RE: Discussion Paper on Better Apartments in Neighbourhoods (DELWP)  
Australian Institute of Landscape Architects Vic. Chapter

Presented by  
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The Australian Institute of Landscape Architects (AILA) is a professional organisation representing landscape architects with core expertise in design of public space in cities including transport infrastructure and open space. AILA champions quality design for public open spaces, stronger communities and greater environmental stewardship, for which we advocate with all levels of government.

We provide our members - which number over 3,500 in urban and rural Australia, and overseas – with training, recognition and a community of practice to share knowledge, ideas and action. With our members, we anticipate and develop a leading position on issues of concern in landscape architecture. Alongside government and allied professions, we work to improve the design, planning and management of the natural and built environment.

Following on from AILA’s feedback from 29 April 2019 we have undertaken a review of the Better Apartments in Neighbourhoods Discussion Paper 2019. We have drawn upon the expertise of our members to provide further comments for consideration. For further information please refer to AILA’s initial feedback.

2.0 GREEN SPACE

General

AILA supports green infrastructure in all forms on future apartment development for Victoria. Melbourne’s Metropolitan Urban Forest Strategy highlights the importance of drastically increasing tree planting:

“With the population of Melbourne expected to double by 2050, there is increasing pressure on space for trees and vegetation, both on public and private lands. It is essential that we recognise the benefits that trees and other vegetation provide for people and nature across our metropolitan city.”
Doing so will help us to manage a range of chronic stresses and acute shocks that otherwise threaten the liveability and, in extreme cases, viability of Melbourne.”

2.4 Proposed changes to landscaping standard (all apartment developments)

AILA supports the move to strengthen landscaping standards for apartments and the greater focus on making allowances for canopy trees which includes sufficient soil volumes, solar access and head room. Existing mature trees should be retained and setbacks from the trees to built form should be based on the actual Tree Protection Zones (TPZ) as determined by a suitably qualified arborist. It is important to highlight that trees are most likely to be needed where they are not part of the current urban context; for example, in areas transitioning from industrial to residential uses.

AILA supports the implementation of landscaping; green infrastructure and canopy trees to all developments and a minimum as stipulated in Table D2, however a definition for Deep soil planting should be provided.

**Suggested definition:**
Deep soil planting is to a depth suitable for growing canopy and should be minimum 800mm-1000mm dependent on species selection. Deep soil planting may be on structural slab but is set down so that trees are flush with the finished surface.

In addition to deep soil planting these approaches to planting may be considered to increase landscaping opportunities:

- Areas of deep soil on natural ground (i.e. unimpeded by structures below and above ground) is preferable for establishing trees as there is access to groundwater and generally more lateral space for root development. However, the quality of the existing subgrade may not always be suitable for tree establishment without improvement in accordance with Australian horticultural standards.
- Deep soil areas on structure raised in planter boxes should also be encouraged.

**Additional notes on soil depths for canopy trees:**
- Regarding soil depth for establishing trees - reference could be made to Hitchmough in the *Urban Landscape Management Handbook*, or other best practice reference. This reference suggests there is no horticultural benefit for providing soil depths greater than 1000mm, rather the overall volume of soil is integral for large canopy trees. If soil volume is achieved in the horizontal plane, then the minimum soil depth could be down to 800mm for small to medium trees.
- Specifying minimum soil volumes is dependent on the tree species proposed and as such it is suggested that part of the design response shows evidence that soil volumes have been calculated.

In addition to the above, AILA recommends that developments maximise tree numbers within the overall volume proposed and the nominated tree species. In *Soils for Landscape Development; Selection Specification and Validation* by Simon Leake, Elke Haege, the following equation is put forward to estimate appropriate soils volumes. \( V=\pi (\text{Radius of mature trees canopy})^2 \)
As the size of the development and area deep soil planting increases, so should the number of canopy trees. This reference should be used only as a guide for minimum number canopy trees, as some tree species thrive in reduced soil volumes and we also acknowledge that trees in ‘bonsai’/reduced soil volumes can be considered to increase planting.

While we agree that vegetation on facades positively contributes to urban amenity, and a sense of health and wellbeing, we note that vertical greening opportunities should not be considered a replacement for on-ground or on-structure landscaping which typically provides greater open space and ecological benefits.

The following refinements are proposed to the Decision Guidelines:

- The health of any trees to be removed; as advised by a suitably qualified arborist and cognisant of the expected lifespan of the tree. Existing mature trees should be retained and setbacks from the trees to built form should be based on the actual Tree Protection Zone (TPZ) as determined by a suitably qualified arborist.
- The suitability of the proposed location and soil volume for canopy trees; based on solar access and tree species selection.
- The suitability of the proposed planting palette.
- Submissions should demonstrate allowances for sufficient soil volumes, drainage and balustrade heights for all green infrastructure elements; including but not limited to green walls, balcony planters, planter boxes and pergolas.

2.5 Proposed changes to communal open space standard (all apartment developments)

AILA supports the requirement for all apartment development to include a landscape communal open space. We support the required size of the communal space be proportionate the overall size of the development as well as the number of units.

The proposed amendment is around smaller apartment developments and would therefore address the less dense, more landscape-dominant contexts of existing neighbourhoods, as sites of infill development. As noted in AILA’s previous submission, the RMIT Centre for Urban Research states that:

“it is the private realm that contributes the majority of urban vegetation in our cities, and this is predominantly located on residential land. Given the development intensification pressure on the inner and middle suburbs this poses a significant risk in terms of maintaining or enhancing the urban forest.”

While the proposed change to the communal open space standard is supported, to ensure an appropriate proportion of infill development to green open space and so as not compromise existing urban and landscape character and ecological systems of suburbs, AILA proposes additional requirements and detail around quantity and quality of open space for developments of this type.
In regard to quantity, in addition to the proposed minimum areas of communal open space per development and private open space per dwelling, we recommend that a defined minimum percentage of all development sites comprise open space.

This is especially crucial in low-rise infill development in existing residential neighbourhoods. The City of Fremantle Council, WA recently amended its local planning scheme (Amendment No. 63, AKA ‘The Freo Alternative’) to ‘facilitate a wider choice of housing in Fremantle’s suburban areas, whilst still maintaining what people value about their neighbourhoods.’ Following extensive community consultation into the appropriate balance between existing neighbourhood character and increased residential density within the Council’s suburban fabric, this planning scheme amendment ultimately requires that small-scale infill development requires a minimum of 70 percent of a development site, be open space with some variation allowed to 60 percent open space.

In regard to open space quality, minimum areas or percentages around green open space not dedicated to car parking are recommended, as well as designs that may allow for the transition of open space dedicated to car parking towards alternative uses in the future. The Infill Opportunities Design Research Report, prepared by Monash Architecture Studio (MAS) for the OVGA in 2011, notes the dominance of multi-unit parking on open space in infill development projects, comprising up to 25 percent of typical infill sites in Melbourne surveyed in the report and eliminating a significant proportion of open space as paved, impermeable surface with low amenity and low flexibility of use. Design ideas generated through the report, providing alternative approaches to the typical sites surveyed, include car parking as ‘shared zone’ that may be transitioned towards communal open space uses in the future, as suburbs become less car dependent.

Given the diversity of apartment types in Melbourne, and the potential cumulative impact of small infill development on the character and landscapes of existing suburbs, we recommend that a set of guidelines specific to small infill apartment development be developed moving forward.

Finally, the proposed amendment to the definition of ‘communal open space’ to include either indoor or outdoor communal space is not supported. Indoor communal space should be provided in addition to outdoor communal spaces. AILA also recommends that the two typically be co-located.

We suggest the Communal open spaces could include additional requirements in the standards:

- Be located to receive a minimum of 6 hour of solar access to allow for a diverse planting palette
- Communal open space must be all accessible. As such, raised planters are not considered areas of communal open space while at grade tree planting where residents can walk and sit underneath canopy trees is counted as communal open space.
- Design responds to the principles of Crime Prevention Through Environmental Design.

2.6 Proposed changes to the design response

AILA supports the nominated additional requirement on the design response. We suggest that applicants submit soil volume calculations to demonstrate reasonable allowance for soil volumes have been made.
2.7 Proposed changes to the Apartment Design Guidelines for Victoria

AILA supports the inclusion of a permit condition requiring information on the proposed landscape maintenance. We note that access to some planted areas, particularly on balconies and facades, is often overlooked and as such recommend that maintenance access should be considered in maintenance plans.

4.0 WIND IMPACTS

General

AILA acknowledges the difficulty in ameliorating the impact of prevailing winds around Melbourne and the increased speeds caused by medium to high density housing.

4.5 Proposed new wind impacts standard (apartment developments of five or more storeys)

AILA supports the recommendation that the form, layout and design of developments should be used to mitigate wind impacts. In addition to careful building design, placement of trees and other vegetation could reduce wind conditions. Wind screens should be considered as a last resort as they can reduce visual connectivity.

5.0 STREET INTERFACE

General

AILA generally supports the change to the Street Interface with the aim of creating safer streets, integrated communities and improved neighbourhood character. We understand that poorly designed building functional requirements; building services, vehicles crossovers, level changes, etc, can contribute to reducing the amenity provided by the building to the neighbourhood. These elements must be considered upfront and reviewed a part of the approval process to ensure that they are integrated.

Please refer to AILA’s previous submission dated 28 April 2019 for further detail.

5.4 Proposed changes to integration with the street standard (all apartment developments)

AILA suggestions for further refinement of the proposed standards:

- Developments should provide adequate and compliant vehicle, pedestrian and cycling links that maintain or enhance local accessibility.
- Buildings should provide for residential, commercial, retail or other active uses at street fronts in line with relevant Structure plans and street visions.

AILA proposes the following additional standards:

- Built form should be cognisant of CPTED design principles and avoid unnecessary setbacks in built form.
- Building services should be integrated into the facade and/or landscape design.
5.5 Proposed changes to access standard (all apartment developments)

AILA supports the standards outlined in this section. Ultimately it would be most desirable to limit new car parks altogether on sites that have multiple sensitive interfaces, and which are located near good public transport facilities. We understand that there is already a surplus of off-street space in the CBD, given the convenient access to public transport and mode shift to share cars and other rapidly evolving road travel services.

AILA suggestions for further refinement of the proposed standards:
The width of accessways or car spaces should not exceed:

- 33 percent of the street frontage, or;
- if the width of the street frontage is less than 20 metres, 40 percent of the street frontage; and, AILA recommends removing this as it will result in cross overs of up to 8m wide. AILA recommends that the maximum width of a vehicle crossover is 4.5m and where double crossovers are required, sufficient space for pedestrian refuge be provided.

5.6 Proposed changes to site services standard (all apartment developments)

Regarding the integration of service cabinets, AILA supports the design intent outlined in the draft Planning Amendment C308 Design in the Central City and Southbank and in the best practice examples illustrated in the supporting Central Melbourne Design Guide.

OTHER

The following matters were also raised by our members regarding the Apartment Guidelines:

- Consider the alignment with the City of Melbourne Green Infrastructure Planning Amendment and the Green Factor Tool (reviewing the amount of green cover required by private developments). DELWP is being consulted as part of this project.
- Landscape character could be better identified as part of the urban context report and design response.
- Water features are generally not encouraged due to on-going concerns regarding availability of water.
- Consider collaborative planning opportunities. For example, if two adjacent residential developments join forces to create a purposeful, publicly accessible open space at ground level, they might be eligible for some form of dispensation.

As previously mentioned, AILA suggests that it would be useful to provide pictorial examples of high quality, integrated landscape solutions to support the policy wording and diagrams, similar to the Central Melbourne Design Guide. AILA would be pleased to assist in sourcing images of highly commended projects in Melbourne and other Australian urban centres. We attach an appendix of images as examples.