection vehicle for waste. All nominated vehicles will be able to access the loading bay via Middleton Place from Spencer Street and depart back onto Spencer Street in a forward direction.

Vehicle Access Arrangements

Vehicular access arrangements are as follows:

— Batman Street will provide access to the basement car park.

— Middleton Place will provide access to the on-site loading area.

A new double-width crossover is proposed along Batman Street to cater for vehicle access to/from the basement parking. The design of the vehicle crossover is in accordance with Melbourne City Council's Engineering Standard drawings (1P 50107) for a concrete crossing bluestone with kerb radials and straights. The redundant crossover and footpath along Batman Street are to be reinstated with the relocation of the existing signage and car space fronting the reinstated crossover and footpath to accommodate the proposed access arrangements.

Bicycle Access

— Middleton Place will provide access to the bicycle parking located at the rear of the site adjacent to the loading bay.

— Residents/staff will have access to the secure bicycle room via an access card or key fob.

— Visitors will have access to the bicycle spaces located outside of the secure bicycle room as well as the bicycle spaces along Middleton Place.

Pedestrian Access

— Access to the retail tenancies on the ground level will be via their respective entrances.

— Access to the office tenancy on Level 1 will be via the staircase or single lift directly accessed from the communal lobby on the ground floor.

— Access to residential areas will be via the communal lobby on the ground floor and the lift and staircase located at the centre of the building.

Table 1.1 compares the development schedule of the approved development (Permit No. TP-2016-722/A) and the proposed development.

Table 1.1: Development Schedule of Approved Development & Proposed Development

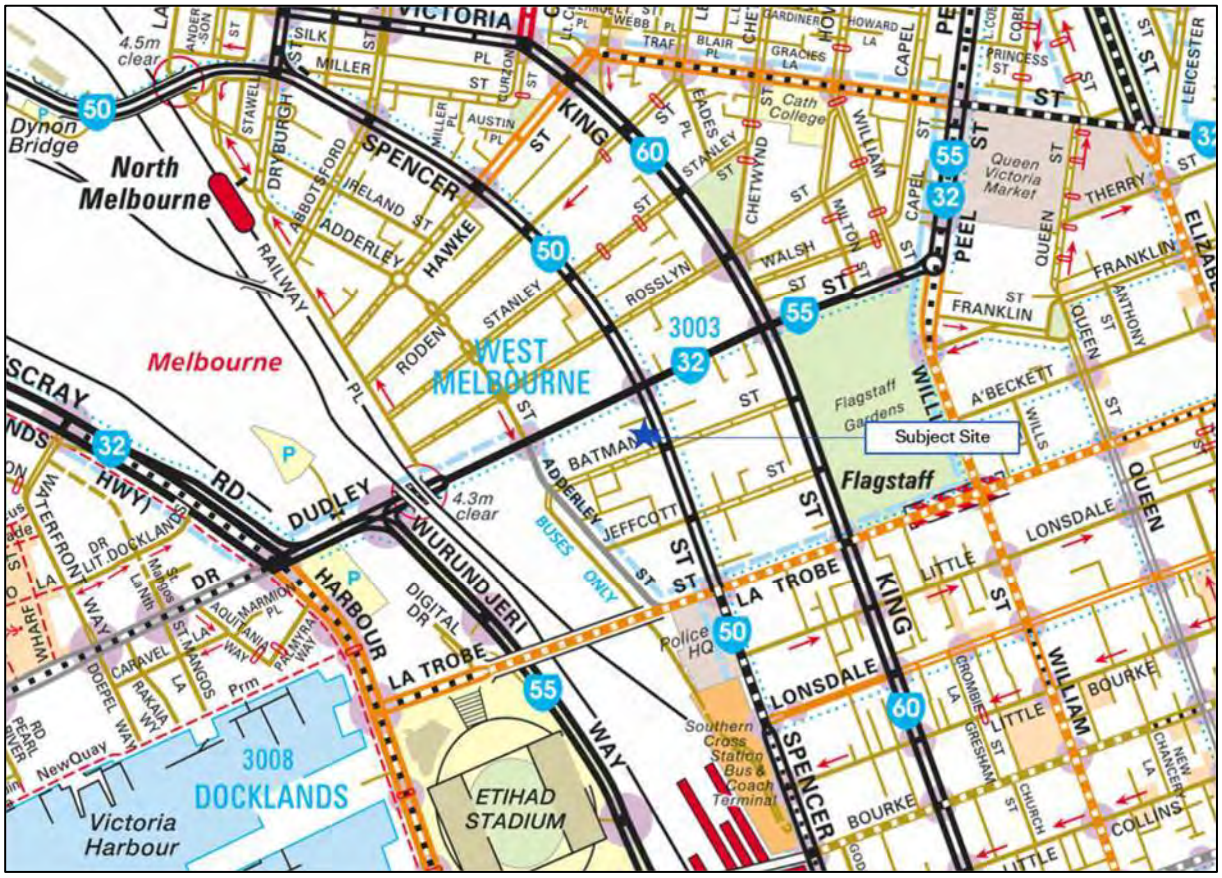
	Approved Development (Permit No. TP-2016-722/A)	Proposed Development	Net Change
Retail	545sqm	581 sqm	+26sqm
Office	437sqm	433sqm	-4sqm
Apartments	198 apartments	190 apartments	-8 apartments
Car Spaces	69 car spaces	44 car spaces	-25 car spaces
Bicycles Spaces	126 bicycle spaces	126 bicycle spaces	-
Vehicle Access	From Middleton Place	From Batman Street	Vehicle access proposed along Batman Street instead of from Middleton Place
Loading and Waste	Loading Bay accessed via Middleton Place for 6.4-mini rear loader waste truck and loading vehicles up to size of SRV. Loading Zone areas surrounding the site accessed for trucks larger than an SRV.	Loading Bay accessed via Middleton Place for 6.4-mini rear loader waste truck and loading vehicles up to size of SRV. Loading Zone areas surrounding the site accessed for trucks larger than an SRV.	-

2. Existing Conditions

2.1. Site and Surrounds

The subject site is located on the north-western corner of the Spencer Street / Batman Street intersection in West Melbourne. Figure 2.1 illustrates the location of the site relative to the surrounding road network.

Figure 2.1: Location of the Subject Site



Source: www.online.melway.com.au/melway

The site is irregular in shape with a frontage to Spencer Street of 38.34 metres, a frontage to Batman Street of 40.30 metres, and an overall site area of approximately 1,683 square metres.

The site was historically occupied by three commercial tenancies, as follows:

— The tenancy located at 405-407 Spencer Street was previously occupied by Dalston Bakery but is currently unoccupied. Vehicular access is provided via a single-width crossover connecting to/from Batman Street.

— The tenancy located at 409 Spencer Street was occupied by Spencer Street Automobiles but is currently closed with vehicular access provided via a single-width crossover connecting to/from Batman Street.

— The tenancy located at 419-421 Spencer Street was previously occupied by GT Road Cuisine but is currently unoccupied. Vehicle access is provided via Middleton Place located along the northern boundary of the site.

A 16-storey mixed used development was constructed in 2016 at 423-435 Spencer Street, West Melbourne, located on the northern side of Middleton Place (adjacent to the subject site). Vehicular access to the development is provided via the 3.0-metre-wide laneway located along the western boundary of the development site, running south from Dudley Street.

The site is located in a Special Use Zone – Schedule 6 (SUZ6) and is subject to the following Planning Scheme Overlays:

— Parking Overlay – Precinct 14 (PO14)

— Design and Development Overlay – Schedule 12 and 33 (DDO12 and DDO33)

— Environmental Audit Overlay

— Heritage Overlay (HO779)

The surrounding land uses being a mixture of special use, commercial, and mixed-use zones. The following key land uses are located within close proximity to the site:

— Australian Red Cross, located adjacent the subject site along Batman Street.

— Festival Hall, located approximately 400 metres west of the site;

— Flagstaff Gardens, located approximately 450 metres east of the site;

— Eades Place Park, located approximately 550 metres north of the site;

— Marvel Stadium, located approximately 700 metres south of the site;

— Queen Victoria Market, located approximately 800 metres north-east of the site; and

— Supreme Court of Victoria, located approximately 1.2km south-east of the site.

Figure 2.2 provides an aerial photograph of the site and its surrounds.

Figure 2.2: Aerial View of the Site and Surrounds



Source: www.nearmap.com

2.2. Road Network

Spencer Street

Spencer Street is a VicRoads managed Primary State Arterial Road that essentially runs in a north-south alignment between Dryburgh Street, in West Melbourne and its continuation as Clarendon Street, in Southbank. Within the vicinity of the site, Spencer Street accommodates two lanes of traffic in each direction, separated by a central median. There is a break in the central median to the north of Middleton Place, seemingly provided to facilitate access to the former uses on the east side of Spencer Street. Kerbside parallel parking is typically provided on both sides of the road and is subject to a range of short-term restrictions. There is also a bus stop located along Spencer Street and adjacent to the subject site. Spencer Street has a posted speed limit of 60km/hr.

A view of Spencer Street fronting the subject site is shown in Figure 2.3.

Figure 2.3: View of Spencer Street fronting the subject site



Source: Google Maps (dated November 2021)

Batman Street

Batman Street is a Local Road that essentially runs in an east-west alignment between Adderley Street and King Street. Batman Street accommodates one lane of traffic in each direction, separated by a row of 90-degree angled parking located in the centre of the road. A bicycle lane and parallel kerbside parking is also provided on both sides of the road. There is a break in the central parking aisle fronting the subject site which allows right turn movements to the existing crossover of 409 Spencer Street. Batman Street has a posted speed limit of 40km/hr.

The Spencer Street / Batman Street intersection is priority controlled with 'stop' signage and line markings provided for vehicles exiting Batman Street. A break in the Spencer Street central median allows for right turn access into and out of Batman Street.

A view of Batman Street fronting the subject site is shown in Figure 2.4.

Figure 2.4: View of Batman Street fronting the subject site



Source: Google Maps (dated November 2021)

Middleton Place

Middleton Place is a bluestone laneway that runs in an east-west and north-south alignment between Spencer Street and Dudley Street. Middleton Place has an initial carriageway width of approximately 3.2 metres (at its connection to Spencer Street), widening to 3.6 metres towards the western end and is 3 metres wide in its north-south alignment. Middleton Place accommodates two-way vehicle movements.

Middleton Place provides vehicle access to the nearby mixed-use development at 423-435 Spencer Street. A view of Middleton Place is shown in Figure 2.5.

Figure 2.5: View of Middleton Place



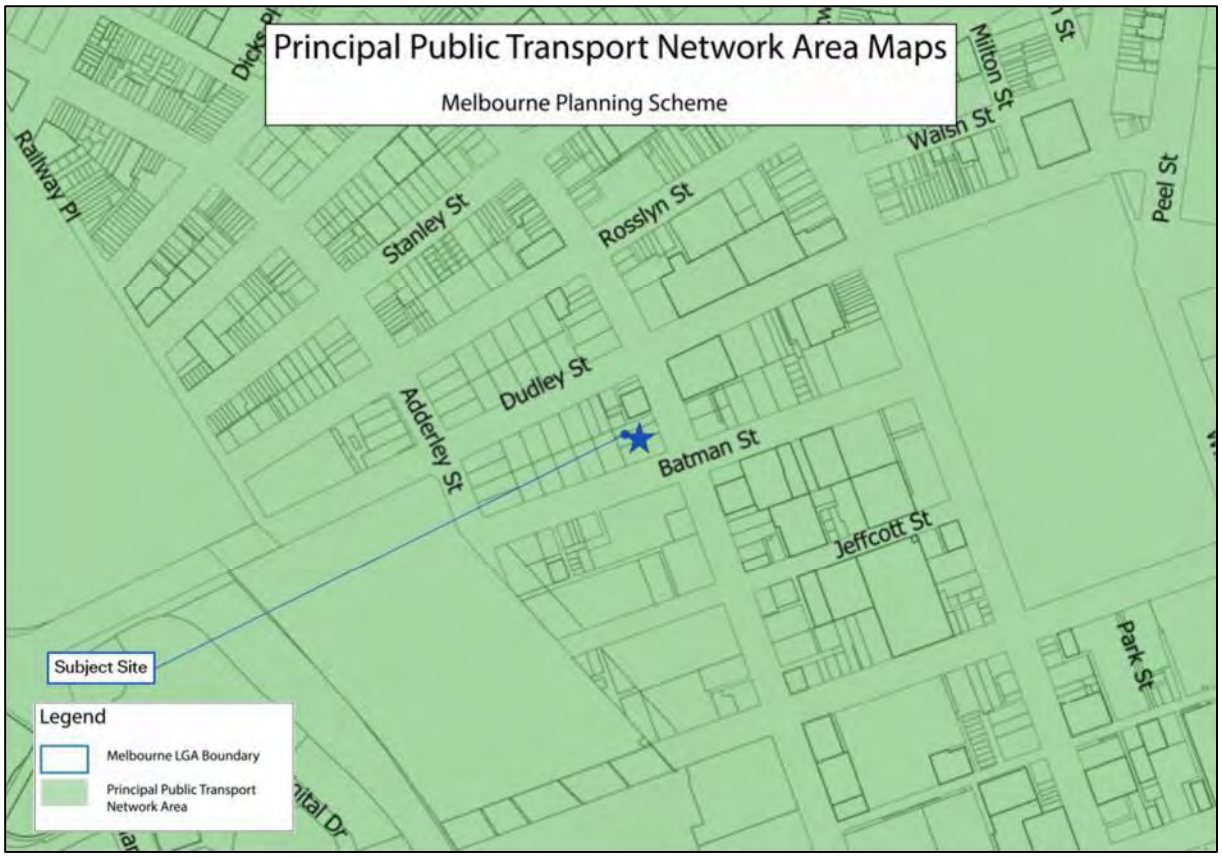
Source: Google Maps (dated November 2021)

2.3. Sustainable Transport

Public Transport

The subject site is located within the Principal Public Transport Network (PPTN) Area, as shown on the PPTN Maps of the State Government of Victoria (August 2018). The location of the subject site relative to the PPTN area is illustrated in Figure 2.4.

Figure 2.4: Subject Site with respect to the PPTN Area



Source: www.planning.vic.gov.au

The site has excellent access to the public transport network, with a number of train, tram, and bus services provided within the vicinity of the site. The following services are provided within close proximity:

Table 2.1: Public Transport Services - Train

Railway Station	Location	Walking time
Flagstaff Railway Station	750 metres east of the site	10 minutes
Southern Cross Railway Station	800 metres south of the site	11 minutes
North Melbourne Railway Station	1.1km north of the site	15 minutes

Table 2.2: Public Transport Services - Tram

Route Number	Route Description	Nearest Stop	Walking Distance
30	St Vincents Plaza to Central Pier Docklands	La Trobe Street/ Spencer Street	270 metres (4 minutes)
35	City Circle		
86	Bundoora RMIT to Waterfront City Docklands		

Table 2.3: Public Transport Services - Bus

Route Number	Route Description	Nearest Stop	Walking Distance
216	City (Queen Street) to Sunshine Station	Dudley Street/ Spencer Street	150 metres (2 minutes)
220	Gardenvale to Sunshine	Spencer Street/ Dudley Street	150 metres (2 minutes)

There are numerous other bus and tram services that operate within Melbourne CAD within the vicinity of the subject site. Melbourne Central Station which services a large proportion of the Melbourne metropolitan area is located approximately 1.3km east of the subject site.

Figure 2.5 shows the public transport services operating in close proximity to the subject site.

Figure 2.5: Public Transport Map



Source: www.ptv.vic.gov.au

2.3.1 Bicycle Network

The site also has excellent access to bicycle facilities, including:

— Off-road bicycle path adjacent to Harbour Esplanade.

— On-road bicycle lanes along Batman Street, Adderley Street and Dudley Street (west of Adderley Street).

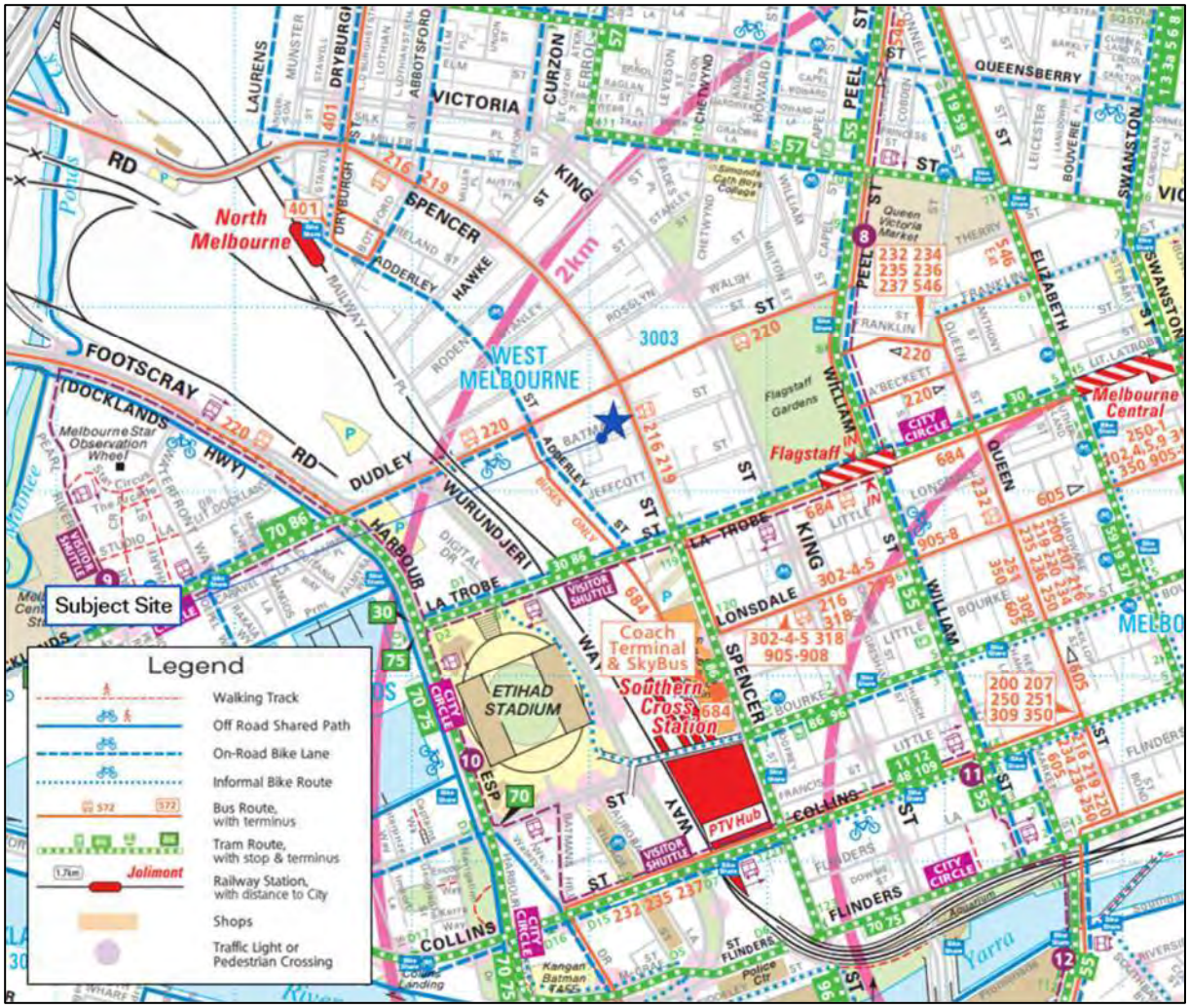
— Physically separated on-road bicycle lanes (Copenhagen Lanes) along La Trobe Street adjacent to the kerbside parking lanes, between Victoria Street and Adderley Street, providing a link across the city.

— Widened kerbside bicycle lanes along William Street which provides a north-south connection through the Melbourne CBD; and

— A range of formal and informal bicycle routes operating within the Melbourne CBD precinct.

Figure 2.6 shows the sustainable transport facilitates within close proximity to the subject site.

Figure 2.6: Sustainable Transport Facilitates



Source: www.melbourne.vic.gov.au

Car Share

There are also multiple car share pods operated by Flexicar, GoGet and Uber Carshare. These vehicles are particularly useful for apartments of the development that are not provided with any on-site car parking and can be used by residents to run daily errands if they require a private motor vehicle. The aforementioned car share operators have the following vehicles near the subject site:

— GoGet has 9 vehicles within a 500-metre walk from the subject site.

— Flexicar has 3 vehicles within a 500-metre walk from the subject site.

— Uber carshare has 8 vehicles within a 500-metre walk from the subject site.

3. Car Park Assessment

3.1. Statutory Car Parking Requirement

Car parking requirements for a range of developments are set out under Clause 52.06 of the Melbourne Planning Scheme. The purpose of the Clause, among other things, is:

- To ensure that car parking is provided in accordance with the State Planning Policy Framework and Local 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 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 number of car parking spaces required for the specified uses is listed under Table 1 of Clause 52.06-5. The car parking requirement specified for a use listed in table 1 does not apply if:

- A car parking requirement for the use is specified under another provision of the Planning Scheme: or
- A schedule to the Parking Overlay specifies the number of car parking spaces required for the use.

The site is subject to Schedule 14 to Clause 45.09 Parking Overlay which specifies the following:

> *"A permit is not required to reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-5 or in the Table to this schedule.*
>
> *A permit is required to provide car parking spaces in excess of the car parking ratios at clause 3.0 of this schedule."*

As such the maximum car parking rates under the table provided in Section 3 have been applied to inform the maximum car parking allowed for the proposal. The application of the relevant rates is detailed in Table 3.1 below:

Table 3.1: Clause 45.09 – Maximum Car Parking Rates

Land Use	Size	Maximum Parking Rate	Statutory Maximum
Dwellings	99 x 1-bedroom apartments/studio apartments	0.30 per one-bedroom dwelling	29 spaces
	76 x 2-bedroom apartments	0.45 per two-bedroom dwelling	34 spaces
	14 x 3-bedroom apartments 1 x 4-bedroom apartment	0.60 per three-bedroom dwelling	9 spaces
Retail	581sqm	0.50 per 100 sqm net floor area	2 spaces
Office	433sqm	0.50 per 100 sqm net floor area	2 spaces
Maximum Statutory Car Parking Provision			76 spaces

On the basis of the above, the proposed development has a maximum car parking requirement of 76 spaces (72 spaces for residents and 4 spaces for 'all other uses' in accordance with PO14).

A total of 44 parking spaces are proposed on-site which is less than the maximum car parking provision allowed and hence, is considered satisfactory.

All car spaces are proposed to be allocated to residents of the development with no parking provided for any staff of the retail and office tenancies or visitors of the development.

4. Vehicle Access and Car Parking Layout

4.1. Design Standard 1 – Accessways

The previously approved development had access to multiple level of car park and loading bay via Middleton Place connecting to/from Spencer Street (with various VicRoads conditions). However, the proposed development proposes main vehicle access to the basement via Batman Street and maintains on-site loading access via Middleton Place. This proposed vehicle access arrangement is considered to be more appropriate for the development as it offers enhanced safety and operational benefits by shifting main access from laneway to a local road. As a result, Middleton Place will operate similar to existing conditions without any modifications and the proposed main access will not adversely affect the operation of Batman Street.

Vehicular access to the site is to be provided a double width crossover to/from Batman Street. The internal accessway has been designed to cater for two-way vehicle movements throughout the basement carpark with the exception of the one-way ramp between Basement Level 1 and 2.

The vehicle crossover connecting Spencer Street to Middleton Place will remain the same as existing conditions and the building will be set back from the northern boundary to enable bicycle parking as well as a wider accessway for sufficient loading and waste vehicle access.

Design Standard 1 of Clause 52.06-9 relates to the design of accessways. The requirements of Design Standard 1 are assessed against the proposal in Table 4.1.

Table 4.1: Design Standard 1 Assessment - Accessways

Requirement	Comments
Must be at least 3m wide.	**Satisfied** - Internal accessways have been designed with a width in excess of 3.0 metres.
Have an internal radius of at least 4m at changes of direction or intersection or be at least 4.2m wide.	**Satisfied**– Internal accessways have been designed with at least 4 metres at changes of direction.
Allow vehicles parked in the last space of a dead-end accessway in public car parks to exit in a forward direction with one manoeuvre.	**Satisfied** – All vehicles parked in the last space of a dead-end accessway can exit the car park in a forwards direction with one manoeuvre.
Provide at least 2.1m headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8m.	**Satisfied** – A headroom clearance in excess of 2.1 metres has been provided beneath overhead obstructions throughout the basement level car

	park exceeding the requirements of Design Standard 1 of Clause 52.06-9. Notably, a ground clearance assessment has been conducted for the headroom clearance at the entrance ramp and it is understood that the car space beneath the one-way ramp on Basement Level 2 has a headroom clearance of at least 2.2 metres.
If the accessway serves four or more car spaces or connects to a road in a Road Zone, the accessway must be designed so that cars can exit the site in a forward direction.	**Satisfied** – All vehicles are able to depart the site in a forward direction.
Provide a passing area at the entrance at least 6.1m wide and 7m long if the accessway serves ten or more car parking spaces and is either more than 50m long or connects to a road in a Road Zone.	**Satisfied** – The entrance to/from Batman Street is also provided with two-way movements separated with a central median. A passing B99 (99.8th percentile vehicle) has been demonstrated at the site entrance which will prevent any vehicles queuing along Batman Street.
Have a corner splay or area at least 50% clear of visual obstructions extending at least 2m along the frontage road from the edge of an exit lane and 2.5m along the exit lane from the frontage, to provide a clear view of pedestrians on the footpath of the frontage road. The area clear of visual obstructions may include an adjacent entry or exit lane where more than one lane is provided, or adjacent landscaped areas, provided the landscaping in those areas is less than 900mm in height.	**Satisfied** – A corner splay dimensioned at 2.0 x 2.5 metres has been provided along the eastern side of the Batman Street entrance. A corner splay is not required on the western side of the entrance given the accessway is two-way.
If an accessway to four or more car parking spaces is from land in a Road Zone, the access to the car spaces must be at least 6m from the road carriageway.	**N/A** – Access to the basement carpark is not from land in a Transport Road Zone. Notwithstanding, all car spaces are at least 6 metres from the road carriageway.
If entry to the car space is from a road, the width of the accessway may include the road.	**N/A** - Entry to the car spaces is not from a road.

4.2. Design Standard 2 – Car Parking Spaces

It is proposed to provide a total of 44 parking spaces arranged as follows:

— 19 at-grade spaces provided within the Basement Level 1; and

— 25 at-grade spaces provided within Basement Level 2.

Design Standard 2 of Clause 52.06-9 relates to the design of car parking spaces. The requirements of Design Standard 2 are assessed against the proposal in

Table 4.2.

Table 4.2: Design Standard 2 Assessment – Car Parking Spaces

Requirement	Comments
Car parking spaces and accessways must have the minimum dimensions as outlined in Table 2 of Design Standard 2.	**Satisfied** – Car spaces are dimensioned in accordance with Table 2 of Design Standard 2, with one of the following configurations: — A length of 4.9 metres, a width of 2.6 metres accessed via a 6.4-metre-wide aisle. — A length of 4.9 metres, a width of 2.8 metres accessed via a 5.8-metre-wide aisle.
A wall, fence, column, tree, tree guard or any other structure that abuts a car space must not encroach into the area marked 'clearance required' on Diagram 1 of Design Standard 2, other than: - A column, tree or tree guard, which may project into a space if it is within the area marked 'tree or column permitted' on Diagram 1. - A structure, which may project into the space if it is at least 2.1m above the space.	**Satisfied** – All car spaces have been designed in accordance with the 'clearance required' diagram as specified in Design Standard 2. All columns have been provided with 300mm clearance to car spaces or outside of the 'clearance required' areas. All car spaces adjacent to walls have been provided with at least 300mm clearance.
Car spaces in garages or carports must be at least 6m long and 3.5m wide for a single space and 5.5m wide for a double space measured inside the garage or carport.	**N/A** – The car park does not have any parking within garages or carports.
Where parking spaces are provided in tandem (one space behind the other) an additional 500mm in length must be provided between each space.	**N/A** – The car park does not have any parking arranged in a tandem format.
Where two or more car parking spaces are provided for a dwelling, at least one space must be under cover.	**Satisfied** - All car spaces are under cover within a basement car park.
Disabled car parking spaces must be designed in accordance with Australian Standard AS2890.6-2009 (disabled) and the Building Code of Australia. Disabled car parking spaces may encroach into an accessway width specified in Table 2 of Design Standard 2 by 500mm.	**N/A** – No DDA spaces have are required or proposed for a development of this nature or scale.

4.3. Design Standard 3 – Gradients

Design Standard 3 of Clause 52.06-9 relates to the design of gradients. The requirements of Design Standard 3 are assessed against the proposal in

Table 4.3.

Table 4.3: Design Standard 3 Assessment - Gradients

Requirement	Comments
Accessway grades must not be steeper than 1:10 (10%) within 5m of the frontage to ensure safety for pedestrians and vehicles. The design must have regard to the wheelbase of the vehicle being designed for; pedestrian and vehicular traffic volumes; the nature of the car park; and the slope and configuration of the vehicle crossover at the site frontage. This does not apply to accessways serving three dwellings or less.	**Satisfied** – The accessway grades are not steeper than 1:10 within 5 metres of the frontage.
Ramps (except within 5 metres of the frontage) must have the maximum grades as outlined in Table 3 of Design Standard 3 and be designed for vehicles travelling in a forward direction.	**Satisfied** – All ramps have a maximum grade of 1:4 as allowed under Table 3 of Design Standard 3.
Where the difference in grade between two sections of ramp or floor is greater than 1:8 (12.5%) for a summit grade change, or greater than 1:6.7 (15%) for a sag grade change, the ramp must include a transition section of at least 2 metres to prevent vehicles scraping or bottoming. Plans must include an assessment of grade changes of greater than 1:5.6 (18%) or less than 3 metres apart for clearances, to the satisfaction of the responsible authority.	**Satisfied** – All ramp transitions are in accordance with this requirement and are designed adequately to prevent vehicle scraping or bottoming out.

4.4. Other Considerations

Stop-Go Signal Operation

To minimize the potential for any conflict along the single width basement ramp between Basement Level 1 and 2, a 'stop/go' signal system will be installed. The signal system will operate in the following manner:

- A two-aspect signal lantern will be installed at both ends of the basement ramp facing the vehicle accessway.
- At all times, motorists entering the site will be given priority, i.e. the signal in Basement Level 2 at the bottom of the ramp will show a default red lantern, whereas the signal at Basement Level 1 at the top of the ramp will show a default green lantern unless the red lantern is activated by a departing vehicle from the Basement Level 2.
- Motorists seeking to depart the site from Basement Level 2 will be required to trigger a detector loop at the holding line or use a remote-control-unit to trigger the sequence. The signal lantern at Basement Level 1 will turn red. There will then be a delay of approximately 15 seconds before the signal lantern in the Basement Level 2 changes to green, to allow for any vehicles on the ramp at that time to enter the basement. The exact amount of green

time provided for the vehicles to depart Basement Level 2 will be determined at a later stage.

— In the event that a vehicle seeking to enter the site encounters a red lantern, they will temporarily need to prop on the holding line provided on Basement Level 1 until the departing vehicle clears the ramp and the red signal lantern ceases. The wait time for a vehicle on the Basement Level 1 holding line could be anywhere between 0 and 15 seconds (conservatively based on a vehicle travelling 5km/hr). This is considered to be acceptable noting the relatively short wait time, the infrequent occurrence of a conflict and low traffic vehicle movements within the basement car park at any one time.

The stop/go signal operation, as described above, will minimize the relatively low probability of conflict along the single-width ramp for vehicles arriving and departing Basement Level 2.

4.5. Swept Path Assessment

An assessment (refer to Appendix A) of the accessibility to/from the site using the 'Autodesk Vehicle Tracking' software has been conducted. The B99 (99.8th percentile car) was used in the assessment and it was found the site could be accessed simultaneously (ingress and egress) in an appropriate manner.

An assessment of the circulation within the basement car park has been conducted with a passing B85 (85th percentile car) and a B99 (99.8th percentile car). It was found that passing can be achieved within the basement levels in an appropriate manner.

An assessment of the accessibility to/from the parking bays has also been conducted. The B85 (85th percentile car) was used in the assessment, and it was found that each space could be accessed (ingress and egress) in an appropriate manner and that vehicles will be able to enter/exit the basement car park in a forward direction.

Some corrective manoeuvres may be required, which is in accordance with AS/NZS2890.1:2004 (Table 1.1), which specifies that the three-point turn movements to enter and exit 90-degree parking spaces are permitted for regular users such as residents.

An assessment of the accessibility to/from the loading bay has also been conducted. The 6.4-metre Small Rigid Vehicle (SRV) and 6.4-metre mini-rear loader waste collection vehicle are both able to access the loading bay via Middleton Place using the existing crossover from Spencer Street, reverse back onto Middleton Place and depart back onto Spencer Street in a forward direction.

The assessment indicates that the vehicle access arrangements, car parking layout and loading/waste arrangements have been designed appropriately and in accordance with the requirements of the Melbourne Planning Scheme and/or AS/NZS 2890.1:2004.

5. Bicycle Parking Assessment

5.1. Bicycle Parking Requirements

The provisions set out under Clause 52.34-3 of the Melbourne Planning Scheme require that bicycle parking be provided as follows in Table 5.1.

Table 5.1 - Statutory Bicycle Parking Requirement

Land Use	User	Bicycle Parking Rate	Size	Statutory Requirement
Dwellings	Residents	In developments of four or more storeys, 1 to each 5 dwellings	190 apartments	38 spaces
	Visitors	In developments of four or more storeys, 1 to each 10 dwellings		19 spaces
Retail	Staff	1 to each 300 sq m of leasable floor area	581 sqm	2 spaces
	Visitors	1 to each 500 sq m of leasable floor area		1 space
Office	Staff	1 to each 300 sq m of net floor area if the net floor area exceeds 1000 sq m	433sqm	0 spaces
	Visitors	1 to each 1000 sq m of net floor area if the net floor area exceeds 1000 sq m		0 spaces
		Total		**60 spaces (38 resident, 2 staff spaces and 20 visitor spaces)**

On the basis of the above, the development has a requirement to provide 60 bicycle parking spaces. The application plans show a total 126 bicycle spaces on ground floor via a two-tier horizontal system (such as the Cora E3DT or similar) and a horizontal rail (such as the Arc De Troimphe or similar). Bicycle parking specification are attached in Appendix B. The bicycle parking provision and allocation are arranged as follows:

— Dedicated lockable bicycle parking room:

- 102 x horizontal bicycle spaces provided for residents.

- 2 x horizontal bicycle spaces provided for staff.

— External to the lockable bicycle parking room:

- 9 x horizontal bicycle spaces provided for visitors.
- 1 x horizontal bicycle spaces provided for staff.

— Along Middleton Place setback:

- 12 x horizontal bicycle spaces provided for visitors.

As above, it is noted that the lockable bicycle parking room is a secure location and meets all the statutory bicycle parking requirements for residents and staff of the proposed development. The bicycle spaces external to the lockable bicycle parking room as well as along Middleton Place will be primarily accessed by residential and retail visitors.

Accordingly, the proposed bicycle parking generously exceeds the requirements of the Melbourne Planning Scheme and is consistent with the approved development.

In addition, AS 2890.3:2015 requires that 20% of the bicycle parking be provided in a horizontal format. The proposed bicycle parking provides all the bicycle spaces in a horizontal format, which exceeds the requirements outlined in the Australian Standards.

5.2. End-of-Trip Requirements

In accordance with Clause 52.34-5 of the Melbourne Planning Scheme, it specifies that shower and change rooms are required for employees of the development. The relevant rates are as follows:

— Showers: If 5 or more employee bicycle spaces are required, 1 shower for the first 5 employee bicycle spaces, plus 1 to each 10 employee bicycle spaces thereafter.

— Change Rooms: 1 change room or direct access to a communal change room to each shower. The change room may be a combined shower and change room.

As a result, there are no requirements to provide any showers or change rooms for staff of the development. Notwithstanding, bathrooms and lockers have been provided adjacent to the secure bicycle room on ground level for cyclists to the development.

6. Loading and Waste Collection Arrangements

6.1. Loading Arrangements

Clause 65.01 of Melbourne Planning Scheme outlines the decision guidelines for the approval of an application or a plan stating the following:

"Before deciding on an application or approval of a plan, the responsible authority must consider, as appropriate:

- *The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts."*

Loading and unloading activities associated with a Build-To-Rent (BTR) development will be associated with residents moving in/out of an apartment which will be conducted with vans / small trucks that will access the loading bay for the loading / unloading of furniture and goods.

Loading and unloading activities associated with the commercial tenancies will be primarily related to the delivery of mail/stationery for the office tenancy and the delivery of goods for the retail tenancies. Given the small sizes of the office and retail tenancies and nature of the use, the majority of loading is anticipated to be undertaken by vans and smaller trucks.

A loading bay has been provided within the ground floor car park, with a length of 8.4 metres and a width of 6.08 metres, accessed via Middleton Place. The loading bay has a minimum height clearance of 3.5 metres which is sufficient to cater for vehicles up to the size of a Small Rigid Vehicle (SRV).

It is not anticipated that larger trucks would be required given the minor nature of the loading activities associated with each user group. However, if required, larger trucks may also utilise the on-street Loading Zone on Batman Street directly fronting the site. This arrangement is consistent with the previously approved development (Permit No. TP-2016-722/A).

Given that the use of the loading bay caters for all loading and waste activities associated with the development, a booking system will be in place for the usage of the loading bay to coordinate all loading and waste activities. This will ensure that there are no vehicle conflicts along Middleton Place with the doubling up of loading vehicles.

On the basis of the above, the proposed loading and unloading arrangements are considered appropriate and satisfactory.

6.2. Waste Collection Arrangements

Waste and recyclables are proposed to be stored within the waste area located at the rear of the site. It is understood from the Waste Management Plan (WMP) that waste and recyclables are proposed to be collected by a private contractor via accessing the loading bay at the rear of the site along Middleton Place using the mini rear loader waste truck, which is 2.08 metres

high, 6.35 metres long and 1.7 metres wide. This arrangement is consistent with the previously approved development (Permit No. TP-2016-722/A).

The swept path assessment (refer to Appendix A) demonstrates the ability for a mini rear loader waste truck to access the loading bay via Middleton Place from Spencer Street in a forward direction, collect waste, and depart in a forward's direction back onto Spencer Street. It is recommended that waste be collected outside of the commuter peak hour periods.

Accordingly, the waste collection arrangements are considered acceptable from a traffic engineering perspective.

6.3. Loading and Waste Collection Swept Path Assessment

The nominated loading and waste collection vehicles will require loading vehicles to enter the loading bay in a forward in direction and reverse back onto Middleton Place to depart the site in a forward direction.

It is understood that the City of Melbourne typically seek that new buildings be designed such that loading vehicles can enter and exit a site in a forwards direction. In this instance, the reverse-out movement is considered acceptable on the following grounds:

- The road in question is a laneway which carries very low levels of road user activity compared to other roads that carry much higher levels of pedestrian and traffic activity.
- The building is setback from the property boundary by approximately 2.78 metres which provides for improved visibility to pedestrians, cyclists and other laneway users that may be present. The setback also facilitates passing to occur along Middleton Place if required.
- The number of loading and waste vehicles accessing the loading bay will be very low based on the nature and scale of residential and commercial uses as well as for waste collection. As such, the likelihood of pedestrian or cyclist movements coinciding with a reversing vehicle will very low.
- A dome mirror is recommended to be provided at the intersection of Middleton Place if required as a condition of permit to allow pedestrians and cyclists to have clear sightlines of the loading bay and allow for them to exercise caution upon traversing the laneway.
- The loading bay is generously dimensioned at 5.5 metres wide. The opening of the loading bay and accessway width combination provides for excellent visibility, which combined with the dome mirror and low frequency and probability of any conflict occurring results in an acceptably low risk from a safety perspective.

7. Traffic Assessment

7.1. Traffic Generation

In consideration of the locality of the site and excellent level of accessibility to public transport, the development is expected to generate traffic at a daily rate of 2 vehicle movements per resident car parking space. Application of this rate to the proposed residential car parking spaces results in a daily traffic volume of approximately 88 vehicle movements per day, including approximately 9 vehicle movements (10%) per hour during periods of peak activity.

About ten percent of the total trips will occur in each of the morning and evening peak hours. Residential trips will be mainly departing in the morning peak (80% depart and 20% arrive) and mainly arriving in the afternoon peak (40% depart and 60% arrive).

The residential traffic generation for the AM and PM peak peaks and daily volumes on a typical weekday are as follows:

Table 7.1: Residential Traffic Generation

	AM Peak	PM Peak	Daily
Arriving trips:	2 vph	5 vph	44 vpd
Departing trips:	7 vph	4 vph	44 vpd
Total trips:	**9 vph**	**9 vph**	**88 vpd**

Given that it is not proposed to provide any car parking for the office or retail uses, it is not expected that these uses will generate any traffic associated with the proposal.

7.2. Traffic Distribution and Impact

The development is expected to generate a total of 9 vehicle per hour during the AM and PM peak hour periods (equating to a vehicle movement every 6 to 7 minutes during peak hour periods).

The traffic generated by the residents will flow directly onto Batman Street and then onto the surrounding road network. The level of traffic generated by the proposal is relatively modest and not expected to adversely affect Batman Street or the surrounding road network.

It is also noted that the estimated traffic generated by the proposal (9 vehicle per peak hour period, 88 vehicles per day) is considerably lower than the estimated traffic generated by the approved development (23 vehicle per peak hour period, 152 vehicles per day) due to the decreased provision of car parking.

The site accessibility will also rely on direct access to/from Batman Street rather than to/from Spencer Street via Middleton Place, which will improve the overall safety and operational conditions of Middleton Place and Spencer Street. This is considered to be a more appropriate outcome given the road classification of Spencer Street and the sharing of Middleton Place access with the adjacent development at 16-storey mixed use development at 423-435 Spencer Street in West Melbourne directly north of the subject site.

8. Response to VicRoads Permit Conditions (Permit No. TP-2016-722/A)

As previously noted, the approved development (Permit No. TP-2016-722/A) had several conditions imposed by VicRoads as a condition of permit. The previous VicRoads conditions are reproduced below with Ratio's response thereafter commenting on the appropriateness and relevance of the previous conditions for the proposed development:

"***VicRoads conditions***

5. Before the development starts, amended plans must be submitted to and approved by the Responsible Authority and the Roads Corporation. When approved by the Responsible Authority and the Roads Corporation, the plans may be endorsed by the Responsible Authority and will then form part of the permit. The plans must be drawn to scale with dimensions and two copies must be provided. The plans must be generally in accordance with Drawing Numbers TP097 to TP213, dated 24 August 2016 but modified to show:

a) A canopy clearance height of at least 5m along Middleton Place;
b) The installation of left in only sign at entrance to right of way facing west bound traffic on Dudley Street;
c) The installation of a No Right Turn sign facing east bound traffic on Dudley Street at entrance to right of way;
d) The installation of a No Left Turn sign within the site (car park) boundary prohibiting left turn vehicular movements onto the right of way;
e) A southbound arrow to be painted on the surface of the right of way between Dudley Street at 437 Spencer Street rear property access;
f) No entry signs facing north bound traffic on the laneway to Dudley Street at the southern boundary of 437 Spencer Street property;
g) The installation of two way signage for the remainder of the right of way including Middleton Lane;
h) To provide continuous median line marking on Dudley Street for an approximate distance of 10 metres in vicinity of the laneway;
i) Physical island on central median along Spencer Street to be extended approximately 10 metres north in vicinity of Middleton Lane towards Dudley Street;
j) Installation of appropriate signage within the central median on Spencer Street facing Middleton Lane directing left turn movements onto Spencer Street; and
k) Installation of left turn sign at Middleton Lane where it meets Spencer Street facing traffic exiting Middleton Lane.

It is understood that a height clearance of at least 5 metres has been provided along Middleton Place. In response to the condition 5 b) to k), the primary access arrangements for the proposal are no longer via Spencer Street and Middleton Place. The only additional traffic

generated by the development along Middleton Place will be via the occasional loading and waste collection vehicle which is recommended to be conducted outside of peak hour commuter periods to not coincide with the operation of Middleton Place associated with traffic generated by the adjacent development at 423-435 Spencer Street in West Melbourne.

It is understood that the restricted left-in-left-out movements and relevant signages were imposed on the previously approved development to manage the combined traffic generated by the previously proposed site access arrangements via Middleton Place and adjacent site at 423-435 Spencer Street in West Melbourne. Given that the only additional traffic generated by the proposal will be loading and waste collection vehicles, the safety and operational impact on Middleton Place will be negligible and consistent with existing conditions.

Additionally, Middleton Place will still be within its operational capacity of 30 movements for a laneway during the peak hour commuter periods given that loading and waste collection activities are recommended to be outside of those peak hour periods.

> ***5. A loading management plan to be provided to the satisfaction of the Responsible Authority to ensure on site waste collection does not obstruct or interfere with vehicular access to the basement and the operation of Dudley Street and Spencer Street.***

Given that the loading bay seeks to cater for multiple user groups as well as for waste collection, it is recommended that a loading management plan be provided to ensure that the loading bay use is coordinated appropriately for the development.

Additionally, it is understood that a booking system is proposed to effectively manage and coordinate all loading and waste collection activities associated with the loading bay.

> ***6. The widening of Middleton Place where it intersects with Spencer Street is to be constructed to the satisfaction of the Roads Corporation and or the Responsible Authority at no cost to the Roads Corporation prior to the commencement of the use hereby approved."***

With the exception of the occasional loading vehicle, the proposal is not anticipated to generate much additional traffic along Middleton Lane. The widening of Middleton Place where it intersects Spencer Street is not expected in this instance as the operational impact at this intersection will be consistent with existing conditions.

9. Conclusion

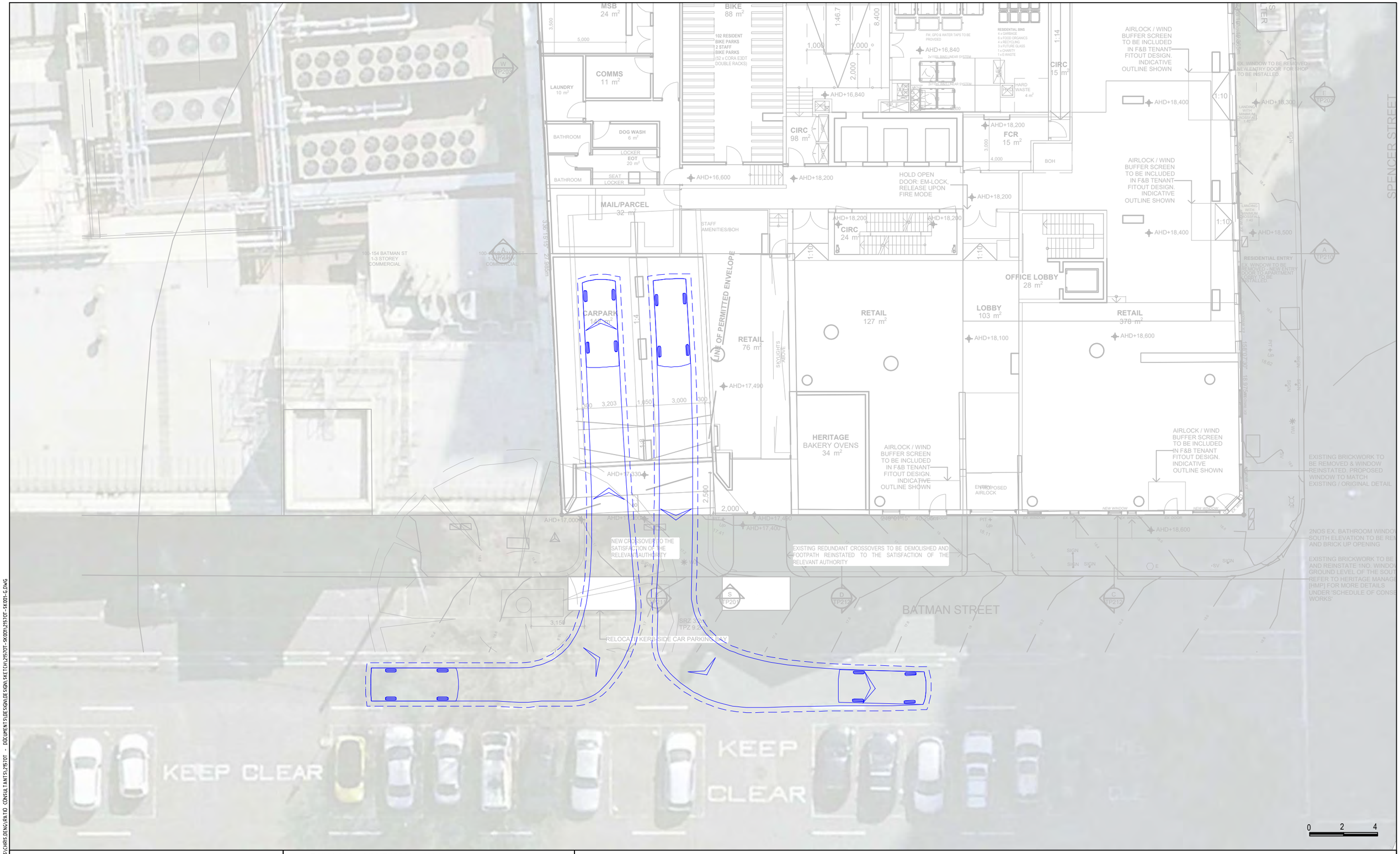
The proposed 20-storey mixed-use development comprises of 190 apartments with retail and office tenancies on ground and first floor located at the land of 405-421 Spencer Street in West Melbourne. The proposed development also includes the provision of 44 car parking spaces on-site within a basement car park.

Based on the above assessment, it is considered the development is appropriate for the following reasons:

- The level of parking provision is considered appropriate as the provision of 44 car parking spaces is well below the maximum car parking rates as set forth Schedule 15 of Clause 45.09 of the Melbourne Planning Scheme.
- The proposed car park and access arrangements have been suitably designed and are in general accordance with the requirements of Melbourne Planning Scheme and/or AS/NZS 2890.1:2004. A swept path assessment has been conducted that demonstrates sufficient site access, circulation within the car park as well as access to/from the critical car parking spaces. A signal system has also been proposed to effectively manage any potential conflict along the one-way ramp between Basement Level 1 and 2.
- The provision of 126 bicycle space exceeds the statutory requirements of 60 bicycle spaces as set forth in Clause 52.34 of the Melbourne Planning Scheme.
- The traffic generated by the proposal will be in the order of 9 vehicular trips during peak hours. The surrounding road network has the capacity to accommodate the additional traffic volumes and is not expected to create any adverse impacts on the safety or operation of the Batman Street or the surrounding road network. Importantly, as opposed to the approved development (Permit No. TP-2016-722/A), primary access to/from the site is no longer from Middleton Place, which will improve its safety and operational impact as well as mitigate any associated works that may be required.
- Loading and waste collection is proposed to be provided via a loading bay accessed via Middleton Place from Spencer Street, catering for vehicles up to the size of an SRV and mini-rear loader waste collection vehicle. A booking system will be in place to coordinate all loading and waste collection activities associated with the loading bay and recommended to be conducted outside of peak hour commuter periods. Larger loading vehicle will access the loading zone spaces directly fronting the site along Batman Street.
- The VicRoads Conditions as per the previously approved development (Permit No. TP-2016-722/A) have been addressed appropriately. Of particular note, given that the site does not propose to use Middleton Place as a primary point of vehicle access, the proposed line marking, signage and civil works are not required as Middleton Place will operate similar to existing conditions post-development. However, a loading management plan is recommended to inform and coordinate the loading and waste collection arrangements for the site.

On the basis of the assessment above, the proposed development is not to create any adverse traffic or parking impacts in the precinct and considered to be acceptable from a traffic engineering perspective.

Appendix A : Swept Path Assessment



ratio:
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CREMORNE, VICTORIA 3121
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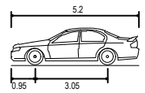
FACSIMILE (03)9429 3011

B99 Vehicle (AS/NZS2890.1:2004)



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Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

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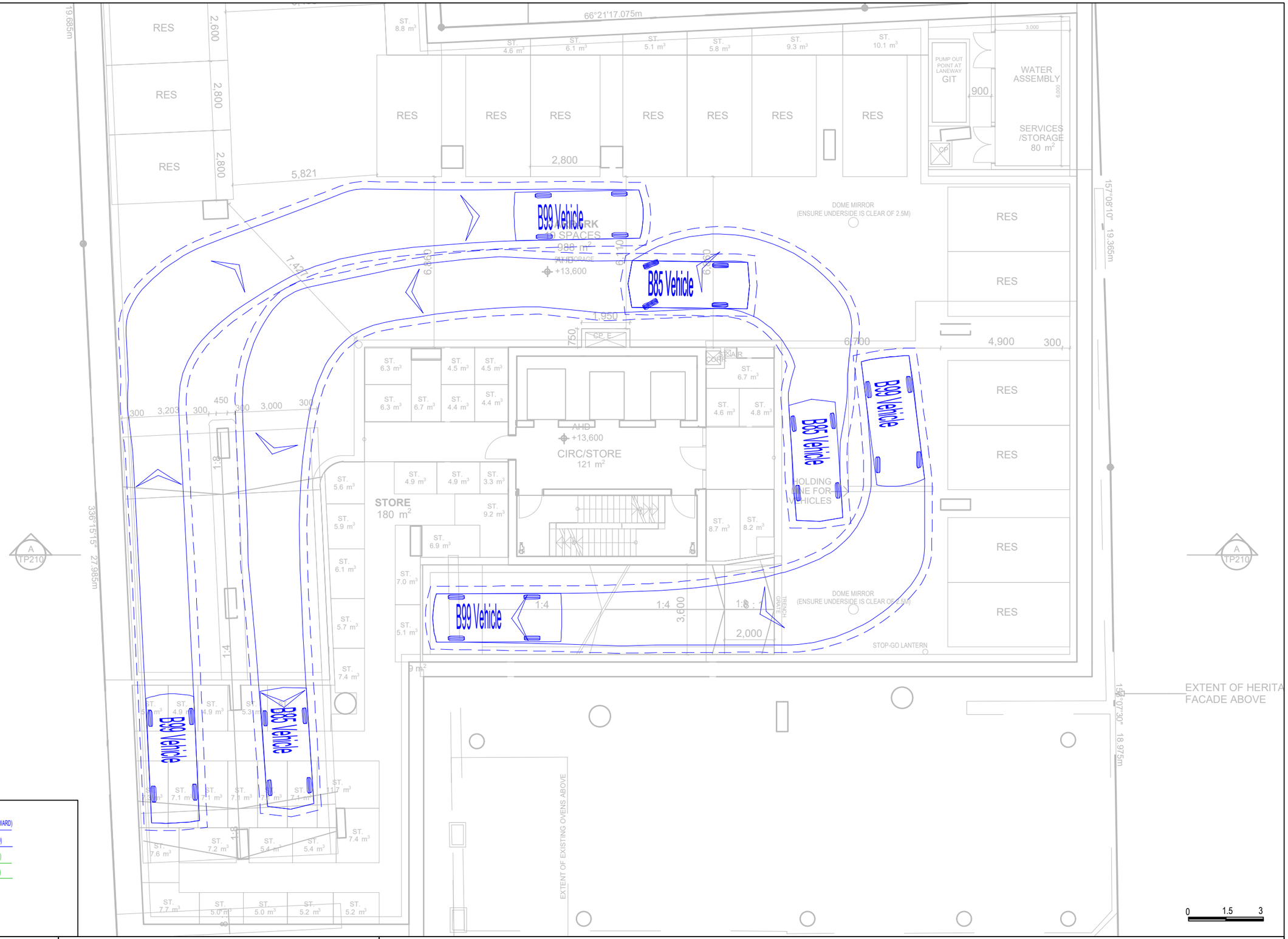

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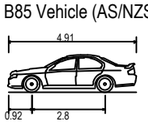

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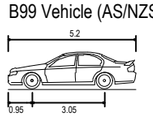
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

B99 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

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Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
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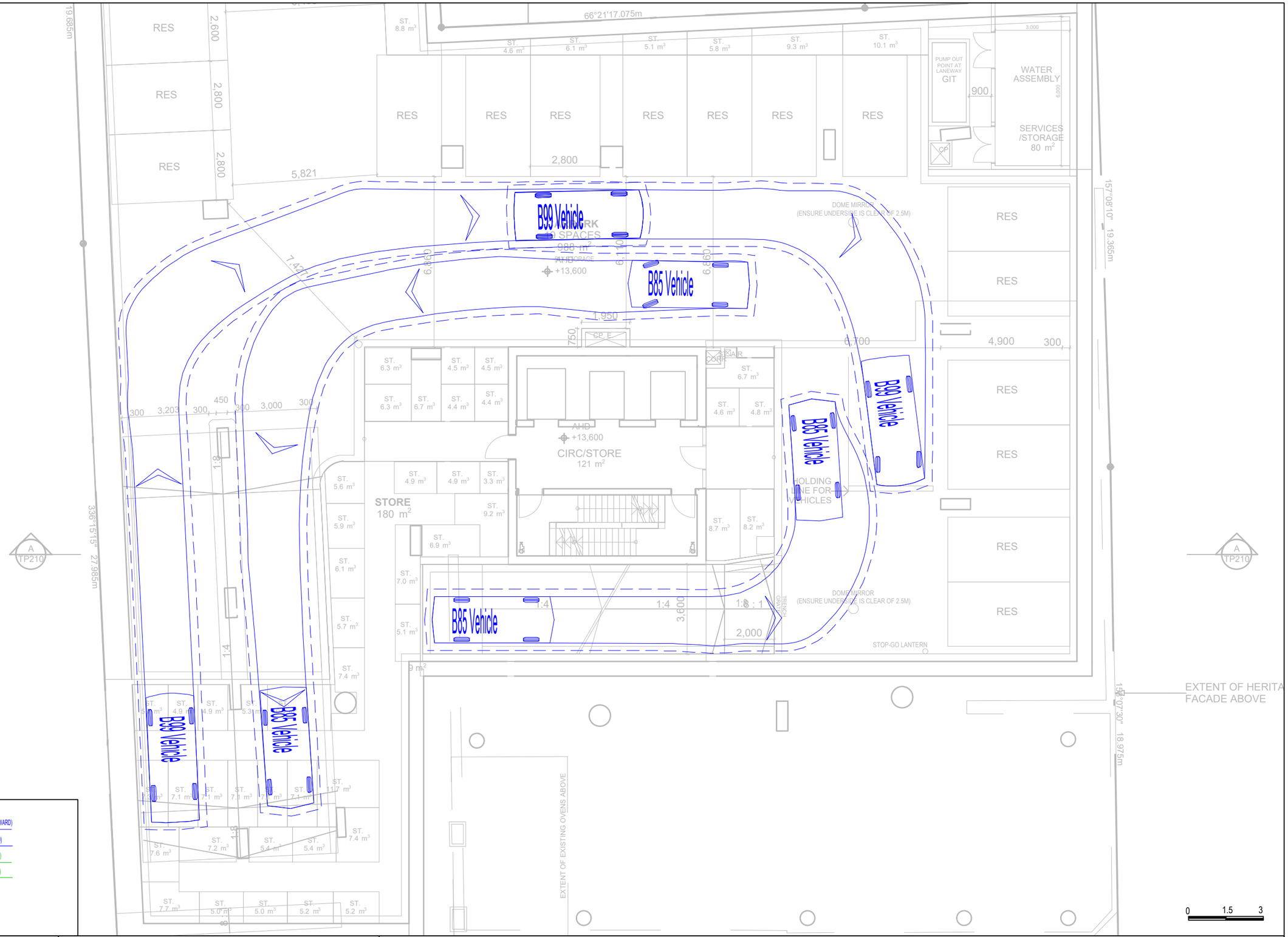

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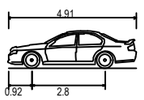

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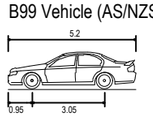
VEHICLE ENVELOPE (REVERSE)	
300mm CLEARANCE (REVERSE)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

B99 Vehicle (AS/NZS2890.1:2004)



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Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

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Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

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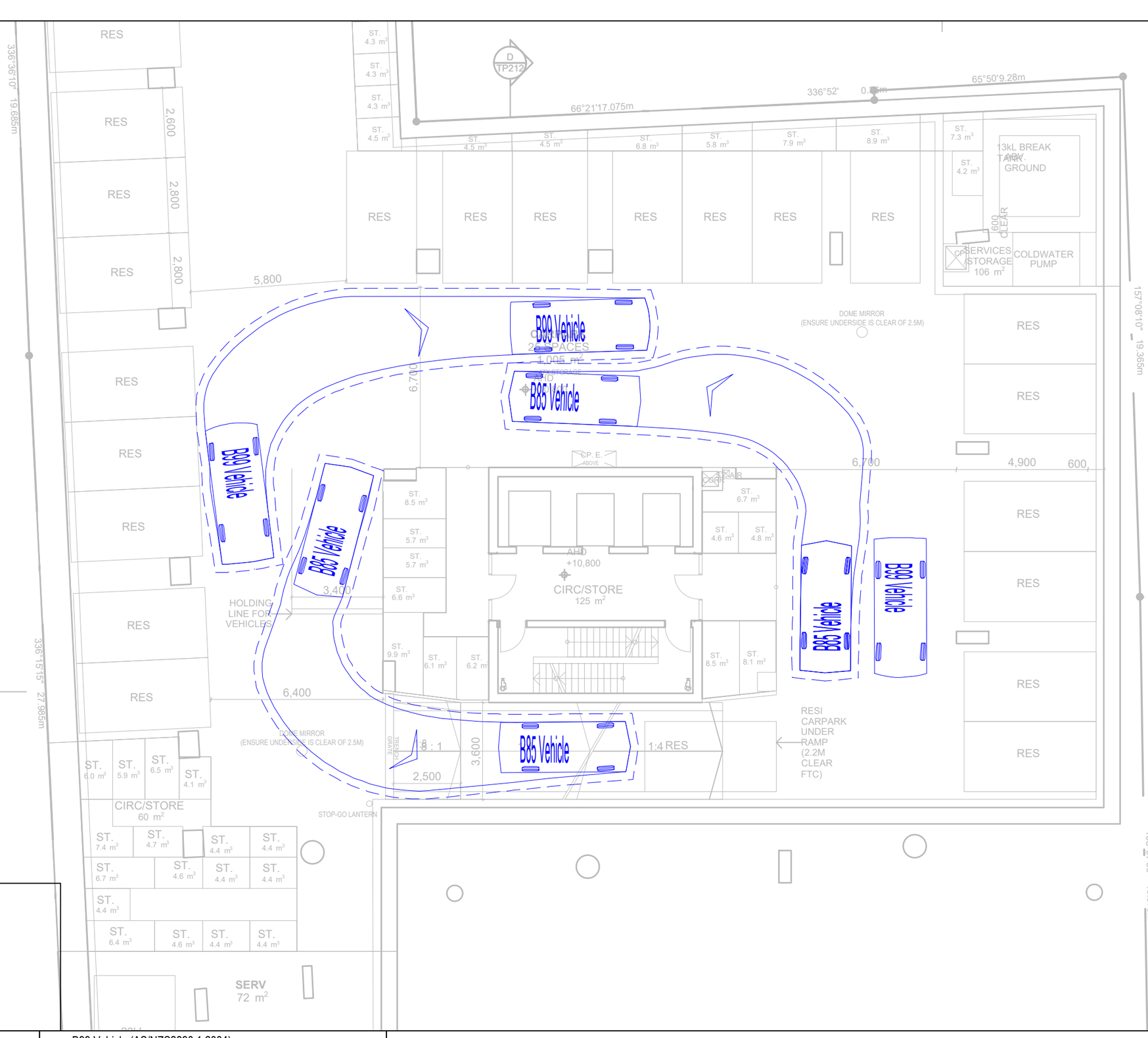

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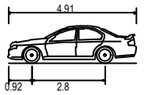

VEHICLE ENVELOPE (FORWARD)	
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VEHICLE ENVELOPE (REVERSE)	
300mm CLEARANCE (REVERSE)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

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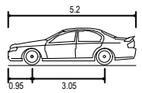

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Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.312m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.30m

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Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
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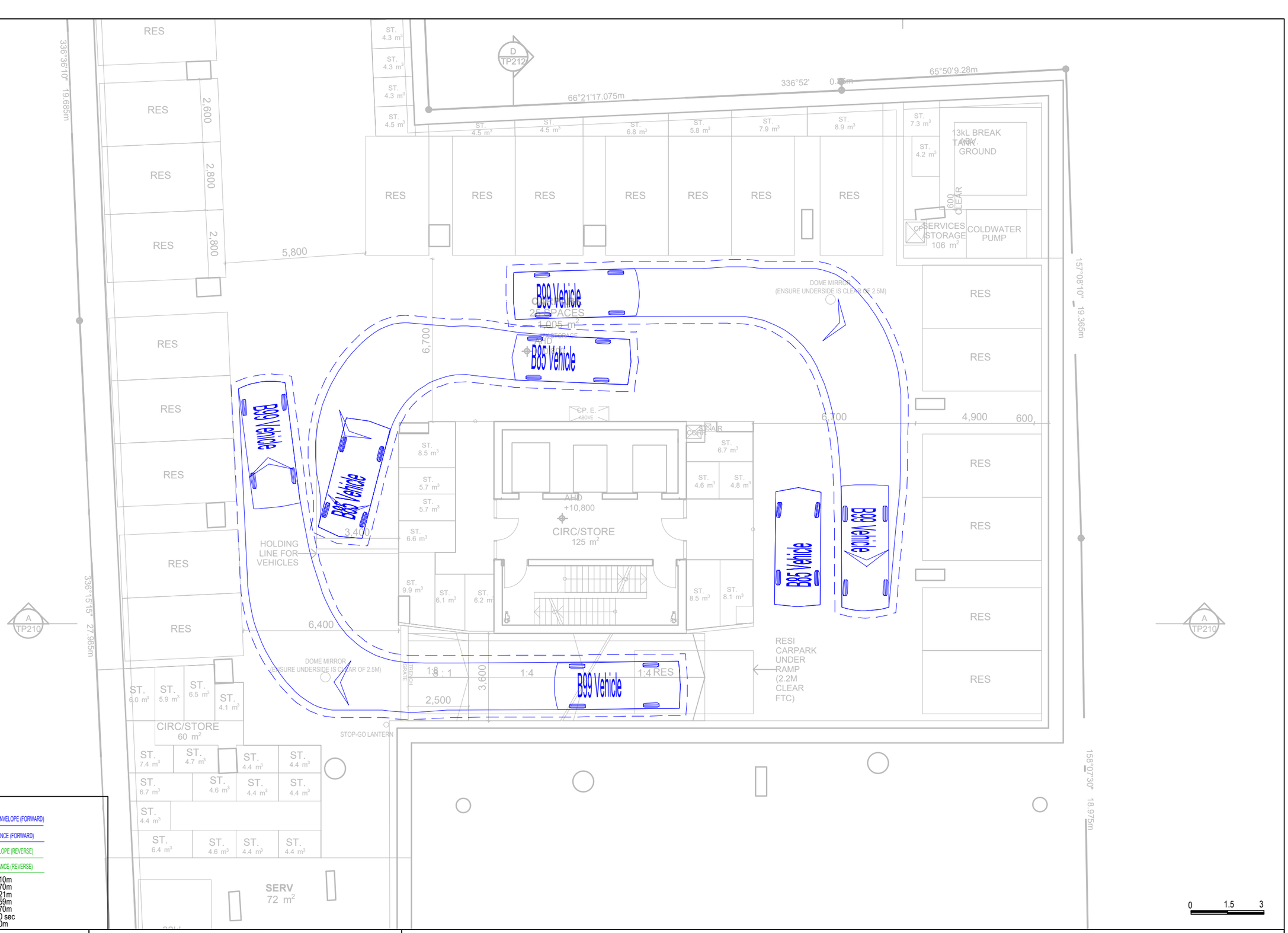

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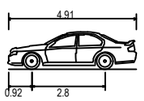

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Overall Length	4.910m
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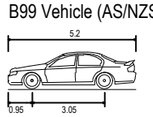
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

B99 Vehicle (AS/NZS2890.1:2004)



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Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
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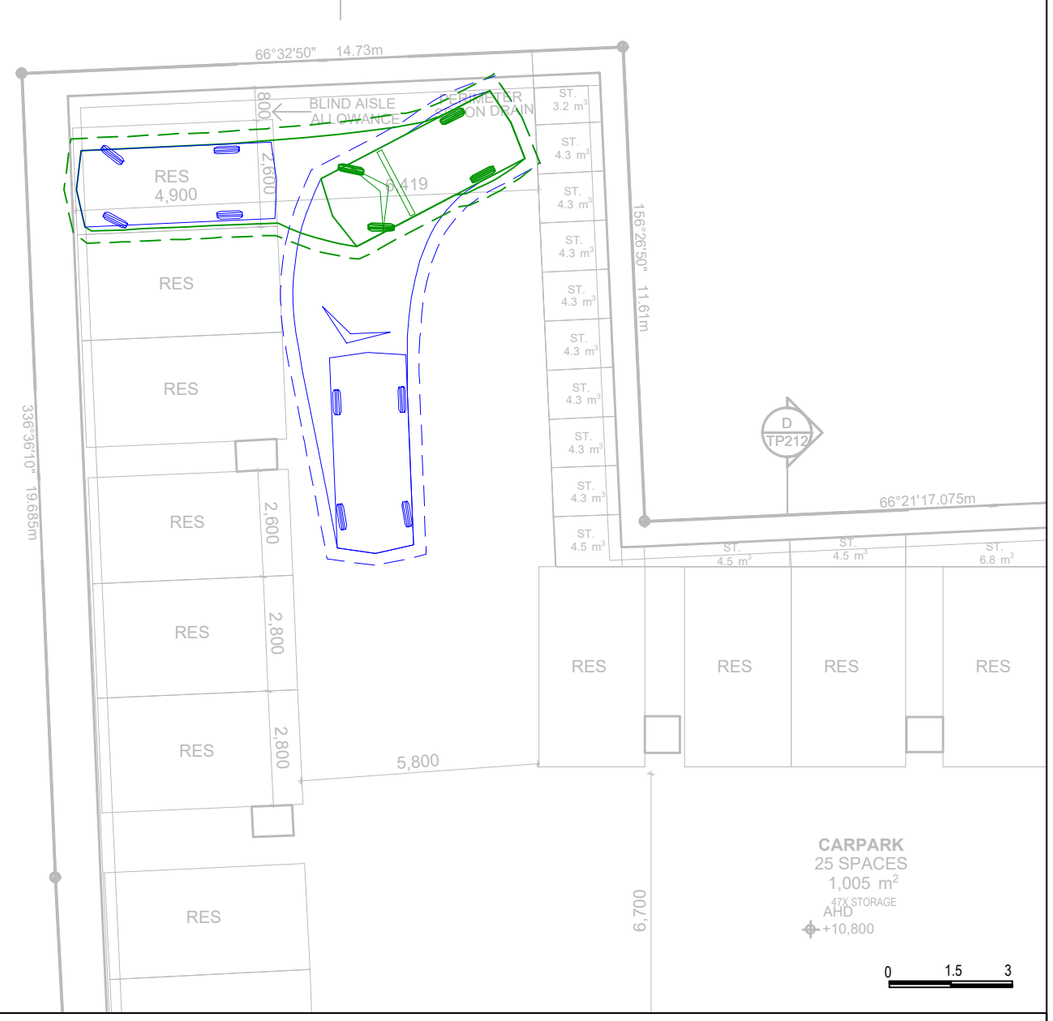

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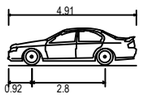
FACSIMILE (03)9429 3011

B85 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
21570T-SK001-G	6 of 12	C.D.	1:150 @A3	2/09/2024

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RES
2,800
5,800
CARPARK
25 SPACES
1,005 m²
47X STORAGE
AHD
+10,800
9,700
CP. E. ABOVE
CORR
AIR
CIRC/STORE
125 m²
3,400
HOLDING LINE FOR VEHICLES
6,400
DOME MIRROR
(ENSURE UNDERSIDE IS CLEAR OF 2.5M)
TRENCH GRATE
1:8
1:4
1:4 RES
3,600
2,500
STOP-GO LANTERN
CIRC/STORE
60 m²
SERV
72 m²
22kL
RAINWATER
ABV.TANK
GROUND
RAINWATER FILTRATION
RAINWATER FLUSH & TANK DIVERSION
IN GROUND SEWER PUMP STATION
A
TP210
336°15'15" 27.985m
249°01'15" 40.295m
0 1.5 3

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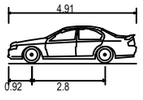
ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B85 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
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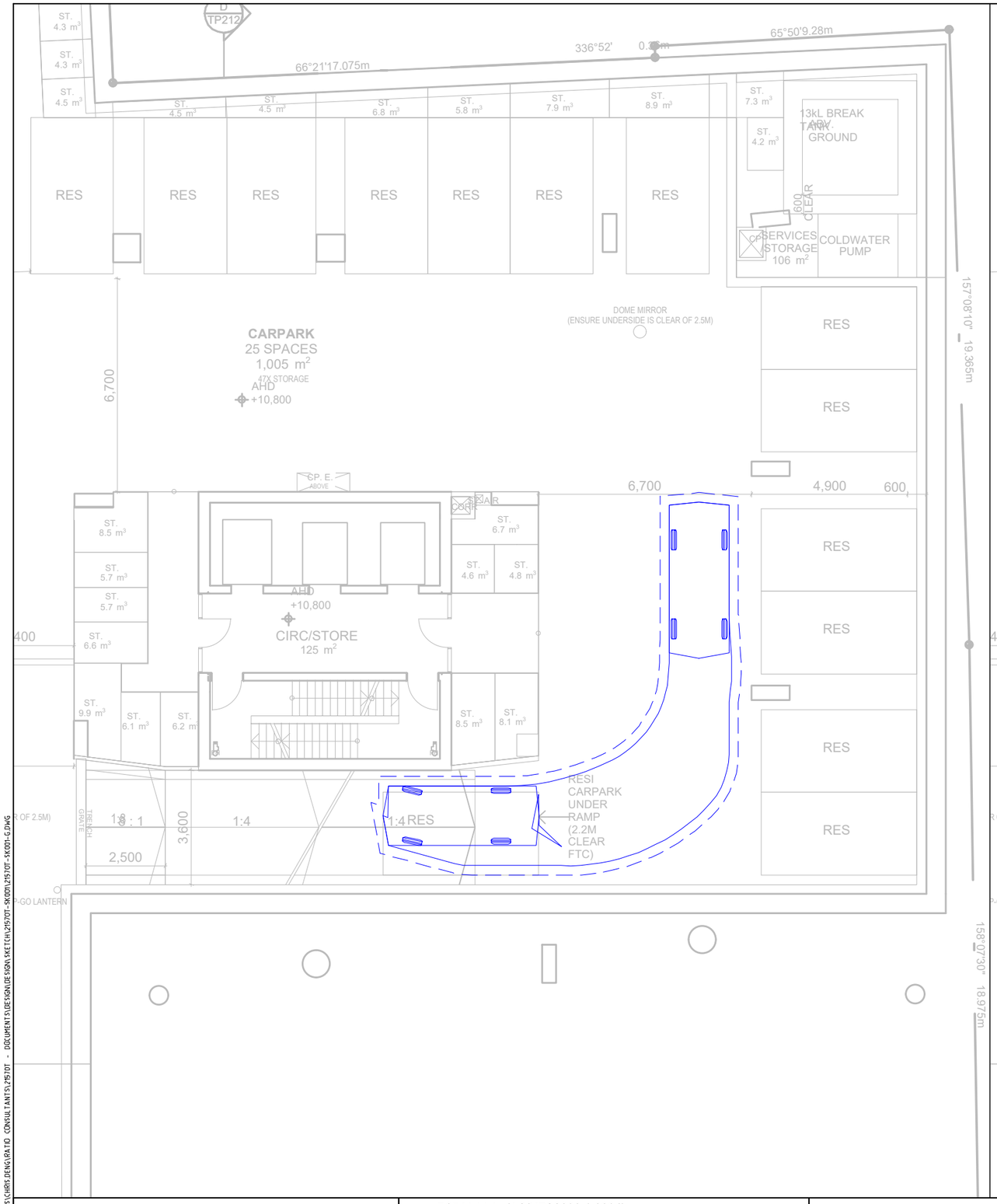
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
21570T-SK001-G	7 of 12	C.D.	1:150 @A3	2/09/2024



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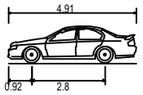
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B85 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)	
300mm CLEARANCE (FORWARD)	
VEHICLE ENVELOPE (REVERSE)	
300mm CLEARANCE (REVERSE)	
Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
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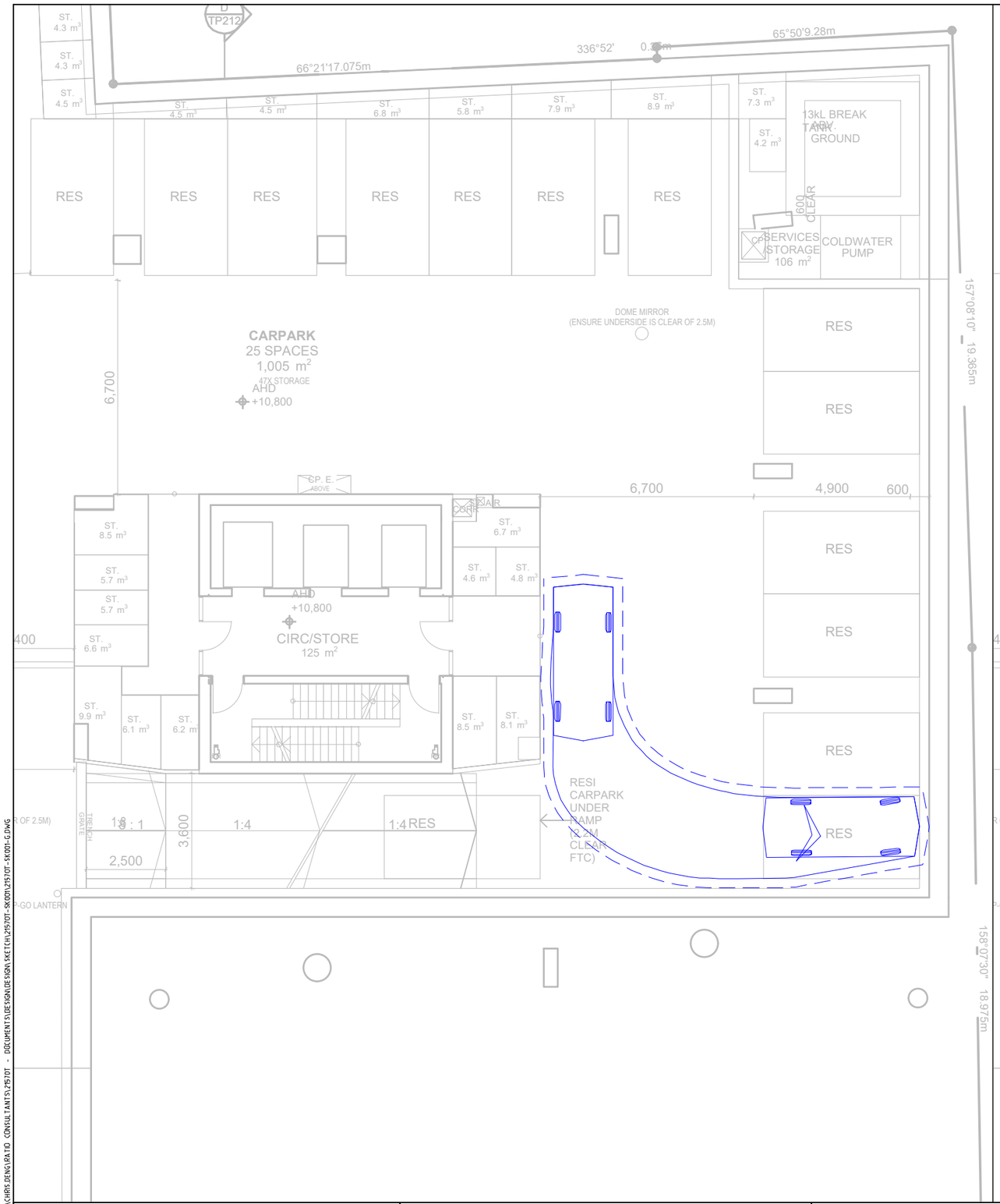

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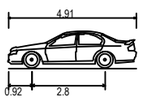
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B85 Vehicle (AS/NZS2890.1:2004)



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	5.80m

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
21570T-SK001-G	9 of 12	C.D.	1:150 @A3	2/09/2024

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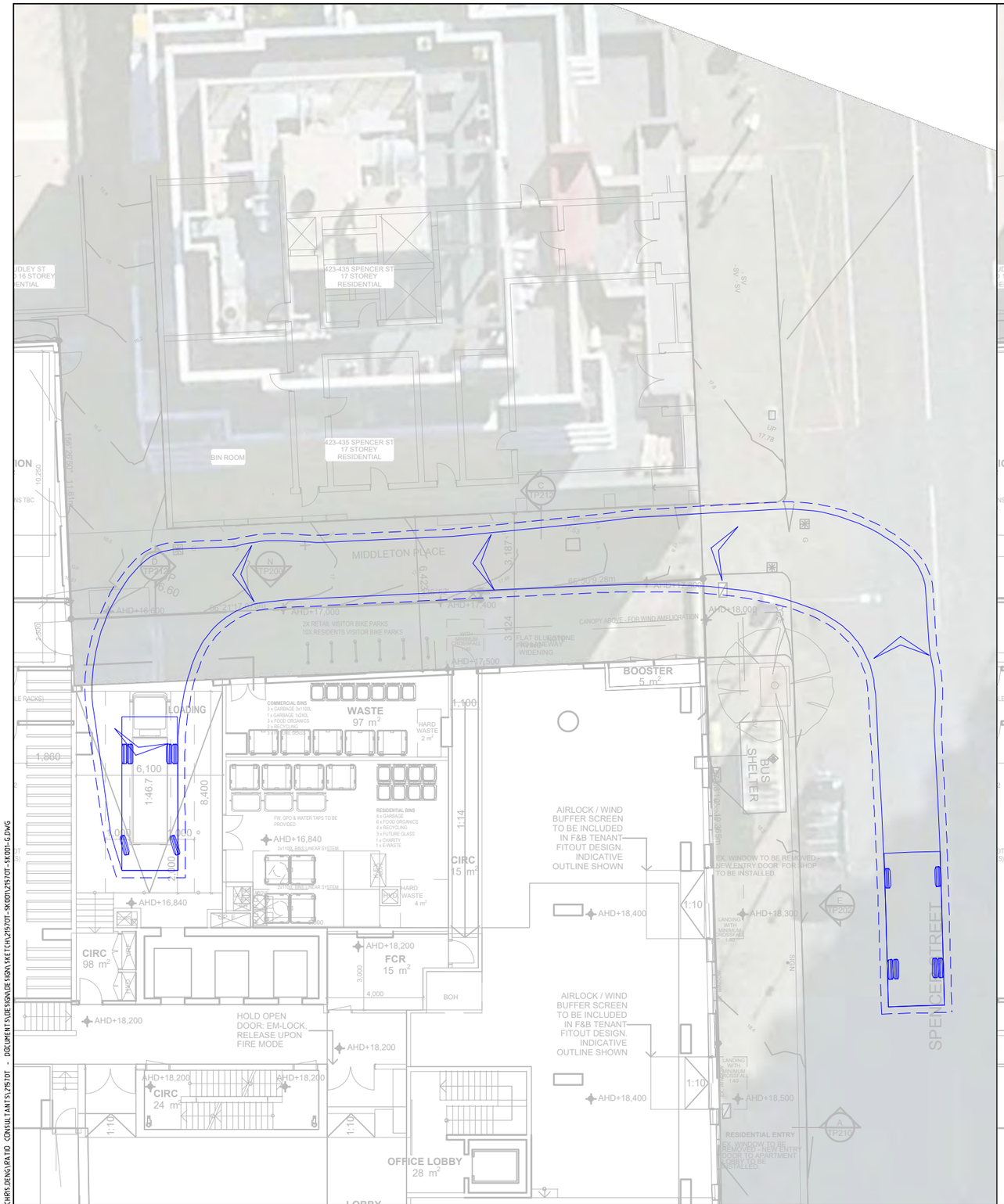

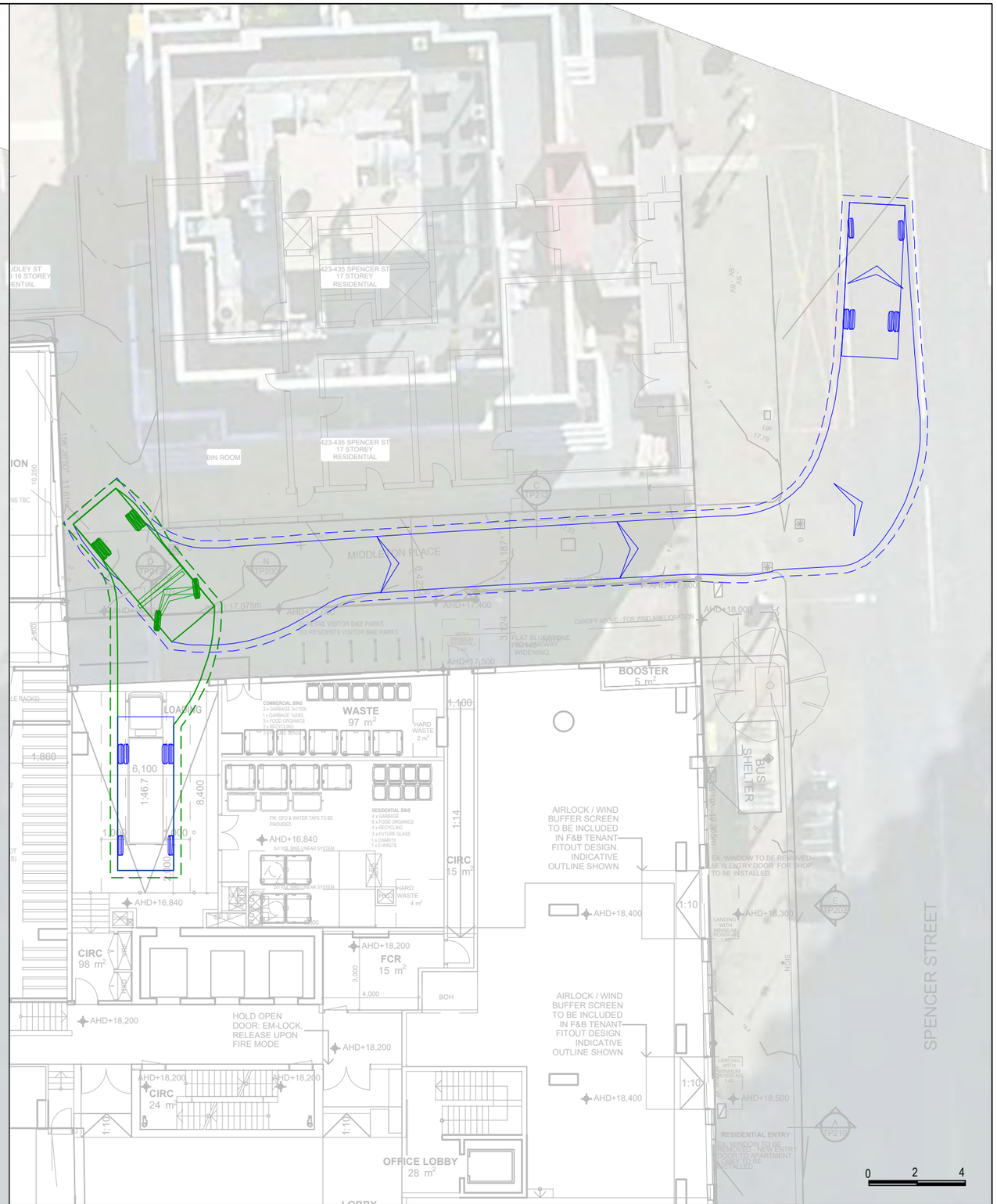

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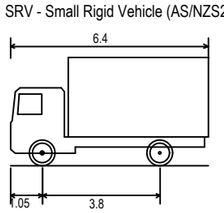
ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

SRV - Small Rigid Vehicle (AS/NZS2890.2:2002)



VEHICLE ENVELOPE (FORWARD)
500mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
500mm CLEARANCE (REVERSE)

Overall Length	6.400m
Overall Width	2.330m
Track Width	2.330m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	7.100m

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
21570T-SK001-G	10 of 12	C.D.	1:200 @A3	2/09/2024

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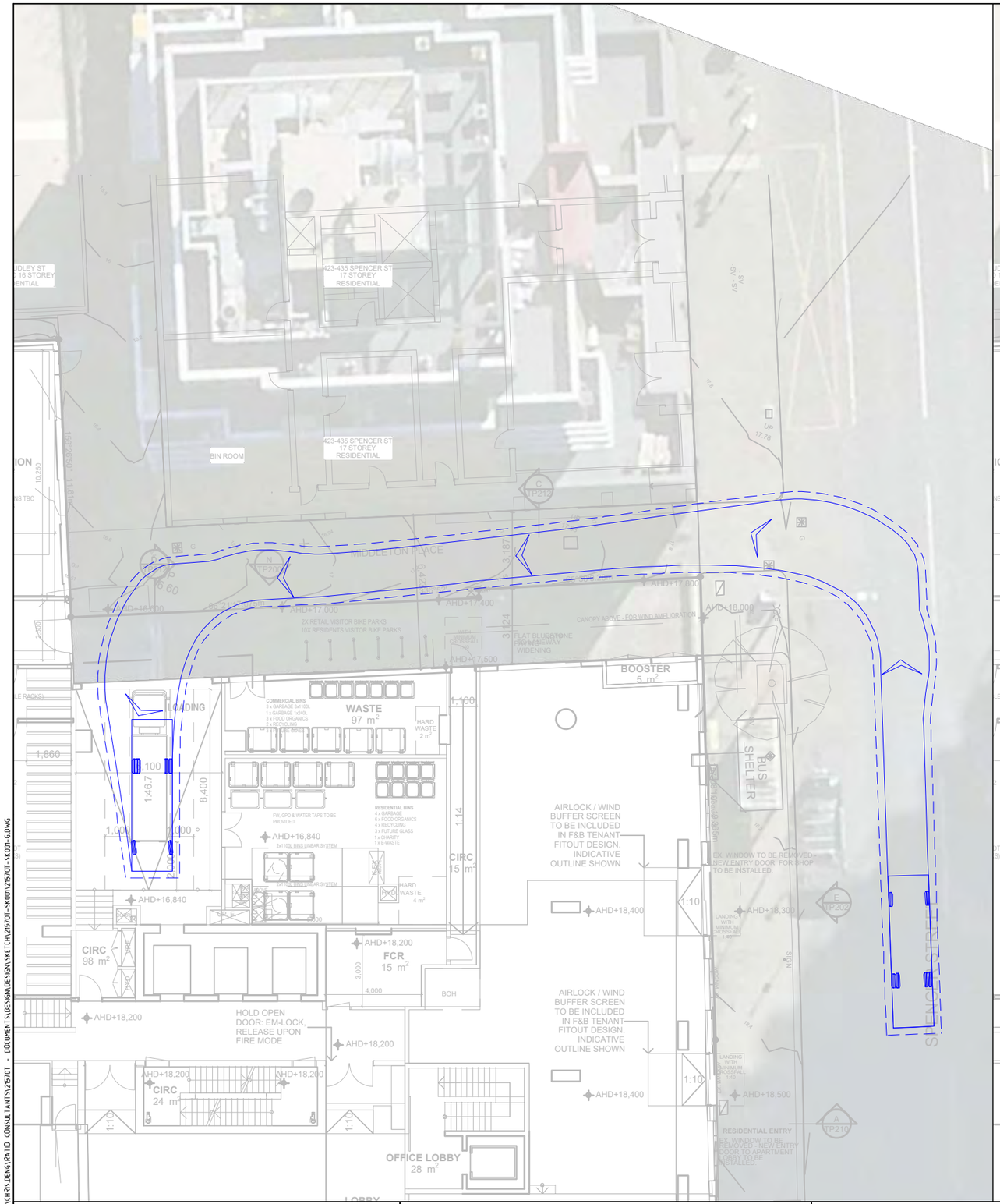

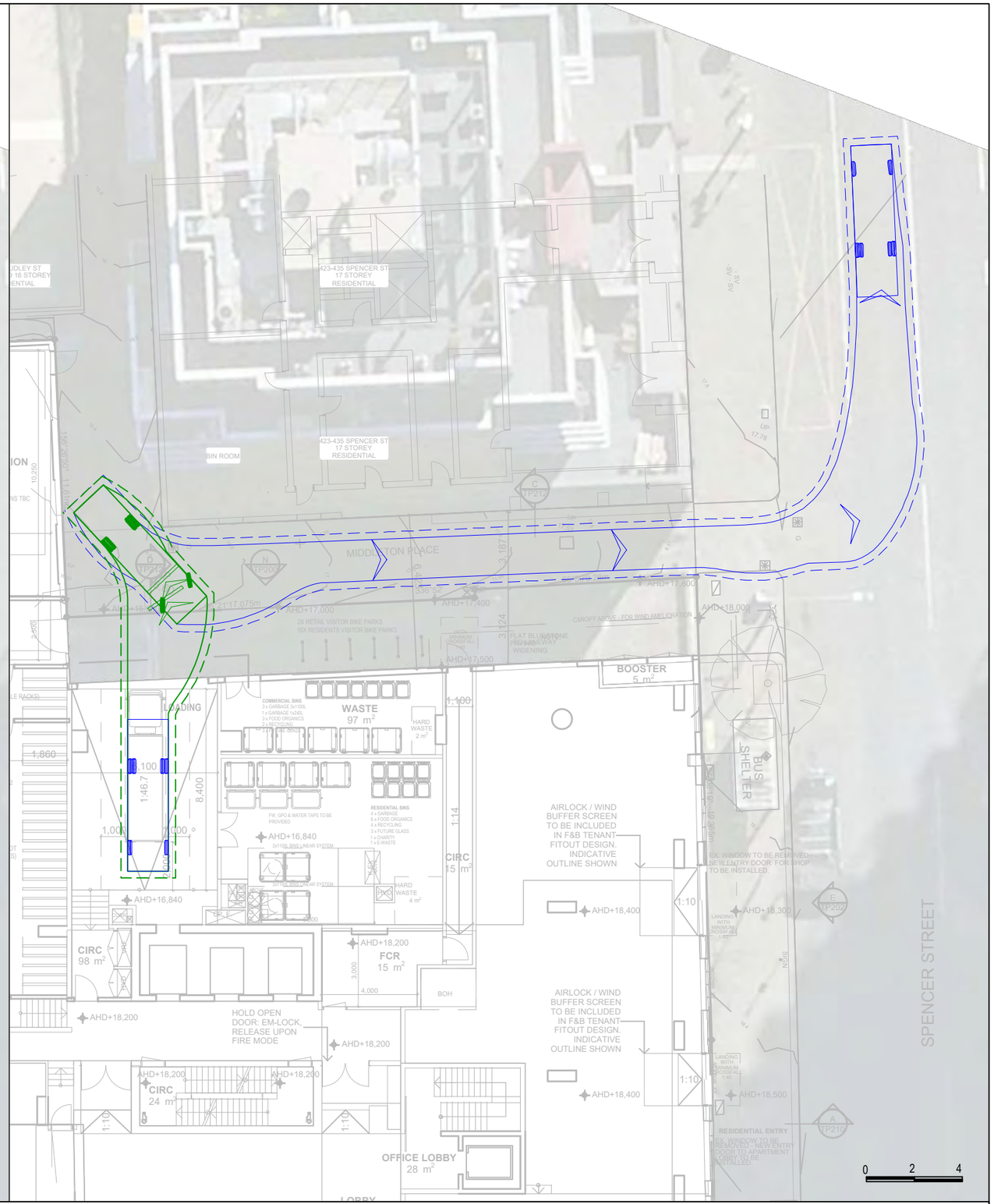

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8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

Mini-Rear Loader Waste Collection Vehicle



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	6.345m
Body Width	1.700m
Overall Body Height	2.080m
Min Body Ground Clearance	0.205m
Track Width	1.670m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.450m

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
21570T-SK001-G	11 of 12	C.D.	1:200 @A3	2/09/2024

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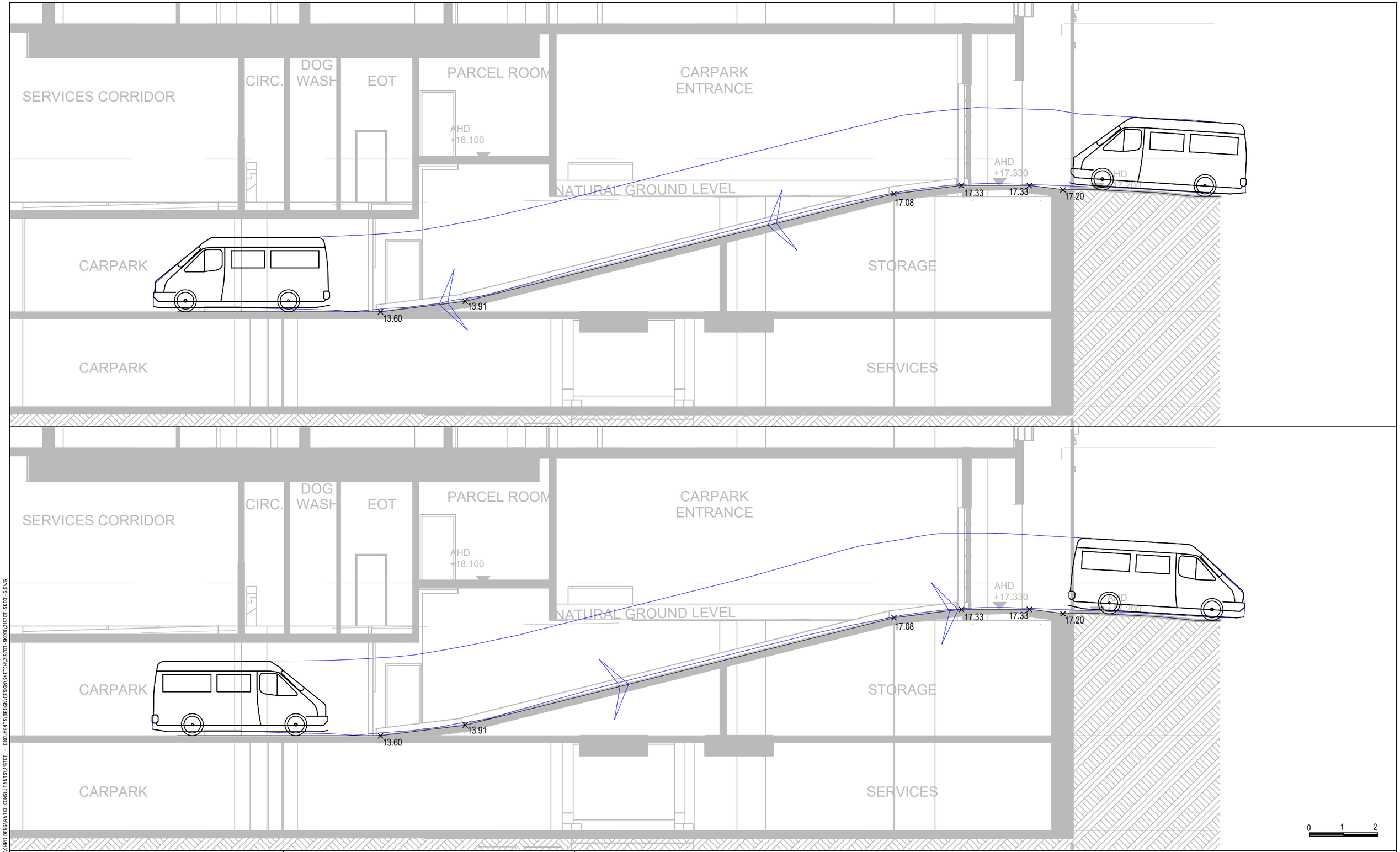

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8 GWYNNE STREET
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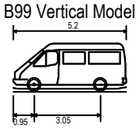
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

B99 Vertical Model (AS/NZS2890.1:2004)



Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	2.200m
Min Body Ground Clearance	0.120m
Track Width	1.840m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	8.000m

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
21570T-SK001-G	12 of 12	C.D.	1:100 @A3	2/09/2024

Appendix B : Bicycle Parking Specifications

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

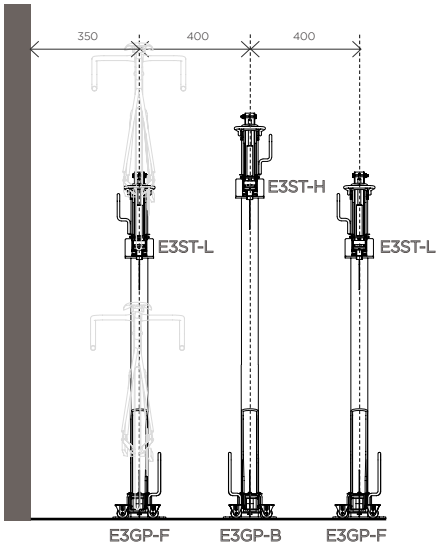




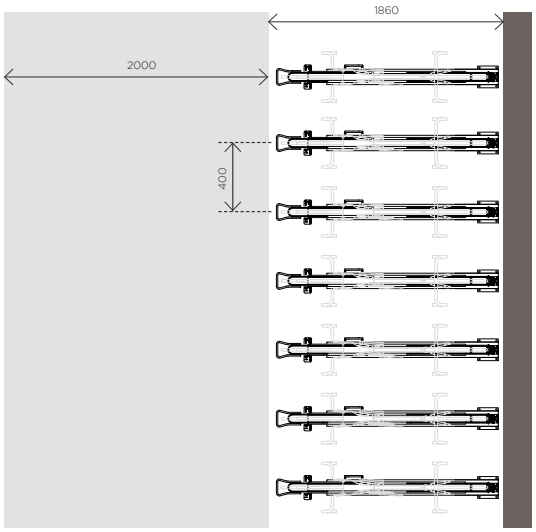
CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

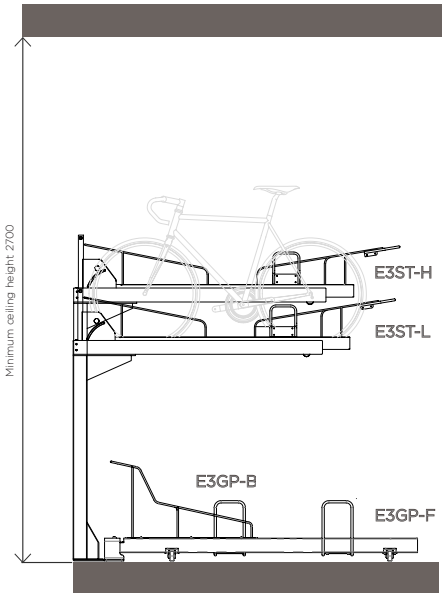
STAGGERED LAYOUT



Front view

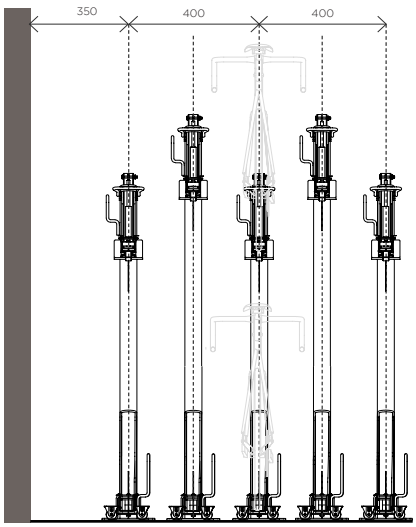


Top view

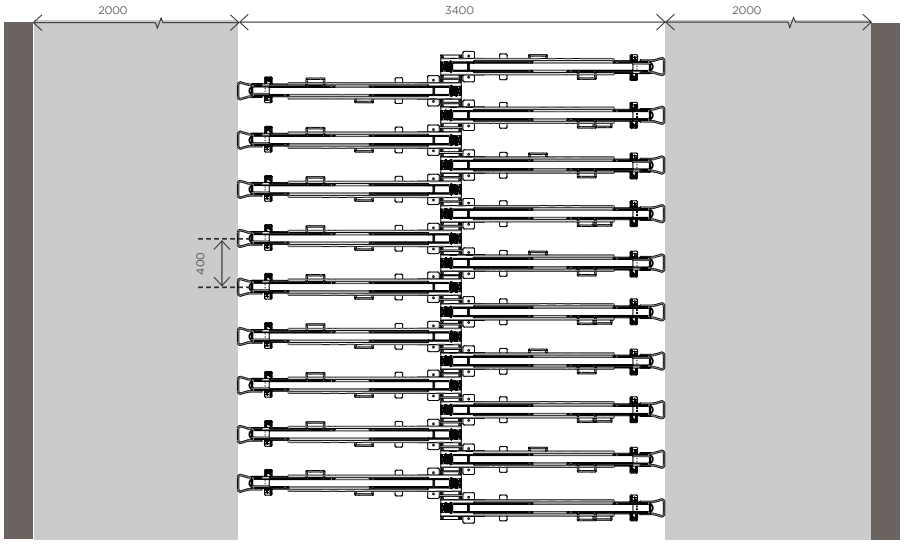


Side view

NESTED LAYOUT



Front view

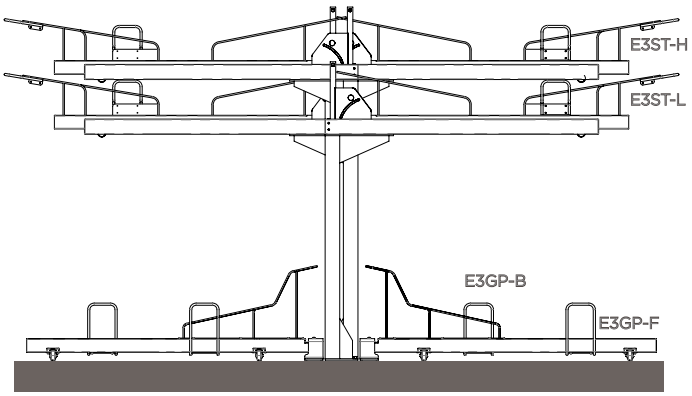


Top view

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.

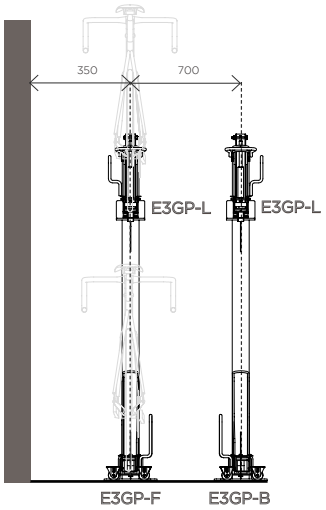


Side view

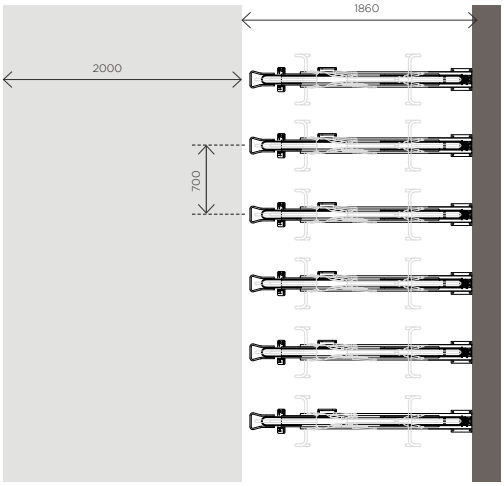
CORA BIKE RACK

PRODUCT SPECIFICATION SHEET

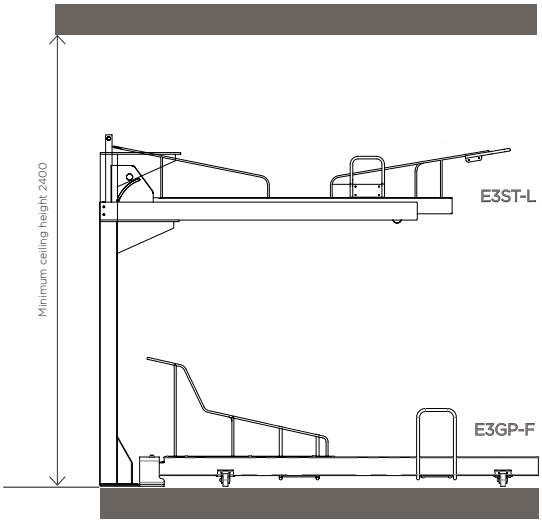
SINGLE LEVEL LAYOUT



Front view



Top view



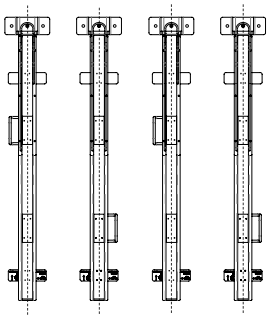
Side view

E3DT-GP DYNAMIC UPPER AND LOWER TIER LAYOUT GUIDE

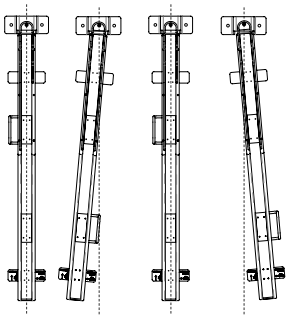
For specific assembly and installation instructions relating to E3DT-GP series racks, please refer to individual instruction information sheets.

Racks should not be installed, based on the information on this sheet alone.

Dynamic side to side movement of lower rack

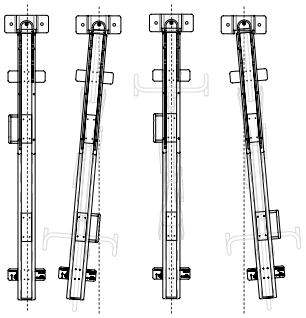


Racks in neutral position



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

CORA BIKERACK

PH 1800 249 878

sales@cora.com.au

www.cora.com.au

Arc de Triomphe™



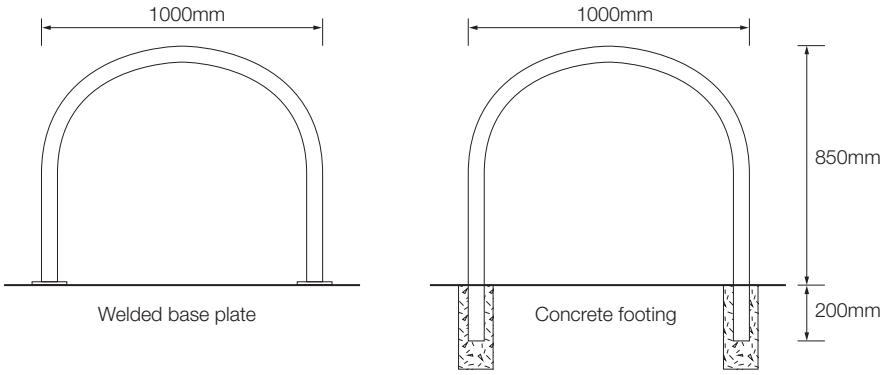
Galvanised finish / Stainless Steel finish

Features



- Each rail supports two adult bikes in an upright position
- Can be either bolted to a concrete slab or concreted in situ
- Available in stainless steel or galvanised steel
- Provides the ability to lock both wheels and frame
- Suitable for foyers and entry areas

Dimensions



Specifications

Material options

- Galvanised (Duragal)
- 316 Marine grade stainless steel

Fixing options

- Welded flange - Bolt on
- In situ

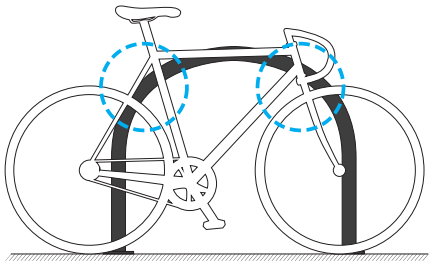
Recommended fasteners

- Galvanised Dynabolts (M10 x 65mm)
- Stainless Dynabolts (M10 x 65mm)
- Shear Nut security fasteners

Dimensions

1000mm [w] x 850mm [h]

Locking Points

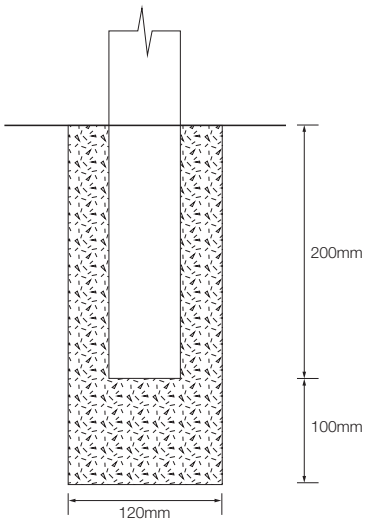


BICYCLE NETWORK BIKE PARKING

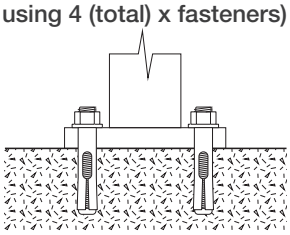
DESIGN. SUPPLY. INSTALL.
Bicycle Network ABN 41 026 835 903
p. 1300 727 563 e. parking@bicyclenetwork.com.au bikeparking.com.au
VIC Level 4, 246 Bourke Street, Melbourne VIC 3000 NSW 234 Crown Street, Darlinghurst NSW 2010
TAS 210 Collins Street, Hobart TAS 7000 NT Suite 5, 18-20 Cavenagh Street, Darwin 0800

Fixing options

In situ (Concrete footing)

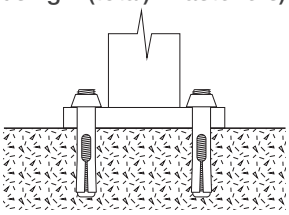


Welded flange (Bolt on)
using 4 (total) x fasteners)



Shown with M10 x 65mm fastener

Welded flange (Security heads)
using 4 (total) x fasteners)

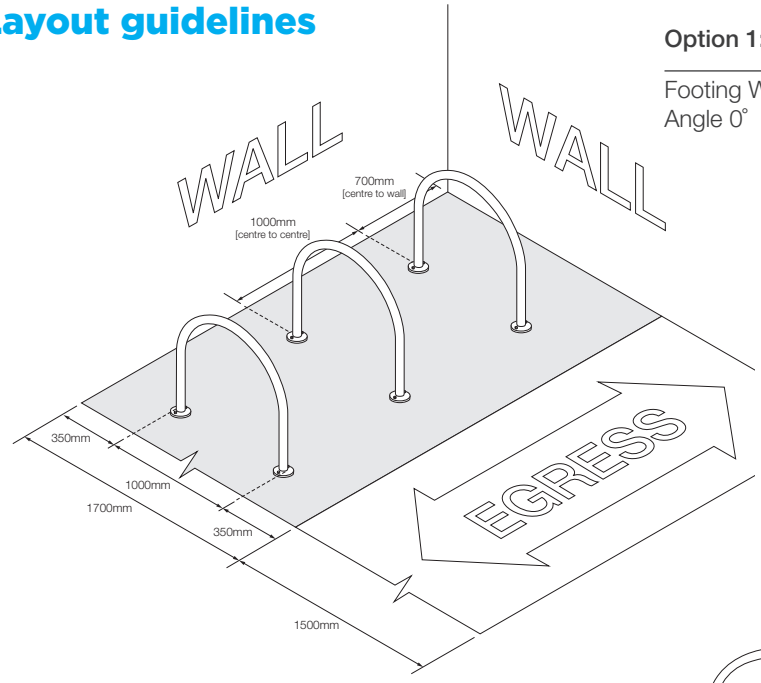


Shown with M10 x 65mm Shear Nuts

Layout guidelines

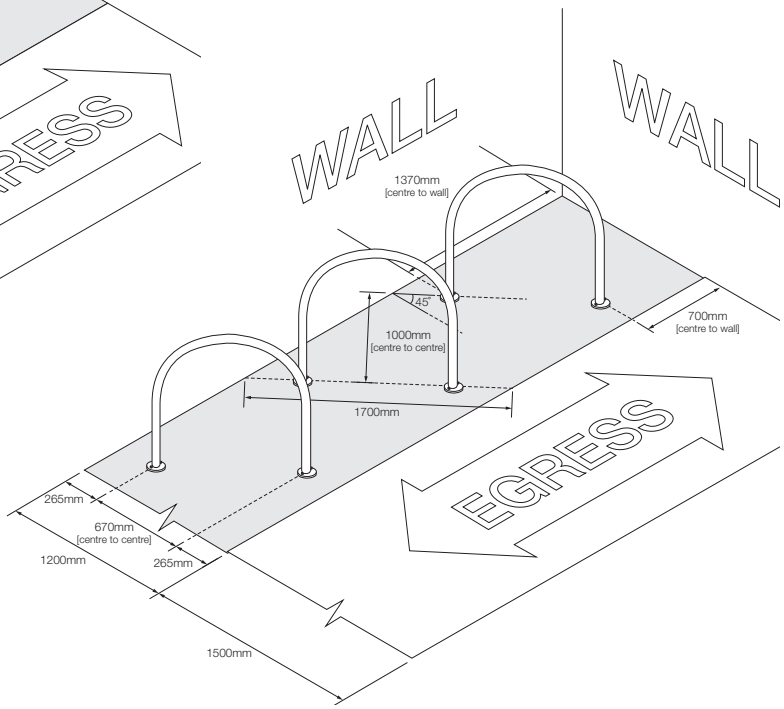
Option 1:

Footing Width 1700mm
Angle 0˚

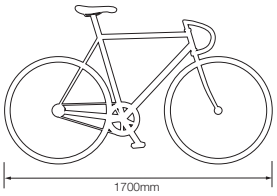


Option 2:

Footing Width 1200mm
Angle 45˚



Typical Bicycle Length



V4.1 - 1/05/2017 | Specification may be subject to change without notice. ©Bicycle Network

BICYCLE NETWORK BIKE PARKING

DESIGN. SUPPLY. INSTALL.

Bicycle Network ABN 41 026 835 903
p. 1300 727 563 e. parking@bicyclenetwork.com.au bikeparking.com.au
VIC Level 4, 246 Bourke Street, Melbourne VIC 3000 NSW 234 Crown Street, Darlinghurst NSW 2010
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waste management plans for all urban developments

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Waste Management Plan



Proposed Development:

405-421 Spencer Street, West Melbourne, Victoria

Prepared for:

Yarrabank Developments Pty Ltd

Document Control

Report Date: 5 September 2024 (supersedes all prior reports)

Prepared By: Carlos Leigh, MIEAust

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Enclosures: Ground Floor Plan and waste truck swept paths.

WASTE MANAGEMENT SUMMARY

- The Operator, as defined below, shall be responsible for managing the waste system and for developing and implementing safe operating procedures.
- Waste shall be stored within the development (hidden from external view).
- Users shall deposit sorted waste into the chutes and/or into designated collection bins.
- Waste shall be collected at the onsite Loading Bay. The collection contractor shall transfer bins between the Bin Stores and the truck.
- A private contractor shall collect waste.

GLOSSARY

Operator: refers to the Owners Corporation, who shall manage site operations (via cleaners, staff and contractors, if required).

User: refers to residents and commercial tenants, who shall utilise the waste system.

1 SPACE AND SYSTEM FOR WASTE MANAGEMENT

1.1 Development Description and Use

This 20-storey development shall consist of residential apartments and commercial tenancies (refer to Table 1).

1.2 Estimated Garbage and Recycling Generation

The following table summarises the waste estimate (m^3/week):

Table 1: Waste Estimate

Waste Source	Base Qty (est.)	Garbage	Food	Recyc.	Glass
Apartments (studio)	No. of units = 44	2,640	880	2,464	1,056
Apartments (1 bed)	No. of units = 55	3,300	1,100	3,080	1,320
Apartments (2 bed)	No. of units = 76	5,700	1,900	5,320	2,280
Apartments (3 bed)	No. of units = 14	1,260	420	1,176	504
Apartments (4 bed)	No. of units = 1	90	30	84	36
Sub-Total Residential		**12,990**	**4,330**	**12,124**	**5,196**
Café	area (m^2) = 378	6,747	1,191	4,234	1,058
Café	area (m^2) = 127	2,267	400	1,422	356
Café/Take-Away	area (m^2) = 76	718	80	718	80
Office	area (m^2) = 433	288	15	303	0
Sub-Total Commercial		**10,020**	**1,686**	**6,677**	**1,494**
TOTAL (Litres/Week)		**23,010**	**6,016**	**18,801**	**6,690**

Note: Waste figures are based on Council guidelines. Amenity areas are included in the above apartment figures.

1.3 Collection Services

It is understood that the development is unable to support access requirements for onsite collection with Council's 8.8m long trucks. Therefore, a private contractor shall be required to collect waste using max. 6.4m long trucks. The Operator shall choose a waste collection provider, negotiate a service agreement, and pay for these services.

Note: Every rateable tenement is liable to pay for municipal charges irrespective of the level of collection services provided by Council.

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1.4 Location, Equipment, and System Used for Managing Waste

The waste management system is summarised as follows:

- Apartment receptacles for garbage, recycling, and glass, plus an organics caddy.
- Tenancy receptacles at internal areas.
- Waste receptacles at amenity areas.
- One Garbage Chute and one Recycling Chute, each with residential level intakes and Residential Bin Store discharge. An optional bin-index shall be considered for each chute.
- Residential Bin Store, Commercial Bin Store, and Loading Bay at Ground Level.
- Collection bins (kept within the Bin Stores - refer to Table 2).

The various collection waste-streams are summarised as follows:

Garbage: General waste shall be placed in tied plastic bags and stored within bins.

Recycling: All recyclables shall be commingled into a single type of collection bin (for paper, cardboard, glass, aluminium, steel, and plastics). However, if glass separation is required in future, the Operator shall provide dedicated glass bins.

Green Waste: Based on negligible landscaping, minimal garden waste generation is anticipated (however, however, the Operator shall engage a contractor, if required).

Food Organics: Users shall place organic waste into Organics bins (a small caddy shall be employed at each tenement). Certified compostable liners shall be adopted for bins and/or caddies.

Other Waste Streams: The disposal of hard/electronic/liquid and other wastes (polystyrene, batteries, paint, chemicals and detox items, etc) shall be organised with the assistance of the Operator and shall be collected privately. Also, the Operator shall organise charity waste collections of unwanted items that are in good condition.

Cafe tenants shall arrange the storage of used cooking oil and its collection by a recycler. The Operator shall organise Grease Interceptor Trap servicing (if any).

Also, office managers shall arrange for the appropriate disposal of secured paper and toner/printer cartridges.

The following table summarises bin quantity/capacity, collection frequency, and area requirements (based on Table 1):

Table 2a: Bin Schedule and Collection Frequency - Current Commingled Glass

Waste Source	Waste Stream	Bin Qty	Bin Litres	Collection Frequency	Net Area m^2
Apartments (shared private bins)	Garbage	4	1,100	3/week	6.4
	Food Organics	6	240	3/week	3.0
	Recycling	6	1,100	3/week	9.6
	Charity Bin	1	240	At Call	0.5
	E-Waste	1	240	1/Month	0.5
	Hard Waste	-	-	1/Month	4.0
Commercial (shared private bins)	Garbage	3	1,100	3/week	4.8
	Garbage	1	240	3/week	0.5
	Food Organics	3	240	3/week	1.5
	Recycling	3	1,100	3/week	4.8
	Hard/E-Waste/Other	-	-	At Call	2.0
Net Waste Storage Area (excludes circulation), m^2:					**37.6**

Table 2b: Bin Schedule and Collection Frequency – Future Separated Glass

Waste Source	Waste Stream	Bin Qty	Bin Litres	Collection Frequency	Net Area m^2
Apartments (shared private bins)	Garbage	4	1,100	3/week	6.4
	Food Organics	6	240	3/week	3.0
	Recycling	4	1,100	3/week	6.4
	Future Glass	3	660	3/week	3.6
	Charity Bin	1	240	At Call	0.5
	E-Waste	1	240	1/Month	0.5
	Hard Waste	-	-	1/Month	4.0
Commercial (shared private bins)	Garbage	3	1,100	3/week	4.8
	Garbage	1	240	3/week	0.5
	Food Organics	3	240	3/week	1.5
	Recycling	2	1,100	3/week	3.2
	Future Glass	3	240	3/week	1.5
	Hard/E-Waste/Other	-	-	At Call	2.0
Net Waste Storage Area (excludes circulation), m^2:					**37.9**

Notes:

- All bins shall be sourced by the Operator (either purchased from a supplier or leased from the collection contractor).
- Additional space would be required for the bin-index systems (also, spare bins shall be considered). For each bin index, please allow a min 150mm clearance all around (plus space to load the bins onto each unit). Index sizes vary between manufacturers.

1.5 Planning Drawings, Waste Areas, and Management of the Waste System

The enclosed drawing illustrates sufficient space for onsite bin storage, as required by the above schedule.

Notwithstanding the above, collection days shall be staged appropriately and the Operator shall stipulate procedures for effective management of the available space.

1.6 Collection Bin Information

The following bins shall be utilised (see Sect. 4.4 for signage requirements):

Table 3: Bin Details

Capacity (litres)	Height (mm)	Width (across front, mm)	Depth (side on, mm)	Empty Weight (kg)	Average* Gross Weight (kg)
240	1060	585	730	13	45
660	1250	1240	780	43	130
1100	1330	1240	1070	65	210

Notes:

- * = Average Gross Weight is based on domestic waste studies (which vary subject to locality and waste-type). Expect greater weight for wet or compacted waste.
- Use the above details as a guide only – variations will occur. The above is based on Sulo plastic flat-lid bins. Also, steel 1100L bins could be adopted.
- Also, bins that receive waste under the chute shall be reinforced to withstand loads from waste falling at high speed.

Table 4: Melbourne Colour Coding

Bin	Garbage	Food & Garden	Recycling	Glass
Lid	Red	Lime	Yellow	Purple
Body	Black	Black	Black	Black

Note: Private bins shall be labelled to identify the waste generator and site address.

2 ACCESS FOR USERS, COLLECTORS, AND COLLECTION VEHICLES

2.1 User Access to Waste Facilities

Residents shall dispose sorted garbage and recyclables via dedicated chutes (available at each apartment level), in accordance with instructions from the chute supplier. For wastes unsuitable for chute disposal, residents shall transfer sorted waste directly to their Bin Store (access via lift/stairs).

Commercial tenants shall dispose sorted waste into allocated collection bins kept within their Bin Store (if required, using a suitable trolley and the lift). Similarly, the Operator shall maintain waste receptacles from amenity areas.

Note: The Operator shall have access to the Bin Stores to rotate the bins, ensuring that empty bins are available along the circulation area so that users are able to reach the bins. Also, the Operator shall monitor the filling of the bins under the chutes and change these when full.

2.2 Collection Arrangements and Access to Waste Facilities

- Waste shall be collected at the onsite Loading Bay.
- Collection staff shall have access to the Bin Stores and transfer bins to the truck and back to the stores.
- The waste collection shall be carried-out by rear-lift vehicles (nom. 6.4m long, 2.1m high, and 6.4 tonnes gross vehicle mass, needing a 2.5m high clearance when lifting 1100L bins).
- The enclosed drawings illustrate the waste system (Table T2b). Also, the enclosed swept paths illustrate truck access.

3 AMENITY, LOCAL ENVIRONMENT, AND FACILITY DESIGN

3.1 Noise Minimisation Initiatives

- Collection bins shall feature rubber wheels for quiet rolling during transfers.
- The waste system and collections shall meet relevant acoustic requirements.
- Local laws shall be observed for all operations in public and private areas.
- Waste collection times shall be as per Council's local laws. Also, the collector shall protect the acoustic amenity by minimising noise during the collection.

3.2 Litter Reduction and Prevention of Stormwater Pollution

The Operator shall be responsible for:

- Promoting adequate waste disposal into the bins (to avoid waste-dumping).
- Securing the waste areas (whilst affording access to users/staff/contractors).
- Preventing overfilled bins, keeping lids closed and bungs leak-free.
- Abating any site litter and taking action to prevent dumping and/or unauthorised use of waste areas.
- Requiring the collection contractor to clean-up any spillage that might occur when clearing bins.

The above will minimise the dispersion of site litter and prevent stormwater pollution (thus avoiding impact to the local amenity and environment).

3.3 Ventilation, Washing, and Vermin-Prevention Arrangements

Waste areas shall feature:

- Ventilation in accordance with Australian Standard AS1668. For chute ventilation, a fan with riser to a rooftop exhaust shall be utilised.
- Adequate vermin-proofing and tight-fitting doors.
- Impervious flooring (also, smooth, slip-resistant, and appropriately drained). Also, impervious walls shall be providing near each chute discharge.
- A graded bin wash area, hosecock, hose, and a suitable floor-waste connected in accordance with relevant authority requirements (alternatively, the Operator shall engage a suitable contractor to wash bins in a mobile bin-wash vehicle). The bin and wash areas may overlap, as stored bins can be moved so that a bin can be washed.
- A water-flushing nozzle with accessible water cock shall be provided at the head of each chute. Include a floor waste and hosecock near each chute outlet.

The Operator shall regularly clean waste areas/equipment. Also, access doors and bin-lids shall be kept closed.

3.4 Design and Aesthetics of Waste Storage Areas and Equipment

Waste shall be placed within collection bins and stored in designated onsite areas (hidden from external view). Following waste collection activities, bins shall be returned to the storage areas as soon as practicable.

Waste facilities shall be constructed of durable materials and finishes, and maintained to ensure that the aesthetics of the development are not compromised. These facilities and associated passages shall be suitably illuminated (this provides comfort, safety, and security to users, staff, and contractors). Access doors shall feature keyless opening from within.

The design and construction of waste facilities and equipment shall conform to the Building Code of Australia, Australian Standards, and local laws.

Chutes, associated shafts, and discharge areas/bin-indexes shall be sized and designed as recommended by a reputable chute manufacturer (chutes and indexes are proprietary items). The chute supplier shall fix safe-operating instructions to each intake-door and place a warning sign on each chute outlet and bin-index.

For improved safety, each chute outlet shall be shrouded with a suitable rubber skirt and designed to minimise the effect of falling waste into the associated bin (and to stop dispersion of debris). Also, access to each chute outlet and bin-index shall be restricted to trained personnel only (this area shall be suitably fenced and kept locked).

The Operator shall train staff and waste collectors concerning hazards associated with the chute discharge area and bin-indexes.

4 MANAGEMENT AND SUSTAINABILITY

4.1 Waste Sorting, Transfer, and Collection Responsibilities

Garbage shall be placed within tied plastic bags prior to transferring into the collection bins or chute. Cardboard shall be flattened and recycling containers un-capped, drained, and rinsed prior to disposal into the appropriate bin/chute. Bagged recycling is not permitted.

Refer to Section 2 for waste transfer requirements and collection arrangements.

4.2 Facility Management Provisions to Maintain & Improve the Waste System

The Operator shall be responsible for managing the waste system and for developing and implementing safe operating procedures (refer to the glossary in page 2).

It shall be the responsibility of the Operator to maintain all waste areas and components, to the satisfaction of users, staff, and the relevant authority (users shall maintain their internal waste receptacles).

The Operator shall ensure that maintenance and upgrades are carried-out on the facility and components of the waste system. When required, the Operator shall engage an appropriate contractor to conduct services, replacements, or upgrades.

4.3 Arrangements for Protecting Waste Equipment from Theft and Vandalism

It shall be the responsibility of the Operator to protect the equipment from theft and vandalism. This shall include the following initiatives:

- Secure the waste areas.
- Label the bins according to property address.
- Waste shall be collected within the onsite Loading Bay (waste shall not be placed for collection outside the site boundary).

4.4 Arrangements for Bins/Equipment Labelling and Ensuring Users and Staff are Aware of How to Use the Waste System Correctly

- The Operator shall provide appropriate signage for the bins. Signage is available at the following internet address: www.sustainability.vic.gov.au.
- The Operator shall publish/distribute “house rules” and educational material to:
  - Inform users/staff about the waste management system and the use/location of the associated equipment (provide the summary in page 2 of this report).
  - Improve facility management results (lessen equipment damage and chute blockages, reduce littering, and achieve cleanliness).
  - Advise users/staff to sort and recycle waste with care to reduce contamination of recyclables.
- For safety when disposing waste and shifting bins, the Operator shall develop and provide safety instructions.

4.5 Sustainability and Waste Avoidance/Reuse/Reduction Initiatives

The ***Environment Protection Amendment Act 2018*** (and the principal EPA Act of 2017) includes fundamentals of environment protection and guidance for waste management decision making. Also, the ***Sustainability Victoria Act 2005*** established Sustainability Victoria as the statutory authority for delivering programs on integrated waste management and resource efficiency.

From a design perspective, the development shall support the Acts by providing an adequate waste system with ability to sort waste.

The Operator shall promote the observance of the Acts (where relevant and practicable) and encourage users and staff to participate in minimising the impact of waste on the environment. For improved sustainability, the Operator shall consider the following:

- Observe the ***Environment Protection Amendment Act 2018*** principle of waste management hierarchy, which states that waste should be managed in accordance with the following order of preference, so far as reasonably practicable: a) avoidance, b) reuse, c) recycling, d) recovery of energy, e) containment, and f) waste disposal.
- Peruse the Sustainability Victoria website: www.sustainability.vic.gov.au.
- Participate in Council and in-house programs for waste minimisation.
- Establish waste reduction and recycling targets; including periodic waste audits, keeping records, and monitoring of the quantity of recyclables found in landfill-bound bins (sharing results with users/staff).

4.6 Waste Management Plan Revisions

For any future appropriate Council request, changes in legal requirements, changes in the development's needs and/or waste patterns (waste composition, volume, or distribution), or to address unforeseen operational issues, the Operator shall be responsible for coordinating the necessary Waste Management Plan revisions, including (if required):

- A waste audit and new waste strategy.
- Revision of the waste system (bin size/quantity/streams/collection frequency).
- Re-education of users/staff.
- Revision of the services provided by the waste collector(s).
- Any necessary statutory approval(s).

5 SUPPLEMENTARY INFORMATION

- The Operator shall ensure that bins are not overfilled or overloaded.
- Waste incineration devices are not permitted, and offsite waste treatment and disposal shall be carried-out in accordance with regulatory requirements.
- For bin traffic areas, either level surfaces (smooth and without steps) or gentle ramps are recommended, including a roll-over kerb or ramp. Should ramp gradients, bin weight, and/or distance affect the ease/safety of bin transfers, the Operator shall consider the use of a suitable tug.
- The Operator and waste collector shall observe all relevant OH&S legislation, regulations, and guidelines. The relevant entity shall define their tasks and:
  - Comply with Worksafe Victoria's Occupational Health and Safety Guidelines for the Collection, Transport and Unloading of Non-hazardous Waste and Recyclable Materials (June 2003).
  - Assess the Manual Handling Risk and prepare a Manual Handling Control Plan for waste and bin transfers (as per regulatory requirements and Victorian COP for Manual Handling).
  - Obtain and provide to staff/contractors equipment manuals, training, health and safety procedures, risk assessments, and adequate personal protective equipment (PPE) to control/minimise risks/hazards associated with all waste management activities. As a starting point, these documents and procedures shall address the following:

Task (to be confirmed)	**Hazard (TBC)**	**Control Measures (TBC)**
Sorting waste and cleaning the waste system	Bodily puncture. Biological & electrical hazards	Personal protective equipment (PPE). Develop a waste-sorting procedure
Bin/waste manual handling	Sprain, strain, crush	PPE. Maintain bin wheel-hubs. Limit bin weight. Provide mechanical assistance to transfer bins
Chute discharge & bin-index operation	Strike & debris from falling waste, and crush/strike/cut by moving bin system and shear points	PPE, staff training, signage and warning system, maintain access restrictions. Include a suitable curtain/skirt around the discharge zone of the chute and a locked mesh fence around the bin-index
Bin transfers and collections. User access to waste areas and loading areas	Vehicular strike/run-over (and equipment hazards listed above)	PPE. Develop a Hazard Control Plan. Maintain visibility. Use a mechanical bin-tipper. Designate the Loading Bay as a Shared Zone
Truck access (reversing & manoeuvring)	Vehicular incident, strike, run-over	PPE. Use a trained spotter. Develop a truck-manoeuvring and traffic-control procedure

Note: The above shall be confirmed by a qualified OH&S professional who shall also prepare site-specific assessments, procedures, and controls (refer to Section 6).

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6 CONTACT INFORMATION

City of Melbourne (local Council), ph 03 9658 9658

Kartaway (private waste collector), ph 1300 362 362

Waste Wise Environmental (private waste collector), ph 1300 550 408

Shred-X (office paper recycler), ph 1300 747 339

Eco-Safe Technologies (odour control equipment supplier), ph 03 9706 4149

FJP Safety Advisors Pty Ltd (OH&S consultant), ph 03 9255 3660

Electrodrive Pty Ltd (tug & trailer supplier – for bin transfers), ph 1300 934 471

Sabco Commercial (supplier of cleaner's trolleys), ph 1800 066 522

Sulo MGB Australia (bin supplier), ph 1300 364 388

One Stop Garbage Shop (bin supplier), ph 03 9338 1411

Wastedrive Equipment (steel bin supplier), ph 02 9630 9333

Wastech Engineering Pty Ltd (chute supplier), ph 1800 465 465

Elephant's Foot (chute supplier), ph 02 9780 3500

ASI JD MacDonald Pty Ltd (chute supplier), ph 03 8558 7200

Note: The above includes a complimentary listing of contractors and equipment suppliers. The stakeholders shall not be obligated to procure goods/services from these companies. Leigh Design does not warrant (or make representations for) the goods/services provided by these suppliers.

7 LIMITATIONS

The purpose of this report is to document a Waste Management Plan, as part of a Planning Permit Application.

This report is based on the following conditions:

- Operational/ ongoing use of the development (excludes demolition/construction stages).
- Drawings and information supplied by the project architect.
- The figures presented in this report are estimates only. The actual amount of waste will depend on the development's occupancy rate and waste generation intensity, the user's disposition toward waste and recycling, and the Operator's approach to waste management. The Operator shall make adjustments, as required, based on actual waste volumes (if the actual waste volume is greater than estimated, then the number of bins and/or the number of collections per week shall be increased, STCA).
- This report shall not be used to determine/forecast operational costs, or to prepare feasibility studies, or to document operational/safety procedures.



TOWN PLANNING

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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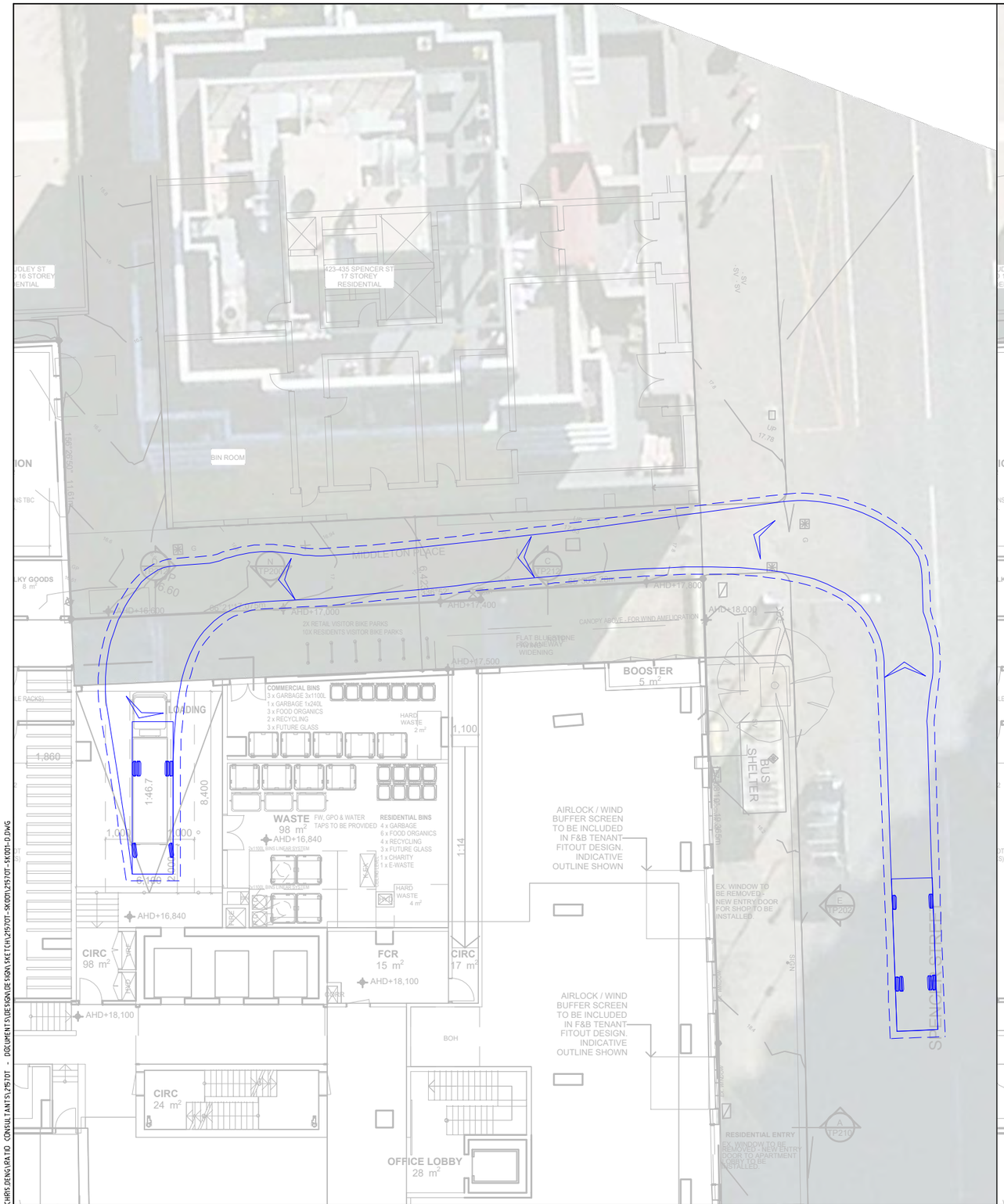
The Builder/Contractor shall verify job dimensions prior to any work commencing. Figured dimensions shall take precedence over scaled work.

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
GROUND FLOOR PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP100	REVISION 1



Mini-Rear Loader Waste Collection Vehicle



VEHICLE ENVELOPE (FORWARD)
300mm CLEARANCE (FORWARD)
VEHICLE ENVELOPE (REVERSE)
300mm CLEARANCE (REVERSE)

Overall Length	6.345m
Body Width	1.700m
Overall Body Height	2.080m
Min Body Ground Clearance	0.205m
Track Width	1.670m
Lock to Lock Time	4.00 sec
Curb to Curb Turning Radius	6.450m

ratio:
RATIO CONSULTANTS PTY LTD
ABN 005 422 104
8 GWYNNE STREET
CREMORNE, VICTORIA 3121
TELEPHONE (03)9429 3111
FACSIMILE (03)9429 3011

Proposed Mixed Use Development
405-421 Spencer Street, West Melbourne
Swept Path Assessment

NOTE:
1) Base Plan Supplied By Plus Architecture
2) Maximum Design Speed 10km/h

RATIO REFERENCE	SHEET No.	PREPARED BY	SCALE	DATE
21570T-SK001-D	12 of 12	C.D.	1:200 @A3	22/07/2024

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22/07/2024 5:02:52 PM

TREE PROTECTION PLAN

405-421 SPENCER STREET, WEST MELBOURNE

PREPARED BY:

SIMON HOWE

CONSULTANT ARBORIST

B.APPSCI (HORT). G.DIP PLAN. DES. (L.ARCH)

JULY 2024

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VERSION	AUTHOR	FILE NAME	DATE
1.0	SH	24-02-03TMP-01.docx	16/02/2024
1.1	SH	24-02-03TMP-01.1.docx	17/07/2024

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1.0 INTRODUCTION

1.1.1 This Tree Protection Plan (TPP) was initially prepared in response to condition 27 of the planning permit issued by the City of Melbourne (TP-2016-722/A) for 405-421 Spencer Street, West Melbourne.

1.1.2 It has subsequently been updated in July 2024 in response to updated plans prepared for the site.

1.1.3 This TPP has been prepared in accordance with the guidelines of AS4970-2009 *Protection of trees on development sites,* as well as the requirements of *Tree protection in the City of Melbourne*.

1.1.4 This TPP details measures to protect and ensure the viability of four trees located outside the subject site within the Batman Street (Tree 1) and Spencer Street (Tree 2-4) road reserves to the south and east of the site respectively.

1.2 SUBJECT TREES

1.2.1 The following trees are subject to this TPP:



TREE: 1	***Ulmus glabra***, Wych Elm			
ORIGIN: Exotic	**HEALTH**: Fair-good	**STRUCTURE**: Fair	**FORM**: Symmetrical	**ULE**: 20+years
AGE: Mature	**HEIGHT** (m): 17	**WIDTH** (m): 16	**DBH** (cm): 76 **DAB** (cm): 90	**TPZ** (m): 9.2 **SRZ** (m): 3.2
NOTES In 1.5 x 3.5 roadside cutout. ID from CoM **CoM ID**: 1013486			**ARBORICULTURAL RATING**: High	



TREE: 2	***Tipuana tipu***, Tipa			
ORIGIN: Exotic	**HEALTH**: Fair-good	**STRUCTURE**: Fair	**FORM**: Symmetrical	**ULE**: 20+years
AGE: Juvenile	**HEIGHT** (m): 2	**WIDTH** (m): 2	**DBH** (cm): 6 **DAB** (cm): 9	**TPZ** (m): 2.0 **SRZ** (m): 1.5
NOTES Undersides of stems chewed. Requires formative pruning over footpath regardless of works In 1.4 footpath cutout **CoM ID**: 1656682			**ARBORICULTURAL RATING**: Low	



TREE: 3	*Platanus orientalis 'Digitata'*, Cyprian Plane			
ORIGIN: Exotic	**HEALTH**: Fair-good	**STRUCTURE**: Fair-good	**FORM**: Symmetrical	**ULE**: 20+years
AGE: Semi-mature	**HEIGHT** (m): 10	**WIDTH** (m): 4	**DBH** (cm): 15 **DAB** (cm): 19	**TPZ** (m): 2.0 **SRZ** (m): 1.7
NOTES 1.4 x 1.4 footpath cutout Minor reduction pruning on west side prior to demolition **CoM ID**: 1440683			**ARBORICULTURAL RATING**: Low	



TREE: 4	*Platanus orientalis 'Digitata'*, Cyprian Plane			
ORIGIN: Exotic	**HEALTH**: Fair-good	**STRUCTURE**: Fair	**FORM**: Symmetrical	**ULE**: 20+years
AGE: Semi-mature	**HEIGHT** (m): 10	**WIDTH** (m): 4	**DBH** (cm): 24 **DAB** (cm): 35	**TPZ** (m): 2.9 **SRZ** (m): 2.2
NOTES 1.4 x 1.4 footpath cutout Minor reduction pruning on west side prior to demolition Suckering at base In 1.5 x 2m cutout **CoM ID**: 1440682			**ARBORICULTURAL RATING**: Medium	

1.3 IMPACT ASSESSMENT

1.3.1 The following drawings have been reviewed in the preparation of this assessment.

- Construction Staging Plan for 405-421 Spencer St, West Melbourne (attached at Section 7.0)
- Demolition Plan TP091 Revision 3 23/08/2021
  Basement 01 Floorplan
  Ground Floorplan
  Level 01 Floorplan
  Level 02 Floorplan
  Architecturals for Coordination
  405-421 Spencer Street, West Melbourne VIC 3003
  Prepared by Plus Architecture

1.3.2 Demolition of most of the site buildings (except for heritage fabric to the corner of Spencer and Batman Streets) and construction of a nineteen-story mixed used building, including basement car park, is proposed. The current site contains boundary to boundary development, and roots from the adjacent street trees are not anticipated to extend into the subject site.

1.3.3 There is limited crown overhang of Tree 1 over the southwestern corner of the site that requires minor reduction pruning, and minor pruning is recommended for Trees 3 and 4 prior to demolition (Figure 1, Figure 2) to minimise the likelihood of inadvertent crown damage.

1.3.4 A new vehicle crossing is proposed to the south west of the site from Batman Street. The encroachment by the grade of the crossing and reconfigured kerbing near Tree 1 is an encroachment into the tree protection zone (TPZ) of 6.5%, however kerbing works are proposed within the structural root zone (SRZ) of the tree, a major encroachment under AS4970. Arborist supervision is required to supervise removal of the existing kerbing and re-instatement of kerb to ensure structural roots from Tree 1 are not damaged by works.

1.3.5 Middleton Place to the north of the site is to be widened, including the crossing interface with Spencer Street within the tree protection zone (TPZ) of Tree 4. Widening of the crossing is an encroachment of 17% of the TPZ and is within its structural root zone (SRZ), a major encroachment under AS4970. Root pruning is required prior to excavation for the widened crossing to ensure roots closer to the tree are not shattered or torn by excavation works.



FIGURE 1 PRUNING REQUIRED FOR TREE 1 PRIOR TO DEMOLITION



FIGURE 2 MINOR CLEARANCE PRUNING IS RECOMMENDED FOR TREE 3 AND 4 PRIOR TO DEMOLITION

1.4 CITY OF MELBOURNE MANDATORY TREE PROTECTION GUIDELINES

- Canopy pruning shall only be undertaken by City of Melbourne approved contractors if deemed appropriate and approved by Urban Forest and Ecology team.
- All roots located on Council managed property greater than 30mm in diameter will be retained. (NOTE: Pruning of any roots greater that 30mm in diameter requires the approval of a Council arborist).
- The property owner/developer will be liable for any damage caused to public trees during the development process, including damage by privately engaged contractors.
- Urban Forest and Ecology must be notified within 24hrs of any breach of the TPP or where damage has occurred to trees and will be documented in the checklist.
- Council will hold a bank guarantee supplied by the developer against the approved TPP for the combined amenity and environmental service values of the trees. Where the TPP is breached, part or the entire bank guarantee will be held as payment until other payment is received for rectification, amelioration or replacement works.
- All rectification works including but not limited to pruning, soil de-compaction, irrigation, fertiliser application and tree removal and replacement will be undertaken by City of Melbourne contractors and invoiced at scheduled rates. The City of Melbourne reserves the right to determine and undertake appropriate rectification works for all damages which may occur due to the project.
- The project arborist will complete a final inspection prior to protection removal at project completion and provide a concluding report to Council for review and approval prior to release of the bank guarantee. The report must document any tree damage, provide rectification or amelioration recommendations and contain the completed compliance checklist.

2.0 PROJECT ARBORIST

2.1.1 Prior to works commencing on site a project arborist is to be appointed to oversee implementation of this TPP. The project arborist is to hold a minimum qualification of Certificate V (or equivalent) in Arboriculture.

2.1.2 The project arborist is to record and certify each of the tree protection measures outlined within this TPP, record variations and non-compliance as required in a compliance checklist. Records should include notes and photographs.

2.1.3 The following provisional timetable outlines the project arborist's supervision for this project. Each stage should be recorded for the purposes of certification.

TABLE 1 PROJECT ARBORIST SUPERVISION TIMETABLE

PRE-CONSTRUCTION	
1.	Meet with project manager / builder to discuss implementation of tree protection plan.
2.	Certification of installation of tree protection fencing and hoardings and tree protection signage.
3.	Liaison with City of Melbourne (CoM) Urban Forest and Ecology team /approved contractors for pruning works.
CONSTRUCTION	
4.	Site establishment, including compliance with TPP
5.	Periodic inspections – minimum 2-monthly intervals
6.	Supervision of demolition/removal of bluestone kerbing within TPZ of Tree 1, and sub-grade preparation for new kerb and crossing grade. If roots greater than 30mm require pruning, the project arborist must liaise with CoM Urban Forest and Ecology team for approval, in accordance with CoM mandatory tree protection guidelines.
7.	Undertake root pruning of Tree 4 prior to excavation for widened crossing to Middleton Place. Liaise with CoM Urban Forest and Ecology team before cutting any roots greater than 30mm diameter.
8.	Practical completion. Removal of tree protection measures
POST-CONSTRUCTION	
9.	Final certification, including tree condition assessment, certify completed works in compliance with approved plans and specifications for tree protection as well as details of deviations from the approved tree protection measures and impacts to the tree. Submit completed compliance and concluding report to CoM.

3.0 TREE PROTECTION MEASURES - PRE-CONSTRUCTION

3.1 TREE PROTECTION HOARDING

3.1.1 Tree protection hoarding is to be installed to each of the three trees along Spencer Street (Trees 2-4) prior to any works occurring on site.

3.1.2 Hoarding is to be installed as shown on the TPP at Section 6.0., enclosing the trunk of each tree and the entirety of each footpath cut-out.

3.2 HOARDING TYPE

3.2.1 The TPZ hoarding is to be heavy duty plywood (form-ply or marine grade plywood) on timber frame enclosures for the full extent of the cut-outs, to a minimum height of 2 metres. Hoarding is to be installed before any machinery or materials are brought onto the site.

3.2.2 Tree protection signage as per Appendix C, AS4970-2009 is to be affixed to the tree protection hoarding with the project arborist and project manager / builder's contact details (see Figure 3).

3.2.3 Once installed, the hoarding must not be removed or altered without the prior approval of the project arborist.

3.3 TREE PROTECTION FENCING

3.3.1 Tree 1, located in the Batman Street road reserve is outside the neighbouring property at 100-154 Batman Street within a 1.5m x 3.4m roadside cut out. This area should be fenced with 2.4m temporary security panels on concrete blocks, forming a 2.4m x 4.8m enclosure around the tree.

3.3.2 Tree protection signage as per Appendix C, AS4970-2009 is to be affixed to the tree protection fencing with the project arborist and project manager / builder's contact details (see Figure 3).

3.3.3 Once installed, the fencing must not be removed or altered without the prior approval of the project arborist.

3.4 PRUNING

3.4.1 No site worker is to prune or lop the subject trees.

3.4.2 The project arborist is to liaise with the City of Melbourne Urban Forest and Ecology team /approved contractor to undertake limited clearance pruning prior to demolition commencing on site. Pruning is limited in all cases to fine peripheral branches overhanging (Tree 1) or close to (Tree 3 and 4) the existing building façade.

3.4.3 Tree 2, a juvenile specimen, requires formative pruning regardless of site development as its lower branches are partially obstructing the footpath.

3.4.4 Before and after photographs of the pruning are to be recorded for the purposes of certification by the project arborist.

3.4.5 In the event of accidental damage, the project arborist is to notify the Urban Forest and Ecology team. Canopy pruning shall only be undertaken by City of Melbourne approved contractors if deemed appropriate and approved by Urban Forest and Ecology team. Any other pruning must be recorded for the purposes of certification.



FIGURE 3 TREE PROTECTION ZONE SIGNAGE

4.0 TREE PROTECTION MEASURES - CONSTRUCTION

4.1 ACTIVITIES NOT PERMITTED WITHIN THE TPZ

4.1.1 The following activities are not permitted within the fenced or unfenced portion of the TPZ of all trees

- Machine excavation including trenching, unless undertaken as part of approved works
- Excavation for silt fencing
- Cultivation
- Storage
- Preparation of chemicals, including preparation of cement products
- Parking of vehicles and plant
- Refuelling
- Dumping of waste
- Wash down and cleaning of equipment
- Placement of fill
- Lighting of fires
- Soil level changes, unless undertaken as part of approved works
- Excavation for sub-surface irrigation and lighting conduit
- Temporary or permanent installation of utilities and signs, and

- Physical damage to the tree

4.2 KERB DEMOLITION AND SUB-GRADE PREPARATION – TREE 1

4.2.1 The project arborist must supervise demolition/removal of bluestone kerbing within the TPZ of Tree 1 and sub-grade preparation for new kerb and crossing grade, to ensure structural roots from Tree 1 are not inadvertently damaged by works.

4.2.2 If roots greater than 30mm require pruning, the project arborist must liaise with City of Melbourne Urban Forest and Ecology team for approval, in accordance with City of Melbourne mandatory tree protection guidelines.

4.3 ROOT PRUNING – TREE 4

4.3.1 Middleton Place to the north of Tree 4 is to be widened as part of site development, including a new crossing interface to Spencer Street. Prior to excavation for the widened crossing, the project arborist is to undertake root running along the line of proposed excavation to ensure roots closer to the tree are not shattered or torn by excavation equipment.

4.3.2 The project arborist will need to liaise with the City of Melbourne Urban Forest and Ecology team for approval to cut any roots greater than 30mm diameter.

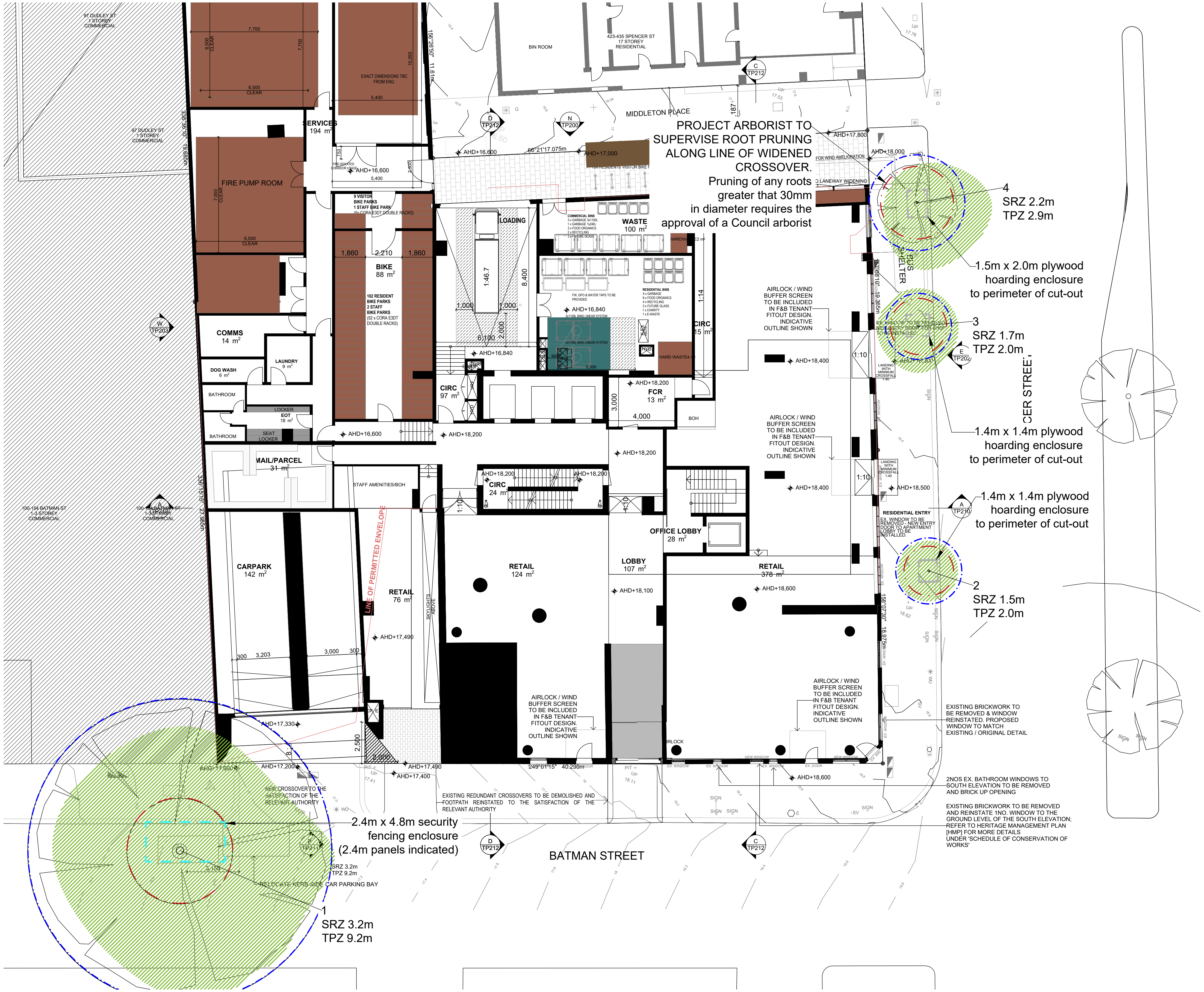
5.0 TREE PROTECTION MEASURES – POST-CONSTRUCTION

5.1.1 At the completion of works the Project Arborist is to undertake a final inspection of all four trees.

5.1.2 Final certification can then be issued, included a completed checklist and inspection report for submission to Council for review and approval prior to release of the bank guarantee.

5.1.3 Certification must document any tree damage and provide rectification or amelioration recommendations.

6.0 TREE LOCATION/HOARDING PLAN



PROJECT ARBORIST SUPERVISION TIMETABLE

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2.	Certification of installation of tree protection fencing and hoardings and tree protection signage.
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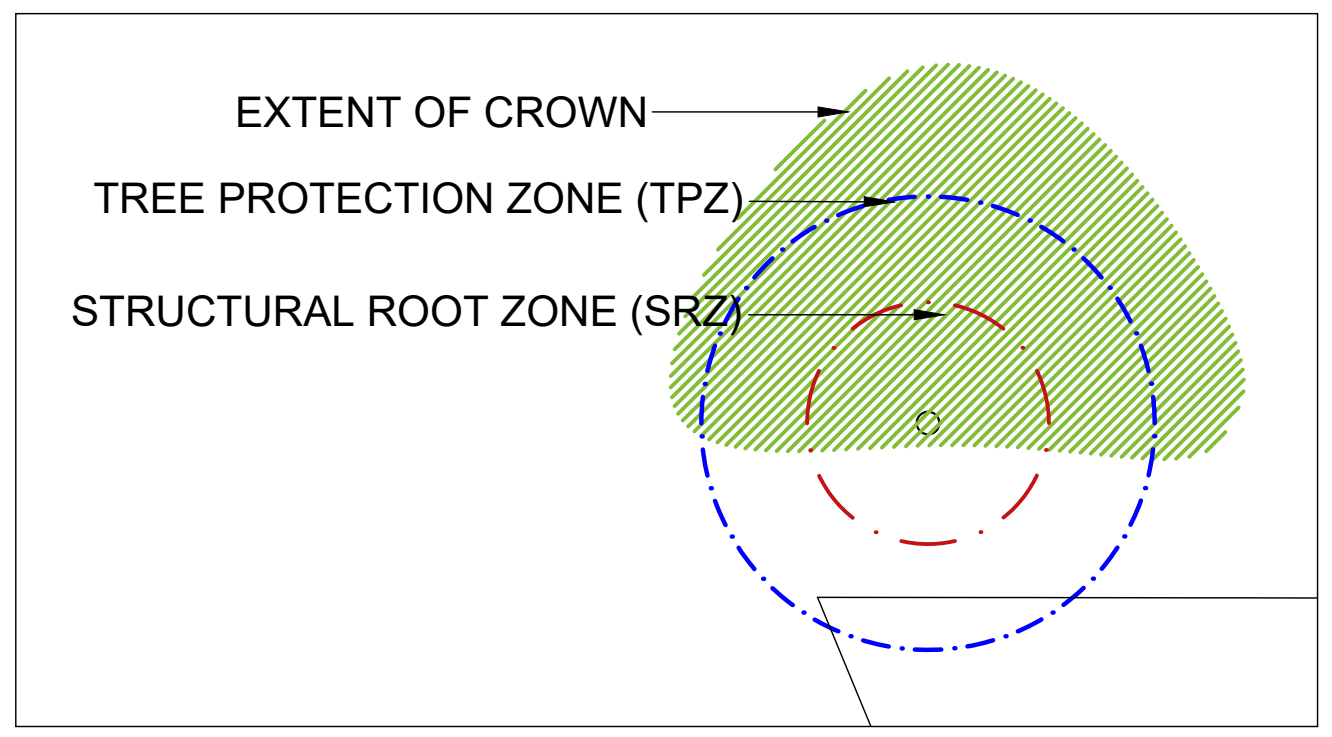
POST-CONSTRUCTION	
9.	Final certification, including tree condition assessment, certify completed works in compliance with approved plans and specifications for tree protection as well as details of deviations from the approved tree protection measures and impacts to the tree. Submit completed compliance and concluding report to CoM.



405-421 SPENCER STREET, WEST MELBOURNE
Address

TREE LOCATION / HOARDING PLAN
Drawing

23-08-01 — Job N°.
1:250@A3 — Scale
16.02.2024 — Date
SH — Drawn
TPP 01 — Drawing N°.
B21.08.24 — Revision

TREE DEPARTMENT
MELBOURNE | CANBERRA
ABN 33 567 299 808 **info@treedepartment.com.au** P.O. BOX 283 CLIFTON HILL VIC 3068

7.0 CONSTRUCTION STAGING PLAN

PLANNING ENVIRONMENT ACT 1987
MELBOURNE PLANNING SCHEME
Endorsed Plan referred to in Permit No. TP-2016-722/A
Sheet 1 of 48 Date: 19/10/2021
For and on behalf of Melbourne City Council
Officer: Nikki Brock

LEGEND
CONCRETE PUMPING BAY
CONSTRUCTION LOADING ZONE
PUBLIC PROTECTION GANTRY
PUBLIC PROTECTION GANTRY
SOLID PLY HOARDING
STREET TREE
SUBJECT SITE

SUBJECT SITE
405-421 Spencer St, West Melbourne

91-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

97 DUDLEY ST
1 STOREY
COMMERCIAL

BIN ROOM

MIDDLETON PLACE

419 RESTAURANT
No. 419-421
SINGLE STOREY BRICK

BUS SHELTER

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

SPENCER ST AUTOMOBILES
No. 405-417
MULTI STOREY BRICK
RENDER AND PRECAST DWELLINGS

EXIST. OVENS

DALTON
BAKERY
1-2 STOREY
BRICK

2,478.93 mm

5,606.67 mm

CONSTRUCTION LOADING ZONE

BATMAN STREET

SPENCER STREET

TP - FOR ENDORSEMENT

DATE	REVISION	BY	CHK	NO.
26/09/2016	RESPONSE TO COUNCIL RFI	JP	CN	1
22/01/2021	TOWN PLANNING FOR ENDORSEMENT	DC	MY	2
23/09/2021	RESPONSE TO HERITAGE RFI & HMP REVIEW	DC	MY	3

CONSULTANTS

STRUCTURAL ENGINEER	#CONSULTANT1-COMPANY NAME	T:CONS. 1 PHONE
SERVICES ENGINEER	#CONSULTANT2-COMPANY NAME	T:CONS. 2 PHONE
BUILDING SURVEYOR	#CONSULTANT3-COMPANY NAME	T:CONS. 3 PHONE
TREE ENGINEER	#CONSULTANT4-COMPANY NAME	T:CONS. 4 PHONE
ESD	#CONSULTANT5-COMPANY NAME	T:CONS. 5 PHONE

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The Builder/Contractor shall verify job dimensions prior to any work commencing. Figured dimensions shall take precedence over scaled work.

PROJECT	405-421 SPENCER STREET WEST MELBOURNE VIC 3003
DRAWING TITLE	EXISTING PLAN
SCALE	1:100 @ B1
DATE	24/09/2016
PLOT DATE	3/09/2021
DRAWN	DC
CHECKED	CN
JOB NO.	12023
DRAWING NO.	TP090
REVISION	3

405-421 Spencer St

Sustainability Management Plan

Prepared for: Yarrabank Developments

Project No: MEL4359
Date: 5 September 2024
Revision: 04



Creating great environments with great people

Project:	405-421 Spencer St
Location:	405-421 Spencer Street West Melbourne, VIC
Prepared by:	ADP Consulting Pty Ltd Level 13, 55 Collins Street Melbourne, VIC, 3000
Project No:	MEL4359
Revision:	04
Date:	5 September 2024

Rev	Date	Comment	Author	Signature	Authorisation & QA	Signature
01	08/08/24	Town planning	Mila Amey	MA	Vickie Huang	VH
02	21/08/24	Town planning (NCC2019)	Mila Amey	MA	Vickie Huang	VH
03	26/08/24	Town planning (NCC2019)	Radhika Gupta	RG	Vickie Huang	VH
04	05/09/24	Town planning (NCC2019)	Radhika Gupta	RG	Vickie Huang	VH

Project Team	
Client / Principal	Yarrabank Developments
Architect	Plus Architects
Building Services	ADP Consulting
ESD Consultant	ADP Consulting

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Executive Summary

The following report provides an overview of the environmentally sustainable development (ESD) strategy for the proposed mixed-use development at 405-421 Spencer Street, West Melbourne within the municipal boundaries of the City of Melbourne.

The objective of this report is to describe how best practice ESD will be incorporated in the development, including targets and proposed design approaches, and to demonstrate that the development meets or exceeds the standards required by the Melbourne City Council Planning Scheme.

Melbourne Council Planning Scheme

The site is situated in West Melbourne within the municipal boundaries of the Melbourne City Council. The council has objectives and strategies relating to ESD which are contained in the council's Planning Scheme. These policies and objectives have been taken into consideration throughout this assessment and in our advice given to the applicant.

The Planning Policy allows large scale buildings to demonstrate best practice ESD standards by using the Green Star rating tool through the Green Building Council Australia (GBCA).

Overall, the proposed ESD initiatives of this development will meet council's overarching goal of promoting sustainable design and buildings.

Environmentally Sustainable Development (ESD) Approach

The project approach includes the following targets as identified in the policy requirements, statutory requirements and the project brief:

- Green Star Design and As Built v1.3 – 5-Star self-assessed rating.
- Average NatHERS rating of 7-stars across the development, with no individual dwelling achieving less than 5.5-stars (residential only)
- Improved building fabric performance on NCC energy efficiency requirements for non-residential and residential common areas of the development.
- MUSIC assessment demonstrating Best Practice pollutant removal objectives are met and potentially exceeded.

Green Star Benchmarking

Green Star has been utilised to benchmark the environmental performance of the project. The proposal has the preliminary design potential to achieve the following performance measures:

- 5-star rating under Green Star - Design & As Built v1.3 (self-assessed).

The table below summarises the 5-Star Green Star points benchmarked for the project, with a full description of the Green Star pathway located in Appendix A. Points benchmarked are subject to change throughout the design development period, whilst maintaining a 5-star rating.

A 5-star rating requires a minimum 60 points to be awarded.

Green Star Point Pathway

Green Star Category / Credit Target	Points
Management	12
Indoor Environment Quality	16
Energy	9.3
Transport	6
Water	5
Materials	8
Land Use and Ecology	4
Emissions	4
Innovation	5
Total Points Benchmarked	**69.3**

1. Introduction

The following report provides an overview of the environmentally sustainable development (ESD) strategy for the proposed mixed-use development at 405-421 Spencer Street, West Melbourne, within the municipal boundaries of the City of Melbourne.

The objective of this report is to describe how best practice ESD will be incorporated in the development, including targets and proposed design approaches, and to demonstrate that the development meets or exceeds the standards required by the Melbourne City Council Planning Scheme.

1.1 Project background

The proposed 190 dwelling development is located at 405-421 Spencer Street, West Melbourne in close proximity to amenities and shops within the West Melbourne precinct. The development includes;

- Basement – carpark
- Ground level – Retail tenancies, bicycle parking and services.
- Level 1 – Commercial and communal Spaces.
- Level 2 – Apartments and communal Spaces.
- Levels 3-18 – Apartments
- Level 19 – Apartments and communal terrace and space.

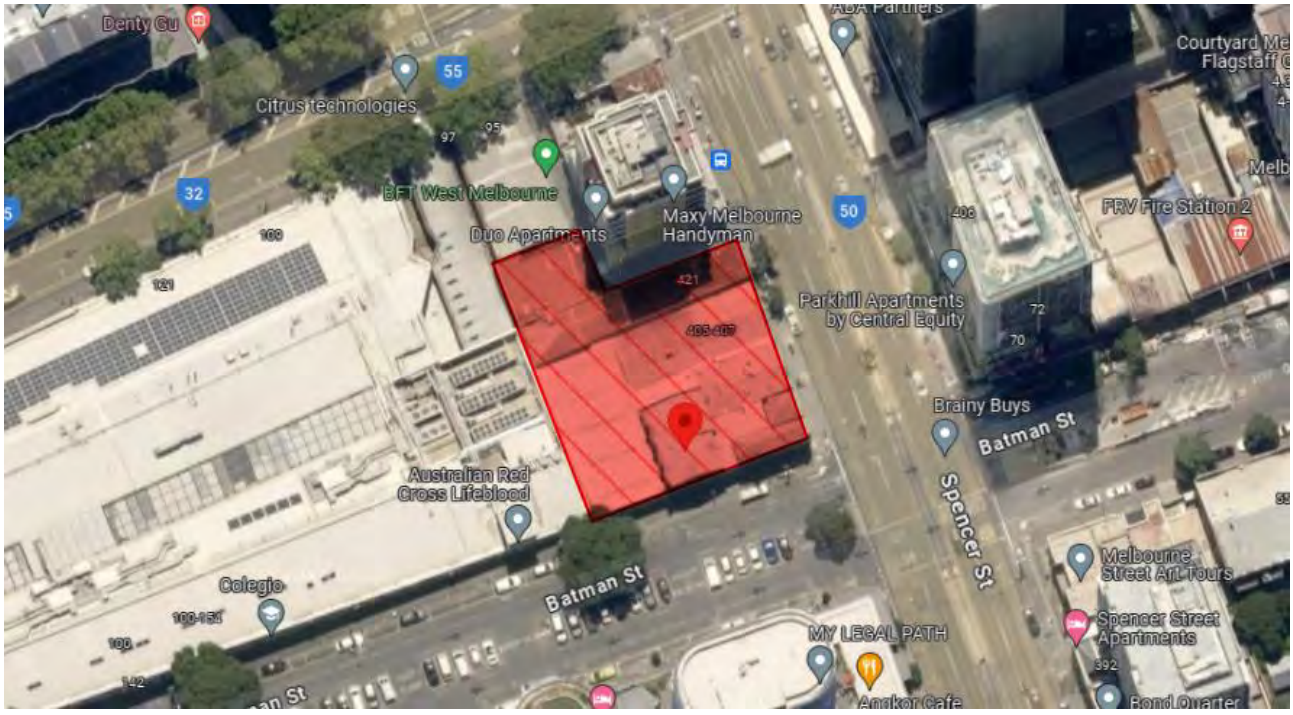


Figure 1 Site location of the proposed development

1.2 Statutory context

1.2.1 Melbourne City Council

The site is situated in West Melbourne within the municipal boundaries of the City of Melbourne. The City of Melbourne has objectives and strategies relating to ESD which are contained in the Planning Scheme;

- Clause 22.19 Energy, Water and Waste Efficiency
- Clause 22.23 Stormwater Management (Water Sensitive Urban Design)
- Clause 58.03 Apartment Developments – Site Layout (Energy efficiency objectives, Standard D6)

These policies and objectives have been taken into consideration throughout this assessment and in our advice given to the applicant.

The Planning Policy allows large scale buildings to demonstrate best practice ESD standards by using the Green Star rating tool through the Green Building Council Australia (GBCA).

Overall, the proposed ESD initiatives of this development will meet Council's overarching goal of promoting sustainable design and buildings.

1.2.1.1 Clause 22.19 Environmentally Sustainable Design

The overarching objective is that development should achieve best practice in environmentally sustainable development from the design stage through to construction and operation.

In the context of this policy best practice is defined as a combination of commercially proven techniques, methodologies and systems, appropriate to the scale of development and site-specific opportunities and constraints, which are demonstrated and locally available and have already led to optimum ESD outcomes. Best practice in the built environment encompasses the full life of the build.

It is a policy to encourage innovative technology, design and processes in all development, which positively influence the sustainability of buildings.

The following objectives should be satisfied where applicable:

- To ensure buildings achieve high environmental performance standards at the design, construction and operation phases.
- To minimise the city's contribution to climate change impacts by reducing greenhouse gas emissions.
- To improve the water efficiency of buildings and encourage the use of alternative water sources.
- To minimise the quantity of waste going to landfill and maximise the recycling and reuse of materials.
- To minimise the impacts of waste on the community.
- To encourage the connection of buildings to available or planned district energy, water and waste systems in urban renewal areas in order to achieve additional energy, water & waste

22.17-4 Performance measures

For residential developments over 5000m2 GFA, the following minimum outcomes are required to be met:

- Energy – Meet BCA / NCC requirements.

- Water – Achieve at least 1 point for the Water credit under the current version of the GBCA Green Star rating tool or equivalent.
- Waste – Prepare a Waste Management Plan in accordance with the current version of the *City of Melbourne's Guidelines for Waste Management Plans*.
- Whole development – achieve a 5 star rating under a current version of the Green Star rating tool or equivalent.

1.2.1.2 Clause 22.23 Stormwater Management (Water Sensitive Urban Design)

22.23-2 Objectives

- To achieve the best practice water quality performance objectives set out in the Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO 1999 (or as amended). Currently, these water quality performance objectives require:
  - Suspended Solids - 80% retention of typical urban annual load
  - Total Nitrogen - 45% retention of typical urban annual load
  - Total Phosphorus - 45% retention of typical urban annual load
  - Litter - 70% reduction of typical urban annual load
- To promote the use of water sensitive urban design, including stormwater re-use.
- To mitigate the detrimental effect of development on downstream waterways, by the application of best practice stormwater management through water sensitive urban design for new development.
- To minimise peak stormwater flows and stormwater pollutants to improve the health of water bodies, including creeks, rivers and bays.
- To reintegrate urban water into the landscape to facilitate a range of benefits including microclimate cooling, local habitat and provision of attractive spaces for community use and wellbeing.

1.3 ESD approach

1.3.1 Project sustainability brief

The project approach includes the following targets as identified in the policy requirements, statutory requirements and the project brief:

- Green Star Design and As Built v1.3 – 5-Star self-assessed rating.
- Average NatHERS rating of 7-stars across the development, with no individual dwelling achieving less than 5.5-stars (residences only)
- Improved building fabric performance on NCC2019 energy efficiency requirements for non-residential and residential common areas of the development.
- MUSIC assessment demonstrating Best Practice pollutant removal objectives are met and potentially exceeded.

This report is based on the set of drawings plotted 30/08/2024.

1.3.2 Green Star

Green Star has been utilised to benchmark the environmental performance of the project. The proposal has the preliminary design potential to achieve the following performance measures:

- 5-star (self-assessed) rating under Green Star - Design & As Built v1.3.

The Green Star Pathway forms the approach and ESD targets contained within this SMP. A summary of the Green Star approach can be found in Section 3 and Appendix A.

The Green Star approach will be self-assessed and minor changes to the outlined pathway contained within may change through the design development process, whilst maintaining a 5-star rating equivalent.

2. ESD Initiatives

2.1 Construction and Building Management



2.1.1 Operational environmental management plan

An Owners Project Requirement (OPR) document will be produced which summarises the targets for the environmental performance of the project.

Environmental reporting goals will be set for the building, including greenhouse gas emissions, energy use and water use and shared with building users and tenants.

Best practice green lease agreements will be produced for all tenants to understand and comply with the commitment targets.

2.1.2 Building commissioning and tuning

2.1.2.1 Services and Maintainability Review

A comprehensive services and maintainability review of the project to be performed during design stage and prior to construction. Either an ICA (if engaged) or the Head Contractor is to conduct this review and produce a Services and Maintainability Report prior to construction.

2.1.2.2 Building Systems Commissioning and Tuning

Following practical completion, full re-commissioning will be undertaken 12 months with monthly monitoring undertaken and outcomes reported including a quarterly tuning process.

2.1.2.3 Independent commissioning agent

An independent commissioning agent will be engaged by the client and/or builder to advise, monitor, and verify the commission and tuning of the nominated building system. Novus will be engaging CSI Services Group as the ICA for the project.

2.1.3 **Building user's guide**

Building operation and maintenance manuals and a CIBSE TM31 Building Logbook will be produced and made available to building owners and occupants.

Building user information will also be made available to all relevant tenants and further displayed on screens in real time to inform building users and visitors.

2.1.4 Commitment to performance

The development will commit to setting, measuring and reporting on environmental performance. Reporting goals may include greenhouse gas emissions, energy targets, water targets and waste targets.

Additionally, a formal commitment will be in place to reduce demolition waste at the end of life of an interior fitout or base building component.

2.1.5 Metering

Accessible metering to all energy and water common uses and major uses within the building will be provided to meet metering requirements.

2.1.5.1 Energy Metering

Separate energy meters will be provided to monitor each of the following distinct uses:

- Each individual floor
- Each separate non-residential tenancy
- Residential common area lighting, heating, cooling and ventilation
- Vertical transport
- Photovoltaic system supply
- Any source of demand greater than 5% of the building's total energy use
- Any source of demand greater than 100kW

2.1.5.2 Water Metering

Separate water meters (and/or sub-meters and private meters) will be provided to monitor each of the following distinct uses:

- Each individual floor
- Irrigation
- Rainwater tank supply
- Common area amenities
- Any source of demand greater than 10% of the project's total water use

2.1.6 Monitoring

A Building Management System will be installed to monitor and control the building various systems.

The monitoring system will be capable of performing the following functions:

- Collecting data from all meters (where possible).
- Alerting to missing data due to failures.
- Recording energy use and water consumption and providing a reporting capability at user adjustable intervals.
- Raising an alarm when the energy or water use increase beyond certain parameters and automatically and instantly issue an alert the facilities manager. The process to assess, correct and validate alerts or faults must be detailed and contained in an accessible location.
- Providing a breakdown of the information by building system (mechanical, electrical, etc.), or by space (or by tenanted floor).
- Including the consumption water or energy, the load versus time (load profile), and the power factor (in the case of energy).
- Producing, as a minimum, a quarterly report that is automatically emailed to the facilities manager responsible for the building.

2.1.7 Construction environmental management plan

A project specific Construction Environmental Management Plan (EMP) will be developed and implemented by the Head Contractor. In addition to this, the builder will be required to have ISO 14001 Environmental Management System accreditation.

2.1.8 High quality staff support

Staff support programs will be implemented that promote positive mental and physical health outcomes as well as enhance worker's knowledge on sustainable practices.

2.1.8.1 Mental and Physical Health

At least three of the following must be addressed in the mental and physical health support programs:

- healthier eating and active living
- reduced harmful alcohol and drug and tobacco-free living
- increase social cohesion, community, and cultural participation
- understanding depression
- preventing violence and injury
- suicide prevention
- decrease psychological distress

2.1.8.2 Sustainable Practises

Training can be provided through one, or a combination of:

- On-site training, such as by including the items above as part of site induction practices.
- Off-site training, such as by providing sustainability training to site workers via a TAFE or similar program within the last 3 years.
- Online training, such as by a third-party service that can provide training on sustainability topics and track personnel who have taken the relevant materials within the last three years.

2.1.9 Waste Management

A specialist Operational Waste Management Plan has been developed for the development and include garbage and recycling facilities as appropriate.

2.2 Indoor Environment Quality



2.2.1 Indoor Air Quality

2.2.1.1 Ventilation System Attributes

The ventilation system will be designed to mitigate the entry of outdoor pollutants, for ease of maintenance and cleaning and will be cleaned prior to occupation and use. The design will comply with ASHRAE 62.1-2003 regarding minimum separation distances between pollution sources and outdoor air intakes.

2.2.1.2 Provision of Outdoor Air

The apartments will be naturally ventilated in accordance with AS 1668.4:2012.

2.2.1.3 Kitchen exhausts

All kitchens must be ventilated in accordance with AS1668.2:2012. Kitchens are required to be physically separated from the adjacent space, or have an opening no larger than 2.5m^2.

For residential kitchens, physical separation is not required. However, they must either exhaust to the outside, or if recirculating, have a filtration media that has been proven to effectively remove kitchen pollutants.

2.2.2 Acoustic Comfort

2.2.2.1 Internal Noise levels

Internal noise levels to be no more the 5dB(A) above the "satisfactory" sound levels in Table 1 on AS/NZS 2107:2000.

2.2.2.2 Reverberation

Reverberation time to be below the maximum stated in the 'Recommended Reverberation Time' provided in Table 1 of AS/NZ 2107:2000.

2.2.2.3 Acoustic Separation

Design to include acoustic separation to minimise crosstalk between rooms and between rooms and open areas.

2.2.3 Artificial Lighting

2.2.3.1 Colour accuracy and flicker free

All lights on the project will be flicker free and accurately address the perception of colour in the space including products with electronic ballasts and a minimum colour rendering index (CRI) of 80.

2.2.3.2 General Illuminance and Glare Reduction

2.2.3.2.1 Dwellings

Lighting will be provided in living spaces, kitchens, bathrooms and bedrooms where:

> The lighting design includes or permits general fixed lighting that provides good, maintained illuminance values for the entire room; and

- The installed fittings all have a rated colour variation not exceeding 3 MacAdam Ellipses (decorative fittings being exempt).

2.2.3.2.2 All other areas

Illuminance levels be provided as per best practice levels as per AS1680 depending on the activity performed in that space.

2.2.3.3 Surface Illuminance

Nominated areas to have a combination of lighting and surfaces to improve uniformity of lighting to give visual interest.

2.2.3.4 Occupant Lighting Control

Appropriate task-based lighting will be provided to kitchens, bathroom and services areas. In addition, sufficient power outlets will be provided around predicted furniture layouts to enable the use of lamps or any task-based lighting for home offices and the like.

2.2.4 Visual Comfort

2.2.4.1 Daylight

Daylight access is determined using manual hand calculations and complying with the GBCA's *Green Star Daylight and Views Hand Calculation Guide*. The nominated areas of residential and non-residential areas have been assessed as having adequate daylight. Refer to Appendix E.

2.2.4.2 Glare Prevention

Glare reduction will be achieved to all facades through a combination of blinds, screens and fixed devices. The Green Star 12.0B credit pathway will be followed to achieve glare prevention for the development. Blinds will be provided to at least 95% of the area of viewing façade and skylights, be controlled by affected occupants within each individual space and have a Visual Light Transmittance (VLT) of ≤10%.

2.2.4.3 Views

At least 60% of primary nominated spaces will have access to high quality internal or external views out towards natural elements, frequent movement of people or vehicles or architectural features (eg. atrium, water feature etc).

2.2.5 Indoor pollutants

Indoor pollutants in the project will be reduced through;

- Reduced Volatile Organic Compounds (VOCs) in all paints, carpets, adhesives and sealants
- Low and no formaldehyde content in all engineered wood products including particleboard, plywood, veneer, MDF and decorative overlaid wood panels
- Specification of low emissions printing and photocopying equipment

2.2.6 Thermal comfort

- Targeting a 7-star average NatHERS rating, with no individual dwelling achieving less than 5.5-stars.
- This exceeds the NCC2019 requirement.

2.3 Energy Efficiency



2.3.1 Operational energy

2.3.1.1 Dwellings

The development will be committing to the following NatHERS star ratings for apartment dwellings:

- 7-star average across the whole development
- No individual apartment less than 5.5-stars

Additionally, dwellings are required to meet the maximum cooling allowance limits per the planning scheme Clause 58.03-1 for Melbourne City Council is 30MJ/m^2 (Climate zone 21 Melbourne).

Final energy ratings of dwellings are to be confirmed when completing certified assessments at building permit stage.

2.3.1.2 Non-residential and Common Areas

The project will exceed Section J requirements of the NCC 2019 for the non-residential tenancies (eg. Retail and commercial spaces.), and common areas and target credit points under the Green Star Energy credit.

2.3.2 Lighting Efficiency and Controls

2.3.2.1 Power Density

The lighting power density is reduced by at least 10% below the maximum lighting power density in Table J6.2a. This applies to all areas of the building.

2.3.2.2 Independent Switching

Independent light switching will be provided in each room of the SOU. In open plan, each functional area will be separately switched.

2.3.2.3 Dynamic Lighting Controls

All common areas accessible by residents will be provided with automated lighting control system(s), such as occupant detection and daylight adjustment.

2.3.3 Ventilation and Air Conditioning

For spaces provided with mechanical heating and cooling:

- The minimum cooling system energy rating for the air conditioning equipment is at least 3-star as per AS 3823.2-2013; and
- The rated cooling or heating capacity of the unit does not exceed the design cooling or heating load, whichever is greater, by more than 15%.

2.3.4 Domestic Hot Water

Hot water supply to the development will be from electric based systems (eg. heat pump units). This includes the proposed pool heating system.

2.3.5 Appliances and Equipment

All appliances installed have a minimum Energy Star rating of 1-star below the maximum Energy Star rating available for that appliance type and capacity. Appliances include but are not limited to:

- Refrigerators/freezers;
- Dishwashers;
- Clothes washers; and
- Clothes dryers.

This requirement only applies to installed appliances; it does not require their installation.

2.3.6 Renewable Energy

The project is proposing to install a 25kW solar PV on the rooftop of the development. The system is intended to provide electricity through the development including common areas, commercial and retail spaces, and dwellings as part of an embedded network. The final solar PV system capacity will be sized to take into consideration expected on-site consumption, shading and overshadowing, and roof space required by other services.

2.3.7 Vertical Transport

Lifts will be specified such that the energy associated with lift machinery or other vertical transportation complies with the following conditions:

- The minimum lift energy efficiency is class A or B in accordance with ISO 25745-2; and
- The lift idle and standby energy performance level is 1 in accordance with ISO 25745-2.

2.4 Transport

2.4.1 Access to public transport & walkability

The proposed development, located at 405-421 Spencer Street, West Melbourne obtains a Walkscore of 92 'Walker's Paradise', meaning the access to shops and amenities is excellent and daily errands do not require the use of a car. The site also has a public transit score of 100 meaning access to excellent public transport facilities.

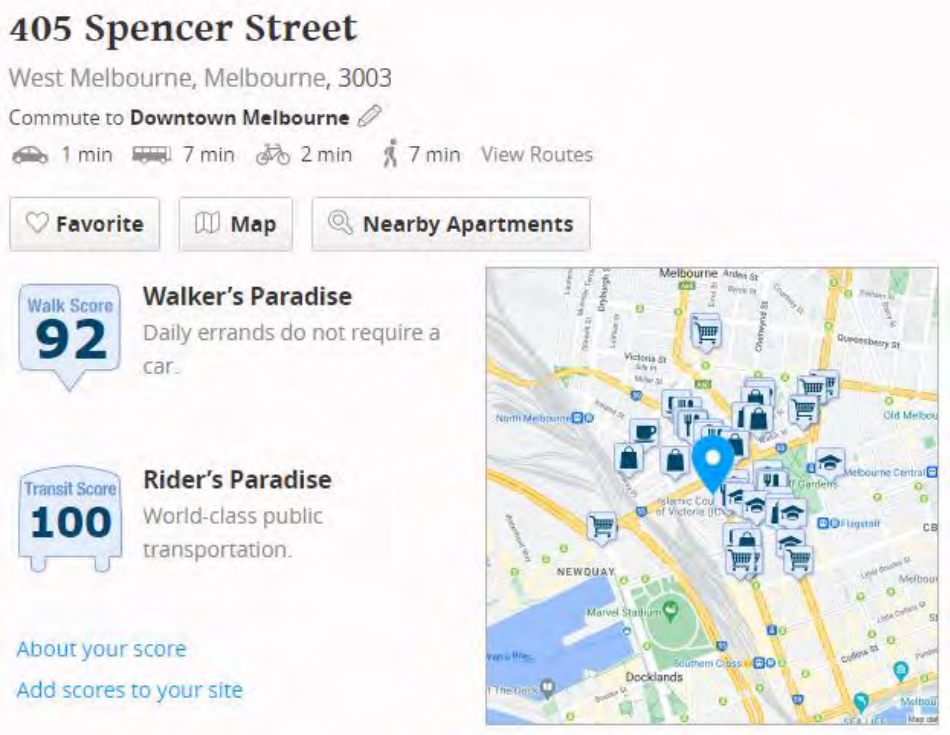


Figure 2 Project walk score and transit score

2.4.2 Bicycle storage

The development is currently proposed contain a total of 126 bicycle parking spaces for residents, staff and visitors of the site. These are proposed to be located on the ground level.

Table 1 Green Star bicycle parking requirements

Land Use and User	Statutory Requirement	Provided
Dwelling - Residents	38	102
Dwelling - Visitors	19	19
Retail and Commercial - Staff	3	3
Retail and Commercial - Visitors	2	2
TOTAL	**62**	**126**

2.4.3 Low emissions vehicles

At least 3 car parking bays (5% of 44 carparks) will be dedicated to fuel efficient vehicles. Fuel efficient vehicles include vehicles having an overall rated fuel efficiency of 5L/100km or better, hybrid cars, electric vehicles, and motorcycles.

Additionally, these spaces will be EV charging ready, where future EV charging infrastructure may be retrofitted.

2.5 Water Efficiency



The project achieves 5 points under the Green Star Water category, exceeding council's requirement, summarised below:

> Water: 1 point for Wat-1 credit under a current version of the Green Building Council of Australia's Green Star – Multi Unit Residential rating tool or equivalent.

2.5.1 Water efficient fittings and fixtures

The project will include best practice water efficient fixtures and fittings across the development including the following WELS ratings;

> Showers: 3 Stars (7.5 L/min or lower)
> Toilets: 4 Stars
> Taps: 5 Stars
> Dishwashers: 4 Stars

2.5.2 Rainwater harvesting

A minimum 22,000L rainwater tank capacity is assessed for the site, capturing runoff from roof areas. It is expected that retention tanks are connected to toilets within the development for flushing purposes, and irrigation systems. The final rainwater tank capacity will take into consideration the expected on-site consumption and benefits towards potable water reduction, as well as best practice stormwater objectives.

2.5.3 Landscape irrigation

All landscape areas will be irrigated using subsurface drip type irrigation systems.

2.5.4 Fire systems

If the fire protection system is proposed to be a sprinkler system, it will consist of fire pumps and tanks capturing at least 80% of the test water for on-site reuse. Sprinkler systems must also be fitted with isolation valves or shutoff points for system-by-system testing.

Further details relating to the fire system are provided below (to be confirmed by the relevant fire engineer/consultant):

Table 2 Fire system and testing system recapture

Is the building required under part E of the National Construction Code (formerly the Building Code of Australia) to have sprinklers installed as part of its fire protection system?	Yes
Does the building's sprinkler system discharge water during testing?	Test water return to fire tank
Is greater than 80% of discharged water captured for reuse?	Yes
Testing frequency (enter number of tests per year)	Monthly
Volume discharged per test (L)	25L/s
Proportion of water captured per test (%)	100%

2.6 Building Materials

2.6.1 Concrete

2.6.1.1 Water Reduction

The mix water for all concrete used in the project will contain at least 50% captured or reclaimed water (measured across all concrete mixes in the project).

2.6.1.2 Aggregate Reduction

The project will seek to minimise the amount of virgin materials used for aggregates by ensuring either:

- At least 40% of coarse aggregate in the concrete will be crushed slag aggregate or another alternative materials (measured by mass across all concrete mixes in the project); OR
- At least 25% of fine aggregate (sand) inputs in the concrete will be manufactured sand or other alternative materials (measured by mass across all concrete mixes in the project).

2.6.2 Steel

2.6.2.1 Reinforcing Steel Reduction

There will be a 5% or more reduction in mass of steel framing, when compared to a suitable reference case building. The structural engineer will provide calculations to demonstrate the reduction.

2.6.2.2 Responsible Steel Sourcing

The steel maker must have the following:

- A currently valid and certified ISO 14001 Environmental Management System (EMS) in place, and
- a current membership with the World Steel Association's (WSA) Climate Action Programme (CAP)

2.6.3 Sustainable timber



The building's timber is to be certified by a forest certification scheme that meets the GBCA's 'Essential' criteria for forest certification.

2.6.4 Environmental toxicity

90% (by cost) of all cables, pipes, flooring and blinds in a project either:

- Do not contain PVC and have an Environmental Product Declaration (EPD); or
- Meet Best Practice Guidelines for PVC.

2.6.5 Environmental responsibility

6% of eligible products are required to meet the requirements of reused products, recycled content, environmental product declarations, third party certification, or stewardship programs.

2.6.6 Construction waste management plan

A construction waste management plan will be developed including a target of 90% of waste generated during construction and demolition to be diverted from landfill.

2.7 Urban Ecology



2.7.1 Reuse of developed land

The proposed development is taking place on a completely developed piece of land. No critically endangered, endangered, vulnerable species, or ecological communities were present on the site at time of purchase.

2.7.2 Enhancing ecological value

The existing site currently has little to no existing vegetation or ecologically significant value. The proposed development will include a communal terrace. At least 50% of plants will be specified as Australian natives.

2.7.3 Contamination and Hazardous Materials

The site is contaminated and is currently undergoing an Environmental Audit in accordance with the EPA Victoria requirements.

2.7.4 Urban Heat Island Effect

At least 75% of the total project site area to comprises building or landscaping elements that reduce the impact of heat island effect.

High Solar Reflective Index (SRI) roofing and paving materials will be utilised on all roofing areas where appropriate to reduce the UHI effect:

- Roofing materials, including shading structures will have the following:
  - For roof pitched <15°– a three year SRI of minimum 64 or initial SRI of minimum 82.
  - For roof pitched >15°– a three year SRI of minimum 34 or initial SRI of minimum 39.
- Unshaded hard-scaping elements with a three year SRI of minimum 34 or an initial SRI of minimum 39;

2.8 Emissions



2.8.1 Water Sensitive Urban Design

2.8.1.1 STORM Assessment

A STORM report has been prepared demonstrating one option of a compliant pathway in demonstrating Best Practice Stormwater pollutant removal objectives have been met. Where the stormwater proposal is to be refined or amended as part of the design process, the proposed system needs to meet or exceed the Best Practice objectives and demonstrate this has been achieved with a compliant STORM or MUSIC Report.

An innovation point has also been targeted as the Column B requirements of the Green Star framework aligns with Melbourne Council's *Urban stormwater best practice environmental guidelines*.

2.8.1.2 Rainwater Tank Maintenance Program

The proposed system will be routinely maintained as part of the maintenance programme and will be included in the service requirements of the project.
The following will be followed:

- First flush devices will be cleaned every 6 months
- Roof and other collection areas will be inspected regularly, at a minimum every 3 months to ensure they are maintained free of pollutants
- The type of tanks and pump will be maintained in accordance with manufacturers' requirements – typically annually but quarterly in the first year as part of building tuning phase

2.8.2 Light Pollution

2.8.2.1 Minimising light pollution to neighbouring bodies

All outdoor lighting on the project will comply with AS 4282:1997 Control of the obtrusive effects of outdoor lighting.

2.8.2.2 Minimising light pollution to the night sky

The direct illuminance from external luminaries on the project produces a maximum initial illuminance value no greater than:

- 0.5 Lux to the site boundary; and
- 0.1 Lux to 4.5 meters beyond the site into the night sky, when modelled using a calculation plane set at the highest point of the building.

Calculation in accordance with AS 4282:1997.

2.8.3 Legionella Risk Management

Any water-based heat rejection systems will include measures for Legionella control and a Legionella Risk Management Plan for the system.

Currently, cooling for residential apartments are proposed to be from refrigerant reverse cycle system. Conditioning to non-residential areas are proposed to be from air-cooled VRV systems.

2.9 Innovation



2.9.1 Ultra-low VOC paints

Over 50% of paint (by cost) are to have a Total Volatile Organic Compound (TVOC) content of less than 5 grams per litre.

2.9.2 Local procurement

A target of 80% of skilled workers and labour to be sourced within 50km of the site areas.

2.9.3 Build-to-Rent

The project team is targeting an innovation point for the Build-To-Rent model employed under 30B (Market Transformation). The project aims to demonstrate the sustainability benefits as a result of this model.

Given that the Green Star framework recognises and rewards sustainable development, the project team is required to outline the sustainability outcomes as a result of employing the build-to-rent model to the assessor in the submission. This should touch on environmental, social and financial benefits. This may include tenant engagement strategies, net zero carbon plans, low emissions transport plans, and ongoing operational management.

2.9.4 Green cleaning

Cleaning services are delivered in accordance with a green cleaning policy or scope of works and are applicable to all common areas (i.e. areas controlled solely by the building owner). The green cleaning policy or green cleaning scope of works as referred to in this credit, must at least cover all cleaning and monitoring procedures, materials, and tasks undertaken within the building owner's (and contractor's) control.

The policy must be consistent with the facility cleaning specifications, and include details regarding:

a. Environmental goals and objectives in accordance with 6.1.3;
b. Implementation procedures and strategies;
c. Environmental performance measurements, including metrics;
d. Quality assurance for ongoing improvement;
e. Responsible parties;
f. Cleaning personnel requirements (including documented monitoring and reporting.
g. A review process to assess the success of the green cleaning policy and make improvements, based on lessons learned.

The policy must include environmental goals, objectives and targets and address at least the following items:

a. Strategies to ensure high standards of surface hygiene and cross-contamination prevention, including hand-hygiene education for occupants and cleaners.
b. Procurement guidelines and standards that cover all cleaning products and equipment, to minimise health risks and meet best practice environmental performance aims.
c. The use of HEPA filtration (or equivalent) in vacuum cleaner equipment to remove particulates and minimise their impact on indoor air quality.
d. Set policy requirements for the minimisation of cleaning products usage.

e. Whenever cleaning products are used, set requirements for products and methods that employ environmental best practice procedures).

2.9.5 Groundskeeping

Best practice operational procedures will be used to maintain landscaped areas, hard surfaces and building exteriors are in place during the performance period in accordance with the following requirements. A groundskeeping policy must be developed that includes the following:

f. The scope of the maintenance program

g. Frequency of maintenance

h. Sustainability requirements, including as a minimum, measures for:

   i. diversion from landfill
   ii. Minimising use of chemicals
   iii. energy and water use
   iv. plant-specific maintenance requirements (where relevant)

i. the recording and reporting mechanism of measured results

j. procedures for prompt adjustments or repairs in response to non-compliance,

k. The party's response for carrying out the maintenance program and measurements

l. A review process to assess the success of the maintenance procedures and make improvements based on lessons learned.

3. Green Star Benchmarking

Green Star has been utilised to benchmark the environmental performance of the project. The proposal has the preliminary design potential to achieve the following performance measures:

> 5-star rating under Green Star - Design & As Built v1.3.

Table 3 summarises the 5-Star Green Star points benchmarked for the project, with a full description of the Green Star pathway located in Appendix A. Points benchmarked are subject to change throughout the design development period, whilst maintaining a 5-star rating.

A 5-star rating requires a minimum 60 points to be awarded.

Table 3 Summary of Green Star credit points benchmarked for the development

Green Star Category / Credit Target	Points
Management	**12**
Accredited Professional	
1.0 Green Star Accredited Professional	1
Commissioning and Tuning	
2.0 Environmental Performance Targets	Complies
2.1 Services and Maintainability Review	1
2.2 Building Commissioning	1
2.3 Building Systems Tuning	1
2.4 Independent Commissioning Agent	1
Building Information	
4.0 Building Information	1
Commitment to Performance	
5.1 Environmental Building Performance	1
5.2 End of Life Waste Performance	1
Metering and Monitoring	
6.0 Metering strategy	Complies
6.1 Monitoring Systems	1
Construction Environmental Management	
7.0 Environmental Management Plan	Complies
7.1 Environmental Management System	1
7.2 High Quality Staff Support	1

Green Star Category / Credit Target	Points
Operational Waste	
8A Specialist Plan	1
Indoor Environment Quality	**16**
Indoor Air Quality	
9.1 Ventilation System Attributes	1
9.2 Provision of Outdoor Air	2
9.3 Exhaust or Elimination of Pollutants	1
Acoustic Comfort	
10.1 Internal Noise Levels	1
10.2 Reverberation	1
10.3 Acoustic Separation	1
Lighting Comfort	
11.0 Minimum Lighting Comfort	Complies
11.1 General Illuminance and Glare Reduction	1
11.2 Surface Illuminance	1
11.3 Localised Lighting Control	1
Visual Comfort	
12.0 Glare Reduction	Complies
12.1 Daylight	2
12.2 Views	1
Indoor Pollutants	
13.1 Paints, Adhesives, Sealants and Carpets	1
13.2 Engineered Wood Products	1
Thermal Comfort	
14.1 Thermal Comfort	1
Energy	**9.3**
Greenhouse Gas Emissions	
15A Conditional requirement	Complies
15A Prescriptive Pathway	0.6
15B.0 Conditional requirement	Complies
15B NatHERS Pathway	8.7

Green Star Category / Credit Target	Points
Transport	**6**
Sustainable Transport	
17B.1 Access by Public Transport	3
17B.2 Reduced Car Parking Provision	1
17B.3 Low Emissions Vehicle Infrastructure	1
17B.5 Walkable Neighbourhoods	1
Water	**5**
Potable Water	
18B.1 Sanitary Fixture Efficiency	1
18B.3 Heat Rejection	2
18B.4 Landscape Irrigation	1
18B.5 Fire Protection System Test Water	1
Materials	**8**
Life Cycle Impacts	
19B.1 Concrete	1
19B.2 Steel	1
Responsible Building Materials	
20.1 Structural and Reinforcing Steel	1
20.2 Timber Products	1
20.3 Permanent Formwork, Pipes, Flooring and Blinds	1
Sustainable Products	
21.1 Product Transparency and Sustainability	2
Construction and Demolition Waste	
22B Percentage Benchmark	1
Land Use and Ecology	**4**
Ecological Value	
23.0 Endangered, Threatened or Vulnerable Species	Complies
23.1 Ecological Value	1
Sustainable Sites	
24.0 Conditional Requirement	Complies
24.1 Reuse of Land	1
24.2 Contamination and Hazardous Materials	1

Green Star Category / Credit Target	Points
Heat Island Effect	
25.0 Heat Island Effect	1
Emissions	**4**
Stormwater	
26.1 Reduced Peak Discharge	1
26.2 Reduced Pollution Targets	1
Light Pollution	
27.0 Light Pollution to Neighbouring Bodies	Complies
27.1 Reduced Pollution Targets	1
Microbial Control	
28.0 Legionella Impacts from Cooling Systems	1
Innovation	**5**
Exceeding Green Star Benchmarks	
Indoor Pollutants: Ultra-Low VOC paints	1
Stormwater Pollution Target	1
Innovation Challenge	
Local Procurement	1
Global Sustainability	
Green Cleaning	1
Groundskeeping	1
Total Points Benchmarked	**69.3**

*Credit 15: Weighted outcome based on non-residential and residential development. Calculated per GBCA GHG emissions calculator (see appendices)

The development is committing to a 5-star Green Star self-assessed target and the final pathway of targeted credits may change during the design process and engagement with further discussions and workshopping between parties (e.g. builder) post town planning.

ADP
Consulting : Engineering

Appendix A
Green Star Preliminary Matrix

405-421 Spencer Street

Green Star Design & As Built v1.3 Credit Matrix

26/08/2024

	Points Available	Points Targeted	Targeted Rating
Core Credits	**100**	**64.3**	**5-Star Design & As Built**
Innovation Credits	**10**	**5.0**	
Total	**110**	**69.3**	**60 Points**

	Area
Credit 15A	1010
Credit 15B	11604

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Management							
Green Star Accredited Professional	1.0	Accredited Professional	1	1	GSAP to be appointed throughout project, from schematic design to construction to completion	Design	ADP ESD
Commissioning and Tuning	2.0	Environmental Performance Targets	N/A	Complies	In order for the minimum requirement to be met, documented targets for the environmental performance of the project must be set.	Design	Project Developer / Local ADP ESD
	2.1	Services and Maintainability Review	1	1	A comprehensive services and maintainability review of the project to be performed during design stage and prior to construction.	Design	Head Contractor ICA
	2.2	Building Commissioning	1	1	Pre-commissioning, commissioning and quality monitoring for all building services (BMS, mechanical, electrical and hydraulic) in accordance with CIBSE or ASHRAE.	Design Construction Handover	ICA All Services Head Contractor
	2.3	Building Systems Tuning	1	1	A tuning process is in place that addresses all nominated building systems. A building tuning commitment must be signed.	Handover	Project Developer . Head Contractor
	2.4	Independent Commissioning Agent	1	1	An ICA is required from beginning of schematic design through practical completion of the project.	Design Construction Handover	ICA Project Developer
Adaptation and Resilience	3.0	Implementation of Project Specific Climate Adaptation Plan	2	0	2 points are available where: - A project-specific Climate Adaptation Plan has been developed in accordance with a recognised standard; and - Solutions have been included into the building design and	Design	ADP ESD Project Team

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Building Information	4.0	Building Information	1	1	1 point is available where: - Comprehensive operations and maintenance information is developed and made available to the facilities management team; and - Relevant and current building user information is developed and made available to all relevant stakeholders.	Design Construction	Project Developer Head Contractor
Commitment to Performance	5.1	Environmental Building Performance	1	1	One (1) point is awarded where at least 80% of the project's gross floor area (GFA), excluding carparking areas, is covered by a commitment to set, measure and report on its environmental performance. A smaller proportion of compliant space may be rewarded partial points on a sliding-scaleto one decimal place, e.g. if 40% of the project's GFA is covered 0.5 points are awarded. Environmental reporting goals (2 at least) to be set for the building, including GHG / Energy Targets, Water targets and Waste targets in use	Design Operation	Project Developer
	5.2	End of Life Waste Performance	1	1	One (1) point is awarded where at least 80% of the project's GFA, excluding carparking areas, has a formal commitment in place to reduce demolition waste at the end of life of an interior fitout or base building component. A smaller proportion of compliant space may be rewarded partial points on a sliding-scale to one decimal place.	Design Operation	Project Developer
Metering and Monitoring	6.0	Metering strategy	N/A	Not targeted	Accessible metering be provided to monitor building energy and water consumption, including all energy and water common uses, major uses and sources. The metering is to be accurate and to inform energy consumption practices and reduce wasted energy.	Design Construction	Electrical Engineer Mechanical Engineer Hydraulic Engineer
	6.1	Monitoring Systems	1.0	1	1 point is available where a monitoring strategy is addressed through a monitoring system, capable of capturing and processing the data produced by the installed energy and water meters, and accurately and clearly presenting data consumption trends.	Design Construction	Mechanical Engineer Electrical Engineer Hydraulic Engineer

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Responsible Construction Practices	7.0	Environmental Management Plan	N/A	Complies	The conditional requirement for a project specific Environmental Management Plan (EMP) for construction to be developed and implemented.	Construction	Head Contractor
	7.1	Environmental Management System	1	1	Builder to have ISO 14 001 Environmental Management System	Construction	Head Contractor
	7.2	High Quality Site Support	1	1	1 point is available where high quality staff support practices are in place that: - Promote positive mental and physical health outcomes of site activities and culture of site workers, through programs and solutions on site; and - Enhance site workers' knowledge on sustainable practices through on-site, off-site, or online education programs.	Construction	Head Contractor
Operational waste management	8A	Performance pathway	1	1	1 point is available where a waste professional prepares and implements an Operational Waste Management Plan (OWMP) for the project in accordance with best practice approaches and	Design	Waste Consultant Architect
			14	**12**			
Indoor Environment Quality							
Indoor Air Quality	9.1	Ventilation System Attributes	1	1	The ventilation system to be designed to mitigate the entry of outdoor pollutants, for ease of maintenance and cleaning; and will be cleaned prior to occupation and use. Design to comply with ASHRAE 62.1-2003 in regards to minimum separation distances between pollution sources and outdoor air intakes.	Design Construction	Mechanical Engineer Head Contractor
	9.2	Provision of Outdoor Air	2	2	For naturally ventilated spaces, two (2) points are awarded where the requirements of AS 1668.4-2012 are met. The nominated area must be provided with the quantity of outdoor air appropriate for the activities and conditions in the space.	Design Construction	Architect
	9.3	Exhaust or Elimination of Pollutants	1	1	Nominated pollutants, such as those arising from printing equipment, cooking processes and equipment, and vehicle exhaust, are limited by either removing the source of pollutants from the nominated area, or exhausting the pollutants directly to the outside while limiting their entry into other areas of the project.	Design Construction	Mechanical Engineer

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Acoustic Comfort	10.1	Internal Noise Levels	1	1	Internal noise levels to be no more than 5dB(A) above the "satisfactory" sound levels provided in Table 1 of AS/NZS 2107:2000	Design Construction	Acoustic Consultant
	10.2	Reverberation	1	1	Reverberation time to be below the maximum stated in the 'Recommended Reverberation Time' provided in table 1 of AS/NZ 2107:200.	Design Construction	Acoustic Consultant
	10.3	Acoustic Separation	1	1	Design to include acoustic separation to minimize crosstalk between rooms and between rooms and open areas	Design Construction	Acoustic Consultant
Lighting Comfort	11.0	Minimum Lighting Comfort	N/A	Complies	All lights on the project to be flicker free and accurately address the perception of colour in the space	Design Construction	Electrical Engineer
	11.1	General Illuminance and Glare Reduction	1	1	1 point is available where, in the nominated area: - Lighting levels and quality comply with best practice guidelines; and - Glare is eliminated.	Design Construction	Electrical Engineer
	11.2	Surface Illuminance	1	1	Nominated areas to have a combination of lighting and surfaces to improve uniformity of lighting to give visual interest	Design Construction	Electrical Engineer
	11.3	Localised Lighting Control	1	1	Occupants to have the ability to control the lighting in their immediate environment	Design Construction	Electrical Engineer

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Visual Comfort	12.0	Glare Reduction	N/A	Complies	Compliance requirement for glare reduction to ALL facades through a combination of blinds, screens, fixed devices, or other means.	Design Construction	Architect
	12.1	Daylight	2	2	Indoor areas to have a Daylight Factor (DF) of at least 2.0% at finished floor level (FFL) under either a CIE overcast sky, or a CIE uniform sky: 40% => 1 point. 60% => 2 point	Design	ADP ESD
	12.2	Views	1	1	60% of nominated area to have clear line of sight to external view	Design	ADP ESD
Indoor Pollutants	13.1	Paints, Adhesives, Sealants and Carpets	1	1	1 point is targeted for reduced VOCs (95% of all paints, carpets, adhesives and sealants meet the Total Volatile Organic Compound (TVOC) Content Limits outlined by Green Star	Design Tender Construction	Architect Building Services Engineers
	13.2	Engineered Wood Products	1	1	All engineered wood products (particleboard, plywood, veneer, MDF and decorative overlaid wood panels) to have low formaldehyde emissions or contain no formaldehyde	Design Tender Construction	Architect
Thermal Comfort	14.1	Thermal Comfort	1	1	Can be achieved with a NatHERS 7-star rating. Alternatively thermal comfort modelling is required	Design Construction	ADP ESD
	14.2	Advanced Thermal Comfort	1	0	Can be achieved with a NatHERS 8-star rating. Alternatively thermal comfort modelling is required.	Design Construction	N/A
			17	**16**			

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Energy							
	15A.0	Conditional Requirement	N/A	Complies	Project teams must demonstrate that the minimum Deemed-to-Satisfy performance requirements stipulated within parts J1 and J2 of the NCC have been exceeded by at least 5%.	Design	ADP ESD
	15A.1	Building envelope	1	1	1 point is awarded where the installed roofs and ceiling, floors and roof lights comply with all the following conditions: - 10% increase on the minimum required total R-values specified for roofs and ceilings in Part J1.3, and floors in Part J1.6, including compliance with J0.4 where applicable; - For roofs, have an upper surface solar absorptance of at least 0.05 less than the maximum allowable vlaues in Part J1.3; - For roof lights, achieve a total system SHGC of less that or equal to 3.3 W/m2K; and - For roof lights, achieve a total system SHGC of less than or equal to 85% of the maximum allowable value in Part J1.4.	Design Construction	ADP ESD

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
	15A.2	Wall-glazing Construction and Retail Display Glazing	1	1	1 point is awarded where all installed wall-glazing construction and retail display glazing comply with all the following conditions: - wall-glazing contructions achieve an area-weighted total system U-value, across all facades (Specification J1.5a U-value - Method 2), at least 10% less than the maximum allowable total system U-value for wall-glazing contrconstructionsuctions as per the requirements of Part J1.5, including compliance with Part J0.5 where applicable; - wall-glazing constructions have a combination of solar heat gain coefficients, across all facades (Specification J1.5a Solar admittance - Method 2), that achieve a calculated proposed representative air-conditioning energy value of not more than 90% of the calculated reference representative air-condiitoning energy value as per the requirements of Part J1.5; and -Where the wall component in 80% or more of the area of the wall-glazing construction, it achieves a 10% increase on the minimum total R-value specified in Table 1.5a; and -For display glazing, have a total system U-value of not more than 5.0 W/m2K and a total system SHGC of not more than 85% of the maximum.	Design Construction	Electrical Engineer
	15A.3	Lighting	1	1	1 point is awarded where the lighting complies with the following conditions: - The actual installed aggregate illumination power density is 30% less than the maximum illumination power densities defined in Table J6.2a; - Automated lighting control systems, such as occupant detection and daylight adjustment, are provided to 95% of the nominated area; and - For Class 5 and 9a buildings only, the size of individually switched lighting zones does not exceed 100m2 for 95% of the nominated area.	Design	Electrical Engineer

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Greenhouse Gas Emissions:	15A.4	Ventilation and Air-conditioning	1	1	1 point is awarded where all spaces comply with the following conditions: Mechanically ventilated spaces: the HVAC systems comply with the following conditions: - The installed fan motor power and pump power, is at least 15% less that the maximum fan motor power and pump power defined in Tables J5.2 and J5.4a; - The thermal efficiency of the installed water heater is 15% more than the required minimum as defined in Table J5.4b; and - The required minimum energy efficiency ratio for packaged air conditioning equipment and refrigerant chillers is at least 15% higher than > that specified in: NCC Tables J5.4d and J5.4e; or > MEPS, where Section J does not apply to the equipment capacity.	Design	Mechanical Engineer
	15A.5	Domestic Hot Water	1	1	1 point is awarded where domestic hot water systems are powered by one of the following heat sources: - Renewable Energy (which may include electric/gas boost); - Natural Gas; - Electric heat pump (minimum COP 3.5 under design conditions); or ▪ Waste heat or heat recovered from another process.	Design	All Services
	15A.7	Fuel Switching	1	1	1 point is awarded where no fossil fuels are burned on site to generate electricity, heating, or cooling; and either: - at least 15% of energy required by the building annually is generated byon site renewable solutions; or - two points have been achieved from 15A.1 – 15A.5 Where a minor amount of fossil fuel (less than 1% of total energy consumption) is used on site for purposes where it can be demonstrated that there are no commercially viable alternatives available (e.g. cooking or emergency generators), Renewable Energy Certificates equal to these emissions for the period of ten years following practical completion must be purchased and retired upfront, or through a contractual agreement with the utility. The RECs purchased must be recognised as directly supporting renewable energy generation in Australia. Refer to the Renewables and Offsets in Green Star Guide for more details.	Design	All Services

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
NatHERS Pathway	15A.9	Vertical transport	1	1	1 point is awarded when the energy associated with lift machinery or other veritcal transport complies with the following conditions: - The minimum lift energy effiiciency is class A or B in accordance with ISO 25745-2; and - The lift idle and stanby energy performance level is 1 in accordance with ISO 25745-2. - The minimum escalator energy performance is class A+ to A+++ in accordance with ISO 25745-3. Where projects have both lifts and escalators installed, all three criteria must be met Where only one tyype of vertical transportation system is present, the associated criteria with the non-present system can be considered 'not applicable'and not required to be met.	Design	Vertical Transport engineer
	15B.0	Conditional Requirement	N/A	Complies	For each pathway a Conditional Requirement must be met in order for the project to be eligible for Green Star – Design & As Built rating. Additional requirements must be met to receive a 5 star or 6 star rating. Compliance with the Conditional Requirement is to be demonstrated as outlined within each of the five pathways described in this credit.	Design	ADP ESD
	15B.1	Energy Intensity reduction	6	3	Up to 6 points are awarded when NatHERS is used to predict the projects thermal and energy performance. Points are awarded based on the energy intensity reduction when compared to a 6.5-star NatHERS rating.	Design Construction	ADP ESD
	15B.2.1	Lighting	1	1	1 point is awarded where the following occurs: - The lighting power density is reduced by at least 10% below the maximum lighting power density in Table J6.2a. Applies to all areas of the building. - Independent Light switching must be provided in each room of the SOU. In open plan, each functional area must be separately switched. - All common areas accessible by residents must be provided with automated lighting control system(s), such as occupant detection and daylight adjustment.	Design Construction	Electrical Engineer

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
	15B.2.2	Ventilation and Air Condition	2	2	**For spaces provided with Mech heating and cooling:** - The minimum cooling system energy rating for the air conditioning equipment is at least 3-star as per AS 3823.2-2013; and - The rated cooling or heating capacity of the unit does not exceed the design cooling or heating load, whichever is greater, by more than 15%. **Additionally, naturally ventilated spaces:** - Compliance is achieved with the Provision of Outdoor Air (9.2C)criterion; - Effective cross ventilation is provided in all apartments; and - Ceiling fans are installed in apartments.	Design Construction	Mechanical Engineer
	15B.2.3	Domestic Hot Water	2	0.5	Up to 2 points are awarded where the domestic hot water service complies with the following requirements: - A solar thermal heating system is provided which contributes at least 30% of the annual thermal energy requirement for water heating (1.5 points available); and - The primary non-renewable heat source for domestic hot water is either natural gas, an electric heat pump with a minimum COP of 3.5, or heat recovered from another process (0.5 points available).	Design Construction	Hydraulic Engineer
	15B.2.4	Appliances and equipment	1	1	1 point is awarded when appliances are present in all units, and all appliances installed have a minimum Energy Star rating of 1-star below the maximum Energy Star rating available for that appliance type and capacity. Appliances included in this credit are: - Refrigerators/freezers; - Dishwashers; - Clothes washers; and - Clothes dryers. This point only applies to installed appliances; it does not require their installation. If no appliances are installed, this point cannot be claimed.	Design Construction	Architect

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
	15B.2.5	Fuel Switching	1	1	1 point is awarded where no fossil fuels are burned on site to generate electricity, heating, or cooling and either: - at least 15% of energy required by the building is generated by on site renewable solutions; or - three points have been achieved from 15B.1	Design	Architect
	15B.2.7	Vertical Transport	1	1	1 point is awarded where the energy associated with lift machinery or other vertical transportation complies with the following confitions: - The minimum lift energy efficiency is class A or B in accordance with ISO 25745-2; and - The lift idle and standby energy performance level is 1 in accordance with ISO 25745-2. - The minimum escalator energy performance is class A+ to A+++ in accordance with ISO 25745-3. Where projects have both lifts and escalator installled, all three criteria must be met. Where only one v ertical transportation system is present, the associated criteria with the non-present system can be considered 'not applicable' and not meant to be met.	Design	Vertical Transport engineer
Peak Electricity Demand Reduction	16A	Prescriptive Pathway: On-site Energy Generation	2	-	Demonstrate that the use of on-site electricity generation systems reduces the total peak electricity demand by at least 15%	Design Construction	ADP ESD
			22	**9.3**			

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Transport							
Prescriptive Pathway	17B.1	Prescriptive Pathway - Access by Public Transport	3	3	Determined the by the Green Star Public Transport Calculator	Design	ADP ESD
	17B.2	Prescriptive Pathway - Parking Provision	1	1	Car parking to be less than Green Star requirements	Design	Architect Transport Consultant
	17B.3	Prescriptive Pathway - Low Emission Vehicle Infrastructure	1	1	Parking spaces and/or dedicated infrastructure provided to support the uptake of low-emission vehicles (meet 1 of the following): - 15% of parking is dedicated to fuel-efficient vehicles (see Definitions), with a maximum of 5% for motorcycle parking - 5% of parking is dedicated to electric vehicles and charging infrastructure is provided for each space in accordance ; or - For residential projects (at least 80% GFA Class 1a or 2), dedicated car share spaces and vehicles are provided at the rate of 1 per 70 project occupants	Design	Architect Transport Consultant
	17B.4	Prescriptive Pathway - Active Transport Facilities	1	0	No. of bicycle racks to be at least equal to Greenstar requirement.	Design	Architect
	17B.5	Prescriptive Pathway - Walkable Neighbourhoods	1	1	Walk score = 90 (greater than minimum Green Star requirement of 80)	Design	ADP ESD
			10	**6**			

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Water							
Prescriptive Pathway	18B	Fixtures and Fittings	1	1	Green Star requirements: 5 Star taps / urinals, 4 Star toilet, 3 Star showers, 5 Star dish washers	Design Construction	Architect
		Rainwater Reuse	1	0	Collect and reuse rainwater	Design	Hydraulic Engineer
		Heat Rejection	2	2	No water based heat rejection.	Design	Mechanical Engineer
		Landscape Irrigation	1	1	One (1) point is awarded where either drip irrigation with moisture sensor override is installed, or where no potable water is used for irrigation. The landscaping and associated systems must be designed to reduce the consumption of potable water required for irrigation through the installation of subsoil drip irrigation and moisture sensor controls.	Design	Hydraulic Engineer Landscape Consultant
		Fire System Test Water	1	1	Fire system to include temporary storage for 80% of the routine fire protection system test water and maintenance drain-downs for reuse on-site. If sprinkler systems are installed, each floor must be fitted with isolation valves or shut-off points for floor-by-floor	Design	Fire Protection Services Engineer
			12	**5**			

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Materials							
Life Cycle Impacts - Concrete	19B.1.1	Portland Cement Reduction	2	**0**	1 point is available where the Portland cement content is reduced by 30%, measured by mass across all concrete used in the project compared to the reference case; OR 2 points are available where the Portland cement content is reduced by 40%, measured by mass across all concrete used in the project compared to the reference case.	Design Construction	Structural Engineer Head Contractor
	19B.1.2	Water Reduction	0.5	0.5	0.5 point is available where the mix water for all concrete used in the project contains at least 50% captured or reclaimed water (measured across all concrete mixes in the project).	Design Construction	Structural Engineer
	19B.1.3	Aggregates Reduction	0.5	0.5	0.5 point is available where either: At least 40% of coarse aggregate in the concrete is crushed slag aggregate or another alternative materials (measured by mass across all concrete mixes in the project), provided that use of such materials does not increase the use of Portland cement by over five kilograms per cubic meter of concrete; OR At least 25% of fine aggregate (sand) inputs in the concrete are manufactured sand or other alternative materials (measured by mass across all concrete mixes in the project), provided that use of such materials does not increase the use of Portland cement by over five kilograms per cubic meter of concrete.	Design Construction	Structural Engineer
Life Cycle Impacts - Steel	19B.2B	Reduced Use of Steel Reinforcement (Concrete framed building)	1	1	Up to 1 point is available when there is a reduction in the mass of steel reinforcement used when compared to standard practice.	Design Construction	Structural Engineer

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Responsible Building Materials	20.1	Structural and Reinforcing Steel	1	1	1 point is available where 95% of the building's steel (by mass) is sourced from a Responsible Steel Maker; and - For steel framed buildings, at least 60% of the fabricated structural steelwork is supplied by a steel fabricator/steel contractor accredited to the Environmental Sustainability Charter of the Australian Steel Institute (ASI); or - For concrete framed buildings, at least 60% (by mass) of all reinforcing bar and mesh is produced using energy-reducing processed in its manufacture (measured by average mass by steel maker annually).	Design Construction	Structural Engineer
	20.2	Timber Products	1	1	One (1) point is awarded where project teams can demonstrate that, at least 95% (by cost) of all timber used in the building and construction works is either: A. Certified by a forest certification scheme, in accordance with 20.2A; OR B. From a reused source, in accordance with 20.2B.	Design Construction	Architect
	20.3	Permanent Formwork, Pipes, Flooring, Blinds and Cables	1	1	90% (by cost) of all cables, pipes, flooring and blinds in a project either: - Do not contain PVC and have an Environmental Product Declaration (EPD); or - Meet Best Practice Guidelines for PVC.	Design Construction	Architect Mechanical Engineer Electrical Engineer Hydraulic Engineer Fire Protection Services Engineer Other Relevant Services
Sustainable Products	21.1	Product Transparency and Sustainability	3	2	3% (1pt), 6% (2pts), 9% (3pts) of eligible products to meet the requirements of reused products, recycled content, Environmental Product Declarations, Third Party Certification, or Stewardship Programs.	Design Construction	Head Contractor
Demolition and construction waste	22B	Percentage Benchmark	1	1	For this option, one (1) point is awarded where the project team can demonstrate that at least 90% of the waste generated during construction and demolition has been diverted from landfill. Waste shall be reported in kilograms.	Construction	Head Contractor/Waste Contractor
			14	**8**			

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Land Use & Ecology							
Ecological Value	23.0	Endangered, Threatened or Vulnerable Species	N/A	Complies	No critically endangered, endangered, or vulnerable species, or ecological communities were present on the site at time of purchase	N/A	Project Developer
	23.1	Ecological Value	3	1	Green Star Ecology Calculator will yield points for the project - based on a comparison of pre & post development landscaping details.	Design	Landscape Consultant
Sustainable Sites	24.0	Conditional Requirement	N/A	Complies	The project site does not include old growth forest or wetland of 'High National Importance'	N/A	N/A
	24.1	Reuse of Land	1	1	75% of the site was previously developed land at the date of site purchase or, for previously owned land, at the projects Green Star registration date.	N/A	Project Developer
	24.2	Contamination and Hazardous Materials	1	1	The site, or an existing building, was previously contaminated and the site has been remediated in accordance with a best practice remediation strategy	Pre-construction	Environmental Auditor
Heat Island Effect	25.0	Heat Island Effect	1	1	At least 75% of the total project site area to comprises building or landscaping elements that reduce the impact of heat island effect. High SRI roofing materials required	Design	Architect
			6	**4**			

Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Emissions							
Stormwater	26.1	Stormwater Peak Discharge	1	1	Post-development peak event discharge from the site does not exceed the pre-development peak event discharge.	Design	Civil Engineer
	26.2	Stormwater Pollution Targets	1	1	Where the first point has been achieved and all stormwater discharged from site meets specified Pollution Reduction Targets.	Design Construction	ADP ESD Hydraulic Engineer
Light Pollution	27.0	Light Pollution to Neighbouring Bodies	N/A	Complies	The minimum requirement is met where the project complies with AS 4282:1997 Control of the obtrusive effects of outdoor lighting. The following values from Table 2.1 of AS 4282:1997 must be applied: For Class 2 buildings (residential), the values in Columns 5A and B;	Design	Electrical Engineer Lighting Designer
	27.1	Light Pollution to Night Sky	1	1	One (1) point is awarded where it can be demonstrated that one of the following specified reductions in light pollution has been achieved by the project. A. Control of upward light output ratio (ULOR), in accordance with 27.1A; or B. Control of direct illuminance, in accordance with 27.1B. This credit covers all external lighting of a project. In addition to other types of external lighting, for the purposes of this credit, luminaries inside glazed atria and those on the uppermost (uncovered) deck of an outdoor car park are considered to be external.	Design	Electrical Engineer Lighting Designer
Microbial Control	28.0	Legionella Impacts from Cooling Systems	1	1	This credit is achieved via one of the following: 1) Building is naturally ventilated and does not require a heat rejection system **2) Waterless heat rejection: no cooling tower, evaporative coolers** 3) Any water-based heat rejection system includes measures for Legionella control and a Legionella Risk Management Plan has been provided for the system	Design Construction	Head Contractor
			5	**4**			

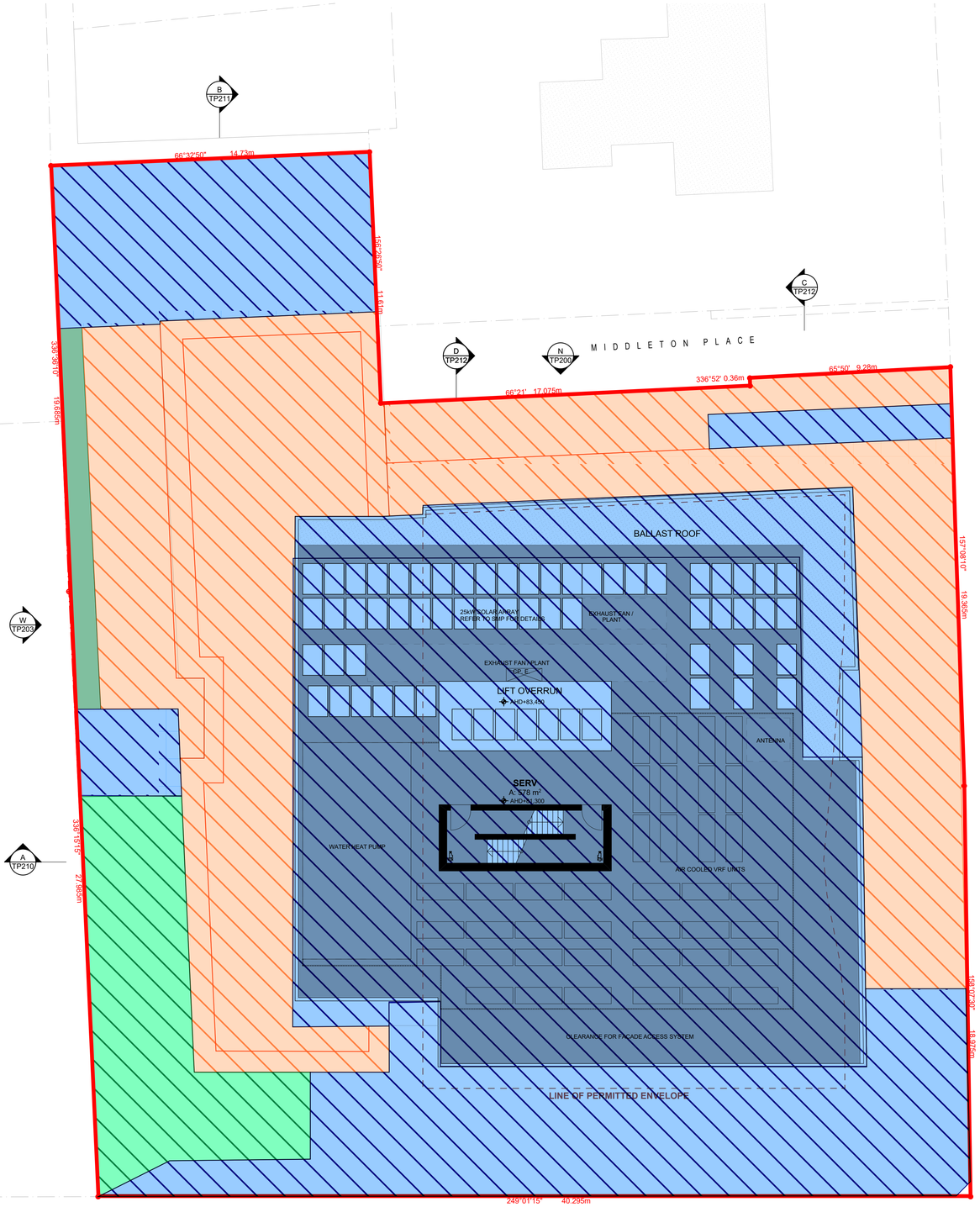
Credits			Points Available	Points Targeted	Credit Requirements	Stage	Responsible Entity
Innovation							
30C Improving on Green Star Benchmarks	30C.1	Ultra-low VOC paints	1	1	Over 50% of paint (by volume) to have a TVOC content of <5g/L - confirmed within specification	Design	Architect
	30C.2	Stormwater Pollution Targets	2	1	1 pt for stormwater discharge quality exceeding Column B pollution reduction targets. Additional 1 pt for stormwater discharge quality exceeding Column C pollution reduction targets.	Design	ADP ESD Hydraulic Engineer
30D Innovation Challenge	30D.1	Local Procurement	1	1	80% of all services and skilled labour will come from within 50km of the project site. This will be tracked through the induction process with site personnel required to provide their postcode of residents.	Construction	Head Contractor
Global Sustainability	30E.1	Green Cleaning	1	1	Cleaning services are delivered in accordance with a green cleaning policy or scope of works and are applicable to all common areas (i.e. areas controlled solely by the building owner).	Operation	Project Developer
	30E.2	Groundskeeping	1	1	1 Point is awarded where best practice operational procedures used to maintain landscaped areas, hard surfaces and building exteriors are in place during the performance period in accordance with the following requirements: A groundskeeping policy must be developed that includes the following: a. The scope of the maintenance program b. Frequency of maintenance c. Sustainability requirements, incldluing as a minimum measures for: i. diversion from landfill ii. Minimising use of chemicals iii. energy and water use iv. plant-specific maintenance requirements (where relevant) d. the recording and repoting mechanism of measured results e. procedures for prompt adjustments or repairs in response to non-compliance, f. The parties response for carrying out the maintenance program and measurements g. A review process to assess the success of the maintenance procedures and make improvements based on lessons learned.	Design	Project Developer
			10	**5**			

ADP
Consulting : Engineering

Appendix B
STORM Assessment

Legend

Assessed site area	1,679.32	sq m
Dog park (impervious)	103.22	sq m
Landscape	19.63	sq m
Non-trafficable roof	1,035.61	sq m
Trafficable areas	520.25	sq m



TOWN PLANNING

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
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The Builder/Contractor shall verify job dimensions prior to any work commencing. Figured dimensions shall take precedence over scaled work.

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
ROOF PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP120	REVISION 1

STORM Rating Report

TransactionID:	0
Municipality:	MELBOURNE
Rainfall Station:	MELBOURNE
Address:	405-421 Spencer Street
	Melbourne
	VIC 3000
Assessor:	ADP Consulting
Development Type:	Residential - Mixed Use
Allotment Site (m2):	1,679.32
STORM Rating %:	100

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Roof - non-trafficable	1,035.61	Rainwater Tank	22,000.00	100	154.60	79.00
Roof - trafficable (untreated)	520.25	None	0.00	0	0.00	0.00
Dog park (untreated)	103.22	Buffer Strip	2.00	0	60.80	0.00

Date Generated: 05-Sep-2024 Program Version: 1.0.0

ADP
Consulting : Engineering

Appendix C
NatHERS Assessment

C.1 Preliminary NatHERS Assessment

The proposed residential development consists of Class 2 apartments. The Victorian amendment of the National Construction Code (NCC) 2019 requires that the buildings achieve the following performance for the building fabric when modelled in accordance with an approved House Energy Rating Software. The NatHERS software has been used to determine the energy star ratings for a sample set of apartments in the development.

Class 2 buildings achieve:

- Each Sole Occupancy Unit has an energy rating of at least 5.5-Stars
- The average energy rating of all Sole Occupancy Units is at least 7-Stars
- The above targets are inline with Green Star (self-assessed) objectives, and are beyond the minimum NCC2019 requirements.

The following document has been used for information in this report:

- Plus Architecture, WIP Architecture for Coordination (30/08/2024)

C.1.1 Summary of Results

Table 4 Summary of Results

Ref	Level	Type	Orientation	Heating Load	Cooling Load	Star Rating
1	1	3 Bed	NW (triple aspect)	39.6	14.2	7.4
2	1	2 Bed	NE (double aspect)	38.9	16	7.4
3	3	1 Bed + S	SW (triple aspect)	48.4	29	6.2
4	3	2 Bed	S	45.5	13.2	7.2
5	3	2 Bed 2BA+S	SE (double aspect)	19.9	15.5	8.4
6	7	2 Bed 2 Bath	NW (triple aspect)	40.9	20.9	7
7	7	2 Bed	W	28.7	26.4	7.3
8	7	Studio	W	7.3	28.8	8.4
9	7	2 Bed 2BA+S	SW (double aspect)	37.5	11.8	7.7
10	13	1 Bed + S	S	39.9	17.9	7.2
11	13	2 Bed 2 BA+S	SE (double aspect)	32.9	13.1	7.9
12	13	1 Bed + S	E	2.6	7.5	10
13	13	Studio	E	9.7	14.4	9.1
14	13	3 Bed	NE (double aspect)	22	16.4	8.3
15	18	2 Bed 2 Bath	NW (triple aspect)	37	28	6.8
16	18	2 Bed	W	31.1	28.5	7.1
17	18	1 Bed	W	21.4	29.2	7.6
18	18	2 Bed 2BA+S	SW (double aspect)	39	18.4	7.2

19	19	2 Bed 2BA+S	W	43.2	22.3	6.8
20	19	3 Bed	SE (double aspect)	28	23.6	7.5
			Minimum	-	-	6.2
			Maximum	48.4	29.2	-
			Average	-	-	7.6

C.1.2 Construction Details

Table below indicates the construction details that were used in the rating of this development as per the architectural drawings. All R-values stated in the table below include the effects of thermal bridging. Changes to any of the listed details may alter the performance and invalidate the energy rating details in this report.

Table 5 Construction Details

Building Fabric	Construction Details & Reference Documents
Floor construction (Between apartments)	> 200-230mm suspended concrete slab
Floor construction (Between conditioned and unconditioned space. E.g., above basement)	> 200mm suspended concrete slab with R2.0 added Insulation
Floor coverings	> Bathrooms and laundries - Tiles > Kitchen/living areas – timber floorboards > Bedrooms and WIR - carpet
Ceiling construction	> 200mm Suspended Concrete slab
Ceiling construction (Exposed to outside)	> Exposed ceilings levels 1-17 – 200mm (230mm) suspended concrete slab with R2.0 added insulation > Roof levels 18 and 19 – 250mm suspended concrete slab with R4.0 added insulation
External wall construction	> Concrete with R2.5 added insulation and plaster board lining
Party wall construction	> Plasterboard with R1.5 added insulation
Glazing	> Generally, all glazing = U-Value: 3.0 & SHGC: 0.27, except: – Apt 03 (winter garden and south oriented glazing) = U-Value: 2.2 and SHGC: 0.32 – Apt 16 (winter garden) = U-Value: 2.2 & SHGC: 0.32 – Apt 17 (winter garden) = U-Value: 2.2 & SHGC: 0.32 – Apt 18 (winter garden) = U-Value: 2.2 & SHGC: 0.32

	Note: Glazing performance will continue to be refined during DD and finalised for building permit, whilst still maintain the overall NatHERS commitment detailed in this SMP.
Entry doors	> Sealed and weather stripped
Exhaust fans	> Bathrooms/ensuites and kitchen – 1 each > Sealed and weather stripped
Recessed downlights	> Sealed
Ceiling fans	> Ceiling fans within studio apartments – 1 x 900mm ceiling fan
Screens	> Screens and shading per plans and elevations

Note:

- **The below insulation and glazing specifications are for preliminary assessment purposes only and <u>should not</u> be used for the purpose of procurement of product (or the like). Final specifications will be confirmed when undertaking certified NatHERS energy ratings.**
- The above listed assumptions are subject to change as the design drawings get developed further (window schedules, door schedules, elevations, section drawings etc.)
- Total U-values and SHGC stated in the above table correspond to whole system values and must take into consideration thermal bridging in window systems. These values are to be confirmed in later stages.
- The units can benefit from a reduced Window-To-Wall ratio (WWR). Lowering the WWR offers increased flexibility in selecting glazing products. The current approach ensures uniformity in glazing for the single occupancy units. The choice of glazing for the development is primarily influenced by the most critical apartments with the highest heat loads. Implementing local changes to these units will enable more favourable glazing adjustments concerning colour and Visible Light Transmittance (VLT) for the entire building.

C.1.3 Next Steps and Conclusion

In the next stage of the project, ADP will conduct further detailed modelling to refine and finalize the set of glazing and building fabric requirements necessary to achieve compliance with NCC 2019 standards.

91-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

97 DUDLEY ST
1 STOREY
COMMERCIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

B TP211
C TP212
D TP212
N TP200
W TP203
A TP210
S TP201
E TP202

66°32'50" 14.73m
7.500
AHD+20,100
CONDENSER/PLANT
22 m²
25°25'50" 11.610m
5,000
3,400
3,000
3,000
3,400
TERRACES
(UNCOVERED)
34 m²
2 BED 2BA+S
86 m²
APT 104
T15
1
3,225
2,700
L
2 BED 2BA+S
81 m²
APT 103
T14
3,000
3,400
TERRACES
(UNCOVERED)
55 m²
POOL PLANT
(UNCOVERED)
21 m²
POOL PLANT
41 m²
4,000
POOL
15,000
COMMUNAL
192 m²
336°55'10" 19.662m
336°55'10" 21.196m
MIDDLETON PLACE
66°21' 17.075m
336°52' 0.36m
65°50' 9.28m
CANOPY
5,200
5,600
TERRACE
(UNCOVERED)
17 m²
TERRACE
(UNCOVERED)
68 m²
5,000
1 BED
50 m²
APT 102
T03
3,255
3,255
3,375
3,000
3,000
3,000
2 BED 2 BATH
76 m²
APT 101
T16
2
4,100
2,400
3,000
L
K.&D.
RWD
GP E
2,100
COMMS
ELEC
DRE
DWD
CIRC
129 m²
AHD+22,100
TERRACES
(UNCOVERED)
94 m²
TERRACES
(COVERED)
7 m²
OFFICE CIRC
17 m²
SKYLIGHTS
TO ROOF
COMMERCIAL
433 m²
AHD+22,100
FIRST FLOOR WEST FACING DELIVERY DOORWAY TO BE RETAINED AND REPAIRED AS REQUIRED EXTERNALLY. DOORWAY TO BE FIXED IN A SEALED POSITION INTERNALLY (NO ACCESS TO OUTSIDE, DOORWAY IS CURRENTLY A WINDOW.
SKYLIGHTS
TO ROOF
ABOVE
LINE OF CHIMNEY ABOVE
SHOWN DASHED
LINE OF PERMITTED ENVELOPE
LINE OF LIGHTWEIGHT
STRUCTURE WITH
CLIMBER PLANTING
ABOVE
LINE OF EXISTING
HERITAGE ROOF ABOVE
TO BE REINSTATED
45°48'10" 18.936m
158°07'30" 18.970m
EX. WINDOW
246°01'15" 40.295m
EX. WINDOW
EX. WINDOW
EX. WINDOW
EX. WINDOW
EX. WINDOW
LINE OF EXIST. CHIMNEY
ABOVE SHOWN DASHED
(4NOS)
EXISTING BRICKWORK TO BE
REMOVED & WINDOW
REINSTATED. PROPOSED WINDOW
TO BE FIXED SASH & INOPERABLE,
TO MATCH EXISTING.
LINE OF EXIST. CHIMNEY
ABOVE SHOWN DASHED (1NO)

BATMAN STREET

SPENCER STREET

EXISTING HERITAGE WALL
RETAINED

TOWN PLANNING

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

DATE	REVISION	BY	CHK	NO.

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BUILDING SURVEYOR	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	SQUARE 1 ENGINEERING	-
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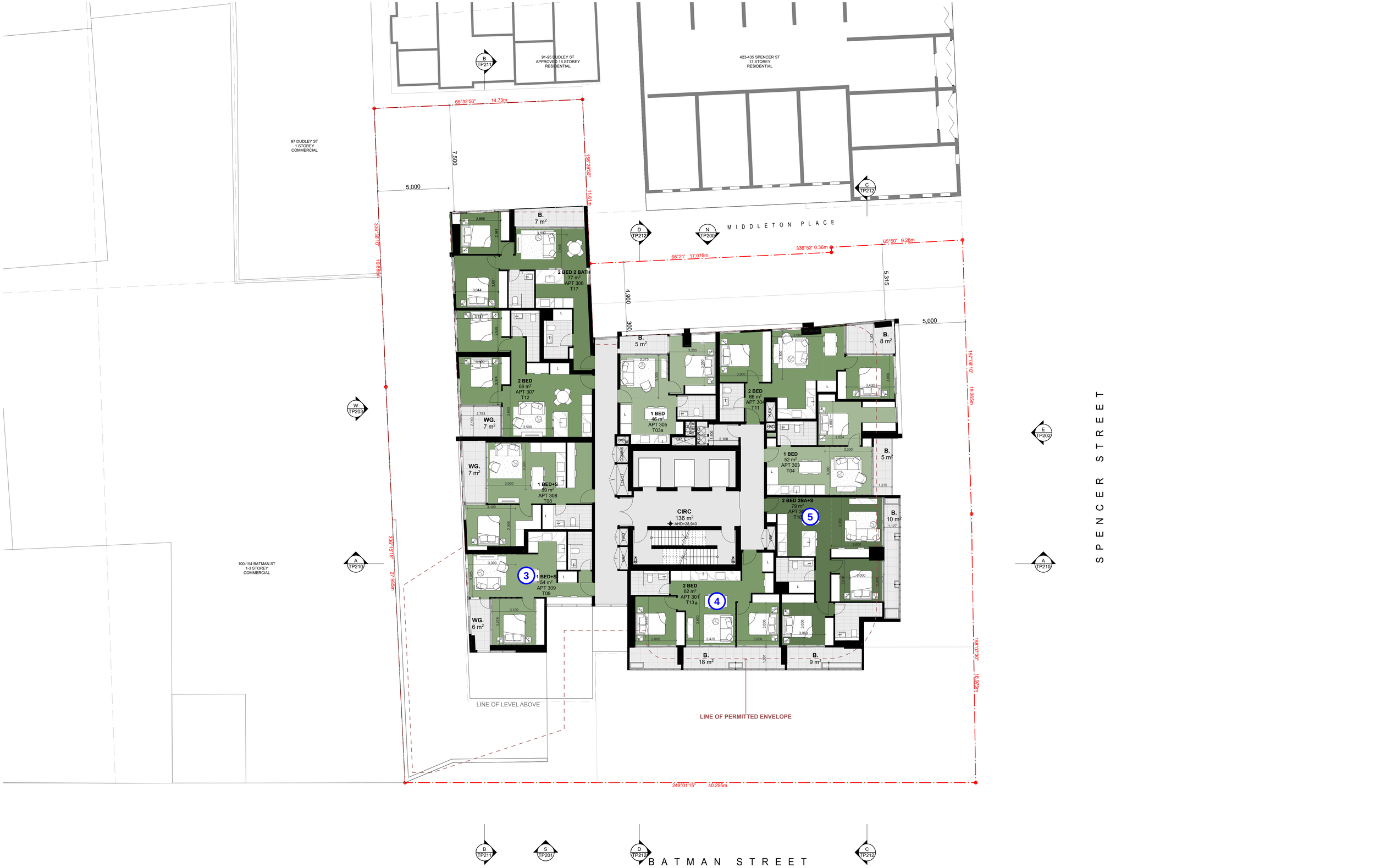
PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 01 PLAN

SCALE 1:100 @ B1	
DATE 19/07/2024	PLOT DATE 30/08/2024
DRAWN AN/XL	CHECKED NA
JOB NO. 12023	DRAWING NO. TP101
	REVISION 1



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PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 03 PLAN

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DATE 19/07/2024	PLOT DATE 30/08/2024	
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JOB NO. 12023	DRAWING NO. TP103	REVISION 1



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TOWN PLANNING

PROJECT	405-421 SPENCER STREET WEST MELBOURNE VIC
DRAWING TITLE	LEVEL 07 PLAN
SCALE	1:100 @ B1
DATE	19/07/2024
PLOT DATE	30/08/2024
DRAWN	AN/XL
CHECKED	NA
JOB NO.	12023
DRAWING NO.	TP107
REVISION	1



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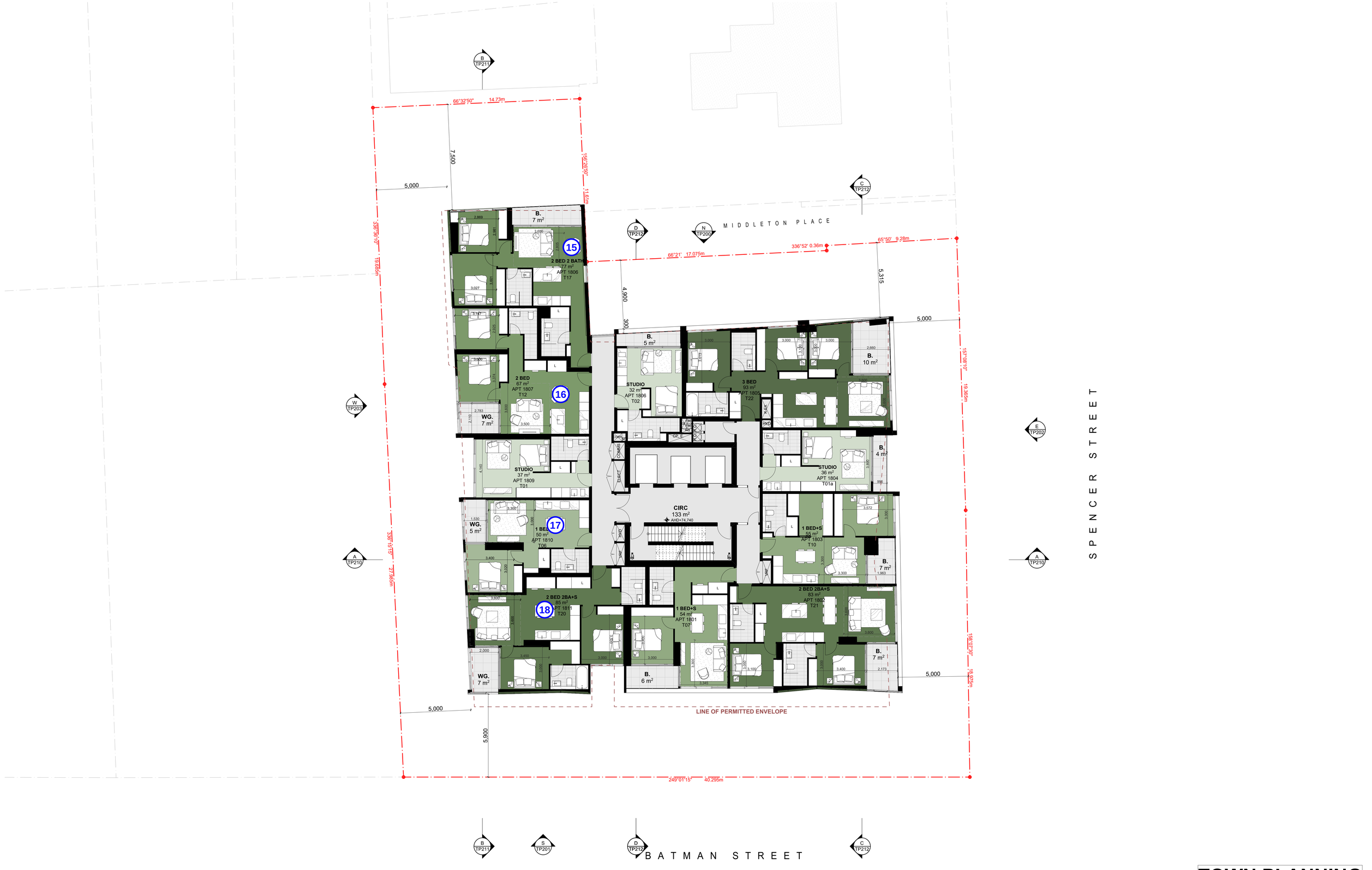
PROJECT	405-421 SPENCER STREET WEST MELBOURNE VIC
DRAWING TITLE	LEVEL 13 PLAN
SCALE	1:100 @ B1
DATE	19/07/2024
PLOT DATE	30/08/2024
DRAWN	AN/XL
CHECKED	NA
JOB NO.	12023
DRAWING NO.	TP113
REVISION	1



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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 18 PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP118	REVISION 1



TOWN PLANNING

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

DATE	REVISION	BY	CHK	NO.

DATE	REVISION	BY	CHK	NO.

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FIRE ENGINEER	SQUARE 1 ENGINEERING	-
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PROJECT	405-421 SPENCER STREET WEST MELBOURNE VIC
DRAWING TITLE	LEVEL 19 PLAN
SCALE	1:100 @ B1
DATE	19/07/2024
PLOT DATE	30/08/2024
DRAWN	AN/XL
CHECKED	NA
JOB NO.	12023
DRAWING NO.	TP119
REVISION	1

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ADP
Consulting : Engineering

Appendix D
NCC2019 Section J Preliminary Calculator

D.1.1 Section J DTS Facade Assessment

The following section J4 & J5 report details the building fabric and building sealing requirements under NCC 2019 Volume One, Amendment 1, following the Deemed-to-Satisfy (DTS) pathway as applicable to 405-421 Spencer Street, West Melbourne and the GF-2F retail, commercial and communal areas.

The calculator has accounted for a 10% improvement on facade calculator limits to meet Green Star Design and As Built requirements. This assessment referred to architectural drawings, Plus Architecture, WIP Architectural for Coordination (30/08/2024).

Table 6 Section J requirements for opaque constructions that forms part of the thermal envelope

Building Component	Proposed R_T (m^2.K/W)[1]	Solar absorptance
Roof	R3.6	< 0.45
Walls	R1.4	-
Floors	R2.2	-

Total R-values are calculated by taking into account thermal bridging in accordance with AS/NZ4859.2

Table 7 Section J requirements for glazing that forms part of the thermal envelope

Glazing Component	U_w (W/m^2.K)	$SHGC_w$	VLT_w (%)
Glazing – existing	U5.8	0.60	60%
Glazing – new (including GL01)	U3.5	0.35	40%

Where skylights are <5% of the floor area of the room or space served, then the performance parameters of the skylight shall be U-value <U3.9 and SHGC <0.29. Where a skylight is >5%, then energy modelling is required to confirm the performance parameter requirements of the skylight amongst all elements of the building fabric.

For Green Star, an improvement on NCC minimum requirements is required, with the building fabric requirements to be refined during the design development stage.

Town planning (NCC2019)

J1.5 Deemed to Satisfy

National Construction Code 2019 - Volume 1

Project	Spencer Street (NCC2019)
Address	405 Spencer St, West Melbourne VIC 3003, Australia (37.81° S, 144.95° E)
Date	2024-08-26, 03:03 PM
Author	(ADP Consulting) sustainabilityteam@adpconsulting.com.au
Scope	National Construction Code 2019
Performance Requirements	JP1 Energy Use
Assessment Process	Deemed-to-Satisfy Provisions
Building Class	5
Climate Zone	6
Storeys	3
Floor to Floor Height	4500 mm

Using Speckel

Speckel provides various calculations in line with the National Construction Code 2019 - Volume 1 - Section J Energy Efficiency. These calculations are tested in line with all applicable NCC equations or NCC referenced primary or secondary documents, for them to represent an accurate Performance Solution against the Performance Requirements - JP1 Energy Use. A Performance Solution must be shown to comply with the relevant Performance Requirements through one or a combination of Assessment Methods. Speckel is a valid Assessment Method by comparison with the Deemed-to-Satisfy Provisions of each relevant area.

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Town planning (NCC2019)

speckel.

Results

Class 5 Office - Method 1

Wall R-Value (m²K°/W)

Aspects	Performance (m²K°/W)	Requirement (m²K°/W)		Pass
North	1.40	1.40	min	✓
East	1.40	1.00	min	✓
South	1.40	1.00	min	✓
West	1.40	1.40	min	✓

Solar Admittance

Aspects	Performance	Requirement		Pass
North	0.08	0.13	max	✓
East	0.09	0.13	max	✓
South	0.08	0.13	max	✓
West	0.02	0.13	max	✓

Wall-glazing U-Value (W/m²K°)

Aspects	Performance (W/m²K°)	Requirement (W/m²K°)		Pass
North	0.92	2.00	max	✓
East	1.48	2.00	max	✓
South	1.41	2.00	max	✓
West	0.81	2.00	max	✓

Class 5 Office - Method 2

	Performance	Requirement		Pass
R-Value (m²K°/W)	1.40	1.40	min	✓
U-Value (W/m²K°)	1.15	2.00	max	✓
AC Value	99.92	151.49	max	✓

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Method

Approach

- This assessment represents whole-façade performance (Method 2) and single aspect of whole-façade performance (Method 1) according to NCC 2019 (Vol 1) J1.5 Walls and glazing and as per Specification J1.5a Calculation of U-Value and solar admittance
- Each elevation (in degrees) is mapped to one of the four aspects (N, E, S, W) as defined in Specification J1.5a Calculation of U-Value and solar admittance
- Total U-value (ISO 15099), and Wall R-value (AS/NZS 4859.2:2018) is calculated as defined in Specification J1.5a Calculation of U-Valueand solar admittance and Specification J1.5b Spandrel panel thermal performance. Solar Admittance (when applicable), Solar Admittance Weight, Wall/Glazing ratio, and threshold Solar Admittance are calculated for the four aspects (N, E, S, W).
- When the Simulated Shading Multipliers feature is enabled, each window is simulated in EnergyPlus twice, to compare a completely unshaded window, to a window affected by attached shading, building self-shading, and surrounding structures. The multiplier is based on the ratio of shaded versus unshaded annual average external incident solar radiation, limited between 0.0 and 1.0.

Assumptions / Limitations

- No overshadowing is assumed from buildings or landscapes
- Generic materials (Specification J1.2 Material properties) are only adopted where actual tested materials have not been selected by the user. It is up to the user to determine the relevance of these materials for their project.
- Interpolation is necessary to determine shading multipliers when ratios do not exactly match Specification J1.5a Calculation of U-Value and solar admittance - Table 7a Shading multipliers — Northern, eastern and western aspect
- To ensure the J1.5 deemed-to-satisfy (DTS) method can be calculated, windows are limited to a maximum of 99% window-to-wall ratio (WWR).

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Town planning (NCC2019)

Inputs

The NCC 2019 - Vol 1 contains technical design and construction requirements for all commercial buildings and their associated structures. The following Building Classes have been adopted in this assessment.

Wall Area (m²)	1460.66
Window Area (m²)	228.44
Glazed Door (m²)	21.39
Window-Wall Ratio (%)	13.52

Levels

Level	Drawing	# Zones	Floor Area (m²)	Wall (m²)	Window (m²)
1	TP - GF	9	1536.5	519.9	72.7
2	Level 01	7	1099.3	710.5	112.6
3	Level 02	4	717.5	230.3	43.1

Zones

Level	Zone	Area (m²)	Volume (m³)	Treated Area (m²)
1	1. BOH	533.30	2293.18	0.00
1	2. Retail 1	357.89	1538.93	357.89
1	3. Retail 2	153.29	659.15	153.29
1	4. Lobby	135.92	584.46	135.92
1	5. Mail room	116.40	500.52	0.00
1	6. Carpark	112.47	483.62	0.00
1	7. Retail 3	54.63	234.91	54.63
1	8. Circulation stairs	20.17	86.74	20.17
1	9. Corridor	16.03	68.95	0.00
2	1. Commercial	393.21	1709.29	393.21
2	2. Communal	189.59	815.82	189.59
2	3. Residential	189.21	823.08	0.00
2	4. Residential	122.32	529.75	0.00

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Town planning (NCC2019)

Level	Zone	Area (m²)	Volume (m³)	Treated Area (m²)
2	5. Corridor	121.49	526.32	121.49
2	6. Office lobby	30.63	133.24	30.63
2	7. GF retail void	23.26	101.18	23.26
3	1. Residential	306.88	856.25	0.00
3	2. Residential	212.29	602.95	0.00
3	3. Corridor	124.79	355.65	124.79
3	4. Communal	53.38	151.94	53.38
		3267.15		1658.25

Walls

Total System R-values of all walls include the effects of thermal bridging, which are calculated in accordance with AS/NZS 4859.2 and NZ 4214:2006 (J1.2 Thermal construction — General (e)) or are stated values.

Proposed	Title	Aspect	Class	R-Value (m²K°/W)	Area (m²)
Exposed to Unconditioned	Internal envelope wall	East	5	1.40	105.76
Exposed to Unconditioned	Internal envelope wall	North	5	1.40	286.25
Exposed to Unconditioned	Internal envelope wall	South	5	1.40	36.15
Exposed to Unconditioned	Internal envelope wall	West	5	1.40	266.31
External	Concept	East	5	1.40	234.55
External	Concept	North	5	1.40	83.60
External	Concept	South	5	1.40	268.05
External	Concept	West	5	1.40	180.00

Windows

Total system U-values of all windows include the effects of thermal bridging at the frame, which are calculated in accordance with ISO 15099, as per J1.2 Thermal Construction — General (e).

Proposed	Title	Aspect	Class	U-value	SHGC	Shading Multiplier	Area (m²)
External	GL01	East	5	3.50	0.30	0.50	6.26
External	GL01	East	5	3.50	0.30	0.51	7.25

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Proposed	Title	Aspect	Class	U-value	SHGC	Shading Multiplier	Area (m²)
External	GL01	East	5	3.50	0.30	0.52	6.30
External	GL01	East	5	3.50	0.30	0.53	6.69
External	GL01	East	5	3.50	0.30	0.53	9.32
External	GL01	East	5	3.50	0.30	1.00	14.59
External	GL01	North	5	3.50	0.30	1.00	21.04
External	GL01	South	5	3.50	0.30	1.00	16.67
External	Glazing - existing	East	5	5.80	0.60	0.58	2.80
External	Glazing - existing	East	5	5.80	0.60	0.60	2.82
External	Glazing - existing	East	5	5.80	0.60	0.79	0.39
External	Glazing - existing	East	5	5.80	0.60	1.00	4.61
External	Glazing - existing	South	5	5.80	0.60	0.77	1.43
External	Glazing - existing	South	5	5.80	0.60	0.88	0.31
External	Glazing - existing	South	5	5.80	0.60	1.00	10.61
External	Glazing - new	East	5	3.50	0.30	1.00	6.51
External	Glazing - new	East	5	3.50	0.30	1.00	49.27
External	Glazing - new	North	5	3.50	0.30	1.00	8.82
External	Glazing - new	South	5	3.50	0.30	0.80	1.44
External	Glazing - new	South	5	3.50	0.30	0.83	2.92
External	Glazing - new	South	5	3.50	0.30	0.84	13.22
External	Glazing - new	South	5	3.50	0.30	0.95	13.81
External	Glazing - new	South	5	3.50	0.30	1.00	5.69
External	Glazing - new	West	5	3.50	0.30	1.00	15.67

Glazed Doors

Proposed	Title	Aspect	Class	U-value	SHGC	Shading Multiplier	Area (m²)
External	Concept	South	5	3.50	0.35	1.00	21.39

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Detailed Results

Building Class 5

Method Two

AC Energy Threshold	151.49
U-Value Threshold (W/m².K)	5.80
Total U-Value (W/m².K)	1.15
Wall R-Value (m².K/W)	1.40
Total Area (m²)	1710.49
Window-Wall Ratio	0.15

Method One - North Aspect

Total U-Value (W/m².K)	0.92
Wall R-Value (m².K/W)	1.40
Solar Admittance Threshold	0.13
Solar Admittance Weighting	2.12
Aspect Area (m²)	399.71
Window-Wall Ratio	0.07

Title	Heading (°)	U-value (W/m²K°)	SHGC	Area (m²)	P (m)	G (m)	H (m)	SC
GL01	356.8	3.50	0.30	12.71	0.00	0.00	0.00	1.00
GL01	357.8	3.50	0.30	8.33	0.00	0.00	0.00	1.00
Glazing - new	0.0	3.50	0.30	8.82	0.00	0.00	0.00	1.00

Method One - East Aspect

Total U-Value (W/m².K)	1.48
Wall R-Value (m².K/W)	1.40
Solar Admittance Threshold	0.13
Solar Admittance Weighting	1.62
Aspect Area (m²)	457.11

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Window-Wall Ratio								0.26
Title	Heading (°)	U-value (W/m²K°)	SHGC	Area (m²)	P (m)	G (m)	H (m)	SC
GL01	88.5	3.50	0.30	7.11	0.00	0.00	0.00	1.00
GL01	88.5	3.50	0.30	7.49	0.00	0.95	4.10	1.00
GL01	88.5	3.50	0.30	6.30	3.68	0.90	3.79	0.52
GL01	88.5	3.50	0.30	7.25	3.68	0.87	3.75	0.51
GL01	88.5	3.50	0.30	6.26	3.69	0.85	3.75	0.50
GL01	88.5	3.50	0.30	6.69	3.70	0.90	4.00	0.53
GL01	88.5	3.50	0.30	9.32	3.70	0.91	4.11	0.53
Glazing - existing	89.3	5.80	0.60	2.89	0.00	0.00	0.00	1.00
Glazing - existing	89.4	5.80	0.60	2.80	3.71	0.78	2.55	0.58
Glazing - existing	89.4	5.80	0.60	2.82	3.77	0.85	2.60	0.60
Glazing - existing	135.0	5.80	0.60	1.72	0.00	0.00	0.00	1.00
Glazing - existing	135.0	5.80	0.60	0.39	3.87	1.35	1.77	0.79
Glazing - new	87.7	3.50	0.30	6.51	0.01	0.25	4.50	1.00
Glazing - new	90.0	3.50	0.30	49.27	0.00	0.00	0.00	1.00

Method One - South Aspect

Total U-Value (W/m².K)								1.41
Wall R-Value (m².K/W)								1.40
Solar Admittance Threshold								0.13
Solar Admittance Weighting								1.00
Aspect Area (m²)								391.69
Window-Wall Ratio								0.22
Title	Heading (°)	U-value (W/m²K°)	SHGC	Area (m²)	P (m)	G (m)	H (m)	SC
GL01	180.0	3.50	0.30	16.67	0.00	0.00	0.00	1.00
Glazing - existing	180.0	5.80	0.60	10.61	0.00	0.00	0.00	1.00
Glazing - existing	180.0	5.80	0.60	1.43	3.90	0.94	2.78	0.77
Glazing - existing	180.0	5.80	0.60	0.31	3.90	2.09	2.49	0.88

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Title	Heading (°)	U-value (W/m²K°)	SHGC	Area (m²)	P (m)	G (m)	H (m)	SC
Glazing - new	179.1	3.50	0.30	13.81	0.50	0.29	3.80	0.95
Glazing - new	180.0	3.50	0.30	5.69	0.00	0.00	0.00	1.00
Glazing - new	180.0	3.50	0.30	13.22	1.20	0.04	4.50	0.84
Glazing - new	180.0	3.50	0.30	2.92	3.89	1.41	3.25	0.83
Glazing - new	180.0	3.50	0.30	1.44	3.90	1.14	2.98	0.80
Concept	180.0	3.50	0.35	7.64	0.00	0.00	0.00	1.00
Concept	180.0	3.50	0.35	2.95	0.00	1.50	4.50	1.00
Concept	180.2	3.50	0.35	10.80	0.00	0.00	0.00	1.00

Method One - West Aspect

Total U-Value (W/m².K)	0.81
Wall R-Value (m².K/W)	1.40
Solar Admittance Threshold	0.13
Solar Admittance Weighting	0.00
Aspect Area (m²)	461.97
Window-Wall Ratio	0.03

Title	Heading (°)	U-value (W/m²K°)	SHGC	Area (m²)	P (m)	G (m)	H (m)	SC
Glazing - new	267.2	3.50	0.30	15.67	0.00	0.00	0.00	1.00

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Town planning (NCC2019)

Drawings

Level 1 - TP - GF



Thermal Line
Windows
Glazed Door
Class 5
Unconditioned

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Town planning (NCC2019)

Level 2 - Level 01



Thermal Line Windows Class 5 Unconditioned

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Level 3 - Level 02



Thermal Line Windows Unconditioned Class 5

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Town planning (NCC2019)

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ADP
Consulting : Engineering

Appendix E
Daylight Hand Calculation

This Daylight Summary provides an overview of the daylight study conducted through Green Star Hand Calculation method for the proposed development.

The project team aims to provide best-practice daylight levels to the retail, commercial, and communal spaces. As well as the Living rooms and bedroom spaces for the residential apartments.

> BESS>33% of the regularly used area achieves a daylight factor of at least 2.0.

The Regularly used area are defined as;

> All spaces a person is expected to work or remain for an extended period

Spaces that have been excluded from the assessment:

> Transient spaces which are accessed intermittently.

The table below shows the results of the daylight study for the regularly used areas across the development, indicating that 63% of the regularly used areas achieve a daylight factor greater than 2.0.

Level	Nominated Area (m2)	Compliant Area (m2)	Percentage of Compliance
GF	522.67	135.1	26%
L1	633.23	181.04	29%
L2	194.91	129.36	66%
L3	162.2	114.77	71%
L4	187.41	129.23	69%
L5-L17	2663.44	2031.38	76%
L18	204.88	156.26	76%
L19	104.25	88.39	85%
TOTAL	**4672.99**	**2965.53**	**63%**

Legend

Non-residential - Compliant daylight area	135.10	sq m
Non-residential - Nominated areas	522.67	sq m

The skylight in this retail space is not included within this assessment. However, it will be only improve the daylight quality within this space.

Note that larger skylights will have significant impacts on NCC Part J compliance.

EXISTING HERITAGE WALL RETAINED

TOWN PLANNING

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PROJECT: **405-421 SPENCER STREET WEST MELBOURNE VIC**

DRAWING TITLE: **GROUND FLOOR PLAN**

SCALE	1:100 @ B1		
DATE	19/07/2024	PLOT DATE	30/08/2024
DRAWN	AN/XL	CHECKED	NA
JOB NO.	12023	DRAWING NO.	TP100
		REVISION	1

Legend

Living - Compliant daylight area	64.94	sq m
Living - Nominated areas	87.74	sq m
Non-residential - Compliant daylight area	116.10	sq m
Non-residential - Nominated areas	545.49	sq m

91-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

97 DUDLEY ST
1 STOREY
COMMERCIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

MIDDLETON PLACE

SPENCER STREET

BATMAN STREET

CONDENSER/PLANT
22 m²

TERRACES
(UNCOVERED)
34 m²

2 BED 2BA+S
86 m²
APT 104
T15

2 BED 2BA+S
81 m²
APT 103
T14

TERRACES
(UNCOVERED)
55 m²

POOL PLANT
(UNCOVERED)
21 m²

POOL PLANT
41 m²

TERRACE
(UNCOVERED)
17 m²

TERRACE
(UNCOVERED)
68 m²

1 BED
50 m²
APT 102
T03

2 BED 2 BATH
76 m²
APT 101
T16

CIRC
129 m²
AHD+22,100

TERRACES
(UNCOVERED)
94 m²

TERRACES
(COVERED)
7 m²

OFFICE CIRC
17 m²

COMMERCIAL
433 m²
AHD+22,100

POOL
COMMUNAL
192 m²

LINE OF PERMITTED ENVELOPE

SKYLIGHTS TO ROOF

SKYLIGHTS TO ROOF ABOVE

FIRST FLOOR WEST FACING DELIVERY DOORWAY TO BE RETAINED AND REPAIRED AS REQUIRED EXTERNALLY. DOORWAY TO BE FIXED IN A SEALED POSITION INTERNALLY (NO ACCESS TO OUTSIDE, DOORWAY IS CURRENTLY A WINDOW.

LINE OF CHIMNEY ABOVE SHOWN DASHED

LINE OF LIGHTWEIGHT STRUCTURE WITH CLIMBER PLANTING ABOVE

LINE OF EXISTING HERITAGE ROOF ABOVE TO BE REINSTATED

LINE OF EXIST. CHIMNEY ABOVE SHOWN DASHED (4NOS)

EXISTING BRICKWORK TO BE REMOVED & WINDOW REINSTATED. PROPOSED WINDOW TO BE FIXED SASH & INOPERABLE, TO MATCH EXISTING.

LINE OF EXIST. CHIMNEY ABOVE SHOWN DASHED (1NO)

EXISTING HERITAGE WALL RETAINED

TOWN PLANNING

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PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 01 PLAN

SCALE 1:100 @ B1	
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DRAWN AN/XL	CHECKED NA
JOB NO. 12023	DRAWING NO. TP101
	REVISION 1



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DRAWING TITLE	LEVEL 02 PLAN
SCALE	1:100 @ B1
DATE	19/07/2024
PLOT DATE	30/08/2024
DRAWN	AN/XL
CHECKED	NA
JOB NO.	12023
DRAWING NO.	TP102
REVISION	1



DATE	REVISION	BY	CHK	NO.
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PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 03 PLAN

SCALE 1:100 @ B1	
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JOB NO. 12023	DRAWING NO. TP103
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PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 04 PLAN

SCALE 1:100 @ B1	
DATE 19/07/2024	PLOT DATE 30/08/2024
DRAWN AN/XL	CHECKED NA
JOB NO. 12023	DRAWING NO. TP104
	REVISION 1

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m

97 DUDLEY ST
1 STOREY
COMMERCIAL

95-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

MIDDLETON PLACE

SPENCER STREET

BATMAN STREET

LINE OF PERMITTED ENVELOPE

B. 7 m²
2 BED 2 BATH 77 m² APT 506 T17
2 BED 67 m² APT 507 T12
WG. 7 m²
STUDIO 37 m² APT 509 T01
1 BED 50 m² APT 510
WG. 5 m²
2 BED 2BA+S 85 m² APT 511 T20
WG. 7 m²
B. 5 m²
STUDIO 36 m² APT 506 T02
B. 6 m²
CIRC 133 m² AHD+35.220
1 BED+S APT 501 T07
3 BED 93 m² APT 505 T22
B. 10 m²
STUDIO 36 m² APT 504 T01a
B. 4 m²
1 BED+S 55 m² APT 503 A10
2 BED 2BA+S 83 m² APT 502 T21
B. 7 m²
B. 7 m²

66°32'50"	14.73m		
336°52'15"	27.985m		
336°52'50"	11.61m		
336°36'10"	19.685m		
66°21'	17.075m		
336°52'	0.36m		
65°50'	9.28m		
157°08'10"	19.365m		
158°07'20"	18.975m		
249°01'15"	40.295m		
7.500	5.000	4.900	5.315
5.000	5.900	300	

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PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 05 PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP105	REVISION 1



DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

DATE	REVISION	BY	CHK	NO.

DATE	REVISION	BY	CHK	NO.

CONSULTANTS

STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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The Builder/Contractor shall verify job dimensions prior to any work commencing. Figured dimensions shall take precedence over scaled work.

TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 06 PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP106	REVISION 1



TOWN PLANNING

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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The Builder/Contractor shall verify job dimensions prior to any work commencing. Figured dimensions shall take precedence over scaled work.

PROJECT	DRAWING TITLE
405-421 SPENCER STREET WEST MELBOURNE VIC	**LEVEL 07 PLAN**

SCALE **1:100 @ B1**		
DATE 19/07/2024	PLOT DATE **30/08/2024**	
DRAWN AN/XL	CHECKED NA	
JOB NO. **12023**	DRAWING NO. **TP107**	REVISION **1**

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m

97 DUDLEY ST
1 STOREY
COMMERCIAL

95-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

B. 7 m²
2 BED 2 BATH 77 m² APT 806 T17
2 BED 67 m² APT 807 T12
WG. 7 m²
STUDIO 37 m² APT 809 T01
1 BED 50 m² APT 810
WG. 5 m²
2 BED 2BA+S 85 m² APT 811 T20
WG. 7 m²
B. 6 m²
B. 5 m²
STUDIO 36 m² APT 806 T02
CIRC 133 m² AHD+44,340
1 BED+S APT 801 T07
3 BED 93 m² APT 805 T22
B. 10 m²
B. 4 m²
STUDIO 36 m² APT 804 T01a
1 BED+S 55 m² APT 803 T10
B. 7 m²
2 BED 2BA+S 83 m² APT 802 T21
B. 7 m²

66°32'50" 14.73m
156°25'50" 11.61m
336°36'10" 19.685m
336°51'15" 27.985m
249°01'15" 40.295m
157°08'10" 19.365m
158°07'30" 18.975m
336°52' 0.36m
66°21' 17.075m
65°50' 9.28m
7,500
5,000
4,900
300
5,315
5,900
LINE OF PERMITTED ENVELOPE

MIDDLETON PLACE
SPENCER STREET
BATMAN STREET

B TP211 · A TP210 · W TP203 · N TP200 · D TP212 · C TP212 · E TP202 · S TP201

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 08 PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP108	REVISION 1



DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 09 PLAN

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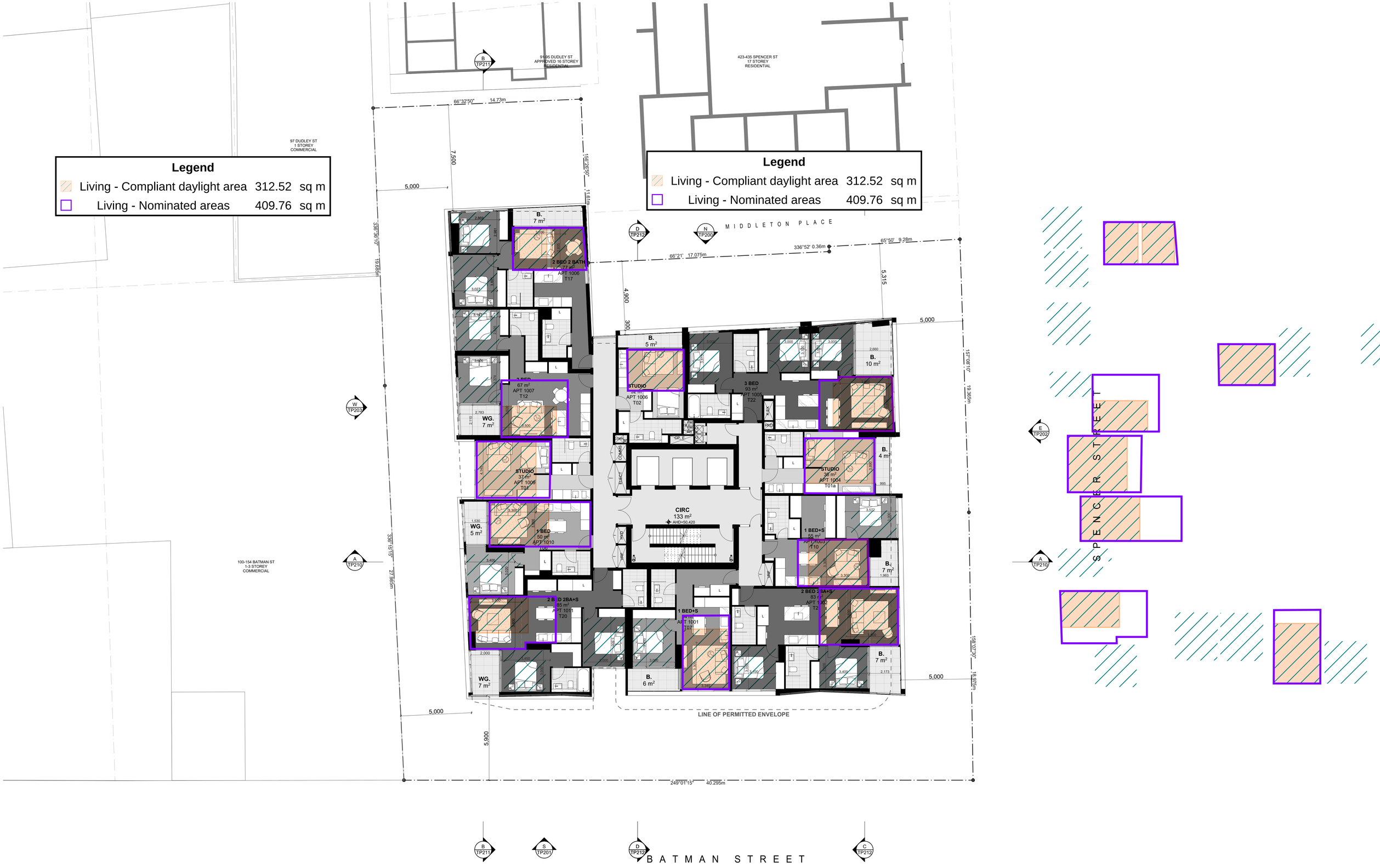
SCALE		
1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP109	REVISION 1



DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 10 PLAN

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SCALE		
1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP110	REVISION 1

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m

97 DUDLEY ST
1 STOREY
COMMERCIAL

95-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

MIDDLETON PLACE

SPENCER STREET

BATMAN STREET

LINE OF PERMITTED ENVELOPE

B. 7 m²
2 BED 2 BATH 77 m² APT 1106 T17
2 BED 67 m² APT 1107 T12
WG. 7 m²
STUDIO 37 m² APT 1109 T01
1 BED 50 m² APT 1110
WG. 5 m²
2 BED 2BA+S 85 m² APT 1111 T20
WG. 7 m²
B. 5 m²
STUDIO 36 m² APT 1106 T02
CIRC 133 m² AHD+53.460
B. 6 m²
1 BED+S APT 1101 T07
3 BED 93 m² APT 1105 T22
B. 10 m²
STUDIO 36 m² APT 1104 T01a
B. 4 m²
1 BED+S 55 m² APT 1103 T10
2 BED 2BA+S 83 m² APT 1102 T2
B. 7 m²
B. 7 m²

66°32'50"	14.73m			
336°52'50"	11.61m			
336°36'10"	19.685m			
336°15'15"	27.986m			
249°01'15"	40.295m			
66°21'	17.075m			
336°52'	0.36m			
65°50'	9.28m			
157°08'10"	19.365m			
159°07'20"	18.975m			
7.500	5.000	4.900	5.315	5.000
5.000	5.900	300		

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 11 PLAN

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SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP111	REVISION 1



DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

DATE	REVISION	BY	CHK	NO.

DATE	REVISION	BY	CHK	NO.

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 12 PLAN

SCALE 1:100 @ B1	
DATE 19/07/2024	PLOT DATE 30/08/2024
DRAWN AN/XL	CHECKED NA
JOB NO. 12023	DRAWING NO. TP112
	REVISION 1

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DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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www.plusarchitecture.com.au

TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 13 PLAN

SCALE **1:100 @ B1**

DATE 19/07/2024

PLOT DATE **30/08/2024**

DRAWN AN/XL

CHECKED NA

JOB NO. **12023**

DRAWING NO. **TP113**

REVISION **1**

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The Builder/Contractor shall verify job dimensions prior to any work commencing. Figured dimensions shall take precedence over scaled work.

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m

91-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

97 DUDLEY ST
1 STOREY
COMMERCIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

MIDDLETON PLACE

SPENCER STREET

BATMAN STREET

LINE OF PERMITTED ENVELOPE

B. 7 m²
2 BED 2 BATH 77 m² APT 1406 T17
2 BED 67 m² APT 1407 T12
WG. 7 m²
STUDIO 37 m² APT 1409 T01
1 BED 50 m² APT 1410
2 BED 2BA+S 85 m² APT 1411 T20
WG. 5 m²
WG. 7 m²
B. 5 m²
STUDIO 36 m² APT 1406 T02
B. 6 m²
CIRC 133 m²
AHD+62,580
3 BED 93 m² APT 1405 T22
B. 10 m²
B. 4 m²
STUDIO 36 m² APT 1404 T01a
1 BED+S 55 m² APT 1403 T10
B. 7 m²
2 BED 2BA+S 83 m² APT 1402 T2
1 BED+S APT 1401 T07
B. 7 m²

66°32'50" 14.73m
156°25'50" 11.61m
336°36'10" 19.685m
336°51'15" 27.985m
249°01'15" 40.295m
157°08'10" 19.305m
158°07'20" 18.975m
336°52' 0.36m
66°21' 17.075m
65°50' 9.28m
7,500
5,000
4,900
300
5,315
5,900

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 14 PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP114	REVISION 1

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m

91-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

97 DUDLEY ST
1 STOREY
COMMERCIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

MIDDLETON PLACE

SPENCER STREET

BATMAN STREET

LINE OF PERMITTED ENVELOPE

B. 7 m²
2 BED 2 BATH 77 m² APT 1506 T17
2 BED 67 m² APT 1507 T12
WG. 7 m²
STUDIO 37 m² APT 1509 T01
1 BED 50 m² APT 1510
WG. 5 m²
2 BED 2BA+S 85 m² APT 1511 T20
WG. 7 m²
B. 5 m²
STUDIO 36 m² APT 1506 T02
CIRC 133 m² AHD+65.620
B. 6 m²
1 BED+S APT 1501 T07
3 BED 93 m² APT 1505 T22
B. 10 m²
B. 4 m²
STUDIO 36 m² APT 1504 T01a
1 BED+S 55 m² APT 1503 T10
2 BED 2BA+S 83 m² APT 1502 T2
B. 7 m²
B. 7 m²

66°32'50" 14.73m
7.500
5.000
156°25'50" 11.61m
336°36'10" 19.685m
66°21' 17.075m
336°52' 0.36m
65°50' 9.28m
4.900
300
5.315
5.000
157°08'10" 19.365m
336°51'15" 27.985m
5.000
5.900
249°01'15" 40.295m
158°07'20" 18.975m

A TP210 · B TP211 · C TP212 · D TP212 · N TP200 · W TP203 · E TP202 · S TP201

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
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SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 15 PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP115	REVISION 1

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m

91-95 DUDLEY ST
APPROVED 16 STOREY
RESIDENTIAL

423-435 SPENCER ST
17 STOREY
RESIDENTIAL

97 DUDLEY ST
1 STOREY
COMMERCIAL

100-154 BATMAN ST
1-3 STOREY
COMMERCIAL

MIDDLETON PLACE

SPENCER STREET

BATMAN STREET

LINE OF PERMITTED ENVELOPE

66°32'50" 14.73m
7.500
5,000
156°32'50" 11.61m
336°36'10" 19.685m
336°51'15" 27.985m
249°01'15" 40.295m
5,900
66°21' 17.075m
336°52' 0.36m
65°50' 9.28m
5,315
4,900
300
5,000
157°08'10" 19.365m
156°07'30" 18.975m
5,000

B. 7 m²
2 BED 2 BATH 77 m²
APT 1606 T17
2 BED 67 m² APT 1607 T12
WG. 7 m²
STUDIO 37 m² APT 1609 T01
1 BED 50 m² APT 1610
WG. 5 m²
2 BED 2BA+S 85 m² APT 1611 T20
WG. 7 m²
B. 6 m²
1 BED+S APT 1601 T07
B. 5 m²
STUDIO APT 1606 T02
CIRC 133 m² AHD+68.660
3 BED 93 m² APT 1605 T22
B. 10 m²
B. 4 m²
STUDIO 36 m² APT 1604 T01a
1 BED+S 55 m² APT 1603 T10
2 BED 2BA+S 83 m² APT 1602 T2
B. 7 m²
B. 7 m²

A TP210 · B TP211 · C TP212 · D TP212 · N TP200 · W TP203 · E TP202 · A TP210 · B TP211 · S TP201 · D TP212 · C TP212

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
STRUCTURAL ENGINEER	☐	WEBBER DESIGN	T 03 9614 7155
SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

TOWN PLANNING

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PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 16 PLAN

SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP116	REVISION 1

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m

MIDDLETON PLACE

SPENCER STREET

BATMAN STREET

LINE OF PERMITTED ENVELOPE

B. 7 m²
2 BED 2 BATH 77 m² APT 1706 T17
2 BED 67 m² APT 1707 T12
WG. 7 m²
STUDIO 37 m² APT 1709 T01
1 BED 50 m² APT 1710
WG. 5 m²
2 BED 2BA+S 85 m² APT 1711 T20
WG. 7 m²
B. 5 m²
STUDIO 36 m² APT 1706 T02
CIRC 133 m² AHD+71,700
B. 6 m²
1 BED+S APT 1701 T07
3 BED 93 m² APT 1705 T22
B. 10 m²
STUDIO 36 m² APT 1704 T01a
B. 4 m²
1 BED+S 55 m² APT 1703 T10
2 BED 2BA+S 83 m² APT 1702 T2
B. 7 m²
B. 7 m²

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

CONSULTANTS			
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BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
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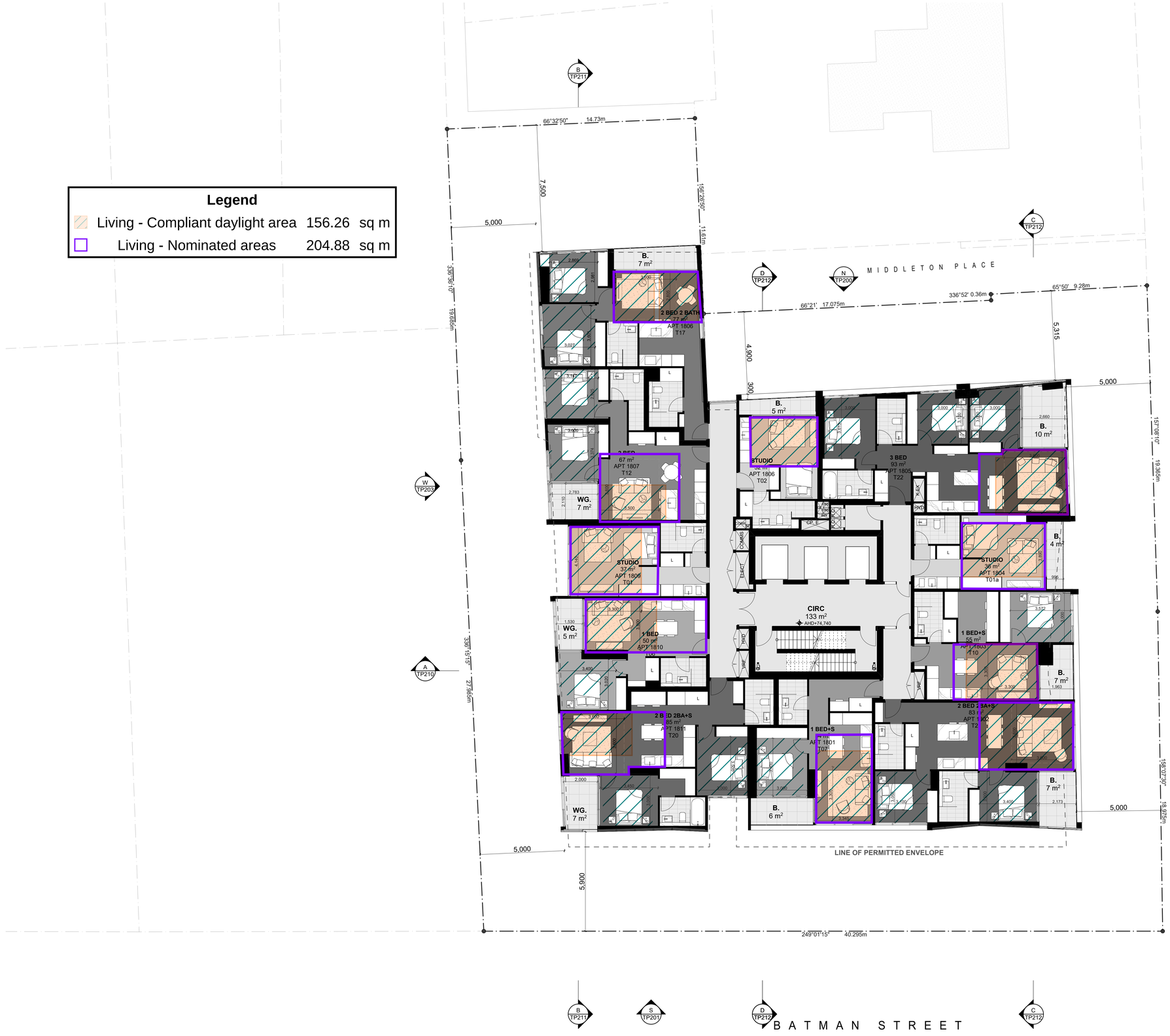
PROJECT	405-421 SPENCER STREET WEST MELBOURNE VIC
DRAWING TITLE	LEVEL 17 PLAN
SCALE	1:100 @ B1
DATE	19/07/2024
PLOT DATE	30/08/2024
DRAWN	AN/XL
CHECKED	NA
JOB NO.	12023
DRAWING NO.	TP117
REVISION	1

Legend

Living - Compliant daylight area	156.26	sq m
Living - Nominated areas	204.88	sq m



DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

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SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
FIRE ENGINEER	☐	SQUARE 1 ENGINEERING	-
ESD	☐	ADP CONSULTING	T 03 9997 9262

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TOWN PLANNING

PROJECT
405-421 SPENCER STREET WEST MELBOURNE VIC

DRAWING TITLE
LEVEL 18 PLAN

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SCALE 1:100 @ B1		
DATE 19/07/2024	PLOT DATE 30/08/2024	
DRAWN AN/XL	CHECKED NA	
JOB NO. 12023	DRAWING NO. TP118	REVISION 1

Legend

Living - Compliant daylight area	88.39	sq m
Living - Nominated areas	104.25	sq m



TOWN PLANNING

DATE	REVISION	BY	CHK	NO.
28/08/2024	TOWN PLANNING AMENDMENT	AN/XL	NA/KC	1

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SERVICES ENGINEER	☐	ADP CONSULTING	T 03 9997 9262
BUILDING SURVEYOR	☐	DU CHATEAU CHUN	T 03 9081 1688
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PROJECT	405-421 SPENCER STREET WEST MELBOURNE VIC
DRAWING TITLE	LEVEL 19 PLAN
SCALE	1:100 @ B1
DATE	19/07/2024
PLOT DATE	30/08/2024
DRAWN	AN/XL
CHECKED	NA
JOB NO.	12023
DRAWING NO.	TP119
REVISION	1

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Yarra Bank Developments Ltd ATF The Paul Lofitis Unit Trust No.2

26 July 2024

Ref: 30N-24-0235-GCO-83562-1

2 Chapel St Cremorne, Victoria, 3121, Australia

Dear Peter Lofitis,

405-421 Spencer Street, West Melbourne

Vipac Engineers & Scientists Ltd was commissioned by **Yarra Bank Developments Ltd ATF The Paul Lofitis Unit Trust No.2** to carry out wind tunnel testing to determine the likely pedestrian level wind conditions for the proposed development at **405-421 Spencer Street, West Melbourne.** Drawings for the wind tunnel test model were provided to Vipac in **August 2016** and wind tunnel testing was conducted on the design (**30N-16-0094-TRP-481147-1)**. The designs have been updated and drawings were provided to Vipac in **July 2024** for a design review, with reference to the previous design and wind tunnel test results.

The building was tested in 2016 using scale model wind tunnel testing of the proposed development and surroundings to determine a quantitative description of the wind environment adjacent to the building. By comparing the amended scheme to the design that underwent wind tunnel testing, we can determine the effect of these changes on the pedestrian wind environment adjacent to the development. The main points to note from a wind environment perspective are:

- The ground floor envelope has remained largely the same and so would not be expected to result in a significant change in the wind environment over that measured in the test (Figure 1 in Attachment). However, the southeast corner has now proposed an entrance for the retail premise.

  During the test, high winds were observed at this corner indicating that this location is not suitable for an entrance. However, it is understood that this entrance is intended to be 'secondary'. It is recommended that patrons be encouraged to utilise the other entrances into the retail unit.

  The other residential entrances and shop entrances on Spencer St and Batman St in the updated design feature an airlock / wind buffer screen which are expected to allow for wind speeds to be within the recommended standing comfort criterion.
- The podium and tower envelope have remained largely the same and so would not be expected to result in a significant change in the wind environment over that measured in the test (Figure 2 to Figure 6 in Attachment);
- The building has deleted two floors and the roof height of the building has reduced from 69.2m to 65 m design which might be expected to have a slight improvement of the wind environment at the ground level (Figure 7 in Attachment).

The design has not changed in a way that would significantly or adversely affect the adjacent wind environment. If anything, the reduction in height to the tower form would result in an improvement over the wind environment measured during the test. Therefore, the recommendations and conclusions of Vipac's wind tunnel test report **30N-16-0094-TRP-481147-1** are still valid for the current design.

Yours sincerely,

Vipac Engineers & Scientists Ltd

Rumman Islam
Wind Consultant

Eric Yuen
Wind Group Leader

Attachments

Updated drawings received:

Name
TP098 BASEMENT 02 PLAN.dwg
TP099 BASEMENT 01 PLAN.dwg
TP100 GROUND FLOOR PLAN.dwg
TP101 LEVEL 01 PLAN.dwg
TP101 LEVEL 01 PLAN1.Shx
TP102 LEVEL 02 PLAN.dwg
TP103 LEVEL 03 PLAN.dwg
TP104 LEVEL 04 PLAN.dwg
TP105 LEVEL 05 PLAN.dwg
TP106 LEVEL 06 PLAN.dwg
TP107 LEVEL 07 PLAN.dwg
TP108 LEVEL 08 PLAN.dwg
TP109 LEVEL 09 PLAN.dwg
TP110 LEVEL 10 PLAN.dwg
TP111 LEVEL 11 PLAN.dwg
TP112 LEVEL 12 PLAN.dwg
TP113 LEVEL 13 PLAN.dwg
TP114 LEVEL 14 PLAN.dwg
TP115 LEVEL 15 PLAN.dwg
TP116 LEVEL 16 PLAN.dwg
TP117 LEVEL 17 PLAN.dwg
TP118 LEVEL 18 PLAN.dwg
TP119 LEVEL 19 PLAN.dwg
TP120 ROOF PLAN.dwg
TP200 NORTH ELEVATION.dwg
TP201 SOUTH ELEVATION.dwg
TP202 EAST ELEVATION.dwg
TP203 WEST ELEVATION.dwg
TP210 SECTION A.dwg
TP211 SECTION B.dwg
TP212 SECTION C.dwg
TP212 SECTION D.dwg

Figures:

Updated Design (July 2024)



Original Design (August 2016)



Figure 1: Ground floor plans for the development at 405-421 Spencer Street, West Melbourne – comparison between revised design and design tested in the wind tunnel.



Figure 2: Level 1 plans for the development at 405-421 Spencer Street, West Melbourne – comparison between revised design and original design tested in the wind tunnel

Updated Design (July 2024)



Original Design (August 2016)



Figure 3: Level 2 plans for the development at 405-421 Spencer Street, West Melbourne – comparison between revised design and original design tested in the wind tunnel

Updated Design (July 2024)



Original Design (August 2016)



Figure 4: Level 18 for the development at 405-421 Spencer Street, West Melbourne – comparison between revised design and original design tested in the wind tunnel



Figure 5: Topmost level of the development at 405-421 Spencer Street, West Melbourne – comparison between revised design(Level 19) and original design (Level 21) tested in the wind tunnel

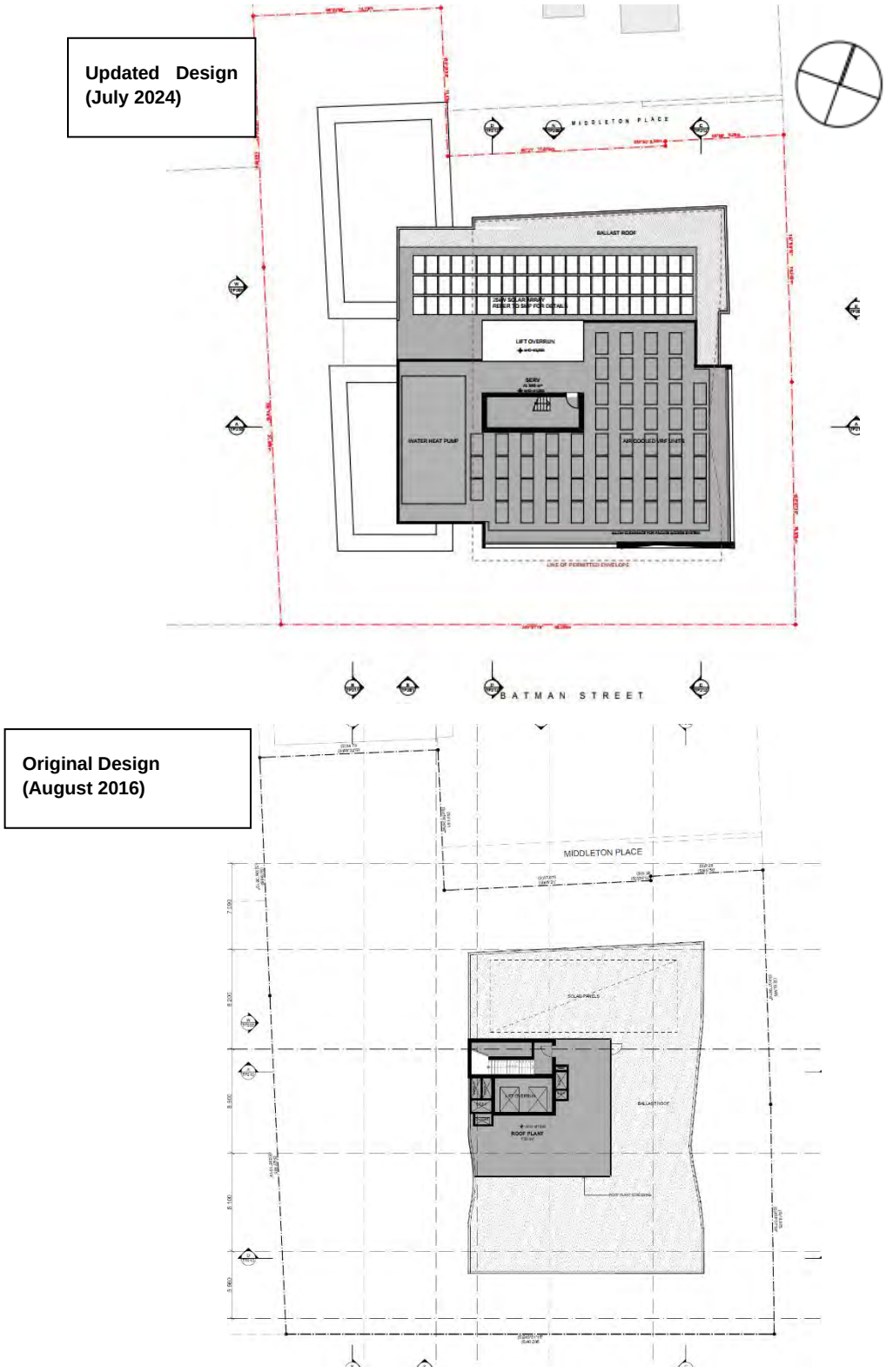

Figure 6: Rooftop plans for the development at 405-421 Spencer Street, West Melbourne – comparison between revised design and original design tested in the wind tunnel

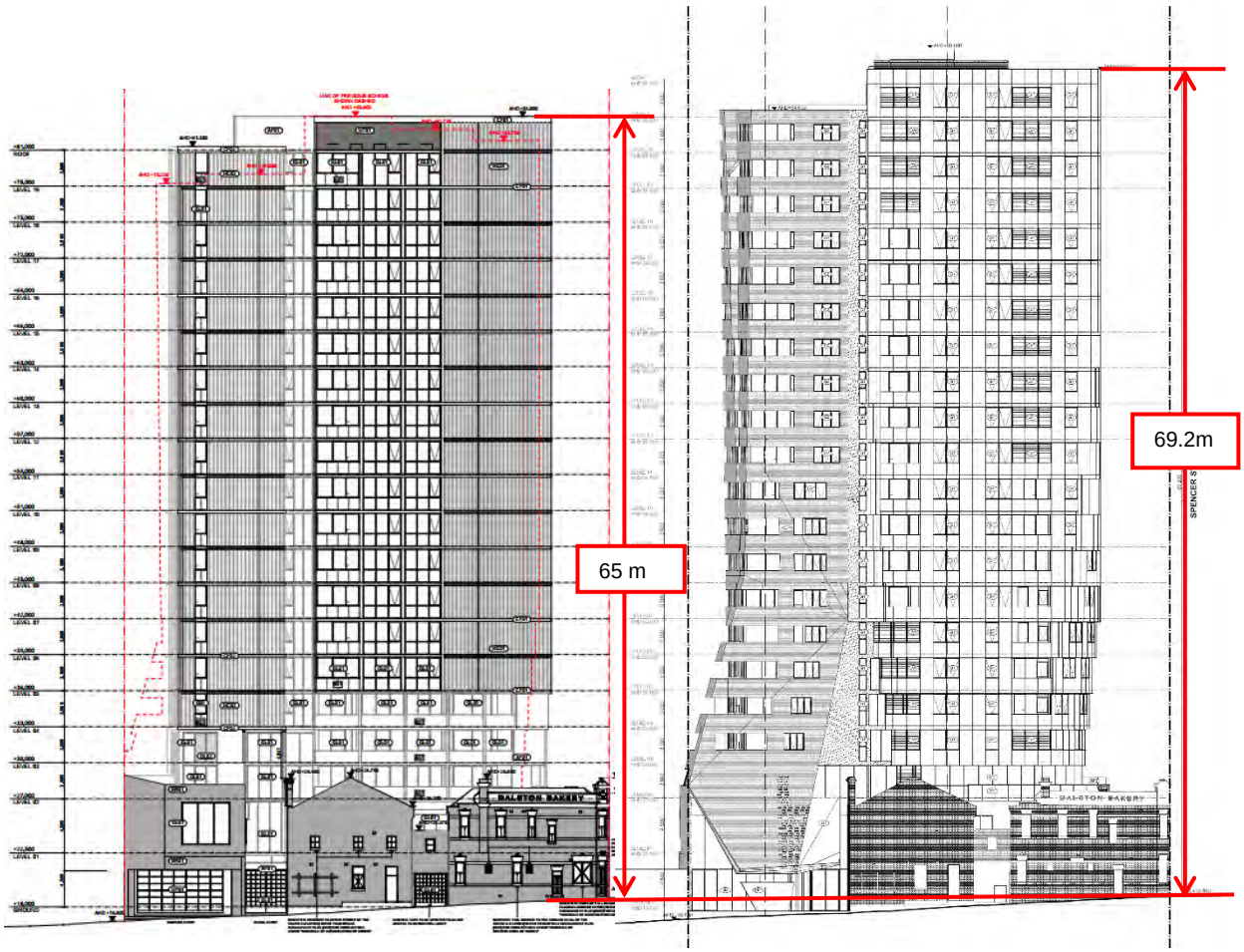

Figure 7: South elevation for the development at 405-421 Spencer Street, West Melbourne - comparison between the revised design and the original design tested in the wind tunnel.

Bryce Raworth

CONSERVATION | HERITAGE

Heritage Impact Statement

405-417 & 419-421 Spencer Street, West Melbourne

Application to amend a Planning Permit

16 September 2024

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Contents

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2.0 Sources of Information....2
3.0 Brief History and Description....3
4.0 Significance....10
5.0 Policy Considerations....12
6.0 Proposed Works....15
7.0 Discussion....15

1.0 Introduction

This Heritage Impact Statement has been prepared on behalf of the owner of 405-417 & 419-421 Spencer Street, West Melbourne. It relates to an application to amend the existing Planning Permit TP-2016-722, which allows for demolition, alterations and additions to a building in the Heritage Overlay.

This report reviews the significance of the existing built form on the property and comments on whether the amended development scheme is appropriate in character and detail, and whether it is acceptable in terms of its impact on fabric of identified heritage significance as included in the Heritage Overlay.

2.0 Sources of Information

By way of background, it is noted that this report utilises information obtained in the preparation of the expert witness statement of Bryce Raworth in relation to VCAT matter P2608/2016, as well as the Heritage Management Plan that was prepared by this office dated 23 August 2021.

The analysis below draws upon internal and external site visits along with a review of the relevant documents and resources including the following:

- *Melbourne Planning Scheme – Clause 43.01 Heritage Overlay, Clause 15.03-1L Heritage, Schedule 33 to Clause 43.02 Design and Development Overlay.*
- *West Melbourne Heritage Review 2016.*
- *Historical MMBW plan.*
- *Building files and plans, Public Records Office of Victoria.*

The report has been prepared by Bryce Raworth Pty Ltd, and is to be read in conjunction with the drawings prepared by Plus Architecture and submitted with respect to this application.

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3.0 Brief History and Description

The development site known as 405-417 and 419-421 Spencer Street, West Melbourne comprises several built form elements. To the corner of Spencer and Batman streets, addressed as 405-407 Spencer Street, is a double storey red brick building with cement parapet and corner pediment. This building has pitched roofs directly behind the parapet which are clad with corrugated iron. Signage on the building includes the words 'Dalston Bakery' on the parapet and `H Bennett est 1850' to the corner entablature in raised lettering. To the rear of the corner building, addressing Batman Street, is a second red brick envelope, gable ended and featuring four red brick chimneys along its west elevation. An L-shaped flat roofed element links these two building envelopes. These structures functioned as a bakery complex, with the inscribed parapets, row of red brick chimneys and remnant internal oven evidence of this past use.

Details provided in the citation for the site as part of the *West Melbourne Heritage Review*, as well as various historical sources of information, illustrate the evolution of the site. The MMBW detail plan from 1895 (Figure 1) indicates that a house originally occupied the corner of Spencer and Batman Street and was separated by a pitched lane from a second building to the rear (west). This rear building evident on the MMBW plan remains as the bakehouse today, although it has been extended to the north.

The existing corner shop/residence was constructed in 1906, replacing the earlier residence as shown in the MMBW plan. Unfortunately, no early images or plans of the double storey shop/residence have been located.

It is known that a permit was issued in August 1921 for alterations to the bakery at a cost of £750 (Building application no. 3503). The associated building files and plans held at the Public Records Office of Victoria show that the configuration of the southern elevation of the bakehouse was intended to feature three windows at first floor level and a louvered window to the gable (Figure 2). Plans also show that the shop entry was located to the splayed corner (Figure 3). Disturbed brickwork and remnant brick voussoirs indicate that windows formerly existed at first floor level, however there is no evidence to show that the louvered window to the gable was constructed.

In the late 1950s further additions to the property included an L-shaped flat roofed infill structure between the bakehouse and residence/shop. It is possible that the removal of the shop door and windows, as well as the enlargement of some windows, that is apparent in the fabric today occurred at this time.

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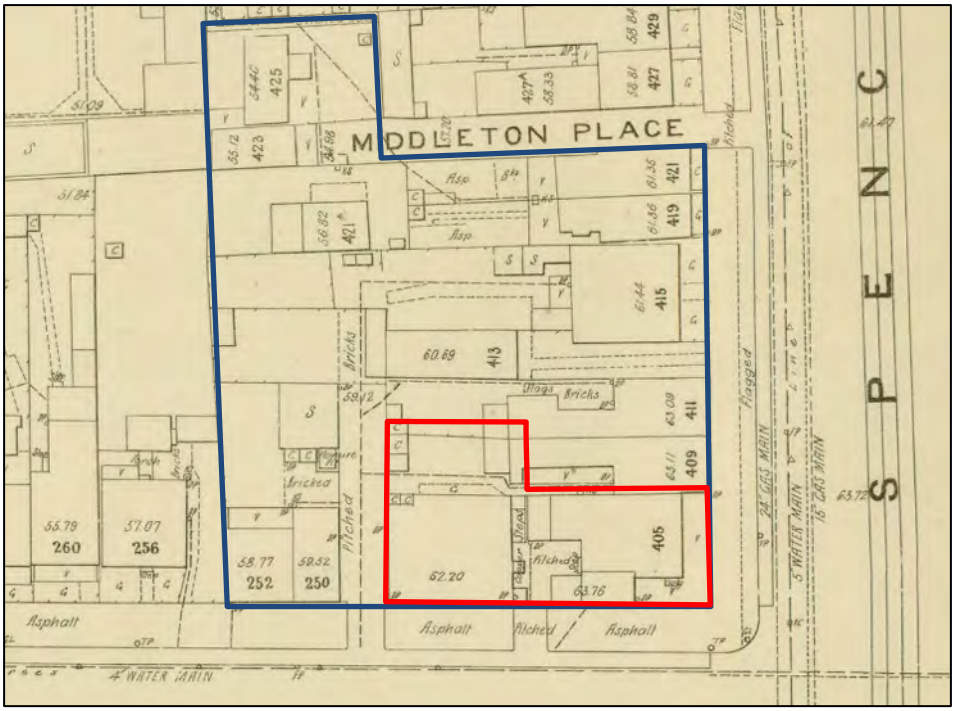

Figure 1 *MMBW plan showing development on the subject site in 1895. The blue portion is the entire development site, while the red highlights the red brick building.*
Source: State Library of Victoria.



Figure 2 *South elevation of the bakehouse, 1921.*
Source: Public Records Office of Victoria.

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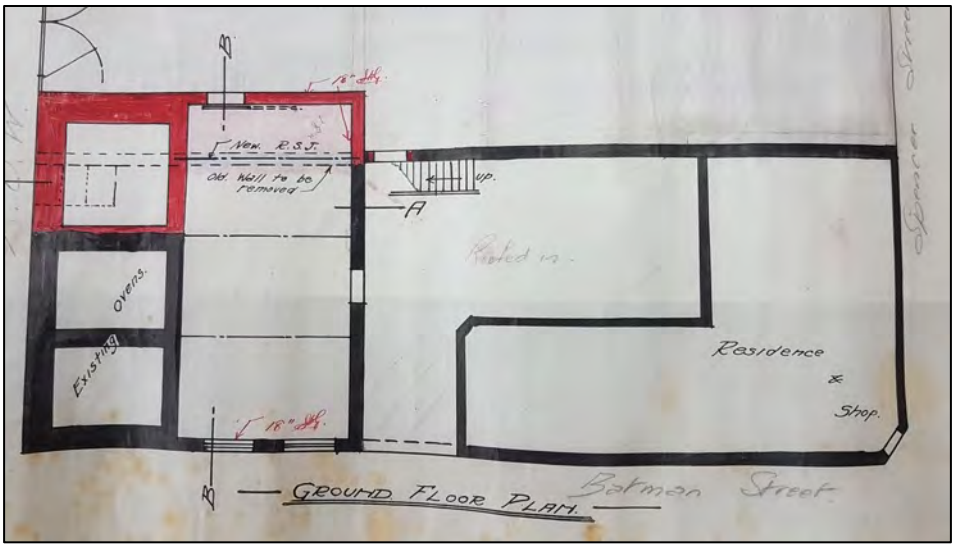

Figure 3 *Plan showing works to the bakehouse, 1921.*
Source: Public Records Office of Victoria.

To the west of the former bakery buildings, addressing Batman Street, is a modern concrete infill structure (Figure 6). To the north along the Spencer Street frontage, 409 Spencer Street is a single storey interwar brick and cement building, with a brick parapet (Figure 7). This building has been overpainted and all fenestration has been altered. At 419-421 Spencer Street is a two storey interwar brick building that has a side frontage along Middleton Place (Figure 8).

Indicative of the emerging character of the wider area, the surrounding urban context is mixed – with regard to both the ages of buildings and their scale. To the north of the subject site at 429 Spencer Street is a recent 15 storey residential development. On the east side of Spencer Street, between Batman and Dudley street, are two recently constructed multi-storey buildings of 18 and 38 storeys respectively. The latter development incorporates a 1930s Streamline Moderne style heritage building into the street podium. To the south, on the opposite side of Batman Street and at the corner of Spencer Street, is another recently constructed development with tower forms ranging in height between 18 and 31 storeys.

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Figure 4 *The Spencer Street elevation of the shop/residence at 405-407 Spencer Street.*



Figure 5 *The Batman Street elevation of 405-407 Spencer Street.*



Figure 6 *Concrete infill building at the rear of 405-407 Spencer Street.*



Figure 7 *409 Spencer Street.*



Figure 8 *419-421 Spencer Street.*



Figure 9 *Apartments at 429 Spencer Street, north of the subject site.*



Figure 10 *Recent multi-storey development on the east side of Spencer Street, between Batman and Dudley streets.*



Figure 11 *Recent development at 393 Spencer Street, south of the subject site.*

4.0 Significance

The property at 405 Spencer Street is individually identified as HO779 in the Schedule to the Heritage Overlay of the *Melbourne Planning Scheme*. External paint controls and solar energy system controls, apply under the provisions of this overlay, however internal alteration and tree controls do not. The remainder of the subject site is of no identified heritage significance.

The statement of significance for the site at 405-407 Spencer Street, as included in the incorporated document *West Melbourne Heritage Review 2016: Statements of Significance February 2020*, is as follows:

What is significant?

Shop and dwelling erected by John Timmins in 1906 for Mrs Bennett, at the corner of Spencer and Franklin Streets to the design of architect R. M. King for use by Henry William Bennett, baker.

Contributory elements include:

- *two storey parapeted face red brick and cement Queen Anne style complex on stone footings;*
- *pitched roofs behind parapets, clad with corrugated iron;*
- *impressive row of red brick corbelled chimney to bakery rear wall, signalling function;*
- *cemented chimney to shop and residence;*
- *black brick string mould at sill level;*
- *baker's shop at corner with splayed corner entry;*
- *cemented cornice and parapet entablature with the name `H Bennett est 1850' and `Dalston Bakery', scrolled around end chimney;*
- *traces of old signage on bakery sidewall;*
- *cemented voussoirs over original openings;*
- *scrolled broken pediment to raised entablature at corner;*
- *double-hung sash windows upper level, staggered on side elevation;*
- *skillion form bakery at rear with pitched crossing to courtyard between shop and bakery; and*
- *contribution to Edwardian-era and Interwar commercial streetscape along Spencer Street.*

Integrity is good despite Edwardian-era windows added to the upper level, painting over of some bricks and stonework, and the corner entry and shopfront having been bricked in on ground level. The entry has been part reopened since 1983 (see North and West Melbourne Conservation Study 1983).

How is it significant?

Bennett's Dalston Bakery is significant historically and aesthetically to West Melbourne and the City of Melbourne

Why is it significant?

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Bennett's Dalston Bakery is significant.

- *Historically, closely linked with the Bennett family of bakers and a bakery and shop over an extended period, also representative of the end of a major growth period in West Melbourne also as a now rare Edwardian-era bakery and baker's shop and residence complex within the City (Criterion A); and*
- *Aesthetically, a custom-designed strong corner Edwardian-era complex with distinctive detailing and bold massing in the Queen Anne style also contributory to a minor commercial Edwardian-era streetscape along Spencer Street (Criterion E)*

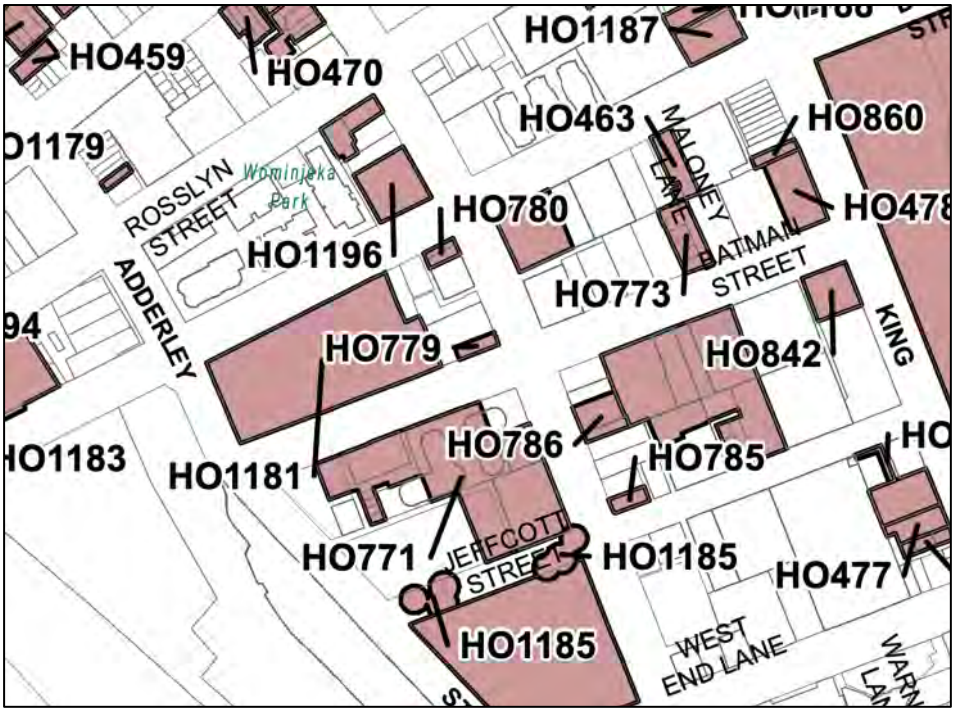

Figure 12 *Detail of the Heritage Overlay map. The subject property is identified as HO779.*
Source: Melbourne Planning Scheme.

5.0 Policy Considerations

The part of the property included in HO779 is subject to the provisions of Clause 43.01. The purpose of Clause 43.01, the Heritage Overlay, is as follows:

> *To implement the Municipal Planning Strategy and the Planning Policy Framework.*
>
> *To conserve and enhance heritage places of natural or cultural significance.*
>
> *To conserve and enhance those elements which contribute to the significance of heritage places.*
>
> *To ensure that development does not adversely affect the significance of heritage places.*
>
> *To conserve specified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.*

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority will need to consider, as appropriate:

- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The significance of the heritage place and whether the proposal will adversely affect the natural or cultural significance of the place.*
- *Any applicable statement of significance (whether or not specified in the schedule to this overlay), heritage study and any applicable conservation policy.*
- *Any applicable heritage design guideline specified in the schedule to this overlay.*
- *Whether the location, bulk, form or appearance of the proposed building will adversely affect the significance of the heritage place.*
- *Whether the location, bulk, form and appearance of the proposed building is in keeping with the character and appearance of adjacent buildings and the heritage place.*
- *Whether the demolition, removal or external alteration will adversely affect the significance of the heritage place.*
- *Whether the proposed works will adversely affect the significance, character or appearance of the heritage place.*

  […]
- *Whether the location, style, size, colour and materials of the proposed solar energy system will adversely affect the significance, character or appearance of the heritage place.*

The proposal will be assessed against Council's local heritage policy as set out under Clause 15.03-1L-02 Heritage. This policy provides more detailed guidance as to the forms of development that might be appropriate in heritage overlay areas. The relevant objectives and strategies of this policy are as follows:

> ***Objectives***
>
> *To encourage high quality contextual design for new development that avoids replication of historic forms and details.*

To encourage retention of the three dimensional fabric and form of a building and discourage facadism.

To enhance the presentation and appearance of heritage places through restoration and reconstruction of original or contributory fabric.

To protect significant views and vistas to heritage places.

Demolition strategies

The demolition of a non-contributory place will generally be permitted.

Full demolition of significant or contributory buildings will not generally be permitted.

Partial demolition in the case of significant buildings and of significant elements or the front or principal part of contributory buildings will not generally be permitted.

Encourage the retention of the three dimensional form regardless of whether it is visible whilst discouraging facadism.

Encourage adaptive reuse of a heritage place as an alternative to demolition.

The poor structural or aesthetic condition of a significant or contributory building will not be considered justification for permitting demolition.

A demolition permit will not be granted until the proposed replacement building or works have been approved.

Preserve fences and outbuildings that contribute to the significance of the heritage place.

Demolition policy guidelines

Consider as relevant:

- *The assessed significance of the heritage place or building.*
- *The character and appearance of the proposed building or works and their effect on the historic, social and architectural values of the heritage place and the street.*
- *The significance of the fabric or part of the building, and the degree to which it contributes to its three-dimensional form, regardless of whether it is visible.*
- *Whether the demolition or removal of any part of the building contributes to the long-term conservation of the significant fabric of the building.*
- *Whether the demolition will adversely affect the conservation of the heritage place.*
- *Whether there are any exceptional circumstances.*

Additions strategies

Ensure additions to significant or contributory buildings:

- *Are respectful of the building's character and appearance, scale, materials, style and architectural expression.*
- *Do not visually dominate or visually disrupt the appreciation of the building as it presents to the street.*
- *Maintain the prominence of the building by setting back the addition behind the front or principal part of the building, and from other visible parts.*

- *Do not build over or extend into the air space directly above the front or principal part of the building.*
- *Retain significant roof form within the setback from the building façade together with roof elements of original fabric.*
- *Do not obscure views of façades or elevations associated with the front or principal part of the building.*
- *Are distinguishable from the original fabric of the building.*

Ensure additions:

- *Adopt high quality and respectful contextual design.*
- *Avoid direct reproduction of the form of historic fabric.*
- *Adopt an interpretive design approach to other details such as verandahs, fences, and shopfronts.*

Concealment of additions strategies

- *Outside the Capital City Zone and Docklands Zone, ensure additions are:*
- *Concealed in significant streetscapes for significant or contributory buildings.*
- *Concealed in other streetscapes for significant buildings, for a second-storey addition to a single storey building, concealment is often achieved by setting back the addition at least 8 metres behind the front facade.*
- *Partly concealed in other streetscapes for contributory buildings, which means that some of the addition may be visible, provided it does not dominate or reduce the prominence of the building's façade(s) and the streetscape.*
- *For ground level additions to the side of a building, set back behind the front or principal part of the building.*
- *All additions to corner properties may be visible, but should be respectful of the significant or contributory building in terms of scale and placement, and not dominate or diminish the prominence of the building or adjoining contributory or significant building.*

The whole of the subject site is included in DDO33 West Melbourne – Flagstaff Precinct. Of the addresses that make up the development site, 405-407 Spencer Street and 419-421 Spencer Street are identified as Special Character Buildings. Relevant design objectives are as follows:

To create a precinct with variable building heights generally between six and sixteen storeys with a lower scale of development to Laneways, activated Laneway interfaces, and a clear differentiation from the Hoddle Grid.

To reference the industrial history of the precinct by supporting the adaptive reuse of Special Character Buildings and encourage contemporary use of common industrial materials.

Relevant built form outcomes are as follows:

- *Street walls that:*
  - *Provide an appropriate transition to adjoining heritage places.*
- *Development that respects the scale of adjoining residential development and heritage buildings.*

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6.0 Proposed Works

The proposal for the subject site, as amended, is for the construction of a multi storey mixed use building, incorporating retained portions of the bakery buildings at 405-407 Spencer Street as well as the retained facade of 409 Spencer Street. All other built form on the subject site will be demolished.

The retained portions of the historical corner shop/residence comprise the facades as they present to Spencer and Batman streets, part of the north elevation to a depth of approximately 5.60 metres, and the two existing chimneys to the south and the north. The retained portions of the bakehouse comprise the south facade to Batman Street, and, internally, the ovens assembly to the south-west corner including ovens and internal walls. A majority of the west elevation and three of the four chimneys will be retained, although a portion of the wall will be required to first be demolished and then reconstructed. Unlike the previously approved scheme, part of the west wall to the shop/residence and part of the east wall to the bakehouse will be retained, rather than demolished and reconstructed. The roof forms to both bakery buildings will be removed and reconstructed to match the existing. Conservation works will be undertaken to the retained fabric, in line with an approved Heritage Management Plan.

The new built form comprises a 20 storey tower element with two levels of basement carparking accessed via Batman Street. Retail and office tenancies are proposed to the ground and first floors, with residential apartments to occupy the upper levels.

7.0 Discussion

From a heritage perspective, the relevant considerations include the proposed partial demolition and the appropriateness of the alterations and new additions. These aspects of the proposal are discussed in turn below.

Demolition

The extent of demolition has due regard for the assessed significance of the heritage place and largely accords with that permitted under Planning Permit TP-2016-722. The most significant elements of the historical place, as identified in the statement of significance, are to be retained. This includes the red brick street facades, the cemented cornice and parapet entablature to the shop/residence. Side walls will be retained rather than reconstructed and, in the case of the east wall of the bakehouse, a greater depth of retention is proposed than in the approved scheme. The roof forms reinstated to match the existing, ensuring that the three-dimensional appearance of the place is maintained.

Conservation works will return the historical structure to a good state of repair, as well as reinstating features, such as fenestration and decorative elements, that have been altered or lost.

This is a positive heritage outcome that will both greatly improve the presentation of the place as well as ensuring the preservation of the buildings into the future.

The most notable departure from the previously approved scheme in terms of demolition is the removal of one chimney and part of the western wall of the bakehouse. This is proposed in order to facilitate the construction of the new development. While this constitutes a change to original fabric, this section of the building is of lesser visibility, being sited away from the street boundary. The chimney in question, being the northernmost of the four chimneys, is not associated with the bakehouse ovens. A portion of the wall will be carefully demolished and reconstructed with original materials, which will ensure that the character and appearance of the bakehouse as viewed from the street is largely maintained, and as such these works are acceptable. The Heritage Management Plan should be updated to reflect the proposed demolition and reconstruction accordingly.

In terms of the fabric outside of HO779, it is intended that the facade of the interwar building at 409 Spencer Street will be retained and incorporated into the new development, while the interwar building at 419-421 Spencer Street is to be demolished. The facade of 409 Spencer Street is the most notable feature of these two buildings; despite being altered, it retains its prominent parapet and extends for six bays along the Spencer Street. Retention of this substantial part of the building as viewed from the street is sufficient response to the built form outcomes of the DDO which support the adaptive reuse of Special Character Buildings.



Figure 13 *Render image showing the interface of the bakehouse with the new development.*
Source: Plus Architecture.

New works

The development takes a tower form with podium levels to the street that incorporate the retained bakery buildings and the facade of 409 Spencer Street, as well as a new envelope to Batman Street. This new envelope has a two storey height which is directly responsive to the height of the bakehouse, while the angled parapet is a contemporary interpretation of the traditional form. A shallow recess separates the bakehouse and new podium envelope at ground floor level, while at first floor level the recess extends to almost the full depth of the west elevation to the bakehouse. This recess, combined with the angled first floor streetwall of the new podium element, will ensure that a viewline to the bakehouse and its chimneys from the south-west are maintained.

The lower levels of the new development have been sensitively managed to ensure that the heritage buildings retain their prominence. The interface between the old and new forms at level 2 of the development incorporates setbacks of between 1.74 and 2.05 metres from the west wall of the bakehouse, and 2.26 metres from the north side of the chimney to the shop/residence. Free airspace is also maintained above the chimneys. Direct abutment with heritage fabric is thus minimized, with walls set back from the chimneys so that they can continue to be perceived as free standing structures.

The design of levels 2, 3 and 4 incorporates in inverse corner to the rear of the historical shop/residence, while the setbacks of level 3 and level 4 from the Batman Street boundary gradually decrease to align with the consistent 5.90 metre (approximate) setback of the tower levels above. These features provide appropriate visual separation between the heritage buildings and the new built form.

To the south elevation, the mass of the tower is broken up by a vertical recess that divides the whole into two, with further differentiation provided by a staggering of the volumes and tonal changes to the materials, which include, exposed concreate slab edges, light and dark metal cladding and clear glazing. The new two storey podium to Batman Street is constructed of light grey brick, which is an appropriately responsive to the traditional red brick materials of the heritage buildings.

At 20 storeys in height, the proposal fits comfortably in the height range of nearby recently constructed developments on the east and west sides of Spencer Street, which includes the 38 storey building with heritage podium at 420 Spencer Street.

In relation to the previously permitted envelope, it is noted that the present scheme generally accords with the line of this envelope in terms of both overall height and setbacks from the heritage building and street boundary, with the setbacks of the south tower elevation having increased in many instances. This is indicative that the proposed amendments, and thus the proposal as a whole, will not have an adverse impact on the heritage significance of the place.



Figure 14 *Render image depicting the materiality of the tower development. Source: Plus Architecture.*

Conclusion

In conclusion, the amended form of the development has been designed with due regard for the existing heritage building and its identified significance, as well as the Council policies in relation to heritage and urban design at Clause 43.01, Clause 15.03-1L and Clause 43.02. The amended development scheme provides a considered response to the retained heritage building, at the same time achieving a well resolved architectural form that will sit comfortably within the evolving character of this part of West Melbourne.

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405-421 Spencer Street, West Melbourne

Acoustic Town Planning Report

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1 INTRODUCTION

This report presents our acoustic assessment of the proposed development at 405-421 Spencer Street, Melbourne in response to Amended Planning Permit Application TP-2016-722/A prepared by City of Melbourne. This assessment has been based on the following documents.

Table 1 – Referenced Documents

Document	Prepared By	Document No.	Date
Amended Planning Permit	City of Melbourne	Amended Planning Permit Application TP-2016-722/A	19 October 2021
Architectural Drawings	Plus Architecture	Drawing No. TP098 to TP120, TP200 to TP203, TP210 to TP212	13 September 2024

2 PLANNING PERMIT

The Council Amended Planning Permit Application TP-2016-722/A requested the following:

17 Prior to the commencement of the development, excluding demolition and bulk excavation, a report from a qualified acoustic engineer must be submitted to the satisfaction of the Responsible Authority certifying that:

a the development will achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium; and

b the external glazing and doors and the air conditioning or ventilation is designed to achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium.

3 SITE DESCRIPTION

The proposed development is located at 405-421 Spencer Street, West Melbourne. The proposal is for a 20-storey mixed-use development, incorporating two levels of basement floors for car parking, retail on ground floor, commercial on first floor, and apartments between ground to level 19 with communal area on level 1, 2 and 19. The subject site is bounded as follows:

- To the east by Spencer Street.
- To the south by Batman Street.
- To the west by Australian Red Cross Lifeblood building.
- To the north by Middleton Place, existing 17 Storey residential apartment building (423-435 Spencer Street), and future 16 storey residential apartment building (91-95 Dudley Street).
- Docklands Stadium is located approximately 630m southwest from the subject site.

Figure 1 below shows the site and its surrounding environment, and noise measurement locations.



Figure 1: Site Map and Surrounding Environment (source: Google Maps™)

3.1 LOCAL NOISE SOURCES

Review of the site found that noise from traffic on surrounding streets is the dominant local noise source.

4 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 principle measurement parameters are used, namely L_{10}, L_{90} and L_{ea}.

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.

The L_1 parameter (or the noise level exceeded for 1% of the time) is used during the night period to assess potential sleep arousal effects due to transient noise sources.

5 ASSESSMENT CRITERIA

5.1 EXTERNAL NOISE INTRUSION – MUSIC NOISE FROM DOCKLANDS STADIUM

Internal noise level criteria for external noise intrusion from music noise emitted from Docklands Stadium has been developed in accordance with Condition 17 of the Amended Planning Permit as noted in Section 2 above. Table 2 below details the criteria set for this development.

Table 2 – Internal Noise Level Criteria for Music Noise emitted from Docklands Stadium (with external windows and doors closed)

Location	Required Maximum Internal Noise Level
Habitable rooms with windows closed	45 dB(A) L_{eq}

6 NOISE LEVEL MEASURMENTS

6.1 MUSIC NOISE MEASUREMENTS

Noise measurements were taken around the stadium during a (Bon Jovi) concert operating scenario on the 7th December 2013. We note that during concert, the roof of the stadium was closed.

Measurements within the stadium were conducted using an Acoustic Research Laboratories Ngara noise monitor while measurements conducted externally were taken using a Norsonic 140 Sound Level Analyser. The meter and the unmanned monitor were calibrated before and after measurements, no significant drift was recorded.

The measured noise levels and location are presented in Table 3 below.

Table 3 - Measured Concert Noise Levels

Measurement Location	Noise Sources	Measurement Noise Level
Roof of Existing High-rise building to north of stadium	Concert Noise	71dB(A) L_{eq}
End of walkway to the north on concourse level	Concert Noise and Patrons on walkway	72dB(A) L_{eq}
Within stadium catwalk	Concert Noise	97dB(A) L_{eq}

Based on the measurements conducted above, the noise level from music noise emitted from Docklands Stadium has been predicted at the façade of the subject site. Note that this does not include any screening from the buildings located between the subject site and the stadium currently being constructed, fully constructed and that have been approved. As such, noise levels at the subject site from music noise emitted from the stadium will be even lower than those noted in Table 4 below.

Table 4 – Predicted Concert Noise Levels

Location	Noise Sources	Predicted Noise Level
Worst Affected Façade of Subject Site	Concert Noise	≤60dB(A) L_{eq}

7 EVALUATION OF NOISE INTRUSION

Internal noise levels will primarily be as a result of noise transfer through the façade glazing as this is relatively light building element 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 façade 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

- Predicted noise level at site
- It was assumed that the guestrooms were carpeted and furnished
- Transmission loss of façade element.

In all cases, the selected glazing type will reduce internal noise levels to a maximum level of 45dB(A) L_{eq} in habitable rooms with windows closed as required by Condition 17 of the Amended Planning Permit.

7.1 RECOMMENDED GLAZING

The following table list the recommended glazing assemblies for this project to achieve the requirements regarding external noise intrusion. All the openable windows and external doors listed are required to be fitted with acoustic seals. The glazing thicknesses recommended are typical only and will be finalised during the detailed design stage of the development and do not consider other requirements such as structural, safety or other non-acoustic requirements. These additional considerations may require the glazing thickness to be increased beyond the acoustic requirement which would be acceptable acoustically.

Table 5 – Recommended Glazing

Facade	Designated Rooms	Glazing requirement	Acoustic seals
East	habitable area	Light to Medium weight IGU (nominal 6/12/6 IGU)[1]	Yes
West	habitable area	Medium to heavy weight IGU (nominal 6/12/6.38 IGU to 6/12/10.38 IGU)[1]	Yes
South	habitable area	Medium to heavy weight IGU (nominal 6/12/6 IGU to 6/12/10.38 IGU)[1]	Yes
North	habitable area	Light to Medium weight IGU (nominal 6/12/6 IGU)[1]	Yes

Note 1: Final glazing thickness to be determined based on final room layout, final window size, façade construction and selected window systems and shall be selected to comply with the nominated criteria.

7.2 ROOF / CEILING

Concrete roof construction will satisfactorily ameliorate external noise intrusion.

7.3 EXTERNAL WALLS

External walls composed of concrete or masonry elements would not require upgrading acoustically. Lightweight wall elements will be designed to ensure compliance with the nominated criteria. Any openings in the façade (for mechanical services etc.) will need to be designed to ensure external noise transfer complies with the criteria nominated above.

8 CONCLUSION

This report presents our acoustic assessment for the proposed development located at 405-421 Spencer Street, Melbourne to address condition 17 of the Planning Permit Application TP-2016-722/A prepared by City of Melbourne. Recommendations have been provided in Section 7 within this report to ensure compliance with Condition 17 of the planning permit. We trust this information is satisfactory. Please contact us should you have any further queries.

Yours faithfully,



Acoustic Logic Pty Ltd
Stanley Sinatra

AMENDED PLANNING PERMIT

CITY OF MELBOURNE

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PERMIT NO.	**TP-2016-722/A**
PLANNING SCHEME	Melbourne Planning Scheme
RESPONSIBLE AUTHORITY	Melbourne City Council
ADDRESS OF THE LAND	405-421 Spencer Street, WEST MELBOURNE VIC 3003
THE PERMIT ALLOWS	• Use of land for a food and drink premises, shop, ~~and for offices~~, in the ~~Mixed~~ Special Use Zone Schedule 6; • ~~To construct two or more dwellings on a lot in the Mixed Use Zone;~~ • To construct a building in the Special Use Zone Schedule 6; • Demolition, alterations and additions to a building in Heritage Overlay 779; • To construct a building and carry out works for noise sensitive uses in Design and Development Overlay Schedule 12; • To construct a building and carry out works in Design and Development Overlay Schedule 33; • ~~To reduce the required number of car parking spaces; and~~ • To alter an existing access to a road in a Road Zone Category 1 in accordance with the endorsed plans.

THE FOLLOWING CONDITIONS APPLY TO THIS PERMIT:

Amended plans

1 Deleted.

2 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, a Facade Strategy must be submitted to and be to the satisfaction of the Responsible Authority. When approved this will form part of the endorsed plans. All materials, finishes and colours must be in conformity with the approved Façade Strategy to the satisfaction of the Responsible Authority. The Facade Strategy for the development must be generally in accordance with architectural plans prepared by Plus Architecture, ~~Drawing No's TP090, TP091, TP097 to TP122,TP200 to TP203, TP210 to TP214~~ plot dated ~~3 September 2021~~7 October 2024 and detail:

a A concise description by the architect of the building design concept and how the façade works to achieve this;

b Elevation details generally at a scale of 1:50 illustrating typical podium details, entries and doors, and utilities, typical tower detail, and any special features which are important to the building's presentation;

Date Issued: 29 June 2017	**Signature of the Responsible Authority**

c Elevation details of the relationship between the heritage façade and contemporary elements within the podium, including depth, materials and finishes;

d Cross sections or other method of demonstrating the façade systems, including fixing details indicating junctions between materials and significant changes in form and/or material;

e Information about how the façade will be accessed and maintained and cleaned, including planting where proposed; and

f Example prototypes and/or precedents that demonstrate the intended design outcome as indicated on plans and perspective images, to produce a high quality built, durable outcome in accordance with the design concept.

3 A schedule and samples of all external materials, colours and finishes must be submitted to the satisfaction of the Responsible Authority prior to the commencement of the development, excluding demolition. The schedule must show the materials, colours and finishes of all external walls, roof, fascias, window frames, glazing types, doors, balustrades, fences and paving, (including car park surfacing), outbuildings and structures. When approved, the schedule will be endorsed and will then form part of the permit. All finishes and surfaces of all external buildings and works, including materials and colours, must be in conformity with the approved schedule to the satisfaction of the Responsible Authority.

VicRoads conditions

4 Delete (all requirements have been satisfied) ~~Before the development starts, amended plans must be submitted to and approved by the Responsible Authority and the Roads Corporation. When approved by the Responsible Authority and the Roads Corporation, the plans may be endorsed by the Responsible Authority and will then form part of the permit. The plans must be drawn to scale with dimensions and two copies must be provided. The plans must be generally in accordance with Drawing Numbers TP097 to TP213, dated 24 August 2016 but modified to show:~~

~~a A canopy clearance height of at least 5m along Middleton Place;~~

~~b The installation of left in only sign at entrance to right of way facing west bound traffic on Dudley Street;~~

~~c The installation of a No Right Turn sign facing east bound traffic on Dudley Street at entrance to right of way;~~

~~d The installation of a No Left Turn sign within the site (car park) boundary prohibiting left turn vehicular movements onto the right of way;~~

~~e A southbound arrow to be painted on the surface of the right of way between Dudley Street at 437 Spencer Street rear property access;~~

~~f No entry signs facing north bound traffic on the laneway to Dudley Street at the southern boundary of 437 Spencer Street property;~~

~~g The installation of two way signage for the remainder of the right of way including Middleton Lane;~~

~~To provide continuous median line marking on Dudley Street for an approximate distance of 10 metres in vicinity of the laneway;~~

Date Issued: 29 June 2017	**Signature of the Responsible Authority**

Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.

~~i Physical island on central median along Spencer Street to be extended approximately 10 metres north in vicinity of Middleton Lane towards Dudley Street;~~

~~j Installation of appropriate signage within the central median on Spencer Street facing Middleton Lane directing left turn movements onto Spencer Street; and~~

~~k Installation of left turn sign at Middleton Lane where it meets Spencer Street facing traffic exiting Middleton Lane.~~

5 A loading management plan to be provided to the satisfaction of the Responsible Authority to ensure on site waste collection does not obstruct or interfere with vehicular access to the basement and the operation of Dudley Street and Spencer Street.

6 The widening of Middleton Place where it intersects with Spencer Street is to be constructed to the satisfaction of the Roads Corporation and or the Responsible Authority at no cost to the Roads Corporation prior to the commencement of the use hereby approved.

Layout Not Altered and Satisfactory Completion

7 The development as shown on the endorsed plans must not be altered or modified without the prior written consent of the Responsible Authority.

8 Once the development has started it must be continued and completed to the satisfaction of the Responsible Authority.

Heritage Management Plan

9 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, a Heritage Management Plan prepared by a suitably qualified heritage consultant must be submitted to and approved by the Responsible Authority. The Heritage Management Plan must include:

a Details of the retained portions of the building(s) and how they are going to be supported during demolition, excavation and construction works;

b Details of the conservation of the retained portions of the building(s) including (but not limited to) repairs and restoration and stabilization works to the chimneys; the existence and retention of the first floor west facing delivery doorway (now a window over the former side laneway); reinstatement of missing or damaged cement render mouldings; retention and restoration of signage; retention and restoration of external plumbing and storm water drainage; window and door repairs and restoration; external paint colours; possible reinstatement of original shopfront windows, other windows and entrance doors (thereby providing a greater retail presence to the ground floor food and drink premises); and resolution of internal floor levels to accommodate the meaningful retention of existing door openings;

c Retention of the whole of the fabric of the ovens insitu;

d Reconstruction of the gable roof slopes to the original Bakehouse (that is, the Bakehouse that contains the ovens) to match the existing;

e Reconstruction of the southern Residence/shop hipped roof slopes to match the existing; and

Date Issued: 29 June 2017

Signature of the Responsible Authority

f Preparation of an interpretive display and/or an interpretive strategy possibly using alternatives to physical display.

When approved, the Heritage Management Plan will be endorsed and form part of the permit. Works to the heritage building that are approved under this permit must be undertaken in accordance with the Heritage Management Plan to the satisfaction of the Council.

Demolition

10 Prior to the commencement of the development, including demolition, a report prepared by a suitably qualified Structural Engineer, or equivalent, must be submitted to the Responsible Authority, demonstrating the means by which the retained portions of building will be supported during demolition and construction works to ensure their retention, to the satisfaction of the Responsible Authority. The recommendations contained within this report must be implemented at no cost to City of Melbourne and be to the satisfaction of the Responsible Authority.

11 Demolition pursuant to this permit must not commence unless the Responsible Authority is satisfied that the permit holder has made substantial progress toward obtaining the necessary building permits for the development of the land generally in accordance with the development proposed under this permit and the permit holder has entered into a bona fide contract for the construction of the development, or otherwise agreed with the Responsible Authority.

Retention of Architectural Firm

12 Except with the consent of the Responsible Authority, Plus Architecture must be retained to complete and provide architectural oversight during construction of the detailed design as shown in the endorsed plans, façade strategy and the endorsed schedule of materials and finishes to the satisfaction of Responsible Authority.

Building Appurtenance

13 Glazing materials used on all external walls must be of a type that does not reflect more than 15% of visible light, when measured at an angle of 90 degrees to the glass surface, to the satisfaction of the Responsible Authority.

14 All building plant and equipment on the roofs are to be concealed or screened to the satisfaction of the Responsible Authority. The construction of any additional plant machinery equipment, including but not limited to air-conditioning equipment, ducts, flues, all exhausts including car parking and communications equipment, shall be to the satisfaction of the Responsible Authority.

15 Any satellite dishes, antennae or similar structures associated with the development must be designed and located at a single point in the development to the satisfaction of the Responsible Authority, unless otherwise approved to the satisfaction of the Responsible Authority.

16 All service pipes, apart from roof down pipes, must be concealed from the view of a person at ground level within common areas, public thoroughfares and adjoining properties, unless these form part of the Heritage Management Plan.

Noise Attenuation

Date Issued: 29 June 2017

Signature of the Responsible Authority



Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.

17 Prior to the commencement of the development, excluding demolition and bulk excavation, a report from a qualified acoustic engineer must be submitted to the satisfaction of the Responsible Authority certifying that:

a the development will achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium; and

b the external glazing and doors and the air conditioning or ventilation is designed to achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium.

Construction Management Plan

18 Prior to the commencement of the development, including demolition or bulk excavation, a detailed Construction and Demolition Management Plan must be submitted to and be approved by the Responsible Authority. This construction management plan is to be prepared in accordance with the City of Melbourne - Construction Management Plan Guidelines and is to consider the following:

a Public safety, amenity and site security;

b Operating hours, noise and vibration controls;

c Air and dust management;

d Stormwater and sediment control;

e Waste and materials reuse; and

f Traffic management.

Waste Management

19 The waste storage and collection arrangements must be in accordance with the Waste Management Plan (WMP) prepared by Leigh Design dated 31 January 2021.

The submitted WMP must not be altered without prior consent of the City of Melbourne – Waste and Recycling.

Environmentally Sustainable Design Statement Implementation

20 Concurrent with the submission of plans for endorsement under condition 1, an Environmentally Sustainable Design (ESD) Statement shall be prepared by a suitably qualified professional and submitted to the satisfaction of the Responsible Authority. The ESD Statement must demonstrate that the building has the preliminary design potential to achieve the relevant policy objectives of Clause 22.19-2 and the policy requirements of Clause 22.19-3 of the Melbourne Planning Scheme.

21 The performance outcomes specified in the Environmentally Sustainable Design (ESD) Statement required by condition 20 must be implemented prior to occupancy at no cost to the City of Melbourne and be to the satisfaction of the Responsible Authority. Any change during detailed design, which affects the approach of the endorsed ESD Statement, must be assessed by an accredited professional. The revised statement must be endorsed by the Responsible Authority prior to the commencement of construction.

Wind Test Modelling

Date Issued: 29 June 2017	**Signature of the Responsible Authority**

Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.

22 ~~Concurrent with the submission of plans for endorsement under Condition 1,~~ W~~w~~ind tests carried out by a suitably qualified consultant, must be carried out on a model of the approved building. A report detailing the outcome of the testing must be submitted to and be to the satisfaction of the Responsible Authority. The report must also recommend any modifications which must be made to the design of the building to reduce any adverse wind conditions in areas used by pedestrians, to the satisfaction of the Responsible Authority. The recommendations of the report must be implemented at no cost to the Responsible Authority and must not include reliance on street trees.

Potentially Contaminated Land

23 Prior to the commencement of the development (excluding any works necessary to undertake the assessment), a Preliminary Risk Screen Assessment (PRSA) of the site must be conducted by a suitably qualified environmental auditor. The PRSA statement and report must be submitted to the Responsible Authority in accordance with section 205 of the Environment Protection Act 2017 and respond to the matters contained in Part 8.3, Division 2 of the Environment Protection Act 2017 to the satisfaction of the Responsible Authority.

24 If the PRSA requires an Environmental Audit be undertaken, then prior to the commencement of the development (excluding any works necessary to undertake the audit), an Environmental Audit of the site must be carried out by a suitably qualified environmental auditor. On completion of the Environmental Audit, an Environmental Audit Statement (EAS) and report must be submitted to the Responsible Authority in accordance with section 210 of the Environment Protection Act 2017 responding to the matters contained in Part 8.3, Division 3 of the Environment Protection Act 2017 to the satisfaction of the Responsible Authority. The EAS must either:

- state the site is suitable for the use and development allowed by this permit; or
- state the site is suitable for the use and development allowed by this permit if the recommendations contained within the EAS are complied with.

25 All the recommendations of the Environmental Audit Statement (EAS) must be complied with to the satisfaction of the Responsible Authority for the full duration of any buildings and works remaining on the land in accordance with the development hereby approved, and must be fully satisfied prior to the occupation of the development. Written confirmation of compliance must be provided by a suitably qualified environmental auditor in accordance with any requirements in the EAS.

26 If any of the conditions of the EAS require ongoing maintenance or monitoring, prior to the commencement of the use and prior to the issue of a statement of compliance under the Subdivision Act 1988 the owner of the land must enter into an agreement with the Responsible Authority under section 173 of the Planning and Environment Act 1987 to the satisfaction of the Responsible Authority to the effect that all conditions of the EAS issued in respect of the land will be complied with.

Tree Protection

27 Prior to the commencement of the development including any demolition, bulk excavation, construction or carrying out of works, a Tree Protection Plan must be prepared by a suitably qualified and experienced Arborist generally in accordance with AS 4970-2009. The Tree Protection Plan must include recommendations to ensure the viability of the Council or Exceptional trees adjacent to the site before, during and after construction to the satisfaction of the Responsible Authority – Urban Landscapes. This report must be to the satisfaction of the Responsible Authority and when approved will form part of the permit.

Municipal Requirements

Date Issued: 29 June 2017

Signature of the Responsible Authority



Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.

28 Prior to the commencement of the development (excluding demolition and excavation), a stormwater drainage system incorporating integrated water management design principles must be submitted to, and approved, by the Responsible Authority - Engineering Services. This system must be constructed prior to the occupation of the development and provision made to connect this system to the City of Melbourne's stormwater drainage system.

29 All projections over the street alignment should be drained to a legal point of discharge in accordance with the plans and specifications first approved by Responsible Authority - Engineering Services.

30 The title boundaries for the property may not exactly agree with the road alignments of the abutting Council lane(s). The approved works must not result in structures that encroach onto any Council lane.

31 All pedestrian paths and access lanes shown on the endorsed plans must be constructed and maintained to the satisfaction of the Responsible Authority - Engineering Services.

32 Prior to the commencement of the use/occupation of the development, all necessary vehicle crossings must be constructed and all unnecessary vehicle crossings must be demolished and the footpath, kerb and channel reconstructed, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

33 The road adjoining the site along Middleton Place must be reconstructed together with associated works including provision of new public lighting, reconstruction or relocation of services as necessary at the cost of the developer, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

34 The footpath(s) adjoining the site along Spencer Street and Batman Street must be reconstructed together with associated works including the reconstruction or relocation of kerb and channel and/or services as necessary at the cost of the developer, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

35 Existing street levels in Spencer Street, Batman Street & Middleton Place must not be altered for the purpose of constructing new vehicle crossings or pedestrian entrances without first obtaining approval from the Responsible Authority – Engineering Services

36 Existing public street lighting must not be altered without first obtaining the written approval of the Responsible Authority – Engineering Services.

37 Existing street furniture must not be removed or relocated without first obtaining the written approval of the Responsible Authority – Engineering Services.

38 All pedestrian ramps must be designed and constructed in accordance with AS 1428:2009 Design for Access and Mobility and should be fitted with ground surface tactile indicators (TGSI's). Details of the TGSI's must be submitted to and approved by City of Melbourne – Engineering Services prior to their installation.

39 All street furniture such as street litter bins recycling bins, seats, bicycle rails and bus shelter must be supplied and installed on footpaths outside the proposed building to plans and specifications first approved by the Responsible Authority – Engineering Services.

Public Transport Victoria conditions

Date Issued: 29 June 2017

Signature of the Responsible Authority



Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.

40 The permit holder must take all reasonable steps to ensure that disruption to the bus operations along Spencer Street are kept to a minimum during the construction of the development. Foreseen disruptions to bus operations and mitigation measures must be communicated to Public Transport Victoria fourteen days (14) prior.

41 The existing bus stop and associated infrastructure on Spencer Street must not be altered without the prior consent of Public Transport Victoria. Any alterations including temporary works or damage during construction must be rectified to the satisfaction of Public Transport Victoria and at the cost of the permit holder

42 If a temporary bus stop in an alternative location is required during construction, the temporary bus stop must be provided in consultation with, and to the satisfaction of Public Transport Victoria. Once the new stop is deemed suitable for operation, the temporary stop must be removed in consultation with Public Transport Victoria. All works associated with the temporary bus stop must be provided at no cost to Public Transport Victoria.

43 Public Transport Victoria requires notice of the relocation of the existing bus stop and all associated infrastructure two weeks prior to relocation.

Expiry

44 This permit will expire if one of the following circumstances applies:

a The development is not started within seven years of the issued date of this permit.

b The development is not completed within ten years of the issued date of this permit.

In accordance with Section 69 of the *Planning and Environment Act* 1987, an application may be submitted to the Responsible Authority for an extension of the periods referred to in this condition.

- End of conditions –

THIS PERMIT HAS BEEN AMENDED AS FOLLOWS:

Date of Amendment: 19 October 2021

Details of Amendment:

Permit preamble
Amended to include the use of land for a shop.

Permit conditions
Condition 1 deleted, which required the following:

1 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, the applicant must submit to the Responsible Authority three copies of plans drawn to scale generally in accordance with the plans TP090, TP091, TP097 to TP122, TP200 to TP203, TP210 to TP214 plot dated 28 September 2016 and prepared by Plus Architecture but amended to show:

a Deletion of levels 13 and 14 from the building and any consequential changes;

Date Issued: 29 June 2017

Signature of the Responsible Authority

Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.

b Clear retention of all chimneys, including on Drawing No. TP091 Rev 1 and Drawing No. TP200;

c Redesign of the two outward opening doors projecting into Batman Street such that they do not project beyond the street alignment when open, when closed or when being opened or closed;

d Any changes required by the Heritage Management Plan required by condition 9, including:

- Retention of the whole of the fabric of the ovens insitu, including the consequent deletion of two car parking spaces on each basement level;
- Reconstruction of the gable roof slopes to the original Bakehouse (that is, the Bakehouse that contains the ovens), and a new north gable end to match the existing;
- Reconstruction of the Residence/shop hipped roof slopes to match the existing;
- Reconstruction of return walls to a length of approximately 2.2 metres at the original courtyard entry;
- Construction of a solid wall immediately below the western end of the southern Residence/shop hipped roof slopes; and
- Works to the bridge over the entry to the original courtyard to ensure that the façade reads as having built form behind it.

e Detailed design resolution including plans, elevations and sections at a scale of 1:100 with detailed façade segments at 1:50 scale that show:

- The ground floor treatment for Batman Street, Spencer Street and Middleton Place; and
- The glazed wind canopy structure over the pedestrian entry to the dwellings.

f Relocation of structural columns to avoid any columns in the space occupied by the ovens;

g Inclusion of windows of the residents' lounge in site plans TP101 and TP102;

h Inclusion of a retractable security gate at the pedestrian entry to the dwellings in accordance with the Sketch Plans Ground Floor Plan (Gate Study) and TP201 South Elevation (Gate Study) dated 31 March 2017;

i Lowering the height of the parapet containing the ballast roof at ground floor level on the northern elevation adjacent to the private lane from 23.6AHD to 20.7AHD in accordance with the Sketch Plans Level 01 Plan (Dropped Roof) and Section B (Dropped Roof) dated 2 May 2017;

j Any changes as required by the Waste Management Plan required by condition 19;

k Any changes as required by the Environmentally Sustainable Design Statement required by condition 20;

l Any changes as required by the wind tunnel modelling report required by condition 22; and

m Provision of a landscape plan for planting proposed on levels 2, 3 and 4 common area and terraces with details of planting to be provided to the satisfaction of the Responsible Authority.

Date Issued: 29 June 2017	**Signature of the Responsible Authority**

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These amended plans must be to the satisfaction of the Responsible Authority and when approved shall be the endorsed plans of this permit.

Existing Condition 2 updated to reflect plot date of amended plans;

Existing Waste Management Condition 19 deleted and replaced with updated condition to reflect amended Waste Management Plan;

Existing Environmental Assessment Condition 23 deleted and replaced with updated condition to reflect changes in requirements for Potentially Contaminated Land; and

Existing Expiry Condition 44 amended to reflect extension of time.

Date Issued: 29 June 2017

Signature of the Responsible Authority

Note: Under Part 4, Division 1A of the Planning and Environment Act 1987, a permit may be amended. Please check with the Responsible Authority that this permit is the current permit and can be acted upon.

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VICTORIAN CIVIL AND ADMINISTRATIVE TRIBUNAL

ADMINISTRATIVE DIVISION

PLANNING AND ENVIRONMENT LIST

VCAT REFERENCE NO. P2608/2016
PERMIT APPLICATION NO. TP-2016-722

CATCHWORDS

Melbourne Planning Scheme; DDO33; tower on site containing heritage building; heritage conservation; urban design response.

APPLICANT	Yarrabank Developments Pty Ltd
RESPONSIBLE AUTHORITY	Melbourne City Council
REFERRAL AUTHORITY	VicRoads, Public Transport Victoria
SUBJECT LAND	405-421 Spencer Street, West Melbourne
WHERE HELD	Melbourne
BEFORE	Michael Nelthorpe, Presiding Member Vicki Davies, Member
HEARING TYPE	Hearing
DATE OF HEARING	23-26 May 2017
DATE OF ORDER	22 June 2017
CITATION	Yarrabank Developments Pty Ltd v Melbourne CC [2017] VCAT 888

ORDER

1 In application P2608/2016 the decision of the responsible authority is set aside.

2 In planning permit application TP-2016-722 a permit is granted and directed to be issued for the land at 405-421 Spencer Street, West Melbourne in accordance with the endorsed plans and the conditions set out in Appendix A. The permit allows:

- Use of land for a food and drink premises, and for offices, in the Mixed Use Zone;
- To construct two or more dwellings on a lot in the Mixed Use Zone;
- Demolition, alterations and additions to a building in Heritage Overlay 779;
- To construct a building and carry out works for noise sensitive uses in Design and Development Overlay Schedule 12;

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- To construct a building and carry out works in Design and Development Overlay Schedule 33;
- To reduce the required number of car parking spaces; and
- To alter an existing access to a road in a Road Zone Category 1.

Michael Nelthorpe
Presiding Member

Vicki Davies
Member

APPEARANCES

For applicant	Mr Stuart Morris QC, assisted by Mr Chris Taylor, solicitor of Planning and Property Partners. They called the following witnesses: Mr Bryce Raworth, conservation consultant and architectural historian; Mr Andrew Hutson, architect; Mr Bruce Trethowan, architect; and Mr Andrew Biasci, town planner of Contour Consultants. Mr Chris Yelland and Ms Candice Ng, architects of Plus Architecture explained the plans. Mr Chris Goss, architect of Orbit Solutions and Mr Stephen Hunt, traffic engineer of Ratio Consultants prepared and circulated evidence but were not called to present this evidence.
For responsible authority	Mr Simon Martyn, town planner of Fulcrum Town Planners. He called the following witnesses: Ms Leanne Hodyl, architect and urban designer of Hodyl & Co.; and Ms Meredith Gould, architect of Meredith Gould Architects.

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INFORMATION

Description of proposal	A 22 level building with ground floor retail, first floor office and 20 residential floors with basement parking.
Nature of proceeding	Application under section 79 of the *Planning and Environment Act 1987* – to review the failure to grant a permit within the prescribed time.[1]
Planning scheme	Melbourne Planning Scheme
Zone and overlays	Mixed Use Zone Heritage Overlay Schedule 779 Design and Development Overlay Schedule 12 Design and Development Overlay Schedule 33
Permit requirements	Clause 32.04-2: to use land for a food and drink premises over 150 square metres; Clause 32.04-6: to construct two or more dwellings on a lot; Clause 32.04-8: to construct a building or construct or carry out works for a food and drink premises over 150 square metres in area; Clause 43.01-1: to demolish or remove a building and to construct a building or construct or carry out works; Clause 43.02-2: to construct a building or construct or carry out works generally, and where associated with new, refurbished or converted developments for noise sensitive uses; Clause 52.06-3: to reduce the required number of car parking spaces; and Clause 52.29: to alter an existing access to a road in a Road Zone Category 1.
Relevant scheme policies and provisions	Clauses 9, 10, 13, 15, 16, 18, 21.16, 22.02, 22.05, 22.17, 22.19, 22.23, 32.04, 43.01, 43.02, 52.06, 52.07, 52.29, 52.34 & 65.

[1] Section 4(2)(d) of the *Victorian Civil and Administrative Tribunal Act 1998* states a failure to make a decision is deemed to be a decision to refuse to make the decision.

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Land description	This 1683 square metre site is on the north-west corner of Spencer and Batman Streets in West Melbourne. It has a 38 metre frontage to Spencer Street and a 40 metre frontage to Batman Street. It abuts a lane known as Middleton Place to the north and a private lane to the west.
Tribunal inspection	23 May 2017, accompanied by representatives of the parties, Ms Gould and Mr Raworth.

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REASONS[2]

1 Yarrabank Developments Pty Ltd ('the applicant') sought a planning permit to construct a 22 storey mixed-use building at 405-421 Spencer Street in West Melbourne. Melbourne City Council failed to grant a permit in the prescribed time and the applicant now seeks a decision by the tribunal.

2 The council says that a permit should not be granted. While further concessions made during the hearing largely satisfy its concerns regarding the retention of the existing building's heritage fabric, it says the new building's relationship to this fabric is unacceptable. Separately, it contends that the new building's scale fails to meet the design objectives of the applicable Schedule to the Design and Development Overlay ('DDO33').

3 The applicant contests these submissions. It contends that the relationship between the new and old buildings is skilfully resolved, and that the new building's scale is appropriate. In saying this, it relies on the discretionary height and setback provisions in DDO33 and the existence of higher buildings near the site.

4 VicRoads and Public Transport Victoria do not object to the grant of a permit subject to conditions.

5 Based on this summary, we consider that we must address the following questions:

- Is enough of the heritage building retained?
- Is the proposed development an acceptable response to the site's heritage significance?
- Is the proposed development's scale an acceptable response to DDO33's design objectives?

6 Having inspected the site and surrounds, and after considering the Melbourne Planning Scheme's relevant provisions, the parties' submissions and the evidence before us, we have determined to grant a permit. With regard to heritage matters, we find that the heritage building is retained to a sufficient degree and that the visual relationship between the old and new form is acceptable. With regard to the building's scale, we find that the proposed development, with some modification to its height, is an acceptable response to DDO33's design objectives.

7 After describing the planning provisions, the existing conditions, and the proposal, we will elaborate on these findings.

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[2] The submissions and evidence of the parties, any supporting exhibits given at the hearing, and the statements of grounds filed; have all been considered in the determination of the proceeding. In accordance with the practice of the Tribunal, not all of this material will be cited or referred to in these reasons.

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WHAT DOES THE PLANNING SCHEME SAY ABOUT DEVELOPMENT IN THIS PART OF WEST MELBOURNE?

8 State and local planning policies generally suggest that the site is suitable for intensive mixed use development given it is at the fringe of the CBD. Both bodies of planning policy also seek to ensure that new development responds to its context, and seek to protect sites with significant heritage and architectural value.

9 Local planning policy on Settlement promotes a particular structure to the municipality's built form, and seeks to conserve and enhance places and sites of heritage significance. In terms of city structure, local policy promotes urban growth within the Hoddle Grid and in existing and proposed Urban Renewal Areas. West Melbourne is outside these areas, and the council deems it, at this high level, as an area suitable for incremental growth.[3]

10 Local planning policy on the Built Environment seeks to ensure that there is a clear distinction between the higher buildings within the Hoddle Grid (south of LaTrobe Street) and the surrounding areas. It also seeks to ensure that the scale of new development is appropriate to an area's preferred character.[4]

11 Local planning policy for North and West Melbourne identifies the mixed use character of these areas, and notes that many of its streetscapes and buildings are recognised for their heritage significance. It reiterates policy seeking a distinction in scale from the CBD. More specifically, it seeks to ensure that the area containing the review site 'provides a contrast in scale between the lower built form of West Melbourne and the higher scale of the Hoddle Grid'.[5]

12 Local planning policy on Heritage Places Outside the Capital City Zone is relevant.[6] It seeks to conserve buildings of historic, social, or architectural interest, and to ensure that new development respects heritage character and positively contributes to its surrounds. It provides various performance standards relating to all aspects of built form change to buildings of heritage significance.

13 Local planning policy on Urban Design outside the Capital City Zone is relevant. [7] It encourages the use of design objectives and built form outcomes in the applicable Design and Development Overlays to guide the scale of new development in creating new built form character.

14 The Design and Development Overlay Schedule 33 – CBD Fringe affects the site and surrounding area. Its relevant design objectives are:

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3 At clause 21.04.
4 At clause 21.06-1
5 At clause 21.16-5
6 At clause 22.05
7 At clause 22.17

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To provide a transition between the taller built form of the central city and the lower scale built form of West Melbourne

To maintain the heritage characteristics of the area by ensuring new development respects the scale of, and provides a transition to, adjoining heritage buildings.

15 It has a discretionary maximum building height of 40 metres. This is to achieve built form outcomes that align with the first design objective.

16 It has a discretionary 16 metre podium height or a lesser appropriate height where the site is adjacent to a heritage building. This is to achieve built form outcomes where the use of podiums and upper floor setbacks provide a transition to adjoining lower scale heritage buildings.

17 It has discretionary setbacks above podium of six metre from all front, side and rear boundaries and two metre setbacks from lanes to achieve built form outcomes that strengthen the pedestrian scale and focus of the area.

18 The sole decision guideline requires consideration of whether the height of a new development or the height of its podium will adversely affect the heritage significance of any adjoining heritage building.

WHAT ARE THE EXISTING CONDITIONS IN THIS PART OF WEST MELBOURNE?

19 The existing conditions around the site reflect the varied policy objectives we have outlined. The CBD's higher built form is visible from outside the site and Spencer Street in this location is clearly a main thoroughfare to the suburbs to the north and west.

20 The older low-rise manufacturing and warehousing buildings throughout the area clearly display the area's commercial/industrial past. Examples in the immediate context are the Sands & McDougall complex on the opposite corner of Batman Street, and the long, low red brick warehouse occupied by the Red Cross to the west of the site. Other examples of this scale or smaller are found throughout this part of West Melbourne, with the larger buildings mostly found on the main thoroughfares.

21 A number of nearby sites have been redeveloped with larger mixed use or solely residential buildings. Many have a form of the podium/tower typology encouraged by DDO33.

22 To the north, across Middleton Place, is a 16 storey residential development. Further 16 storey buildings have been approved on the adjacent site to the north, being the corner of Spencer and Dudley Streets, and to the north-west at 93-95 Dudley Street.

23 At 420 Spencer Street to the north-east, there is a 40 storey tower retaining elements of the low scale, 1930's heritage listed building in its podium, which is nearing completion.

24 At 371-379 Spencer Street and 83-113 Batman Street, opposite the review site to the south, plans have been approved for a development of two

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towers, each with two joined forms, above a four-storey podium. The maximum height of the towers is 20 and 27 storeys respectively.[8]

25 Opposite this site, a 16 storey tower incorporating a heritage façade is under construction at 386 Spencer Street. Further north, between Dudley and Rosslyn Street, plans for a complex of six buildings ranging from 3 to 15/16 storeys are said to be approved for the large, former Australia Post site.

26 Two further buildings of 14 and 15 storeys are found further east on Batman Street, while a building with a height of 66.3 metres (20 storeys) has been approved at 15 Batman Street, and a building with a height of 52.9 metres (17 storeys) has been approved at 50 Batman Street.[9] Separately, another division of the tribunal has assessed a 69.4 metre high building on the corner of King and Batman Streets.[10] It found this height was *'generally acceptable in the context of its relationship to the CBD'*[11] yet refused to grant a permit for other reasons.

THE PROPOSAL

27 It is proposed to construct a 22 storey building comprising 181 apartments, ground level retail space and first floor office space. 17 one-bedroom, 141 two-bedroom and 17 three-bedroom apartments are proposed. 115 car parking spaces in a three level basement are proposed, as are 76 bicycle parking spaces.

28 The external walls and roof of the heritage-listed bakery complex are proposed to be retained in part, with the internal space to be used as a food and drink premises.

29 The proposed tower commences behind and beside these retained features. It comprises two joined elements. A light, glazed rectangular form with recessed balconies faces Spencer and Batman Streets, while a dark, brick tiled elongated rectangular form with exposed windows and recessed balconies runs along the western boundary behind the bakery complex.

30 There are two distinctive elements in the architecture. The first is that the lower levels of the glazed tower element progressively extend over the airspace above the heritage building before adopting a conventional, upright form. The architect describes this element as a 'vase-like' structure where a solid form sits above a narrow base. The second distinctive element is at the base of the dark, brick tiled section of the tower. This 'podium' adopts a faceted geometric form that angles away from the conventional, upright form above it. Further to this, it hangs above a glazed ground floor. These

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8 The endorsed plans show heights of 73.7 metres AHD (17 storeys) and 83.1 metres AHD (20 storeys) for the smaller tower at the corner of Spencer and Batman Streets, and 92.4 metres AHD (24 storeys) closest to the north-east corner and 101.7 metres AHD (27 storeys) for the taller tower deeper into the site.

9 As described in *DCF 407 King Street Developing Entity v Melbourne CC* [2017] VCAT 423 [37].

10 Ibid [2].

11 Ibid [39].

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distinctive concave and convex elements merge at the 8th storey and serve to visually enclose the two-storey bakery complex.

31 The pedestrian entrance to the residential tower aligns with this point of merger, which continues upward as a shallow recess that separates the two elements of the tower. At ground level, the western wall of the bakery building forms one side of the pedestrian entry, with the glazed shopfront and cantilevered form of the dark, brick tiled 'podium' forming the other side.

32 The maximum height of the building is approximately 69 metres. In terms of setbacks, its tower is generally set back five metres from the street frontages and western boundaries above a podium of varying height and form as described above.[12] To the north, Middleton Lane is substantially widened to improve vehicle access and the tower is to provide a nine metre separation to habitable spaces in the adjacent 16 storey residential tower.

33 Internally, the apartments are sited around a central lift core, and are designed so that living spaces and bedrooms have direct access to natural light. Balconies of varying sizes are provided, with west facing balconies sized in order to maintain reasonable daylight to west facing apartments if the adjoining site is developed with higher built form.

IS ENOUGH OF THE HERITAGE BUILDING RETAINED?

The nature of the heritage place

34 The part of the subject land that comprises the former Dalston Bakery is covered by the individual Heritage Overlay HO779. External paint controls apply. Internal alteration controls do not apply.

35 This bakery complex consists of a two-storey shop and residence sited on the corner of Spencer and Batman Streets and built to both front boundaries. Ms Gould describes this as Building C. The complex continues west along Batman Street, as a two-storey bakehouse is located behind the shop and residence. The older section of the bakehouse is built to the Batman Street frontage. The original ovens and two chimneys remain in the western wall. Ms Gould describes this as Building A. It has been extended, with the bakehouse extension being behind, or to the north of, the original building. No ovens remain in this extension, yet two chimneys remain in the western wall. Ms Gould describes this as Building B. Originally, a paved courtyard separated the shop and residence building from the bakehouse. A short passageway joins these buildings at first floor level. Ms Gould describes this as Building D.

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[12] The tower element is setback 5 metres from Spencer and Batman Streets, a minimum of 5.2 metres from Middleton Place, and a minimum of 7.5 metres from the private lane that separates the site from 93-95 Batman Street. Where it abuts the site to the west, the building tapers back from a minimum 0.7 metre setback at level 3 to four metres at level 6, then 4.8 metres for the remainder of its height.

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36 The *Heritage Places Inventory June 2016* ('the Inventory') is an incorporated document that lists graded buildings (and the associated streetscape grading) that are outside of the Capital City Zone. 405 Spencer Street is identified as a C graded building in a Level 3 streetscape. It was initially identified in the 1983 *North and West Melbourne Conservation Study* and at that time it was seen as having a D value. However, the data sheet for the 'Dalston Bakery' gives it a C grading and records the date of the building as 1906 and the 'Notable/Original Elements' as the finishes (bricks) and design. There is the notation 'South elevation notable (Haddon?)'. The building's integrity and condition are both recorded as 'Fair'.

37 By Amendment C272, the council seeks to implement the *West Melbourne Heritage Review 2016* ('the Review'). The Review upgrades the bakery complex to a B graded building that is still covered by HO779. It also recommends the revision of the Inventory so as to include 409-417 Spencer Street and 419-421 Spencer Street as D graded buildings, although it is not proposed to include them in a Heritage Overlay.[13] The Review also upgrades this section of Spencer Street to a Level 2 streetscape. The Review has a detailed statement of significance for the bakery complex that includes a list of 13 contributory elements and records the significance as historical and aesthetic.

38 For various reasons, Amendment C272 was incorporated into Amendment C258, which was exhibited earlier this year. Amongst other things, Amendment C258 revises clause 22.05, replaces the existing heritage places inventory with a new incorporated *Heritage Places Inventory 2017* (which grades all heritage place using the Significant/Contributory/Non-Contributory grading system) and incorporates documents with revised statement of significance.[14] In the revised Inventory, the bakery complex is identified as Significant.

39 There are a number of other properties in the immediate area covered by individual heritage overlays. In particular, the Red Cross property to the west is HO1181 (which expires on 1 March 2018) and the parts of the Sands and McDougall precinct to the south and southwest are HO771 (which is also an interim control, except as it affects 355 Spencer Street).

Heritage considerations

40 The objective of the State heritage conservation policy is 'To ensure the conservation of places of heritage significance'. Associated strategies include 'Retain those elements that contribute to the importance of the heritage place' and 'Encourage the conservation and restoration of contributory elements'.

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13 We were provided with some extracts of the Review, but not any sections relating to 409-417 and 419-421 Spencer Street.

14 *West Melbourne Heritage Review 2016: Statements of Significance.*

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41 The purpose of the Heritage Overlay (clause 43.01) includes to conserve and enhance 'heritage places of natural and cultural significance' and 'those elements which contribute to the significance of heritage places'. The decision guidelines include 'Whether the demolition, removal or external alteration will adversely affect the significance of the heritage place'.

42 Clause 22.05 (Heritage Places Outside the Capital City Zone) is the local policy regarding the discretion under clause 43.01. Its Performance Standard regarding demolition states that demolition 'will not normally be permitted' in the case of 'A' and 'B' buildings or for the front part of 'C' and many 'D' graded buildings, with the front part 'generally considered to be the front two rooms in depth'. The matters to be considered include the degree of significance; the character and appearance of the building; whether the demolition or removal of any part contributes to the long-term conservation of the significant fabric of the building; and whether the demolition or removal is justified for the development of land or the alteration of, or addition to, the building.

43 The Performance Standards regarding renovating graded buildings include 'Intact significant external fabric on any part of an outstanding building, and on any visible part of a contributory building, should be preserved'. When considering the removal or alteration of any fabric, considerations include the degree of its significance, structural condition and the character and appearance of proposed replacement materials.

Proposed demolition and works

44 The plans considered by the council show the demolition of all of the existing buildings on the review site except for:

- the facade of 405-407 Spencer Street (along Spencer Street and Batman Street); a return (4.8 metres long) of its north boundary; and its west (rear) boundary wall, including four chimneys; and
- the Spencer Street facade of 409-417 Spencer Street.

45 During the course of the hearing, we were advised of the applicant's preparedness to retain or reconstruct further elements. In particular, it is now proposed to:

- retain the whole of the fabric of the original ovens in the southern section of the bakehouse ('Building A');
- reconstruct the gable roof slopes of Building A, to match the existing, and install a new north gable end;
- reconstruct the hip roof slopes of the residence and shop ('Building C'), to match the existing;
- construct a solid wall immediately below the western end of the southern hipped roof of Building C (but not extending to the ground);

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- reconstruct the return walls (for a length of approximately 2.2 metres) at the original courtyard entry from Batman Street ('Building D' - the bridging element between Buildings A and C);
- carry out works to the bridge structure over the entry (Building D) to ensure that the facade reads as having built form behind it; and
- retain the first floor west-facing delivery doorway (now a window) in the northern section of the bakehouse ('Building B').

46 Mr Yelland explained that, for structural reasons, the earth beneath the retained ovens must be left in place and that, consequently, two car spaces at each of the basement levels will be lost. Proposed columns will also need to be relocated.

Does the retained fabric effectively convey the heritage significance?

47 The council is now generally satisfied that the retained fabric, as revised at the hearing, conveys the significance of the bakery complex, as it now retains a three dimensional form rather than just the facades.

48 We agree with this as most of the original fabric that can be seen from the public realm is now proposed to be retained. Conversely, most of the fabric to be removed is not visible from the street, or is secondary in character. We acknowledge the retention of the two ovens in Building A despite the absence of internal heritage controls, and recognise their interpretative value as part of the proposed food and drink premises.

49 As such, the differences of opinion between the heritage experts that we must adjudicate on is limited to whether the return walls of the original courtyard entry should be retained or reinstated; how far those walls should extend into the ground floor; whether the material of the retained roofs should be retained or replaced; and whether the roof of Building B and the space within it should be retained.

Return walls of the original courtyard entry

50 The applicant is prepared to reinstate the brick return walls for a depth 2.2 metres by reusing the bricks or a best match. This depth equates with the existing recessed entry. They contend that retaining these walls in situ is not warranted given the building's C grading.[15].

51 Ms Gould says otherwise. She says that the return walls should be retained in situ, and for a greater depth than 2.2 metres, perhaps as much as the extent of the rear wall of Building C. Her reasoning is that this will convey a sense of the entry to the courtyard that originally separated the shop and residence from the bakehouse.

52 Ultimately, we find that reinstatement of the walls for a depth of 2.2 metres is a reasonable outcome. We consider that the retention of the walls is not

[15] Mr Yelland explained the engineering solution required to do that (piles on each side of the walls and a slab installed underneath before the basement is excavated).

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justified given its cost and limited benefit. The brick return walls of the original courtyard entry have not been visible from the public realm for many years, being either inside the building or covered by newer wings walls to the sides of the recessed entry. We are satisfied that what is now proposed reflects the original passage especially as the associated bluestone crossing is retained. We do not support the retention or reinstatement of the walls for a greater depth as this would unduly compromise the efficiency of the internal space. We find that the heritage benefit of reusing the original bricks, if possible, or at least a best match is sufficient.

Roofing material

53 Ms Gould supports the proposed additional roof retention but thinks that the roof fabric should be retained, or at least be reused. She argues that if it is accepted that this is an individually significant building, the actual fabric of the building has a high conservation value. She highlights that the Review specifically mentions the 'pitched roofs behind parapets' as contributory elements.

54 Invoking the local policy that requires a depth of two rooms to be retained for a C graded building, Ms Gould suggests that given the corner location, and the particular importance of the long Batman Street frontage, the roofing over that depth should be retained from Batman Street. She saw that as capturing Building A, part of Building B and all of Buildings C and D.

55 Ms Gould also suggests that the revised proposal opens up other opportunities for the retention of original fabric. For instance, she sees no need to reconstruct the roof of Building A. Its existing gabled roof could be retained.

56 We are not persuaded by this evidence, as it relies too heavily on the provisions proposed to be introduced through Amendment C258. We place greater weight on the fact that the heritage buildings on the review site are currently graded C, in a Level 2 streetscape. In this context, the Performance Standards in clause 22.05 envisage the demolition of parts of a C graded building, stating that demolition will not normally be permitted for the 'front part' of such buildings.

57 In applying this standard, we are satisfied that the applicant's proposal to reconstruct the roof of the residence and shop (Building C), original bakehouse (Building A) and bridge between them (Building D) is an acceptable response to the Performance Standard. We note that many elements of these roofs are not visible from the public realm or are unlikely to be the original fabric. We agree with Mr Raworth that where roof material has been replaced over time, it makes little difference if it is replaced again. It is common sense to replace with matching material, as part of the overall redevelopment and restoration.

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58 None of the heritage experts have any objection to the inclusion of a skylight on Building D. It would allow light into the ground floor food and drink premises, and first floor offices, and thus avoid the introduction of new windows on the Batman Street façade.

59 Ultimately, we agree with Mr Trethowan that the retained or reinstated fabric included on the revised proposal effectively treats the complex of buildings on the review site commensurate with a grading of 'B' or 'C', or Significant.

Building B

60 Ms Gould considers that the full extent of Building B makes an important contribution to significance and all of its roof should be retained, or at least its fabric reused. She saw the opportunity to incorporate the first floor of Building B into the development (as an apartment or office), potentially incorporating windows on the eastern side of the roof.

61 The first floor of Building B could have been incorporated, but that is not the proposal before us. We do not think it is necessary to retain or reinstate the roof of Building B. We agree with Mr Raworth that its roof is not the 'front part' of the building (whether that comprises the front two rooms or not), even if its west wall is being kept. It is the least important roof in the complex of buildings.

Other heritage matters

Additional façade Spencer Street

62 Ms Gould was critical of the retention of the facade of 409-417 Spencer Street, describing it as 'wallpaper'. We accept that this aspect of the proposal represents facadism, which is usually discouraged. Nevertheless, we see no harm in keeping the façade as part of the proposed shop. It has been there a long time even if it is not in HO779. It is possible that it was once part of the bakery operation and is recognised in the Review as having value. We agree with Mr Raworth that its retention is a positive outcome as it retains the status quo. We find that it should be painted in a colour to complement the proposed development.

Restoration works and interpretation

63 Restoration works are not itemised on the plans, but the heritage experts assume that such works will occur.

64 A draft permit condition requires a Heritage Management Plan, prepared by a suitably qualified heritage consultant, to be submitted and approved by the Responsible Authority. Amongst other things, it requires details of how the retained portions of the building are going to be supported during demolition, excavation and construction works and details of the conservation of the retained portions of the building. That would include the façade of 409-417 Spencer Street.

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65 We accept that the retained fabric, particularly the ovens, is the key to the future interpretation of the significance of this complex of heritage buildings. As Ms Gould notes, interpretation is not restricted to text and photographs. It can be incorporated into the architecture and there are now digital means of telling the story of a building. The preparation of appropriate interpretation, to the satisfaction of the council, will be required as part of the Heritage Management Plan.

IS THE PROPOSED DEVELOMENT AN ACCEPTABLE RESPONSE TO THE SITE'S HERITAGE SIGNIFICANCE?

Heritage considerations

66 The State heritage conservation policy includes the strategies of encouraging 'appropriate development that respects places with identified heritage values and creates a worthy legacy for future generations' and ensuring 'an appropriate setting and context for heritage places is maintained and enhanced'.[16]

67 The relevant clause 43.01 purpose is 'To ensure that development does not adversely affect the significance of heritage places'. Relevant decision guidelines include whether the location, bulk, form or appearance of the proposed building 'will adversely affect the significance of the heritage place' and 'is in keeping with the character and appearance of adjacent buildings and the heritage place'.

68 The strategies in the heritage provisions of the Municipal Strategic Statement include 'Maintain the visual prominence of heritage buildings and landmarks' and protect buildings and streetscapes of heritage significance 'from the visual intrusion of new built form'.[17]

69 To the extent that part of the land is covered by HO779, it is appropriate to have regard to clause 22.05, including its objectives. It has Performance Standards under headings that include Form; Facade Pattern and Colours; Materials; Details; and Building Height. In a Level 3 streetscape, the external shape of a new building, the facade pattern and colours, and the details should all be 'interpretive'. 'Interpretive' is defined as meaning 'a looser reference to historic size, form, proportions, colours, detailing and decoration, but still requires use of historic or closely equivalent materials'. The surface materials 'should always be respectful' and the height of a building 'should respect the character and scale of adjoining buildings and the streetscape'.

70 There are also provisions regarding 'Concealment Of Higher Rear Parts (Including Additions)'. In a Level 2 and 3 streetscape, higher rear parts of a new building, and of an addition to an existing graded building, should be 'partly concealed'. That provision does not apply to land within Schedule 5 to the Capital City Zone (City North). It was suggested to us that the

[16] Clause 15.03-1.
[17] Clause 21.06-2.

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exclusion should also apply to this CBD fringe area that is covered by DDO33, as it clearly does not envisage podium-tower development. In any event, we do not see the need to give weight to that aspect of clause 22.05.

71 The design objectives of DDO33 include 'To maintain the heritage characteristics of the area by ensuring new development respects the scale of, and provides a transition to, the adjoining heritage buildings'. The second built form outcome in the table to Schedule 33 is 'Development provides a transition to adjoining low scale heritage buildings by the use of podiums and upper level setbacks'. As noted earlier in these reasons, there is only one decision guideline. It only applies when a site adjoins a Heritage Overlay and states:

> - Whether the height of any new development or the height of its podium will adversely effect [sic] the heritage significance of any adjoining heritage building, including the grading of the building as listed in the Heritage Places Inventory 2012.

Assessment

72 The essential issue is whether the visual relationship between the new building and the retained heritage building is acceptable. The submissions and evidence focused on two controversial issues – the proposed entry arrangement and visibility of the retained chimneys; and the broader issue of whether the height, form, setbacks and materiality of the tower respects the significance of the heritage building. There is also the issue of whether the proposal effectively responds to adjoining heritage buildings.

Entry arrangement and visibility of the four chimneys

73 We give weight to the proposed retention of the chimneys as they are a distinguishing and interpretative feature of the building. The wall with the four chimneys (at the rear of Buildings A and B) will be the eastern wall of the proposed entry from Batman Street to the residential lobby. The western side of the entry space will be the glazed wall of the shop and the high wall of the residents' lounge. A glazed canopy/wind device (approximately 3.6 metres above ground level) is proposed across most of the entry space. Although not shown on the plans, a security gate (with door for after-hours entry) will be provided.

74 Ms Gould is critical of the proposed entry arrangement, noting that it will compromise the potential views of the chimneys and thus an understanding of the function of the former bakery. In particular, she notes that the rear chimney would have new development above it, with there being a clearance of only 850mm to an apartment on level 3. She also considers that the glazed canopy will restrict views of the chimneys from within the entry space given it extends to between 600mm and 900mm of the wall.

75 Ms Gould is also concerned that the western tower element will obstruct and compromise views of the chimneys from outside the site along Batman

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Street. She estimates that views of all four chimneys will be limited to a 2.6 metre wide viewing cone on the other side of Batman Street.

76 Ms Hodyl shares those concerns. She thinks the lower part of the tower is too close to the entry and too proximate to the chimneys. She thinks the strategy to 'peel away' the building is the right one, but that the reveal is not generous enough. She thinks the necessary supporting structure of the canopy would further diminish the view of the heritage building. She also notes that only part of the eastern wall of the residents' lounge is glazed, thus limiting views out to the heritage building.

77 We are satisfied with the entry arrangement. Given that the chimneys are around 11.5 metres above the ground level, we find that they could only be prominent if the western tower element was substantially set back from Batman Street. We consider that this is not necessarily anticipated by the Planning Scheme. We find that the benefit of incorporating the western wall of the bakehouse (Buildings A and B) in the entry is a positive and respectful response to this heritage fabric. It outweighs the fact that the chimneys would only be seen in angled, upward views within this space. We also give weight to the design and siting of the residents' lounge that provides views to the wall and chimneys.

78 Perspectives provided by the applicant confirm that vantage points for views of all four chimneys will be limited to a relatively small arc. We do not see that as critical. The gable roof of the original bakehouse building (Building A) has always restricted views from the east. The chimneys will be less apparent in oblique views from the west, but clearly seen above the canopy in some views.

79 We accept that the new development is close to the rear chimney, essentially surrounding it. Contrary to Ms Gould, Mr Trethowan sees this relationship 'celebrates the chimneys', while Mr Raworth envisages the chimneys will read as independent elements that are 'embraced in the new complex'.

80 Such assessments inevitably have a subjective element. Ultimately, we think that the entry arrangement focuses sufficient attention on the chimneys, and that the overall design does not detract from their ability to 'tell the story' of the bakery significance. We find it relevant that the western wall of the bakehouse (Buildings A and B) is now hidden by a concrete building used for car repairs whereas the proposal creates a view of the wall and reintroduces an access way that was part of the original laneway. As such, we are satisfied with the entry arrangement.

Does the tower development respect the significance of the heritage building?

81 Mr Morris describes using a heritage building as a podium as the 'Melbourne solution to heritage'. He and Mr Raworth list various examples, in the vicinity of the review site, within the CBD and throughout

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Melbourne. Mr Morris also provided photos from around the world of 'new meets old architecture'.

82 We do not need to be persuaded that tower development that utilises a heritage building as a podium is legitimate, or that 'old' and 'new' building forms can coexist. Such development can take various forms. It can be a tower 'growing out of' a heritage building (such as the Herald and Weekly Times building on Flinders Street or the addition to the Russell Street police headquarters at the LaTrobe Street corner). It can be a tower behind the facade or a greater section of a heritage building (such as the buildings being completed at 420 and 386-390 Spencer Street, or the approved addition to the Fletcher Jones building on the corner of Flinders and Queen Streets). More controversially, it can be a tower that effectively encloses a heritage building, extending above and over it (such as the approved development at 696-708 Elizabeth Street).

83 It is axiomatic that a tower rising above a modest heritage building completely changes the context of a heritage building and will not be partially concealed. In considering the consequences of this, we are assisted by the observations in *Creative Wealth (Aust) Pty Ltd v Melbourne CC* where a tower was proposed above the Fletcher Jones building in Flinders Street.[18] In that case, the tribunal grappled with the idea of how it could be said that an extension which is many times larger than a host building 'does not in some way dominate, overwhelm or distract from the host building'. It said that:

> [17] The visual relationship between the new building, as it rises above the restored facades of the existing building is of heritage importance. It is accepted by all parties that the new building elements should not so overwhelm or distract from the existing building that a passer-by cannot understand the three-dimensional character of the original heritage building.
>
> [19] Setbacks between the old and new elements of buildings adapted in this way are an important device to reduce the extent to which these very large extensions overwhelm or distract from the heritage building.
>
> [21] Moreover, we are of the view that because the existing building can be understood as a three-dimensional object, it is unlikely that the proposed building will distract from a heritage understanding of the old, provided that the architecture of the transition, the tower and the cap is appropriately handled.

84 Accordingly, the issue before us is whether the new development detracts from the presentation of the retained three-dimensional form of the bakery complex or, to use words of the tribunal in the Fletcher Jones case, whether the 'architecture of the transition' and the tower itself are appropriately handled.

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18 [2015] VCAT 1522 [25].

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85 The council says that the new development is too dramatic a transition from the heritage building, with Mr Martyn describing the 'aggressive nature of the proposal' and arguing there needs to be 'space for the heritage building to be appreciated'. The council considers that the form, bulk and lack of setbacks are inconsistent with the clause 21.06 strategies of maintaining the visual prominence of heritage buildings and protecting significant buildings from the visual intrusion of new built form. Essentially, it contends that the eye will be drawn to the towers, not the bakery complex. In particular, Mr Martyn says that the corbelling weakens the podium-tower expression, especially as the bakery complex has a height of only 9 metres.

86 Ms Gould's evidence is that the tower is too close to the bakery complex and greater setbacks are needed to provide a three-dimensional presence. She thinks the setback from Batman Street should be comparable to the 7.3 metres depth of original bakehouse building (Buildings A and B), rather than the minimum upper levels setback of 5 metres. She thinks an increased setback from Spencer Street would also assist.

87 She says that the corbelling (the 'vase effect') is unnecessarily complex and introduces confusion. She criticises the complex shape of the western component, particularly its 'heavy foot' that obstructs view to the bakery complex. She says that these elements visually intrude on the bakery complex, and draw the eye upward, rather than toward the form and depth of the bakery complex. She thinks a conventional, straight tower would be a more respectful response.

88 Those criticisms are reflected in Ms Hodyl's urban design evidence. She sees the form of the tower as overly dominant, and finds the corbelling creates a top-heavy building that leans uncomfortably over the bakery complex. She sees its 9 metre height constrains the tower's height, and does not have the benefit of concealing the upper floor form in the way that a 16 metre podium (provided for in DDO33) would do. She argues as a matter of principle that a heritage building loses prominence, and a sense of complementarity, as the height of a tower increases. In this case she says that the combination of the corbelling effect and the building's height compounds the dominance of the tower.

89 We accept that more generous setbacks of the tower would undoubtedly enhance the presentation of the bakery complex, but we are satisfied that the relationship between the old and new forms is acceptable for the following reasons.

90 We find that the overall height of the tower – whether it is 16 storeys, 22 storeys, or some level in between – is of limited consequence in terms of an appreciation of the bakery complex. We agree with Mr Hutson's observation that when a passer-by is close enough to see the detailing of the bakery complex, they will not be aware of the tower's upper levels, unless specifically looking up. We accept his opinion that, once over 10 storeys or so, the appreciation of the bakery complex from opposite the review site

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would not really change. We also agree that in broader views, such as from the other side of Spencer Street, the five levels of corbelling will be the main view above the bakery complex and the levels above that will have no real impact. We also agree that from more distant vantage points, there would be little or no visibility of the bakery complex and its relationship to the tower. Separately, we note that the shop and residence of the bakery complex is well displayed in views from the south-west with the sky above it. In all, we see no need to reduce the height of the proposed development for heritage reasons.

91 We are also satisfied with the form of the new building and how the bakery complex will be read in the context of the mass behind. We agree with Mr Morris that a 'suite of techniques' have achieved an acceptable integration between the old and the new. Firstly, the tower has a minimum setback of 5 metres to both street frontages, with greater and varied setbacks at the lower levels. We find that these setbacks create a physical independence of the bakery complex. It will sit proud of the tower. Secondly, we are satisfied that the brick finish of the western tower element suitably references the bakehouse (Buildings A and B), and that the eastern tower element's reflective curtain wall glazing provides a suitably restrained contrast to the shop and residences' more formal façade (Building C). Thirdly, we find the 'organic/free flowing form' of both tower elements provides an acceptable contrast with the formal and utilitarian form of the bakery complex.

92 More particularly, we find it beneficial that the footprint of the tower does not 'grow out of' the roof of the bakery complex, although its sculptured form steps back out at higher levels. We agree with Mr Hutson that corbelling is an effective device to draw away the lower sections of the tower from the bakery complex. The corbelling is gentle and will not give the feeling of the tower leaning over, or being cantilevered. Facing Batman Street, it would be around 10 metres to the face of the tower (at level 2), which is a generous setback in this area. We also agree with Mr Hutson's reference to the 'dynamism' in the south-west corner, with the glass shopfront and strong brick element above it, giving priority to the solid bakery complex. We agree with Mr Raworth's observation that this is 'not dumb non-architecture'.

93 In summary, we conclude that the proposal appropriately handles the 'architecture of the transition' and meets the local policy objectives, strategies and Performance Standards so far as they are relevant. The materials and height are suitably respectful and the tower is suitably interpretive of a modest heritage building, to the extent that it can, or should, be.

Impact on other heritage buildings in the vicinity

94 The design objective of DDO33 that relates to heritage calls for a consideration of whether the height of the building, or the height of its podium, will adversely affect the significance of any adjoining heritage

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building. Accordingly, we need to consider the impact on the Red Cross building (HO1181) adjoining to the west.

95 We are satisfied that the proposal would not have any adverse effect on the adjoining building. The Red Cross building has a very strong horizontal form, extending all the way down to Adderley Street. It is likely to 'hold its own', notwithstanding intensive development on the review site. In terms of design and materiality, we find that the brick feature at the base of the western tower responds to the material and height of the Red Cross building.

IS THE PROPOSED DEVELOPMENT'S SCALE AN ACCEPTABLE RESPONSE TO DDO33'S DESIGN OBJECTIVES?

96 The council says the proposed development fails to meet DDO33's design objectives and does not deliver the desired built form outcomes. It acknowledges the existing and approved buildings that significantly exceed DDO33's preferred maximum height, yet submits that these should not set the direction for building height on this site.

97 It relies on the following observation and findings made by the tribunal with regard to the development at 371-379 Spencer Street and 83-113 Batman Street:[19]

> [49] The Panel however did agree that if the final outcome within DDO33 was a series of 60 metre buildings then, as submitted by Council, it would be unacceptable and would detract from the essential built form character of the area, and the built form outcomes sought to be achieved.
>
> [50] We agree with this position. Whilst discretionary controls provide flexibility to consider proposals which do not meet those specified as 'maximum', the whole point of discretionary controls and the policy underpinning them would be negated if development proposals were consistently approved which exceeded the desired maximum height limit.

98 The council acknowledges that, despite this finding, the tribunal found that heights of more than double the preferred maximum were acceptable in that case because of the size of the site and the quality of the design. Specifically, it said that:

> [73] …we acknowledge the applicant's evidence that the size of the site and the curvilinear design of the separated buildings above the podium provide a valid basis to approve a higher building…
>
> [74] …we agree with the applicant's submission that this is one of a few available sites large enough to support a development of this size, and because of the quality of the curved glazed design.

[19] *Melbourne CC v Minister for Planning* [2015] VCAT 412.

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99 From these findings, the council submits that this site is distinguished from others in DDO33 and cannot be used to justify constructing a 69 metre high tower with limited setbacks on the site before us.

100 In this context, it contends that the scale of the proposed development adversely affects the desired streetscape character. It says that this effect is caused by the combination of the proposed development's height, its 'reverse overhang' of the bakery complex, its diminished podium, and its non-compliant tower setbacks.[20]

101 Ms Hodyl says that DDO33 seeks more than a transition in height between the CBD and West Melbourne's low rise areas. In particular, she says that DDO33's requirements suggest a distinct mid-rise podium and tower character for the area that is emerging through the 50 metre high buildings with defined podiums. She says that the higher buildings read as exceptions.

102 In her view, the architecture of the proposed development does not contribute to this character. While she acknowledges the architect's design intent, she say that it has been diminished in the journey from concept to final product. In short, she says that it fails to deliver its promise.

103 The applicant says that the combination of strategic support for more intensive development, and the presence of existing and approved buildings that are at least twice DDO33's preferred maximum height suggest that this 69 metre high building is acceptable. They rely on the discretionary nature of DDO33's requirements, submitting that these allow greater heights and lesser setbacks based on an assessment of a proposal's merits.

104 Similarly to the council, they refer to comments made by the Panel that supported DDO33, except they rely on the Panel's observations that:

- There was no rigorous analysis explaining or justifying the control;
- The proposed 40 metre (height) control was 'quite arbitrary'; and
- The location of taller buildings in the CBD and DDO33 would increasingly consist of random clusters and isolated tall buildings, with their proximity depending on site size, proximity to other features and market opportunities.[21]

105 From these observations, they contend that the proposed development will be one of a small cluster of taller existing and proposed buildings that, collectively, are an acceptable response to DDO33's design objective.

106 Mr Biasci shares this view. He says that it is a logical response given the existing and approved heights of nearby buildings, and says that these approvals show a tolerance for variations in height.

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[20] Council's submission at paragraphs 165 & 179.

[21] Amendment C96 Panel report at p.32, as summarised in the applicant's submission at paragraph 13.

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107 Mr Hutson disagrees with Ms Hodyl regarding the proposed development's architecture and form. He says that the architecture is well resolved, and that the variety of setbacks and the distinctions between the two elements of the tower effectively reduces its visual impact.

108 In considering this issue, we find the applicant's submissions and evidence are more persuasive given the site's location, its physical context and the architectural response.

109 With regard to the proposed development's height, we are persuaded that the existing and approved heights of nearby buildings show the tolerance for variations in height that Mr Biasci describes. We acknowledge Ms Hodyl's massing studies and agree that buildings of 40-50 metres in height have a different visual impact than those of 70 metres, yet we are not persuaded that the proposed development's height offends DDO33's design objectives. Rather, we accept that it will be viewed as part of a 'field' of higher buildings on this part of Spencer Street as the applicant suggests.

110 Despite this general finding, we are influenced by the tribunal's findings in *Melbourne CC v Minister for Planning*, which place weight on the size of that site compared to those around it. We recognise the urban design principle that larger sites can accommodate higher buildings as greater setbacks can be provided and the impact of a building's scale can be reduced. We find this sense of proportion applies here, and are not satisfied that the proposed development should exceed the height of the closest of the towers on that site. Given that this tower has a 20-storey maximum height, we will require two levels of the proposed development to be removed, so that it is, and reads as, a smaller building than its neighbour.

111 We acknowledge Mr Morris' submission that the removal of two levels that each contain nine dwellings is the equivalent of requiring the development of more than one additional hectare of land on the urban fringe. However, we acknowledge the counterpoint to this submission is that we have allowed this building to be at least four levels higher than what the council contends is appropriate. In Mr Morris' terms, this 'saves' more than two additional hectare of land on the urban fringe.

112 We are not persuaded by Ms Hodyl's opinion that a character of 40-50 metre high buildings with 16 metre high podiums must be promoted here given the existing approvals and the robust character of Spencer Street. We can envisage that character emerging in the streets that run perpendicular to Spencer Street given these have greater potential to deliver the pedestrian scale that she refers to.

113 Apart from that, we note that DDO33 envisages podiums of less than 16 metres when adjacent to heritage buildings, as is the case here. To this extent, DDO33 anticipates a different expression for the lower floors of the new development than that envisaged by Ms Hodyl.

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114 In terms of upper level setbacks, we are not persuaded that strict compliance with DDO33's requirement would significantly alter perceptions of the proposed development's mass. In the main, the difference between what DDO33 requires and what is proposed is around one metre on three sides of the tower. We find this is not significant on a tower with dimensions of 23 metres east to west, and 27 metres north to south. Consequently, we find that DDO33 generally envisages a building of this form on this site.

115 Separately, we are persuaded that the proposed development will contribute acceptably to the pedestrian scale and focus of the area, as much as can be expected on a heavily trafficked road like Spencer Street.

116 Two factors contribute to this finding. The retention and activation of the heritage building makes a positive contribution at street level, as does the retention of the older facades along Spencer Street. Separately, the impact on the pedestrian experience of the robust, car-oriented nature of Spencer Street cannot be ignored, and we find it allows some leeway for a varied response to podium heights and upper floor setbacks.

117 We recognise that this second factor does not apply in the same way to the pedestrian experience in Batman Street. When viewed from the west, we find the angled, hanging and interpreted podium combined with the retention of the three-dimensional form of the bakery complex is an acceptable response to the area's pedestrian scale. From the east, we find the barrier of Spencer Street outweighs any perceived detriment to pedestrian scale resulting from the proposed development.

OTHER MATTERS

118 Ms Hodyl gave evidence that a 40-50 metre building height is supported by reference to the council's Open Space Strategy and the Discussion Paper for the revised West Melbourne Structure Plan. Particularly, she says that a building of a greater height would overshadow Batman Street, which may be a future public open space under that Plan.

119 We are not influenced by this opinion. We find her extrapolation from the Discussion Paper cannot be given weight given it seeks to make specific findings from what is an embryonic document. The Discussion Plan will be subject to consultation and further scrutiny before it is adopted and we cannot be certain of the ultimate outcome. Given this situation, we find it is inappropriate to apply it as a factor when assessing this development.

WHAT CONDITIONS ARE APPROPRIATE?

120 The draft conditions circulated by the council were discussed at the hearing. We have modified Condition 1 to adopt the heritage related changes that were offered at the hearing and to reflect our reasons. Otherwise, we have made the following alterations:

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- Conditions 1, 2, 8 and 11 have been amended by distinguishing buildings and works pursuant to this permit from those that are not;
- Draft condition 10 has been deleted as there are other means to confirm or enforce the proper completion of works under this permit;
- Condition 14 has been amended to allow the screening of building plant and equipment;
- Condition 16 has been amended to allow the retention of service pipes if they form part of the Heritage Management Plan;
- Condition 17 has been amended to refer to the acoustic standard required by Design and Development Overlay Schedule 12 being achieved for doors and windows, and air conditioning and ventilation systems;
- Condition 24 has been amended to exclude excavation as well as demolition if a Comprehensive Environmental Assessment of the site is required; and
- Condition 28 has been amended to exclude demolition and excavation from the requirement to provide a stormwater drainage system associated with the development.

121 Futhermore:

- We have not amended condition 12 regarding the choice of architects, as we find that it incorporates the option of choosing another architect as sought by the applicant;
- We have not amended condition 13 regarding the reflectivity of glazing as we find that it is reasonable;
- We have revised the expiry condition to allow three years for commencement and a further three years for completion however, we have linked both commencement and completion to the issue date of the permit, as preferred by the council. We have done this to avoid any uncertainty over these dates.

CONCLUSION

122 For the reasons outlined above, the decision of the Responsible Authority is set aside and a permit is granted.

Michael Nelthorpe
Presiding Member

Vicki Davies
Member

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APPENDIX A – PERMIT CONDITIONS

PERMIT APPLICATION NO:	TP-2016-722
LAND:	405-421 Spencer Street, West Melbourne

WHAT THE PERMIT ALLOWS

In accordance with the endorsed plans:

- Use of land for a food and drink premises, and for offices, in the Mixed Use Zone;
- To construct two or more dwellings on a lot in the Mixed Use Zone;
- Demolition, alterations and additions to a building in Heritage Overlay 779;
- To construct a building and carry out works for noise sensitive uses in Design and Development Overlay Schedule 12;
- To construct a building and carry out works in Design and Development Overlay Schedule 33;
- To reduce the required number of car parking spaces; and
- To alter an existing access to a road in a Road Zone Category 1.

CONDITIONS:

Amended plans

1 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, the applicant must submit to the Responsible Authority three copies of plans drawn to scale generally in accordance with the plans TP090, TP091, TP097 to TP122, TP200 to TP203, TP210 to TP214 plot dated 28 September 2016 and prepared by Plus Architecture but amended to show:

a Deletion of levels 13 and 14 from the building and any consequential changes;

b Clear retention of all chimneys, including on Drawing No. TP091 Rev 1 and Drawing No. TP200;

c Redesign of the two outward opening doors projecting into Batman Street such that they do not project beyond the street alignment when open, when closed or when being opened or closed;

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d Any changes required by the Heritage Management Plan required by condition 9, including:

- Retention of the whole of the fabric of the ovens insitu, including the consequent deletion of two car parking spaces on each basement level;
- Reconstruction of the gable roof slopes to the original Bakehouse (that is, the Bakehouse that contains the ovens), and a new north gable end to match the existing;
- Reconstruction of the Residence/shop hipped roof slopes to match the existing;
- Reconstruction of return walls to a length of approximately 2.2 metres at the original courtyard entry;
- Construction of a solid wall immediately below the western end of the southern Residence/shop hipped roof slopes; and
- Works to the bridge over the entry to the original courtyard to ensure that the façade reads as having built form behind it.

e Detailed design resolution including plans, elevations and sections at a scale of 1:100 with detailed façade segments at 1:50 scale that show:

- The ground floor treatment for Batman Street, Spencer Street and Middleton Place; and
- The glazed wind canopy structure over the pedestrian entry to the dwellings.

f Relocation of structural columns to avoid any columns in the space occupied by the ovens;

g Inclusion of windows of the residents' lounge in site plans TP101 and TP102;

h Inclusion of a retractable security gate at the pedestrian entry to the dwellings in accordance with the Sketch Plans Ground Floor Plan (Gate Study) and TP201 South Elevation (Gate Study) dated 31 March 2017;

i Lowering the height of the parapet containing the ballast roof at ground floor level on the northern elevation adjacent to the private lane from 23.6AHD to 20.7AHD in accordance with the Sketch Plans Level 01 Plan (Dropped Roof) and Section B (Dropped Roof) dated 2 May 2017;

j Any changes as required by the Waste Management Plan required by condition 19;

k Any changes as required by the Environmentally Sustainable Design Statement required by condition 20;

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l Any changes as required by the wind tunnel modelling report required by condition 22; and

m Provision of a landscape plan for planting proposed on levels 2, 3 and 4 common area and terraces with details of planting to be provided to the satisfaction of the Responsible Authority.

These amended plans must be to the satisfaction of the Responsible Authority and when approved shall be the endorsed plans of this permit.

2 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, a Facade Strategy must be submitted to and be to the satisfaction of the Responsible Authority. When approved this will form part of the endorsed plans. All materials, finishes and colours must be in conformity with the approved Façade Strategy to the satisfaction of the Responsible Authority. The Facade Strategy for the development must be generally in accordance with architectural plans prepared by Plus Architecture, Drawing No's TP090, TP091, TP097 to TP122,TP200 to TP203, TP210 to TP214 plot dated 28 September 2016 and detail:

a A concise description by the architect of the building design concept and how the façade works to achieve this;

b Elevation details generally at a scale of 1:50 illustrating typical podium details, entries and doors, and utilities, typical tower detail, and any special features which are important to the building's presentation;

c Elevation details of the relationship between the heritage façade and contemporary elements within the podium, including depth, materials and finishes;

d Cross sections or other method of demonstrating the façade systems, including fixing details indicating junctions between materials and significant changes in form and/or material;

e Information about how the façade will be accessed and maintained and cleaned, including planting where proposed; and

f Example prototypes and/or precedents that demonstrate the intended design outcome as indicated on plans and perspective images, to produce a high quality built, durable outcome in accordance with the design concept.

3 A schedule and samples of all external materials, colours and finishes must be submitted to the satisfaction of the Responsible Authority prior to the commencement of the development, excluding demolition. The schedule must show the materials, colours and finishes of all external walls, roof, fascias, window frames, glazing types, doors, balustrades, fences and paving, (including car park surfacing), outbuildings and structures. When approved, the schedule will be endorsed and will then form part of the

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permit. All finishes and surfaces of all external buildings and works, including materials and colours, must be in conformity with the approved schedule to the satisfaction of the Responsible Authority.

VicRoads conditions

4 Before the development starts, amended plans must be submitted to and approved by the Responsible Authority and the Roads Corporation. When approved by the Responsible Authority and the Roads Corporation, the plans may be endorsed by the Responsible Authority and will then form part of the permit. The plans must be drawn to scale with dimensions and two copies must be provided. The plans must be generally in accordance with Drawing Numbers TP097 to TP213, dated 24 August 2016 but modified to show:

a A canopy clearance height of at least 5m along Middleton Place;

b The installation of left in only sign at entrance to right of way facing west bound traffic on Dudley Street;

c The installation of a No Right Turn sign facing east bound traffic on Dudley Street at entrance to right of way;

d The installation of a No Left Turn sign within the site (car park) boundary prohibiting left turn vehicular movements onto the right of way;

e A southbound arrow to be painted on the surface of the right of way between Dudley Street at 437 Spencer Street rear property access;

f No entry signs facing north bound traffic on the laneway to Dudley Street at the southern boundary of 437 Spencer Street property;

g The installation of two way signage for the remainder of the right of way including Middleton Lane;

h To provide continuous median line marking on Dudley Street for an approximate distance of 10 metres in vicinity of the laneway;

i Physical island on central median along Spencer Street to be extended approximately 10 metres north in vicinity of Middleton Lane towards Dudley Street;

j Installation of appropriate signage within the central median on Spencer Street facing Middleton Lane directing left turn movements onto Spencer Street; and

k Installation of left turn sign at Middleton Lane where it meets Spencer Street facing traffic exiting Middleton Lane.

5 A loading management plan to be provided to the satisfaction of the Responsible Authority to ensure on site waste collection does not obstruct or interfere with vehicular access to the basement and the operation of Dudley Street and Spencer Street.

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6 The widening of Middleton Place where it intersects with Spencer Street is to be constructed to the satisfaction of the Roads Corporation and or the Responsible Authority at no cost to the Roads Corporation prior to the commencement of the use hereby approved.

Layout Not Altered and Satisfactory Completion

7 The development as shown on the endorsed plans must not be altered or modified without the prior written consent of the Responsible Authority.

8 Once the development has started it must be continued and completed to the satisfaction of the Responsible Authority.

Heritage Management Plan

9 Prior to the commencement of any demolition, bulk excavation, construction or carrying out of works on the land pursuant to this permit, a Heritage Management Plan prepared by a suitably qualified heritage consultant must be submitted to and approved by the Responsible Authority. The Heritage Management Plan must include:

a Details of the retained portions of the building(s) and how they are going to be supported during demolition, excavation and construction works;

b Details of the conservation of the retained portions of the building(s) including (but not limited to) repairs and restoration and stabilization works to the chimneys; the existence and retention of the first floor west facing delivery doorway (now a window over the former side laneway); reinstatement of missing or damaged cement render mouldings; retention and restoration of signage; retention and restoration of external plumbing and storm water drainage; window and door repairs and restoration; external paint colours; possible reinstatement of original shopfront windows, other windows and entrance doors (thereby providing a greater retail presence to the ground floor food and drink premises); and resolution of internal floor levels to accommodate the meaningful retention of existing door openings;

c Retention of the whole of the fabric of the ovens insitu;

d Reconstruction of the gable roof slopes to the original Bakehouse (that is, the Bakehouse that contains the ovens) to match the existing;

e Reconstruction of the southern Residence/shop hipped roof slopes to match the existing; and

f Preparation of an interpretive display and/or an interpretive strategy possibly using alternatives to physical display.

When approved, the Heritage Management Plan will be endorsed and form part of the permit. Works to the heritage building that are approved under

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this permit must be undertaken in accordance with the Heritage Management Plan to the satisfaction of the Council.

Demolition

10 Prior to the commencement of the development, including demolition, a report prepared by a suitably qualified Structural Engineer, or equivalent, must be submitted to the Responsible Authority, demonstrating the means by which the retained portions of building will be supported during demolition and construction works to ensure their retention, to the satisfaction of the Responsible Authority. The recommendations contained within this report must be implemented at no cost to City of Melbourne and be to the satisfaction of the Responsible Authority.

11 Demolition pursuant to this permit must not commence unless the Responsible Authority is satisfied that the permit holder has made substantial progress toward obtaining the necessary building permits for the development of the land generally in accordance with the development proposed under this permit and the permit holder has entered into a bona fide contract for the construction of the development, or otherwise agreed with the Responsible Authority.

Retention of Architectural Firm

12 Except with the consent of the Responsible Authority, Plus Architecture must be retained to complete and provide architectural oversight during construction of the detailed design as shown in the endorsed plans, façade strategy and the endorsed schedule of materials and finishes to the satisfaction of Responsible Authority.

Building Appurtenance

13 Glazing materials used on all external walls must be of a type that does not reflect more than 15% of visible light, when measured at an angle of 90 degrees to the glass surface, to the satisfaction of the Responsible Authority.

14 All building plant and equipment on the roofs are to be concealed or screened to the satisfaction of the Responsible Authority. The construction of any additional plant machinery equipment, including but not limited to air-conditioning equipment, ducts, flues, all exhausts including car parking and communications equipment, shall be to the satisfaction of the Responsible Authority.

15 Any satellite dishes, antennae or similar structures associated with the development must be designed and located at a single point in the development to the satisfaction of the Responsible Authority, unless otherwise approved to the satisfaction of the Responsible Authority.

16 All service pipes, apart from roof down pipes, must be concealed from the view of a person at ground level within common areas, public

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thoroughfares and adjoining properties, unless these form part of the Heritage Management Plan.

Noise Attenuation

17 Prior to the commencement of the development, excluding demolition and bulk excavation, a report from a qualified acoustic engineer must be submitted to the satisfaction of the Responsible Authority certifying that:

a the development will achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium; and

b the external glazing and doors and the air conditioning or ventilation is designed to achieve a maximum noise level of 45dB(A)leq in habitable rooms with windows closed when music is emitted from Docklands Stadium.

Construction Management Plan

18 Prior to the commencement of the development, including demolition or bulk excavation, a detailed Construction and Demolition Management Plan must be submitted to and be approved by the Responsible Authority. This construction management plan is to be prepared in accordance with the City of Melbourne - Construction Management Plan Guidelines and is to consider the following:

a Public safety, amenity and site security;

b Operating hours, noise and vibration controls;

c Air and dust management;

d Stormwater and sediment control;

e Waste and materials reuse; and

f Traffic management.

Waste Management

19 Concurrent with the submission of plans for endorsement under condition 1, a Waste Management Plan (WMP) shall be prepared and submitted to the City of Melbourne - Engineering Services. The WMP should detail waste storage and collection arrangements and be prepared with reference to the City of Melbourne Guidelines for Preparing a Waste Management Plan. Waste storage and collection arrangements must not be altered without prior consent of the City of Melbourne - Engineering Services.

Environmentally Sustainable Design Statement Implementation

20 Concurrent with the submission of plans for endorsement under condition 1, an Environmentally Sustainable Design (ESD) Statement shall be prepared by a suitably qualified professional and submitted to the satisfaction of the Responsible Authority. The ESD Statement must demonstrate that the building has the preliminary design potential to achieve the relevant policy

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objectives of Clause 22.19-2 and the policy requirements of Clause 22.19-3 of the Melbourne Planning Scheme.

21 The performance outcomes specified in the Environmentally Sustainable Design (ESD) Statement required by condition 19 must be implemented prior to occupancy at no cost to the City of Melbourne and be to the satisfaction of the Responsible Authority. Any change during detailed design, which affects the approach of the endorsed ESD Statement, must be assessed by an accredited professional. The revised statement must be endorsed by the Responsible Authority prior to the commencement of construction.

Wind Test Modelling

22 Concurrent with the submission of plans for endorsement under Condition 1, wind tests carried out by a suitably qualified consultant, must be carried out on a model of the approved building. A report detailing the outcome of the testing must be submitted to and be to the satisfaction of the Responsible Authority. The report must also recommend any modifications which must be made to the design of the building to reduce any adverse wind conditions in areas used by pedestrians, to the satisfaction of the Responsible Authority. The recommendations of the report must be implemented at no cost to the Responsible Authority and must not include reliance on street trees.

Environmental Assessment

23 Prior to the commencement of the development (excluding demolition and excavation), the applicant must carry out a Preliminary Environmental Assessment (PEA) of the site to determine if it is suitable for the intended use(s). This PEA must be submitted to, and be approved by the Responsible Authority prior to the commencement of the development (excluding demolition). The PEA should include:

a Details of the nature of the land uses previously occupying the site and the activities associated with these land uses. This should include details of how long the uses occupied the site; and

b A review of any previous assessments of the site and surrounding sites including details of the anticipated sources of any contaminated materials.

24 Should the PEA reveal that further investigative or remedial work is required to accommodate the intended use(s), then prior to the commencement of the development (excluding demolition and excavation), the applicant must carry out a Comprehensive Environmental Assessment (CEA) of the site to determine if it is suitable for the intended use(s). This CEA must be carried out by a suitably qualified environmental professional who is a member of the Australian Contaminated Land Consultants Association or a person who is acceptable to the Responsible Authority. This CEA must be submitted to, and be approved by the Responsible

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Authority prior to the commencement of the development (excluding demolition and excavation). The CEA should include:

a Details of the nature of the land uses previously occupying the site and the activities associated with these land uses. This includes details of how long the uses occupied the site.

b A review of any previous assessments of the site and surrounding sites, including details of any on-site or off-site sources of contaminated materials. This includes a review of any previous Environmental Audits of the site and surrounding sites.

c Intrusive soil sampling in accordance with the requirements of Australian Standard (AS) 44582.1. This includes minimum sampling densities to ensure the condition of the site is accurately characterised.

d An appraisal of the data obtained following soil sampling in accordance with ecological, health-based and waste disposal guidelines.

e Recommendations regarding what further investigate and remediation work, if any, may be necessary to ensure the site is suitable for the intended use(s).

Prior to the occupation of the building, the applicant must submit to the Responsible Authority a letter confirming compliance with any findings, requirements, recommendations and conditions of the CEA.

25 Should the CEA recommend that an Environmental Audit of the site is necessary then prior to the occupation of the building the applicant must provide either:

a A Certificate of Environmental Audit in accordance with Section 53Y of the *Environment Protection Act* 1970; or

b A Statement of Environmental Audit in accordance with Section 53Z of the *Environment Protection Act* 1970. This Statement must confirm that the site is suitable for the intended use(s).

26 Where a Statement of Environmental Audit is provided, all the conditions of this Statement must be complied with to the satisfaction of the Responsible Authority and prior to the occupation of the building. Written confirmation of compliance must be provided by a suitably qualified environmental professional who is a member of the Australian Contaminated Land Consultants Association or other person acceptable to the Responsible Authority. In addition, the signing off of the Statement must be in accordance with any requirements in it regarding the verification of works.

If there are conditions on the Statement that the Responsible Authority consider requires significant ongoing maintenance and/or monitoring, the applicant must enter into a legal agreement in accordance with Section 173 of the *Planning and Environment Act* 1987 with the Responsible Authority.

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This Agreement must be executed on title prior to the occupation of the building. The owner of the site must meet all costs associated with the drafting and execution of this agreement including those incurred by the Responsible Authority.

Tree Protection

27 Prior to the commencement of the development including any demolition, bulk excavation, construction or carrying out of works, a Tree Protection Plan must be prepared by a suitably qualified and experienced Arborist generally in accordance with AS 4970-2009. The Tree Protection Plan must include recommendations to ensure the viability of the Council or Exceptional trees adjacent to the site before, during and after construction to the satisfaction of the Responsible Authority – Urban Landscapes. This report must be to the satisfaction of the Responsible Authority and when approved will form part of the permit.

Municipal Requirements

28 Prior to the commencement of the development (excluding demolition and excavation), a stormwater drainage system incorporating integrated water management design principles must be submitted to, and approved, by the Responsible Authority - Engineering Services. This system must be constructed prior to the occupation of the development and provision made to connect this system to the City of Melbourne's stormwater drainage system.

29 All projections over the street alignment should be drained to a legal point of discharge in accordance with the plans and specifications first approved by Responsible Authority - Engineering Services.

30 The title boundaries for the property may not exactly agree with the road alignments of the abutting Council lane(s). The approved works must not result in structures that encroach onto any Council lane.

31 All pedestrian paths and access lanes shown on the endorsed plans must be constructed and maintained to the satisfaction of the Responsible Authority - Engineering Services.

32 Prior to the commencement of the use/occupation of the development, all necessary vehicle crossings must be constructed and all unnecessary vehicle crossings must be demolished and the footpath, kerb and channel reconstructed, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

33 The road adjoining the site along Middleton Place must be reconstructed together with associated works including provision of new public lighting, reconstruction or relocation of services as necessary at the cost of the developer, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

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34 The footpath(s) adjoining the site along Spencer Street and Batman Street must be reconstructed together with associated works including the reconstruction or relocation of kerb and channel and/or services as necessary at the cost of the developer, in accordance with plans and specifications first approved by the Responsible Authority – Engineering Services.

35 Existing street levels in Spencer Street, Batman Street & Middleton Place must not be altered for the purpose of constructing new vehicle crossings or pedestrian entrances without first obtaining approval from the Responsible Authority – Engineering Services

36 Existing public street lighting must not be altered without first obtaining the written approval of the Responsible Authority – Engineering Services.

37 Existing street furniture must not be removed or relocated without first obtaining the written approval of the Responsible Authority – Engineering Services.

38 All pedestrian ramps must be designed and constructed in accordance with AS 1428:2009 Design for Access and Mobility and should be fitted with ground surface tactile indicators (TGSI's). Details of the TGSI's must be submitted to and approved by City of Melbourne – Engineering Services prior to their installation.

39 All street furniture such as street litter bins recycling bins, seats, bicycle rails and bus shelter must be supplied and installed on footpaths outside the proposed building to plans and specifications first approved by the Responsible Authority – Engineering Services.

Public Transport Victoria conditions

40 The permit holder must take all reasonable steps to ensure that disruption to the bus operations along Spencer Street are kept to a minimum during the construction of the development. Foreseen disruptions to bus operations and mitigation measures must be communicated to Public Transport Victoria fourteen days (14) prior.

41 The existing bus stop and associated infrastructure on Spencer Street must not be altered without the prior consent of Public Transport Victoria. Any alterations including temporary works or damage during construction must be rectified to the satisfaction of Public Transport Victoria and at the cost of the permit holder

42 If a temporary bus stop in an alternative location is required during construction, the temporary bus stop must be provided in consultation with, and to the satisfaction of Public Transport Victoria. Once the new stop is deemed suitable for operation, the temporary stop must be removed in consultation with Public Transport Victoria. All works associated with the temporary bus stop must be provided at no cost to Public Transport Victoria.

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43 Public Transport Victoria requires notice of the relocation of the existing bus stop and all associated infrastructure two weeks prior to relocation.

Expiry

44 This permit will expire if one of the following circumstances applies:

a The development is not started within three years of the issued date of this permit.

b The development is not completed within six (6) years of the issued date of this permit.

In accordance with Section 69 of the *Planning and Environment Act* 1987, an application may be submitted to the Responsible Authority for an extension of the periods referred to in this condition.

- End of conditions –

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