

## APPENDIX G - Residential Flat Design Code - Compliance Assessment

The following is an assessment against the relevant guidelines of the Residential Flat Design Code.

### Local Context

- Primary Development Controls

The applicant has outlined that the primary development controls are set out in the approved Concept Plan including Floor Space Ratio (FSR), building heights, building envelopes and building separation.

Compliance against the Concept Plan, including building separation, was discussed under part 6 of this report.

### Site Design

- Site Analysis

This was addressed under Part 6 Concept Plan considerations of this report. The subject application responds to the identified building footprint.

- Site Configuration

The site configuration, in terms of building footprint, is largely governed by the Concept Plan envelope. The applicant describes the surrounding configuration as:

*“The proposal incorporates landscaped areas in the forecourt and common area on the eastern side of the lower ground floor of Building North and a walkway providing access to residents of the upper floor apartments on the building’s western side. The semi-public space associated with the forecourt includes features such as a large timber sundeck and bbq area, glass screens and an open pergola. The western side includes deep soil planting zones and gardens for residents.”*

The provision of the hotel forecourt is considered a positive contribution to the site and would assist providing visual surveillance and activity to the existing north-south through site pedestrian link.

The ‘rules of thumb’ suggest that 25% of the site should be deep soil zone. The development incorporates basement parking with landscaping on top of the podium. The landscaping plan nominates deeper soil zones for actual tree planting. This arrangement is generally consistent with previous stages of the concept plan and given the dense urban environment this is considered acceptable.

The ‘rules of thumb’ suggest 25% to 30% of the site area should be communal area and that ground level apartments should have 25m<sup>2</sup> of open space.

The forecourt and landscaped areas to the west of the buildings represents approximately 30% of the site area.

Given the fall of the site there is effectively only one ground level unit being Unit 1 at Ground Level 1. A 25m<sup>2</sup> courtyard for a 1-bedroom unit is not considered necessary with adequate private open space provided.

The 'rules of thumb' indicate a soil depth of 1m for medium trees as proposed. This could be accommodated on the podium and addressed in the required comprehensive landscape plan at Construction Certificate stage.

### Site Amenity

The 'rules of thumb' suggest a crime risk assessment for all residential development over 20 dwellings.

- Safety

The submitted SEE included an analysis against the principles of Crime Protection Through Environmental Design (CPTED). The proposed amended development is considered acceptable now that secure access has been achieved for both residential buildings. The design generally provides for surveillance of communal areas and clearly defines public and private areas.

- Privacy

In terms of privacy the 'rules of thumb' refer to the building separation distances under primary development controls. Building separation, was discussed within Section 6 Concept Plan considerations and is considered acceptable.

### Site Access

- Building entry

The building entries are readily identified and secure access provided.

- Parking

The building incorporates basement parking thereby minimising impact on the streetscape.

- Pedestrian access

The 'rules of thumb' suggest readily identifiable access from street or car parking areas which has been achieved in the amended design.

The 'rules of thumb' require compliance against AS1428 – design for access and mobility. The applicant has submitted a Disability Access Report by Lindsay Perry in support of the DA. The report considers AS1428 and also the Disability Discrimination Act 1992 with regards to access for persons with a disability. The report concludes:

*'We consider the drawings presented for assessment generally comply with The Building Code of Australia 2011 and the intent of the Disability Discrimination Act 1992, subject to further development at the construction certificate stage.'*

Appropriate conditions of consent have been recommended in this regard.

- Vehicle access

The 'rules of thumb' suggest limiting driveway crossings to 6m and located off secondary streets. The Site Design Guidelines have preferred vehicular access from King Street. The development incorporates an access from King Street and two access points off Shortland Esplanade. As outlined in the traffic discussion under Section 6 of this report it would be desirable to limit the driveway crossings in Shortland Esplanade to one, however on balance the two crossings can be accepted.

### Building Configuration

- Apartment layout

'Rules of thumb' suggest single aspect apartment should be a maximum depth of 8m, cross over apartments a maximum depth of 15m and minimum width of 4m, and back of kitchen a maximum 8m from a window.

The apartment depths comply other than Unit 7 on Levels 4 to 8 of the southern building. These apartments are cross-over apartment and are approximately 17.5m deep. However, this represents only 5 units within the entire development and the units are equal or greater than 4m in width. The minor non-compliance is considered acceptable in terms of the overall development.

- Balconies

'Rules of thumb' suggest minimum 2m deep balconies and provide a range of preferred balcony areas dependent on unit size, with an absolute minimum of 6m<sup>2</sup>. Given the proximity of the site to Newcastle Beach and public open space opposite if the units can achieve a minimum balcony depth of 2m and minimum area of 6m<sup>2</sup> this would be considered acceptable. Council raised concern with the original proposal that a number of apartments had balconies either below 2m in depth, below 6m<sup>2</sup> or both.

The amended design now provides for larger balconies that satisfy this requirement and the provision of private open space for the units is now considered acceptable.

- Ceiling heights

The 'rules of thumb' recommend minimum 2.7m ceiling heights.

The plans provide for 3m between residential floors. Allowing for the slab thickness would provide for approximately 2.7m ceilings.

- Storage

The 'rules of thumb' recommend at least 3m<sup>3</sup> storage for each dwelling in addition to kitchen cupboards and wardrobes. The basement car park appears to provide 135 storerooms which is slightly deficient for the 150 residential dwellings proposed. However, it is evident that there is sufficient area within the basement to accommodate further storage compartments. This has been addressed as a recommended condition of consent.

## Building Amenity

- Daylight access

The 'rules of thumb' recommend living rooms and open space of at least 70% of apartments receive at least two hours of direct sunlight (allowing for dense urban area) between 9am and 3pm mid winter.

The applicant's RFDC statement suggests that of the 150 apartments at least 105 will receive 2 hours of direct sunlight between 8am and 3pm. This represents 70%.

However, this does not refer to living areas or open space and the sunlight must be received from 9am not 8am. A review of the plans would suggest that 70% of units would receive 2 hours but not necessarily the living areas.

The submitted statement indicates that:

*'The proposed building has been designed to make the most of its natural context in terms of location and orientation.'*

Given the coastal location it is only natural that the living areas be orientated to capture ocean views. While this does not always result in the best solar access the visual amenity gained is considered to justify the shortfall. Furthermore orientating balconies to the ocean provides for a more attractive urban form facing Shortland Esplanade. It is noted that the UDCG did not raise any objection to buildings solar access.

- Natural ventilation

'Rules of thumb' suggest building depths of 10 to 18m support natural ventilation.

The building has a maximum depth of approximately 17m and is considered acceptable.

The 'rules of thumb' suggest 60% of units should be naturally cross ventilated. Units are considered to have reasonable cross ventilation by virtue of cross-over design, a corner location, or very shallow single aspect.

- Ground level 1 – Unit 7 (1 unit)
- Level 2, 3 – Units 1, 5, 6, 7 (8 units)
- Level 4, 5, 6 – Unit 1, 5, 6, 7 (12 units)
- Level 7 – building south – Units 1, 5, 6, 7 and building north – Units 1, 4, 5, 8, 9, 10, 11 (11 units)
- Level 8 – building south – Units 1, 5, 6, 7 and building north – 1, 4, 5, 8, 9, 10, 11, 12 (12 units)
- Level 9, 10, 11, 12, 13, 14 – Units 1, 4, 5, 8, 9, 10, 11, 12 (48 units)

This represents 92 out of 150 units (or 61%) and is therefore acceptable.

The 'rules of thumb' suggest 25% of kitchens should have access to natural ventilation. All kitchens have access to natural ventilation. While some kitchens are located deeper in the floor layout they all have reasonable access to natural ventilation and are considered acceptable.

### Building Form

The general building form has been considered by UDCG and was considered acceptable other than providing a clearer delineation between the south and north buildings and better resolution between the hotel and residential uses. These issues have now been resolved in the amended plans.