15th July 2018

Wollongong Design Review Panel – Chair comments in response to revised design
9-15 Railway Parade, DA-2017/992

The following comments outline how revised drawing have addressed design issues previously raised by the panel. Issues previously raised by the panel are italicised:

Design quality principals SEPP65	
Context and Neighbourhood Character	*The proposal is located at the edge of Wollongong's main commercial precinct, on a prominent corner site adjacent to the railway line and within easy walking distance of the railway station.* *The surrounding precinct is in a state of transition, with approved and pending DA applications for buildings of significant scale on surrounding sites. The future context of this building is likely to be a series of buildings that are significantly taller and denser than the current context of this site. It is imperative that this proposal considers this future context. Additional contextual analysis has been provided. However, the documentation provided still lacks a detailed exploration of how the proposal relates to the future built form context of this precinct. Refer to ADG appendix 1 for detail requirement of a site analysis, specific consideration should be given to:* - *Elevations must demonstrate how the building sits within Railway Parade and Rawson Street (existing and future context). This is an important step in determining an appropriate built form for the site.* - *View analysis, to establish potential views from the tower.* - *Solar access analysis, examining solar access to the proposal should be updated to show the revised design* - *Public domain analysis, how will the proposal connect to and enhance the surrounding streets.* Though elevations still lack contextual information, a reasonable built form study, documenting the proposal in its future context has been provided (drawing 010C). This drawing demonstrates a reasonable relationship between the proposed tower and potential future built forms. A revised solar access study has also been provided, demonstrating that a reasonable level of solar access will be provided.
Built Form and Scale	*A pattern of development is developing along the southern face of Rawson Street, where towers sitting on active / articulated podiums are visually prominent in the street. The panel have previously expressed concerns regarding the squat horizontal proportions of the of the Railway Parade façade. In reducing the height of the building by 4 storeys the proportions of the proposed tower fronting Railway Parade have become more squat and horizontal. The reduced FSR has created different opportunities for the distribution of built form across the site, as part of a robust design process these options should be considered / explored. Simply reducing the height of the proposed building by 4 levels in no way responds to the context of the site to provide the best outcome.*

	The panel's preferred response to this site would be for a taller / more slender building form achieved by reducing the typical tower foot print from 8 units to 6 units. This approach would provide more corner units with better amenity and potentially increase separation between tower forms. With suitable finishing, a taller, slender tower will be a welcome addition from nearby public vantage points such as the adjoining railway station, commuters in trains travelling along the associated railway line, and possibly from any viewing points within the escarpment to the west. The applicant is encouraged to explore this design option in more detail. The proponent is encouraged to review and acknowledge the architectural design expectations associated with the design excellence clause (7.18) of the WLEP 2009 which applies to the site. *It is, however, acknowledged, that a tower designed that realizes the full extent of the 80m height permissible, is not the only valid design response to this site. If a shorter building is to be developed on this site its scale and massing must respond to its street corner location and be articulated to express a more vertical building form.* *Consideration should be given to relocating the southern 4 units of level 14 (14.05, 14.06, 14.07 and 14.08) above the northern units to create level 15. This will create a two storey step in the building which will provide a taller northern form to address the street corner, whilst the shorter southern form allows improved solar access to the future tower located on the site to the south. In doing this consideration must be given to the location of the egress stair, to service the upper two levels. The option to increase the height on the southern portion of the building was also raised as a design option during the meeting as it relates to the contextual topography and may improve the amenity of the roof terrace, but it is considered problematic by members of the panel because it will weaken the building's expression of its corner location and increase over shadowing of the future neighbor to the south.* *The proportions of the broad eastern and western elevation must then be improved by further developing the expression of the façade, to provide a more vertical expression (refer to comments below, Aesthetics). Streetscape elevations should be developed to assist this process.* The applicant has now proposed a taller more-slender building form, by stepping the building to provide a 19 storey tower addressing the street corner. This development has improved the proportions of the building, provided a better contextual fit with the future context of the site and improved the amenity of several units. The expression of the tower façade also contributes to the vertical expression. *It is acknowledged that the laneway will primarily be a utilitarian space used for accessing and servicing the building. However, it must also be acknowledged that this will be a pedestrian environment, providing access to Rawson Street and beyond. The introduction of deep soil planting areas within the lane will assist in improving the quality of this space. In response to the panel's previous comments, units within the podium have been extended across the full length of Rawson Street and wrapped around the corner of the lane. This aspect of the building will be very prominent when walking down Rawson Street towards the railway station. The amended design is considered by the panel*

	to improve the building's presentation to the street. No change to this issue. *The treatment of the roof above the level 3 podium, on the north eastern corner of the site remains unclear. Perspectives show a narrow roof form wrapping around the perimeter of the podium with a planting bed beneath it. Architectural plans (103C) show a broad concrete slab roof which covers: a grassed area; ornamental shrub plantings; a small tree planting within the footprint of the wall to the stairwell; and a shade structure over a children's playground. It appears that the treatment of this area remains unresolved and unco-ordinated. The applicant is required to work with his landscape architect to resolve both the use and expression of this space. The landscape should be integrated with the architecture and the roof form should be developed to relate to the spaces below it. Providing shelter and shade to space that will benefit from this environment as well as contributing to the aesthetic and form of the building.* The treatment of the roof above the level 3 podium is now consistently depicted in the documents provided. There remains a lack of logic to the position of the narrow roof form that wraps around the north eastern corner, providing shelter to soft planting areas. However, it is acknowledged that the roof form does contribute to the proportions of the building base and as such has some aesthetic merit. *Some positive developments have been made to building's interface with the street. A nil set back has been provided to Railway Parade and ground floor retail has been wrapped around the perimeter of the building, retail units appear to have been developed to relate to street levels, ramps have been removed from the public domain and retail tenancies nominally increased in size to provide more functional spaces. However, it is recommended that more detail is added to the documentation; clearly showing street levels and how they relate to proposed point of entry (see landscape comments below).* The proposals interface with the street remains reasonable, additional level information has been provided as requested. *In response to the panel's previous comments the applicant has developed a more solid base to the building. Solid balustrades have been provided, along with masonry walls and screening to balconies. The extent of changes may now be creating spaces that are too dark and enclosed. The privacy previously sought by the panel could still be achieved if the extent of masonry wall proposed were significantly reduced or even eliminated, provided appropriate screening and balcony treatments are developed.* A more balanced approach the mixture of solid and transparent elements has now been developed.
Density	*It is understood that the proposal now complies with council's maximum FSR requirement. The building form must now be developed to accommodate this FSR in a manner that more appropriately responds to the context of the site.* The revised form of the building now responds to the future context of the site in a more appropriate manner.

Sustainability	*Compliance with the minimum requirements of the ADG must be clearly demonstrated. Sun's eye views have been provided at hourly intervals between 9am and 3pm in mid-winter. However, they have not been updated to show the revised building form or model the impact of the proposed screening. The sun's eye studies should be used as a tool to develop appropriate screening systems that improve the quality of the units. Current solar screening systems do not appear respond to their orientation or contribute to the spatial quality of the unit. For example, vertical screens are proposed on the north and west facing level 1 and 2 units. These screens may be appropriate on the western elevation if appropriately designed, but they appear to serve no purpose on the northern elevation where they will obscure outlook. A more robust approach must be taken to the design of solar screening devices.* A revised solar access study has now been provided, compliance with the requirements of the ADG have been demonstrated. Aspects of the solar screening still appear to be more of an aesthetic value than a functional necessity. For example, the vertical blades on the northern face of the building appear to provide no functional purpose, they are purely aesthetic. However, within this framework solar screens appear to have been developed to better respond to their orientation. The number of vertical screens on the north has been reduced, horizontal over hangs are provided along the northern façade and the vertical blades to the east and west elevations remain appropriate. *Natural ventilation has been provided to more than 60% of units, meeting the minimum requirements of the ADG* No change to this issue. *Natural lighting has now been provided to common circulation areas, eliminating dependency upon artificial lighting.* No change to this issue. *A rainwater tank has now been provided to service the podium planting. Other water minimization measures should be considered.* No change to this issue. *Species selection for any plantings should aim to support council's commitment to maintaining local biodiversity and natural landscapes, and preventing future weed problems* No change to this issue.
Landscape	*As raised in the above comments, the landscape design needs further development. The Rawson Street elevation should be designed collaboratively by the landscape architect and the architect. The constraints of the grade need to be resolved to achieve a functional and inviting environment that will promote commercial uses that activate the streetscape. The plans show 4 street trees along this frontage in a linear ('soldiers in a line") planting. Street tree plantings need to be developed in*

	consultation with Council, with consideration given to such factors as biodiversity, solar access, the amenity of the podium level apartments and potential vehicular impacts. *The development of the communal open space (COS) on level 3 is an improvement on previous schemes but still requires further development. In addition to the issues raised with regard to the roof form in the north-eastern corner, the lay-out of the spaces warrants reconsideration. It is questionable as to whether the optimal location for the children's play area is in the north-eastern corner rather than in a more central location. The provision of storage on this level will be useful for users of the landscape but the panel questions the extent of the area proposed for this purpose. It is recommended that the option of utilizing some of the storage area to provide an indoor common room that opens into the COS be explored.* *The proposal for a glass-enclosed "winter garden" on the roof is supported by the panel. The panel noted that increasing the height of the residential component at the roof level will be beneficial. The upper level apartments will enjoy the visual and recreational amenity of this garden, improve surveillance of the area, and help activate it.* Landscape drawings and architectural drawings have now been better coordinated. Further developments to areas of communal open space now provide a reasonable level of amenity to future residents.
Amenity	*A far more generous entry has now been provided at street level.* *The proposal is located upon a site with minimal constraints, there is no justification for not complying with the basic requirements of the ADG including:* - *All bedrooms and living rooms must meet minimum dimensional requirements. Some units appear to contain under sized rooms. Documents must show the dimension of each habitable room, confirming compliance with ADG requirements.* *Dimensions are provided to most habitable rooms, from the information provided it appears that some rooms remain marginally below minimum ADAG requirements. For example, room 4.03 is a 2 bed unit with a living room which appears to be less than 4m wide, bed 1 of unit 4.07 is less than 3m wide* - *All units must meet minimum area requirements.* *Units appear to be largely compliant with minimum area requirements. With eh exception of unit 4.02, which is a two bed, two bath room unit slightly less than the minimum required 75sqm.* - *A window must be visible from any point within a habitable room.* The proposal has been developed to address this issue. *Adaptable units must be provided in-accordance with council controls. For ease of adaptation it is recommended that toilets remain in the same location, after adaptation. The applicant is encouraged to work closely with his access consultant to*

	maximize the functionality of these dwellings by keeping bathroom dimensions to a minimum to allow more space to be dedicated to living areas... No adaptation plans where provided. Adaptable units depicted on floor plans appear to provide adequate space for a compliant bath room, bed room and entrance. However, circulation in accordance with the requirements of AS4299 and AS1428.1 must be demonstrated in living areas (whilst furnished). *Units 1.03 and 2.03 must be developed to provide access from bed room 1 directly onto the eastern balcony.* Access to the balcony has now been provided. *Units 1.02, 1.03, 2.02, 2.03, 3.02, 4.01, 4.08, 5.01, 5.08, 6.01, 6.08, 7.01, 7.08, 8.01, 8.08, 9.01, 9.08, 10.01, 10.08, 11.01, 11.08, 12.01, 12.08, 13.01, 13.08, 14.01 and 14.08 must provide access directly from the living room to the balcony.* Access to the balcony has now been provided. *Windows within the living area of units 2.01, 206, 3.01 and 306 are located within a narrow slot in the western face of the podium. The position and typology of these windows must be configured to limit potential privacy issues between units.* Windows have now been offset.
Safety	*A safe pedestrian environment must be developed for/to Waters Lane way. Wrapping residential units around the base of the building (to the south and east) helps to activate the edges of the lane way that are exposed to the street and improve casual surveillance of the lane. The quality of material finish and landscaping within the lane will also contribute to an environment that is more inviting to pedestrians.* No change to this issue.
Housing Diversity and Social Interaction	*The proposed mixed-use development will potentially provide an appropriate contribution to the city. Retail spaces have now been developed to provide a more positive contribution to the street. However, ideally a larger proportion of retail space would be provided.* *Given the current trend towards increased working from home and home offices, the design of the podium level apartments to accommodate this demand could be a viable approach. Council are encouraged to support/promote this type of mixed use through its LEP.* No change to these issues.
Aesthetics	*A taller more, slender tower remains the preferred built form option of the panel, as outlined above (built form). This option should be explored by the applicant.* *If the applicant chooses to develop a lower building form by creating two stepping horizontal elements as outlined above (built form). Façade treatments can be developed to express two separate elements with more vertical proportions, helping to break down the width of the east and west elevations. A solid*

	section of the façade could be developed on the edge of the northern portion of the tower, to form a visual break between the north and south portions of the façade. The solid element could be expressed as a continuous vertical element that goes from the top of the tower down to the ground floor entry. This will add further clarity to the building entry as well as contributing to a more vertical expression to the tower. A taller more-slender tower has now been proposed. *Solar screening elements should be developed to respond to the orientation and improve the quality of space within the unit they serve. It is recommended that this is developed in conjunction with the applicant's environmental consultant.* Aspects of the solar screening still appear to be more of an aesthetic value than a functional necessity (see comments above, sustainability). However, the majority of screens have been developed to better respond to their orientation and not negatively impact the amenity of the unit. *Servicing of the building must be considered at this stage of the design process. The location of service risers, car park exhausts, AC condensers, down pipes, substation and fire hydrant boosters should be accommodated* No change to this issue.
Design Excellence WLEP2009	
Whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved	*Further development of the material pallet is recommended. Materials (including plants) should be selected on the basis of the coastal hinterland context of this site which will require them to be resilient to salty, strong winds and a high level of solar exposure.* *More detail information is also required to demonstrate the detail intent. A dimensioned 1:50 section should be provided. All materials should be clearly identified.* A detailed section has been provided. Though the building is well proportioned and articulated, there remains a concern that that the building consists largely of applied paint finishes. Further development to the material finishes applied to the base of the building, perhaps expanding the extent of masonry used a street level as depicted in drawing 123B.
Whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,	*Further development required.* *Further consideration should be given to how any built form for the site can capture surrounding opportunities. As mentioned earlier, this may include providing a visually appealing form which captures views from the nearby railway station, commuters travelling along the rail line, from throughout the city centre generally, and potentially from any vantage points throughout the broader escarpment given the site is effectively at the perimeter of the city centre and will therefore be easily accessible visually.* The taller more-slender tower now relates to its context in an appropriate manner.

Whether the proposed development detrimentally impacts on view corridors,	*Some analysis has now been provided showing the building's visual impact from street level. However, the proposal's impact upon views from future built form in this precinct has not been explored.* *From the information provided the proposed tower appears to be positioned on the site in a logical manner to respond to its context pending further development of the tower form.* From the information provided the proposed tower appears to be positioned on the site in a logical manner to respond to its context.
Whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,	*The extent of over- shadowing has been improved through the design review process by repositioning the building on the site and developing a slender tower form. There remains scope for further improvement by refining the form of the tower, given the recent reduction in FSR.* *A copy of the sun plane protection map has not been provided to confirm compliance.* No change to this issue. It is noted that the shadow created by tall slender tower passes quickly over its neighbors limiting over shadowing.
How the development addresses the following:	
the suitability of the land for development,	*The site location, size, orientation and access potential make the site suitable for the proposed development* No change to this issue.
existing and proposed uses and use mix	*The site's proximity to the train station and CBD provides an ideal location for residential units and retail/commercial activity. Ideally a larger proportion of retail / commercial space would be provided.* No change to this issue.
heritage issues and streetscape constraints,	*The relationship between the commercial spaces and the sloping streetscape of Rawson street requires further development. The aim should be to support commercial activities that utilise the amenity of this northerly and relatively sheltered aspect, both improving their leasehold appeal and supporting street activation.* Ground floor commercial tenancies now relate to the street in an appropriate manner.
the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,	*Further development is required to refine the tower form.* The tower form is appropriately located.

bulk, massing and modulation of buildings	*Further development is required to refine the tower form.* The bulk / massing of the building are both consistent with the future desired character of this precinct.
street frontage heights	*The podium provides a reasonable scale street wall, consistent with the desired future context of this site.* No change to this issue.
environmental impacts such as sustainable design, overshadowing, wind and reflectivity	*Solar access must be more clearly demonstrated. The form of the tower can be improved to further mitigate over shadowing.* *The extensive use of decorative panels and solar screens as solutions to design concerns (including the character of the building) involves unnecessary use of building materials and construction resources.* A revised solar study has now been provided and solar screening rationalised to some extent.
the achievement of the principles of ecologically sustainable development	*Solar screening must be developed to provide a positive contribution to the building environment.* Though purely decorative in some locations, solar screening will contribute to the environment of the building. *The bathrooms in the adaptable units should be designed to enable conversion to adaptable use with a minimum of alteration and use of new fittings and materials.* Further information is required. *The landscape plan should rely predominantly on locally indigenous species that can cope with the site conditions (this is now proposed). Rainwater should be incorporated into the water supply for irrigating the plantings. The coastal environmental conditions should inform materials selection. It is noted that "steel tables" are currently specified for the level 1 landscape. This is not optimal – steel exposed to the sun becomes extremely hot and unless it is of an extremely high quality, it is liable to start to begin to rust within a short period of outdoor exposure. The furniture for the COS should be solid, weather-resistant and durable, and its maintenance should be included in the landscape plan of management.* No change to these issues.
pedestrian, cycle, vehicular and service access, circulation and requirements	*Vehicle access has been appropriately located.* *Access to the level 3 COS is now simple and clear, but the architectural plans do not show a doorway from the northern end of the corridor.* Pedestrian and vehicular access remains acceptable.
impact on, and any proposed improvements to, the public domain	*Further information documenting the building's interface at ground level is required.* Additional level information has been provided as requested.
Key issues, further	Significant improvements have been made to the quality of the

Comments & Recommendations	proposal during the course of the design review process. The form of the building is now consistent with the future desired character of this precinct, the building now engages with the street and the level of amenity provided to residents has significantly improved. Major issue raised by the panel have been addressed in a satisfactory manner. However, there remain detail issues that warrant further development: - All room sizes should comply with the minimum requirements of the ADG (refer to detail comments above, amenity). - Adaptable units must demonstrate full compliance with the requirements of AS2499 and AS1428.1, circulation spaces must be demonstrated in living rooms (refer to detail comments above, amenity). - Further development of building materials (refer to detail comments above, aesthetics).