

Appendix 2: Internal Referral Responses

I.1 Internal referrals

The application was internally referred for comment.

A summary of responses is as follows:

Internal Department / Referral Officer	Internal Referral Comments (summarised)
Heritage	15-10-2019: No Heritage issues
Waste Management	<p>23-10-2020 (10-17 storey proposal): I have reviewed the plan and have below comments;</p> <ul style="list-style-type: none"> • Allocation of waste and recycling bins are not sufficient for the apartments therefore either the number of bins could be increased or the number of collections. <ul style="list-style-type: none"> ○ Allocation of bins to commercial area is suffice. • Recommend allocated space for food/organic bin for future council services. • Recommend allocated space for E-Waste. <p>09-07-2020 (10-13 storey proposal): I have reviewed the plan and have following comments;</p> <ul style="list-style-type: none"> • As mentioned on the WMP, space allocation for Hard Waste on commercial bin storage needs to be drawn on the plan. • Please provide width of the resi bin room door (lobby door) and also the door width to the bin chute room. • Highly recommend space allocation for organic/green bin for future council services • Highly recommend space allocation for Charity bin and E-Waste
Traffic Engineers	<p>23-10-2020 (10-17 storey proposal): <u>Parking Layout and Access Arrangements</u></p> <ul style="list-style-type: none"> • Proposed access to off-street parking facilities is via a proposed crossover to Rocklea Drive, this is considered acceptable. • The traffic report has indicated that all 90-degree car spaces will be provided to be at least 2.6m wide, 4.9m long and generally accessed from an aisle at least 6.4m long. This is in accordance with the planning scheme and is considered acceptable. • The traffic report has indicated that all columns have been located outside the door opening envelop for parking spaces, as well as an additional 300mm clearance has been provided adjacent to any walls and/or columns. This is considered acceptable. • The traffic report notes that aisle extensions been provided at end of blind aisles to facilitate access to parking spaces, in accordance with the planning scheme. If this cannot be achieved, please provide swept path assessment showing access/egress can be achieved. • The traffic report has indicated that all disabled car parking spaces will be provided in accordance with Australian Standards, including the adjacent shard area. This is considered acceptable. • The traffic report indicates that critical spaces have been checked for accessibility using a B85 design vehicle. Can the applicant please provide evidence of this assessment in the form of a swept path analysis (Noting critical spaces include end spaces, spaces adjacent columns/walls, DDA spaces etc) • Can the swept path assessment also include two-way traffic flow for all access ramps located within the off-street car park (B85 and B99 vehicle simultaneously using the ramps with suitable clearance). • Plans provided by the applicant indicate motor cycle spaces have been designed at least 1.2m wide and 2.5m long, in accordance with the Australian Standards. This is considered acceptable. • The traffic report has indicated that all ramp grades and transition changes have been provided in accordance with the planning scheme. This is considered acceptable.

- The traffic report has indicated that all ramp grades and transition changes have been provided in accordance with the planning scheme. This is considered acceptable.
 - **Please ensure a minimum height clearance of 2.1m is provided above all parking spaces in accordance with Clause 52.06 of the planning scheme.**
 - All redundant crossovers must be reinstated to Council satisfaction.
 - All proposed crossovers must be installed to Council satisfaction.
- Parking Overlay and Parking Provisions**
- Clause 45.09 of the planning scheme sets out the following maximum car parking space rates:
 - 0.5 spaces to each one or two-bedroom dwelling
 - 1 space to each three or more-bedroom dwelling
 - 3.5 spaces to 100sqm of leasable restaurant floor area
 - Based on the above rates, the maximum car parking spaces for each land use is as follows:
 - 6 spaces for one-bedroom dwellings
 - 76 spaces for two-bedroom dwellings
 - 29 spaces for three-bedroom dwellings
 - 7 spaces for restaurant use
 - The traffic report has indicated that parking provisions for the one-bedroom dwellings, three-bedroom dwellings and restaurant use will be provided in accordance with the above maximum parking rates and is considered acceptable.
 - The traffic report has indicated that 93 parking spaces will be allocated to the two-bedroom dwellings, exceeding the maximum by 17 parking spaces. Based on this provision, the applicant is seeking a permit to exceed the maximum car parking limit.
 - Clause 45.09 sets out a list of decision guidelines for exceeding the car parking limit. The traffic report has indicated that 8 of the 9 guidelines have been met in this case. Considering the assessment provided in the traffic report, the additional car parking spaces allocated to the 2-bedroom dwellings is considered acceptable in this case.
 - Clause 37.04 of the planning scheme sets out the following car share parking rates:
 - 2 spaces, plus an additional 1 space per 25 spaces for residential uses
 - 1 space per 60 car spaces for non-residential uses (if exceeds 10,000sqm)
 - Based on the above rates, the number of car share spaces required is as follows:
 - 7 residential use car share spaces
 - The traffic report has indicated that 7 car share spaces will be provided for the residential uses. This level of car share parking is in line with the planning scheme and is considered acceptable.
 - **Regarding the car share spaces, can the Applicant provide more information about the Car Share i.e. what providers will occupy the spaces, have they been in contact with them etc. We suggest referring the planning application to the Strategic Transport team for comments and feedback.**
 - Clause 33.07 of the planning scheme requires at least 3 off-street motor cycle spaces be provided for the proposed land uses. The traffic report has indicated that at least 6 spaces will be provided, this exceeds the planning scheme and is considered acceptable.
- Traffic Generation**
- The traffic report has suggested a residential peak traffic generation rate of 0.25 vehicle movements per apartment with a car space. Based on this rate, traffic generation assumptions of 8 inbound and 24 outbound movements during the AM peak and 22 inbound and 10 outbound movements during the PM peak. This rate has been assessed and is considered acceptable.
 - The traffic report has suggested that each of the allocated restaurant parking spaces will generate a movement during the commuter peak periods. Based on this rate, a traffic generation assumption of 8 movements is expected during each of the peak period. This rate has been assessed and is considered acceptable.
 - The traffic likely generated by the proposed car share spaces will be negligible.
 - The total traffic generation from the proposal is 40 movements for entry and exit volumes during peak hours. This is considered satisfactory.

- The traffic report has undertaken a SIDRA intersection analysis of the critical intersection, which indicates that the intersection will operate in a satisfactory manner (with minimal delays and queues) post development of the site.
- **Please note that no cumulative trip generation for other developments has been considered.**

Pedestrian Sightlines

- The traffic report has indicated that pedestrian sight triangles will be provided in accordance with the planning scheme, being 2m x 2.5m and at least 50% clear of obstruction. This is considered acceptable.

Provisions for Loading & Waste Collection

- One (1) loading area has been proposed on-site, located on the ground floor within the off-street car park.
- The traffic report has provided a swept path assessment which indicates that a 6.35m Waste wise vehicle can enter and exit each loading area with suitable clearance and number of corrective manoeuvres, this is considered acceptable.
- The traffic report does not provide any information on how residents are expected to load and unload during moving in/out operations. **Can the traffic report please be updated to include information on residential loading activates (including swept paths for a typical residential loading vehicle), noting that the proposed loading area will need to have convenient access to/from residential lobbies and elevators.**
- **All loading (commercial and residential) generated by the proposed development must be contained wholly within the site.**
- Waste Management plan to be referred to Council's Waste Management department for assessment.

Provisions for Bike Parking

- Clause 37.04 of the planning scheme sets out the following bicycle parking rates:
 - In developments of more than 50 dwellings, 1 space per dwelling for residents and 1 space per 10 dwellings for visitors
 - In developments with over 10,000sqm of non-residential floor space, 1 space per 50sqm of net floor area for staff and 1 space per 1,000sqm of net floor area for visitors.
- Based on the above rates, the number of bicycle spaces required is as follows:
 - 194 residential bicycle spaces
 - 19 residential visitor spaces
- The traffic report has indicated that 197 bicycle parking spaces will be provided for residential use, comprising a mixture of horizontal rails, vertical racks and storage cage spaces. This level of bicycle parking exceeds the planning scheme and is considered acceptable.
- The landscape plan has indicated that 28 visitor bicycle parking spaces will be provided along the sites frontage to Rocklea Drive, this exceeds the residential visitor requirement and is considered acceptable.
- The Australian Standards require that a minimum of 20% of all bicycle spaces are provided at ground level. The traffic report has indicated that 82 of the 225 spaces will be provided at ground level, this exceeds the standard and is considered acceptable.
- **All bicycle spaces must be installed in accordance with the Australian standards, ensuring each space has a clear 1.5m access aisle, Ned Kelly spaces are spaced at 0.5m intervals (min.), ground level spaces (i.e. hoops) are spaced at 1m intervals (min.)**
- The plans indicate all visitor bicycle parking will be provided along the sites frontage to Rocklea Drive, this is considered acceptable.

(10-13 storey proposal):

I note the Traffic Report dated 28 April 2020 is generally consistent with the report dated 5 September 2019.

Similar to the previous version the site is requesting to exceed the number of car parking provided for two-bedroom dwellings. Below is an extract of the traffic report. Similar arguments as per previous report were made to seek approval for the parking variation.

Use	No./Size	Max. Rate	Max Limit ⁽¹⁾	Allocation	Variation Sought?
One-Bed Dwelling	12	0.5 per unit	6 spaces	6 spaces	No
Two-Bed Dwelling	121	0.5 per unit	60 spaces	101 spaces	Yes
Three-Bed Dwelling	21	1 space per unit	21 spaces	21 spaces	No
Restaurant	224m ²	3.5 space per 100m ²	7 spaces	7 spaces	No
<i>Car Share Allocation⁽²⁾</i>			7 spaces	7 spaces	No
TOTAL			101 spaces	142 spaces	Yes

Note (1): Clause 52.06 states... "if in calculating the number of car spaces the result is not a whole number, the required number of car parking spaces is to be rounded down to the nearest whole number."

Note (2): Additional to the Clause 45.09 requirements, Clause 37.04 requires car share spaces at a rate of 2 space, plus an additional 1 space per 25 spaces.

No cumulative traffic generation for other developments has been considered.

It is recommended the "Potential Future Conversion" plan are fully dimensioned.

Update plans to clearly show ramps' length.

No indication if a boom gate (or something similar) will be provided. Should a boom gate is installed/proposed it must be setback to ensure all vehicles will be queued on-site.

Consistent with Jacob's comments, can the Applicant provide swept path assessments for critical parking spaces (this includes end spaces, spaces adjacent columns/walls, DDA spaces etc) and show two-way traffic flow (simultaneously) for all access ramps?

The traffic report does not indicate if the loading area can be used by future residents. This will be beneficial to ensure all loading and unloading are undertaken on-site.

Can the Applicant confirm the largest service vehicle can access the site? I note, as per AS 2890.2 the minimum headroom clearances for a SRV and MRV are 3.5m and 4.5m, respectively.

The plans indicate a canopy/awning is proposed across the driveway. It is recommended this section of the canopy/awning is removed. Also update plans to clearly show the dimensions of the canopy.

A Green Travel Plan is not provided. I also suggest you seek advice from the Strategic Transport team too regarding the GTP.

Also, more information should be provided regarding the Car Share space. I also suggest you seek advice from the Strategic Transport team too.

Can they clearly show where visitor bike racks are located?

I suggest delete the footpath trading (table/chair). The footpath must be unobstructed at all time.

City Strategy / Urban Design

06-01-2020 (10-17 storey proposal):
Site and Context

The diagram overlaid illustrates key aspects of the site (shown with red outline) and its context that influence development outcomes:



- A. The **Westgate Freeway**, abutting part of the northern boundary, has a 160m wide minimum reserve width in this location. This corridor forms the northern edge of Wirraway and is a non-sensitive interface. This major road has potential to cause amenity impacts on future residents (e.g. noise and air quality). To the north of the Freeway is an industrial area (**Employment Precinct**) with uses and activities that may cause further amenity impacts.
- B. A **potential freight alignment** is included in CCZ1, running between the subject site and the Westgate Freeway reserve. The exact location and width of this corridor has not yet been determined, and there is no specific protection afforded in current planning controls. There is potential that the corridor will extend into the subject site, which will impact on development yield and built form outcomes. The Fishermans Bend Framework indicates that this route would be elevated, which may result in additional residential amenity impacts. It appears that this corridor would also remove the majority of existing roadside vegetation that provides some buffering from the Westgate Freeway.
- C. **Salmon Street** is a key north-south transport route within Fishermans Bend, connecting Wirraway / Williamstown Road with the Employment Precinct / Lorimer Street. The volume of vehicles movements and width of the reserve will likely act as some form of barrier to residential movements between neighbourhoods. Vehicle crossovers onto Salmon Street are also not permitted, which will direct vehicle access for adjoining development sites to other streets, such as Rocklea Drive.
- D. There is a 220kV **transmission line** traversing the northern portion of Wirraway, which is contained within a 40m easement. This infrastructure will constrain the

development and use of some public open space in the area, including the proposed park south of the site.

- E. The **core area** of Wirraway is readily accessible to the site, with the Plummer Street boulevard approximately 300m to the south. A tram route is proposed along this street, and a potential Metro station is located approximately 400m to the southeast.
- F. The site has very good access to proposed **cycle routes**, including the strategic cycling corridors along Plummer and Salmon Streets. A future pedestrian / cycle bridge is proposed over the Westgate Freeway from the northern end of Rocklea Drive (adjacent to the site), which will connect with the Employment Precinct.
- G. A **new park** is proposed immediately to the south of the site, on the opposite side of Rocklea Drive (an island site). The area of unencumbered open space (not within the electricity easement) is approximately 3,600sqm and is intended to function as a 'neighbourhood park'. The **Wirraway North open space** is also proposed further to the east of the site, on the opposite side of Salmon Street.
- H. A new north-south road is proposed between Plummer Street and the southern section of Rocklea Drive, as an extension of Smith Street. This street will provide a view corridor from the Plummer Street spine towards the new neighbourhood park, with the subject site behind. Any development on the site will act as a natural **focal point** at the end of this corridor.
- I. The site has good **solar access**, however, has exposure to the western sun.
- J. The development potential of the property at **19 Rocklea Drive**, abutting the northeast boundary of the site, will be greatly influenced by its relatively small size of 770sqm. Should land be acquired for the potential freight corridor, this area will be reduced, which would further reduce the scale of built form that could eventuate.
- K. The property at **11-15 Rocklea Drive**, abutting the western boundary of the site, is also shown within the extent of the potential freight corridor.

Policy Context

The Fishermans Bend Vision is; "A thriving place that is a leading example for environmental sustainability, liveability, connectivity, diversity and innovation" (Clause 22.15).

The site is located within the Wirraway precinct. The Fishermans Bend Framework (September 2018) provides the vision for this precinct:

A predominantly family-friendly inner city neighbourhood close to the bay and Westgate Park.

Wirraway is a family-friendly neighbourhood. Small parks, plazas and playgrounds throughout the neighbourhood are linked by leafy streets lined with shops, businesses and homes. Wirraway provides a choice of diverse housing, including townhouses and small to medium scale apartment buildings. There is also some high-rise development centred on the intersection of proposed public transport routes. Within this precinct a range of retail, cafes and restaurants create an active community space along the Plummer Street boulevard. Building heights step down towards Williamstown Road to respect Garden City's low-scale built form.

JL Murphy Reserve continues to be a focus for recreation, active through the day and evening, with organised sports and leisure activities. Easy access to Sandridge Beach, Westgate Park and into the Sandridge Precinct is provided by high quality walking and cycling links.

Wirraway is known for its thriving arts scene. Small galleries, art and design centres and cultural facilities are promoted and attract visitors from all over Melbourne. This is part of Wirraway's success as a place for innovation and creativity and gives it a clear identity.

The following key planning controls apply to the subject site:

- Capital City Zone – Schedule 1 (Fishermans Bend Urban Renewal Area) (CCZ1).
- Design and Development Overlay – Schedule 33 (Fishermans Bend – Wirraway Precinct) (DDO33).
- Clause 22.15 (Fishermans Bend Urban Renewal Area Policy).

- Infrastructure Contributions Overlay – Schedule 1 (Fishermans Bend Infrastructure Contributions Plan) (ICO1).
 - Parking Overlay – Schedule 1 (Fishermans Bend Urban Renewal Area) (PO1).
- Under these controls, the following key requirements that apply to the proposed development. All controls are discretionary unless noted as mandatory.
- Maximum dwelling density (non-core area of Wirraway) – 174 dwellings/ha (equating to 55 dwellings for the site) (CCZ1). As discussed in Section 2.1, this mandatory requirement does not apply to this proposal;
 - Building typology – mid-rise (defined as being between seven to 15-storeys) (Area W1) (DDO33). The preferred precinct character is; “*Generally mid-rise developments that:*
 - *Have the potential for commercial uses, including campus style developments and smaller scale commercial spaces that support creative industries, north of Woolboard Road.* [We consider that this outcome applies to the subject site, as the east-west section of Rocklea Drive is effectively a continuation of Woolboard Road]
 - *Include block (such as courtyard and perimeter block developments), hybrid and narrow lot developments, south of Woolboard Road extension.* [Not relevant to subject site]
 - *Retain and adaptively reuses heritage and character buildings.* [Not relevant to subject site]
 - *Provide landscaped spaces at ground level through the provision of lanes and through block links, plazas, courtyards and communal open space to provide high levels of amenity for residents and workers.*
 - *Create a sense of address for properties fronting the Woolboard Road Linear Park and new Wirraway North Park.* [Not relevant to subject site];
 - Maximum building height – 30m / eight storeys (DDO33);
 - No additional overshadowing of proposed new park immediately south of the site between 11:00am and 2:00pm on 22 September (above the shadows cast by hypothetical buildings built to the Maximum street wall height and existing buildings) (mandatory) (DDO33);
 - Built to street boundary, except for 3m setback for ground floor apartments to facilitate a landscaped transition from the street (DDO33);
 - Maximum street wall height – six storeys (Rocklea Drive is 20m wide) (mandatory) (DDO33);
 - Setbacks above the street wall – 10m preferred; 5m minimum (mandatory) (proposed building is between eight and 20 storeys) (DDO33). Note, the preferred building height is 8 storeys;
 - Side and rear setbacks (DDO33):
 - Below the maximum street wall height – on or within 300mm of boundary or 9m preferred; 6m minimum (mandatory); and
 - Above the maximum street wall height – 10m preferred; 5m minimum (mandatory) (proposed building is less than 20 storeys);
 - Building separation within site (above street wall height) – 20m preferred; 10m minimum (mandatory) (DDO33);
 - No causing of unsafe wind conditions in publicly accessible areas in proximity of site (mandatory) and should achieve comfortable wind conditions in proximate publicly accessible areas (DDO33);
 - Communal open space – 30% minimum net developable area, which is designed to meet the needs of a range of potential users and can be readily accessed from within the development and provide direct pedestrian connections to the street. Ground level spaces are encouraged (DDO33);
 - Active street frontages, with specific requirements for ground level dwellings, car parking, entrances, windows and balconies, and building services (DDO33). [Note

that requirements relating to Primary or Secondary active street frontages as Rocklea Drive is not identified as one of these streets];

- Provision of building adaptability opportunities, for future employment uses, and different dwelling and retail / commercial tenancies, specifically floor to ceiling heights, level car parking floors, dwelling layouts and location of load bearing walls (DDO33);
- Minimum plot ratio for employment floor area – not applicable (Clause 22.15);
- Housing diversity, including 6% minimum affordable housing, dwellings suitable for households with children, 30% minimum 3-bedroom dwellings and adaptable floor plates (Clause 22.15);
- The social housing uplift provisions in Clause 22.15 and CCZ1 aren't relevant to the subject proposal as dwelling density requirements don't apply;
- Design excellence, being (amongst other things) (Clause 22.15):
 - Buildings that contribute to a high quality public realm;
 - Developments that deliver spaces, including open spaces, for people to meet, gather, socialise, exercise and relax; and
 - Developments that deliver variation in massing, building height, and roof forms and staggering or offsetting of tower footprints;
- Provision of landscaping in open space areas and use of landscape elements that reduce the impact of the urban heat island effect including vegetation, green roofs and water bodies (Clause 22.15);
- Maximum car parking (PO1):
 - For each one- or two-bedroom dwelling – 0.5 space;
 - For each three-bedroom dwelling – 1 space; and
 - Retail premises (restaurant) – 1 space for each 100sqm of gross floor area; and
- Other parking (CCZ1):
 - Bicycles – 1 space per dwelling and 1 visitor space per 10 dwellings;
 - Motorcycles – 1 space for 50 dwellings; and
 - Car share scheme – 2 spaces plus 1 space per 25 car spaces.

Development requirements are also provided elsewhere in the Planning Scheme, particularly Clause 21.05 (Built Form), Clause 22.06 (Urban Design Policy for Non-Residential Development and Multi-Residential Development) and Clause 58 (Apartment Developments).

Assessment

Site Planning

- Landscaped spaces at ground level have not been provided, which are required to provide high levels of amenity for residents and workers. Such spaces include plazas, courtyards and communal open space (preferred precinct character for Area W1). Instead, the podium fills the majority of the site and the communal open spaces are located on the podium and tower roofs. In addition, 3.0m landscaped setbacks have not been provided to ground level dwellings on street frontages. On this basis, site planning is not consistent with DDO33.

It is considered that the mid-block link recommended in Clause 22.15-4.8 through the site is not required, due to the abutments of the site (particularly the Westgate Freeway).

- The proposed car parking numbers are significantly higher than the maximum permitted for this site under PO1 (currently 149 spaces proposed compared with 113 spaces permitted). Based on the current proposal plans, this 36-space excess is the equivalent to one level of podium parking – this floor area could be better utilised to reconfigure the podium to create a built form that better responds to the preferred building typology and character of the area.
- The location of vehicle access via the existing crossover at the southwest corner of the site is consistent with DDO33. Relocation of this access, however, to the northeast corner of the site (northern end of the Rocklea Drive frontage) should be explored. As illustrated in the diagram below, if there are no vehicle access points on

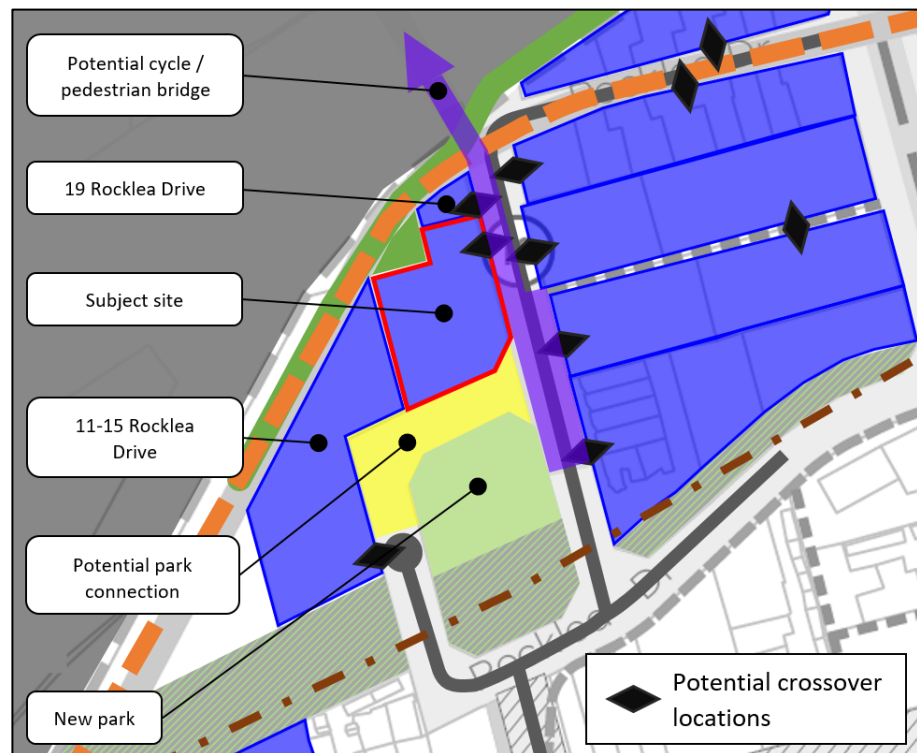
the abutting east-west section of Rocklea Drive (both the subject site and 11-15 Rocklea Drive), there is potential to expand the new park across this road reserve. This outcome will provide a better interface to the park. This outcome will provide the following benefits:

- Provide enhanced amenity and liveability for future residents and visitors to the subject development and future development on 11-15 Rocklea Drive (which could help offset the adverse amenity impacts on the adjoining Westgate Freeway and future elevated freight route); and
- Provide a larger area of public open space for this area that is not encumbered by the existing transmission lines and easement running through the southern portion of the new park as well as other proposed open space areas in this area.

If this occurred, the additional public open space would not be used for overshadowing calculations under Clause 2.6 of DDO33.

This potential outcome could be compromised by the future pedestrian / cycle bridge proposed over the Westgate Freeway from the northern end of Rocklea Drive. This bridge will potentially impact vehicle access to the subject site, as well as other properties fronting this section of Rocklea Drive. This matter was identified in the Fishermans Bend Planning Review Panel hearings. The Review Panel recommended that this issue should be resolved in the Precinct Plan (Section 6.12 of Report No. 5), which has not been undertaken to date.

The loading area, bicycle parking and services should also be relocated in accordance with the new vehicle access point (acknowledging that direct access between the restaurant and loading bay will be challenging).



- Sleeving of the car parking areas within the podium behind the restaurant and dwellings on the street frontages is supported and needs to be maintained as part of any changes to the proposal.
- The car parking areas within the podium are located on the western site boundary, where aluminium louvres are proposed for ventilation. The proponent should consider the impact on natural ventilation of the car parking area should future development on the adjacent site at 11-15 Rocklea Drive be built to the boundary (as allowed for in DDO33).
- The primary residential access point at the southeast corner of the site is consistent with DDO33.

- The proposed restaurant tenancy on the Ground Floor and facing the new park is supported. Proposed street-trading to the entry forecourt is generally supported. The tenancy has a 224sqm area, so it would be beneficial for the design to allow for division into smaller tenancies if needed to respond to specific operators and market factors.

Built Form

Building Typology

- Site planning of the proposal has resulted in a large podium that occupies most of the site. On top of this podium are two towers – a taller northern tower and a lower southern tower. A tower building typology on this site is not consistent with DDO33.
- The Fishermans Bend Urban Design Strategy 2017¹, provides explanations for the preferred building typologies in Fishermans Bend, which help achieve the delivery of housing diversity (p. 66). In combination with a range of building height limits and dwelling density controls, the diversity of living environments created by different typologies provides choice for different lifestyles and life stages. Figure 36 provides further description and preferred locations of the different building typologies for Fishermans Bend (pp. 68-69).
- The distribution of different built form, including typologies, is guided by CCZ1, which states that the “*scale of growth is aligned with the provision of public transport and other infrastructure*” (zone purpose). It is in the Core area of Wirraway, and particularly centred on the intersection of proposed public transport routes that some high-rise development is envisaged. The DDO33 design objectives seek, “*some slender, well-spaced towers included in Core areas and a ‘tooth and gap’ approach on both sides of Plummer Street and the Core*”.
- The Fishermans Bend Urban Design Strategy describes the preferred building typology for Wirraway:

“The primary focus of Wirraway is to support family friendly housing. The residential density targets here are lower than the other three precincts. Within the new activity core taller buildings are supported to define this centre, however these should ensure that the southern side of Plummer Street is not overshadowed. Generally 6 storey height limit in the non-core areas is proposed, reducing to 4 storeys at the interface to low-scale neighbourhoods to the south.” (p. 88)

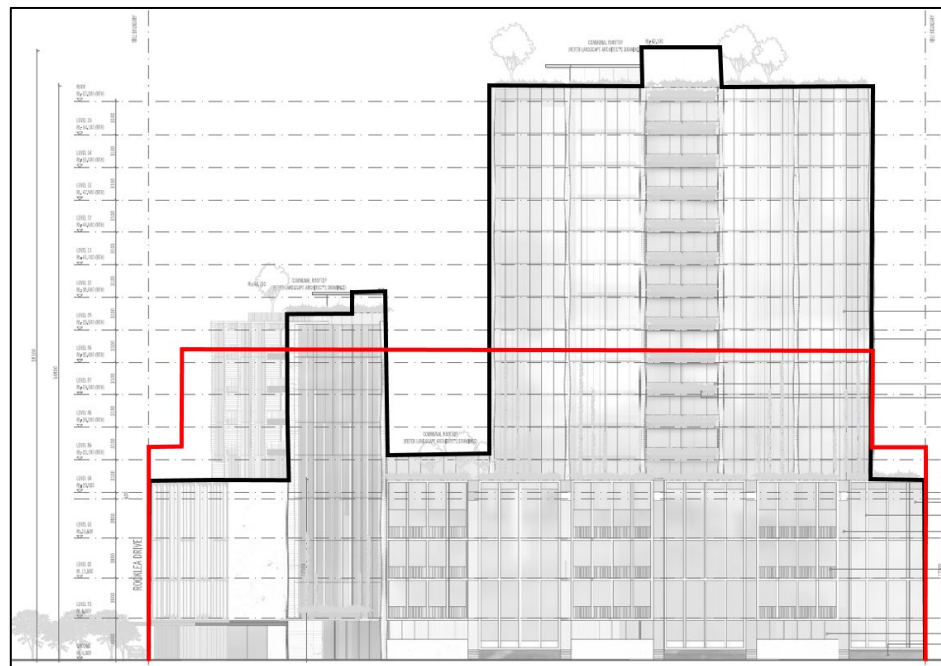
Figure 42 of that Strategy also shows the subject site as having a proposed built form that is; “*Low-mid-rise to support a diverse range of family friendly housing, including infill, courtyard and perimeter block developments*” (p. 89). Tower forms are not supported in the Non-core areas of Wirraway (Figure 36).
- These typologies will help achieve the preferred mid-rise character for the Non-core Area W1 of Wirraway. The character description refers to “*campus style developments and smaller scale commercial spaces*” in the portion north of Woolboard Road (including the subject site, as discussed previously in this advice). Elsewhere in Area W1, block (such as courtyard and perimeter block developments), hybrid and narrow lot developments are envisaged.
- The proposed tower building typology will not contribute to the creation of a neighbourhood that has a “*distinct identity and character*”, as sought by Clause 22.15 (policy objective).

Building height

- The proposed building height is a maximum 58.1m (top of the core overrun of the northern tower). The core overrun is included in height calculations, as it is not set back at least 3m behind the building façade, as required in Clause 2.5 of DDO33. The communal lounge on the roof of the northern tower is considered a storey, so the northern tower is 17 storeys. The southern tower has a maximum height of ten storeys and 36.7m.
- The maximum building height for Area W1 is eight storeys / 30m (refer to diagram below). Both the northern and southern towers are higher the preferred building

¹ Referred to as a background document to the Fishermans Bend Framework (refer p. 79).

height by nine storeys / 28.1m and two storeys / 6.7m respectively (as illustrated in the diagram overleaf). This is a substantial exceedance. Under the definition of mid- and high-rise in Clause 2.4 of DDO33, the proposal is high-rise and is not consistent with DDO33.

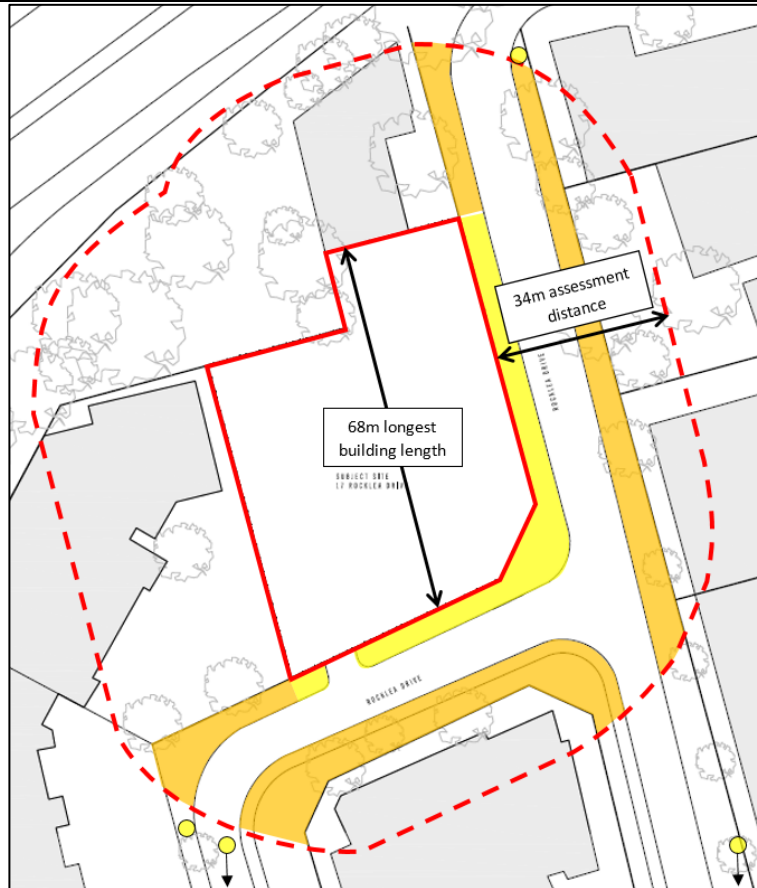


- It is recognised that the proposal responds to the maximum building height for the subject site under the interim built form controls (DDO33), which was 18 storeys (Area A4). The proposal now, however, must comply with the current planning controls as brought in under Amendment GC81. In preparing the Amendment, it appears the Minister for Planning considerably reduced the maximum building heights for the Non-core area of Wirraway to deliver the preferred character of the area. The advertised built form controls proposed a 6-storey (23m) maximum height, which reflected the lower residential density targets for Wirraway. Following advice from the Fishermans Bend Planning Review Panel, the building height was increased to the current eight storeys. This change was based solely on concerns about the viability of six storey development².

² Refer to Section 3.6(ii) of the Panel Report for Wirraway (p. 17).

	<ul style="list-style-type: none"> ▪ The proposed building height aligns more with the preferred building heights for the Core area of Wirraway, which are mostly ten, 12 or 24 storeys. As shown on the diagram on the previous page, the subject site is not located in proximity to the Core area, but rather on the outer edge of the Non-core area. ▪ The proposed dwelling density is significantly higher than the maximum density permitted for this site under CCZ1 (currently 194 dwellings proposed compared with 55 dwellings permitted). Whilst the dwelling density controls don't apply to this proposal, this 350% disparity is a clear indication that the proposal is an overdevelopment of the site. It is noted that an eight-storey proposal would still exceed the CCZ1 dwelling yield (the eight-storey portion of the building currently contains 109 dwellings). To comply with the mandatory CCZ1 dwelling density requirements, it appears that a four- or five-storey building only could be achieved on the site³. ▪ The proposed 17-storey building does not appropriately respond to the preferred precinct character, both in itself and when considered in the context of the scale of development that will likely be delivered elsewhere in Wirraway and particularly in the surrounding mid-rise Area W1. Future built form will need to comply with the mandatory dwelling densities of CCZ1 and significant employment floor area is not envisaged outside the core area. Accordingly, it is expected that building heights achievable for future development would be around four to five storeys, and certainly no more than eight storeys. It is acknowledged that built form outcomes associated with from dwelling density will depend on the take-up of the social housing uplift provisions, which is unknown at this time. The proposal in its current form does not provide an appropriate transition and relationship to its future lower scale neighbours. Furthermore, when viewed from the new park to the south and along Rocklea Drive to the east, the northern tower appears overtly dominating, and visually imposes on the smaller, finer-grain reading of the podium and mid-rise southern tower. ▪ The excessive height of the northern tower significantly reduces the sunlight access to the primary communal open space area of the top of the podium (Level 04). The shadow study included in the proponent's Urban Context Report (shows) most of this area is under shadow between 11:00am and 2:00pm on 22 September. Solar access to communal open space for apartment developments is measured at the winter solstice (21 June) (refer to Clause 58.03-3), which means that sunlight access to this communal open space will be even worse than currently shown. On this basis, the proposal does not achieve one of the design objectives of DDO33, which is to, "<i>incorporate communal open space with high levels of sunlight access</i>". ▪ Associated with building height and massing is the DDO33 requirement that taller buildings maintain a safe and pleasant pedestrian environment on footpaths and other public spaces for walking, sitting or standing (Clause 2.11). The requirements in relation to safety are mandatory whilst those associated with comfort are discretionary. Should a building higher than 40m be supported, it is recommended that an amended wind assessment be undertaken that complies with the DDO33 requirements. The assessment accompanying the current proposal (<i>Pedestrian Wind Environment Study</i> by Windtech Consultants; dated 30 August 2019) reported that the majority of study point locations failed both the comfort criteria and safety limit. The assessment recommended several ground level treatments to improve the wind conditions, however such improvements have not been substantiated. In addition, it appears that the wind speed criteria used applies only to walking areas (5m/s) and not sitting or standing areas. Several treatments are proposed within the road reserve rather than the development site itself, which is not acceptable because wind mitigation needs to be managed within the development site. On this basis, the proponent has not demonstrated that the development adequately limits "<i>impacts on the amenity of the public realm as a result of ... wind</i>" (built form outcome for building height in Clause 2.5 of DDO33). The diagram overleaf illustrates that current assessment area (yellow shading) and the additional publicly accessible areas that need to be included in the assessment area (orange shading).
--	--

³ 54 dwellings are accommodated in the lower four storeys in the current proposal plans.



- As discussed later in this advice, the number of dwellings that will be exposed to the amenity impacts of the adjacent Westgate Freeway also indicates that the northern tower is too tall.
- Based on the above discussion, there is overall concern with the scale and height of the proposal, particularly its 17-storey northern tower. It is recommended that the building height of the proposal (both towers) be reduced to comply with the maximum building height of DDO33 (i.e. 8 storeys or 30m).

Street wall height

- A four-storey street wall is proposed, which complies with the requirements of DDO33. The inverted podium approach at the street (southeast) corner of the site to provide for an entry forecourt is also supported.
- It is recommended that the building be set back 3m from the street frontages where Ground Floor dwellings face the street (currently the east frontage to the north-south section of Rocklea Drive). This setback is sought by DDO33 to provide a landscaping strip to “*facilitate a landscaped transition from the street to ground floor apartments*” (Clause 2.7).

It is noted that under DDO33, a six-storey street wall is permissible. This increased street wall / podium height could be supportable at the eastern street frontage (north-south section of Rocklea Drive) in any building redesign. The four-storey street wall to the southern street frontage (east-west section of Rocklea Drive) should be maintained to ensure solar access to the new park and to provide a more human scale interface to the park.

Upper level setbacks

- Above the podium, minimum 5m setbacks above the street wall are proposed, which comply with the mandatory minimum requirements of DDO33. Due to the design of the tower facades, where it is designed to read as angled and stepped edges, the setbacks increase in part to 6.2m. This design approach is supported as it enhances

the articulation of the tower and provides for a more dynamic reading of the building edge / parapet.

It is noted that under DDO33, an eight-storey building would only require 3m minimum setbacks above the street wall (5m preferred minimum).

Conversely, if a building height greater than eight storeys is supported, the upper level street setbacks (particularly the eastern side of the northern tower) should be increased to the DDO33 preferred 10m where the building exceeds eight storeys. This setback would better achieve the built form outcomes of Clause 2.8 of DDO33.

- The side boundary setbacks above the street wall height are also proposed to be a minimum of 5m, which comply with the mandatory minimum requirements of DDO33. Considering the orientation of the site and towers (with the 'short' edges of the tower aligning with the side boundaries), this is appropriate provided internal amenity and equitable development opportunities are adequately addressed.

Design detail

- The architectural treatment to the podium design is generally supported, where the street wall is modulated through breaks in the building mass to avoid a continuous facade.
- The alternation of architectural treatments along the street wall blocks introduces a rhythm and scale which is more responsive to a residential setting.
- The inverted podium approach to the street corner of the site to provide for an entry forecourt is supported, providing for an enhanced residential address and physical connection to the street, as well as enhanced activation of the street.
- Large expanses of blank wall are proposed to the northern walls of the podium. The eastern section of this wall abuts a future development site at 19 Rocklea Drive, whilst the western section of this wall abuts the Westgate Freeway reserve. Given the configuration of the adjoining development site, it is considered that the podium wall built to the common boundary is a positive outcome. Architectural treatment should be provided to the northern walls of the podium to reduce the visual bulk of this component of the development.
- If a building height greater than eight storeys is supported by the Standing Advisory Committee, the southern facade of the northern tower should be revised to reduce the visual bulk and provide for a more diverse reading of built-form. When combined with stepping of building heights, a more varied and architecturally interesting skyline would be achievable. Re-orientation of balconies to the southwest corner of the tower, as discussed later in this advice, will help reduce its visual bulk.
- The development should provide an urban art contribution (e.g. sculpture) to the entry forecourt that addresses Principle 1 and 2 of Council's *Urban Art Strategy 2002*, as required in Clause 22.06-3.

Landscaping

- The proposed tree planting along both street frontages is supported to enhance the amenity of the street and neighbourhood, whilst providing for wind attenuation. It would be beneficial to confirm the preferred street tree species noting deciduous trees may be preferred to allow for winter sunlight to the public realm, however the wind assessment recommends evergreen species to ensure consistent and sustainable plantings within Fishermans Bend / Wirraway. The proposed streetscape palette (such as street furniture and paving) also should be confirmed to ensure consistency and ease of maintenance. The landscape plans should clearly state that separate approval will be required for any works within the road reserve. A decision is also required as to whether works in the road reserve should be borne by the developer or deemed a contribution. The landscaping plans also assume removal of the existing bus shelters along the north-south section of Rocklea Drive, which would need to be confirmed with the relevant authority.
- It is recommended that the 3m wide landscaping strip sought by policy be provided along the north-south Rocklea Drive frontage to "*facilitate a landscaped transition from the street to ground floor apartments*" (Clause 2.7 of DDO33).

- To the primary communal open space area (currently on Level 04), the provision of open natural lawn areas and tree-planting is supported, as it will provide for connection to nature for residents, as well as help support biodiversity and habitat opportunities for fauna.
- Overall, the landscape strategy should consider the integration of a performative green roof to all outdoor spaces, for stormwater retention delay and climate resilience to heat, as to align with the Sustainability Goals of the Fishermans Bend Framework. The development should therefore reconsider the use of synthetic turf in lieu of natural turf to the rooftop outdoor area, as well as increase the area of natural landscaping. The use of natural turf is also considered to enhance the natural setting these outdoor spaces and user amenity.

Community and Diversity

Dwelling diversity

- As discussed earlier in this advice, the proposed dwelling density is significantly higher than the maximum density permitted for this site under CCZ1. Although the mandatory dwelling density controls do not apply to this proposal, it is considered reasonable that any additional building height above eight storeys only be supported by the provision of public benefit such as social housing or additional affordable housing. Any social housing provision would need to comply with the requirements of Clause 22.15-4.3.
- The vision for Wirraway provides a greater emphasis on accommodating households with children compared with other precincts in Fishermans Bend. In addition to a greater proportion of three-bedroom dwellings than other precincts (30%). The current proportion of three-bedroom apartments (15%) in the proposed dwelling mix is not consistent with Clause 22.15, as it is well below the 30% minimum sought for Wirraway, as well as below the minimum sought for both Sandridge and Montague precincts (Clause 22.15-4.2).

Whilst it is proposed that the apartments have been designed to enable consolidation of one and two-bedroom dwellings, the opportunities to do so in the current design are limited in both quantity and location within the development (northern end of the podium). Even if all one-bedroom apartments are consolidated, the resultant three-bedroom mix would remain below the precinct target. Furthermore, the adaptation of the development layout in the future is considered to be an onerous, and unnecessary financial burden on the purchaser.

It is recommended that a larger percentage of three-bedroom apartments be provided (30% of total dwelling yield preferred, with a minimum of 25%). In addition, proposed family apartments should (as sought in Clause 22.15-4.2):

- Have living room sizes that exceed minimum requirements; and
- Have storage areas located with easy access.
- In addition to the alternative layout for Levels 10-15 (Drawing No. A0110(b)), it is recommended that a proportion of the three-bedroom 'family' dwellings should be townhouse style dwellings (e.g. two-storeys). This outcome will provide a greater diversity of housing choice within the development. There are three key locations for these dwellings:
 - On the Ground Floor fronting Rocklea Drive (both street frontages, based on relocation of the vehicle access, as discussed earlier). These dwellings should be designed to have primary access to the street (e.g. direct path from street to front door). Secondary access could be maintained internally to the building (for access to parking, waste, community facilities, etc);
 - Fronting and with direct access to communal open space areas (currently on Level 04 of the northern tower). As many of these dwellings as possible should be located to achieve direct visual access to children's play spaces (as sought by Clause 22.15-4.2); and
 - On any podium roofs to enable provision of larger terraces for private open space.

- It is recommended that the proposed allocation of the 6% affordable housing provision be shown on the proposal plans. As required in Clause 22.15-4.3, affordable housing should:
 - Be a mix of one, two and three bedrooms that reflects the overall dwelling composition of the building;
 - Have internal layouts identical to other comparable dwellings in the building; and
 - Be externally indistinguishable from other dwellings.

Communal open space

- DDO33 requires communal open space to provide direct pedestrian connections to the street. Ground level communal open space is encouraged to provide high levels of amenity for residents. This outcome would be more readily achieved with a different building typology (such as courtyard and perimeter block) and reduced building heights, as discussed earlier in this advice.
- There is general concern regarding solar access to the communal open space area on the podium (Level 04), given that the 17-storey northern tower is located directly to the north. In addition, the ongoing amenity of the pool and covered outdoor communal area in the southwest corner is questionable. Future development on the abutting property (11-15 Rocklea Drive) is permitted to have a six-storey street wall, which would be two-storeys higher than the proposed podium level. This outcome could affect equitable development opportunities for this property.
- Clause 22.15-4.2 requires communal open spaces to include a range of facilities, garden and recreation areas, with consideration given to opportunities for a range of users. Given the emphasis in Wirraway on accommodating households with children, it is recommended that children’s play spaces be included in the outdoor communal green space on the podium level. As an indication, based on the demographic projections for Wirraway⁴ there will be nearly 40 children aged under fifteen living in this development. In addition, children’s communal active indoor play or recreation space should be provided as part of indoor communal spaces – preferably collocated with the outdoor play spaces on the podium.

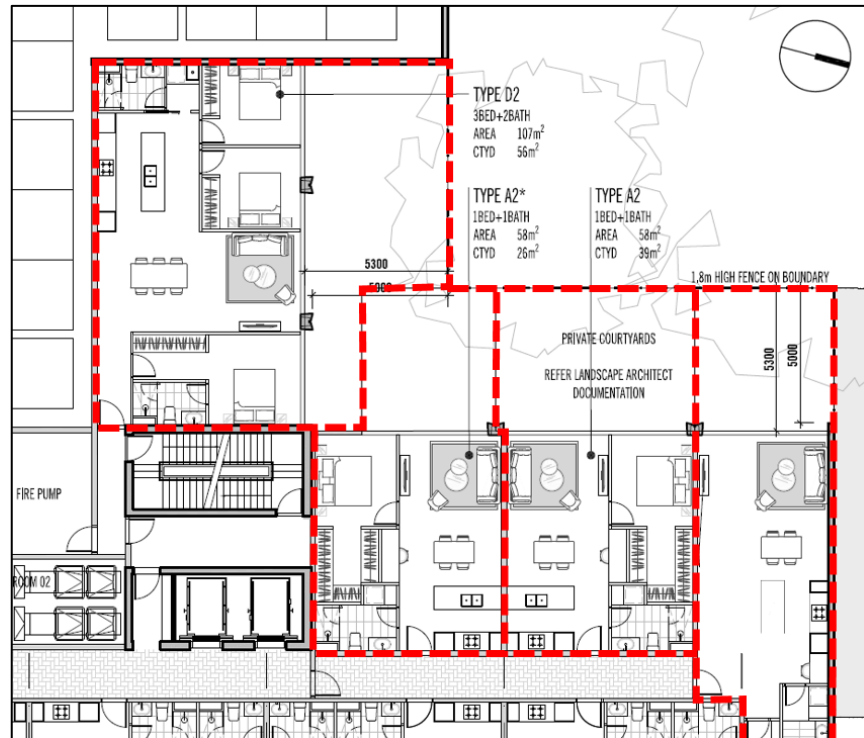
Residential Amenity

- There is concern with the number of apartments with living areas and balconies exposed to the Westgate Freeway and Employment Precinct and their associated amenity impacts. In particular, there are three or four each on the Ground Floor and Levels 01-15 of the northern tower that directly face the Freeway (with a 300m or so separation). The acoustic assessment accompanying the current proposal (by Acoustic Logic; dated 10 July 2019) found that that noise from the Freeway will exceed allowable noise limits, both in living rooms and bedrooms. Whilst the recommended construction standards (glazing, etc.) will help ameliorate internal noise impacts, the result will be that these dwellings will generally be permanently ‘sealed off’ from the outside, which will limit any benefit of their secluded private open space and natural ventilation opportunities. This is a poor development outcome and not consistent with DDO33 and Clause 22.15. Furthermore, the proponent has not demonstrated that the Freeway (as well as surrounding industrial activities) will cause air quality impacts on future residents. On this basis, the proponent has not demonstrated that the development will provide high liveability and internal amenity as sought by policy. It is acknowledged that exposure to the Freeway cannot be avoided completely, however, different options in site planning and building design should be explored to minimise amenity impacts whilst providing adequate liveability for residents. In addition, an Amenity Impact Plan needs to be prepared that includes measures to mitigate all potential adverse amenity impacts, as required by Clause 22.15-4.10.
- The apartments directly abutting the Westgate Freeway reserve on the Ground Floor and Levels 01-03 are not supported, due to poor amenity outcomes resulting from direct exposure to a busy road corridor and industrial area (Employment Precinct) (particularly noise and air quality). The Ground Floor dwellings are shown on the diagram below. The amenity of these dwellings will be further compromised should

⁴ Fishermans Bend Population & Demographics (DELWP; September 2016)

the potential elevated freight route immediately to the north of the site be constructed. This infrastructure will also remove the existing mature trees that provide some buffering to the Freeway. The entry arrangement for the 'Type D2' apartment through several back of house corridors is also not supported.

This area of the development should be utilised for parking, services, storage, etc, with the building footprint built to the boundary. The additional podium roof area could then accommodate more substantial landscaping to further buffer the north-facing Level 04 dwellings from the Freeway. Alternatively, additional employment floorspace could be provided in this area (such as small offices or creative industries), where amenity needs are less than for dwellings. In this option, a separate pedestrian entry from Rocklea Drive could readily be provided. A landscaped setback from the boundary could then be retained; albeit at a reduced



width (e.g. 3m).

- The apartments located directly above the entry forecourt (southeast corner of Levels 01-03) are not supported. There is concern regarding the compromised amenity to these bedrooms, due to being highly exposed to the entry forecourt. This is with respect to both visibility / privacy (ultimately resulting in bedroom blinds being drawn all day) and noise (which will constrain opportunity for open windows and ventilation). Openable windows are required for natural ventilation of these apartments (refer to Part 08.2 of the Urban Context Report). The layout of these apartments will also limit opportunities for passive surveillance of the entry forecourt, which is a poor outcome. There is also concern regarding the compressed layouts of these apartments, which on appearance, do not appear to conform to the requirements of Clause 58.
- The number of apartments with living areas and balconies facing west is not supported (28 apartments in total, being two each on Levels 04-15 of the northern tower and one each on Levels 05-08 of the southern tower). This outcome will result in compromised energy efficiency and amenity of these apartments and should be avoidable considering the area and configuration of the site. Furthermore, the proponent has not demonstrated that this configuration of dwellings and provision of the minimum 5m boundary setback provides equitable development opportunities for the abutting site (11-15 Rocklea Drive).

To improve the energy efficiency and amenity of these apartments, it is recommended that the west facing apartments in the northern tower (Type C3 / C3.1) and the southern tower (Type B3) be reconfigured so that the living areas and balconies are oriented to the north or south (e.g. corners of the apartment footprints).

- There is concern with the north-facing location of living areas and terrace / balconies of the Type D4 / D4.1 apartments in the northern tower (one each on Levels 04-15). The proponent has not demonstrated that this configuration of dwellings and provision of the 5m boundary setback provides equitable development opportunities for the abutting site (19 Rocklea Drive). It should be assumed that a future building on this site would have a 30m maximum height. Furthermore, the proposed elevated freight route immediately to the north will also compromise the amenity of these apartment, particularly at the lower / middle levels. To address this issue, it is recommended that these apartments (particularly those on Levels 04-08) be reconfigured so that the living areas and balconies are oriented to the east / northeast (e.g. corners of the apartment footprints).
- The bedrooms of Ground Floor apartments with 'snorkel' windows are not supported, as the windows directly face entries from Rocklea Drive. Privacy and noise issues will likely result in permanently closed window coverings, which would compromise daylight access to these bedrooms.
- As discussed earlier in this advice, a 3m wide landscaping strip should be provided along the north-south Rocklea Drive frontage to enhance the amenity of the ground floor apartments.
- There is some concern regarding solar access to the south-facing apartments within the 17-storey northern tower, particularly at the lower levels (facing the ten-storey southern tower). It is acknowledged that the proposal achieves the 10m minimum building separation sought by DDO33.
- There is some concern regarding the excessive expanse of blank wall along the northern façade of the ten-storey southern tower. It is acknowledged that this wall will be have some visual interest through the 'tower blade wall' finish. There will, however, be 12 apartments in the northern tower directly facing it (three each on Levels 05-08). To reduce the visual impact of this wall, it is recommended that the Type D5 apartments on these levels (in the southeast corner) be reconfigured so that the living areas and balconies are oriented to the east / southeast. In addition, creeping figs (or similar) could be trained up the wall in a similar way proposed for the blanks walls of the entry forecourt.
- The Ground Floor hallway from the residential lobby to the lift core servicing the northern tower appears to be excessively long (approximately 20m) with no natural light or ventilation.
- It appears that the waste shutes servicing the northern tower are situated above a walkway on the Ground Floor.

Conclusion and Recommendations

In summary, it is considered that the proposal in its current form will not contribute to the creation of an urban renewal area that is a "*leading example for design excellence, environmental sustainability, liveability, connectivity, diversity and innovation*", as sought by Clause 22.15. The critical issues can be broken down into four matters:

1. Building typology;
2. Ground level communal open space and landscaping;
3. Building height; and
4. Residential amenity.

The proposal does not include any overriding public benefit, such as provision of community facilities, additional public open space or social or affordable housing, that would justify a departure from the development outcomes sought by policy.

On this basis, the proposal in its current form is not consistent with planning policy, particularly CCZ1, DDO33 and Clause 22.15, from an urban design and strategic planning perspective.

Recommendations

For urban design / strategic planning support

To be consistent with planning policy, the following changes would be required (refer to Section 2 for more specific guidance):

- (a) Revised building typology (such as courtyard and perimeter block);
- (b) Reduction of the maximum building height to eight storeys or 30m;
- (c) Relocation of primary communal open space areas to the ground level with direct pedestrian connections to the street and adequate solar access on 21 June;
- (d) Demonstration that safe and comfortable wind conditions will be maintained in publicly accessible areas;
- (e) Provision of 3m landscaped setbacks where ground level dwellings front streets;
- (f) Demonstration that side boundary setbacks and apartment layouts will provide adequate internal amenity and equitable development opportunities for abutting properties (11-15 and 19 Rocklea Drive);
- (g) Provision of a greater proportion of three-bedroom dwellings (30% minimum of total dwelling yield). It is preferred that a number of these dwellings be located on the Ground Floor fronting Rocklea Drive, fronting communal open space area/s and on any podium roofs; and
- (h) Demonstration that all dwellings with direct or indirect exposure to the Westgate Freeway and existing surrounding industrial activities will have adequate liveability and internal amenity, particularly in relation to noise and air quality. An Amenity Impact Plan needs to be prepared that includes measures to mitigate all potential adverse amenity impacts, as required by Clause 22.15-4.10.

Should a building height greater than eight storeys be supported, the following additional outcomes should be achieved:

- (a) Provision of a public benefit, such as social housing or additional affordable housing; and
- (b) Provision of 10m street setbacks above the street wall / podium (particularly the eastern side of the northern tower); and

Recommended outcomes

It is also recommended that the following outcomes be sought as part of any changes to the proposal:

- (a) Relocation of the site vehicle access and associated building services to the northeast corner of the site (northern end of the Rocklea Drive frontage);
- (b) Architectural treatment to the northern walls of the podium;
- (c) Contribution of urban art (e.g. sculpture) to the entry forecourt at the southeast corner of the building;
- (d) Allocation of the proposed affordable housing dwellings;
- (e) Inclusion of children's play spaces in communal open space areas;
- (f) No bedroom windows in Ground Floor apartments directly facing street entries;
- (g) Removal of the apartments directly abutting the Westgate Freeway reserve on the Ground Floor and Levels 01-03;
- (h) Removal or reconfiguration of apartments southeast corner of Levels 01-03 so that bedrooms are not located directly above the entry forecourt;
- (i) Reduction in visual bulk impact of northern façade of the southern tower, through training creeping figs (or similar) up the wall;
- (j) Reconfiguration of the apartments in the southeast corner on Levels 05-08 of the northern tower be so that the living areas and balconies are oriented to the east / southeast;
- (k) Minimisation of the number of dwellings with living areas and balconies directly facing the Westgate Freeway (particularly on the Ground Floor and Levels 01-15 of the northern tower);
- (l) Minimisation of the number of dwellings with living areas and balconies directly facing west. A recommended outcome would be to reconfigure the west-facing apartments in the northern tower so that the living areas and balconies are oriented to the north or south (e.g. corners of the apartment footprints);

(m) Minimisation of the number of dwellings with living areas and balconies directly facing the abutting site at 19 Rocklea Drive. A recommended outcome would be to reconfigure the north-facing apartments in the northern tower so that the living areas and balconies are oriented to the east / northeast; and

(n) Should a building height greater than eight storeys be supported, the presentation of the southern facade of the northern tower should minimise its visual bulk.

City Development assessment

As part of its assessment, City Development should determine the adequacy of the following:

- (a) Natural ventilation of the podium car parking areas;
- (b) Provision for future division of retail tenancy into smaller tenancies;
- (c) Solar access to the communal open space on Level 04 (podium roof);
- (d) The proposed street tree species and streetscape palette (such as street furniture and paving) and removal of the existing bus shelters along the north-south section of Rocklea Drive;
- (e) The use of synthetic turf in lieu of natural turf to the rooftop outdoor area;
- (f) The internal layout of the apartments above the entry forecourt;
- (g) Solar access to the south-facing apartments within the northern tower, particularly at the lower levels (refer to recommendation above regarding reconfiguration of some of these apartments);
- (h) Design of the Ground Floor hallway from the residential lobby to the lift core servicing the northern tower; and
- (i) Location of the waste chutes servicing the northern tower.

16-07-2020 (10-13 storey proposal):

Thank you for the opportunity to provide comment of this amended development proposal.

As you stated in your email below, the proposal is little changed overall apart from the reduction in height and consequential changes to parking ratios, etc. Further, it appears that there has been little response to the issues outlined in the Strategy & Design referral advice on the original proposal that was provided in January.

On this basis, the amended proposal remains inconsistent with planning policy, particularly CCZ1, DDO33 and Clause 22.15, from a strategic planning perspective.

The proposal does not include any overriding public benefit, such as provision of community facilities, social housing or additional affordable housing, that would justify a departure from the development outcomes sought by policy.

The outstanding strategic planning issues are outlined below. I defer to City Design for more details comments on urban design and landscaping matters.

KEY ISSUES

Built Form

- Site planning of the proposal has resulted in a large podium that occupies most of the site. On top of this podium are two towers – a taller northern tower and a lower southern tower. A **podium-tower building typology** on this site is not consistent with DDO33. The character description for the Non-core Area W1 of Wirraway refers to “*campus style developments and smaller scale commercial spaces*” in the portion north of Woolboard Road (including the subject site). Elsewhere in Area W1, block (such as courtyard and perimeter block developments), hybrid and narrow lot developments are envisaged.

The Fishermans Bend Urban Design Strategy 2017^[1] describes the preferred building typology for Wirraway: “*The primary focus of Wirraway is to support family*”

^[1] Referred to as a background document to the Fishermans Bend Framework (refer p. 79).

friendly housing. The residential density targets here are lower than the other three precincts. Within the new activity core taller buildings are supported to define this centre, however these should ensure that the southern side of Plummer Street is not overshadowed. Generally 6 storey height limit in the non-core areas is proposed, reducing to 4 storeys at the interface to low-scale neighbourhoods to the south” (p. 88). Figure 42 of that Strategy also shows the subject site as having a proposed built form that is; “Low-mid-rise to support a diverse range of family friendly housing, including infill, courtyard and perimeter block developments” (p. 89).

The preferred precinct character for W1 also includes provision of landscaped spaces at ground level to provide high levels of amenity for residents and workers, such as plazas, courtyards and communal open space. Clause 2.12 of DDO33 also requires communal open space to provide direct pedestrian connections to the street. Instead, the podium fills the majority of the site with limited landscaping and communal open spaces located on the podium and tower roofs.

- The amended proposal has a reduced **building height** of 45.7m (top of the core overrun of the northern tower). The core overrun is included in height calculations, as it is not set back at least 3m behind the building façade, as required in Clause 2.5 of DDO33. The communal lounge on the roof of the northern tower is considered a storey, so the northern tower is 13 storeys. The southern tower has a slightly reduced height of ten storeys and 35.9m. Both the northern and southern towers are higher the preferred maximum building height for Area W1 of eight storeys / 30m. Whilst the proposal now conforms with the ‘mid-rise’ definition under Clause 2.4 of DDO33, the overall height of the development, combined with the podium and tower typology, remains concerning and in conflict with planning policy.
- The proposed 13-storey building does not appropriately respond to the preferred precinct character, both in itself and when considered in the context of the scale of development that will likely be delivered elsewhere in Wirraway and particularly in the surrounding mid-rise Area W1. Future built form will need to comply with the mandatory dwelling densities of CCZ1 and significant employment floor area is not envisaged outside the core area. Accordingly, it is expected that building heights achievable for future development would be around four to five storeys, and certainly no more than eight storeys. It is acknowledged that built form outcomes associated with from dwelling density will depend on the take-up of the social housing uplift provisions, which is unknown at this time. The proposal in its current form does not provide an appropriate transition and relationship to its future lower scale neighbours. Furthermore, when viewed from the new park to the south and along Rocklea Drive to the east, the northern tower remains dominant, and visually imposes on the smaller, finer-grain reading of the podium and mid-rise southern tower. The proposed building height aligns more with the preferred building heights for the Core area of Wirraway, which are mostly ten, 12 or 24 storeys. The subject site is not located in proximity to the Core area, but rather on the outer edge of the Non-core area.
- The proposed **dwelling density** remains significantly higher than the maximum density permitted for this site under CCZ1 (154 dwellings proposed compared with 55 dwellings permitted). Whilst the dwelling density controls don’t apply to this proposal, this disparity is a clear indication that the proposal is an overdevelopment of the site. It is noted that an eight-storey proposal would still exceed the CCZ1 dwelling yield (the eight-storey portion of the building currently contains 109 dwellings). To comply with the mandatory CCZ1 dwelling density requirements, it appears that a four- or five-storey building only could be achieved on the site^[2]. It is considered reasonable that any additional building height above eight storeys only be supported by the provision of public benefit such as social housing or additional affordable housing. Any social housing provision would need to comply with the requirements of Clause 22.15-4.3.
- Associated with building height and massing is the DDO33 requirement that taller buildings maintain a safe and pleasant pedestrian environment on footpaths and other public spaces for walking, sitting or standing (Clause 2.11).. Should a building higher than 40m be supported, it is recommended that an amended **wind**

^[2] 54 dwellings are accommodated in the lower four storeys in the current proposal plans.

assessment be undertaken that complies with the DDO33 requirements. The assessment accompanying the current proposal (Pedestrian Wind Environment Study by Windtech Consultants; dated 30 August 2019) reported that the majority of study point locations failed both the comfort criteria and safety limit. The assessment recommended several ground level treatments to improve the wind conditions, however such improvements have not been substantiated. In addition, it appears that the wind speed criteria used applies only to walking areas (5m/s) and not sitting or standing areas. Several treatments are proposed within the road reserve rather than the development site itself, which is not acceptable because wind mitigation needs to be managed within the development site. On this basis, the proponent has not demonstrated that the development adequately limits *“impacts on the amenity of the public realm as a result of ... wind”* (built form outcome for building height in Clause 2.5 of DDO33).

- **Landscaped setbacks** (3m) have not been provided to ground level dwellings that face the street (currently the east frontage to the north-south section of Rocklea Drive). This setback is sought by DDO33 to provide a landscaping strip to *“facilitate a landscaped transition from the street to ground floor apartments”* (Clause 2.7 of DDO33).
- The proposed **car parking numbers** are significantly higher than the maximum permitted for this site under PO1 (currently 142 spaces proposed compared with 101 spaces permitted). Based on the current proposal plans, this 41-space excess is roughly equivalent to one level of podium parking – this floor area could be better utilised to reconfigure the podium to create a built form that better responds to the preferred building typology and character of the area. The proponent’s statement that, *“car parking areas have been designed for potential future conversion to apartments, should this additional parking no longer be required in future to meet demand”* (Section 6.3.4 of Planning Assessment) is supported in principle, however this outcome is uncertain given the constraints of a large floorplate podium built to all boundaries.
- The car parking areas within the podium are located on the western site boundary with aluminium **ventilation louvres**. The proponent should consider the impact on natural ventilation of the car parking area should future development on the adjacent site at 11-15 Rocklea Drive be built to the boundary (as allowed for in DDO33).

Community and Diversity

- The vision for Wirraway provides a greater emphasis on accommodating households with children compared with other precincts in Fishermans Bend. A greater proportion of **three-bedroom dwellings** is sought than other precincts (30%). The current proportion of three-bedroom apartments (14%) in the proposed dwelling mix is not consistent with Clause 22.15, as it is well below the 30% minimum sought for Wirraway (as well as below the minimum sought for both Sandridge and Montague precincts).

Whilst it is proposed that a proportion of apartments have been designed to enable consolidation of one and two-bedroom dwellings, the opportunities to do so in the current design are limited in both quantity and location within the development (northern end of the podium). Even if all one-bedroom apartments are consolidated, the resultant three-bedroom mix would remain below the precinct target.

Furthermore, the adaptation of the development layout in the future is considered to be an onerous, and unnecessary financial burden on the purchaser.

It is recommended that a larger percentage of three-bedroom apartments be provided (30% of total dwelling yield preferred, with a minimum of 25%). In addition, proposed family apartments should (as sought in Clause 22.15-4.2):

- Have living room sizes that exceed minimum requirements; and
- Have storage areas located with easy access.

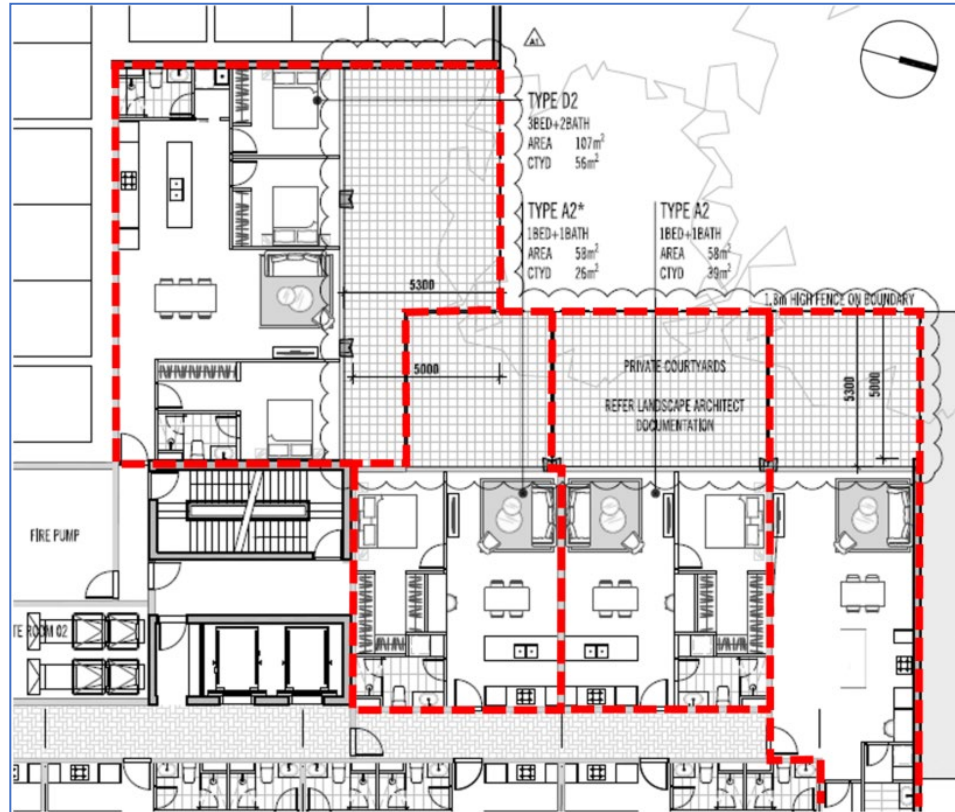
- It is recommended that a proportion of the three-bedroom **‘family’ dwellings** should be townhouse style dwellings (e.g. two-storeys). This outcome will provide a greater diversity of housing choice within the development. There are three key locations for these dwellings:

- On the Ground Floor fronting Rocklea Drive (both street frontages if possible). These dwellings should be designed to have primary access to the street (e.g. direct path from street to front door). Secondary access could be maintained internally to the building (for access to parking, waste, community facilities, etc); and
- Fronting and with direct access to communal open space areas (currently on Level 04 of the northern tower). As many of these dwellings as possible should be located to achieve direct visual access to children's play spaces (as sought by Clause 22.15-4.2); and
- On any podium roofs to enable provision of larger terraces for private open space.
- There is general concern regarding **solar access to the communal open space** area on the podium roof (Level 04), given that the 13-storey northern tower is located directly to the north. The shadow study included in the proponent's Urban Context Report most of this area is under shadow between 11:00am and 2:00pm on 22 September. Solar access to communal open space for apartment developments is measured at the winter solstice (21 June) (refer to Clause 58.03-3), which means that sunlight access to this communal open space will be even worse than currently shown. On this basis, the proposal does not achieve one of the design objectives of DDO33, which is to, "*incorporate communal open space with high levels of sunlight access*". In addition, the ongoing amenity of the pool and covered outdoor communal area in the southwest corner is questionable. Future development on the abutting property (11-15 Rocklea Drive) is permitted to have a six-storey street wall, which would be two-storeys higher than the proposed podium level. This outcome could affect equitable development opportunities for this property.

Residential amenity

- There is concern with the number of apartments with living areas and balconies **exposed to the Westgate Freeway and Employment Precinct and their associated amenity impacts**. In particular, there are three or four each on the Ground Floor and Levels 01-11 of the northern tower that directly face the Freeway (with a 300m or so separation). The acoustic assessment accompanying the original proposal (by Acoustic Logic; dated 10 July 2019) found that that noise from the Freeway will exceed allowable noise limits, both in living rooms and bedrooms. Whilst the recommended construction standards (glazing, etc.) will help ameliorate internal noise impacts, the result will be that these dwellings will generally be permanently 'sealed off' from the outside, which will limit any benefit of their secluded private open space and natural ventilation opportunities. This is a poor development outcome and not consistent with DDO33 and Clause 22.15. Furthermore, the proponent has not demonstrated that the Freeway (as well as surrounding industrial activities) will cause air quality impacts on future residents. On this basis, the proponent has not demonstrated that the development will provide high liveability and internal amenity as sought by policy. It is acknowledged that exposure to the Freeway cannot be avoided completely, however, different options in site planning and building design should be explored to minimise amenity impacts whilst providing adequate liveability for residents. In addition, an Amenity Impact Plan needs to be prepared that includes measures to mitigate all potential adverse amenity impacts, as required by Clause 22.15-4.10.
- The apartments directly **abutting the Westgate Freeway reserve** on the Ground Floor and Levels 01-03 are not supported, due to poor amenity outcomes resulting from direct exposure to a busy road corridor and industrial area (Employment Precinct) (particularly noise and air quality). The Ground Floor dwellings are shown on the diagram below. The amenity of these dwellings will be further compromised should the potential elevated freight route immediately to the north of the site be constructed. This infrastructure will also remove the existing mature trees that provide some buffering to the Freeway. The entry arrangement for the 'Type D2' apartment through several back of house corridors is also not supported.
This area of the development should be utilised for parking, services, storage, etc, with the building footprint built to the boundary. The additional podium roof area could then accommodate more substantial landscaping to further buffer the north-

facing Level 04 dwellings from the Freeway. Alternatively, additional employment floorspace could be provided in this area (such as small offices or creative industries), where amenity needs are less than for dwellings. In this option, a separate pedestrian entry from Rocklea Drive could readily be provided. A landscaped setback from the boundary could then be retained; albeit at a reduced width (e.g. 3m).



- The apartments **located directly above the entry forecourt** (southeast corner of Levels 01-03) are not supported. There is concern regarding the compromised amenity to these bedrooms, due to being highly exposed to the entry forecourt. This is with respect to both visibility / privacy (ultimately resulting in bedroom blinds being drawn all day) and noise (which will constrain opportunity for open windows and ventilation). Openable windows are required for natural ventilation of these apartments (refer to Part 08.2 of the Urban Context Report). The layout of these apartments will also limit opportunities for passive surveillance of the entry forecourt, which is a poor outcome. There is also concern regarding the compressed layouts of these apartments, which on appearance, do not appear to conform to the requirements of Clause 58.
- The number of apartments with **living areas and balconies facing west** is not supported (20 apartments in total, being two each on Levels 04-11 of the northern tower and one each on Levels 05-08 of the southern tower). This outcome will result in compromised energy efficiency and amenity of these apartments and should be avoidable considering the area and configuration of the site. Furthermore, the proponent has not demonstrated that this configuration of dwellings and provision of the minimum 5m boundary setback provides equitable development opportunities for the abutting site (11-15 Rocklea Drive). To improve the energy efficiency and amenity of these apartments, it is recommended that the west facing apartments in the northern tower (Type C3 / C3.1) and the southern tower (Type B3) be reconfigured so that the living areas and balconies are oriented to the north or south (e.g. corners of the apartment footprints).
- There is concern with the north-facing location of living areas and terrace / balconies of the Type D4 / D4.1 apartments in the northern tower (one each on Levels 04-11).

The proponent has not demonstrated that this configuration of dwellings and provision of the 5m boundary setback provides **equitable development opportunities** for the abutting site (19 Rocklea Drive). It should be assumed that a future building on this site would have a 30m maximum height. Furthermore, the proposed elevated freight route immediately to the north will also compromise the amenity of these apartment, particularly at the lower / middle levels. To address this issue, it is recommended that these apartments (particularly those on Levels 04-08) be reconfigured so that the living areas and balconies are oriented to the east / northeast (e.g. corners of the apartment footprints).

- There is some concern regarding **solar access to the south-facing apartments** within the 13-storey northern tower, particularly at the lower levels (facing the ten-storey southern tower).
- There is some concern regarding the excessive expanse of **blank wall** along the northern façade of the ten-storey southern tower. It is acknowledged that this wall will be have some visual interest through the 'tower blade wall' finish. There will, however, be 12 apartments in the northern tower directly facing it (three each on Levels 05-08). To reduce the visual impact of this wall, it is recommended that the Type D5 apartments on these levels (in the southeast corner) be reconfigured so that the living areas and balconies are oriented to the east / southeast.
- The Ground Floor **hallway** from the residential lobby to the lift core servicing the northern tower appears to be excessively long (approximately 20m) with no natural light or ventilation.

ISSUES THAT COULD BE CONDITIONED

- It is recommended that the proposed allocation of the 6% affordable housing provision be shown on the proposal plans. As required in Clause 22.15-4.3, affordable housing should:
 - Be a mix of one, two and three bedrooms that reflects the overall dwelling composition of the building;
 - Have internal layouts identical to other comparable dwellings in the building;
 - Be externally indistinguishable from other dwellings; and
 - Have equitable access to communal open space and facilities.
- Clause 22.15-4.2 requires communal open spaces to include a range of facilities, garden and recreation areas, with consideration given to opportunities for a range of users. Given the emphasis in Wirraway on accommodating households with children, it is recommended that children's play spaces be included in the outdoor communal green space on the podium level. In addition, children's communal active indoor play or recreation space should be provided as part of indoor communal spaces – preferably collocated with the outdoor play spaces on the podium.
- The bedrooms of Ground Floor apartments with 'snorkel' windows are not supported, as the windows directly face entries from Rocklea Drive. Privacy and noise issues will likely result in permanently closed window coverings, which would compromise daylight access to these bedrooms.
- Large expanses of blank wall are proposed to the northern walls of the podium. The eastern section of this wall abuts a future development site at 19 Rocklea Drive, whilst the western section of this wall abuts the Westgate Freeway reserve. Given the configuration of the adjoining development site, it is considered that the podium wall built to the common boundary is a positive outcome. Architectural treatment should be provided to the northern walls of the podium to reduce the visual bulk of this component of the development.
- The southern facade of the northern tower should be revised to reduce the visual bulk and provide for a more diverse reading of built-form. Re-orientation of balconies to the southwest corner of the tower, as discussed earlier, will help reduce its visual bulk.
- Greater visual interest should be added to the blank wall along the northern façade of the ten-storey southern tower (in addition to reconfiguring the Type D5 apartments on Levels 05-08 (in the southeast corner) as discussed above).

- Sleeving of the car parking areas within the podium behind the restaurant and dwellings on the street frontages is supported and needs to be maintained as part of any changes to the proposal.
- It appears that the waste chutes servicing the northern tower are situated above a walkway on the Ground Floor.

**Urban Design
(Landscape
Architect)**

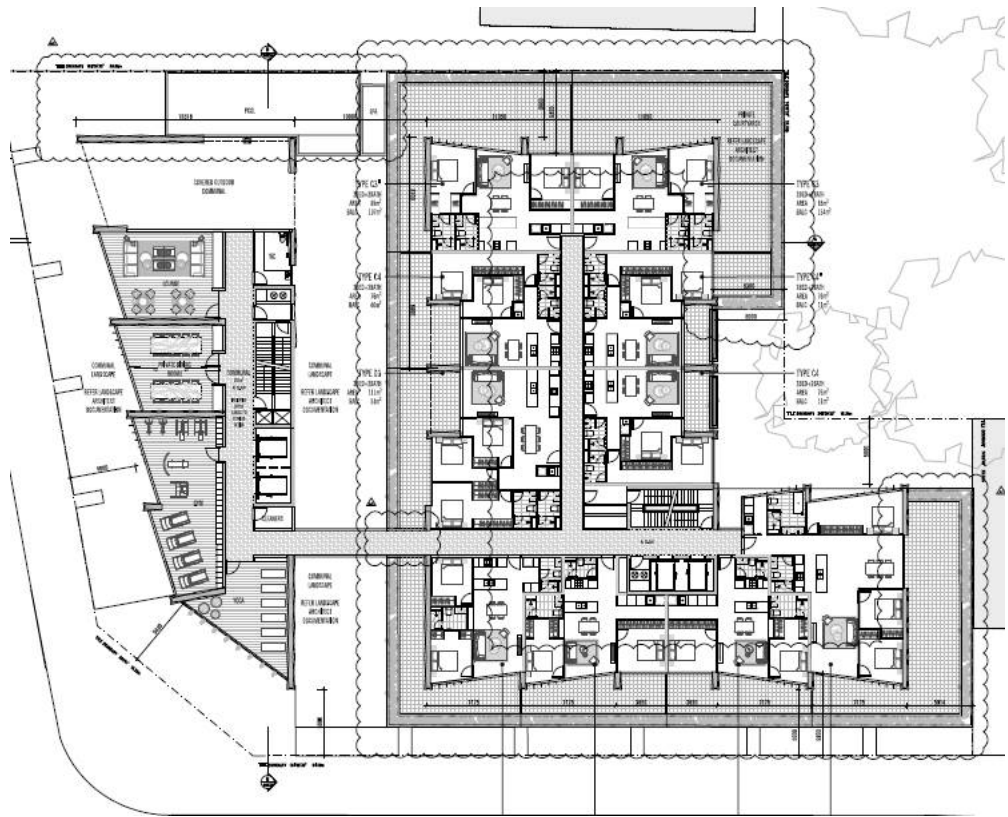
15-07-2020 (10-13 storey proposal):

The architectural features shown in the landscape plans don't match on Level 4, example below:

Architectural (E90339/20)	Landscape (E90343/20)

Level 4

The south side (right side) of the building shows a large patio area with planting along the edge. This is not included in the landscape plans.



The architectural features shown in the landscape plans don't match on Level 12, example below:

Architectural (E90339/20)	Landscape (E90343/20)

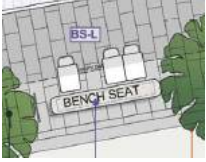
Especially on the level 4 podium, pedestrians should be able to access the edge of the podium and be able to overlook the street.

Plants:

- Ficus pumila is a known environmental weed
- Nandina domestica is a sleeper weed

Materials:

- Development proposes bluestone paving – Asphalt with bluestone kerbs is what's been set out in CoPP's street sections

	<ul style="list-style-type: none"> • All furniture on the street should follow council standards – Off-form concrete benches should not be used • If alfresco dining will be applied for on the footpath than perhaps benches should not be proposed  <p>Planner Comment</p>
<p>Sustainable Design</p>	<p>14-01-2020 (10-17 storey proposal):</p> <p>The architectural documentation and Sustainable Management Plan (SMP) for the above project were reviewed against the FBURA and ESD requirements in the planning scheme.</p> <p>It is noted that the submitted information does not adequately address Fishermans Bend planning scheme requirements which should be incorporated into an updated SMP and architectural documentation.</p> <p>.....</p> <p>Management:</p> <p><i>Commissioning and Tuning - 2.0 Provide an indication of the Environmental Performance Targets for energy and water for the development.</i></p> <p><i>Adaptation and Resilience - 3.0 Provide a Climate Adaptation Plan in accordance with Green Star credit to ensure that climate risks have been allowed for in the design.</i></p> <p><i>Metering and Monitoring - 6.0 Notate requirements on planning drawings specifically sub-metering for energy and water.</i></p> <p>Energy:</p> <ul style="list-style-type: none"> • Provide preliminary NatHERS ratings demonstrating that an 8 star average can be obtained for the development with no apartment less than 7 stars. • As no roof plan has been provided it is difficult to determine the potential for solar. Indicate the proposed size (50-65kw) of solar PV on the town planning drawings representing each panel. • Preliminary Section J assessment should be conducted now and submitted for review as evidence to demonstrate energy efficiency objectives for the retail tenancies. • Shading devices to the north, east and west façades should be considered to reduce unwanted heat gains. The design response contains large spans of unshaded glazing <p>Indoor Environment Quality:</p> <ul style="list-style-type: none"> • There is no response to daylight access within the development. At least 1 point under 12.1 Daylight needs to be achieved and demonstrated through daylight modelling. • Further detail should be provided on how the project will achieve 14.1 Thermal Comfort and 14.2 Advanced Thermal Comfort requirements including nominated areas and preferred compliance pathway. <p>Stormwater management:</p> <ul style="list-style-type: none"> • The proposed stormwater treatment system is inadequate in relation to requirements for FBURA. The SMP ignores the FBURA specific integrated water management (IWM) requirements, such as the tank sizing requirement set out in the mandatory permit conditions at Clause 4.3 of Schedule 1 to the Capital City Zone. The proposal must be amended to successfully integrate the FBURA IWM requirements (third pipe and rain tank) as follows:

- Increase stormwater harvesting catchment area to include all of roof and podium. Where any surface areas cannot be included in the catchment this must be clearly justified to our approval.
- Increase the RWT tank capacity to meet the CCZ1 mandatory tank sizing requirement of 0.5m³ per 10m² of catchment area.
- In FBURA the RWT is the primary mechanism for stormwater management and the tank sizing requirement also builds in a proponent of OSD and flood mitigation. Therefore a heavy reliance on proprietary systems will not be accepted. Proprietary devices should only be used as part of the pre and post RWT mechanism in the treatment train, and they cannot be relied upon to remove nitrogen or phosphorus -Modelling must demonstrate that the RWT will perform that function.
- Specify that the RWT will be connected to ALL non-potable outlets throughout the development (not just limited to certain levels within the building).
- A MUSIC model must be provided that demonstrates compliance with Pollution Reduction Targets Table 26.2 Column B in Green Star Design and As Built. The use of the STORM tool is not suitable for a development of this scale.
- The SMP must specifically address the third pipe and rain tank requirements of CCZ Schedule 1 at Clause 4.3.

Third pipe and rain tank:

- A third pipe must be installed for recycled and rain water to supply all non-potable outlets within the development for toilet flushing, irrigation and washing machine unless otherwise agreed by the relevant water authority.
- An agreed building connection point must be provided from the third pipe, designed to the satisfaction of the relevant water supply authority, to ensure readiness to connect to a future precinct-scale recycled water supply.
- Is fitted with a first flush device, meter, tank discharge control and water treatment with associated power and telecommunications equipment approved by the relevant water authority.
- The size of the rainwater tank needs to have a minimum effective volume of 0.5 cubic meters for every 10 square meters of catchment area to capture rainwater from 100% of suitable roof rainwater harvesting areas (including podiums). Quick calculations indicate the tank needs an effective volume of at least 77.5KL.
- Rainwater captured from roof harvesting areas must be re-used for toilet flushing, washing machine and irrigation or, controlled release. It is noted that irrigation has not been connected to the tank and although the areas of planter box are small this could be an additional consideration. Washing machine connection has also not been committed to.

Transport:

A Green Travel Plan needs to be submitted as a response to [LPP ESD 22.13](#). Planning drawings need to show spaces for 15% for fuel efficient transport if adopted in 5 Star Green Star certified assessment.

Urban Ecology:

Heat Island Effect - 25.0 Provide evidence on planning drawings and in the SMP that the current proposal will meet the compliance requirements of this credit.

Innovation:

- The development is relying on at least 10 innovation points, some of which will be questionable and may be declined by the GBCA. It is advised to reduce this amount to 5 points and look for an additional 5 points in the rest of the tool. Specifically for FBURA the following guidance [Review of Sustainability Standards](#) document should be reviewed to ensure the Green Star assessment aligns closely with the objectives of the Fishermans Bend Framework.

Conditions:

In addition to the conditional requirements set out at Clause 4.3 of Schedule 1 to the Capital City Zone, the following conditions should be applied:

- Implementation of Environmentally Sustainable Design (ESD)

Prior to the occupation of any dwelling/building approved under this permit, a report (or reports) from the author of the Sustainability Management Plan (SMP) approved under this permit, or similarly qualified persons or companies, outlining how the performance outcomes specified in the endorsed SMP have been implemented must be submitted to the Responsible Authority. The report(s) must be to the satisfaction of the Responsible Authority and must confirm and provide sufficient evidence that all measures specified in the endorsed SMP have been implemented in accordance with the relevant approved plans. This may be satisfied by documentation prepared for the Green Star Design and As-Built submission.

- Verification of Certified Green Star Rating

Following final GBCA certification of the project's Green Star Design & As-Built rating, copies of the certificate must be submitted to the Responsible Authority.

15-07-2020 (10-13 storey proposal):

The issues identified in the previous referral advice from Steven McKellar, based on the previous version of the SMP (Rev D), haven't been addressed. For continuity, the previous comments have been copied below in italics with my commentary provided for each item (non-italicised).

Key issues include:

- Incomplete response to the integrated water management requirements for Fishermans Bend including tank and third pipe requirements of the CCZ1. Refer to comments under Stormwater section below.
- No commitment to third pipe.
- Lack of external shading to glazing.
- No solar PV on plans (notation only with no sizing or layout).
- Lack of detail on plans for reduction of urban heat island effect.

Management:

Commissioning and Tuning – 2.0 Provide an indication of the Environmental Performance Targets for energy and water for the development. – NOT PROVIDED

Adaptation and Resilience – 3.0 Provide a Climate Adaptation Plan in accordance with Green Star credit to ensure that climate risks have been allowed for in the design. – COMMITMENT MADE BUT PLAN NOT PROVIDED

Metering and Monitoring – 6.0 Notate requirements on planning drawings specifically sub-metering for energy and water. – NOT SHOWN ON PLANS

Energy:

- *Provide preliminary NatHERS ratings demonstrating that an 8 star average can be obtained for the development with no apartment less than 7 stars. – NOT PROVIDED*
- *As no roof plan has been provided it is difficult to determine the potential for solar. Indicate the proposed size (50-65kw) of solar PV on the town planning drawings representing each panel. – NOT SHOWN ON PLANS*
- *Preliminary section J assessment should be conducted now and submitted for review as evidence to demonstrate energy efficiency objectives for the retail tenancies. – NOT PROVIDED*
- *Shading devices to the north, east and west façades should be considered to reduce unwanted heat gains. The design response contains large spans of unshaded glazing – NOT PROVIDED*

Indoor Environment Quality:

- *There is no response to daylight access within the development. At least 1 point under 12.1 Daylight needs to be achieved and demonstrated through daylight modelling. – NOT TARGETED*

- *Further detail should be provided on how the project will achieve 14.1 Thermal Comfort and 14.2 Advanced Thermal Comfort requirements including nominated areas and preferred compliance pathway. – NOT PROVIDED*

Stormwater management: - NOT RESOLVED: The SMP refers to the mandatory rain water tank requirements in CCZ1 but the following matters need to be resolved:

- Enlarge the catchment to include all suitable surfaces including podiums.
- Confirm catchment area in m² and demonstrate that effective tank volume equals 0.5m³ per 10m² of catchment.
- Clarify tank capacity. SMP states 50kL and 95kL, plans show 95kL.
- Confirm tank connection to ALL non-potable outlets in the development (toilets, laundry, irrigation etc.) not just the lower levels as currently stated in the SMP.
- Provide MUSIC modelling to demonstrate that best practice urban stormwater quality will be achieved as required by Clause 22.12. STORM has been used and is not acceptable for proposals in the FBURA.
- *The proposed stormwater treatment system is inadequate in relation to requirements for FBURA. The SMP ignores the FBURA specific integrated water management (IWM) requirements, such as the tank sizing requirement set out in the mandatory permit conditions at Clause 4.3 of Schedule 1 to the Capital City Zone. The proposal must be amended to successfully integrate the FBURA IWM requirements (third pipe and rain tank) as follows:*
- *Increase stormwater harvesting catchment area to include all of roof and podium. Where any surface areas cannot be included in the catchment this must be clearly justified to our approval.*
- *Increase the RWT tank capacity to meet the CCZ1 mandatory tank sizing requirement of 0.5m³ per 10m² of catchment area.*
- *In FBURA the RWT is the primary mechanism for stormwater management and the tank sizing requirement also builds in a proponent of OSD and flood mitigation. Therefore a heavy reliance on proprietary systems will not be accepted. Proprietary devices should only be used as part of the pre and post RWT mechanism in the treatment train, and they cannot be relied upon to remove nitrogen or phosphorus -Modelling must demonstrate that the RWT will perform that function.*
- *Specify that the RWT will be connected to ALL non-potable outlets throughout the development (not just limited to certain levels within the building).*
- *A MUSIC model must be provided that demonstrates compliance with Pollution Reduction Targets Table 26.2 Column B in Green Star Design and As Built. The use of the STORM tool is not suitable for a development of this scale.*
- *The SMP must specifically address the third pipe and rain tank requirements of CCZ Schedule 1 at Clause 4.3.*

Third pipe and rain tank: - NOT MENTIONED IN SMP

- *A third pipe must be installed for recycled and rain water to supply all non-potable outlets within the development for toilet flushing, irrigation and washing machine unless otherwise agreed by the relevant water authority.*
- *An agreed building connection point must be provided from the third pipe, designed to the satisfaction of the relevant water supply authority, to ensure readiness to connect to a future precinct-scale recycled water supply.*
- *Is fitted with a first flush device, meter, tank discharge control and water treatment with associated power and telecommunications equipment approved by the relevant water authority.*
- *The size of the rainwater tank needs to have a minimum effective volume of 0.5 cubic meters for every 10 square meters of catchment area to capture rainwater from 100% of suitable roof rainwater harvesting areas (including podiums). Quick calculations indicate the tank needs an effective volume of at least 77.5KL.*
- *Rainwater captured from roof harvesting areas must be re-used for toilet flushing, washing machine and irrigation or, controlled release. It is noted that irrigation has*

	<p><i>not been connected to the tank and although the areas of planter box are small this could be an additional consideration. Washing machine connection has also not been committed to.</i></p> <p><i>Transport:</i> <i>A Green Travel Plan needs to be submitted as a response to LPP ESD 22.13. Planning drawings need to show spaces for 15% for fuel efficient transport if adopted in 5 Star Green Star certified assessment. – NOT SUBMITTED</i></p> <p><i>Urban Ecology:</i> <i>Heat Island Effect – 25.0 Provide evidence on planning drawings and in the SMP that the current proposal will meet the compliance requirements of this credit.- COMMITMENT in SMP but NOT SHOWN ON PLANS.</i></p> <p><i>Innovation:</i></p> <ul style="list-style-type: none"> <i>• The development is relying on at least 10 innovation points, some of which will be questionable and may be declined by the GBCA. It is advised to reduce this amount to 5 points and look for an additional 5 points in the rest of the tool. Specifically for FBURA the following guidance Review of Sustainability Standards document should be reviewed to ensure the Green Star assessment aligns closely with the objectives of the Fishermans Bend Framework.</i> <p><i>Conditions: - STILL APPLICABLE</i></p> <ul style="list-style-type: none"> <i>- In addition to the conditional requirements set out at Clause 4.3 of Schedule 1 to the Capital City Zone, the following conditions should be applied:</i> <i>- Implementation of Environmentally Sustainable Design (ESD)</i> <i>Prior to the occupation of any dwelling/building approved under this permit, a report (or reports) from the author of the Sustainability Management Plan (SMP) approved under this permit, or similarly qualified persons or companies, outlining how the performance outcomes specified in the endorsed SMP have been implemented must be submitted to the Responsible Authority. The report(s) must be to the satisfaction of the Responsible Authority and must confirm and provide sufficient evidence that all measures specified in the endorsed SMP have been implemented in accordance with the relevant approved plans. This may be satisfied by documentation prepared for the Green Star Design and As-Built submission.</i> <i>- Verification of Certified Green Star Rating</i> <i>Following final GBCA certification of the project's Green Star Design & As-Built rating, copies of the certificate must be submitted to the Responsible Authority.</i>
<p>Subdivision Officer</p>	<p>08-10-2019 (10-17-storey plans):</p> <ol style="list-style-type: none"> 1. It needs to be clear from the amendment process, if the public open space contribution will be provided through the amendment or through a later subdivision permit. If the development is approved, a planning permit for the subdivision cannot be issued until the infrastructure contributions plan is incorporated (45.11-2 and Clause 1.0 Schedule 1 to 45.11). Although this shouldn't be an issue, 253-273 Normanby has shown us that subdivision may be very soon after approval (before plans are fully approved for the development). It is likely that the owners may wish to have a subdivision approved at a very early stage. Do we have any timing on the ICP? 2. The plans need to be clear who will have use of the communal spaces, particularly the communal open space. Preferably state that such spaces will be available to all residents and guests; or to the commercial occupiers and guests; or to all occupiers. 3. Any plans to be approved need to clearly show which, if any car spaces are to be allocated to the restaurant. If the restaurant is to utilise the car park, the only access between the restaurant and the car park appears to be over the driveway, over the loading bay or through the corridor leading to dwellings. None of these options is appropriate. It would be usual for the future subdivision to create an owner's corporation and common property which is only accessible to the dwelling lots, which would rule out access between the restaurant and car park through the residential corridor. 4. The plans need to specifically show which spaces are to be allocated to car share.

	<p>5. If individual car spaces are to be allocated (3 bedroom dwellings?) it needs to be clear on any approval / plans.</p> <p>6. The report states that the western portion of the car park at level 3 has been designed to enable the future conversion of the car parking area to apartments. How will these car parks be treated on the subdivision? At the very least they need to be highlighted on any plans approved. The current Clause 3.1 of Schedule 1 to Clause 37.04 which states:</p> <p style="padding-left: 40px;"><i>Car parking areas must be retained in a single or a consolidated title as common property, unless the responsible authority agrees otherwise.</i></p> <p>does not provide a reasonable or legal way to allow for the current car parks to be owned / administered before such future redevelopment.</p> <p>(10-13 storey proposal): Planner Comment Issues from the earlier plans carry over to the amended plans.</p>
Housing Development Officer	<p>06-11-2019 (10-17 storey plans):</p> <p>The application proposes to provide the affordable housing in the form of 6% of dwellings treated as 'build to rent' dwellings, rented at 80% of market rent for 10 years and managed by a registered Housing Association or Housing Provider.</p> <p>My comments on this proposal are as follows:</p> <ul style="list-style-type: none"> • A 10 year period for maintaining the affordable rent is inadequate, as it does not contribute to the long-term supply of affordable housing. This has been the shortcoming of the National Rental Affordability Scheme (NRAS), which creates dwellings that are discounted by 20% of market rent for 10 years. The affordability period should be long-term, such as for the economic life of the building, and 'economic life' be defined in the permit condition. Further advice on this definition will need to be provided. • Discounting the rent at 80% of market rent will only create a marginal improvement in housing affordability, due to the high market rents experienced in Port Phillip. The affordability of the discounted rent will vary according to the household type (single, couple or family), the size of the dwellings, and whether the households are of very low, low and moderate incomes, as defined in the Planning & Environment Act. To assess the affordability of the dwellings, the applicant needs to provide specific information for the proposed 6% affordable dwellings, showing the affordability of a rent discounted to 80% of market rent on: <ul style="list-style-type: none"> - The target household type - The target dwelling type / number of bedrooms and - The target income range. • An 80% discounted rent is only likely to assist moderate income earners, and may exclude some households in that income cohort. The affordable housing report in the application refers to the need to assist key workers <u>and low</u> to moderate income earners (pages 18, 26). The application needs to demonstrate how low income wage earners will be able to afford rents discounted by only 20% from market rents. • The affordable housing report in the application refers to the need to provide housing diversity (page 20), a mix of one, two and three bedroom dwellings (page 21), and include larger housing that responds to the needs of families (page 21). The proposed mix of dwelling types/number of bedrooms that addresses this diverse need should be provided in a proposed schedule, including the information recommended in the second dot point. • A discounted long-term rent is one model for providing affordable housing. The 6% affordable housing policy can include social housing. Unless a long-term discounted rent is provided for low and moderate income earners, an acceptable alternative is for the affordable housing dwellings to be provided in the form of gifted social housing dwellings.