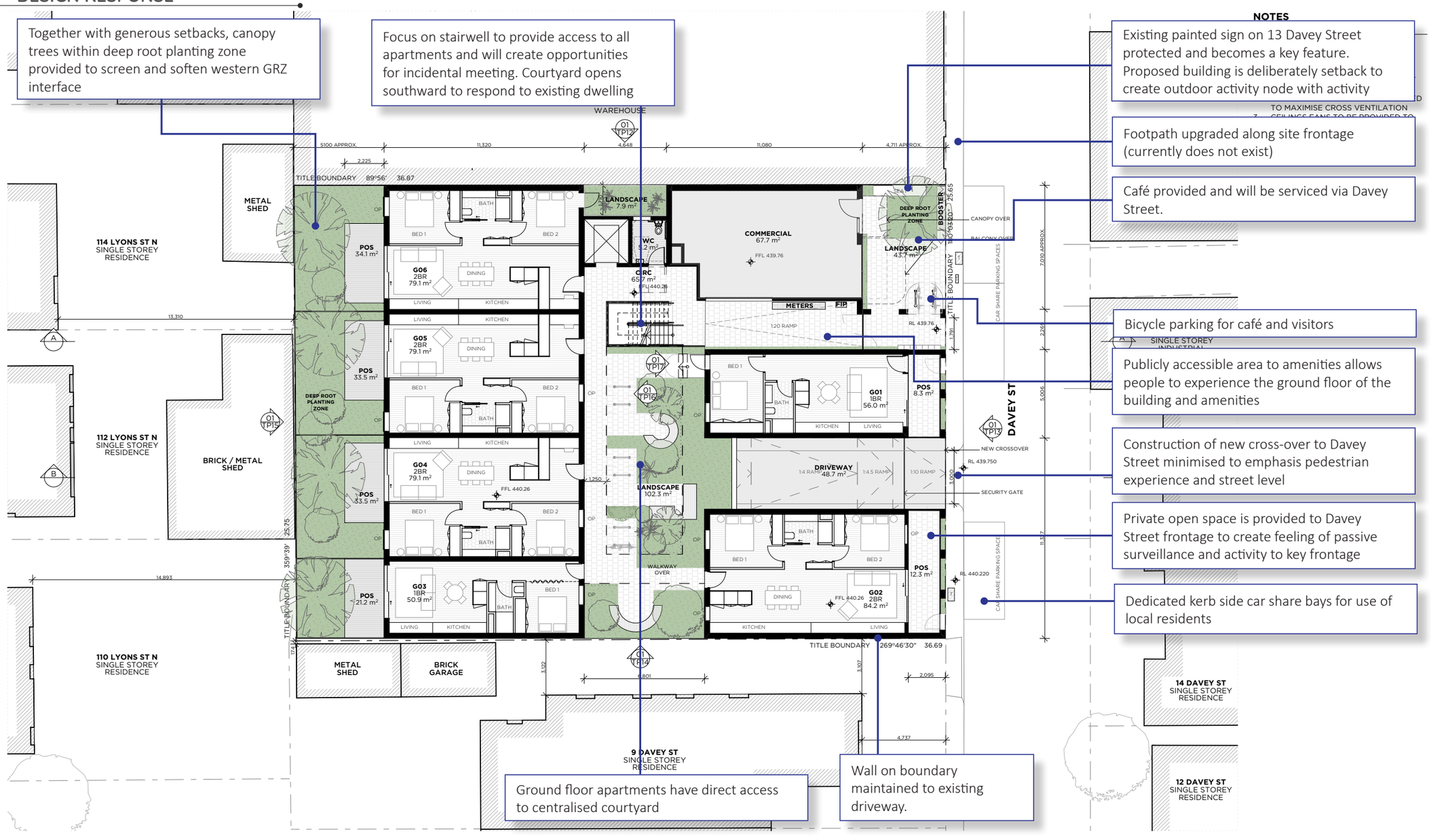
GROUND FLOOR

DESIGN RESPONSE

Together with generous setbacks, canopy trees within deep root planting zone provided to screen and soften western GRZ interface

Focus on stairwell to provide access to all apartments and will create opportunities for incidental meeting. Courtyard opens southward to respond to existing dwelling



NOTES

Existing painted sign on 13 Davey Street protected and becomes a key feature. Proposed building is deliberately setback to create outdoor activity node with activity

Footpath upgraded along site frontage (currently does not exist)

Café provided and will be serviced via Davey Street.

Bicycle parking for café and visitors

Publicly accessible area to amenities allows people to experience the ground floor of the building and amenities

Construction of new cross-over to Davey Street minimised to emphasis pedestrian experience and street level

Private open space is provided to Davey Street frontage to create feeling of passive surveillance and activity to key frontage

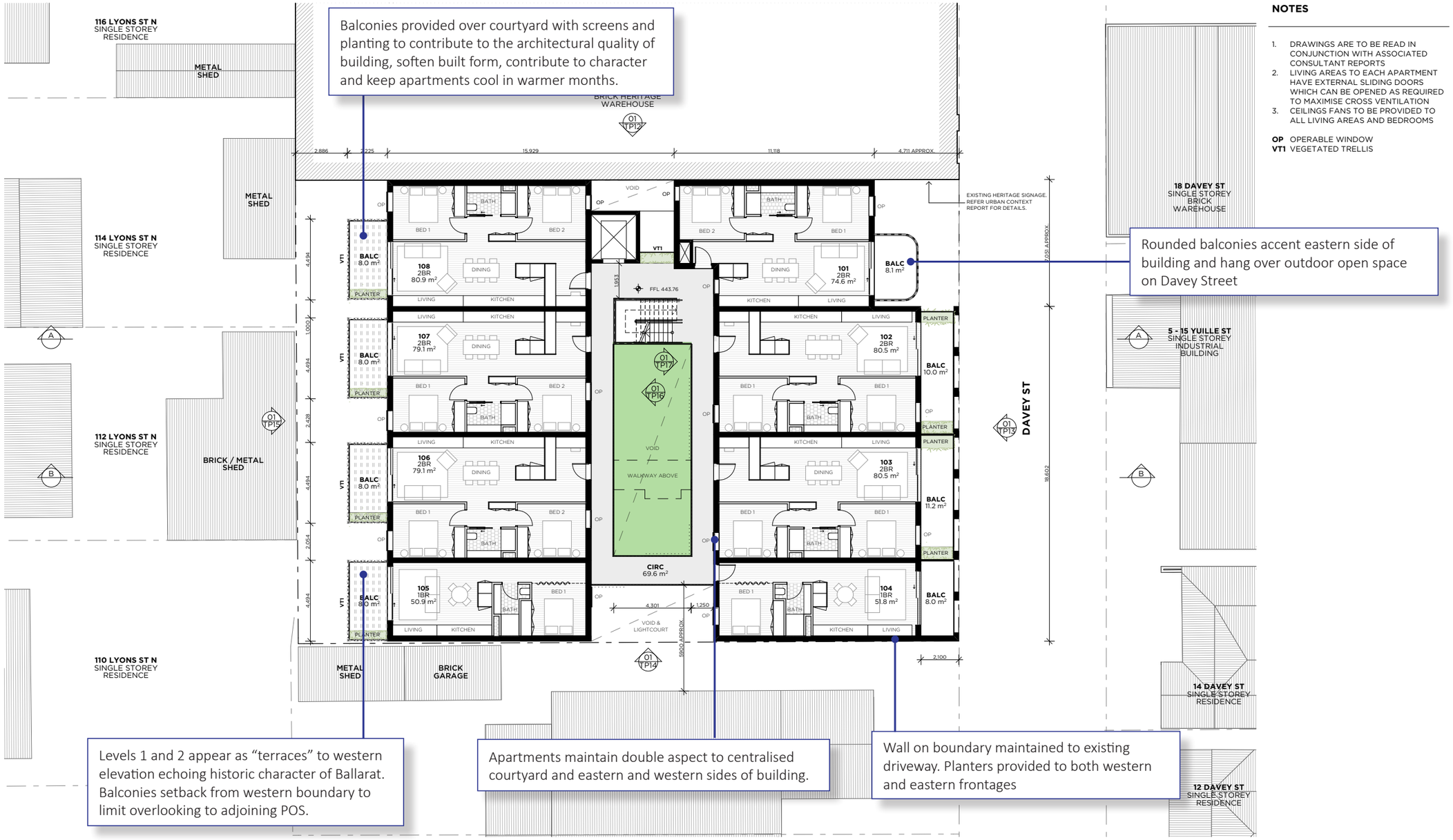
Dedicated kerb side car share bays for use of local residents

Ground floor apartments have direct access to centralised courtyard

Wall on boundary maintained to existing driveway.

FIRST FLOOR

DESIGN RESPONSE



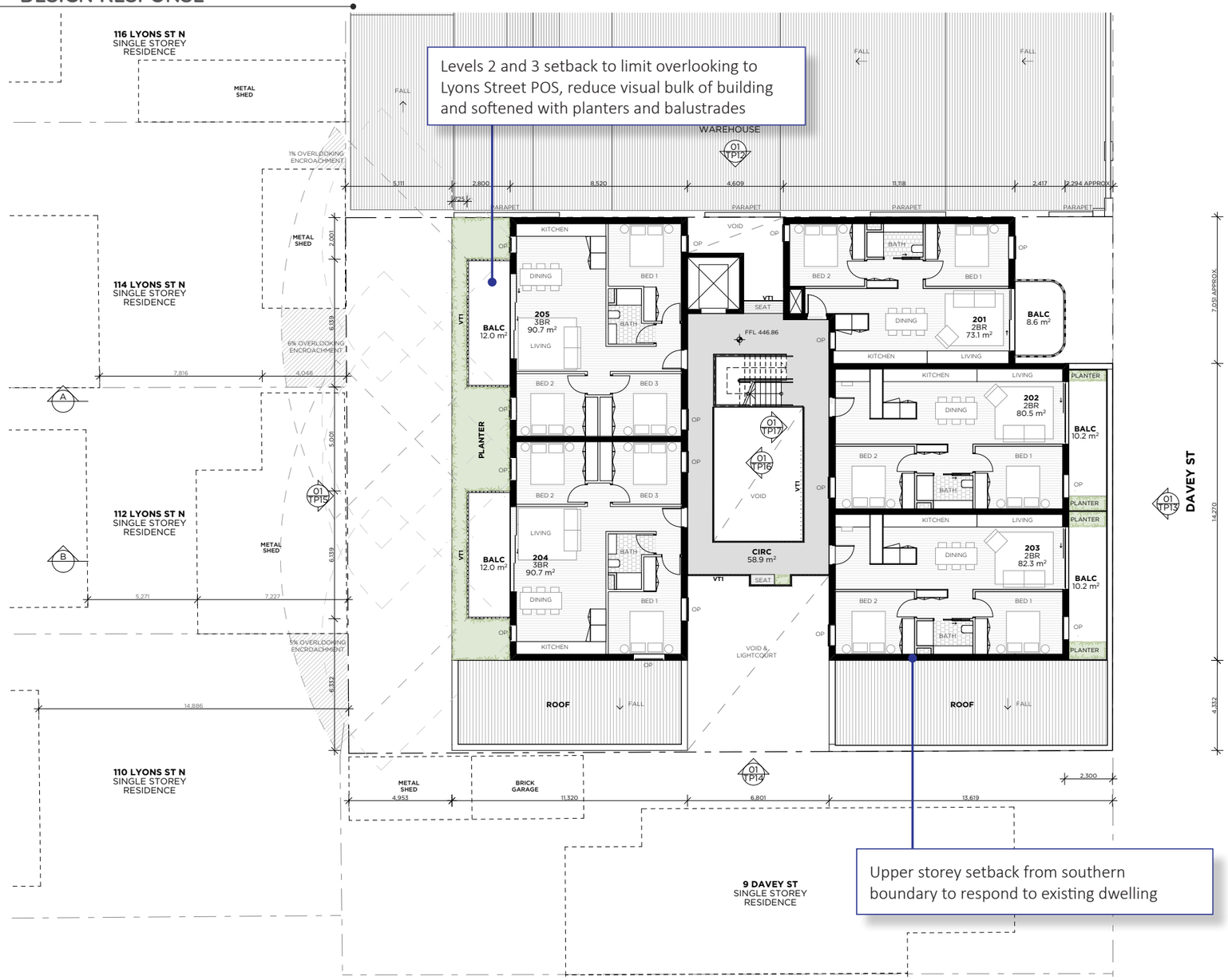
NOTES

1. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ASSOCIATED CONSULTANT REPORTS
2. LIVING AREAS TO EACH APARTMENT HAVE EXTERNAL SLIDING DOORS WHICH CAN BE OPENED AS REQUIRED TO MAXIMISE CROSS VENTILATION
3. CEILINGS FANS TO BE PROVIDED TO ALL LIVING AREAS AND BEDROOMS

OP OPERABLE WINDOW
VT1 VEGETATED TRELLIS

SECOND & THIRD FLOORS

DESIGN RESPONSE



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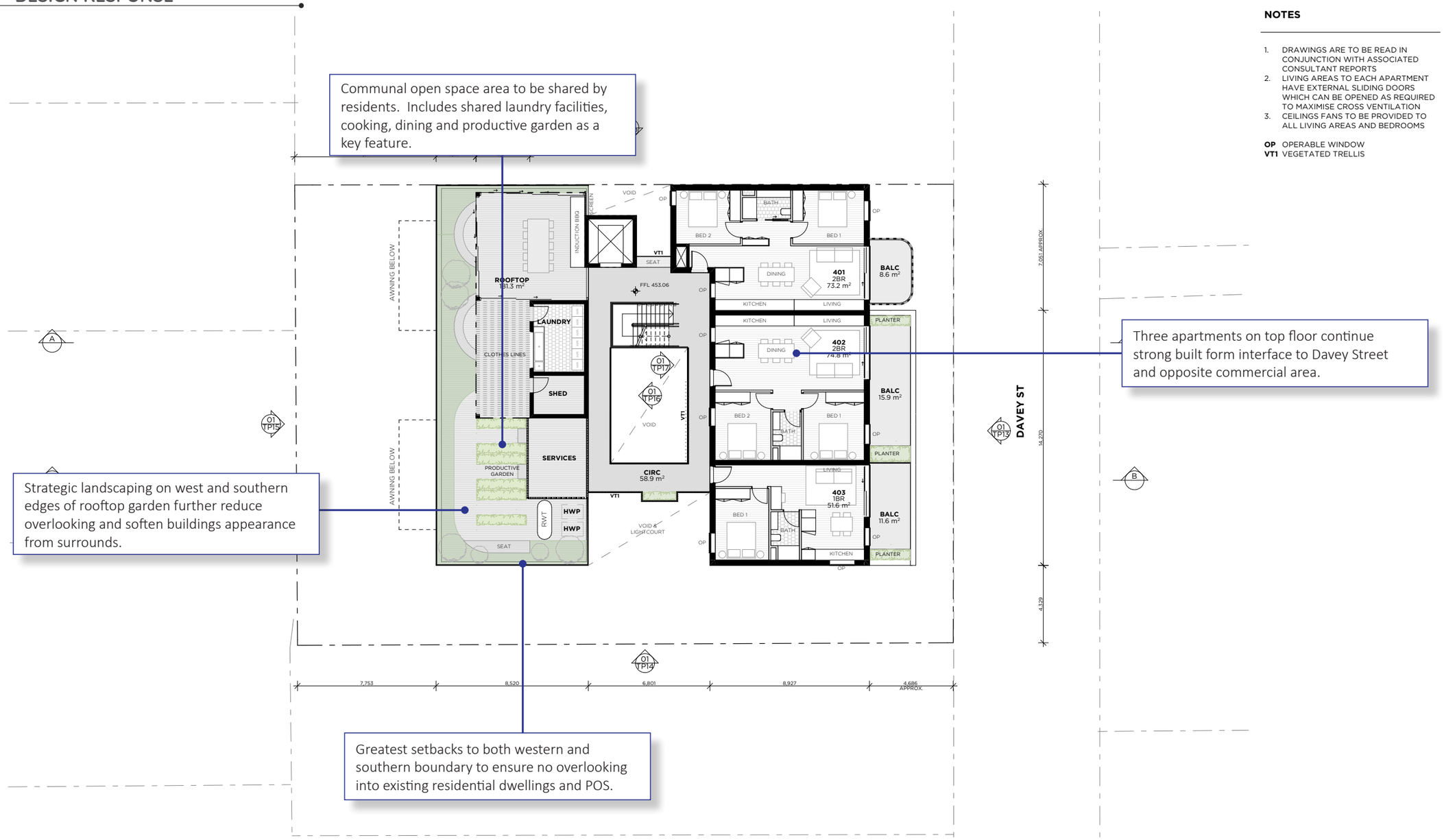
3. CEILINGS FANS TO BE PROVIDED TO ALL LIVING AREAS AND BEDROOMS

OP OPERABLE WINDOW
VT1 VEGETATED TRELLIS

FOURTH FLOOR

DESIGN RESPONSE

Communal open space area to be shared by residents. Includes shared laundry facilities, cooking, dining and productive garden as a key feature.



Three apartments on top floor continue strong built form interface to Davey Street and opposite commercial area.

Strategic landscaping on west and southern edges of rooftop garden further reduce overlooking and soften buildings appearance from surrounds.

Greatest setbacks to both western and southern boundary to ensure no overlooking into existing residential dwellings and POS.

NOTES

1. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ASSOCIATED CONSULTANT REPORTS
2. LIVING AREAS TO EACH APARTMENT HAVE EXTERNAL SLIDING DOORS WHICH CAN BE OPENED AS REQUIRED TO MAXIMISE CROSS VENTILATION
3. CEILINGS FANS TO BE PROVIDED TO ALL LIVING AREAS AND BEDROOMS

OP OPERABLE WINDOW
VT1 VEGETATED TRELLIS

Apartment Development

Purpose

To implement the Municipal Planning Strategy and the Planning Policy Framework. To encourage apartment development that provides reasonable standards of amenity for existing and new residents.

To encourage apartment development that is responsive to the site and the surrounding area.

Application Provisions in this clause apply to an application to construct or extend an apartment development, or to construct or extend a dwelling in or forming part of an apartment development, if:

The apartment development is five or more storeys, excluding a basement, and is in the General Residential Zone, Residential Growth Zone, Mixed Use Zone or Township Zone, or

The apartment development is in the Commercial 1 Zone, Commercial 3 Zone, Special Use Zone, Comprehensive Development Zone, Capital City Zone, Docklands Zone, Priority Development Zone or Activity Centre Zone

Clause 58

Standard	Requirement	Response
Clause 58.02 Urban Context		
D1 **Urban Context** *To ensure that the design responds to the existing urban context or contributes to the preferred future development of the area.* *To ensure that development responds to the features of the site and the surrounding area.*	The design response must be appropriate to the urban context and the site. The proposed design must respect the existing or preferred urban context and respond to the features of the site.	**Complies** An urban context assessment has been submitted with the application. It is outlined in the officer's recommendation that the development is responsive to site features and context and is appropriate.
D2 **Residential Policy** *To ensure that residential development is provided in accordance with any policy for housing in the Municipal Planning Strategy and the Planning Policy Framework.* *To support higher density residential development where development can take advantage of public and community infrastructure and services*	An application must be accompanied by a written statement to the satisfaction of the responsible authority that describes how the development is consistent with any relevant policy for housing in the Municipal Planning Strategy and the Planning Policy Framework.	**Complies** The applicant has provided a written statement to support the application which describes the proposals consistency with State and Local Policy in relation to housing. This is also addressed in the officer's recommendation.
D3 **Dwelling Diversity** *To encourage a range of dwelling sizes and types in developments of ten or more dwellings.*	Developments of ten or more dwellings should provide a range of dwelling sizes and types, including dwellings with a different number of bedrooms.	**Complies** A range of dwellings sizes and types are provided throughout the development. This includes: - 6 x 1 bedrooms - 17 x 2 bedrooms - 4 x 3 bedrooms Some apartments are designed to meet mobility requirements and

Standard	Requirement	Response
		are suitable for affordable housing (20% of the development). The dwellings sizes and types proposed within the development will contribute to the overall housing mix in this part of central Ballarat.
D4 **Infrastructure** *To ensure development is provided with appropriate utility services and infrastructure.* *To ensure development does not unreasonably overload the capacity of utility services and infrastructure.*	Development should be connected to reticulated services, including reticulated sewerage, drainage, electricity and gas, if available. Development should not unreasonably exceed the capacity of utility services and infrastructure, including reticulated services and roads. In areas where utility services or infrastructure have little or no spare capacity, developments should provide for the upgrading of or mitigation of the impact on services or infrastructure.	**Complies** The site is serviced, and the proposed development will not place unreasonable capacity on existing infrastructure. Both a servicing and drainage plan has been submitted with the application. The permit applicant will undertake all necessary upgrade works required to deliver the project.
D5 **Integration with the Street** *To integrate the layout of development with the street.*	Developments should provide adequate vehicle and pedestrian links that maintain or enhance local accessibility. Development should be oriented to front existing and proposed streets. High fencing in front of dwellings should be avoided if practicable. Development next to existing public open space should be laid out to complement the open space.	**Complies** The proposed development integrates appropriately with Davey Street. A commercial space (food and drink premises) seeks to activate the frontage adjacent to the entrance of the building. The vehicle access to the basement is centrally located. Two dwellings within the ground floor will feature balconies to the street with balustrading. The development is not located adjacent to existing public open space.
Clause 58.03 Site Layout		
D6 **Energy Efficiency** *To achieve and protect energy efficient dwellings and buildings.* *To ensure the orientation and layout of development reduce fossil fuel energy use and make appropriate use of daylight and solar energy.*	Buildings should be: • Oriented to make appropriate use of solar energy. • Sited and designed to ensure that the energy efficiency of existing dwellings on adjoining lots is not unreasonably reduced. Living areas and private open space should be located on the north side of the development, if practicable.	**Complies** A sustainability report has been submitted with the application. The development will be designed to achieve 7.5 natHERS rating. The development will be fossil fuel free. The dwellings proposed are dual aspect and providing for energy efficiency thought light

Standard	Requirement	Response
To ensure dwellings achieve adequate thermal efficiency.	Developments should be designed so that solar access to north-facing windows is optimised. Dwellings located in a climate zone identified in Table D1 should not exceed the maximum NatHERS annual cooling load specified table.	penetration and cross ventilation. This is achieved through the provision of the central courtyards Given the orientation of the site the development predominately faces east/west. Proposed balconies and windows within the development will have some northern aspect. A communal outdoor area is provided on the rooftop which will have a full solar aspect.
D7 **Communal Open Space** *To ensure that communal open space is accessible, practical, attractive, easily maintained and integrated with the layout of the development.*	Developments with 40 or more dwellings should provide a minimum area of communal open space of 2.5 square metres per dwelling or 250 square metres, which ever is lesser. • Communal open space should: Be located to: – Provide passive surveillance opportunities, where appropriate. – Provide outlook for as many dwellings as practicable. – Avoid overlooking into habitable rooms and private open space of new dwellings. – Minimise noise impacts to new and existing dwellings. • Be designed to protect any natural features on the site. • Maximise landscaping opportunities. • Be accessible, useable and capable of efficient management.	**N/A** Less than 40 dwellings proposed. A communal area is provided to the roof top space and within the central courtyard.
D8 **Solar Access to Outdoor Communal Open Space** *To allow solar access into communal outdoor open space.*	The communal outdoor open space should be located on the north side of a building, if appropriate. At least 50 per cent or 125 square metres, whichever is the lesser, of the primary communal outdoor open space should receive a minimum of two hours of sunlight between 9am and 3pm on 21 June.	**Complies** The proposed communal roof space will receive northern solar access in accordance with the standard. The space will feature both areas open to the sky and covered for weather protection. This will ensure the area can be enjoyed by residents all year round.
D9 **Safety** *To ensure the layout of*	Entrances to dwellings should not be obscured or isolated from the street and internal accessways.	**Complies** The entrance to the development is clearly legible from Davey

Standard	Requirement	Response
development provides for the safety and security of residents and property.	Planting which creates unsafe spaces along streets and accessways should be avoided. Developments should be designed to provide good lighting, visibility and surveillance of car parks and internal accessways. Private spaces within developments should be protected from inappropriate use as public thoroughfares	Street. Each dwelling will be accessible from the internal core of the building. The setback created to Davey Street will allow for a small outdoor area and activation via the inclusion of the food and drink premises. A landscaping scheme has been submitted with the application documentation. Landscaping is considered appropriate and will not result in any unsafe spaces throughout the development. It is intended that the ground floor entry will be open to the public to use during café hours for use of amenities and to experience the internal ground floor of the building. This is a common feature in all nightingale schemes. If appropriately managed future management conflict should not occur.
D10 **Landscaping** *To encourage development that respects the landscape character of the area.* *To encourage development that maintains and enhances habitat for plants and animals in locations of habitat importance.* *To provide appropriate landscaping.* *To encourage the retention of mature vegetation on the site.* *To promote climate responsive landscape design and water management in developments that support thermal comfort and reduces the urban heat island effect.*	The landscape layout and design should: • Be responsive to the site context. • Protect any predominant landscape features of the area. • Take into account the soil type and drainage patterns of the site and integrate planting and water management. • Allow for intended vegetation growth and structural protection of buildings. • In locations of habitat importance, maintain existing habitat and provide for new habitat for plants and animals. • Provide a safe, attractive and functional environment for residents. • Consider landscaping opportunities to reduce heat absorption such as green walls, green roofs and roof top gardens and improve on-site stormwater infiltration. • Maximise deep soil areas for planting of canopy trees. Development should provide for the	**Complies** A detailed landscape scheme has been submitted with the proposal. This landscape proposal will be formalised by conditions of approval. The landscape scheme provides for landscaping for all communal areas, including the central core and roof top communal space, private open space, balconies and includes deep root planting and green facades as required by the standard.

Standard	Requirement	Response
	retention or planting of trees, where these are part of the urban context. Development should provide for the replacement of any significant trees that have been removed in the 12 months prior to the application being made. The landscape design should specify landscape themes, vegetation (location and species), paving and lighting. Development should provide the deep soil areas and canopy trees specified in Table D2. If the development cannot provide the deep soil areas and canopy trees specified in Table D2, an equivalent canopy cover should be achieved by providing either: • Canopy trees or climbers (over a pergola) with planter pits sized appropriately for the mature tree soil volume requirements. • Vegetated planters, green roofs or green facades.	
D11 **Access** *To ensure the number and design of vehicle crossovers respects the urban context.*	The width of accessways or car spaces should not exceed: • 33 per cent of the street frontage, • or if the width of the street frontage is less than 20 metres, 40 per cent of the street frontage. No more than one single-width crossover should be provided for each dwelling fronting a street. The location of crossovers should maximise the retention of on-street car parking spaces. The number of access points to a road in a Road Zone should be minimised. Developments must provide for access for service, emergency and delivery vehicles.	**Complies** The site currently has a cross over to its entire frontage. The development will seek to create one single crossover to Davey Street to facilate access to the proposed basement. The reinstatement of kerb and channel, and footpath to the site frontage will provide for three new on street car parking spaces to Davey Street. There is opportunity for emergency vehicle access on Davey Street.
D12 **Parking Location** *To provide convenient parking for resident and visitor vehicles. To protect residents from vehicular noise within developments*	Car parking facilities should: • Be reasonably close and convenient to dwellings. • Be secure. • Be well ventilated if enclosed. Shared accessways or car parks of other dwellings should be located at least 1.5 metres from the windows of	**Complies** A traffic and car parking assessment forms part of the application documentation. It is proposed to provide a basement car park accommodating 27 car parking spaces and bicycle storage

Standard	Requirement	Response
	habitable rooms. This setback may be reduced to 1 metre where there is a fence at least 1.5 metres high or where window sills are at least 1.4 metres above the accessway	facilities. Car share pods will be conveniently located on the street frontage for use of residents from the development and other residents in the area. A reduction in the car parking requirements of the planning scheme is required. The reduction is supported by Council traffic and transport officers as discussed in the officer's recommendation. Provision of car parking in the basement will ensure that future residents are protected from vehicle noise.
D13 **Integrated Water and Stormwater Management** *To encourage the use of alternative water sources such as rainwater, stormwater and recycled water.* *To facilitate stormwater collection, utilisation and infiltration within the development.* *To encourage development that reduces the impact of stormwater run-off on the drainage system and filters sediment and waste from stormwater prior to discharge from the site*	Buildings should be designed to collect rainwater for non-drinking purposes such as flushing toilets, laundry appliances and garden use. Buildings should be connected to a non-potable dual pipe reticulated water supply, where available from the water authority. The stormwater management system should be: • Designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999). • Designed to maximise infiltration of stormwater, water and drainage of residual flows into permeable surfaces, tree pits and treatment areas.	**Complies** A stormwater and Sustainability strategy forms part of the application documentation. The stormwater strategy has been deemed to be satisfactory by Councils Development Engineers subject to standard conditions. Water tanks will be provided upon the communal roof space to facilate stormwater collection.
Clause 58.04 Amenity Impacts		
D14 **Building Setback** To ensure the setback of a building from a boundary appropriately responds to the existing urban context or contributes to the preferred future development of the area. To allow adequate daylight	The built form of the development must respect the existing or preferred urban context and respond to the features of the site. Buildings should be set back from side and rear boundaries, and other buildings within the site to: • Ensure adequate daylight into new habitable room windows. • Avoid direct views into habitable	**Complies** The proposed height and setbacks of the building reflects the aspirations of the zone and provides for appropriate setbacks as demonstrated in relation to built form and urban design as part of the officer's recommendation. The proposed dwellings are also

Standard	Requirement	Response
into new dwellings. To limit views into habitable room windows and private open space of new and existing dwellings. To provide a reasonable outlook from new dwellings. To ensure the building setbacks provide appropriate internal amenity to meet the needs of residents.	room windows and private open space of new and existing dwellings. • Developments should avoid relying on screening to reduce views. • Provide an outlook from dwellings that creates a reasonable visual connection to the external environment. • Ensure the dwellings are designed to meet the objectives of Clause 58.	provided with a high standard of internal amenity with adequate daylight to habitable room windows and cross ventilation. Direct views into habitable room windows both within the development and the private open space of existing dwellings has been addressed via the assessment of internal views and overlooking. Screening has been reduced to provide for an improved internal amenity within the development thereby maintaining a visual connection with the surrounding environment while also minimising amenity impacts.
D15 **Internal Views** *To limit views into the private open space and habitable room windows of dwellings within a development.*	Windows and balconies should be designed to prevent overlooking of more than 50 per cent of the private open space of a lower-level dwelling directly below and within the same development	**Complies** Windows and balconies within the development have been designed to prevent overlooking of more than 50 per cent of the private open space of a lower-level dwelling directly below and within the same development. This is achieved by incorporating deep root planting at ground level, balustrading and creepers to address overlooking impacts to the ground level private open space of dwellings G03-G06 and residential development to the west. Concern was raised by council officers and objectors in relation to the effectiveness of creepers in addressing overlooking, given the climatic conditions in Ballarat. In response revised plans planters have been included on the western balconies of levels 1 and 3 of the building. The planters have a minimum depth of 400mm which will further preclude overlooking to properties to the west.
D16 **Noise Impacts** *To contain noise sources in developments that may*	Noise sources, such as mechanical plants should not be located near bedrooms of immediately adjacent existing dwellings.	**Complies** The layout of the proposed development will minimise noise transmission to and from the site.

Standard	Requirement	Response
affect existing dwellings. *To protect residents from external and internal noise sources.*	The layout of new dwellings and buildings should minimise noise transmission within the site. Noise sensitive rooms (such as living areas and bedrooms) should be located to avoid noise impacts from mechanical plants, lifts, building services, non-residential uses, car parking, communal areas and other dwellings. New dwellings should be designed and constructed to include acoustic attenuation measures to reduce noise levels from off-site noise sources. Buildings within a noise influence area specified in Table D3 should be designed and constructed to achieve the following noise levels: • Not greater than 35dB(A) for bedrooms, assessed as an LAeq,8h from 10pm to 6am. • Not greater than 40dB(A) for living areas, assessed LAeq,16h from 6am to 10pm. Buildings, or part of a building screened from a noise source by an existing solid structure, or the natural topography of the land, do not need to meet the specified noise level requirements. Noise levels should be assessed in unfurnished rooms with a finished floor and the windows closed.	Noise sources, such as mechanical plant within the development is located in the proposed basement and on level 4 within the communal garden area and have been sited to minimise impact to existing and proposed dwellings. Vehicle access to the proposed basement is sited centrally to the Davey Street frontage to minimise impact to adjacent development.
Clause 58.05 On Site Amenity and Facilities		
D17 **Accessibility** *To ensure the design of dwellings meets the needs of people with limited mobility.*	At least 50 per cent of dwellings should have: • A clear opening width of at least 850mm at the entrance to the dwelling and main bedroom. • A clear path with a minimum width of 1.2 metres that connects the dwelling entrance to the main bedroom, an adaptable bathroom and the living area. • A main bedroom with access to an adaptable bathroom. • At least one adaptable bathroom that meets all of the requirements of either Design A or Design B specified in Table D4.	**Complies** The dwellings are designed to cater for persons with limited mobility including 20% of dwellings within the development which are dedicated affordance housing. Dwellings are designed to be adaptable to address the accessibility requirements of the standard.
D18	Entries to dwellings and buildings	**Complies**

Standard	Requirement	Response
Building Entry and Circulation *To provide each dwelling and building with its own sense of identity.* *To ensure the internal layout of buildings provide for the safe, functional and efficient movement of residents.* *To ensure internal communal areas provide adequate access to daylight and natural ventilation.*	should: • Be visible and easily identifiable. • Provide shelter, a sense of personal address and a transitional space around the entry. The layout and design of buildings should: • Clearly distinguish entrances to residential and non-residential areas. • Provide windows to building entrances and lift areas. • Provide visible, safe and attractive stairs from the entry level to encourage use by residents. • Provide common areas and corridors that: – Include at least one source of natural light and natural ventilation. – Avoid obstruction from building services. – Maintain clear sight lines.	The entry to the development is clearly visible from the street. A transition area is provided at the entry to provide for safe and functional access. The central core will provide adequate circulation around the building and ease of access for each dwelling. Common areas are suitably location and will be designed to a high standard which will ensure adequate light, ventilation and visibility. Common areas are not inappropriately impacted by building services.
D19 **Private Open Space** *To provide adequate private open space for the reasonable recreation and service needs of residents.*	A dwelling should have private open space consisting of: • An area of 25 square metres, with a minimum dimension of 3 metres at natural ground floor level and convenient access from a living room, or • An area of 15 square metres, with a minimum dimension of 3 metres at a podium or other similar base and convenient access from a living room, or • A balcony with an area and dimensions specified in Table D5 and convenient access from a living room, or • A roof-top area of 10 square metres with a minimum dimension of 2 metres and convenient access from a living room. If a cooling or heating unit is located on a balcony, the balcony should provide an additional area of 1.5 square metres.	**Variation Required** Dwelling G03 (ground floor) private open space is 21.2m2 which is less than the 25m2. Dwellings G01/G02 (ground floor) is also less than the 25m2. The variation is considered appropriate given that the dwellings are single bedroom, have direct access to the ground level internal courtyard and rooftop open space. All other balconies and ground level open space areas within the development comply with the standard.
D20 **Storage** *To provide adequate storage facilities for each dwelling.*	Each dwelling should have convenient access to usable and secure storage space. The total minimum storage space (including kitchen, bathroom and	**Complies** Each dwelling will have access to adequate storage in accordance with the standard. As required storage will be provided in each respective dwelling and storage

Standard	Requirement	Response
	bedroom storage) should meet the requirements specified in Table D6.	cages are provided in the basement car park.
Clause 58.06 Detailed Design		
D21 **Common Property** *To ensure that communal open space, car parking, access areas and site facilities are practical, attractive and easily maintained.* *To avoid future management difficulties in areas of common ownership.*	Developments should clearly delineate public, communal and private areas. Common property, where provided, should be functional and capable of efficient management.	**Complies** Common areas within the development comprise the basement, central courtyard and roof space. The development will be subject to an owner's corporation which will ensure that common areas are suitably managed and maintained.
D22 **Site Services** *To ensure that site services can be installed and easily maintained.* *To ensure that site facilities are accessible, adequate and attractive.*	The design and layout of dwellings should provide sufficient space (including easements where required) and facilities for services to be installed and maintained efficiently and economically. Mailboxes and other site facilities should be adequate in size, durable, waterproof and blend in with the development. Mailboxes should be provided and located for convenient access as required by Australia Post.	**Complies** Provision has been made for site services throughout the development. The services are suitable and will ensure ongoing efficient maintenance. Mail boxes are proposed at the entry to the building and accord with Australia Post requirements.
D23 **Waste and Recycling** *To ensure dwellings are designed to encourage waste recycling.* *To ensure that waste and recycling facilities are accessible, adequate and attractive.* *To ensure that waste and recycling facilities are designed and managed to minimise impacts on residential amenity, health and the public realm.*	Developments should include dedicated areas for: • Waste and recycling enclosures which are: – Adequate in size, durable, waterproof and blend in with the development. – Adequately ventilated. – Located and designed for convenient access by residents and made easily accessible to people with limited mobility. • Adequate facilities for bin washing. These areas should be adequately ventilated. • Collection, separation and storage of waste and recyclables, including where appropriate opportunities for on-site management of food waste through composting or other waste recovery as appropriate. • Collection, storage and reuse of garden waste, including	**Complies** A Waste Management Plan was submitted with the application documentation. Waste and recycling enclosures are provided in the basement of the building. The development will be required to operate in accordance with the approved waste management plan.

Standard	Requirement	Response
	opportunities for on-site treatment, where appropriate, or off-site removal for reprocessing • Adequate circulation to allow waste and recycling collection vehicles to enter and leave the site without reversing. • Adequate internal storage space within each dwelling to enable the separation of waste, recyclables and food waste where appropriate. Waste and recycling management facilities should be designed and managed in accordance with a Waste Management Plan approved by the responsible authority and: • Be designed to meet the best practice waste and recycling management guidelines for residential development adopted by Sustainability Victoria. • Protect public health and amenity of residents and adjoining premises from the impacts of odour, noise and hazards associated with waste collection vehicle movements.	
Clause 58.07 Internal Amenity		
D24 **Functional Layout** *To ensure dwellings provide functional areas that meet the needs of residents*	Bedrooms should: • Meet the minimum internal room dimensions specified in Table D7. • Provide an area in addition to the minimum internal room dimensions to accommodate a wardrobe	**Complies** Plans have been prepared which demonstrate that the proposed dwellings have an appropriate functional layout in accordance with the standard.
D25 **Room Depth** *To allow adequate daylight into single aspect habitable rooms.*	Single aspect habitable rooms should not exceed a room depth of 2.5 times the ceiling height. The depth of a single aspect, open plan, habitable room may be increased to 9 metres if all the following requirements are met: • The room combines the living area, dining area and kitchen. The kitchen is located furthest from the window. • The ceiling height is at least 2.7 metres measured from finished floor level to finished ceiling level. • This excludes where services are provided above the kitchen.	**Complies** Plans have been prepared which demonstrate that habitable rooms meet the required standard for room depth.

Standard	Requirement	Response
	The room depth should be measured from the external surface of the habitable room window to the rear wall of the room.	
D26 **Windows** *To allow adequate daylight into new habitable room windows.*	Habitable rooms should have a window in an external wall of the building. A window may provide daylight to a bedroom from a smaller secondary area within the bedroom where the window is clear to the sky. The secondary area should be: • A minimum width of 1.2 metres. • A maximum depth of 1.5 times the width, measured from the external surface of the window.	**Complies** Plans have been prepared which demonstrate that all habitable rooms feature windows in the external wall of the building to allow for adequate daylight in accordance with the standard.
D27 **Natural Ventilation** *To encourage natural ventilation of dwellings.* *To allow occupants to effectively manage natural ventilation of dwellings*	The design and layout of dwellings should maximise openable windows, doors or other ventilation devices in external walls of the building, where appropriate. At least 40 per cent of dwellings should provide effective cross ventilation that has: • A maximum breeze path through the dwelling of 18 metres. • A minimum breeze path through the dwelling of 5 metres. • Ventilation openings with approximately the same area. The breeze path is measured between the ventilation openings on different orientations of the dwelling.	**Complies** Plans have been prepared which demonstrate that the proposed dwellings will receive appropriate ventilation in accordance with the standard.

Clause 55 Assessment

B1 - Neighbourhood Character *To ensure that the design respects existing neighbourhood character or contributes to a preferred neighbourhood character.* *To ensure that development responds to features of the site and surrounding area.*	✔ **Complies** The proposed development makes use of the large site to provide additional housing in an appropriate location. Further, the proposal provides dwellings at an increased density (double-storey) on land that has a lower slope to that surrounding it. The development also responds appropriately to its immediate boundaries. In particular, the 6 rear (eastern) dwellings front onto Marks Reserve to activate the connection between the balconies and Private Open Space areas of the subject site and the reserve. Refer above for further discussion on response to neighbourhood character.
B2 - Residential Policy *To ensure that residential development is consistent with housing policies in the SPPF, LPPF including the MSS and local planning policies.* *To support medium densities in areas to take advantage of public transport and community infrastructure and services.*	✔ **Complies** The proposal is considered to be consistent with the Planning Policy Framework and the Municipal Planning Strategy which encourages the construction of higher density housing where it can take advantage of existing social and physical infrastructure. The site is within close proximity to shops, services, schools and a number of sporting options. The site also has access to a bus service.
B3- Dwelling Diversity *To encourages a range of dwelling sizes and types in developments of ten or more dwellings.*	✔ **Complies** The development includes dwellings of varying sizes. The dwellings are provided with 2, 3 or 4 bedrooms.
B4 – Infrastructure *To ensure development is provided with appropriate utility services and infrastructure.* *To ensure development does not unreasonably overload the capacity of utility services and infrastructure.*	✔ **Complies** Electricity, reticulated water and sewerage are available and will be utilised in this development
B5 - Integration with the Street *To integrate the layout of development with the street.*	✔ **Complies** Dwellings 1 to 4 provide a frontage towards Lydiard Street. The entrances are clearly defined and provide an engaging integration with the street. The proposal creates adequate vehicle and pedestrian links throughout the development which ultimately connect to the existing footpaths of Lydiard Street.

	The subject site abuts Marks Reserve to the rear. The proposed development has been oriented to ensure the rear lots face the reserve and create a connection between the two sites.

Clause 55.03 – Site Layout and Building Massing

B6 - Street Setback *To ensure the setbacks of buildings from a street respect the existing or preferred neighbourhood character and make efficient use of the site.*	✓ **Variation required** Refer to discussion above.
B7 - Building Height *To ensure that the height of buildings respects the existing or preferred neighbourhood character.*	✓ **Complies** The proposed height of the buildings respects the existing and preferred neighbourhood character, as it reflects nearby existing dwellings and units, with a maximum height of 6.79 metres. Further, the subject site is located at the low point in the topography.
B8 - Site Coverage *To ensure that the site coverage respects the existing or preferred neighbourhood character and responds to the features of the site.*	✓ **Complies** The development proposes a site coverage of 42.21%.
B9 – Permeability *To reduce the impact of stormwater run-off on the drainage system.* *To facilitate on-site stormwater infiltration.*	✓ **Complies** The development provides a permeability of 63.07%.
B10 - Energy Efficiency *To achieve and protect energy efficient dwellings and residential buildings.* *To ensure the orientation and layout of development reduce fossil fuel energy use and makes appropriate use of daylight and solar energy.*	✓ **Complies** The internal living areas of the proposed dwellings have been orientated towards the north where practical.
B11 - Open Space *To integrate layout of development with any public and communal open space provided in or adjacent to the development.*	✓ **Complies** The proposed development has incorporated a layout which integrates with the abutting Marks Reserve, with the provision of balconies and private open space immediately abutting this reserve area. Otherwise there is no public or communal open space provided within the development.

B12 – Safety *To ensure the layout of development provides safety and security for residents and property.*	✓ **Complies** Refer to discussion above.
B13 – Landscaping *To encourage development that respects the landscape character of the neighbourhood.* *To encourage development that maintains and enhances habitat for plants and animals in locations of habitat importance.* *To provide appropriate landscaping.* *To encourage the retention of mature vegetation on the site.*	✓ **Complies – subject to conditions** The dwellings will have adequate landscaping opportunity given its positioning on the property. There is adequate space for landscaping of the site. The plans were accompanied by a concept landscape plan and a comprehensive landscape plan will be addressed through a condition of the permit. The landscape plan will also require provision of semi advanced species to ensure a high-quality development outcome for the site. A minor variation is also required to the location of the crossover to Lydiard Street to ensure retention of the street trees as per the recommendations of council's arborist.
B14 – Access *To ensure vehicle access to and from the site is safe, manageable and convenient.* *To ensure the number and design of vehicle crossovers respects neighbourhood character.*	✓ **Complies – subject to conditions** The proposal includes only one vehicle crossover to Lydiard Street, reflecting the character and structure of nearby and surrounding developments. The frontage to Lydiard Street is 40.25 metres, and therefore the accessway width should not exceed 13.3 metres. The proposed accessway is 6.3 metres and is therefore compliant. A minor variation is also required to the location of the crossover to Lydiard Street to ensure retention of the street trees as per the recommendations of council's arborist. This can be addressed as a condition of approval.
B15 – Parking Location *To provide convenient parking for resident and visitor vehicles.* *To avoid parking and traffic difficulties in the development and the neighbourhood.* *To protect residents from vehicular noise within developments.*	✓ **Complies** The proposal includes the provision of 32 car parking spaces. Of these 32 car parking spaces, 2 visitor spaces are provided. This signifies a car parking reduction of 2 visitor spaces, as 4 visitor spaces as required by Clause 52.06. Clause 52.06 Car Parking states that 1 car parking space is required for dwellings with 1 or 2 bedroom dwellings, 2 car parking spaces are required for each dwelling with three or more bedrooms, in addition to 1 visitor car space to

	every 5 dwellings for developments of 5 or more dwellings. Each 1 and 2 bedroom dwelling includes a single car space, and each 3 or more bedroom dwelling includes a double garage (thus two car parking spaces), in addition to 2 visitor car spaces for the overall development. The proposed shared accessway is located at least 1.5 metres from the windows of habitable rooms where practically possible, and landscaping will be provided to act as visual buffers where habitable room windows are located less than 1.5m from the shared accessway.

Clause 55.04– Amenity Impacts

B17- Side and Rear Setbacks *To ensure that the height and setback of a building from a boundary respects the existing or preferred neighbourhood character and limits the impact on the amenity of existing dwellings.*	✔ **Complies** Refer to discussion above
B18 - Walls on Boundaries *To ensure the location, length and height of a wall on a boundary respects the existing or preferred neighbourhood character and limits the amenity impacts of existing dwellings.*	✔ **Complies** Refer to discussion above
B19 - Daylight to Existing Windows *To allow adequate daylight into existing habitable room windows.*	✔ **Complies** No habitable room windows will be affected by this development, given sufficient separation to HRW of dwellings to adjoining properties.
B20 - North Facing Windows *To allow adequate solar access to existing north-facing habitable room windows.*	✔ **Complies** Refer to discussion above.
B21 - Overshadowing Open Space *To ensure buildings do not significantly overshadow existing secluded private open space.*	✔ **Complies** The overshadowing caused by the development is very minimal and complies with standard.
B22 - Overlooking	✔ **Complies** Refer to discussion above.

To limit views into existing secluded private open space and habitable room windows.	
B23 - Internal Views *To limit views into existing secluded private open space and habitable room windows of dwellings and residential buildings within the same development.*	✔ **Complies** Refer to discussion above.
B24 - Noise Impacts *To contain noise sources in developments that may affect existing dwellings.* *To protect residents from external noise.*	✔ **Complies** The proposed dwellings will only be subjected to normal pedestrian and local vehicle noise consistent with the residential use of the land.

Clause 55.05 – On-site Amenity and Facilities

B25 – Accessibility *To encourage the consideration of the needs of people with limited mobility in the design of developments.*	✔ **Complies** The proposed development incorporates access for people with limited mobility, incorporating level pedestrian pathways from the street to each individual dwelling. Dwelling entries are not significantly raised from ground level.
B26 - Dwelling Entry *To provide each dwelling or residential building with its own sense of identity.*	✔ **Complies** The proposed development has been designed to incorporate individual footpath access to each dwelling. Further, the amended plans have resolved issues that address a sense of identity to each dwelling (refer to discussion above).
B27 - Daylight to New Windows *To allow adequate daylight into new habitable room windows.*	✔ **Complies** All habitable room windows have adequate access to daylight.
B28 - Private Open Space *To provide adequate private open space for the reasonable recreation and service needs of residents.*	✔ **Complies** Refer to the discussion above.
B29 - Solar Access to Open Space *To allow solar access into the secluded private open space of new dwellings and residential buildings.*	✔ **Variation required** The private open space has been adequately located to respond to setback needs, surrounding neighbours, and solar access. The majority of the development has incorporated private open space areas which are located on the northern and eastern sides of the built form. Where this is not done, a variation is sought for this standard.

	The height of the first floor wall is approximately 6.3m. Therefore, the southern boundary of an SPOS should be setback at least 7.6m from the first floor. The height of the ground floor is approximately 3.1m, and the southern boundary should be set back 4.7m. The above setbacks are not met in the case of every dwelling – where this is not met, the variation is accepted as the open space areas are functional and generally exceed the requirements in terms of size. Further the abutting Marks Reserve will provide additional adequate amenity for future residents.
B30 - Storage *To provide adequate storage facilities for each dwelling.*	✓ **Complies** The proposal provides adequate storage facilities for each dwelling.

Clause 55.06 – Detailed Design

B31 - Design Detail *To encourage design detail that respects the existing or preferred neighbourhood character.*	✓ **Complies** The dwellings have been designed to utilise materials, scale and density which respects the existing and future neighbourhood character. The subject site is located within an 'ongoing change area', which encourages infill development at higher densities where the area is well-serviced by public transport and amenities. The proposal's dwelling layout reflects a medium density development which enjoys close proximity to various public transport routes, services and amenities.
B32 – Front Fences *To encourage front fence design that respects the existing or preferred neighbourhood character.*	✓ **Complies** The development proposes transparent front fencing, which reflects the current front fencing treatments existing along Lydiard Street. Lydiard Street front fencing currently comprises of a mix of no front fences, low front fences, and high transparent front fences consistent with the proposal.
B33 - Common Property	✓ **Complies** The common property is the internal driveway. It is practical and can be easily maintained.

To ensure that communal open space, car parking, access areas and site facilities are practical, attractive and easily maintained.	
B34 - Site Services *To ensure that site services and facilities can be installed and easily maintained.* *To ensure that site facilities are accessible, adequate and attractive.*	✔ **Complies** Site services will be located where possible in the most efficient and economical location. A condition of the permit will require a Waste Management Plan.

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HERITAGE IMPACT ASSESSMENT

Place:	11 Davey Street, Ballarat
Date:	19 August 2019
For:	Hygge Property

Introduction

This heritage impact assessment is prepared to assess the likely heritage impacts of the proposed Nightingale Development at 11 Davey Street Ballarat and explains my support of the permit application No. PLP/2019/409 on heritage grounds. The proposal is for demolition of the existing industrial building and construction of an apartment building, as shown by the plans prepared by Breathe Architects dated the 21st of June 2019. The local heritage controls of the City of Ballarat Council Planning Scheme at Clause 22.01 *Built Form, Heritage and Design* and Clause 22.05 *Heritage Conservation and Heritage Precincts* apply to the site, as does Clause 22.15 *Heritage Conservation*. The subject site falls under the Heritage Overlay HO166 *Central Ballarat Heritage Precinct*. The Statement of Significance for the precinct is found under the *Ballarat Heritage Precincts Statements of Significance 2006 (revised August 2014)*. I have also had regard to *'Ballarat Planning Scheme Heritage Control 2004 – Incorporated Plan (revised October 2015).*

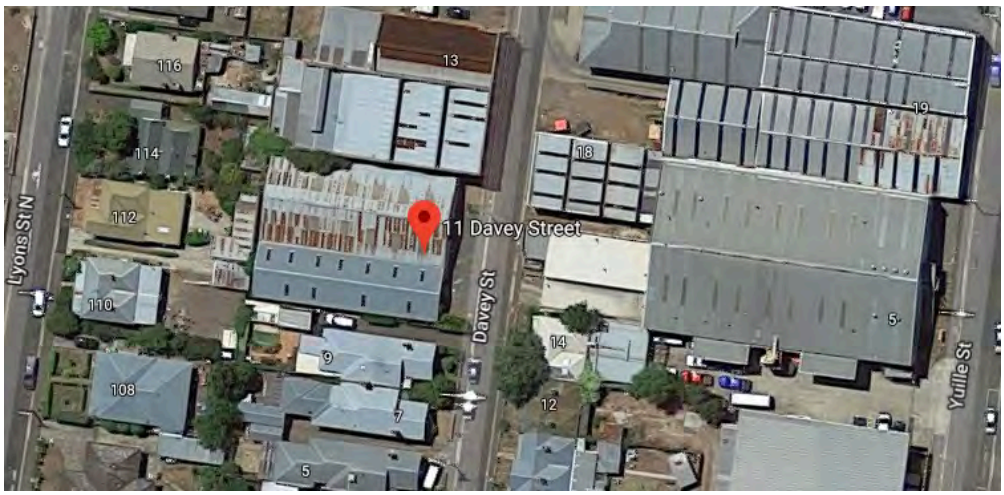

Figure 1 - Aerial of subject site, indicated by red pin (Source: Google Maps)

Site Description

The existing dwelling is on a rectangular large block 25.65m long on the Davey Street boundary and a 36.87m deep on the North boundary. An existing single storey industrial building sits on the subject site. The existing building is of masonry block wall construction. Above the masonry block walls are two gables and roofing with metal cladding. The existing building is setback from Davey street and has two metal garage doors. At the north end of the frontage there is a single metal door and a metal framed window divided into 4 panels of glass by metal mullions. The existing buildings on the site are without any heritage value.

Figure 2 – South side of subject house showing top four weatherboards to the depth of 1 room being original (Source: Google Streetview)

Davey Street has a mixed streetscape with a fragmented heritage character. As described above, the subject site is contemporary industrial building. Opposite the subject site at 14 Davey Street is another contemporary industrial building. At 4 Davey Street is a contemporary single story red brick building without particular architectural interest.

The neighbouring building to the subject site to the north is a large two storey interwar industrial building. The building is of red brick and concrete wall, and render, construction. The façade has imbedded piers that extrude beyond the concrete rendered parapet. At first floor level between the piers of the façade are tall and narrow timber framed windows. There are two sets windows just south of the middle of the façade with a corresponding double timber door at ground floor level below. To the north on the ground floor is a single panel timber door. Below the north most first floor window, at ground level a door seems to have been removed with the opening in filled with bricks to match the existing.

The houses of numbers 10, 12 and 14 on the opposite side of Davey Street and south from the subject site, are of Mid-Victorian expression. The houses which are a terrace of timber buildings each have L-shaped plan form to their frontage, with a verandah next to a protruding room with a gable front. The walls are clad in weatherboards. Above the verandah roof there are decorative brackets the gable frontage have decorative bargeboards. The roof of the terrace row is clad with galvanised corrugated iron roof, presents with no fire separation and has unpainted brick chimneys. The original verandah at 14 Davey Street has been removed and replaced with a timber framed windows and door, and a timber framed door has also been inserted into the timber weatherboard wall under the gable front. Other than these alterations the Victorian form and simple detailing, such as the brackets, remain.

South of the subject site on the same side of the street are modest interwar single storey cottages at 3, 5, 7 and 9 Davey Street. No's. 5, 7 and 9 Davey Street have central windows in the façade with awnings. The exteriors are clad timber weatherboards to the top of the windows, beyond the walls and gable are clad in stucco and half timbering. No 3 Davey has been altered significantly to the rear of the gable half-timbered frontage.

At 1 Davey Street is an asymmetrical gable and hipped roof dwelling of interwar expression.

At 8 Davey Street is an existing symmetrical gable fronted Victorian industrial building constructed of painted brickwork. The building has been altered. The façade has a central tall entrance (that has been filled in) capped with an arched window. The central entrance has decorative brickwork on its boarder. There are two similarly sized arched windows on either side of the entrance eight brick course lower than the central arch. The brickwork in the gable has modest gothic decoration that is similar to the gothic decorative timber barge boards at 10, 12, and 14 Davey Street.

At 18 Davey Street is a two-storey brick industrial building. The building has a colonial brickwork bond and rough crude concrete construction. The building has had some alterations and is not of particular architectural interest, other than its possible age of construction.

Proposal

It is proposed to demolish the existing factory building and build a new apartment building with three tiers of height rising to five stories. The frontage of the proposed is to be a symmetrical double storey arcade of recycled brick. Within the brick arcade is a ground floor and first floor with fine expression of the first floor concrete balcony floor slab and with vertical metal balustrading within the brick pillars. The walls of the apartments within the arcade of brick are light colour and textured with vertical ribbing. At the North end of the façade is a separate vertical element constructed with textured walls and curved balconies with coloured metal rod balustrades. This section of the building is setback approximately 4.7m from the front of the brick arcade frontage. At the ground floor of this level there is to a be commercial space. The remaining development will accommodate apartments.

Above the brick arcade will be balconies for the apartments on the second floor. The second and third floors are is to be setback 2.3m from the brick arcade in line with the front wall within the arcade. The second and third floor frontage is also clad in red brickwork however the balcony openings in the façade third floor are rectilinear. The rectangular openings are the same height but not the width, with two narrow and two wide openings on the second floor and three narrow and two wide on the third. The asymmetry of the openings suggests an adapted earlier use to arrive at the proposed composition.

The fourth floor is setback again from the front of the brick balconies of the second and third floor, to align with face of the North vertical element of the building façade. The wall is also to have a textured white finish.

Figure 4 – Proposed frontage of the subject site (Source: Breathe Architects)

The side elevations are proposed as compositions of textured wall with inset sections with green screening. The rear elevations is stepped and large treated with vertical garden screens.

Heritage Significances

The subject property is identified as significant under the Heritage Overlay HO166 *Central Ballarat Heritage Precinct*. The heritage grading of the subject site is Non-Contributory as found in the *Ballarat Heritage Precincts Statements of Significance 2006 (revised August 2014)*. There are no significant trees near the subject site as noted from *'Ballarat Planning Scheme Heritage Control 2004 – Incorporated Plan (revised October 2015).*

Figure 7 – City of Ballarat Council Heritage Overly Map extract – showing the site under HO166

The Statement of Significance for the *Central Ballarat Heritage Precinct* retrieved from the *Ballarat Heritage Precincts Statements of Significance 2006 (revised August 2014.* The description of the precinct is as follows.

> *The Central Ballarat Precinct is located directly to the north-west of the Ballarat City centre, within urban Ballarat. It is characterised by a heterogeneous combination of substantially intact residential buildings, which were constructed from the early 1860s (and possibly earlier) to the 1940s, and into the early 1950s. They are interspersed with a number of notable cultural/community, commercial, educational and industrial buildings constructed from the early 1860s onwards. The precinct is also characterised by the irregularly spaced grid layout of nearly all of its streets, many of which feature avenues of mature to semi-mature trees; by scattered areas of grassed and treed public and private open space including the grounds of various schools and other institutions, the small park within the Duncan Street road reserve west of Drummond Street North, and the lawns of the Servicemen's Memorial Bowling Club; and by numerous well-maintained private gardens, some of which contain notable mature tree specimens. Furthermore, the precinct is specially distinguished by the substantial integrity of its original engineering infrastructure, particularly as identified by the extensive network of bluestone spoon drains and gutters that can be seen along most roads in the precinct, sometimes in conjunction with wide gravel/grass shoulders. Other important engineering infrastructure*
>
> *The north boundary of the Central Ballarat Precinct is effectively the narrowest part of the precinct and is generally formed along the north side of Cardigan Street (between Wendouree Parade and Burnbank Street) and along the rear boundaries of the allotments on the north side of Cardigan Street (between Burnbank Street and Lexton Street and including two allotments facing Lexton Street). The east boundary begins at the north-east corner of the intersection of Lexton Street with Pisgah Street and runs in a staggered line in a south-east direction. It is generally formed by the east side of Lexton Street, the north side of Macarthur Street (between Lexton Street and Creswick Road), the west side of Creswick Road to Webster Street, the east side of Yuille Street (including some allotments), the rear boundaries of the allotments on the south side of Mair Street (between Dawson Street North and Lyons Street North), and by the east side of Lyons Street North (between Mair Street and Sturt Street).*
>
> *The south boundary is generally formed by the north boundary of the Sturt Street Central Heritage Precinct, which predominantly runs along the rear of the allotments on the north side of Sturt Street but also encompasses all of the Ballarat Base Hospital site. The west boundary runs along the west side of Pleasant Street North to Wendouree Parade, before turning to run along the east side of Wendouree Parade (the east boundary of the Lake Wendouree Heritage Precinct) up to the north-east intersection of Wendouree Parade and Cardigan Street.*

The Central Ballarat precinct covers an area north of Sturt Street, south west of Lake Wendouree. The area was first surveyed in 1851 and 1852 with a formal grid layout and the first land sales occurred in 1852.

Residential and commercial development occurred amidst significant mining activity, although building development had not spread beyond Mair Street and the southern side of Webster Street. People were attracted by the close proximity to the commercial centre around Lydiard and Sturt Streets, the railway station, the recreational pursuits at Lake Wendouree. The residences reflected the prosperity of 1870-1880's Ballarat.

Small cottages appeared along the southern sections of Mair Street extending from central Ballarat to Pleasant Street. Most of the cottages were weatherboard and were predominantly owner occupied, again reflecting the prosperity of the town. Timber was preferred as it was plentiful and could be easily relocated if necessary.

Housing in the northern sections of the precinct while still timber were more characteristic of workers cottages. The more modest homes can be attributed to the decline of mining form the 1870's, leading to a substantial increase in rented homes. The establishment of the railway workshops in 1914 may have been an added influence for the provision of affordable housing, within walking distance of the workshops. Some commercial businesses were also located in the precinct, including two flourmills and an electricity supply company on Wendouree Parade, taking advantage of the water supply. Hotels and breweries sprang up serving the miners working in the vicinity of Webster Street.

The precincts close proximity to the city centre made it a prime location for educational, religious and medical institutions such as the Australian Catholic University, St John of God and Ballarat Base Hospitals and Ballarat and Clarendon College.

The precinct is architecturally important as it contains many original and early examples of Victorian, Federation, Inter War and early Post War era residential, commercial and industrial buildings. These include key landmark buildings such as Nazareth House, the Ballarat Christian Fellowship Church and Hall especially the dominant spire, the educational buildings, shops, the three-storey terrace in Webster Street and the former William Bailey mansion in Drummond Street.

Typically, residential buildings in the precinct are single storey (although some are 1 1⁄2 to 2 and rarely 3 storey), with hipped and/or gabled roofs clad in either galvanised corrugated iron, slate or terra cotta tiles.

Buildings were constructed of weatherboard, brick or bluestone and include verandahs or porches, eaves, unpainted chimneys, decorative detailing, timber framed doors and double hung or casement windows.

The commercial, educational, cultural/community buildings also show similar features as the residential buildings. However, they also have complex and individual detailing and decoration. Roofs are generally steeper and clad in slate or tiles. The buildings are one, two or three storey and constructed from brick with contrasting cement rendered details.

The important visual qualities of the precinct include views to Lake Wendouree and the City Oval, the Old Ballarat Cemetery, Mount Buninyong, Black Hill and the Soldiers Hill residential area. The precinct also features views of the highly significant Wendouree Creek Channel engineering infrastructure such as the extensive network of bluestone spoon or channel drains, bluestone inverted channel gutters, bluestone pitcher kerbs and deeper brick and bluestone storm water drains and wrought iron guard rails.

Other features of the precinct are the mature street plantings, grass/gravel shoulders, early tram shelters, the landscaped private and public open space, fences, private gardens and mature canopy trees.

The statement of significance for the heritage precinct are set out as follows.

The Central Ballarat Precinct is historically significant at a LOCAL level. (AHC criteria A.3, 4 and H.1).

(a) the place's importance in the course, or pattern, of Australia's natural or cultural history;

(a3) importance in exhibiting unusual richness or diversity of built landscapes and cultural features;
(a4) & (h1) importance for association with events, developments, cultural phases and individuals which have had a significant role in the human occupation and evolution of the region.

The urban development and character of the Precinct has historic significance for its association with a number of significant activities that links together some of the main themes in the historical, social and architectural development of Ballarat.

Aspects that contribute to the historic significance of the Precinct include its associations with underground quartz mining, particularly the main Inkerman Lead that wound its way through the precinct to the south.

The Precinct is historically important as an example of a highly desirable mid 19th century goldfields residential area, as evidenced by the physical fabric from the period 1870s-1890s. It is also associated with an unusually high incidence of home ownership in this period helped along by a policy of establishing residential areas with deep lead mining areas that has shaped the subsequent development of the area.

Its close proximity to the central business district of Ballarat made it a prime location for a number of educational, religious and medical institutions built from the early 1870s. Today, the Precinct still houses the Aquinas campus of the Australian Catholic University, a campus of Ballarat and Clarendon College and St. John of God Hospital. The western section of Mair Street, particularly from Talbot Street to Doveton Street has become a medical precinct due to the large campus of St. John of God Hospital and the neighbouring Ballarat Base Hospital. Medical practitioners now occupy many of the contributory timber Victorian and Edwardian cottages in the immediate vicinity of the hospitals.

The Precinct is historically important as the location for several early commercial and industrial enterprises that operated throughout the 1850s and 1860s. Two flour mills took advantage of the ready water supply of Lake Wendouree and located along Wendouree Parade. The Hassell and Monckton Mill included a substantial brick chimney and other buildings designed by architect Henry Caselli. In 1904, it became the site of the new powerhouse for the Electric Supply Company of Victoria. Hotels and breweries sprung up throughout the 1860s, hoping to take advantage of the many miners in the immediate vicinity working the 'mini-rush' along Webster Street.

The Central Ballarat Precinct is aesthetically and architecturally significant at a LOCAL level. (AHC criteria D, E and F). (d) its importance in demonstrating the principal characteristics of: (i) a class of Australia's Cultural places; or (ii) a class of Australia's cultural environments (including way of life, custom, process, land-use, function, design or technique); (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

(f) its importance in demonstrating a high degree of creative design or artistic excellence, or technical achievement at a particular period.

The Precinct is architecturally significant for its many substantially intact residential, commercial, cultural/community and educational buildings and important early industrial buildings dating from the 1860s and 1940s, and into the early 1950s. Generally there is a good retention of original housing stock throughout the precinct with scattered examples of larger villas, terraces as well as small cottages (the latter predominantly erected in the Victorian era).

The historic urban design context of the Precinct is important for the harmony of the overall townscape derived from its rectilinear street layout pattern that reflects typical 19th century neoclassical planning ideals, the outstanding engineering infrastructure, in particular the bluestone drains, public street furniture, the landscape treatment of the streets, inclusive of European tree lined avenues and wide gravel/grass road shoulders. The success of a unifying aesthetic ideal derived from overseas 19th century and early 20th century architectural and planning ideas adapted to a provincial Australian model is evidenced by the diverse array of building styles in the Precinct which collectively contribute to a visually unified townscape of beauty.

The residential architecture of the area is aesthetically significant for its high degree of integrity and condition, and forms an important collection of Victorian, Federation, Inter- War and early Post-War buildings. While there is considerable variety across the area due in part to different allotment sizes, within the same street or sections of streetscapes, groups of houses are quite similar in size, scale, set back, with a unity of materials as well as design characteristics. The roofline throughout the Precinct, is characteristically dominated by a forest of brick chimneys, some with complex brick patterning or render detailing, others have notable features including cement rendered caps and chimney pots.

The Precinct is architecturally important for the significant numbers of quality houses that date to 1880s. The area experienced a period of brisk development between 1861and 1871, when a number of lucrative deep leads were mined. The reputation of the area as a fashionable town address, especially within the vicinity of Webster Street after the mid 1860s attracted a number of local mining magnates to the area. Houses along Webster Street were characterized by their large allotments and emphasis on formally designed private gardens with plantings of exotic trees. This street character, along with sections of neighbouring Drummond Street, remains largely intact and reflects the prosperity of Ballarat in the 1870s-1880s. Baileys's Mansion' (1883), on the corner of Mair and Drummond Streets and now part of St. John of God Hospital, is a visual reminder of the prosperity of this section of West Ballarat in the late 1870s-1880s. While it is a fairly typical example of a 'boom-time' mansion, complete with tower, it is a rare style for Ballarat and more common to Melbourne.

The Precinct is architecturally important for the number of terrace rows, or pairs of semi-detached residences scattered throughout the Precinct. The most notable of which is the three storey terrace at the east end of Webster Street. At the same time as these substantial residences were being erected, canvas dwellings had almost disappeared and almost ninety per cent of houses were wooden with between three and four rooms. The existing houses in this precinct still tend to be timber with some fine examples of boom style Victorian villas and Edwardian and Federation style houses.

Wood was the chosen material for much of the housing in the Precinct and neighbouring precincts because it was cheap, plentiful and available locally through a thriving timber industry. Apart from the cost, miners often preferred timber residences because of the ease with which the house could be relocated if necessary. This was a fairly common occurrence throughout the 1870s, particularly if the house had been erected on a miner's right. Numerous small cottages had appeared along the southern sections of the Precinct. While housing in the northern sections of the precinct, are often later examples of typical timber framed workman's cottage. This can be partly attributed to the changing status of miners and the general decline in the mining industry at the beginning of the 20th century. The emphasis on affordable rental accommodation may have continued in the northern section of this precinct when the Railway Workshops opened at North Ballarat in 1914.

The western section of the Precinct including Wendouree Parade is architecturally significant for the collection of Inter-War houses that exhibit a great variety of individual architectural styles. These examples are aesthetically important as within a small locality it is possibly to view a range of designs that illustrate the personal tastes and creative inspiration of a provincial mid 20th century Australian city.

Further important aesthetic qualities of the Precinct include the variety of significant urban landmarks, a number of which can be seen from outside of the precinct. The variety of framed and panoramic views, within the Precinct can be experienced in numerous directions and along streets as well as narrow rear access laneways or rights-of-way. The important visual qualities of the Precinct are also enhanced by the mature street tree plantings that are a significant component of many of the streetscapes; the soft landscaping of wider streets; landscaped public and private open spaces and the many private gardens with their mature canopy trees.

The residential gardens in the Precinct show a high degree of variety. Many gardens are well planted with native and exotic plants, expansive lawns and mature canopy trees which are often complemented by large, well-maintained front hedges. Some of the gardens are listed on the Register of the National Estate, and/or by the National Trust of Australia (Victoria). These varied residential gardens, along with the pockets of highly visible landscaped and

treed grounds belonging to religious and educational institutions complement the treed lined avenues and contribute to an informal garden setting of the precinct.

The Precinct is also transected in the northern part of the precinct (from the north- west area to the south-east area) by the historic brick-lined Wendouree Creek Channel, parts of which are covered while other parts are open and visible from various local streets.

The Central Ballarat Precinct is scientifically significant at a LOCAL level (AHC criteria C and F).

(c) its potential to yield information that will contribute to an understanding of Australia's natural or cultural history;
(f) importance for its technical, creative, design or artistic excellence, innovation or achievement.

It is of importance for contributing to a history of the infrastructure development of this area of the former municipality of Ballarat West, particularly as identified by the extensive network of significantly intact bluestone spoon or channel drains, and bluestone inverted channel gutters with bluestone pitcher kerbs, and by the brick Wendouree Creek Channel and some bluestone lined stormwater drains. The use of bluestone pitchers as the principal material to form much of this engineering infrastructure also demonstrates an early, and now rarely used construction technology, as well as the excellence of traditional craftsmanship. Many buildings and associated structures also demonstrate high standards of construction and craftsmanship.

The Central Ballarat Precinct is socially significant at a LOCAL level. (AHC criteria G).

(g) the place's strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

The Precinct is recognized and highly valued by the local community for its early and ongoing residential, commercial, religious, and educational associations.

Comment: Whilst the precinct description and statement of significance are extensive there is relatively little that directly pertains to the heritage building stock found in Davey Street. The street is made up of Victorian and Interwar dwellings, to the south of the subject site, that match the above statement of significance and precinct description and the character and appearance of locality of the site is heavily influenced by the double storey height interwar warehouse on the immediate north side. The character of the street whilst retaining a prevailing period character does not present a consistent or cohesive character in form, period, scale or use.

Heritage Policy

The local heritage policy Clause 43.01 requires a permit for a building to have restoration and reconstruction works, be partially demolished and to construct a new addition. Below are the relevant decision guidelines for the proposed:

43.01-8 Decision Guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must 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.

The City of Ballarat Policy at Clause 22.05 provides guidance for the assessment of proposed changes to heritage places. Under Clause 22.05-1.1, Objectives, the objectives faded grey are not relevant to the assessment of the proposal and underlined section are in my view of particular pertinence:

Objectives

• To implement the Heritage Victoria's 'The Heritage Overlay – Guidelines for Assessing Planning Permit Applications; Public Draft February 2007'.

• To support the demolition of buildings that are 'not of heritage significance' in a heritage precinct as listed in the:

- *'Ballarat Heritage Precincts – Statements of Significance (2006)' incorporated document.*
- *'Ballarat Heritage Precincts Study Part A 2006 – Statements of Significance' incorporated document.*

• To ensure new development is consistent with the Statement of Significance of the relevant heritage precinct as listed in the:

- *'Ballarat Heritage Precincts – Statements of Significance (2006)' incorporated document.*
- *'Ballarat Heritage Precincts Study Part A 2006 – Statements of Significance' incorporated document.*

• To ensure that new development interprets the cultural significance of the place.

Policy

It is policy:

• To apply Heritage Victoria's 'The Heritage Overlay – Guidelines for Assessing Planning Permit Applications; Public Draft February 2007' when considering applications under the Heritage Overlay.

• That all buildings other than those specifically listed as 'not of heritage significance' within the 'Ballarat Heritage Precincts – Statements of Significance (2006)' and the 'Ballarat Heritage Precincts – Statements of Significance Study Part A July 2006 incorporated documents are considered to be prima facie contributory to the significance of the heritage place where they are located. An applicant may lodge an application for sites that are deemed contributory. In considering whether a building contributes to the significance of the heritage place the responsible authority should have regard to the criteria for establishing significance set out for each precinct within the relevant statement of significance.

• To apply the 'Ballarat Heritage Precincts – Statements of Significance (2006)' and the 'Ballarat Heritage Precincts Study Part A 2006 Statements of Significance' when considering applications under the Heritage Overlay.

• Where a permit is required for demolition, to not grant a permit for demolition unless a permit has already been granted for the development of the land, or is to be simultaneously granted for the development of the land.

• Where a permit is granted for demolition, it is policy that the heritage place be recorded, based on the "City Of Ballarat: Recommended Guidelines For Recording Of Heritage Places".

• That new development interprets the cultural significance of the place. A heritage impact statement may be required.

Assessment

The obvious aspect of the proposed development that is likely to be contentious is the five-storey scale. This scale is not however directly present abutting the very humble heritage house. The south side of the development that is proposed as the neighbour to the house at no. 9 Davey Street is double storey brickwork of the same scale as the existing interwar warehouse heritage presence on the property to the north. The interwar workers housing to the south of the proposed development is in a local of industrial presence and juxtaposition of taller brickwork walls commensurate with the interwar industrial building to the north of the subject site does not present as unusual. The second tier of the development is set back a further full room width at 4.3 metres from the side boundary and is again compatible with early factory and industrial forms.

The use of recycled brickwork will provide authentic materiality to the development that will visual relate to, and reference earlier period character of industrial buildings. The proposed use of a ribbed light grey white walling should also provide a textural quality having authenticity commensurate with heritage construction although evidently contemporary. The management of the detail of the finish and expression of the proposal is, in my view, foundational to the successful integration with the wider heritage place and should be subject to conditions requiring endorsement of the detail prior to relevant stages of construction.

In the view north up Davey Street from the Mair Street intersection the mix of building form, character and appearance is evident. This mixed character does not relent in the approach to the subject site where the south elevation will be very evident in juxtaposition with the residential

streetscape to the fore. Similarly the view from the north end of Davey Street at the Webster Street intersection is flanked by the bulk of a three storey Victorian terrace form on the west side, built to the Davey Street frontage, whilst on the other corner is a relatively diminutive single storey, charming Edwardian and airy timber villa.

Notwithstanding other planning and zoning issues the circumstances of the site and surrounds are such that the scale of the building proposed can, in my view, be entertained although it would not be so in many of the residential streets in close proximity.

In reviewing the design it is my conclusion that the proposal has sufficient variation of materiality associated with change in scale to maintain visual interest in conjunction with integrity of design composition and materiality. The visualization included a mature tree that would take time to realises and for the purposes of assessment should not have been included. I also note that the design shows planter boxes to the balconies and these elements can be relied upon as a component of the presentation of the development to Davey Street. I also hold the view that whilst the authenticity of the brick arch has deep resonance, the suspension of a pier of brickwork to make way for vehicle access is disruptive of the otherwise grounded character that the proposal promises as a complement to its robust interwar neighbour to the north. A flat brick arch over the vehicle access to provide visual support for the floating pier would settle this element logically into the façade and could be an acceptable option.

It is my assessment that the proposed is an acceptable heritage outcome, despite its unusual scale. In the particular context with appropriate conditions, it is my recommendation that the application is worthy of support on heritage grounds.

John Briggs

John Briggs Architects Pty Ltd

HOUSING CHOICES AUSTRALIA | 10 YEARS 2008-2018

Tuesday, 25 June 2019

Ms Angela Perry
Chair
Nightingale Housing
9 Florence Street
BRUNSWICK VIC
3065

Dear Ms Perry,

Re: Letter of Support for the Nightingale Ballarat at Davey St, Ballarat

It is with pleasure that I confirm Housing Choices Australia's support for the proposed development of the Nightingale Ballarat, located in Davey Street, Ballarat. We recognise this project as a world leading development that has the potential to redefine the medium density development in Australia.

Housing Choices Australia Limited is a Registered Housing Association in Victoria under the Housing Act 1983. Housing Choices is the parent company of the Housing Choices Group, a national, not-for-profit housing provider that creates safe, quality, affordable housing for people on low to moderate incomes. The Housing Choices Group National Portfolio consists of over 5,000 properties across NSW, Tasmania, Victoria & South Australia.

We deliver a wide range of housing products and services including large scale management transfers, Specialist Disability Accommodation, Mixed Equity and head lease arrangements. Housing Choices has several properties in Ballarat and its surrounding suburbs including group homes and multi-dwelling units for independent disability housing. Our commitment to expanding our affordable housing footprint in the Ballarat Council region stems from its excellent local amenity, access to employment opportunities, community services and vibrant and diverse neighbourhoods.

Our Board has expressed its enthusiasm, both for the Nightingale projects undertaken to date and to establish a successful relationship in providing a social and affordable housing component in future Nightingale projects. Our commitment to Nightingale Ballarat is driven by its ability to deliver the following key outcomes:

- We have a deep understanding and respect of the ability of Nightingale Housing to lead a successful partnership approach and to transform complex inner-city sites into high quality and innovative residential and community spaces.
- Environmental benefits provided by the built form reducing running costs for resident, which are particularly important for residents on low incomes.
- Shared focus and values in delivering social and affordable housing stock that is of high quality.
- The commitment and capacity to integrate social housing within the residential landscape.
- Realising the benefits of mixed tenure to deliver unified communities, particularly the capacity of the Nightingale model to ensure long-term commitment to place making, community building and low occupancy turn over. This includes a natural integration of income and cohort profiles that is needed for successful mixed tenure delivery within large developments.
- A transparent partnership where Housing Choices retains visibility of the financial model and how development costs are allocated.
- The acknowledgment of Housing Choices' expertise in how our tenants use and engage with properties and spaces and how this should be filtered throughout design.

Our Board supports our relationship with Nightingale, subject to the usual feasibilities and due diligence. Housing Choices Australia is currently finalising a term sheet to provide 20% (6 dwellings) of the development as Social Housing. These dwellings will be provided for a range of people in housing need, including people with a

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disability and ageing residents. We will also seek to maximise the number of outcomes possible by seeking additional contributions from other funding sources.

The Social Housing at Nightingale Ballarat is predicated on the current design, yield expectations and associated NLA (Net Lettable Area) calculations. Our operational model measures feasibilities over a 40 year period and given the cohorts we house and sensitivities to our funding model, all our investment decisions are considered carefully. If there is a reduction in density to the building, this will have the effect of increasing the square metre rate and our ability to participate will become unviable.

Housing Choices Australia encourages Council to consider the importance of incorporating social and affordable in this proposal.

Thank you for the opportunity to provide this letter of support.

Yours sincerely,

Michael Lennon
Managing Director

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Nightingale Ballarat
11 Davey Street
Transport Impact Assessment

180580TIA001D-F

25 June 2019

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Prepared by	Adam Gardiner	Reviewed by	Valentine Gnanakone
Signature		Signature	

CONTENTS

TABLES

FIGURES

APPENDICES

1 INTRODUCTION

onemilegrid has been requested by hygge property to undertake a Transport Impact Assessment of the proposed Nightingale development at 11 Davey Street, Ballarat.

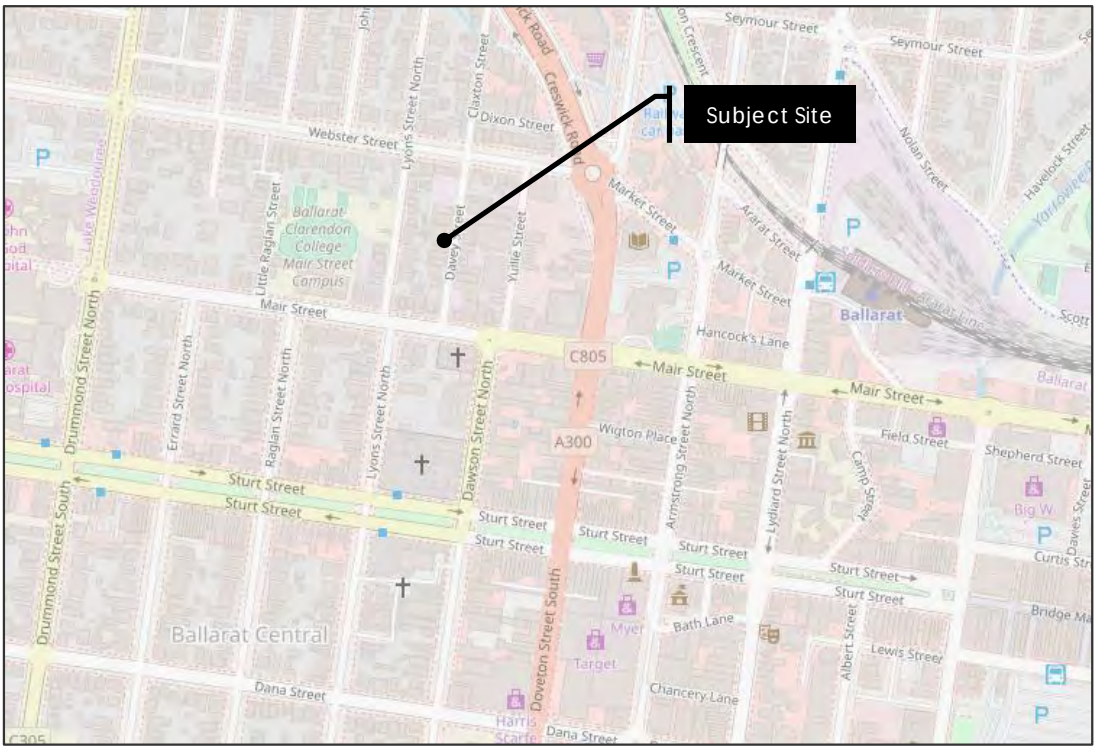
As part of this assessment the subject site has been inspected with due consideration of the development proposal, traffic data has been sourced and relevant background reports have been reviewed.

2 EXISTING CONDITIONS

2.1 Site Location

The subject site is located on the western side of Davey Street, approximately mid-way between Webster Street and Mair Street, as shown in Figure 1.

Figure 1 Site Location



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The site is generally rectangular in shape with a frontage to Davey Street of approximately 26 metres and depth of 37 metres.

The site is currently occupied by a large warehouse which is setback from the street thereby historically allowing car parking within the front setback to Davey Street. This results in a wide crossover to Davey Street, measuring approximately 21 metres in width. It is noted the crossover

extends past the southern boundary of the site, providing access to 9 Davey Street. The site is currently not operating.

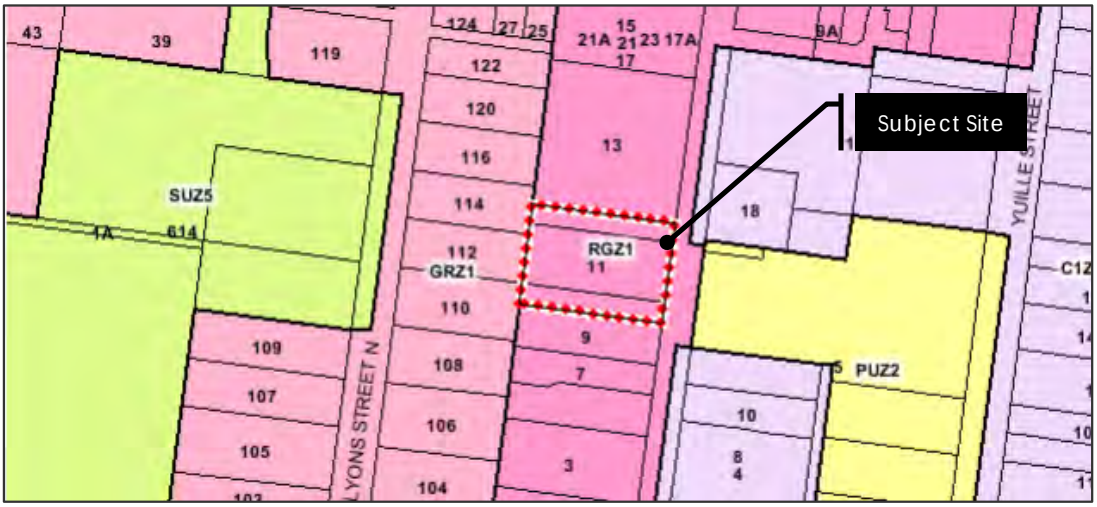
Land use in the immediate vicinity of the site is mixed in nature, including both industrial and residential uses.

The site is well located with regard to amenities, education and employment. Of note, the site is located on the cusp of the commercial centre of Ballarat, Australian Catholic University is located to the west, Federation University is located to the east and the active medical precinct is located to the west.

2.2 Planning Zones and Overlays

It is shown in Figure 2 that the site is located within a Residential Growth Zone (RGZ), for which the permitted uses are listed in Clause 32.07 of the Ballarat Planning Scheme.

Figure 2 Planning Scheme Zones



2.3 Road Network

2.3.1 Davey Street

Davey Street is a local road aligned north-south, running between Webster Street in the north, and Mair Street in the south. Davey Street has a pavement width measuring approximately 5.0 metres and operates one-way running south to north.

Kerbside parking is permitted on the western side of the road only, generally restricted to 2 hours 9am to 5:30pm Monday to Saturday.

The cross-section of Davey Street at the frontage of the site is shown in Figure 3.

Figure 3 Davey Street, looking south from the subject site

2.3.2 Mair Street

Mair Street is a local road generally aligned east-west, running between Wendouree Parade in the west, and Victoria Street in the east. Mair Street provides a single traffic lane, a bicycle lane and angled parking lane in each direction.

On-street car parking is available on both sides of the road restricted to 2 hours on the north side and 1 hour on the south side in the vicinity of the site. The restrictions are in place 9am – 5:30pm Monday through to Saturday.

A 50 km/h speed limit applies to Mair Street in the vicinity of the site, except during school pick up and drop off periods when a 40 km/h speed limit applies.

The cross-section of Mair Street looking west from Davey Street is shown in Figure 4.

Figure 4 Mair Street, looking West from Davey Street

2.3.3 Webster Street

Webster Street is a local road generally aligned east-west, running between Midland Highway in east, and Wendouree Parade / Ripon Street North in the west. Webster Street provides a single traffic lane a bicycle lane and 90 degree parking lane in each direction.

On-street car parking is available on both sides of the road restricted to 3 hours on the north side and 2 hours on the south side in the vicinity of the site. The restrictions are in place 9am – 5:30pm Monday through to Saturday.

2.4 Sustainable Transport

2.4.1 Public Transport

The full public transport provision in the vicinity of the site is shown in Figure 5 and detailed in Table 1.

Figure 5 Public Transport Provision

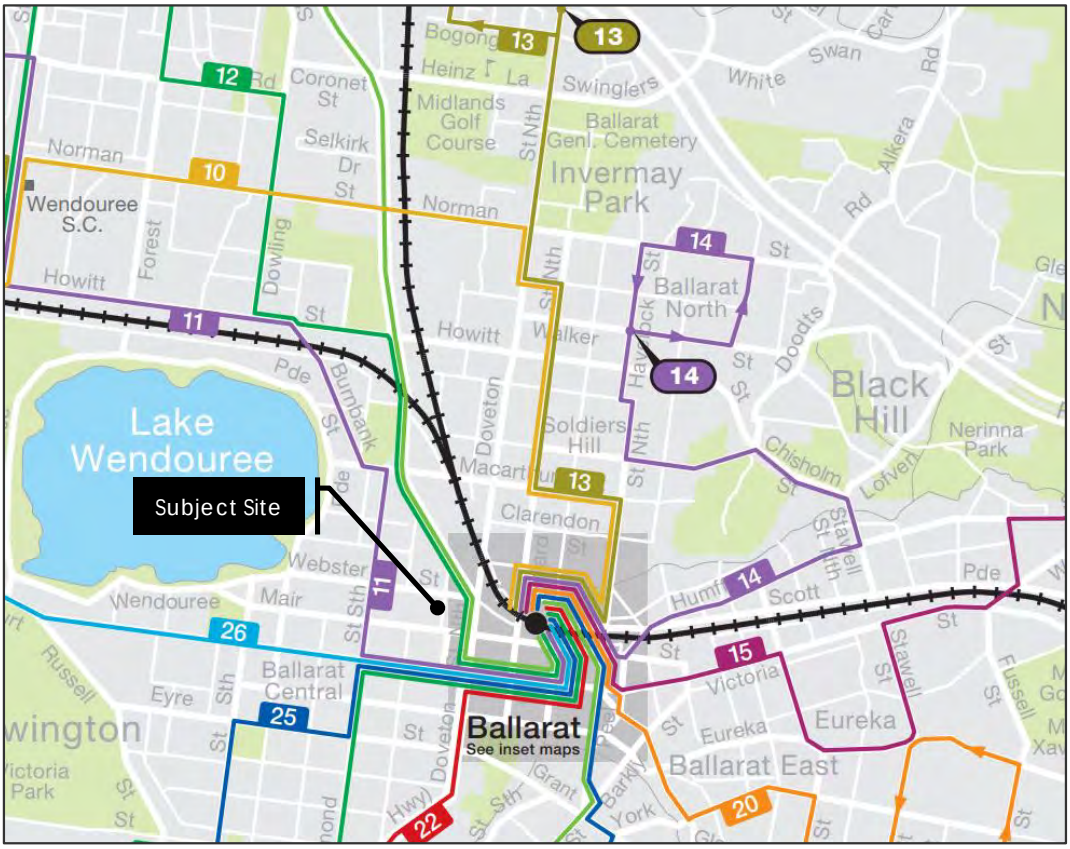


Table 1 Public Transport Provision

Mode	Route No	Route Description	Nearest Stop/Station
Train		Ballarat V/Line Service	Ballarat Station
Bus	12	Wendouree – Ballarat Central	Doveton Street N
Bus	30	Midland Highway – Ballarat Central	Doveton Street N

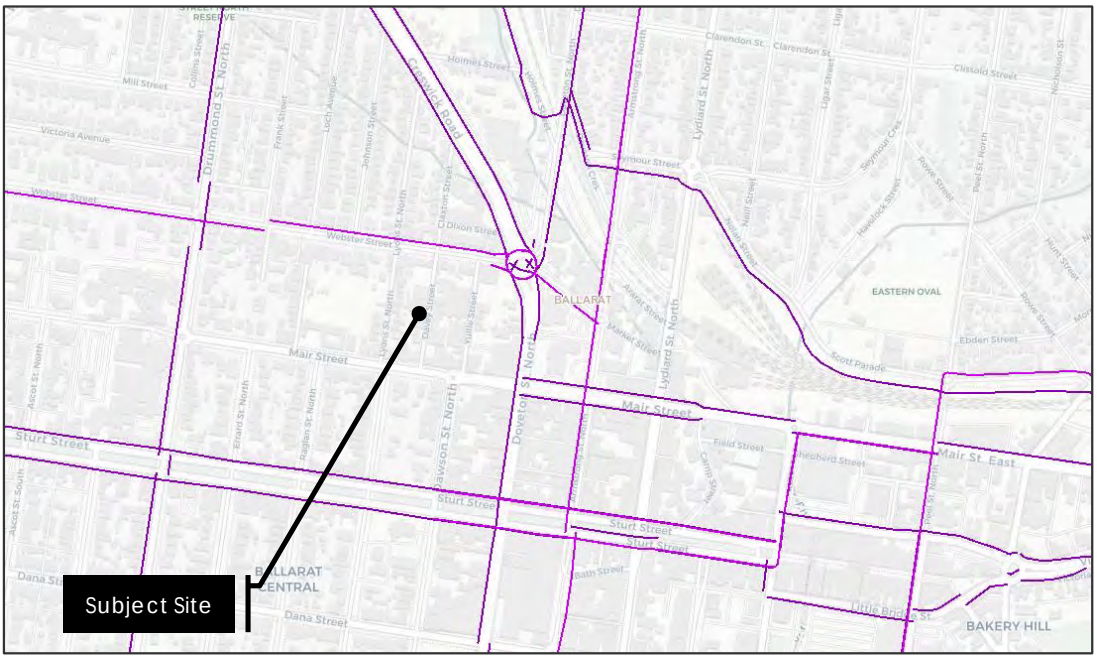
In the immediate vicinity of the site, public transport is limited to two bus services (Routes 12 & 30), located within less than a 400m walk of the subject site.

Further afield, the Ballarat Railway Station is located within a 600 metres radius of the subject site which is also the terminal for the most buses within Ballarat, providing greater access to the extended network. Ballarat Station is accessible via the two bus routes that operate along Doveton Street proximate to the site.

2.4.2 Bicycle Facilities

The subject site is well located with regard to connections to the Principal Bicycle Network as shown in Figure 6 with a combination of formal and informal routes connecting to designated Bicycle Routes.

Figure 6 Principal Bicycle Network

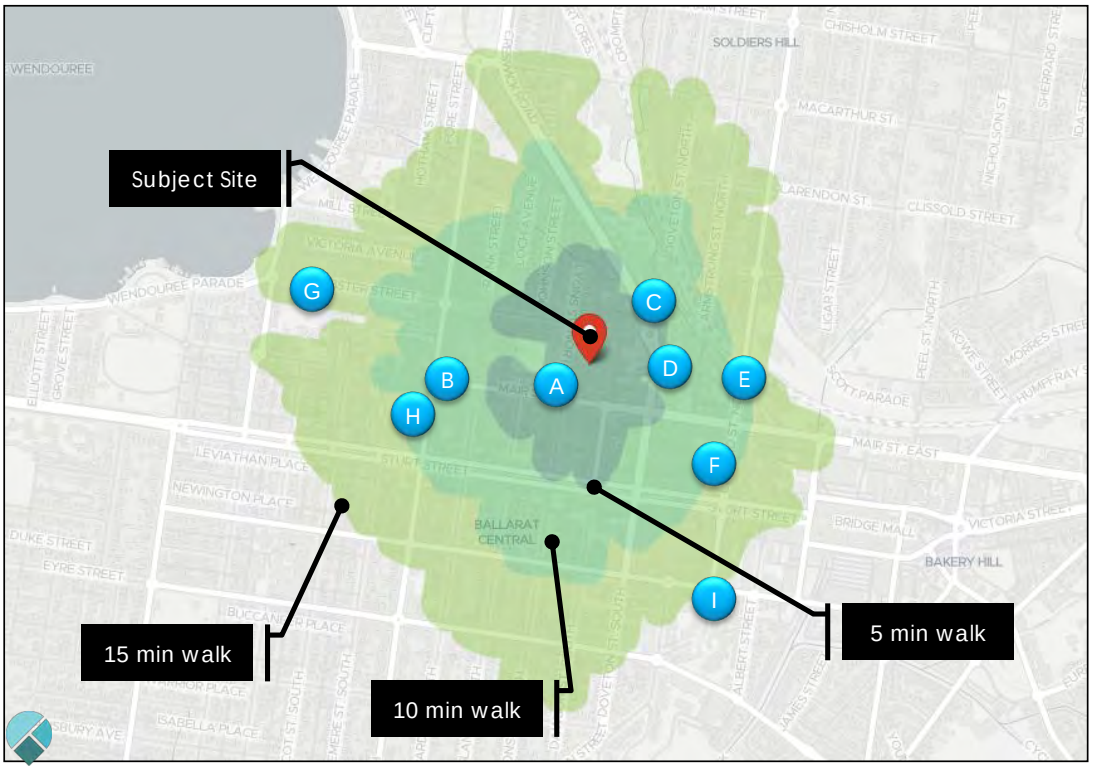


2.4.3 Pedestrian Accessibility

In addition to having good access to sustainable transport modes, the site is well-located with regard to pedestrian accessibility, with a number of recreation, education, shopping and employment uses located within 10 - 15 minutes' walk of the site.

Figure 7 shows a pedestrian walk time map for the site, with the major facilities in the vicinity of the site identified in Table 2.

Figure 7 Pedestrian Walk-Time Map



Courtesy of Targomo

Table 2 Site Facilities

Ref	*Facility*	*Approx. Distance*
A	Clarendon College Mair Street Campus	300m
B	University of Melbourne	600m
C	Aldi Ballarat	400m
D	Ballarat Library	350m
E	Ballarat Station	650m
F	Ballarat Town Centre	700m
G	Australian Catholic University	1km
H	Medical Services Precinct	700m
I	Federation University Australia – SMB Campus	1.2km

3 PROPOSAL

3.1 Nightingale Overview

It is proposed to develop the site for a Nightingale Housing Model project.

Nightingale Housing is a relatively new concept whereby multi-residential buildings are constructed with the primary goal to be financially, socially and environmentally sustainable. One of the key aspects of the Nightingale model is to reduce individual services allocated to dwellings in favour of a shared communal environment to also deliver a socially inclusive community as part of the project.

Future residents whose values align with the model enter a ballot to be provided an opportunity to buy into the development. The registration system ensures that all future residents are fully aware of the outcomes of the proposal including the typically reduced car parking provision and the fact that not all dwellings and in some cases no dwellings will be allocated car parking.

In relation to this project, Nightingale Housing held an information night for prospective residents in Ballarat in May 2019. As part of the information evening, a survey was undertaken to understand prospective residents need for car parking. 54% of responders said they would be willing to live without a car space, 56% said they would be likely to take up cycling as an alternate transport method and 51% said they would use public transport. The survey included a total of 72 respondents.

3.2 Proposed Development

It is proposed to develop the site for the purpose of a mixed-use development, comprising of 27 apartments and a ground level food and drink tenancy. As noted above, the proposed development will be in line with the Nightingale model. In addition, of the dwellings provided, 20% will be affordable housing.

A breakdown of the development schedule is provided in in Table 3 below.

Table 3 Proposed Development

Use	*Component*	*No. / Area*
Dwellings	1-Bedroom Dwelling	6
	2-Bedroom Dwelling	17
	3-Bedroom Dwelling	4
	Sub-Total	27
Food and Drink Tenancy		68m^2

3.3 Car Parking and Vehicular Access

A total of 14 car spaces are proposed in a basement car park, with access via a single width crossover to Davey Street leading to a ramp.

As a result of the development, it is proposed to reinstate the wide crossover along the frontage of the site which will result in the introduction of 3 on-street car parking spaces. It is proposed to allocate these spaces to a car share provider (GoGet). Car share pods will be available to residents and the general public.

3.4 Bicycle Parking

A key element to the Nightingale model is to provide sustainable transport options for travel to and from the site. In this regard, it is proposed to provide a total of 54 bicycle spaces across the site. Of the bicycle parking, 38 spaces are located within a secure compound within the basement car park including 30 wall mounted racks and 8 spaces level spaces suitably dimensioned to accommodate 'cargo bikes'. The remaining 16 spaces are located on the ground floor in Arc De Triomphe style racks with 4 spaces for visitors.

4 GREEN TRAVEL INITIATIVES

The proposed development will include a number of commitments to promoting sustainable transport through the proposed provisions. The following initiatives are each expected to reduce the reliance on private motor vehicle ownership/use and promote sustainable transport mode choices.

4.1 Walkability

By virtue of the location of the site, the proposed development is well positioned for future residents to walk to nearby services and facilities. As identified in Section 2.4 of this report there are a number of facilities within convenient walking distance to the site.

As a green travel initiative for the proposed development, it is suggested that future residents be provided with a map of the nearby facilities within walking distance to the site and the existing pedestrian connections.

4.2 Cycling

The proposed development includes bicycle parking facilities far in excess of the requirements of Clause 52.34 of the Planning Scheme.

As a green travel initiative, it is suggested that the body corporate includes regular maintenance of these areas and promote the use of the bike parking for both residents and visitors.

4.3 Public Transport

The subject site has reasonable access to existing public transport services. To encourage the use of these existing services it is suggested that each resident be provided with information on the ease of access to these services including the provision of maps both online and in hard copy / on display.

As a green travel initiative, it is suggested that the development could subsidise the purchase of Myki passes for residents.

4.4 Car Share Services

As part of the proposed development, it is intended to provide three car share pods along the frontage of the site within the reinstated crossover area. The car share pods will be operated by GoGet and will be made available to residents and the general public. Of note, as part of the development in line with the Nightingale model, each resident will receive 'GoFrequent' membership to GoGet.

5 DESIGN CONSIDERATIONS

5.1 General

onemilegrid has undertaken an assessment of the car parking layout and access for the proposed development with due consideration of the Design Standards detailed within Clause 52.06-9 of the Planning Scheme. A review of those relevant Design Standards is provided in the following section.

5.2 Design Standard 1 – Accessways

A summary of the assessment for Design Standard 1 is provided in Table 4.

Table 4 Clause 52.06-9 Design Assessment – Design Standard 1

Requirement	*Comments*
Be at least 3 metres wide	Satisfied – minimum width of ramp is 4 metres
Have an internal radius of at least 4 metres at changes of direction or intersection or be at least 4.2 metres wide	N/a – no change in direction along accessway
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	N/a – private car park
Provide at least 2.1 metres headroom beneath overhead obstructions, calculated for a vehicle with a wheel base of 2.8 metres	Satisfied – a height clearance of at least 2.1 metres is achieved
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
Provide a passing area at the entrance at least 6.1 metres wide and 7 metres long if the accessway serves ten or more car parking spaces and is either more than 50 metres long or connects to a road in a Road Zone	N/a – does not connect to a road zone
Have a corner splay or area at least 50 per cent clear of visual obstructions extending at least 2 metres along the frontage road from the edge of an exit lane and 2.5 metres 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 – permeable fencing is proposed on either side of the driveway to provide the required sightlines. It is noted that more often than not vehicles will be located centrally on the ramp thereby providing additional viewing opportunities in excess of the standard requirements.
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 6 metres from the road carriageway.	N/a – Does not connect to a road zone

5.3 Design Standard 2 – Car Parking Spaces

Standard car spaces have been designed with a length of 5.4 metres a minimum width of 2.4 metres and are accessed from aisles of no less than 5.8 metres in accordance with the Australian Standard for Off-Street Car Parking AS2890.1.

It is noted that Design Standard 2 recommends the use of the Planning Scheme dimensions in preference to the Australian Standard however the Australian Standard dimensions still provides for safe and efficient access to car spaces and is considered acceptable.

To test the accessibility of a sample of spaces within the basement, swept paths have been prepared and are attached as Appendix A.

5.4 Design Standard 3 – Gradients

A ramp is proposed from the street level to the basement. The ramp has been designed with various sections of ramp grades with a 1:10 section at the top of the ramp for 3 metres steadily transitioning into the basement. The remainder of the ramp has a maximum grade not more than 1:4, in accordance with the requirements of Design Standard 3. Transitions are provided where changes of grade exceed 12.5%, and transition lengths have been designed to prevent potential scraping.

It is acknowledged that the first section of 1:10 ramp is 3 metres compared to the standard Planning Scheme requirement of 5 metres. Following the 1:10 ramp section a 2 metre section of 1:4.5 is provided. Due to the dimensions of the site and to maximise the basement footprint, there is no opportunity to extend the 1:10 section. Notwithstanding, it is considered that the proposed ramp arrangement is acceptable for the following reasons:

- The intention of the 5 metre section of 1:10 is to provide visibility to pedestrians on the footpath;
- Based on the standard wheel base of a B85 vehicle (2.8m) and allowing for the front overhang (920mm), at the interface with the title boundary, the vehicle will only be inclined 100mm more in the proposed scenario. This will still ensure the driver has good visibility to potential pedestrians on the footpath;
- Vehicles travelling along the ramp will be doing so as low speeds; and
- The very low traffic movements expected to be generated.

In view of the above, the minor non-compliance with the scheme is considered acceptable and will not compromise vehicle or pedestrian safety.

5.5 Waste Collection

A bin storage area is located within the car park. Bins will be transferred to Davey Street for collection by a waste contractor on collection days.

Refer to the Waste Management Plan for further information.

5.6 Bicycle Parking

It is proposed to provide vertically mounted and staggered bicycle racks within a storage area within the basement level of the development accommodating 38 bicycles as well as an additional 16 spaces on ground level using Arc De Triomphe style racks.

It is proposed to provide 30 bicycle parking spaces in the form of 'Ned Kelly' style wall-mounted rails at 400mm centres. The remaining 8 basement spaces are to be provided in horizontal bike racks at 500mm centres with a length of 2.3 metres. The spaces will be accessed from an aisle with a width no less than 1.5 metres.

The set out of the bicycle parking spaces is generally in accordance with Bicycle Network Victoria recommendations, and is sufficient to accommodate bicycles measuring 0.7m in width at the handlebars, 1.7m in length and 1.2 m in height in accordance with the requirements of Clause 52.34 of the Planning Scheme.

6 LOADING CONSIDERATIONS

Clause 65 (Decision Guidelines) of the Ballarat Planning Scheme identifies that "*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.*"

Given the size of the ground floor tenancy (less than 100m²) in total, it is not considered practical or necessary to provide an on-site loading bay. It is expected that the majority of deliveries will occur via small vans and utility vehicles, which can utilise the existing on-street parking in the area.

The provision for loading is therefore considered appropriate for the proposed use.

7 BICYCLE PARKING CONSIDERATIONS

The bicycle parking requirements for the subject site are identified in Clause 52.34 of the Ballarat Planning Scheme, which specifies the requirements for the different components of the proposed development as shown in Table 5.

Table 5 Clause 52.34 – Bicycle Parking Requirements

Component	*No/Area*	*Requirement*	*Total*
Residential Building (four or more storeys)	27	1 space per 5 dwellings for residents 1 space per 10 dwellings for visitors	5 3
Food & Drink (Retail land use)	68m²	1 space per 300m² for employees 1 space per 500m² for visitors	0 0
Total		Residents Employees Visitors	5 0 3

It is proposed to provide a total of 54 bicycle parking spaces within the development with 50 allocated to residents and 4 to visitors. The resident spaces are to be provided in the basement car park and on the ground level which is secured by a security door while the visitor spaces are to be provided on Arc De Triomphe style racks on the ground floor towards the Davey Street frontage.

Considering the above, the proposed provision of resident, employee and visitor bicycle parking significantly exceeds the requirements of the Planning Scheme which will encourage sustainable transport use to and from the site.

8 CAR PARKING CONSIDERATIONS

8.1 Statutory Car Parking Requirements

The car parking requirements for the subject site are identified in Clause 52.06 of the Ballarat Planning Scheme, for which the requirements for the different components of the proposed development are shown in Table 6.

Table 6 Clause 52.06 – Car Parking Requirements

Use	*No/Area*	*Rate*	*Car Parking Measure*	*Total*
Dwelling	23	1	to each one or two bedroom dwelling, plus	23
	4	2	to each three or more bedroom dwelling (with studies or studios that are separate rooms counted as bedrooms), plus	8
	27 total dwellings	1	for visitors to every 5 dwellings for developments of 5 or more dwellings	5
Food and Drink Premises	68m²	4	to each 100m² of leasable floor area	2
Total				38

Based on the above calculations, a total of 38 parking spaces are required for the proposed development.

It is proposed to provide a total of 14 car parking spaces on-site, with 13 spaces allocated to residents and one space allocated to the ground floor tenancy. The proposed provision of parking results in a shortfall of 24 spaces when compared to the Planning Scheme requirements.

In this regard, Clause 52.06-7 of the Ballarat Planning Scheme indicates that an application to reduce (including reduce to zero) the requirement for car spaces must be accompanied by a Car Parking Demand Assessment. The Assessment must assess the car parking demand likely to be generated by the proposed development, having consideration to:

- The likelihood of multi-purpose trips within the locality which are likely to be combined with a trip to the land in connection with the proposed use.
- The variation of car parking demand likely to be generated by the proposed use over time.
- The short-stay and long-stay car parking demand likely to be generated by the proposed use.
- The availability of public transport in the locality of the land.
- The convenience of pedestrian and cyclist access to the land.
- The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.
- The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.
- Any empirical assessment or case study.

Practice Note 22 (June 2015) specifies that the provisions for reducing car parking requirements draw a distinction between the assessment of the likely demand for parking spaces (the Car Parking Demand Assessment), and whether it is appropriate to allow the supply of fewer spaces than assessed by the car parking demand assessment. These are two separate considerations, one technical while the other is more strategic. Different factors are taken into account in each consideration.

Accordingly, the applicant must satisfy the responsible authority that the provision of car parking is appropriate on the basis of a two-step process, which has regard to:

- The car parking demand likely to be generated by the use; and

- Whether it is appropriate to allow fewer spaces to be provided than the likely demands generated.

An assessment of the likely parking demands and the appropriateness of reducing the car parking provision below them is set out below.

8.2 Car Parking Demand Assessment

8.2.1 Residents

8.2.1.1 ABS Car Ownership Data

Car ownership data from the 2016 Census for the City of Ballarat was sourced from the Australian Bureau of Statistics (ABS).

For development types similar to that proposed, the data is outlined in Table 7.

Table 7 2016 Census Car Ownership – City of Ballarat

Dwelling Type	*No of Bedrooms*	*Average Car Ownership*	*%'age that do not own a car*
Flat, unit or apartment	1	0.77	31.3%
	2	0.97	21%
	3	1.39	8%

The data above indicates that there is a market for dwellings with reduced car parking provisions. Of note, the data indicates that residents of more than 30% of 1-bedroom apartments did not own or otherwise have a need to park a car at their place of residence. The ABS data was further assessed to review the ownership levels of the larger 3-bedroom dwellings. The data indicates that residents of 60% of these sized dwellings owned 1 car or less. This data suggests that there is a demand for apartments that do not provide, and therefore do not require owners/occupiers to pay for, parking spaces they do not have a use for. This is fully in line with the Nightingale Model.

Considering the location of the site and its proximity to local amenities, employment and education, it is expected that the parking demands generated by the proposed development will therefore be reduced, being particularly appealing to potential owners who do not have the need to park a vehicle at their place of residence. This is particularly the case considering the Nightingale model being proposed on-site.

Furthermore, it should be recognised that resident parking demands are, in part, dependent on car parking provisions, insofar as an owner with the need to park a vehicle is unlikely to occupy a dwelling that does not provide a car parking space. This is particularly true in areas where on-street parking is restricted to short durations, meaning on-street parking is not a viable alternative to on-site parking for residents. This is the case for the subject site whereby most parking in the vicinity is restricted Monday through to Saturday thereby making it not viable for a resident who does not own a car.

Notwithstanding, based on the data in an unconstrained circumstance, a demand for 20 spaces could be projected, with 4 spaces associated with the 3-bedroom dwellings (1 to each dwelling), 13 associated with the 2-bedroom dwellings (0.79 spaces per dwelling), and 3 spaces to the 1-bedroom dwellings (0.69 spaces per dwelling).

8.2.1.2 Share Car Provision

General

Car sharing is a relatively new form of transport that allows people to hire vehicles on demand for short periods of time, via telephone or internet booking service. The vehicles are generally parked on-street in dedicated bays (a "pod") or within developments and are accessible to members at any time of the day or night. In this way, members benefit from the flexibility of having access to a private vehicle but do not have to pay the overheads associated with owning their own car or have access to a car space in which to park it.

These car share services effectively leverage the 'downtime' of a typical car (where it would ordinarily spend most of the time parked or in storage), and spreads ownership and use of the car over many members. Data from car share service providers shows that, on average, each car supports around twenty members.

Research

In February 2016, a research paper was prepared by Phillip Boyle & Associates, a public transportation consultancy, in order to inform the Port Phillip City Council Car Share Policy for 2016-2021.

The paper synthesised numerous researches undertaken by others in Australia and overseas and identified that Car Share services significantly reduce the need for private car ownership and can replace in the order of 10 privately owned vehicles for each car share pod.

The research cited shows that when car ownership is replaced by an immediate and conveniently accessible car share service, local residents or employees join and subsequently reduce their private vehicle use. The car share service acts as a catalyst for modal change, switching trips previously made by car to public transport, bicycle and walking. This reduction comes about for a range of reasons, but most significantly because the price of each additional car journey is considered more carefully.

As a result of the above, the car share service impacts on car ownership in three distinct ways:

1. Many people can avert the purchase of a second car by using car sharing to supplement single car ownership;
2. Many people can avoid purchasing a car altogether by joining a car-share scheme;
3. Many car share members sell existing cars after joining a car share scheme.

Points 2 and 3 are of particular relevance to the proposed development, where there is a reduced car parking provision for dwellings.

As part of the proposed development, it is intended to provide three car share pods along the frontage of the site within the reinstated crossover area. The car share pods will be operated by GoGet and will be made available to residents and the general public. Of note, as part of the development in line with the Nightingale model, each resident will receive 'GoFrequent' membership to GoGet.

Operation

As noted previously, the development will provide three car share pods on Davey Street at the property frontage. These pods will be available to residents as well as the general public.

It is noted that these car share pods would be the first of their kind within Ballarat. As such providing three car share pods will be beneficial in establishing car share services in Ballarat, benefitting not only to the proposed development but also to existing residents, employees and the general community.

8.2.1.3 Alternative Modes of Transport

As indicated in Section 2.4, the site has reasonable access to Public Transport, with bus services and the main train station in the vicinity.

Additionally, the site provides a significant over supply of bicycle parking and as noted previously includes car share pods along the frontage.

These alternative transport modes provide an alternative to private car travel and car ownership for residents of the development.

8.2.1.4 Resultant Resident Car Parking Demand

It is reiterated that under the Nightingale model, future residents will be made aware of the car parking situation prior to buying or occupying one of the dwellings. Additionally, it is proposed to provide Go Get share cars at the site frontage, to provide flexibility for residents who may need to use a vehicle on occasion, without needing them to own their own vehicle and keep it at the site. As such, it is expected that due to the very specific nature of the housing model proposed, resident car parking demands will amount to the on-site car parking provision of 13 resident spaces.

As previously noted, of the potential residents surveyed more than half indicated that they would be comfortable in residing in the development without an allocated car space.

8.2.2 Food and Drink Tenancy

It is expected that the ground floor tenancy will largely generate customers from the apartments of the proposal and existing and future residents in the area, walking or riding to the site. As such, the majority of parking demands generated will be attributable to staff.

For the purposes of the following assessment, the commercial uses will be assumed to generate staff demands at approximately 1 space per 100m^2.

For the 68m^2 of commercial floor area proposed, this equates to projected demand for a single staff space. It is acknowledged that there may be a small customer car parking demand generated.

8.2.3 Anticipated Parking Demand

Based on the above, it is anticipated the proposed development will generate a demand for 13 resident spaces, 1 staff space, and the occasional demand for short term customer parking.

8.3 Review of Car Parking Provision

8.3.1 Planning Scheme

It is proposed to provide a total of 14 car parking spaces on-site, comprising 13 spaces for residents and 1 space for staff.

Clause 52.06-7 of the Ballarat Planning Scheme states that a permit may be granted to reduce the number of parking spaces, in consideration of the following:

- The Car Parking Demand Assessment.
- Any relevant local planning policy or incorporated plan.
- The availability of alternative car parking in the locality of the land, including:
  - Efficiencies gained from the consolidation of shared car parking spaces.

- Public car parks intended to serve the land.
- On street parking in non-residential zones.
- Streets in residential zones specifically managed for non-residential parking.

- On street parking in residential zones in the locality of the land that is intended to be for residential use.
- The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.
- Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.
- The future growth and development of any nearby activity centre.
- Any car parking deficiency associated with the existing use of the land.
- Any credit that should be allowed for car parking spaces provided on common land or by a Special Charge Scheme or cash-in-lieu payment.
- Local traffic management in the locality of the land.
- The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.
- The need to create safe, functional and attractive parking areas.
- Access to or provision of alternative transport modes to and from the land.
- The equity of reducing the car parking requirement having regard to any historic contributions by existing businesses.
- The character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.
- Any other matter specified in a schedule to the Parking Overlay.
- Any other relevant consideration.

8.3.2 Council Policy

The Ballarat Integrated Transport Strategy is outlined in The Ballarat Strategy "Our Vision for 2040" document prepared by the Ballarat City Council in July 2015 which highlights the initiatives it wishes to implement. The primary focus of the Integrated Transport Strategy is to develop a sustainable transport network within Ballarat.

The key initiatives highlighted in The Ballarat Strategy relevant to transport include:

- Connected Ballarat 4.1 – Transition Ballarat towards a more sustainable transport system
- Connected Ballarat 4.2 – Benchmark travel behaviour measures against 2011 figures, to monitor progress towards a less car dependent future

Both of the above initiatives fall under the banner of "Build a Less Car-dependant Community with a More Sustainable Transport System" with decision principle 7 stating "Embrace technology and innovation as an enabler of better transport choice and accessibility".

Overall the Ballarat Integrated Transport Strategy aims to provide a more sustainable transport network by following a decision framework that reduces the dependence on personal motor vehicles.

The proposed development which reduces car ownership reliance is entirely in line with the initiatives within the strategy.

8.3.3 Potential for On-site Car Parking

It is noted that the basement footprint is rather limited and has been maximised to provide car parking, storage and bicycle parking. It is considered that the current layout has been suitably

designed and providing more car parking would not be an efficient outcome to the development or encouraging sustainable transport options.

8.3.4 Viability for Future Residents

As noted, the proposed development proposes reduced car parking. Occupants of the development are well located with regard to access amenities, education and employment. Of note, an Aldi supermarket is located 400 metres to the south and the town centre is located just 700 metres to the southeast which includes a wide variety of shopping, commercial and amenity based options (food, groceries, banks, post office etc).

With regard to vehicle travel, car share pods are located on eth frontage providing the opportunity for residents on the odd occasion that they need a vehicle to utilise a share car.

Based on the above, the day to day requirements of a resident can be comfortably met without the need for a private vehicle on-site. Furthermore, the proposed development is to include a Green Travel Plan which details a number of initiatives to promote alternative and sustainable transport modes.

8.3.5 Availability of Public Car Parking

The proposed food and drink premises may generate the occasional customer parking demand. On-street car parking in the vicinity of the site is generally restricted to short term (1P or 2P). This relatively high turnover of parking lends itself well for use by customers of a use such as a food and drink premises.

8.4 Adequacy of Proposed Car Parking Provision

It is expected that the proposed supply of car parking is appropriate for the proposed development, considering the following:

- The 2016 Census data identifies that a market exists for dwellings with reduced car parking;
- The Nightingale model fully supports sustainable outcomes including reduced motor vehicle travel and as such future owners will be well versed with the intentions of the development;
- The provision of three car-share pods at the frontage of the property will encourage a reduction in car ownership, provide a car on an as-needs basis for those without one, or supplement usage for those with the occasional need for two vehicles;
- The proposed development provides bicycle parking in excess of the Planning Scheme requirements, therefore providing an alternate means of transportation;
- The development is within walking distance of amenities, including shops, education, entertainment and recreational facilities;
- The reduced provision of car parking is entirely in line with the initiatives within the Ballarat Integrated Transport Strategy;
- Reduced car parking provision assists with the desired reduction in private vehicle usage, therefore minimising traffic impacts in the vicinity.

9 TRAFFIC CONSIDERATIONS

9.1 Traffic Generation

Based on the reduced provision of car parking, the level of traffic generated will naturally be reduced. For the purposes of this assessment, it will be assumed that during the peak hours, half of the car spaces 'turns over' thus generating a total of 7 movements. Due to the largely residential allocation of car parking, it is envisaged that during the morning peak 6 movements will be outbound and 1 inbound whilst during the afternoon 4 movements will be inbound and 3 movements outbound.

9.2 Traffic Impact

The total traffic generation of the subject site is expected to be minimal (equivalent to less than one additional vehicle every 8 and a half minutes during the peak periods), and will be easily accommodated by the existing road network in the vicinity of the site.

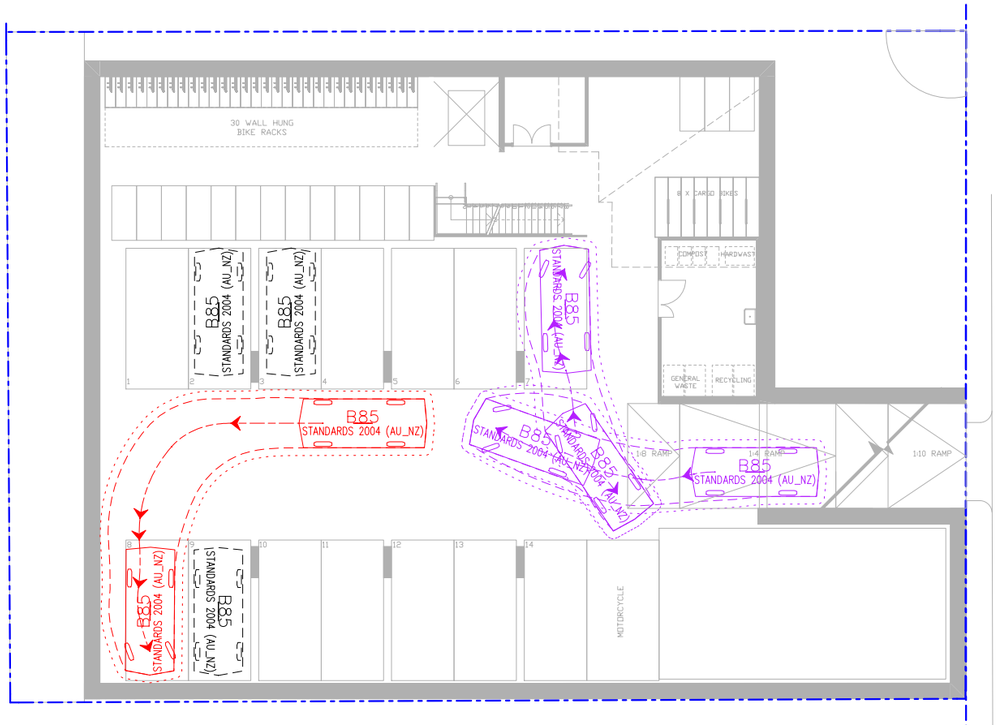
10 CONCLUSIONS

It is proposed to develop the subject site for the purposes of a Nightingale residential development, with 14 car parking spaces in a basement car park.

Considering the analysis presented above, it is concluded that:

- The proposed car parking, bicycle parking and access design is considered appropriate;
- The proposed provision of resident and visitor bicycle parking exceeds the requirements of the Planning Scheme, and is therefore considered appropriate;
- The proposed supply of car parking is appropriate for the proposed development;
- The proposed development is expected to have a negligible impact on the surrounding road network;
- There are no traffic engineering reasons which would preclude a permit from being issued for this proposal.

Appendix A Vehicle Swept Paths



DAVEY STREET

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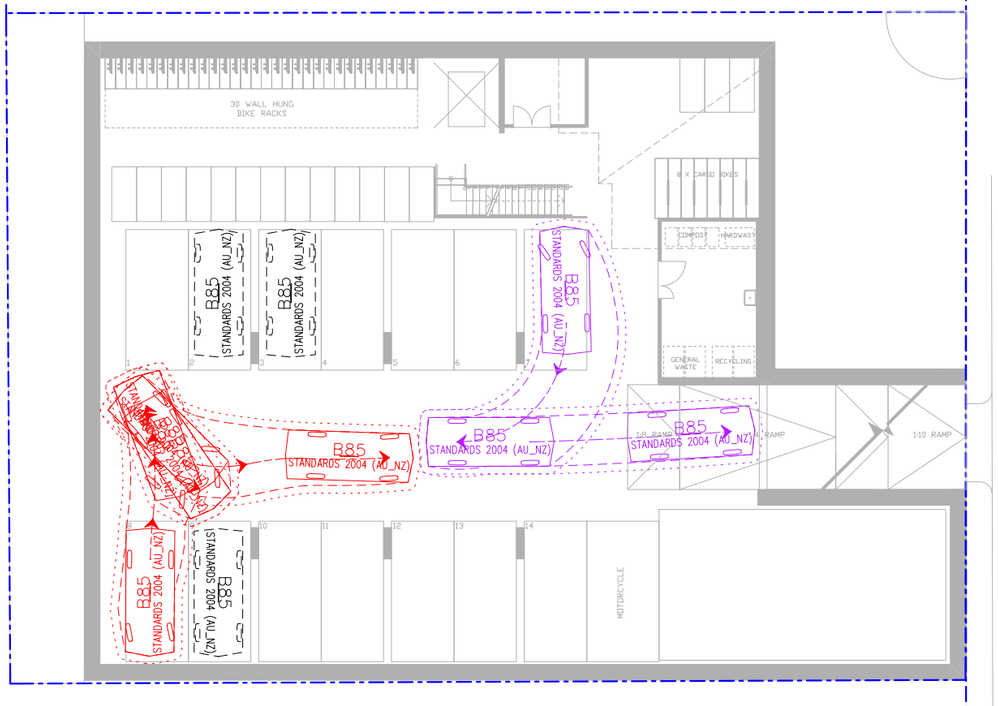

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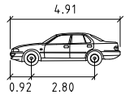

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Drawing Title
11 DAVEY STREET, BALLARAT
SITE ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
DW	VG	NA

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Project Number	Drawing Number	Revision
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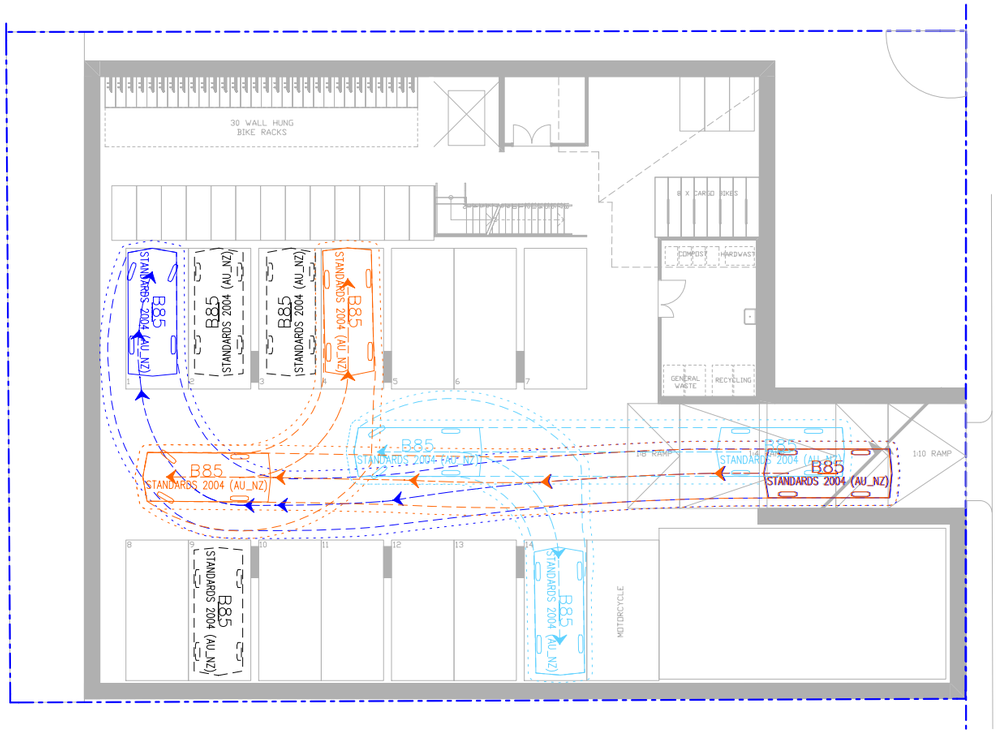

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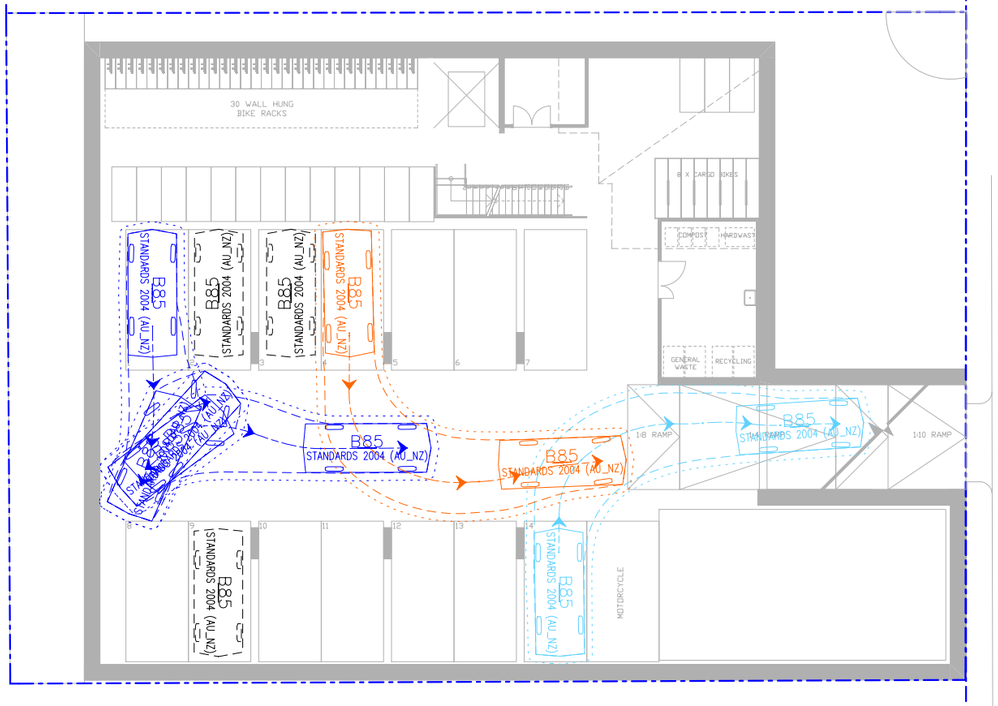

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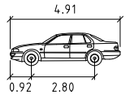

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Drawing Title
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SITE ACCESS
SWEPT PATH ANALYSIS

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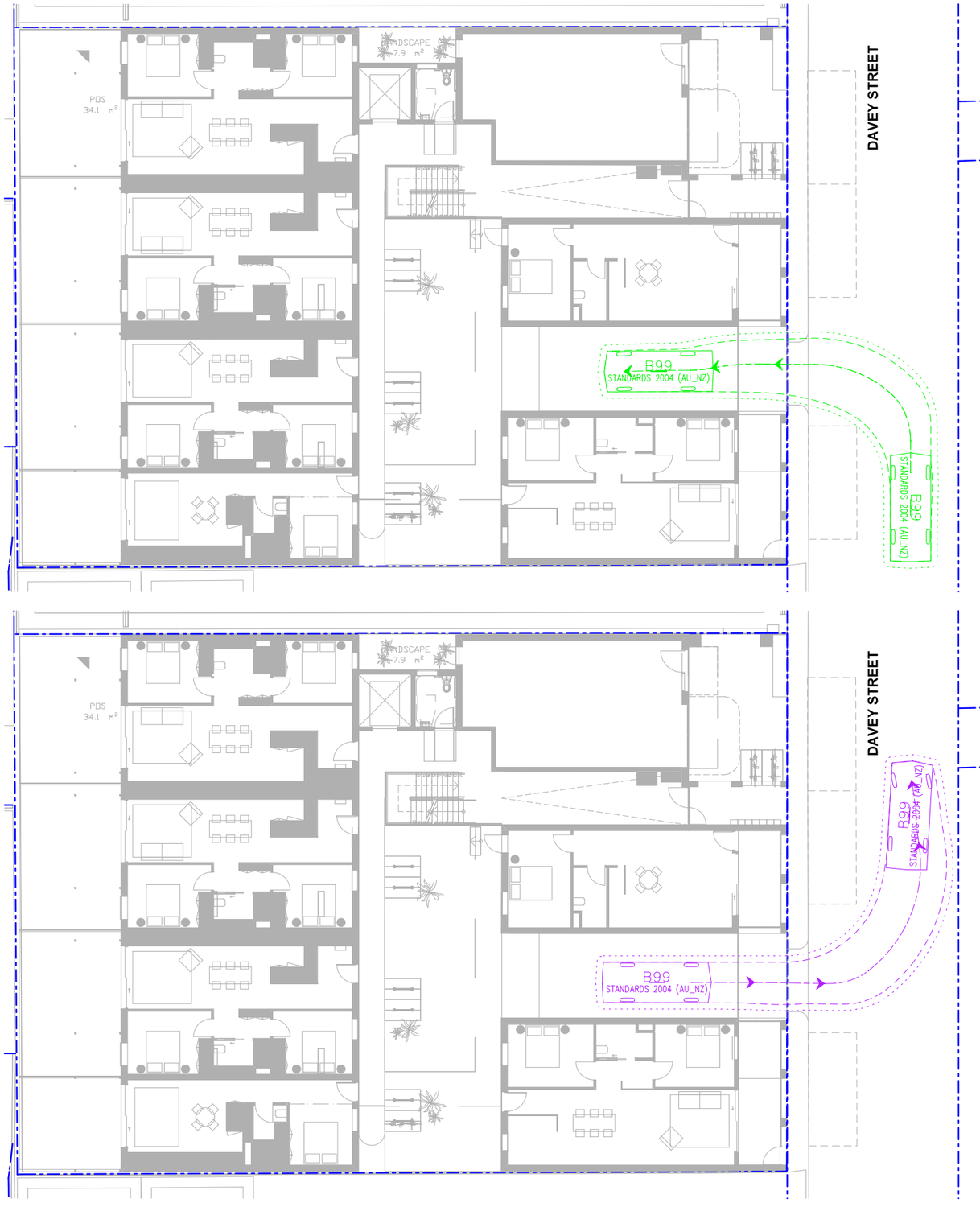

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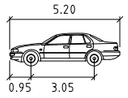

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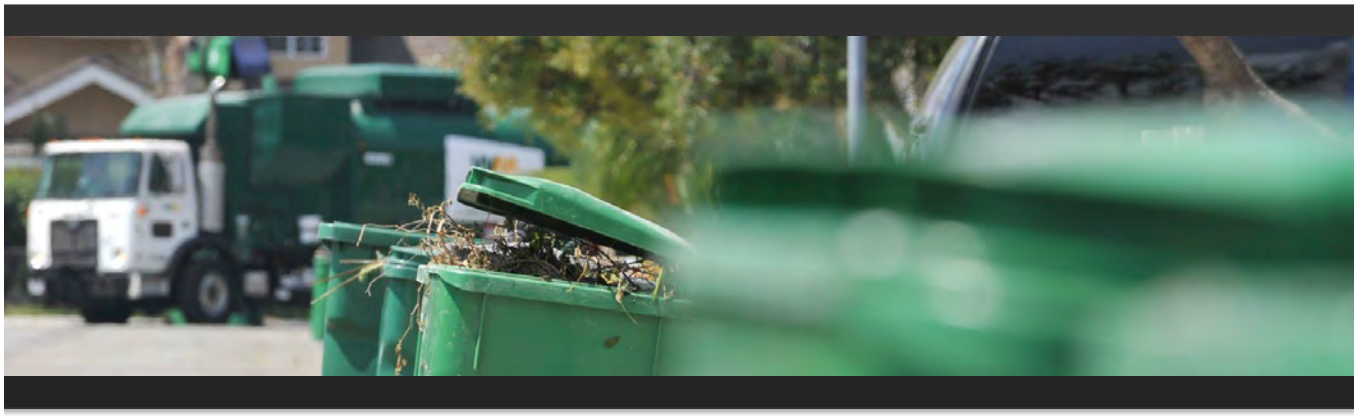
Drawing Title
11 DAVEY STREET, BALLARAT
SITE ACCESS
SWEPT PATH ANALYSIS

Designed	Approved	Melway Ref
DW	VG	NA

Project Number	Drawing Number	Revision
180580	SPA200	A

11 Davey Street, Ballarat

Waste Management Plan



180580WMP001B-F

25 June 2019

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DOCUMENT INFORMATION

Prepared for	hygge property		
File Name	180580WMP001B-F	Report Date	25 June 2019
Prepared by	Adam Gardiner	Reviewed by	Valentine Gnanakone
Signature		Signature	

CONTENTS

TABLES

FIGURES

1 INTRODUCTION

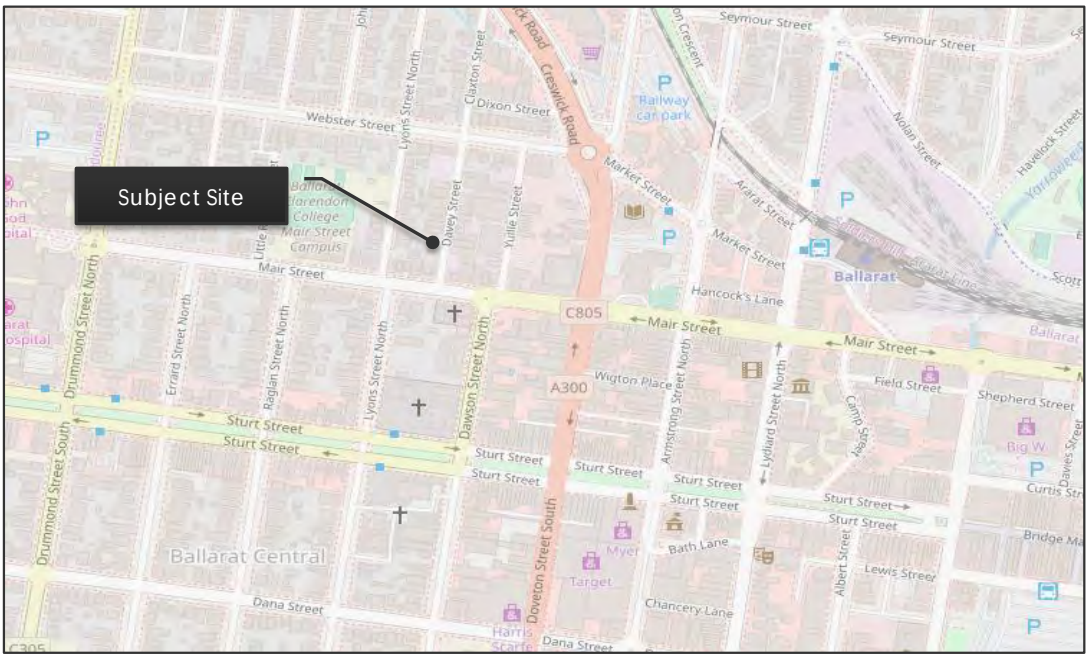
onemilegrid has been requested by hygge property to prepare a Waste Management Plan for the proposed mixed-use development at 11 Davey Street, Ballarat.

The preparation of this management plan has been undertaken with due consideration of the Sustainability Victoria Better Practice Guide for Waste Management and Recycling in Multi-unit Developments and relevant Council documentation.

2 EXISTING SITE CONDITIONS

The subject site is located on the western side of Davey Street, approximately mid-way between Webster Street and Mair Street, as shown in Figure 1.

Figure 1 Site Location



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The site is generally rectangular in shape with a frontage to Davey Street of approximately 26 metres and depth of 37 metres.

Land use in the immediate vicinity of the site is mixed in nature, including both industrial and residential uses.

3 DEVELOPMENT PROPOSAL

3.1 General

It is proposed to develop the site for the purpose of a mixed-use development, comprising 27 apartments and a ground level commercial space.

A breakdown of the development schedule is provided in in Table 1 below.

Table 1 Proposed Development

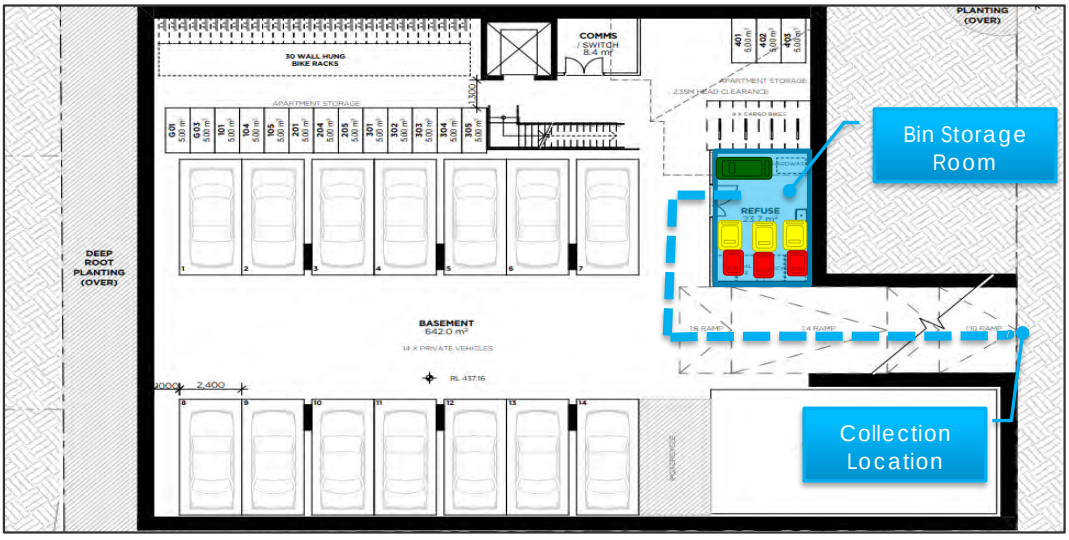
Use	*Component*	*No. / Area*
Dwellings	1-Bedroom Dwelling	6
	2-Bedroom Dwelling	17
	3-Bedroom Dwelling	4
	Sub-Total	27
Food and Drink Premises	Café	68 m²

3.2 Waste Management

It is proposed to utilise a private contractor to manage the collection and disposal of all waste streams associated with the development.

Bins for both the residential and commercial waste will be stored within a dedicated bin storage room within the basement level of the development. Bins will be transferred by the private contractor from the storage room, emptied (on Davey Street) and immediately returned to the bin room. The collection location and expected transfer route is shown in Figure 2 below.

Figure 2 Bin Storage Room and Collection Details



The development will include a dual bin system (landfill and recycling) as well as a composting system for food and green waste, to ensure garbage and recyclables are sorted at the time of disposal.

Residents and staff will be responsible for disposing of recyclables, food or bagged garbage into the appropriate bins located within the bin storage room.

4 WASTE GENERATION

4.1 Garbage and Recycling

The Sustainability Victoria Better Practice Guide for Waste Management and Recycling recommends the following waste generation rates for residential apartments.

Table 2 Multi-Dwelling Residential Developments – Adopted Waste Generation Rates

Dwelling Type	*Garbage*	*Recycling*
One-bedroom unit/apartment	80 L per week	80 L per week
Two-bedroom unit/apartment	100 L per week	100 L per week
Three or more-bedroom unit/apartment	120 L per week	120 L per week

Additionally, the guide recommends adoption of the following rates for commercial uses, based on the rates published by the City of Melbourne.

Table 3 Sustainability Victoria Recommended Rates – Commercial

Use	*Garbage Rate*	*Recycling Rate*
Café	300 L per 100 m^2 per day	200 L per 100 m^2 per day

It is noted that waste generation for shops is highly dependent on the specific tenant and use for both garbage and recycling generation. The above rates are considered to be an upper limit rate which would accommodate the vast majority of retail uses.

The above rates are considered to be appropriate for the proposed development and are aimed to encourage garbage minimisation and increased recycling. Furthermore, the proposed inclusion of compost bins for the proposed development is expected to result in a reduced generation of general garbage.

Based on the recommended waste generation rates, the following weekly waste generation is expected.

Table 4 Expected Waste Generation – Residential

Dwelling Type	*No of Dwellings*	*Garbage*	*Recycling*
One-bedroom apartment	6	480 litres	480 litres
Two-bedroom apartment	17	1,700 litres	1,700 litres
Three-bedroom apartment	4	480 litres	480 litres
Sub-Total	27	2,660 litres	2,660 litres
Café	68m^2	1,020 litres	680 litres
Total		3,680 litres	3,340 litres

4.2 Green and Organic Waste

Given the nature of the proposed development and dwellings (being multi-unit/multi-level), it is expected that green waste generation will be minimal or negligible, and therefore a green waste collection service is not expected to be required.

However, an area within the bin room has been provided for communal compost bins in order to encourage the diversion of green waste away from landfill. The maintenance of these bins will be overseen by the building manager or body corporate.

It is expected that any maintenance and gardening undertaken on common property will be managed by a contractor appointed by the Owner's Corporation. The appointed contractor will be responsible for the disposal of any green waste accumulated during the course of their duties. The contractor will be able to utilise the compost as fertilizer for the common grounds' gardens.

Should the development be producing more compost than can be absorbed by the communal gardens it is recommended that the Body Corporate seek out a willing recipient such as a community garden or local farm.

4.3 Hard Waste

The City of Ballarat does not offer a hard waste collection service. However, hard waste may be disposed of independently by residents, at Council's Recycling Centre/Transfer Station.

4.4 Electronic Waste (E-Waste)

E-waste includes all manner of electronic waste, such as televisions, computers, cameras, phones, household electronic equipment, batteries and light bulbs. On 1st July 2019, the disposal of E-waste to landfill will be banned by the Victorian Government.

Council does not provide a residential kerbside pick-up service for E-waste, therefore E-waste must be taken by residents to the appropriate collection centre, as described below:

- Gillies Street Transfer Station in Ballarat accepts all e-waste;
- Officeworks stores accept small amounts of personal E-waste;
- Aldi stores accept batteries; and
- Some Bunnings stores accept batteries.

5 BIN REQUIREMENTS

5.1 Bin Provision and Specifications

5.1.1 Garbage and Recycling

It is proposed to utilise a private waste contractor, providing weekly waste and recycling collection.

The expected bin requirements for the development are summarised in Table 5. It is noted that only 3 bins are recommended for garbage and recycling although their expected generation is higher than capacity. This is considered acceptable as the majority of food waste should be diverted from the garbage stream to compost reducing the amount reaching the bins. For the recycling it is expected that there will be some natural compaction due to the size of the bins reducing the volume slightly.

Table 5 Bin Provision

Component – Stream	*Total Waste/Week*	*Bin Size*	*Collection Frequency*	*Bins Required*
Garbage	3,680 litres	1,100 litres	Weekly	3 bins
Recycling	3,340 litres	1,100 litres	Weekly	3 bins
Total				6 bins

Table 6 Bin Specifications

Stream	*Capacity*	*Width*	*Depth*	*Height*	*Colour*
Garbage	1,100 litres	1.25m	1.10m	1.35m	Dark green lid and body
Recycling	1,100 litres	1.25m	1.10m	1.35m	Yellow lid and dark green body

To differentiate between Council collection, it is recommended that the bins are colour coded to the Australian Standard (AS4123) or to the standard colour specifications of the private contractor.

5.1.2 Organic Waste

It is proposed to provide each individual dwelling with a composting bin similar to the product offerings of Urban Composter that will allow the storage of organic waste, between trips to the communal bin room. Provision of these bins will encourage the separation of food waste from general waste at the source, diverting it from landfill and reducing the waste footprint of the site.

5.2 Bin Storage

As indicated in Figure 2, it is proposed to provide a bin storage area within the basement level of the development to collect all residential and commercial waste generated. The bin storage area can comfortably store 6 x 1,100 litre bins and the composting system.

The proposed bin storage room is therefore appropriately sized to accommodate the bins required to store all generated waste between collections. Additional area is also provided within the bin storage room to allow for the temporary storage of bulk items and packaging, under the control of the Owners Corporation as well as the communal compost bins.

Furthermore, the bin storage room is located appropriately for access by residents and staff while being secured from the common areas.

The bin storage room should be vermin proof, and have appropriate ventilation, lighting and drainage.

The bin storage room shall be ventilated, and shall be cleaned regularly by the operator or waste collection contractor, to minimise odour.

5.3 Bin Collection

To allow for collection, bins will be transported to the Davey Street frontage by the waste contractor for collection and then immediately returned to the bin storage room.

A bin tug is to be provided to assist in moving the bins up and down the ramp.

5.4 Bin Cleaning

The Owners Corporation shall ensure that the bins are kept in a clean state, to minimise odours and to discourage vermin. This may include regular cleaning by a third party, cleaning by the waste contractor, bin swapping by the waste contractor, or maintenance by residents.

A bin cleaning area should be provided within the bin storage area, with a drain connected to sewer.

6 WASTE MANAGEMENT

6.1 Best Practice Waste Management

Best Practice Waste Management is an initiative designed to reduce the amount of waste generated through encouraging a change of behaviour and action on waste management and moreover recycling.

The benefits of reducing waste generation are far reaching and has been identified as significantly important by Council and the Victorian Government.

The Victorian Waste and Resource Recovery Policy "Getting Full Value" has been prepared by the Victorian Government, and "sets out a position and an approach that will position Victoria as a national leader in resource recovery".

One of the primary goals of the policy is to "Assist Victorians to reduce the waste they generate and save Victorians' money through efficient use of resources", for which the following strategic directions are listed:

- Support commercial, not-for-profit and Victorian public sector organisations to achieve financial savings through waste reduction;
- Provide households with the information and support they need to reduce waste by using household goods more efficiently;
- Continue to work in partnership with the Commonwealth Government through the National Waste Policy: Less Waste, More Resources, and take a lead role in national strategies that harness Victoria's strengths and capabilities

This policy builds on the Towards Zero Waste strategy, which was launched in 2005.

The Owners Corporation shall encourage residents and staff to participate in minimising and reducing solid waste production by:

- Promoting the Getting Full Value Strategy and the Municipalities Waste Management Strategy, including the use of The Waste Hierarchy, which in order of preference seeks to:
  - Avoid waste generation in the first place;
  - Increase the reuse and recycling of waste when it is generated; and
  - Recover, treat or contain waste preferentially to;
  - Its disposal in Land Fill (which is least desirable).
- Providing information detailing recyclable materials to ensure that non-recyclable materials do not contaminate recycling collections;
- Providing information regarding safe chemical waste disposal methods and solutions, including correct battery and electronics disposal methods;
- Encouraging composting for residents; and
- Providing tips for recycling and reusing waste, including encouraging the disposal of reusable items in good condition via donations to Opportunity Shops and Charities.

Furthermore, to maximise recycling, a dual bin system will be installed within each townhouse, providing separate bins for garbage and recycling.

6.2 Bin Usage

Residents will bag and dispose of garbage in the provided bins, located in the bin storage room.

Residents will transport and dispose of recyclables (non-bagged) in the provided bins, located in the bin storage room. Cardboard boxes should be flattened, and containers rinsed and cleaned prior to disposal in the provided bins.

Commercial tenants will dispose of recyclables and bagged garbage in the provided bins in the bin storage room. Cardboard boxes should be flattened, and containers rinsed and cleaned prior to disposal in the provided bins.

Food waste will be transported from individual bins within each apartment to the composting system in the basement.

6.3 Common Property Litter and Waste Removal

The proposed development includes a number of common property areas, including foyers, hallways, parking areas and the bin storage area.

The Owners Corporation shall ensure that all common areas are kept clear of litter, and that all waste is removed from common areas on a regular basis. This includes the bin storage area in particular, to discourage vermin.

6.4 Signage

To avoid contamination between garbage streams, bin lids will be colour coded generally in accordance with contractor standards, to ensure the bin type is easily distinguishable. Furthermore, bins should include typical signage (preferably on the bin lid) to reinforce the appropriate materials to be deposited in each bin. Example signage available from Sustainability Victoria is shown below.

Figure 3 Example Waste Signage

6.5 Collection

On collection days, all bins must be transferred from the bin storage room to the Davey Street frontage for collection by the private contractor, emptied, then immediately returned to the bin storage area.

6.6 Resident and Tenant Information

To ensure all residents and tenants are aware of their responsibilities regarding waste and bin management, an information package should be provided to all residents, including the following information:

- A copy of this Waste Management Plan;
- Methods and techniques for waste reduction and minimisation;
- Information regarding bin collection days and requirements;
- Resident and tenant responsibilities regarding bin usage, storage, and collection; and
- Resident and tenant responsibilities regarding litter and waste removal from the common property.

6.7 Municipal Charges

It is noted that every rateable tenement within the proposed development is liable for municipal waste charges, irrespective of the services provided by Council.

7 PLANNING SCHEME REQUIREMENTS – CLAUSE 55.07-11

Clause 55.07-11 of the Ballarat Planning Scheme identifies the waste and recycling objectives for Apartment Developments, including:

- To ensure dwellings are designed to encourage waste recycling.
- To ensure that waste and recycling facilities are accessible, adequate and attractive.
- To ensure that waste and recycling facilities are designed and managed to minimise impacts on residential amenity, health and the public realm.

In particular, Standard B45 indicates that developments should include dedicated areas for:

- Waste and recycling enclosures which are:
  - Adequate in size, durable, waterproof and blend in with the development.
  - Adequately ventilated.
  - Located and designed for convenient access by residents and made easily accessible to people with limited mobility.
- Adequate facilities for bin washing. These areas should be adequately ventilated.
- Collection, separation and storage of waste and recyclables, including where appropriate opportunities for on-site management of food waste through composting or other waste recovery as appropriate.
- Collection, storage and reuse of garden waste, including opportunities for on-site treatment, where appropriate, or off-site removal for reprocessing.
- Adequate circulation to allow waste and recycling collection vehicles to enter and leave the site without reversing.
- Adequate internal storage space within each dwelling to enable the separation of waste, recyclables and food waste where appropriate.

Waste and recycling management facilities should be design and managed in accordance with a Waste Management Plan approved by the responsible authority and:

- Be designed to meet the best practice waste and recycling management guidelines for residential development adopted by Sustainability Victoria.
- Protect public health and amenity of residents and adjoining premises from the impacts of odour, noise and hazards associated with waste collection vehicle movements.

In relation to the above, the proposed development provides a centrally located and accessible bin storage area, which can accommodate the required waste bins. It also provides opportunity for residents to compost any green and organic waste on site.

8 OCCUPATIONAL HEALTH & SAFETY RESPONSIBILITIES

The Owners Corporation/site operator shall ensure compliance to all relevant OH&S regulations and legislation, including the following:

- Worksafe Victoria Guidelines for Non-Hazardous Waste and Recyclable Materials

9 CONTACT INFORMATION

9.1 Council

Ballarat City Council

Phone: (03) 5320 5500 (Customer Service)

Web: www.ballarat.vic.gov.au

9.2 Contractors

Cleanaway

Services: Private contractor

Phone: 131 339

Web: www.transpacific.com.au/content/transpacific-cleanaway.aspx

WasteWise

Services: Private contractor

Phone: 1300 550 408

Web: www.wastewise.com.au

9.3 Equipment

Eco-Safe Technologies (odour control equipment)

Phone: 0411 335 753

Web: www.eco-safe.com.au

Email: info@eco-safe.com.au

Electrodrive (bin tug systems)

Phone: 1800 333 002

Web: www.electrodrive.com.au

Email: vic@electrodrive.com.au

Urban Composter

Phone: 0403 990 782

Web: www.urbancomposter.com.au/contact-us/

9.4 Others

Sustainability Victoria

Services:	Sustainable Waste Management initiatives and information
Phone:	1300 363 744 (Energy, Waste and Recycling)
Web:	www.sustainability.vic.gov.au
Email:	info@sustainability.vic.gov.au

7. GENERAL BUSINESS - MATTERS ARISING FROM THE AGENDA

8. CLOSE