Wollongong Design Re	view Panel – Council Administration Building & MS Teams Meeting minutes and recommendations	
Date Meeting location	Wollongong City Council Administration Offices & MS Teams	Annligante Basnonso
Panel members	David Jarvis (Chair)	Applicants Response
	Tony Tribe (Panel member) Marc Deuschle (Panel member)	
Apologies	Jerah Fox – Strategic Project Officer Felicity Skoberne – Landscape Architect	
Council staff	Andy Goldie – Senior Landscape Architect Mark Adamson - Manager Development Assessment and Certification	
	Pier Panozzo - City Centre & Major Development Manager	
	Rebecca Welsh - Senior Development Project Officer Nigel Lamb - Senior Development Project Officer	
	Joel Thompson - Coordinator Heritage - Strategic Project Officer Kate Rintoul - Strategic Project Officer	
Guests/ representatives of the applicant	In person attendees_ Steven Turner (ColonySix)	
	Shaun Doyle (ColonySix)	
	Omaira Kola (ColonySix) Roger Jasprizza (Oculus)	
	Leny Lembo (BVN) Online attendees:	
	Edward Green – Urbis	
	Andrew Harvey - Urbis Chris Bickerton – BVN	
	Andrew Lancaster – Win Group Chris Halios-Lewis – WIN Group	
	Phillip Rossington - BVN Ciaran Dumey	
	Julian Bott Joe Gallace	
	Justin Leo Ninotschka Titchkosky	
Item number	None 2	
DA number Reason for consideration	DA-2021/957 Design review as per Clause 28 of SEPP65 and Design	
by DRP	Excellence as per Clause 7.18 of WLEP 2002	
Determination pathway	Southern Regional Planning Panel (SRPP)	
Property address	City block bounded by Crown, Keira, Burelli and Atchison Streets, Wollongong.	
	Demolition of existing structures, retention of heritage facades, tree removal, excavation for basement car parking and construction of a mixed-use development at the street block bound by Crown, Keira, Burelli and	
	Atchison Streets, comprising three (3) residential towers (shop top housing), one (1) commercial building,	
	retail shops, entertainment facilities (cinema, exhibition / performance space) and a wellness centre (pool, gym, and health services)	
Applicant or applicant's representative	The meeting was conducted in person and by video link between the Panel (Council offices) and some of the applicants' team (remote).	
address to the design review panel		
Background	The Panel have previously visited the site on several occasions and reviewed design proposals for	
	the site on three separate occasions (21/8/2020, 15/10/2020 and 18/11/2020) prior to the proposal being lodged as a	
	development application. The DRP reviewed the design post lodgement on 15/10/21 and 7 April 2022.	
Design quality principals SEPP 65		
Context and	Future Urban Context	
Neighbourhood Character	WLEP 2009 design excellence criteria requires that the proposal is considered within its future context: "The location of any tower proposed, having regard to the need to achieve an acceptable relationship	
	with other towers (existing or future proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form".	
	Given that the proposal will contain the tallest tower in the city it is essential to demonstrate that the	
	proposal (particularly tower 1) contributes to an equitable and cohesive pattern of development on surrounding sites.	
	A contextual study has now been provided, documenting potential future building forms on neighbouring sites that realise council permissible GFA controls and demonstrate compliance with ADG building	
	separation requirements. A sunlight analysis has also been provided. The analysis demonstrates that solar access to the site immediately to the south of the subject site (site 5) will be challenging,	
	particularly to the lower levels of the development. However, there appears to be sufficient flexibility to develop ADG compliant solar access to future residential towers located above podium level.	
	Overshadowing of MacCabe Park	
	Council's sun plane protection restricts over-shadowing of MacCabe Park, no overshadowing is allowed between 9am and 2pm, mid-winter. In response to the Panel's previous comments building	
	mass fronting Burelli Street has been redistributed to comply with Council's overshadowing objectives. The Panel endorses the proposed redistribution of the building mass fronting Burelli Street.	
	It is noted that the currently proposed building form remains noncompliant with Council's building height control. However, the now minor noncompliance helps to facilitate a rational distribution of	
	building mass and no longer has a negative impact upon the public domain.	
	Connecting to Country	
	The Panel is pleased that a Connecting with Country Framework has now been included. With the specialist consultant coming onto the team late in the design process - and acknowledging that the	The WIN Grand project commenced several years before the NSW Government Architect introduced the Draft Connecting with Country Framework.
	Government Architect NSW Draft Framework was first released after the project commenced - it is not surprising that much of the work is a high-level endorsement of the current design.	Subsequently, a specialist consultant (Bangawarra) was introduced into the design process and while they noted many community-focused and sustainability drivers existed within the WIN Grand design, the consultant did not expect the
	While many suggestions: use of local language in wayfinding, integration of artwork in the public	design process for WIN Grand to be initiated through Country.
	domain, integration of local indigenous ecologies in the landscape; need not be fully documented for a DA, very little evidence of the architecture or landscape design, and how it	Nonetheless, the project is committed to implementing the ideas and initiatives outlined in the Bangawarra Connecting with Country Framework throughout the detailed design phase and delivery of the project. This will involve the creation of
	relates to Country is currently evident.	interpretation strategies, arts and culture approaches and cultural related programming. The DRP noted that the planting design proposed as part of the project's landscaping strategy has responded to Country
		even prior to the development of a Connecting with Country framework. This has positively grounded the project in place and will continue to be developed in line with the other initiatives identified in the Connecting with Country framework.
Built Form and Scale	Height transfer between tower 2 and 3	· · · · · · · · · · · · · · · · · · ·
	See comments above (over shadowing of MacCabe Park). The redistribution of the built form fronting Burelli Street has addressed the concerns raised by the Panel without compromising the	
	overarching design intent (strengthen grain and tactility) outlined by the applicant. The rationalised height of the lower portion of tower 3 has also created a stronger, more consistent expression of the building	
	base to the Burelli Street frontage, resulting in a more legible street scale. It is also noted that the reconfigured towers will result in better amenity for more residents.	
	Separation between residential towers.	
	The separation provided between residential towers largely complies with the numerical requirements of the ADG. However, there are isolated areas where ADG separation distances have not	A plan has been prepared with design details for the privacy screens - refer to Appendix 1. The privacy screens will be constructed out of a high quality material and continue down the building facade to provide a
	been achieved. To address these non-compliances, the applicant has proposed privacy screening that maintains the outlook from habitable rooms but prevents a direct visual connection between habitable	consistent, high-quality design outcome for the residential towers while meeting the objectives of the ADG.
	rooms of neighbouring residential buildings. The Panel agrees that the provision of appropriately	
	designed privacy screens as outlined by the applicant will address the objectives of the ADG, mitigate potential privacy issues, and provide an acceptable design response.	
	To ensure that the design intent outlined in the applicant's presentation is realised, detail design (1:10 detail showing materials dimensions of and spacing between louvers / blades) of the	
	privacy screens should be provided as part of the DA documentation package.	
	Separation between Tower 3 and The Grand Hotel.	Plans were provided as part of the Response to Submissions (RtS) (June 22 - refer to drawing AR-DA-B-10-06), which
	Lower-level units of tower 3 will overlook the external terrace / beer garden servicing the Hotel. To address this issue a pergola has been provided over the terrace. The applicant also advised that	describe the intent of the terrace/beer garden roof structure. The beer garden roof structure will consist of a light weight articulated structure that creates a rational, expressed grid
	residential windows will be acoustically treated, and privacy screens provided. The terrace will receive good solar access (around lunch time), providing a very amenable space to	arrangement and format to allow the reading of a primary structure from the terrace/beer garden. The roof structure will include operable/open sections to allow solar access into the space while providing the flexibility to close during inclement
	enjoy a midday meal / beverage. Any structure proposed above the terrace should seek to maintain	include operable/open sections to allow solar access into the space while providing the flexibility to close during inclement weather.
	solar access to the space during the day but allow the terrace to be more enclosed during the evenings. A flexible design should seek to address potential privacy issues, whilst maintaining the quality of	The final resolution and detail is to be developed in the detailed design phase of the project.
	the space. Details of the terrace roof structure and screens to windows should be provided as part of the DA	Refer to Appendix 1 (and the above commentary) for the privacy screens that are located above the terrace/beef garden
	documentation package.	roof.

	the detail resolution of interfaces between the lower level of the towers (particularly tower 2) and the	
	wellness center.	The southern facade of the pool and gym building includes limited windows, the majority of which are located at a high level thereby preventing views directly into the lower apartments of towers 2 and 3 while still providing natural light into the pool and gym building. The bases of towers 2 and 3 have a brick facade design with deep balcony arrangements, a layering of brick columns and fenestrated balustrades that provide high levels of privacy to the apartments in towers 2 and 3. Refer to drawings provided as part of the RtS AR-DA-C-30-21 and AR-DA-C-30-22 for further details.
		Any glazing to the wellness centre and gym/pool will be acoustically treated (if required) as recommended by the acoust consultant in the detailed design phase of the project. The combined arrangement of windows in the pool and gym building along with the design of the lower levels of towers 2 and 3 demonstrate that any potential privacy issues are mitigated.
	Burelli Street developments The street level interface has been developed with a scalloped form that provides an additional 2m setback from the street. This strategy contributes to a more generously proportioned footpath that is now serviced by a continuous awning. This development now allows street trees to be provided along Burelli Street. The 2m deep scalloped brick work will provide an interesting feature to the building that will provide a positive contribution to the street. The height, width and transparency of the awning. Awnings must also provide effective weather protection and light to this highly exposed, sunless pedestrian way. Their design should include co-ordination with street tree planting and mature growth projections. Details of awnings should be provided as part of the DA documentation package, as should clarity as to where trees are in relation to high / low scallops to ensure adequate space for trees to grow.	Burelli St Awning Design The RtS documentation included a plan detailing the new proposed awnings around the perimeter of the site that will provide pedestrian coverage - refer drawing number AR-DA-A-00-14. It is confirmed that the design intent/arrangement for the Burelli St awning will include concrete perimeter structure providing the structural support with glazed, transparen awning insert panels (along the length of the awning) which will allow: Access to light from above penetrating down to street level •Visual access to the scalloped brickwork looking up from street level to the scalloped arrangement The final resolution and design detail is to be developed in the detailed design phase of the project. Awnings and Existing Trees The leading edge of the awning structure does not foul or clash with any of the existing trees. A sketch has been prepared with dimensions of the clearances between each tree and awning - please refer to Appendix 2. The front of the awning clears any existing tree located on Atchison or Burelli Streets as noted below and in the followir diagrams: •Atchison Street – tree located at comer of Atchison and Crown Street is clear by approx. 1.5m •Burelli Street - existing tree at T2 is clear by approx. 1.7m. •Burelli Street - existing tree at T2 is clear by approx. 1.7m. The awning in this location is notched to provide adequate clearance to the truck.
	provides a positive contribution to the street. Cinema display graphics shown in perspectives appear to be providing a positive contribution to street in this location. The display areas should be developed as an integral part of the design and shown on elevations. Detail resolution of the street awning and lighting will also contribute to the quality the street interface. The addition to the hotel has been refined to provide a more appropriately scaled addition to the existing street façade. The external terrace (level 2) has also been relocated to the southerm side of the	As depicted in the photomontage on page 3 of the RtS architectural documentation package, the area between the
	Crown Street development, including public plaza The mass of the Wellness Center has been redistributed to provide a more consistent two storey street wall fronting Crown Street and provides greater separation between the Wellness Center and tower 2. The proposed redistribution of mass of the wellness center is a positive development. The triangular plaza to Crown Street has now been established as a public plaza addressing Crown Street and located close to bus stops / shelters, and the meeting steps at the corner of Crown / Keira Streets. Its location creates a good connection into the site and has the potential to create visual connection from the street to the central square. See also 'Landscape'. The alignment of the central laneway along Crown Street creates a good connection into the site. However, the spatial quality of the lane is unclear, from the information provided it appears to be a narrow inactive space consisting largely of blank walls. Retail tenancies should address the lane. At a minimum, windows should be provided to document how the wellness centre entry contributes to the quality of the lane. Elevations of all proposed lanes must be provided and included in the DA documentation package.	Supplementary plans of sections through the laneways were provided as part of the response to the Council RFI (7/10/22) - refer appendix 6. These plans indicate retail tenancies with glazing will front the laneways and provide casu surveillance, where the levels permit. Additional opportunities for artwork have also been identified in the laneway.
	The lane connecting the public square to Crown Street The lane connecting the public square to Crown Street is 8m wide and serviced by awnings on both sides. The extent, height, solidity, and materiality of the awnings appear to be enclosing the lane, creating a space that presents as an internal space that may lack natural light. Further refinement of the awning is recommended. Connecting with Country Framework, should be reflected in the quality and detail of these spaces.	The lane connecting the public square with Crown Street has a planted awning on the western side of the lane and the commercial office building cantilevers out over the lane on the eastern side. The design intent of the lane was to create a compressed space that provides a sense of human scale and activation. The design, orientation, width and surrounding built-form for the laneway were benched against other successful laneways and the proposed laneway will create strong point of interest along Crown Street, leading into the public square.
ensity	Building mass has been distributed in a reasonable manner to respond to the immediate context of the site. The FSR should be checked and confirmed once a finalized set of DA documents has been provided.	Based on the revised split of residential (59%) to non-residential (41%), the permitted FSR on the site is 4.52:1 (equatin to a GFA of 59,153sqm). The proposed FSR is 4.48:1 (equating to a GFA of 58,655sqm) and compliant with the maximum.
ustainability	To meet council's design excellence requirement, the proposal must address the principles of ecologically sustainable development. Given the scale and prominence of this development, this proposal should aim to be an exemplar of environmental sustainability. The applicant has outlined that they will not follow the usual accreditation pathways, however, will still meet outlined sustainability targets by committing to a carbon neutral development. The commitments will include both the construction and ongoing operation of the development. Carbon neutral commitment would need to be independently reviewed and verified on an annual basis in a process acceptable to Council If these commitments will have been addressed. Long term sustainability is contingent on an ownership and management structure which ensures commitments are met on an on-going basis, regardless of change pressures. It is unknown whether the	The project has committed to achieving Carbon Neutral Certification in operation and will annually renew this certification A Place Management Plan has been documented and supplied to Council in the most recent RFI response (7/10/22). Within this document, the ownership and management structure along with the responsibility for achieving Carbon Neut Certification in operation is captured for the project in an on-going basis. The project's sustainability strategy and initiatives were documented in the non-residential (appendix J) and residential (appendix Y) reports supplied to Council in the RtS (June 22). These documents demonstrate that the project is taking leading role in promoting ecologically sustainable development through a number of verifiable and measurable outcome that will also continue in operation.
	application includes such documentation.	The applicat between the server of Crown and Keirs Streets and the new lift estrance ranges from 1:0 at the server to

Landscape	and public domain of the project. The retention of all street trees surrounding the site, inclusion of	The gradient between the corner of Crown and Keira Streets and the new lift entrance ranges from 1:9 at the corner to 1:23 near the entrance to the lift and hence, is non-compliant for a large portion of the Keira Street footpath. The gradient between the corner of Keira and Burelli Streets and the new lift entrance is approximately 1:23. These gradients are referenced in the public realm plans submitted in the RtS (June 22). Universal access from the corner of Crown and Keira Streets to all the Keira Street buildings is provided via the project's internal public space, where patrons can use the lifts located in the cinema lobby or access the lift via the entry adjacent to the Grand Hotel building. The project has developed a design that provides equitable access from all corners of the site and throughout all buildings within the development. This outcome has been achieved despite the significant changes in gradients in the surrounding streets.
	<ul> <li>While these aspects are leading to project to a quality outcome, several high-level issues remain of concern for the Panel:</li> <li>The major function of the landscape appears to be to service the retail and commercial offerings, resulting in spaces that predominantly consist of circulation and seating.</li> <li>Besides the 'incidental' playground there is no landscape- driven program in the development.</li> <li>There is no program that could supplement the COS of the residential towers, noting this could also simultaneously activate the public domain throughout the day.</li> <li>Solar access a cross the public domain is highly constrained, and areas that do receive solar access in mid- winter, besides the beer garden, are generally circulation or secondary spaces. Even the playground is mostly overshadowed.</li> <li>Canopy cover appears to remain at &lt;20% when it was a core principle at the start to achieve &gt;35%.</li> </ul>	-The project achieves compliance with the communal open space requirements of ADG since each residential tower is providing communal open space equivalent to 5sqm for each apartment, as required under the Wollongong DCP. - The project aims to maximise solar for all publicly accessible spaces, however, it is not always achievable in a central CBD location, regardless of the project's own built form. Considering the constraints, the development achieves a high levels of level of solar access to the public domain and the project's design indicates a high quality public domain outcome will be delivered that will provide a significant contribution to the Wollongong CBD. - The project targeted canopy coverage of approximately 20% of the site which represents an increase of approximately 35% over the existing canopy coverage of the site (refer DRP 3 presentation, slide 57).

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are:	-The pathway arrangement has been designed to work with the footpath levels along Burelli Street to ensure there is an equitable access route into the South-West corner of the site to the public lift. The arrangement would also ensure that
<ul> <li>Bicycle parking at the western end is accessible only via a narrow, zig-zag pathway along the building edge. This constrains access and will cause pedestrian and bicycle movements to clash. Bins are also located behind where bikes are parked making them inaccessible.</li> <li>It was discussed in the meeting that the playground was not suited to being cascaded down the slope but rather would stretch further north when developed in detailed design. The Panel would suggest that any such change needs to be reflected in the DA documentation. Previous comments about the playground being able to take advantage of the slope and becoming a site drawcard</li> </ul>	<ul> <li>cyclists would need to dismount before entering to prevent any pedestrian/cyclist conflict.</li> <li>The southern portion of the playground will be lifted by 550mm and the small dividing wall removed so the playground is located on one continuous level. Stretching the playground further north as suggested by the DRP would impede on pedestrian circulation routes and create a significant point of conflict. The proposed playground location allows parents to supervise children in a safe environment while providing adequate circulation space for pedestrians.</li> <li>-Refer comments below in response to bike parking</li> </ul>
<ul> <li>(especially for residents above) remain.</li> <li>Bicycle parking within the central space clashes with proposed seating, making seats unusable when bikes are parked. Given the wider public footpath further east, perhaps more bike parking could be provided there to allow the space in question to be better resolved for public use.</li> <li>The upper central space appears to have seating as its only programmed function. The Panel would urge more program to be placed into spaces like this, especially given it is less encumbered by circulation being a dead-end.</li> <li>The eastern space, adjacent to a 7m high retaining wall appears to have become a dead corner. This space needs to be better resolved, perhaps with additional planting to screen the high wall</li> </ul>	-The upper central space has been designed to function as a larger open flexible use space for outdoor dining, events, markets, performance etc -The eastern space requires clear access for two fire egress points and the Fire Booster access doors. Refer to the Architectural drawings for detail.
 behind, and additional bike parking to free up usable space as noted above. <u>Keira Street</u> Footpath grades should be indicated to demonstrate that a universally accessible path of travel is	The existing gradient between the corner of Crown and Keira Streets and the new lift entrance ranges from 1:9 at the corner to 1:23 near the entrance to the lift and hence, is non-compliant for a large portion of the Keira Street footpath.
possible to the relocated lift between the cinema and hotel.	Refer to the public realm plans submitted in the RtS (June 22) which indicate the existing gradient between the comer of Keira and Burelli Streets and the new lift entrance is approximately 1:23. Universal access from the comer of Crown and Keira Streets to all the Keira Street buildings is provided via the project's internal public space, where patrons can use the lifts located in the cinema lobby or access the lift via the entry adjacent to the Grand Hotel building. The project responds to the existing gradients around the site and has developed a design that resolves access issues by providing equitable access from all corners of the site and throughout all buildings within the development.
Crown Street         As previously noted, the current approach to the corner of Crown and Keira Street is supported in principle in that it provides a stronger presence to the corner that previous iterations. The Panel acknowledges that the levels around this corner are possibly the most difficult to resolve on the entire boundary, and that a terraces approach is a logical one. Further refinement is still required to make this corner function better which may include:         - A stair connection up and into the retail tenancies         - An external balcony from the tenancies connecting to this edge         - Ant or activation specific to this corner         - A canopy or shade cover given the highly exposed nature of this corner.	-The seating terraces have been spaced uniformly at 1m apart to allow for comfortable seating and movement - refer appendix 8. The planter terraces have been specifically designed as varied shapes and dimensions to break down the level changes to the North and East and allow the planting to spill over to soften the edges - refer appendix 8. - The preliminary public art strategy submitted in the RtS (June 22) identified this location as the primary location for public art. - An additional tree has been introduced at the Corner of Crown and Keira Streets - refer appendix 3 for revised landscape plans.
In detail it appears the terraces are not evenly spaced with one at 400mm and the next at 600mm. This should be resolved. How this comer relates to the next space along Crown Street, the public plaza should also be considered; for example, could the language of the large seating steps and smaller stairs be unified, or could planting connect the two spaces? The public square on Crown Street deals with some difficult levels which have been resolved via a	
staggered set of stairs and level lawn with trees. Given the northerly aspect the lawn should do well, and the trees will provide a nice canopy for the space over time. Consideration should be given to how the universal path of travel from the lower eastern side of Crown Street could lead more directly into the central space, and how the usable space could be maximised. For example, could the lawn be extended to the boundary, and separated by a walkway from ~RL21.000-370, that slopes gently up into	- The proposed public square design fronting Crown Street has been developed in response to the requirements of the bus stop location and pedestrian footpath widths proposed by Council and TfNSW. The stairs entering the site on the eastern side are required, as the difference in level between the internal public square and the footpath on the eastern side is approximately 1m. The stairs have been minimised and shifted further right with an accessible path of travel now achieved approximately mid-way through the public square. The proposed design meets all the requirements for the new bus stop and provides pedestrians with accessible paths of travel.
The inclusion of new trees along Crown Street is supported and it is the Panels understanding the species is in line with Council's recommendation. More clarity should be provided as to how the paved blister in which these trees are planted functions. The tree location suggest it is not a footpath widening, though it is also not shown as a spill out space for F+B. If there is no intended function, could the blister be planted to provide a buffer to the pedestrian footpath?	- The street tree planting located within the blisters and footpath design was nominated by TfNSW and Council. The applicant will coordinate the project's design with any works being undertaken by TfNSW and Council that are outside the applicants boundary.
Bike Parking         It should be demonstrated that bike parking, when in use, will not impact the path of travel along the footpath and circulation corridors, or negatively impact adjacent spaces, throughout the development.         Specific concerns include (but are not limited to):         Burelli Street west – access path of travel         Burelli Street central – clash with seating / space         Keira Street south – encroachment on footpath         Crown Street – encroachment on footpath         Public Square – location at knuckle / change of direction         Central Laneway west – space could be used more efficiently / provide better program	
reduced significantly.	The project will have canopy coverage equal to 18.8% (2,464sqm) and landscape green cover equal to 25% (3,341sqm) of the site area, and is delivering 4,742sqm of public realm space that has the flexibility for a variety of programming. The programming of the public realm space will be managed and curated by a precinct management team to ensure continued activation.
<u>Crown Street Plaza Alley</u> Leading into the site from the triangular Crown Street Plaza (NE corner of site) this alley consists of two accessways of 4m (upper) and 4.2m (lower) with a central planter of 3.8m. Awnings over will limit daylight in this space and should be reviewed. Likewise, if food and beverage offerings are intended along this section, could the space be reviewed to allow breakout spaces between the trees in some areas?	<ul> <li>Regarding awnings, refer response under "the lane connecting the public square to Crown Street" above.</li> <li>The project is supportive of this feedback and will investigate the opportunity of creating breakout spaces in-between the trees as identified by the DRP. The reduction in landscaping is considered to be offset by the additional program created through the breakout spaces.</li> </ul>
<u>Public Square</u> The public square was originally a civic-type space activated by the cinema entry and exhibition spaces. These both still exist but have been shifted to the north-eastern and south-eastern comers respectively. As a result of the Keira Street built form widening, the space has shrunk, further reduced by circulation corridors along all edges. The resolution of levels has also resulted in a disconnected 'square', with ramps, stairs and planters creating several distinct zones. Being the largest outdoor / public domain space on the development, it seems like a lost opportunity to not develop this area as a drawcard of the landscape as originally conceived.	While the central public domain space has reduced as a result of the changes to the Keira Street buildings in response to feedback from Council/DRP, the program of the space has been reconsidered and amended to play an important function in supporting the surrounding landscape. A flexible use and performance space has been introduced in the central public domain and the previously designed seating removed from this area - refer appendix 7. As a result the flexible use and performance space allows for a diverse use of program that will support the surrounding seating and allow for activation of the area.
The Laneway Consideration should be given to limiting the extent of the laneway to only the western end to allow a larger public square to be established. The design consists of two walkways on either side of a central strip consisting of paving, planters, pots and bike parking. The Panel feels that this laneway could be a more programmed space, potentially with some uses that supplement the rooftop COS for residents. The current arrangement underutilised the space.	<ul> <li>The laneway has been developed to create an important pedestrian thoroughfare combined with areas of landscape and seating in response to Council's early aspirations to create mid-block connections, to what is a large CBD block.</li> <li>The project is compliant with the communal open space requirements of ADG since each residential tower is providing communal open space equivalent to 5sqm for each apartment, as required under the Wollongong DCP.</li> </ul>
Trees         Tree species proposed for the development are generally native and many are locally endemic to the region; this is commended. Some issues to consider moving into detail include:         Could there be more deciduous trees in the central zone and other confined areas to ensure good solar access during winter (this does not discount the fact that all public spaces should be afforded good solar access during the winter months).         The use of Illawarra flame trees within the central space is a good choice and in keeping with the original intent expressed about using endemic species to celebrate the area's culture.         The use of Banksia integrifolia and Elaeocarpus reticulatus as feature trees within the public square is questioned. Neither tree is known for its beautiful or ornamental growth, nor straight or feature trunks / crowns; these should be reconsidered.         One of the key principles noted by the Proponent is that canopy coverage would be a minimum of 35%. While a specific number is not noted in the review package the design appears to still only achieve ~17.3% as previously noted. Maximising the urban canopy, particularly in summer, should be prioritised and the original rate of 35% achieved.         Several sections (e.g., 18 / L723) show soil depths and widths that do not look adequate for the healthy and sustained growth of the proposed trees.	<ul> <li>Noting that there are already deciduous tree species proposed in this location, the Banksia integrifolia and Elaeocarpus reticulatus will be reconsidered during the detailed design phase.</li> <li>The project targeted canopy coverage equal to 18% of the site which represents an increase of approximately 35% over the existing canopy coverage of the site (refer DRP 3 presentation, slide 57).</li> <li>The proposed soil depths have been amended to align with the ADG guidelines of planting on structure - refer appendix 9. The Planters in the middle would be linked through a continuous trench constructed along the extent of the tree zone to ensure adequate soil volumes are achieved.</li> </ul>

	<u>Planting</u> The extent of rooftop planting is commended and supported. It is questioned if this could be extended to include all buildings on Crown Street. Concerns remain about the viability and maintenance of the planted awnings throughout the site.	The green awning extends the entire length of the pool and gym building which predominantly covers the extent of Crown Street. A green awning on the Marcus Clark building is inconsistent with the strategy of restoring the building to it's original heritage design. A Place Management Plan has been provided to Council in the most recent RFI submission (7/10/22) detailing the proposed maintenance strategy for the precinct.
	Art Public art for this development should aim to be interactive and engaging, not static. Locations should be considered to draw people into the public spaces. Connection to Country may be expressed in parts via artworks, however this must not be the totality of its expression within the project as noted in previous commentary. The landscape itself should aim to be artistic and engaging.	A preliminary public art plan was prepared and submitted as part of the RtS (Council advised this was issued to the DRP). On the 17th June 2022, a meeting was held with representatives from the Wollongong Council Assessment and Public Art Teams where the project's public art strategy was presented. Council's Public Art Team is supportive of the project's proposed public art strategy. Council's Public Art Team requested the opportunity to continue its involvement in the detailed design phase of the project, where the public art strategy will be developed in more detail and the project looks forward to engaging with Council's Public Art Team during this phase.
	Communal Open Space (COS) to Residential Towers Additional COS has been provided to each tower, ensuring each tower now reaches minimum area requirements. It is unclear from the landscape drawings which area is open to the sky and which is undercroft. Some of the communal open space contained within south facing undercrofts may be colder and darker than is optimal. It is suggested the south facing under crofts are developed to provide internal communal rooms serviced by well-proportioned balconies / terraces. There are 18 trees proposed on the communal rooftops – there is an opportunity here to increase the shade for residents and provide a higher overall canopy cover by increasing this number. With seats located beside several edge planters, and as parapet levels are not included on plans, safety with regards to climbability is unclear but remains a concern. There are several 'integrated play elements / active play zones that show little detail as to what they are, or how children can play with them. Do they require fall zones and therefore is there enough space for them as proposed? The raised lawns and some decks will not be accessible to all and should be resolved.	Apartments were removed and the residential communal open space redesigned to create an outdoor space, as the DRP previously advised it did not consider common internal space to meet the requirements of the ADG. While the city centre can experience cold and windy conditions at certain times of the year, it also experiences hot conditions, and communal open space that is shaded, is considered to offer valuable amenity. The project will comply with all National Construction Code requirements and any concerns raised regarding climbability over parapets of COS areas will be mitigated during the detailed design phase. Likewise, detailed design of kids play areas will be resolved during the detailed design phase as fall zones are dependent on the specific play equipment and manufacturers recommendations. It is agreed that all raised lawns and decks should be accessible to all. This detail will be documented in the detailed design phase of the project.
	T1 (Marcus Clarke Building)         Detailed issues that require further clarity / resolution include:         What is the program available on the lower rooftop space?         Why is there a kitchenette in the play zone? It's location seems to encroach on the usability of the space.         The location of the sculptural art seems to minimise the usability of the lawn.         Why does the upper level have a separate kitchenette and BBQ? The kitchenette arrangement results in most of the rooftop becoming circulation. Consideration should be given to moving the BBQ / kitchenette together and into a comer to allow more usable space overall.         Some planters are extremely narrow and will become unworkable – resolve.	<ul> <li>The lower rooftop space allows for a more flexible open use area with great solar access and informal play opportunities. This will create the opportunity for social interactions, group and individual recreation activities for residents and is appropriate given the central CBD location of the development. This outcome is considered to align closely with the objectives of the ADG and examples referenced within for the communal open space.</li> <li>The kitchenette will be relocated to sit within the BBQ area and the Sculptured art will be removed from the lawn.</li> </ul>
	Tower 2         Detailed issues that require further clarity / resolution include:         - Are the sunroofs for solar only or also for ventilation – how will this impact privacy?         - Is a conversation nook beside an exercise area a good co- location? Perhaps there should be more distance between these for privacy / acoustic buffering.         - What is active play – it looks like paving only.	<ul> <li>The sunroofs are for solar and any privacy concerns will be mitigated through the use of non-reflective glazing.</li> <li>The communal open space has developed in response to feedback from the DRP and Council, including the removal of apartments to increase the open space and the play infrastructure will continue to be explored through the detailed design phase of the project, as the quality and nature of such equipment continues to evolve and improve rapidly. The design will provide valuable amenity for residents by allowing for a range of activities and responds well to the central CBD location of the site.</li> </ul>
	Tower 3 Detailed issues that require further clarity / resolution include: - Feature elements like the table tennis tables would be better suited to the ground floor as a shared asset for the residents and public.	- The communal open space has developed in response to feedback from the DRP and Council, including the removal of apartments to increase the open space. The design will provide valuable amenity for residents by allowing for a range of activities and responds well to the central CBD location of the site. Public play infrastructure options will continue to be explored through the detailed design phase of the project in response to feedback from the DRP and as the quality and nature of such equipment evolves rapidly.
Amenity	The above commentary is limited based on the provided documentation to date. Coloured plans were shared during the meeting, however the Panel has only reviewed landscape DA documentation. The Panel would strongly advise that renders be provided as part of the DA package that indicate the spatial quality of each landscape space to allow a better assessment as to the quality and characteristics of each space.  Public Domain: Crown & Kiera The extensive weather protection awnings now incorporated to surrounding streets, with occasional breaks, are commended. However, in this latest iteration, the least protected area is now the busiest pedestrian connection, potential meeting place and CBD landmark. (i.e. from the Crown Street/Kiera Street intersection west along Crown Street to the main site entry.) It is strongly recommended that the design of this area be finessed to ensure the highest possible all-weather public amenity and civic presence.	A revised landscape plan was provided as part of the most recent Council submission (7/10/22) and now includes a feature tree in the landscaped terraced area on the corner of Crown and Keira Streets - refer to Appendix 3. The applicant considers the introduction of an awning on the corner of Crown and Keira streets to be extremely problematic. The amended commercial building sought to create a strong architectural built-form presence to hold the corner of Crown and Keira streets as requested by the DRP and Council while using landscaping to navigate through complex level changes. The introduction of an awning is considered to erode the built-form architecture that the revised design offers as the awning would need to extend an inordinate length from the building to provide meaningful pedestrian coverage and require its own substructure. A design change that reduces the length of the awning and provides meaningful pedestrian cover would require the building facade line move towards the boundary line and the landscaping be removed. The applicant does not support this option as it would: - present a blank wall to the Crown Street footpath due the level differences with no opportunity for activation (i.e., the commercial building netry level FFL is +21.50 and the footpath approx. +19.5) - create a visual disconnection between the retail spaces and the corer of Crown and Keira Streets - reduce the opportunity for active and passive surveillance. Such a design change would negatively impact the revised architectural built-form prepared in response to Council and DRP feedback, reduce greening opportunities and detract from the pedestrian experience that the design has sought to create at this key city comer. Furthermore, the introduction of an awning in this location will necessitate the removal of the newly proposed tree.
	Bus Stop: Crown St The design and integration of the bus stop and shelters remains an outstanding, but critical, issue pending Transport for NSW inputs.	The bus stop design has been amended in response to feedback from TfNSW and Council - refer appendix 4 for plans and detail on the amended design.
	Internal Public Walkways The L1 undercroft to the west of the office building is potentially the busiest pedestrian thoroughfare. Its width after protruding columns and escape doors is 2 metres. Adequacy and safety should be assessed. Planted concrete awnings to south of Gym/Pool buildings work well for apartment overlooking, but potentially mean dark, sunless shopping environment. Occasional 'skylights' worthy of consideration.	The escaped doors as noted by the DRP are retail tenancy doors nominated on plans for the purposes of identifying the tenancy shopfront. The retail tenancies will not have doors that open into the laneway and encroach on the pedestrian path of travel or impede safety.
	<u>Circulation</u> The proposal has been developed to provide accessible points of entry close to the four corners of the site. A further accessible point of entry has been provided at the centre of Crown Street. The relocation of the lift and stair from the eastem edge of Burelli Street to the southern end of Keira Street has eliminated conflicts with the hotel terrace / beer garden. However, the new lift location may hinder accessibility due to the steepness of the grade along Keira Street itself. Perspectives also appear to indicate that the roof above the new stairs significantly restricts sightlines between the public square and street. Further refinement of the extent, height and materiality of the roof above the stairs should seek to improve sightlines and increase natural lighting to the stairs.	The new entry adjacent the Grand Hotel provides equitable access throughout all levels of the Grand Hotel building and into the podium level of the precinct from Keira Street. The space has been designed to utilise open air principles and makes use of natural light to enhance the space.
	Servicing A loading dock has been provided on the eastern end of the site. The dock provides convenient servicing access to the northern retail block, the cinema, the wellness center, the hotel, and the commercial building on the corner of Crown and Keira Street. However, the Marcus Clarke building and retail / commercial units in the southern block are not serviced by the loading dock. It is unclear how these units will be conveniently serviced. It is of particular concern that the viability of the Marcus Clarke building may be impacted by its lack of a convenient servicing strategy.	The Marcus Clark building will primarily be serviced from the loading dock via lift access through the service corridor on the podium level and ramp access to the Marcus Clark building. The service corridor has been designed to create a direct link to the retail tenancies under the pool and gym building and with access to the Marcus Clark building. The service corridor will ensure deliveries are undertaken in an efficient manner with the shortest possible route to each of these tenancies. For further detail on the entire precinct servicing strategy including all retail tenancies, refer to the Traffic Impact Assessment included in the RtS. Any deliveries from Atchison Street will be supplementary only and limited time loading (i.e. 7am - 10am).
	<u>Solar access</u> The suns eye view diagrams provided do not appear to be providing a true and accurate representation of the location of the sun. An accurate solar study must be provided to allow ADG solar access requirements to be assessed. Suns eye view diagram should also show the extent of solar access to the full extent of the public domain within the development.	The ADG solar analysis was undertaken with the correct sun eye orientation (axonometric view), however, the sun eye diagrams submitted as part of the RtS documentation and provided to the DRP, were not correct. Revised sun eye diagrams that match the numerical solar calculation for each tower are attached as appendix 10. These diagrams confirm that each individual tower meets the 70% ADG solar level of compliance (the total number of solar compliant apartments for each tower has not changed, note the correction to the percentage calculation for tower 2). The extent of solar access to the public domain was included in the RtS documentation - refer drawing number AR-DA-T-30-01.

	Natural cross ventilation         The proposal does not meet cross ventilation requirements as outlined in part 4B of the ADG. The proposal is reliant upon ventilation through narrow slots within the building with a depth to width ration far lower than 2:1, as specified by the ADG. To address this issue a report has been provided outlining that the development meets the objectives of the ADG by incorporating specific design initiatives to facilitate natural cross ventilation.         If ADG compliance is to be accepted, the Panel recommends that site specific modelling is undertaken to demonstrate that ADG objectives can be met. The "clear opening sizes" of all windows relied upon for natural ventilation should also be documented.         Apartment type comments:       2F entry direct to living area         1C 1+2 Torturous journey Bed to Bathroom       3G 1+2- Internal kitchen and journey to bathroom via kitchen.         SP1+2- Laundry (has window) accessed via studybetter reversed?       1A 1+2, 1B 1+2- Bed-Bath journey         2C 1+2- Internal KitchenThoroughfare       1E- Bed/Bath remote         3B- Bathroom 2 open to kitchen/living       3B- Bathroom 2 open to kitchen/living	The RtS (June 22) included site specific modelling undertaken by the wind consultant RWDI - attached here as Appendix 5 Natural Ventilation Memo. The site specific modelling concluded that after taking into account the assumptions for the pressure loss coefficients, the apartments assessed (Types 1C and 2A) are naturally cross ventilated in accordance with AS1668.4 and the City of Sydney Natural Ventilation Guidelines (used for reference as Wollongong Council has no guidelines on Cross Ventilation). Natural cross ventilation is viable more than 85% of the time at 100% opening area. It is also noted that an unobstructed window opening of at least 5% of the floor area served for all habitable rooms will be incorporated in the design, allowing suitable air flow through the apartments.
	The applicant previously advised that the central landscape areas and laneways will remain open 24 hours a day, effectively becoming part of the public domain. Casual surveillance of these spaces must be maximised and other Crime Prevention Through Environmental Design principles should be developed. Safe travel through, and egress from, different use carparks need to be resolved in conjunction with title/ownership/management strategy. As previously noted, sustainable ownership and management plans need to include egress and fire-fighting issues. There remains an uneasiness with the single carpark entry serving extensive multiple uses. Internal safety aspects and the lack any off-site roadworks warrants verification. Apartment tower detail design sections highlight issues having design impacts: - Flat plate slabs with step-up to balcony level access and waterproofing issues. A slab detail that steps down to balconies, to accommodate a level threshold and appropriate water proofing is encouraged Full height glass walls have potential BCA spread of fire/ separation issues. Appropriate detail resolution should be demonstrated at DA stage.	Management details have been documented in the Place Management Plan submitted as part of the most recent Council RFI (7/10/22). The single car park entry has been demonstrated as functional and is supported by TfNSW and Council. A single driveway entry point along Burelli Street is preferred as it reduces the number of pedestrian and vehicle interaction points, on what Council desire to be a busy pedestrian thoroughfare. The project has adopted a flat slab approach on the residential buildings and will implement a suitable water-proofing detail for balconies. The project will meet all fire compartmentalisation/fire separation issues as required under the BCA. Given the National Construction Code is being updated and new codes will apply, the project will address the revised requirements of NCC 2022 during the detailed design phase. This will negate the requirement to undertake design of these works twice.
	A reasonable mix of uses has been proposed. Consideration should be given to providing some	The project is providing 390 apartments into the market, across three different buildings, in a central CBD location. The
Aesthetics	affordable housing within the development. Detailed documentation provided to date generally demonstrates a well resolved architectural aesthetic and appropriate material selection. However, as previously noted DA documents are yet to be finalised.	project will deliver a diversity of apartment configurations and pricing to the market.
Design Excellence		
	The documentation provided to date indicates the potential for appropriately high standard	
	architectural design, materiality, and detailing, to building types and locations. The finalised DA documents should reflect the additional details requested in these notes	
	Developments to the form, massing and public domain interfaces provide an improved contextual response. However, further refinements / detailed information as outline in this report are required.	
Whether the proposed development detrimentally impacts on view corridors,		
Whether the proposed development detrimentally overshadows an area shown distinctively coloured and	Tower 3 has now been developed to eliminate over-shadowing of MacCabe Park before 2pm mid-winter. The proposal now complies with Council requirements.	
numbered on the Sun Plane Protection Map,		
How the development addresses the following:		
for development,	The proposal is situated in a prominent City centre location ideal for a mixed-use development. A reasonable mix of uses has been proposed.	
heritage issues and streetscape constraints,	The retention of the Marcus Clarke building, and Grand Hotel, facades is commendable.	
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,	The proposal has demonstrated an acceptable relationship with existing and future built forms can be achieved.	
bulk, massing and modulation of buildings	The revised massing provides an improved response to the immediate context of the site. The basic massing principles of the development are acceptable.	
street frontage heights	The proposed developments have reinforced the two-storey street wall height to Crown Street and provided a more consistent / appropriate street wall datum to Burelli and Kiera Street. Street frontage heights are acceptable.	
environmental impacts such as sustainable design, overshadowing, wind and reflectivity	An accurate solar study is required. The proposed long-term ownership and management structure need to form part of the application.	Refer to the revised sun eye diagrams (attached appendix 10) and the Place Management Plan submitted to Council as part of the most recent RFI response (7/10/22).
the achievement of the principles of ecologically sustainable development	The commitment to a carbon neutral development is commendable.	
pedestrian, cycle,	Acceptable. Pending, extent of all external road and other works being clarified and indicated on plans.	
to, the public domain	Improvements have been made to interface with the public domain, However, the public domain and internal landscape spaces still rely too heavily on activation by the architecture and provide little amenity of their own besides seating and circulation. It is recommended a Staging Plan, clarifying any the extent and timeline of disruption in the public domain form part of any consent.	Any disruption for works to the public domain will require the approval of Council and relevant authorities prior to the commencement of works. This is best addressed as a condition of consent.
further Comments &	The form and massing of the proposal responds to the site and its immediate context in a reasonable manner. Large scale details and material selection and perspectives also indicate that a high-quality aesthetic can be achieved.	
	However, further detail information and design refinements are required to ensure that the proposal provides a high-quality contribution to the public domain, an appropriate level of amenity to residents and a functional servicing strategy to all commercial and retail components.	