ATTACHMENT 8 - Compliance Table

1. SEPP 65 (DESIGN QUALITY OF RESIDENTIAL FLAT DEVELOPMENT)

Relevant provisions of the Code are addressed in Table 1 below. This Table was attached to the 1 December 2014 JRPP meeting.

Matters which have changed as a result of the final revisions are marked with an asterix (*).

Table 1: Residential Flat Design Code

Standards/controls	Comment	Compliance
Part 1 – Local context Building Depth		
Max 18m (glass line to glass line) For wider buildings, must demonstrate how satisfactory daylight and natural ventilation are achieved	The proposed building depth varies throughout the building. The final plans have increased the western setback in the northern part of the building, reducing the building depth at this point. On Levels 1-3, the maximum depth is approximately 34m (measured east-west). The building narrows as the height increases, with Levels 4-6 approximately 34m, Level 7 33m, Level 8 32m, Levels 9-17 21m, and Levels 19-24 20m.	Satisfactory
	These depths are considered satisfactory, as in the commercial and hotel levels extensive areas of glazing and voids allow daylight access. The design of outdoor terraces provides natural ventilation.	

Standards/controls	Comment	Compliance
Standards/ tontrols	Comment	Combilante

Building Separation

Objectives

- To ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings.
- To provide visual and acoustic privacy for existing and new residents.
- To control overshadowing of adjacent properties and private or shared open space.
- To allow for the provision of open space with appropriate size and proportion for recreational activities for building occupants.
- To provide deep soil zones for stormwater management and tree planting, where contextual and site conditions allow.

Developments that propose less than the recommended distances apart must demonstrate that daylight access, urban form and visual and acoustic privacy has been satisfactorily achieved. <u>Levels 1-4</u> are less than 12m in height. At these levels, the proposed approximate minimum building separation would be:

North (6-8 Regent Street): nil

West (1 Governors Lane): 18m

West (2-4 Rawson): 5.6m

Levels 5-7 (<25m)

North (6-8 Regent Street): nil

Levels 8-25 (>25m)

No adjoining buildings above 25m

Standards/controls	Comment	Compliance
Rule of thumb		
Between adjoining sites:		
• Up to four storeys/12m		
 12m between habital rooms/balconies 	ble	
 9m between habital rooms/balconies and no habitable rooms 		
 6m between non-habitable room Five to eight storeys/up to 25m: 	ms	
 18m between habital rooms/balconies 	ble	
 13m between habital rooms/balconies and no habitable rooms 		
 9m between non-habital rooms 	ble	
• Nine storeys and above/over 25s	n:	
 24m between habital rooms/balconies 	ble	
 18m between habital rooms/balconies and no habitable rooms 		
 12m between non-habital rooms 	ble	
 Allow zero buildi separation in appropria contexts, eg. urban are between street wall buildi types (party walls) 	ate cas	
Side and rear setbacks		
Objectives	Building separation is discussed above.	As above
 To minimise the impact development on light, air, su privacy, views and outlook for neighbouring properties, including future buildings. 	For	
 Maintain deep soil zones 		
 Maximise building separation provide visual and acoustic priva Where setbacks are limited by size and adjacent buildings, 'st in' the plan to provide interaccourtyards and limit the length 	lot ep nal	

Standards/controls	Comment	Compliance

Part 2 – Site design

Deep Soil Zone

The rule of thumb is for a minimum of 25% of the open space area of site to be a deep soil zone.

The applicant has not quantified the area deep soil zone. Street tree plantings are proposed; all other plantings are in beds or other structures. Council's landscape officer has no objection.

Satisfactory

Landscape design

To add value to residents' quality of life within the development in the forms of privacy, outlook and views.

A landscape plan has been provided which is satisfactory. Minor changes to the hotel terraces expand the landscaped area and will require submission of a revised landscape plan. This may be conditioned.

Satisfactory

Open Space

The rule of thumb is for between 25-30% of the site area to be communal open space.

The minimum recommended area of private open space for each apartment at ground level or similar space on a structure is 25m², minimum preferred dimension is 4m

30% of the site area = 1094.49m².

Communal open space is proposed in the form of terraces on Levels 1 and 8. These are likely to be for exclusive use of hotel patrons.

Additional communal open space is available on the roof level, where a pool and pool terrace/BBQ area is provided. The applicant has not quantified the total amount of communal open space, but it appears less than 25% of the site. Notwithstanding, the residential component is 20.9% of the total GFA and provision of the full 1094.49m² is not warranted.

Satisfactory

All residential apartments are provided with private open space in the form of balconies.

Orientation

To optimise solar access to residential apartments within the development and adjacent development

The building length runs north-south, with longer elevations east and west. Private open space in the form of balconies is located on the north, east and west elevations and these would receive adequate solar access. Shadow diagrams have been provided which show acceptable solar access to adjoining properties.

Satisfactory

Planting on Structures

Select appropriate plant species and size.

A landscape plan has been provided which shows proposed plantings on structures.

Satisfactory

Stormwater management

 To minimise the impacts of residential development and A stormwater concept plan has been provided which is satisfactory.

Standards/controls Comment Compliance

associated works on the health and amenity of natural waterways.

- To preserve existing topographic and natural features, including watercourses and wetlands.
- To minimise the discharge of sediment and other pollutants to the urban stormwater drainage system during construction activity.

Safety

The rule of thumb is that a formal crime risk assessment be carried out for residential developments of over 20 new dwellings.

Visual privacy

- To provide reasonable levels of privacy externally and internally, during the day and at night
- To maximise outlook and views from principal rooms and private open space without compromising visual privacy.

Building entry

- To create entrances which provide a desirable residential identity for the development.
- To orient the visitor
- To contribute positively to the streetscape and building façade design

A crime risk assessment is provided in the Statement of Environmental Effects. Adequate measures have been adopted to minimise crime risk. Access to residential floors is likely to be restricted via lift programming.

The location of sensitive residential floor space is adequately separated from adjoining land uses. Commercial levels could be impacted by future development on the western property, however the existing easements result in a considerable building separation which is likely to be sufficient to provide amenity.

The Design Review Panel comments dated 11 September 2014 recommended the western setback be increased, which the applicant has now done.

Council's Design Review Panel noted on 11 September 2014 that improvements should be made to Level 1 to improve legibility of the separate land uses and reinforce connections with Rawson and Regent Streets. The Panel's comment on 11 May 2015 recommended further changes to the Rawson Street pedestrian plaza area. The revised design satisfactorily addresses these matters.

Satisfactory

Satisfactory

Standards/controls	Comment	Compliance
<u>Parking</u>		
• To minimise car dependency for commuting and recreational transport use and to promote alternative means of transport-public transport, bicycling and walking.	Parking is provided in accordance with WDCP 2009.	Satisfactory
• To provide adequate car parking for the building's users and visitors, depending on building type and proximity to public transport.		
Pedestrian Access		
Barrier free access to at least 20% of dwellings.	All dwellings are serviced by residential lifts. Accessible entry to the building is provided.	Satisfactory
<u>Vehicle access</u>		
 Generally limit the width of driveways to a maximum of 6 metres. Locate vehicle entries away from main pedestrian entries and on secondary street frontages. 	The final plans represent a change from the earlier scheme to locate vehicle entry and exit on Rawson Street. The proposed location of vehicle entry is supported by Council's Design Review Panel. A 6.5m driveway is proposed on Regent Street. A vehicle drop-off/pick up area is proposed on Rawson Street.	Satisfactory.
Part 3 – Building Design		
Apartment layout		
• Single-aspect apartments should be limited in depth to 8m from a window	Apartments are located on Levels 18-24. All apartments have more than one aspect. All apartments have kitchens less than 8m from a window.	Satisfactory
Back of a kitchen should be no more than 8m from a window	All apartments have private open space in	
• Providing open space in the form of a balcony, a terrace, a courtyard or a garden for every apartment	the form of balconies. All apartments have living areas adjoining balconies.	
• Locating main living areas adjacent to main private open space.	All apartments have internal storage.	
• Include adequate storage space.		
Apartment mix		
• To provide a diversity of apartment types, which cater for different household requirements now and in the future.	The proposed apartments include 3 and 5 bedrooms.	Satisfactory

To maintain equitable access to new housing by cultural and socio-

Standards/controls	Comment	Compliance
economic groups.		
<u>Balconies</u>		
 Provide primary balconies with a minimum depth of 2m. 	All apartment balconies have minimum depths exceeding 2m.	Satisfactory
 Developments that seek to vary from the minimum standards must demonstrate negative impacts from noise, wind cannot be mitigated with design solutions. 		
<u>Ceiling heights</u>		
Minimum 2.7m for habitable rooms	All apartments have ceiling heights of minimum 2.7m.	Satisfactory
<u>Flexibility</u>		
• To encourage housing designs which meet the broadest range of the occupants' needs as possible.	Three adaptable units are provided.	Satisfactory
• To promote 'long life loose fit' buildings, which can accommodate whole or partial change of use.		
• To encourage adaptive re-use.		
Ground floor apartments		
• Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.	No ground floor apartments are provided. The ground floor (Level 1) contains commercial and hotel uses.	Not applicabl
• Provide ground floor apartments with access to private open space, preferably as a terrace or garden.		
Internal circulation		
In general, where units are arranged off a double loaded corridor, the number of units accessible from a single core/corridor should be limited to eight.	All residential floors have less than 8 units off a corridor.	Satisfactory
Mixed use		
Choose a compatible mix of uses	The development incorporates commercial, hotel and residential areas. This mix is considered suitable.	Satisfactory

Standards/controls	Comment	Compliance
Storage		
Studio apartments – 6m³ One-bedroom apartments – 6m³ Two bedroom apartments – 8m³ Three plus bedroom apartments – 10m³	All residential apartments provide internal storage in the form of linen closet and wardrobes. Additional storage is provided on Level 1 adjacent to the residential lobby.	Satisfactory
Acoustic privacy		
 Adequate separation from neighbouring buildings. Unit arrangement to avoid noise transmission. 	Adequate acoustic privacy is provided. The floor plan groups non-sensitive rooms. Minimum standards for acoustic privacy within the Building Code of Australia would apply.	Satisfactory.
Daylight access		
Living rooms and private open spaces for at least 70% of apartments should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter. In dense urban areas a minimum of 2 hours may be acceptable.	Shadow diagrams have been provided. The SEE and shadow diagrams confirm that at least 70% of residential apartments would receive 3 hrs in midwinter.	Satisfactory
Natural ventilation		
60% of residential units should be naturally cross ventilated.	All apartments have balconies which would allow for natural ventilation. Corner apartments increase opportunities for cross-ventilation.	Satisfactory
<u>Facades</u>		
• To ensure that new developments have facades which define and enhance the public domain and desired street character.	Council's Design Review Panel identified opportunities of improvement, including treatment of the upper levels of the tower. The final plans resolve these matters.	Satisfactory *
• To ensure that building elements are integrated into the overall building form and façade design.		
Roof design		
 To provide quality roof designs, which contribute to the overall design and performance of residential flat buildings. 	The final version of the plan has reduced the building height and amended the roof level removing some structures. In response to Council's Design Review Panel comments, the upper tower profile has been amended.	Satisfactory *
Energy efficiency		
	A BASIX certificate has been provided.	Satisfactory
<u>Maintenance</u>		
To ensure long life and ease of maintenance for the development.	The proposed external finishes are acceptable. The glazed exterior incorporates maintenance access.	Satisfactory

Standards/controls	Comment	Compliance
Waste management		
Supply waste management plans as part of the development application.	Waste storage room is located on Basement Level 1.	Satisfactory
Water conservation		
• To reduce mains consumption of potable water.	A BASIX certificate has been provided.	Satisfactory
• To reduce the quantity of stormwater run off.		

2. WOLLONGONG DEVELOPMENT CONTROL PLAN 2009

CHAPTER D13 – WOLLONGONG CITY CENTRE

The site is located within the Wollongong City Centre, as defined in WLEP 2009 and WDCP 2009. Chapter D13 applies to the development and prevails over other parts of the DCP where there is any inconsistency. Relevant provisions are addressed in Table 2 below.

This Table was attached to the 1 December 2014 JRPP meeting. Matters which have changed as a result of the final revisions are marked with an asterix (*).

Table 2: WDCP 2009

2 Building form

Objectives/controls	Comment	Compliance
2.1 General Building form and character refers to	The proposed design incorporates	Satisfactory *
the individual elements of building design that collectively contribute to the character and appearance of the built environment. Wollongong City Centre LEP includes provisions for land use, building heights and sun access planes, floor space ratio and design excellence. The building form provisions are intended to encourage high quality design for new buildings, balancing character of Wollongong with innovation and creativity.	building separation to the northern boundary not in accordance with WLEP 2009. Council's Design Review Panel has viewed all five major versions of the development and in their final comments, recommended further changes needed in order for the development to satisfy design excellence requirements of WLEP 2009. The final revised proposal	Satisfactory *
The resulting built form and character of new development should contribute to an attractive public domain in central Wollongong and produce a desirable setting for its intended uses. 2.2 Building to street alignment and street setbacks	satisfactorily resolves these concerns.	
B3 zone: Nil setback at ground level 4m minimum setback above street frontage height	Levels 1-7 constitute street frontage height and have a nil setback. Above Level 7, the building is setback minimum 4m.	Satisfactory
2.3 Street frontage heights in commercial core		
Street frontage heights of 12-24m are required.	The proposed street frontage height is 23.8m is proposed	Satisfactory
2.4 Building depth and bulk		
Maximum 1200m² floor plate size for non-residential is above 24m Maximum 900m² floor plate size for residential above 24m	The proposed building incorporates a wider footprint on the lower levels, with smaller upper levels of the tower.	Satisfactory *
Maximum 25m building depth for non	Maximum building depth is	

residential

Maximum 18m building depth residential

approximately 34m (commercial) and 20m (residential). The proposed footprint is considered able to provide light and ventilation and respond to the proposed mix of land uses.

The Design Review Panel questioned the proposed bulk and massing The revised changes satisfactorily resolves these matters.

2.5 Side and rear building setbacks and building separation

Up to street frontage heights: Nil side and rear setback

Residential uses (habitable rooms) between street frontage height and 45m: 12m side and rear setback

All uses (including non-habitable residential) between street frontage height and 45m: 6m side and rear setback

All uses above 45m: 14m side and rear setback

The building footprint consequential setbacks vary in response to angled allotment boundaries and the building design (screens, terraces etc.). The western setback has been increased following the JRPP meeting of 21 October 2014.

Up to street frontage heights: Nil side and rear setbacks.

Residential uses (habitable rooms) between street frontage height and 45m: Not applicable as residential uses

All uses (including non-habitable residential) between street frontage height and 45m (ie. Levels 8-14): west side minimum 7.2m; north side 3.39m.

All uses above 45m (ie. Levels 15-24): west side Level 15 22m, Levels 16-24 approx. 22m; north side approx. 13m

Variations above Level 8 are considered satisfactory, as there are no directly adjoining buildings at a comparable height. Council's Design Review Panel recommended increased west side setbacks to the commercial areas on Levels 1 and 4-6, which have been provided.

2.6 Mixed used buildings

Minimum 3.3m ceiling heights for Commercial ceiling heights are 3.3m commercial space

Separate commercial service areas from residential access

Locate clearly demarcated residential clearly identified from Regent Street

1 Basement Level separates residential and service areas

The residential entry on Level 1 is

and Satisfactory

Objectives / controls	Comment	Compliance
entries from the public street	and accessed via the concourse.	
0.7.0		
2.7 Deep soil zone	150/ 62/40 2 2 - 547 24 2	C .: C .
Minimum 15% of site area shall be deep soil zone	The applicant has not quantified the	Satisfactory
For a residential component of mixed use buildings, required deep soil zone may be reduced.	deep soil provided, however it	
<u>2.8 Landscape design</u>		
A landscape plan must be provided.	Council's landscape officer has no objection	Satisfactory
2.9 Planting on structures		
Provide soil depth appropriate for plant type and structure	Council's landscape officer has no objection	Satisfactory
3 Pedestrian amenity		
Objectives/controls	Comment	Compliance
3.3 Active street frontages		
Residential developments are to provide a clear street address and direct pedestrian access off the primary street front, and allow for residents to overlook all surrounding streets	JRPP meeting, the applicant	Satisfactory
3.4 Safety and security		
Ensure adequate lighting, surveillance and good lines of sight. Provide security access where required.		Satisfactory
3.5 Awnings		
Continuous street awnings are required for both Rawson and Regent Street frontages		Satisfactory*
3.6 Vehicular footpath crossings		
One vehicle access point only will generally be permitted.	on Regent Street.	Satisfactory
	A drop-off/pick up area is provided	

	on Rawson Street. This has been provided in response to Design Review Panel comments. Council's traffic engineer has no objection to the proposal.	
,	A schedule of external finishes has been provided (Plan DA40.2-T) and is satisfactory	Satisfactory
3.10 Views and view corridors Maintain and enhance views to the foreshore and escarpment, where practical.		Satisfactory *
4 Access, parking and servicing		
Objectives/ controls	Comment	Compliance
4.2 Pedestrian access and mobility Main building entry should be clearly visible.	The land slopes down from Rawson Street towards the north.	Satisfactory *
Development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.	proposed. Barrier free access is	
Development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access.		
Building entrance levels and footpaths must comply with the longitudinal and cross grades specified in AS 1428.1:2001, AS/NZS 2890.1:2004 and the Disability Discrimination Act.		
4.3 Vehicular driveways and		

All vehicles must enter and exit in Council's traffic engineer has no Satisfactory

to

the proposed

manoeuvring areas

forward direction with maximum 3- objection

point turn. driveways. The hotel proposes on-street pick-Driveway widths and dimensions and car space widths and dimensions must up/drop off. comply with Australian Standards. Semi-pervious materials on driveway to provide for stormwater filtration. 4.4 On-site parking Parking must be on-site and meet Parking is discussed in the report. Satisfactory AS2890.1 2004 (as amended). 4.5 Site facilities and services Provide mailboxes in one accessible Details of mailboxes have not been Satisfactory provided, but could be addressed in location. construction plans. Locate satellite dish and telecommunication Waste storage is proposed on antennae, air conditioning units, ventilation stacks Basement Level 1. Servicing is and any ancillary structures: required to be effected by a medium i) Away from the street frontage, and or hard rigid vehicle. ii) Integrated into the roof scape design Utility connection may be finalised at construction phase. to adequately All development is accommodate waste handling storage on-site. The development must ensure that adequate provision has been made for all essential services including water, sewerage, electricity and and telecommunications stormwater drainage. 5 Environmental management Objectives / controls Comment Compliance 5.2 Energy efficiency and conservation New dwellings are to comply with SEPP A BASIX certificate has been Satisfactory (BASIX) provided 5.3 Water conservation New dwellings are to comply with SEPP A BASIX certificate has been Satisfactory (BASIX) provided 5.4 Reflectivity Visible light reflectivity from building A light reflectivity report has been Satisfactory materials used on facades of new provided, which concludes that with

> specific treatment, reflectivity would be at acceptable levels. Conditions of consent could incorporate these

> provided. The propose building is

A wind effects report has been Satisfactory

recommendations.

buildings should not exceed 20%.

For buildings over 32m, a wind effects

5.5 Wind mitigation

report is required.

	satisfactory in relation to wind conditions.	
5.6 Waste and recycling		
A site waste minimisation and management plan is required.	A site waste minimisation and management plan has been provided.	Satisfactory
6 Residential development standards		
Objectives/controls	Comment	Compliance
6.1 SEPP 65 and residential flat design code		
SEPP 65 controls are adopted	Refer SEPP 65 discussion	Refer SEPP 65
6.2 Housing choice and mix		
Minimum 10% of all units are to be capable of adaptation	3 (i.e. 13%) units are adaptable	Satisfactory
6.6 Basement Carparks		
The roof of any basement podium, measured to the top of any solid wall located on the podium, must not be greater than 1.2m above natural or finished ground level, when measured at any point on the outside walls of the building. Where height of basement podium is less than 1.2m above ground level, the basement may be located on the boundary. Any portion which exceeds 1.2m, must be set back from boundaries by a ratio of 1:1, with a minimum setback of 1.5m. Ventilation structures and air conditioning ducts must be located away from windows of habitable rooms and private open space areas. Basements must be protected from inundation by 100-year ARI flood levels.	The basement levels are integrated into the base of the tower. Services are shown on each basement level. Detailed specifications of ventilation structures has not been provided, however residential apartments are located on Levels 19-24 and are not expected to experience ventilation noise or odour. The land is not identified as flood affected.	Satisfactory
6.7 Communal open space		
Minimum 5m ² of communal open space is required for each apartment in developments containing more than 10 apartments		Satisfactory
	private open space in excess of the minimum required. Subject to commercial arrangement, hotel recreation facilities may be available to residents.	
6.8 Private open space		
Private open space in the form of balcony or terrace is required for each		Satisfactory

apartment

6.9 Overshadowing

Adjacent residential buildings and their public spaces must receive at least 3 hours of direct sunlight between 9.00am and 3.00pm on 21 June.

The design of the development must have regard to the existing and proposed level of sunlight which is received by living areas and private open space areas of adjacent dwellings. Sensitive design must aim to retain the maximum amount of sunlight for adjacent residents. Council will place greatest emphasis on the retention of sunlight within the lower density residential

In areas undergoing change, the impact of overshadowing on development likely to be built on adjoining sites must be considered, in addition to the impacts on existing development.

6.10 Solar access

Shading devices should be utilised where necessary, particularly where windows of habitable rooms are located on the western elevation.

The living rooms and private open space of at least 70% of apartments should receive a minimum of three hours of direct sunlight between 9.00am and 3.00pm.

The number of single aspect apartments with a southerly aspect (south-westerly to south-easterly) is limited to maximum of 10% of the total number of apartments proposed.

6.11 Natural ventilation

A minimum of sixty percent (60%) of all residential apartments shall be naturally cross ventilated.

6.12 Visual privacy

The internal layout of buildings should be designed to minimise any direct overlooking impacts occurring upon private habitable rooms and balcony/open space courtyards, wherever possible separating by open space and public communal domain areas from windows of rooms,

the form of balconies.

Shadow diagrams have been provided. These show shadowing would extend west of the Illawarra rail line, south to Crown Street and south-east to Kenny Street. Detailed analysis of the existing solar access to all residential properties within this range has not been provided. However, the high density urban location has been taken into account.

The residential building at Governors Lane would receive 3 hours of sunlight as required. If a future development was constructed on 6-8 Regent Street in the current car park location, the residential building at 1 Governors Lane may experience further shadowing.

Shading devices are proposed.

At least 70% of apartments achieve the requires solar access.

No apartments are single aspect.

All apartments have balconies which | Satisfactory would allow for natural ventilation. Corner apartments increase opportunities for cross-ventilation.

Residential apartments are located Satisfactory on Levels 18-24. Communal open space is not located on these levels.

Satisfactory

Objectives/controls	Comment	Compliance
particularly sleeping room and living room areas.		
8 Works in the public domain Any works within the public domain are to be in accordance with the Public Domain Technical Manual (Appendix 2)	reviewed the proposed public	Satisfactory
WDCP 2009)	A standard condition requiring compliance with the Public Domain Technical Manual may be imposed.	