Appendix

City of Port Phillip Internal Referral Responses - December 2021 Plans

Urban Design Architect, Landscape Architect, Strategic Planning

22-02-2021: Thank you for the opportunity to comment on this revised proposal. This referral advice builds on previous advice provided on 16 October 2020.

Summary

A high intensity mixed-use development is appropriate for this key site within the core area of the Wirraway Precinct. The proposal, however, needs to demonstrate a high quality design that is consistent with the precinct's desired function and character. The following aspects of the proposal are not supported:

- 1. The proposed 'tooth and gap' design response has been tailored to meet the letter rather than the spirit of the planning scheme and has not achieved a high-quality urban design response. In particular, the scheme does not include sufficient 'gaps' between buildings to provide substantial variety, visual relief or sense of openness.
- 2. Public realm response to streets, park and laneways do not provide sufficient pedestrian safety, amenity or activation.
- 3. Public and communal building entry and circulation are not safe, legible or convenient for commercial and residential
- 4. Residential amenity of apartments do not meet minimum standards, including common circulation and cross ventilation.
- 5. The detailed design of the proposal does not contribute to a safe, attractive and inviting public realm.
- 6. Aspects of the proposal do not encourage and facilitate easy and safe pedestrian and bike access, which undermines the strategic intent for Fishermans Bend.

It is apparent that many of the above problems relate to the majority of the site's ground floor being occupied by two large supermarkets in a side-by-side format, as well as associated vehicle parking and circulation. To retain two supermarkets of that size on this site requires alternative design solutions, such as stacking the supermarkets one over the other i.e. moving one to the first floor or perhaps basement. A first floor supermarket could relate well to the very large food court type space proposed for there. Alternatively, if two ground floor supermarkets are preferred, it may be necessary to reduce the size of one or both of the tenancies.

We would welcome the opportunity to discuss our concerns further and potential ways they could be resolved during or prior to the Standing Advisory Committee process. In particular, we'd be pleased to assist with more precise wording of incorporated document conditions and to be involved in discussions with the proponent and other authorities.

Detailed Review

The following detailed review is structured as follows: A: Urban Structure, B: Site Layout, C: Building Massing, D: Building Program, E: Design Detail.

	Response
nt design treats the park as a to the development i.e. the ent is designed to integrate with the park, with retail tenancies and lobbies fronting the plaza to "ensure of activation and activity at all hours of the hours of the place of the page 21 of the place of plans indicate outdoor seating	The proposed park is a critical public open space located at a key intersection on the future Plummer Street boulevard. This space should be designed and function as a highly utilised urban space that is activated through the day and into the evening hours with general public uses. The proposed commercial lobbies and shop tenancies fronting the park are supported. The circulation and program of these uses, however, need to be revised so that the function of the park is largely public. In particular, access to the two commercial lobbies should be revised so that they don't rely on access through the park (i.e. access directly from street or through private land). Ideally, these would be relocated to street or laneway frontages. The T2 residential lobby would be more suitable to access from adjacent to (not through) the park Whilst outdoor seating is desirable in this park, this detail has not been resolved. The appropriateness of any business activities has not
֡	I Park Int design treats the park as a great to the development i.e. the sent is designed to integrate with the park, with retail tenancies and lobbies fronting the plaza to "ensure of activation and activity at all hours of thin this area" (refer to page 21 of eport). In appendix indicate outdoor seating with the shops located within the

		public use of the space (e.g. casual seating). The provision and feasibility of these shop tenancies should not be reliant on any income-generating activity on public land. This matter should be formalised in the proposed incorporated document.		
	It is proposed that Council will be responsible for the design and delivery of the park, in conjunction with the landowner (refer to page 22 of Planning Report).	It is preferable that the proponent deliver the park as part of the development; the cost of which could be offset against the required open space / development contributions. This approach could provide construction cost efficiencies and provide a 'ready-made' attraction and sense of place for the development, which could assit in marketing and sales.		
		The design and construction of the park would need to be in accordance with the planned function of this space and Council's standards (including materials and plant / trees species) and be approved by Council.		
		Should the land only be provided by the proponent, as currently proposed, it needs to be in the following condition:		
		Removal of exisitng buildings, works, private infrastructure and trees / landscaping;		
		Remediation of any site contamination;		
		Relocation / consolidation of any public infrastructure / services;		
		Site levelling for surface drainage;		
		Protection of Tree 14 (refer to Arboricultural Report); and		
		Basic grass coverage.		
		If the current proposal for the park to be used as sole access for the lobbies and shops is approved (contrary to above advice), the proponent should construct this access at no cost to Council. Land associated with this access should be excluded from the required open space land contribution, and associated costs should not be offset against required mometary contributions.		
		Bollards should not be placed around the perimeter of the public park unless it has been identified as being at risk of a hostile vehicle attack from a qualified authority. Should the site be identified as requiring HVM, bollards should be used as a last resort. Other measures that can obscure HVM measures should be considered first such a planter walls, seating walls, planted beds, level changes, artwork and street furniture.		
A network of new streets and laneways transform existing industrial scale blocks into a walkable neighbourhood. High quality walking and cycling links provide easy access to, from and within the neighbourhood.	New Laneway Network The proposal does not transform the industrial scale of the existing block into a walkable neighbourhood, arguing that to do so would 'preclude the ability to accommodate two supermarkets' (page 21 Urban Context and Design Response Report). Eastern Laneway (on adjoining site): North-South link The laneway on adjoining site to east is currently lined with vehicle parking on both sides,	The proposal does not make enough ground floor and public space available to deliver the pedestrian friendly vision described in 22.15-4.8. This is due to the amount of ground floor space devoted two supermarkets as well as their associated vehicle parking and circulation. Two supermarkets are welcome and appropriate on this site, but their provision should not be at the expense of the required site transformation to improve permeability, pedestrian amenity and activation. For example, more ground floor space would be liberated by relocating one		

22.15-4.8 New streets, laneways and pedestrian connections, including New shared streets or shared laneways should prioritise pedestrian movement and safety.

New streets and laneways should be designed to:

- Enable views through the street block
- Have active frontages in a core
- Be open to the sky
- Allow for canopy tree planting.

A footpath 2m wide is proposed within the site by settubg back the building line. The path is straight for approximately I I 0m long.

This frontage has one entrance and one small commercial tenancy for its entire length. It is also fronte by a large percentage of unsleeved building services and vehicle circulation and parking

Southern Laneway (within site): East-West link

A 2.9m wide footpath is proposed adjoinin new 6m wide laneway (3m of which is on subject site).

At the Salmon St corner, the architectural and traffic plans show the footpath narrowing to approximately 1.5m wide to make room for vehicle crossover.

supermarket to the first floor, where it would relate to the food court style space. The liberated space on the ground floor could be directly used to improve site and building circulation (a fundamental problem with the proposal) as well as additional ground floor active uses and building entries around all four public frontages.

The design response to the eastern laneway does not provide sufficient activation or pedestrian amenity, in particular:

 the lack of sleeving to large percentage of building services and vehicle access points is very detrimental. Providing "active frontage glazing" in front of basement ramps and vehicle parking/loading areas is not an acceptable design response to this issue.

Both laneways suffer shared problems of:

- While the upper level facades provide articulation, this does not continue to the ground floor façade which is straight and unarticulated. This is poor pedestrian amenity.
- Building entrances to upper level uses are not provided along the laneway, which is a missed opportunity to improve access to upper levels and improve activation of the laneway.

Changes to the building design and circulation, as well as footpath design are required on both laneways to create a high quality pedestrian environment i.e.

- 2m should be minimum clear width, with additional break-out spaces along the length.
- Safety (CPTED): space should receive surveillance from adjoining areas (ground floor and upper floors)
- Activation: e.g. ground floor uses and regular building entries to upper floor level uses
- Destination, wayfinding and amenity: routes should include interesting and comfortable spaces to rest and socialise. This should include contributing to the 'leafy and green' character of the precinct.
- Pedestrian priority and safety for footpaths at vehicle crossovers and intersections. It is not appropriate for footpath to narrow at corners where passing and sightlines are required.

1.0 Design objectives, includes

To ensure built form: facilitate comfortable wind conditions, to deliver a high quality public realm.

2.11 Built form outcomes

Local wind conditions that:

Maintain a safe and pleasant pedestrian spaces

Wind effects on the public realm

The desktop Wind Impact Statement concluded that recommended criteria is expected to be achieved for public realm and communal open spaces. Detailed assessment, including wind tunnel modelling, was not undertaken.

The Statement said that the site, "is relatively exposed for winds from north and west directions which are the prevailing wind directions from Melbourne climate" (page 11). It adopted walking comfort criteria for publicly accessible areas, with the exception of small areas immediately outside building / tenancy entries (standing criteria). The Statement then concluded that these criteria "would be expected" to be

The level of assessment in the Wind Impact Statement, including no wind tunnel modelling, is inadequate for this scale of development. The proponent has not demonstrated that the development will not create adverse wind impacts in the public realm.

Clause 22.15-4.4 requires developments to contribute to a "high quality public realm and deliver spaces, including open spaces, for people to meet, gather, socialise, exercise and relax".

This outcome is particularly relevant for the subject site, which is located in the "heart of Wirraway...which is the focus of activity with an active and engaging pedestrian experience along Plummer Street Boulevard" (Clause 21.06-8).

achieved. There was no consideration of safety criteria.

On this basis, adoption of walking comfort criteria for most publicly accessible areas is not supported, as this undermines the purpose of these areas.

Based on the requirements of Clause 2.11 of DDO33, an assessment distance of approximately 60m is required from the site boundaries. This area encompasses the following public areas that will perform important roles in the amenity and livability of the area:

- Approximately 200m length of footpath on both sides of Plummer Street;
- Approximately 240m length of footpath on both sides of Salmon Street;
- The new park at the southeast corner of Plummer and Salmon Streets (within development site);
- Most of the new park at the northeast corner of Plummer and Salmon Streets;
- Most of the new linear park on the opposite side of Salmon Street;
- Approximately 180m length of the new linear park along Tarver Street and through to JL Murphy Reserve;
- A portion of the western end of JL Murphy
 Reserve:
- The existing north-south laneway along the eastern boundary; and
- The proposed east-west laneway along the southern boundary.

A detailed wind assessment is required (including wind tunnel modelling) that demonstrates that the development will result in local wind conditions that maintain a safe and pleasant pedestrian environment on footpaths and other public spaces for walking, sitting or standing (as required by Clause 2.11 of DDO33).

Managing wind impacts on the public realm is closely associated with built form. Required wind treatments will need to be incorporated into the design of the development. On this basis, the wind assessment needs to be prepared, and the above matters addressed, prior to a decision being made.

The wind assessment needs to address the following matters:

- The assessment distance used must be in accordance with Clause 2.11;
- The assessment must address approved and proposed development and publicly accessible areas within the assessment distance:
- The mandatory wind safety criteria in DDO33 must be achieved. Where the safety criterium is exceeded under existing conditions, the development must not increase the extent of non-compliance, and should seek to improve the level of safety;

- The following comfort criteria should apply to the publicly accessible areas within the assessment distance (not those recommended in the Statement):
 - Sitting all parks (including linear parks);
 - Standing both footpaths of Plummer and Salmon Streets and outside other retail / commercial tenancies and pedestrian entry areas; and
 - Walking remaining publicly accessible areas

Where these criteria are exceeded under existing conditions, the development must not worsen the wind situation.

- Wind management treatments must be located within the development site; and
- Any proposed changes to the built form and/or wind treatments need to be qualified to demonstrate how an amended proposal will achieve the policy requirements in Clause 2.11 of DDO33.

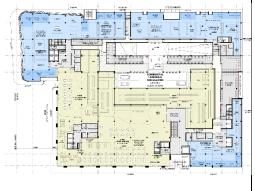
B. Site Layout

Circulation

The current proposal only locates residential and commercial lift cores on two sides of the large site (original scheme included a lift core in southeast corner).

Access to T1 residential dwellings shares lifts with commercial tenancies.

First Floor Layout



The amenity and safety of the circulation throughout the site is considered a poor design response.

Residents in Tower I sharing lifts with commercial and retain tenancies is not supported.

The long and complicated access to first and second floor commercial spaces facing laneway (such as south -east corner) through car parking and back of house storage areas is not supported. Building entries to the upper levels are also a valuable way of activating laneway frontages and would greatly improve the amenity and legibility of accessing these spaces.

Circulation for Towers T2 & T3 is not supported i.e. the current arrangement produces poor amenity to long residential corridors (T2 almost 50m long, T3 over 40m long) and internal apartments amenity (high percentage of single aspect apartments).

Improvements to the circulation are required, supported by a circulation plan that demonstrates:

- Travel routes between the public realm and key destinations within the development / building (e.g. lift lobby areas, communal open spaces, amenities, bicycle storage) and between key destinations for the following users (including residents, staff and visitors):
 - > Pedestrians
 - Cyclists
 - o People with limited mobility
- Demonstrates that equitable access is being provided through:
 - Managing changes in level and direction
 - Manage potential conflicts with different users of spaces (such as corridors, driveways)

C/L laneway will likely be a popular pedestrian route into other properties or as a shortcut into JL Murphy Reserve in addition to the proposed commercial and residential lobbies and commercial uses. Ample space is required to support pedestrian movements.

The architectural plans and landscape plans contradict one another on bollard placement.

Proposed car turning radius and subsequent bollard placement restrict pedestrian movement.

Cycle parking is distributed throughout all parking levels and requires cyclists to use the vehicle entries and circulation routes.

Recommend that all residential, office and commercial bike parking is accommodated in one location and offers a seperated access / circulation routes so as not to conflict with vehicles or pedestrians.

DDO33 2.12 Communal open

space that:

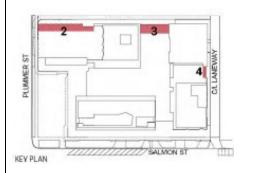
Meets the needs of residents.

Delivers significant opportunities for landscaping, including large trees, within the development and contribute to the visual amenity of apartments.

Supports a range of recreational uses.

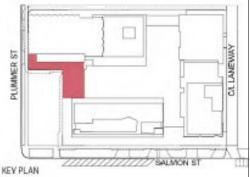
Can be readily accessed from within the development and provide direct pedestrian connections to the street.

Communal Open Space





Communal open space is highly fragmented over two levels (levels 4 & 6) and with isolated pockets.Podium – Level 4 is noted to have four



isolated pockets of communal open space. <u>Level</u> $\underline{\underline{4}}$

Level 4

The proposed communal open space does not provide sufficient amenity for residents, such as multiple opportunities for recreation and equal access to all residents.

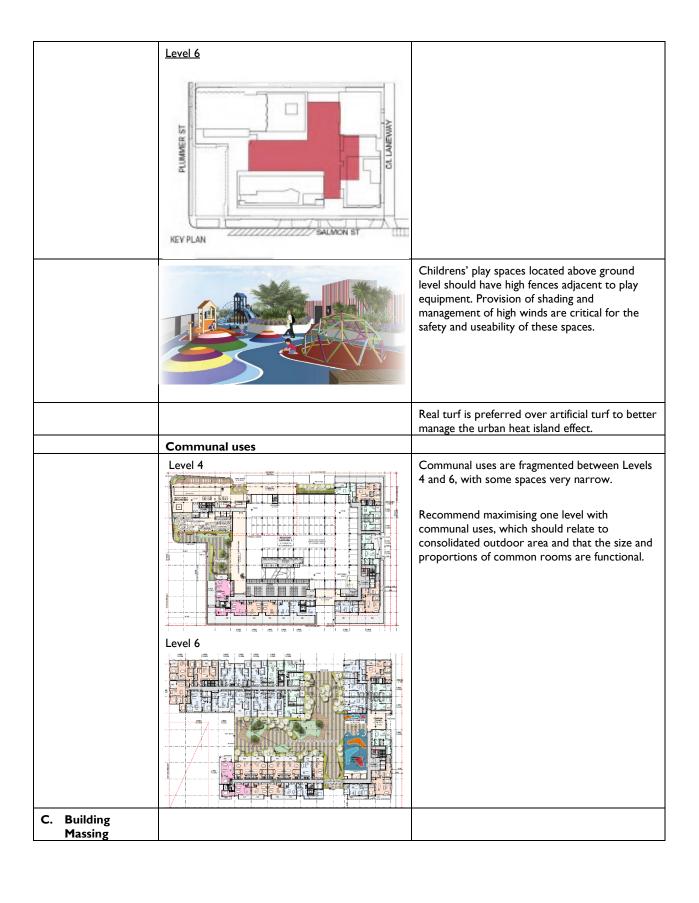
Current plans offer limited recreation for adult exercise and relegates children's play equipment to Level 15. Breaking up these spaces reduces access to these spaces and reduces the opportunities to provide recreation opportunities. Seating and gardens on their own will not satisfy the requirements of Clause 2.12 of DDO33.

Recommend consolidating the urban form so that the communal open space can be maximised at one level.

Provide more opportunities for active recreation. Most spaces are dominated with passive uses such as seating.

Demonstrating that the location and design of the communal open spaces achieves high amenity with respect to winter sunlight access (as required by Clause 58.03-3) and and wind impacts. Safety wind criteria must be achieved for all communal open spaces. Standing and sitting wind comfort criteria should be achieved for communal open spaces, depending on the function of individual spaces. Achievement of walking criteria only, as currently proposed, does not meet planning requirements for the function of these spaces.

Cascading landscaping is not accessible to anyone and barely overlooked. Recommend it's consolidated with Level 6 communal open space.



2.4 Precinct is to be predominantly Midrise: development of 7 storeys to 15 storeys.

Contribute to a varied and architecturally interesting skyline.

Limit impacts on the amenity of the public realm as a result of overshadowing and wind.







The material provided demonstrates that the proposed development, when viewed from most ground-level vantage points, will not contribute to a varied and architecturally interesting skyline.

The stepping of building heights provides limited relief to the skyline.

The building heights are considerably higher than precinct vision of 7 to 15 storeys, with the proposed lowest building effectively 13 storeys (T1 with roof extensions) and highest effectively 22 storeys (T2 with roof over extensions etc). The development has strong visual bulk, with the gaps between the building do not providing visual relief from the apparently continuous perimeter development i.e. the "tooth and gap" typology does not have sufficient "gap"

The proposed architectural facade differentation has only very limited benefit in creating visual difference between the towers i.e. glass curtain walls are the predominate expression of the development

As noted above, the issue of building massing also needs to be considered alongside issues such as wind effects and the amenity and location of common open space.

D. Building Program

Program and Activation

Park frontages:

Retail / café / restaurant uses are preferred to line the park space to activate it equitably for general public use. As noted above, the two commercial lobby entries should be redesigned or relocated to either of the adjoining street frontages.

Street and laneway frontages:

Active ground floor uses and regular building entries should be provided on all building frontages.

Activation of the adjoining public realm required in Clause 2.13 of DDO33 could be improved by provision of openable windows and balconies to the commercial and shop tenancies on the First, Second and Third Floors (particularly the food and drink tenancies fronting the new park and Salmon Street).

Affordable Housing

A condition has been proposed in the Incorporated Document seeking that 6% of dwellings will be set aside for the purposes of affordable housing.

The proposed number of affordable housing dwellings complies with planning requirements.

The incorporated document should include the other requirements Clause 22.15-4.3, being that the affordable housing dwellings must:

- Be a mix of one, two and three bedrooms that reflects the overall dwelling composition of the development;
- Have internal layouts identical to other comparable dwellings in the development; and

		Be externally indistinguishable from other dwellings. These dwellings also need equitable access to the proposed communal open space areas.	
E. Building Detail	The ground floor facades adjoining the two laneways do not align with the articulation provided on the upper level facades, resulting in straight, undifferentiated pedestrian experience.	Upper level façade treatments should extend to the ground plane to improve the pedestrian amenity and visual interest of the laneways.	
		Building canopies should align with the proposed footpaths (discussed below) and not preclude the establishment and growth to maturity of street trees.	
Residential Amenity	Upper level plans	Residential amenity is greatly compromised by the long corridors to Towers T2 and T3, meaning that a great proportion of dwellings do not achieve satisfactory conditions in their communal spaces and within their dwellings. For example, less than 40% of dwellings achieve the required effective building ventilation standard. Both Towers T2 and T3 should be revised to reduce lentgth of common corridors and achieve effective building ventilation layout by introducing second lift cores and opening end of corridors to receive natural light as per p.27 Better Apartments Design Standards plan:	
F. Landana			
F. Landscape - Streetscape			
Port Phillip Planning Scheme: Wirraway precinct is to be 'leafy and green, with tree lined streets'	Plummer Street & Salmon Street No off-site works are currently proposed to the two street frontages, except as required to transition levels up to the Ground Level FFL.	The proponent should provide the following improvements along the Plummer Street and Salmon Street frontages of the site: • A minimum 3m wide footpath, increased to provide space for street furniture, etc;	
		Street trees, to supplement the existing street trees along Salmon Street to the retained and protected; and	
		Underground electricity lines (currently along Plummer Street) and common trenching / pits for underground services and infrastructure.	
		The design and construction of this work is to be in accordance with Council's technical standards and be approved by Council.	
	The Arboricultural Report recommends the retention and protection of several trees within Salmon Street (Nos. 1, 5, 6 and 14): "The council owned street trees (Trees 1, 5, 6 and 14) are significant and dominant in the landscape and must be retained and protected." Of the existing trees within the site, Tree 3 is "quite dominant in the landscape due to its size. It is unfortunately next to the fire hydrant which could be an issue in the future from roots as it continues to grow. It is worth retaining in the short term, <10 years".	Trees I, 5, 6 and I4 (within road reserve) need to be retained and protected, unless otherwise agreed by Council's arborist. They will play an important role in the amenity of this public realm, will help contribute to manging heat island effect and wellbeing of people using this area. The "judicious pruning of their canopies and roots systems" recommended in the Arboricultural Report needs to retain the amenity value of the trees (not only their health).	

Tree 2 is located within the adjoining property and is not anticipated to be impacted by the development.	Tree 3 (within site) also contributes to the amenity of the area and should be retained. In particular, it's location at the intersection of Salmon and Tarver Streets will help create sense of place and aid in wayfinding. It is expected that the fire hydrant mentioned in the Report will be removed as part of the development so should not impact on the long-term viability of the tree. The architectural plans do not appear to retain any existing trees. In particular, the proposed built form along Salmon Street and works within the road reserve will likely inhibit the long-term form and health of Trees 5 and 6. The landscape plans instead propose new street trees along Salmon Street. There is no opportunity for Tree 3 to be retained. For such canopy trees of existing local importance and opportunity to contribute to the future amenity and sustainability of the area, the design of development needs to respond (and adjust) to the trees. In this situation, however, the trees will need to adjust to the proposed development, which appears will impact on their viability. Tree 2 (within adjoining property) needs to be protected through development works.
	The proposed level transition within the Salmon Street road reserve may be supportable. The design would need to be approved by Council and achieve the following outcomes:
	 Provides equitable access both along Salmon Street and into the development. A minimum 3m wide footpath is required, increased to provide space for street furniture, etc. Retains and protects the existing street trees and provides for additional street tree planting; Consolidates infrastructure and services undergrounding of any power lines, if required; Maintains safe pedestrian access to existing on-street car parks; and Does not impact on the efficiency of future streetscape improvements to achieve the ultimate design of Salmon Street. It is recommended that the incorporated
	document include conditions relating to this matter. The design and construction of any works within the road reserve are to be approved by Council.
Highly patterned paving is proposed as a feature to laneway and footpath.	Highly patterned paving can cause navigation issues for those with visual impairments and be disturbing to those with cognitive impairements. Recommend that colour or pattern variation on private property is muted so that there is little
	impact on people with protected attributes. Footpaths and laneways are to be designed and constructed to Council's standards and be approved by Council.

Heritage

16-02-2021: No Heritage issues

Open Space and Recreation (Arborist)

19-02-2021: We have concern around the use of palm species on levels above ground level. Please ensure the applicant sources transplant stock with large enough root balls to provide adequate anchorage, planters are large enough to support future growth, and engineers have assessed the impact of wind on the canopy of palms with respect to anchorage.

An Arboricultural Impact Assessment report is required for review, prior to approval of the permit for works at this site. The report must be prepared by a suitably qualified Arborist (AQF level 5 or equivalent) and include all nature strip trees adjacent the property and on neighbouring properties with TPZs that fall within the subject site.

The report must follow the guidelines from Council Arboriculture Victoria and comply with the Australian Standard 4970:2009 Protection of Trees on Development Sites.

Should the report find that any works encroach into 10% or more of the Tree Protection Zone, or into the Structural Root Zone of any tree, and the design cannot be modified to reduce the incursion, then a non-destructive root investigation (NDRI) must be conducted and documented (with a root map) the location, depth and diameter of all roots found along the line of the proposed works. The findings, photographs and recommendations should be presented in the impact assessment report.

Following council arborist approval of the Arboricultural Impact Assessment, a Tree Protection and Management Plan that details how the trees will be protected, in accordance with AS4970-2009 (Protection of Trees on Development Sites), will be required for endorsement and form part of the permit.

22-02-2021: The Arboricultural report by John Patrick Landscape Architects (dated 22 February 2022) has not sufficiently assessed the impact to the street trees adjacent the site and in front of 14-16 Salmon Street, Port Melbourne. Furthermore, aerial photography shows a private tree within 14-16 Salmon Street, closely adjacent the property line, that has not been included in the report.

The DBH values given in the report, for several trees on the subject site, may deem them protected under Council's Local Law. The report is to be updated to determine which trees require a <u>significant tree permit</u> to be removed. No protected tree may be removed without an approved permit.

An Arboricultural Impact Assessment report is required for review, prior to approval of the permit for works at this site. The report must be prepared by a suitably qualified Arborist (AQF level 5 or equivalent) and include all nature strip trees adjacent the property and on neighbouring properties with TPZs that fall within the subject site.

The report must follow the <u>guidelines</u> from Council Arboriculture Victoria and comply with the Australian Standard 4970:2009 Protection of Trees on Development Sites. The report must visually show how the incursion values into each TPZ has been calculated and include the SRZ in all pictures. The report must demonstrate, with marked up detailed photos, what pruning would be required for building clearances, as well as clearances for scaffolding and/or gantries. As the previous report is 4 years old, updated and current measurements must be used to determine the TPZ and SRZ of the trees.

Should the report find that any works encroach into 10% or more of the Tree Protection Zone, or into the Structural Root Zone of any tree, and the design cannot be modified to reduce the incursion, then a non-destructive root investigation (NDRI) must be conducted and documented (with a root map) the location, depth and diameter of all roots found along the line of the proposed works. The findings, photographs and recommendations should be presented in the impact assessment report.

Following council arborist approval of the Arboricultural Impact Assessment, a Tree Protection and Management Plan that details how the trees will be protected, in accordance with AS4970-2009 (Protection of Trees on Development Sites), will be required for endorsement and form part of the permit.

Subdivision Officer

18-02-2021: ... the eastern (rear) footpath is a private pathway providing access to those shared services. Eventually it might act a part of the Road when it is created to the north, but not really relevant now. There will be built form over the northern end, near Plummer Street, so I think we should be accepting that it will be common property. If we really want to add it to the Road, when that's constructed, then we'd need to make sure that the projections are high enough to satisfy our engineers, and we would only take the Road to a certain height.

Similarly with the southern laneway. The laneway part is clear and should become a Road to Council (that they build), but the footpath has building above and below, and ramps onto it, so is better as common property. It would be almost impossible to condition it as part of the Road.

Sustainable Design

18-02-2021: The SMP doesn't refer to the site address, only "Wirraway Central". It needs to include the street address too.

The proposal is required to achieve a 5star Design and As Built Certified Green Star rating, which is acknowledged in the Sustainable Management Plan (SMP) Summary. The SMP targets 60.5 points, which would meet the minimum requirement of 60 points to achieve a 5star Green Star rating. However, the proposed Green Star pathway should target additional points to ensure that, if any items are compromised through design development and construction, there are sufficient ESD initiatives to ensure that a 5star outcome is achieved. A 10% buffer is recommended, equivalent to a score of 66 points.

See detailed comments below for specific issues. Note that natural daylight to living areas and provision of external shading to glazing are two key issues.

. . . .

Full Assessment Comments by Category:

IEQ:

External shading:

The design incorporates substantial masses of glazing exposed to solar heat gain, particularly on the north elevation. The proposed recesses provided by balconies, wintergardens and façade features will assist in providing some solar protection, particularly on the east and west façades, although it will not be enough to prevent significant heat gain. The north façade seems to rely on low-e tinted glazing as an alternative to shading. While that will result in lower solar gain compared to standard clear glazing, there is no substitute for incorporating fixed overhangs into the façade design to provide effective solar shading that remains for the life of the development. It doesn't appear that the façade strategy was designed to take account of solar exposure as there is more fixed shading on the east and west facades compared to the north façade.

The completely glazed envelope of tower 2 has no external shading integrated into the façade design. Considering the location of the tower at the north-eastern corner of the site, it will be significantly exposed to solar heat gain. The façade of tower 2 should incorporate external shading with the use of performance glazing as a secondary measure in solar protection.

The elevation details in the drawing set show that some louvres are provided above east and west facing balconies, which will provide some useful solar protection to the glazing. These should be very clearly labelled on the plans. Currently there's only one direct reference to them on drawing TP403 Detail 01 (page 54 in the full set of plans). The notation on this plan points to a feature that is mostly obscured on the Salmon Street side of the building.

These louvred sunscreens appear on many of the façade details including the west façade on drawings TP419 Detail 06 – Artists Impression and TP420 Detail 06 – Elevation, and the east façade (east façade of Tower I facing internal podium roof garden) TP422 Detail 07 – Artists Impression and TP423 Detail 07 - Elevation. The louvred sunscreens are located along the tops of recessed balconies and will assist with solar shading. They appear to be an integral part of the façade design but aren't labelled on those detailed drawings, nor on the elevations. A condition is recommended to ensure that they are clearly detailed on the plans.

Natural Daylight:

Dwelling types T2-1A and T2-2A has a narrow living area measuring 8.3m deep with one external window (glazed doors) located beneath a 2.5m recessed balcony/ winter garden. Therefore natural daylight to this living area is likely to be poor. Design reconfigurations are required to ensure adequate natural daylight, unless daylight modelling can be provided to show that at least 90% of the living area floor space would achieve a minimum daylight factor of 1.0%.

Natural daylight to the recessed bedroom of apartment type T2-2A may also be poor due to the location of its only window beneath a recessed balcony/ wintergarden. Daylight modelling is required to demonstrate that at least 90% of the floor area of the bedroom would achieve a minimum daylight factor of 0.5%.

The above request for daylight modelling for living areas and recessed bedrooms also applies to apartment type T2-2B, the living areas of apartment type T2-2C, type T2-2D and Type T2-2E, types T3-2A and T3-3B. That covers a high proportion of apartments in tower 2 and tower 3, therefore it's crucial to ensure provision of adequate natural daylight prior to endorsing the apartment layouts.

Daylight modelling is required notwithstanding the fact that the apartments meet Clause 58 standard D25 for room depth. The decision guidelines for D25 include consideration of any overhang above habitable room windows that limit daylight access and each of the apartment types queried include significant overhangs above the balconies/ wintergardens. It is also noted that tinted glazing is proposed which will further reduce natural daylight internally.

Energy:

The SMP doesn't specify the type of heating, ventilation and cooling systems to be installed. This is a critical factor in the energy use of a building, particularly for a development of this scale. The type of HVAC and its efficiency should be specified in the SMP.

The SMP includes commitments to achieve the energy objectives of the Fishermans Bend Urban Renewal Area Policy at Clause 22.15-4.5, including a 20% improvement on current NCC energy efficiency standards with an average NatHERS rating of 7 stars and provision of solar PV. However, the objective to provide on-site energy storage isn't addressed. A commitment to this should be included in the SMP.

The proposed electric heat pump hot water should be committed to, as opposed to natural gas hot water and the consideration of a Green Power supply contract for at least 50% of the development's electricity consumption should be made into a definite commitment in the SMP. This would elevate the development as a leader in ESD for FBURA so far.

Further information is required about the targeted energy credits as shown in the Green Star pathway at appendix A of the SMP. Three out of 20 available points are targeted but no information is provided as to how this number has been reached. The information in the Energy section of the SMP simply states that the energy objectives for FBURA at Clause 22.15-4.5 will be met. How will this be achieved and how have the Green Star points been calculated?

Water:

The SMP states that the rainwater tanks will be connected to the commercial, retail and basement toilets. The mandatory third pipe and rain tank requirements at Clause 4.3 of Schedule I to the Capital City Zone require the rainwater tanks to be connected to all toilets and non-potable outlets within the development. This is to enable rapid drawdown from the tanks, to allow for tank storage to be available in the event of a storm event, as part of the precinct-wide flood management strategy.

Stormwater:

STORM has been used to evaluate the stormwater quality outcome. However, STORM is not an acceptable tool to use for a development of this scale. The STORM tool is suitable for small scale developments but it lacks the complexity required to provide an accurate picture of the likely stormwater quality outcome for a development of this scale and type. The SMP must include MUSIC modelling to demonstrate that stormwater quality requirements are met.

The proposed stormwater catchment area shown in Fig I of the Water Sensitive Urban Design Response (page 9), shows a large band of "untreated site" area, which consists of non-trafficable landscaped space on top of the podium. These areas should be constructed as green roofs, which would provide stormwater treatment to that surface area. Otherwise an alternative way of treating stormwater from that area must be proposed. Currently the area labelled "untreated site" on the stormwater catchment plan is 3,645m2 in size. This is far too large a catchment area to be untreated.

The intent of the mandatory third pipe and raingarden requirements at Clause 4.3 of schedule I to the capital city zone is that the stormwater catchment should be as large as possible, consisting of the majority of the site area. Ideally none of the site's surface area should be untreated in Fishermans Bend. This is part of the precinct-wide flood management strategy, whereby discharge to the storm drainage network is minimised (among other objectives). Increasing the proposed catchment area will also necessitate an increase in tank capacity, due to the mandatory tank sizing requirement of $0.5 \, \mathrm{m}^3$ per $10 \, \mathrm{m}^2$ of roof area. Sufficient space allocation must be provide on the plans for the increased tank size, with notations for tank capacity and connection to all non-potable outlets in the development included on the plans.

Transport:

The SMP states that provision will be made for electric vehicle charging. This should be detailed on the floor plans showing EV charging facilities to meet the requirements for the Green Star Sustainable Transport credit 17B.3. Note that the same credit in Green Star (17.B3), which is being targeted in the SMP, also requires 15% of parking to be dedicated to fuel-efficient vehicles with max. 5% motorcycle parking and provision of dedicated car share spaces and car share vehicles at a rate of 1 per 70 occupants. Evidence of where this would be provided should also be noted on the plans.

As part of the Green Star credit requirement for Sustainable Transport the application is targeting the Green Star requirement for active transport facilities but this results in a bicycle parking requirement that is less than the requirements listed in Table 2 (Parking Provision requirements) at Clause 4.2 in Schedule I to the Capital City Zone. The SMP must commit to providing bike parking in accordance with the Clause 4.2 requirements of the CCZI.

The SMP must also quantify how many showers and lockers will be provided to meet the end of trip facilities for Green Star Sustainable Transport credit 17.B.4 and this detail should be shown on the plans.

Waste:

The SMP targets Green Star credit 8A, provision of a specialist Operational Waste Management Plan. The operational Waste Management Plan by Leigh Design submitted with the application does not address any of the Green Star credit requirements, such as setting diversion from landfill targets, and should be amended to do so. Otherwise the credit must be removed from the SMP.

Urban Ecology:

Refer to water comments about installing a green roof on the non-trafficable areas of the podium.

Building Management & Construction:

The proposal is targeting the Green Star credit for implementation of a Climate Adaptation Plan, stating that said plan will be developed early in the design stages. Given that the proposed application plans include very detailed design of the proposed development, it's considered appropriate to require the Climate Adaptation Plan to be provided now as an appendix to the SMP, demonstrating how the plan has influenced the design of the development to adapt to climate change. The Green Star Submission Guidelines for the Design and As Built rating tool (v1.2) specifically require design responses to be demonstrated in response to risks identified in the Climate Adaptation Plan.

Materials:

No comments.

Innovation:

The SMP targets a high number of innovation initiatives, which is welcomed. However, noting that the proposal is targeting 60.5 points to achieve a 5 star Green Star rating, a higher points buffer is highly recommended in the SMP (as mentioned above) to ensure that, should any of the targeted initiatives not work out as intended, the required 5 star Green Star rating can still be achieved. Any additional points targeted for that buffer should not rely on innovation initiatives.

Traffic Engineers

Please find attached traffic/parking comments.

My key concerns mainly include the new laneway and expected conflict and traffic volumes.

I. New Laneway along the southern boundary

Update plans to show a wider laneway. The building will need to be setback further to provide a typical footpath, with kerb and channel, and safe two-way traffic flow along this laneway. The applicant should assess expected largest vehicles to conflict within the laneway (e.g. semi-trailer and MRV).

Semi-trailers swept path diagrams will need to show 0.5m clearance envelope.

The proposed bollards to separate pedestrian and traffic are not supported.

It is strongly recommended the building's corner, at the intersection of Salmon Street and new laneway, is setback further to provide a pedestrian sightline area.

The Applicant should provide swept path diagrams for two B99 cars turning at the new and eastern laneways. In addition, I strongly recommend the building's corner is setback for pedestrian sightlines. I understand the link between the new and existing laneways has not been resolved.

Street lighting and adequate height clearance will need to be provided in accordance with the relevant BCA, Aus Standards and emergency services guidelines.

Comments that may require further discussions with other Council's teams:

- I suggest aligning the new laneway with the new street opposite the site. This will provide a conventional cross intersection. I believe the proposal will result in two staggered "T" intersections.
- The new laneway's surface level should be the same as Salmon Street. The intersection design of the new
 laneway and Salmon Street should be treated like a typical intersection. The expected traffic movements
 per day along this new laneway will be within the range of a typical local street.
- A raised pedestrian crossing along Salmon Street at the new laneway should be provided.

2. Access Arrangements

As per Schedule I to Clause 45.09 Parking Overlay it is strongly recommended the proposed crossovers to be consolidated. The three adjoining accessways proposal is approximately 21.0m wide and will result in multiple conflict points for cars and pedestrian. No pedestrian refuge is provided. This is a poor outcome.

It is recommended the building vehicle entry is setback further from the footpath to improve turning movements. The semi-trailer swept path does not show a safe clearance from the opposite property.

All boom gates will need to be setback from the building entry to ensure all vehicles queuing are contained onsite. A queuing assessment will need to be undertaken to determine the distance of the boom gate from the building entry.

The plans show columns within the pedestrian sight splay area and will need to be removed.

The semi-trailer will require the full width of the laneway to turn. The proposed loading access/exit manoeuvres will result in multiple conflict points within the laneway with cars approaching and leaving the basement and upper level areas. The Applicant may want to consider installing a warning light system to stop cars from exiting the building when the semi-trailer is entering and leaving the site.

3. Ramps

Accessway ramps – Update plans to show the length of the 1:10 ramps adjacent to the building's frontage in accordance with CI 52.06.

Internal ramps – The report states the 'retail parking ramps do not exceed I in 6'. The plans show a ramp grade of I in 5 between ground and second level (commercial car park level). Update plans to show the correct ramp grade in accordance with Clause 52.06.

The traffic report states all ramps are designed 6.1m wide between walls. I recommend the plans clearly show the length, width (including the kerbs) and RLs of the ramps.

A cross-section plan must be submitted showing height clearances of the ramps in accordance with AS.

4. Parking Layout

A Car Park Management Plan will need to be submitted. The report should discuss, but not limited to, access arrangement, hours of public parking, car share etc.

The plans indicate commercial car parking spaces are within the basement and Level; however, the traffic report indicates all commercial car parking is within the Basement level. The Applicant will need to clarify the parking arrangement.

Most car parking spaces are generally designed in accordance with Cl 52.06, 2.6m wide \times 4.9m long access from a minimum aisle width of 6.4m.

Update plans and annotate the locations of supermarket, shop and office (visitors and staff parking) bays.

The 20 motorcycle parking spaces (basement x five spaces; commercial level x six spaces; residential level nine spaces) have been designed in accordance with AS.

Basement Level – "Boom gates" are shown within the basement level (just beneath the proposed loading turntable). Given that the basement level is intended for commercial/public parking, can the Applicant advise the purpose of the boom gate?

It is recommended the 'trolley areas' are relocated to provide the clearance required as per CI 52.06 for car parking spaces 22, 43, 64, 85, 116 and 181. Car parking spaces 9, 106 and 154 are adjacent to walls and are also not provided with 0.3m additional clearance.

The six disabled parking spaces are considered acceptable. The disabled spaces 11 and 12 will need to be repositioned to ensure at least 6.4m wide aisle is maintained. A cross-section plan will need to be submitted to confirm the headroom clearance in accordance with AS.

The Basement car parking shows one-way aisles, however, the arrows shown are misleading. This will need to be clarified. I have no objection for the aisles to be two-way. Swept path diagrams will need to be submitted to demonstrate simultaneous movements for B85 and B99 vehicles.

Three car share bays are proposed. I strongly recommend seeking feedback from Strategic Transport team as they may also raise concerns about the location and public access.

Levels I to 5 - The Applicant will need to clarify how the two 'access points' on Level 2 will be managed.

If walls are proposed adjacent to car parking spaces 33 and 49 will need to be provided with a 0.3m clearance.

Update swept path diagrams to show simultaneous movements for B85 and B99 vehicles in opposing directions at turning locations on all levels and in/out at ramps.

Height clearances for each car park levels will need to be in accordance with Clause 52.06 or for future conversion of car parking areas to alternative employment generating uses as per Clause 45.09. A cross-section plan will need to be submitted.

5. Parking Provision

Table 3 of the traffic report outlines the car parking requirements and Applicant's proposal:

Table 3: Statutory Car Parking Requirements (Clause 45.09 & 52.06)					
Us	se	No. / Size	Statutory Requirement	Max No. of Spaces Required	Provision
Supermarke	t	4,962 m ²	2 spaces to each 100 m ²	99 spaces	178 spaces
Shop		3,500 m ²	1 car spaces to each 100 m ²	35 spaces	
Office		9,491 m ²	1 car spaces to each 100 m ²	94 spaces	74 spaces
Residential	1 & 2-bed	231 no.	0.5 car space to each dwelling	115 spaces	280 spaces
	>3-bed	131 no.	1 car space to each dwelling	131 spaces	
Total				474 spaces	532 spaces

Table 4 of the traffic report identified bike, motorcycle and car share parking requirements:

Table 4: Clause 37.04 Bicycle, Motorcycle and Car Share Parking Requirements				
	Parking	Rate	No./Size	Requirement
Bicycle	Residential	1 space per dwelling	362 units	362 spaces
Parking	Resident Visitors	1 space per 10 dwellings	362 units	36 spaces
	Non-residential	1 space per 50 m ²	17,953 m ²	359 spaces
	Non-residential Visitors	1 space per 1000 m ²	17,953 m ²	18 spaces
	Total			775 spaces
Motorcycle Parking	Residential	1 space per 50 dwellings	362 units	7 spaces
	Non-residential	1 space per 100 car spaces	255 spaces	3 spaces
	Total			10 spaces
Car Share Parking	Residential	2 spaces plus 1 per 25 car spaces	280 spaces	13 spaces
	Non-residential	1 per 60 car spaces	255 spaces	4 spaces
	Total			17 spaces

The Applicant will need to provide a breakdown car parking proposal for residential, supermarket and shop.

The number of car parking proposed will exceed the maximum car parking requirements. Section 4.1.2 of the report comments on their decision to exceed the maximum car parking spaces. Some of the key comments includes lack of public transports, delivery and timeframe of future public transports are not confirmed, the proposal is to meet current parking demands, etc.

A **disabled car parking** space is not strictly required for office and residential premises by the Building Code of Australia; however, it is strongly recommended the site has disabled car parking spaces on-site and installed to Australian Standard. Any future requests for an on-street disabled parking spaces will not be supported.

20 motorcycle parking spaces are proposed and is considered satisfactory.

Three car share spaces are proposed. This does not meet the parking requirements of 37.04.

I strongly recommend you seek feedback from Strategic Transport team regarding the number of car parking and car share spaces proposed.

Note that the assessment for the appropriate rate for car parking provision lies with Statutory Planning.

6. Bike Facilities:

A total of 775 bike parking spaces are required as per Clause 37.04.

The report and plans indicate 780 bike parking spaces are proposed. The traffic report and plans will need to clearly indicate how many bike parking spaces will be allocated to each premises (incl staff, visitors, etc).

The ramp leading to the basement and upper levels is steep and exceed AS 2890.3. I also have concerns for bike rider's safety sharing the basement and upper levels area with cars. The basement and upper level will generate relatively high traffic volumes as public and commercial car parking is proposed. If bike riders are required to use a swipe card (or similar device) it will need to be located at an appropriate location in accordance with AS.

It is strongly recommended they revised the bike access proposal to ensure all bike users can easily and safely access the bike parking area (such as a separate path from cars) and should be located within one level of street access points. It is preferred all bike racks are located on the ground floor.

At least 20% of bike racks must be installed horizontal (i.e. not wall mounted) as per AS 2890.3. In addition, it is strongly recommended all visitor parking spaces are horizontal.

The traffic report and plans need to be updated to clearly indicate how many shower and change rooms will be proposed in accordance with CI 52.34. These rooms should be located near the bike areas.

The proposed bike parking along Salmon Street is not supported and will need to be installed on-site.

They will need to indicate bike parking facilities models and specifications.

7. Loading Provision / Waste Collection Area

The traffic report states a Loading Dock Management Plan will be prepared. This will need to be submitted for review. All vehicle conflicts must be contained on-site.

Supermarket loading (ground level) – A vertical clearance of 4.5m is required as per AS2890.2-2018. This should include doorways. An annotation on the plans indicate the clearance proposed is 4.0m.

AS2890.2-2018 states 'where a turntable is provided there shall be a minimum of 300mm horizontal clearance between the design vehicle on the turntable and any fixed obstruction'.

Updated plans to clearly show the loading bays dimensions and widen the accessway aisle as Traffix Group has identified.

Key concerns:

- Cars approaching the site will not be aware and where to yield to give way to trucks exiting the site.
- How will truck drivers know the loading bays are fully occupied?
- Trucks waiting and/or reversing on the new laneway will not be supported.
- An action plan will need to be prepared when the turntable is not working.

Level I loading area – The traffic report states this loading area will accommodated for up to four passenger vehicle/courier vans and waste collection. The site should be able to facilitate all loading on site. It is noted, the loading area is not conveniently located for future residents or commercial premises to use and access the Lifts. Any requests for on-street loading zones will not be supported. The Applicant will need to clarify if the loading area is designed for service/removalist vehicles too.

I do not support cars stopping on the ramp to give way to vehicles turning in and out of the loading area.

Swept path diagrams will need to be submitted showing vehicles turning, within the direction of the traffic lane, in and out of the loading area with an opposing moving B99 vehicle.

Key concerns:

- Height clearance, including the doorway, will need to satisfy AS 2890.2-2018.
- How will drivers be aware the loading area is fully occupied?
- Vehicles waiting and/or reversing on the ramp and laneway will not be supported.
- Potential conflict during waste collection days/times.
- The location of the loading area and the ramp reduces driver's sightline.
- How will the access point be managed? This may force vehicles to overhang onto the traffic aisle/ramp.

Waste Management plan to be referred to Council's Waste Management department for assessment.

8. Traffic Impact Assessment:

Can Traffix Group share the traffic report G22233R-02D dated September 2019? It's not clear how this report is relevant to this site (Section 5.1 and 5.3).

Section 5.2.1 residential – will need to be reassessed for peak hour traffic movements. They have incorrectly applied 0.1 vehicle movements in peak hours instead of 0.25 as mentioned in the report. 280 dwellings \times 0.25 = 70 – Rpt is correct

Section 5.2.2 supermarket and retail – Traffix Group adopted a rate of 3.5 vehicle movements per 100sqm for peak hour traffic. An 8,462sqm of retail floor will generate 296 vehicle movements in peak hours.

Based on Traffix Group case study this site may generate 5.9 vehicle movements per 100sqm. This equates to 499 vehicle movements in peak hours.

I suggest given the timeframe of new developments will be built in Fishermans Bend a conservative traffic generation rate should be adopted.

Section 5.2.3 office component – The expected 50% of the available parking spaces allocated to office will be filled and vacated during morning and afternoon peak hours respectively. The suggested trips per parking space during AM and PM peak hours are considered low. Other Traffix Group reports identified a higher traffic generation for peak hours.

A queuing assessment will need to be undertaken. Note, all vehicles queuing will need to be contained on-site.

Generally speaking, based on these traffic volume figures the expected vehicle movements on this new laneway (from this site only) will be more than the expected traffic volume range for a typical laneway.

Further to our conversation, depending on the use of the 'shops' on level 1 may generate a different traffic volume/rate then a retail.

I suggest a cumulative traffic assessment is undertaken for future developments in this area.

9. Others

The plans show new ramps, landscaping and canopy along the building's frontage on Salmon Street. At this stage the ramps, canopy and landscaping are not supported. Further assessment and discussions with Council's teams regarding future street scape in this area is required.

Waste Management

22-02-2022: The T2 Bin room is not sufficient for the 17 bins proposed in the WMP including storage for Hard and Green Waste.

It is a fair bit of distance for that many bins to transport all the way to the loading bay for collection, especially for Res. Bins. It might hold the traffic in that area if the loading bay is a shared bay.

It is important that the passageway doors from the bin room (especially from T2) to the loading bay are wide enough to transport bins.

Rest looks good.

Municipal Building Surveyor

17-02-2021: I have reviewed the architectural drawings provided and note the following:

- I. There are no major regulatory issues that can be identified from the proposed drawings, other than some "deemed-to-satisfy" non compliances in relation to emergency egress. These issues will very likely be dealt with under the performance provisions of the Regulations (i.e. fire engineering) and will likely not impede the building approval process.
- 2. There are some fairly large canopy projections beyond the street alignments to Salmon and Plummer Streets at first floor, however these will likely comply with the as of right provisions of the Regulations.
- 3. The development is likely to undergo minor design development.
- 4. It is expected that a building permit could be obtained based on the developed design drawings without major difficulty.

(The two ground floor fire escapes on the east (rear) opening onto a 1.8m setback are satisfactory). Even if the fence was to remain as existing on that boundary the discharge of the three fire isolated exits along that side of the building would meet the performance provisions of the Regulations.