

ANNEXURE 3

Architectural and Urban Design Review

**prepared by
BHI Architects**

**Various Allotments
Terralong, Akuna and Shoalhaven Streets
Kiama**

ARCHITECTURAL / URBAN DESIGN REVIEW

BHI ARCHITECTS

100 TERRALONG STREET, 3 AKUNA STREET, 55 SHOALHAVEN STREET, 61
SHOALHAVEN STREET, KIAMA – ADM ARCHITECTS
DA10.2016.304.1

1. INTRODUCTION

On 11th December 2017, the JRPP issued a Deferral for DA10.2016.304.1, a proposed mixed use development at 100 Terralong Street, 3 Akuna Street, 55 Shoalhaven Street, 61 Shoalhaven Street, Kiama. The Record of Deferral states:

"That the current and amended plans be reviewed by Council's external architecture/urban design consultants to improve the urban design response."

BHI Architects was present at a meeting with the JRPP on 30th April 2018, at which the following recommendations were made:

"JRPP resolved to defer the Akuna Street development application on Monday for further amended plans to:

- i. Delete level 4 from building D and E (to achieve height compliance) and replace with communal open space*
- ii. Provide differentiation of the articulation and materials for building D and E*
- iii. Review the access between Akuna and Terralong Streets to provide more direct pedestrian permeability*
- iv. Review the car park access for Shoalhaven Street shops*
- v. Provide details of hours of access to the carpark*
- vi. Update the landscaping plan with locations for canopy plantings in communal open space areas*

The JRPP also resolved that Council engage an external architect and urban design consultant to review the development in relation to its architectural language, SEPP 65 and the overall urban design outcome."

The purpose of this report is to document the Architecture and Urban Design guidance provided by BHI Architects to the applicant, and to provide a design review in relation to the development's architecture, SEPP 65 and the overall urban design outcome, as requested by the JRPP.

2. JRPP RECOMMENDATIONS

BHI Architects provided notes to the applicant to provide clarity regarding the recommendations of the JRPP, as stated in the tables below. Upon receipt of architectural drawings Issue Z dated September 2018 from the applicant, BHI also offers a review of the revised drawings in the tables below.

(i) Delete level 4 from building D and E and replace with communal open space to achieve height compliance on this building and closer compliance to the overall communal open space requirements.

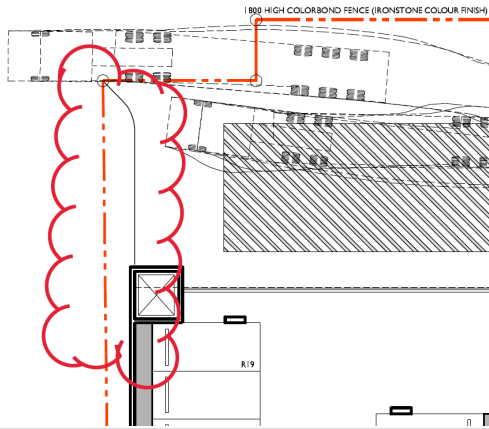
BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> The communal open space provision across the site was deemed to be insufficient, and proximity to Hindmarsh Park was not deemed to satisfy the ADG requirements for the site. 	<ul style="list-style-type: none"> Additional communal open space on the roof and upper levels of buildings has resulted in a compliant 1968m²/25% communal open space. 	✓
<ul style="list-style-type: none"> The JRPP identified that the height exceedance in this location was significant and therefore unsupportable. Given the longer street frontage of this building, the additional bulk also had a greater impact than other buildings within the site. The recommendation to resolve these items simultaneously is to remove level 4 from this building and replace it with communal open space. 	<ul style="list-style-type: none"> Height compliance has not been achieved despite removal of level 4 and replacement with communal open space. This is due to raising the residential floor levels by 1m to reduce the height difference between the Level 1 apartments and the streetscape, which improves resident amenity and allows greater activation of the Akuna Street frontage. The overall height and perceived bulk from Akuna Street has been reduced. Components of the building above the height plane fronting Akuna Street are the building core and planter boxes, which are necessary components of the communal open space. BHI believes the height exceedance is justified in this position due to the above. 	Justified

(ii) Provide a differentiated building articulation and materiality to building D and E.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> The JRPP identified that the building facade facing Akuna Street was too uniform in its architectural expression, and that the architectural character of the buildings was not clear from the drawings. It was proposed that building D/E have a different architectural expression due to its separation from the rest of the site by the lane, longer frontage to Akuna Street and interface with adjacent development to the West. This expression should be dealt with by differences in built form massing, building articulation and materiality. 	<ul style="list-style-type: none"> The architectural character of the buildings fronting Akuna Street has been differentiated with a range of materials, articulation of built form and architectural detailing. Building D/E reads differently to other buildings on the site through materiality, articulation and rooftop landscaping/ structures. BHI is satisfied that the Akuna Street frontage is sufficiently varied in its built form. 	✓

(iii) Review pedestrian access between Terralong Street and Akuna Street to provide more legible and direct access.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> The JRPP deemed the public access between Terralong Street and Akuna Street through the retail arcade and basement parking to be unsuitable. The circuitous route across the site currently results in legibility, convenience and safety issues. This will likely weaken the connection across the site. 	<ul style="list-style-type: none"> A much clearer pedestrian circulation route has been provided to the Western edge of the site, legible from the main circulation route within the retail arcade. 	✓
<ul style="list-style-type: none"> BHI notes that an ideal location for the lift/stair connection across the site would allow direct movement and legibility from the retail arcade access point on Terralong Street. The most direct location would be located within the specialty retail tenancies with visual connection to the Terralong Street frontage, with egress provided through a commercial lobby in Building D/E fronting Akuna Street. BHI also notes that bringing a public thoroughfare through this building, which is separated from the commercial frontage to the East, must be managed sensitively to avoid compromising residential amenity. 	<ul style="list-style-type: none"> A direct link through the site within building D/E was deemed inappropriate due to privacy and safety concerns. The walkway along the Western edge of the site separates the pedestrian from resident circulation. Residential privacy has been maintained through dense planting associated with the balconies of residential apartments, in conjunction with screen planting. Due to the public benefit of the walkway and the mixed use nature of the locality, BHI believes that the nil setback to the Western boundary for the walkway is justified. The walkway presentation to Akuna Street is currently non-descript in character and blends in with Building D/E. 	Justified

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
	<ul style="list-style-type: none"> BHI recommends that a condition of consent be included requiring the further development of the walkway presentation to Akuna Street so as to read as a commercial element separate from the residential building, achieved through differential architectural detailing and materiality. BHI recommends that a condition of consent be included requiring planting to the Residential Parking Floor Plan (A-104) on the Western boundary, to the North of the raised planter box. See image below for location. 	
<ul style="list-style-type: none"> BHI recognises that this connection across the site was originally identified by Kiama Council as being a key relationship in the Kiama commercial centre. This connection will connect any further commercial development in Akuna Street to the primary commercial zone on Terralong St. 	<ul style="list-style-type: none"> BHI is satisfied that a legible connection across the site has been provided, connecting Terralong Street with Akuna Street. 	✓

(iv) Review pedestrian access for Shoalhaven Street shops basement car parking spaces.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> The JRPP identified a conflict between residential and commercial uses within residential Lobby A adjacent to Shoalhaven Street. The lift servicing this lobby connects commercial basement parking and residential parking to Lobby A, resulting in an unacceptable conflict of uses. This conflict will reduce residential amenity and result in security concerns. BHI recommends that an additional commercial-only lift should be introduced which discharges directly to Shoalhaven Street to provide access to shops. 	<ul style="list-style-type: none"> BHI is satisfied that the residential and commercial circulation has been separated, removing amenity and security concerns. 	✓

(v) Provide details of hours of operation, availability of access for car parking.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> The JRPP was concerned that security issues may arise if public access to the development, through car parking and pedestrian access, is not adequately detailed and controlled. 	<ul style="list-style-type: none"> ADM has provided the following comments in relation to securing the development: <i>"It is envisaged and subject to the actual intended hours of operation of the commercial complex that 6 am to 11 pm will be common practice hours of operation of the car park. All access will be secured via appropriate ticketing, swipe card, remotes, lift access panels subject to the specific technical requirements of each device/access asset. Additionally, there will be an appropriate surveillance system in place in addition to building managing staff to ensure the safety and proper functioning of the complex and its car park."</i> BHI is satisfied that as long as the above controls are enforced, security concerns have been adequately addressed. 	✓

(vi) Identify locations for canopy planting in the communal open space areas and update the landscape plan to reflect any changes.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> Amend landscape plan to include the communal open space on Building D/E and include canopy planting. 	<ul style="list-style-type: none"> BHI is satisfied that sufficient additional canopy planting has been detailed on the Landscape Plans. 	✓

3. APARTMENT DESIGN GUIDE

BHI Architects has undertaken a review of the amended design against relevant Design Criteria and Design Guidance contained within the Apartment Design Guide (ADG) to address the JRPP's recommendation for design review in regards to SEPP 65. Only the aspects of the ADG that were deemed relevant to BHI's role in reviewing the architecture and the overall urban design outcome of the development were offered as guidance to the applicant, and subsequently reviewed in relation to the amended design.

3C Public Domain Interface

Front fences and walls along street frontages should use visually permeable materials and treatments. The height of solid fences or walls should be limited to 1m.

In developments with multiple buildings and/or entries, pedestrian entries and spaces associated with individual buildings/entries should be differentiated to improve legibility for residents, using a number of the following design solutions: architectural detailing, changes in materials, plant species, colours.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> Details of fencing and walls along Akuna Street should be included in amended drawings. 	<ul style="list-style-type: none"> Open fencing is provided, detailed on the Landscape Plans. 	✓
<ul style="list-style-type: none"> The four residential entries facing Akuna Street should be differentiated to improve legibility for residents and visitors. 	<ul style="list-style-type: none"> Residential lobby entries have been differentiated by material and architectural expression. 	✓

3D Communal and Public Open Space

Communal open space has a minimum area equal to 25% of the site. Where communal open space cannot be provided at ground level, it should be provided on a podium or roof.

Facilities are provided within communal open spaces and common spaces for a range of age groups, incorporating some of the following elements: seating for individuals or groups, barbecue areas, play equipment or play areas, swimming pools, gyms, tennis courts or common rooms

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> Provide calculations demonstrating communal open space compliance. 	<ul style="list-style-type: none"> Additional communal open space on the roof and upper levels of buildings has resulted in a compliant 1968m²/25% communal open space. 	✓
<ul style="list-style-type: none"> Careful consideration should be given to the design of rooftop space, with visual and acoustic privacy maintained within the site and to neighbouring properties. 	<ul style="list-style-type: none"> The rooftop landscaping has been designed to sit back from the building edge, with screening planting to reduce visual and acoustic impacts. 	✓
<ul style="list-style-type: none"> Add additional seating and communal facilities to the communal open spaces to activate the spaces. 	<ul style="list-style-type: none"> Additional varied communal open space has been provided, including seating, barbecue areas, play areas and common room. 	✓

3E Deep Soil Zones

Deep soil zones are to meet the following minimum requirements: site area greater than 1,500sqm - 7% - minimum dimensions 6m.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> Provide calculations demonstrating deep soil zone compliance. 	<ul style="list-style-type: none"> 454m²/6% of deep soil zone has been nominated on the plans. BHI considers this provision to be satisfactory due to site constraints including the steep topography and a satisfactory provision of canopy trees, including retention of significant street trees to Akuna Street. 	Justified

3F Visual privacy - was not deemed relevant to be addressed given the general compliance with these controls as outlined in the SEE.

3G Pedestrian access and entries - these matters are discussed in Section 2 of this report.

3H Vehicle Access

Garbage collection, loading and servicing areas are screened.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> Provide details of boundary screening to the loading area to the North of the site. 	<ul style="list-style-type: none"> A 1.8m Colorbond fence has been nominated on the plan to screen the loading area. 	✓
<ul style="list-style-type: none"> Screen the loading area from residential apartments overlooking it to reduce visual and acoustic impacts. 	<ul style="list-style-type: none"> Planter boxes have been provided for a majority of windows, balconies and communal open space directly overlooking the loading bay, however some bedrooms are visually and acoustically exposed to the loading bay. BHI acknowledges that an acoustic report provides a management strategy to limit loading times and frequency, however this does not address visual screening. BHI recommends that a condition of consent be included requiring that additional visual/acoustic treatments are installed to all North facing bedrooms from Residential Level 1 to Residential Level 3. These could include a combination of the following: using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens), solid balcony balustrades, external screens and soffits. 	Justified

3J Bicycle and car parking - was not deemed relevant to BHI's role as reviewing the architecture and the overall urban design outcome of the development.

4A Solar and daylight access - was not deemed relevant to be addressed given the established compliance with these controls in Appendix 1 of the SEE.

4B Natural ventilation - was not deemed relevant to be addressed given the general compliance with these controls as outlined in the SEE.

4C Ceiling heights

Minimum ceiling height for apartment and mixed use buildings: If located in mixed used areas 3.3m for ground and first floor to promote future flexibility of use. Habitable rooms 2.7m

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> Provide 3.3m to Ground and First floor units. 	<ul style="list-style-type: none"> Given the ongoing concerns regarding height exceedance on the site, and the lack of direct access to ground floor apartments from the street due to the steep site topography, BHI deems the current 2.7m ceiling height for habitable rooms to be satisfactory. There is also a significant quantum of commercial space provided throughout the development. 	Justified

4D Apartment size and layout - was not deemed relevant to be addressed given the established compliance with these controls in the SEE.

4E Private open space and balconies - was not deemed relevant to be addressed given the established compliance with these controls in the SEE.

4F Common circulation and spaces - was not deemed relevant to be addressed given the established compliance with these controls in the SEE.

4G Storage - was not deemed relevant to be addressed given the established compliance with these controls in the SEE.

4H Acoustic privacy - was not deemed relevant to be addressed given the established satisfaction of these controls in 3H Vehicle Access above.

4J Noise and pollution - was not deemed relevant to be addressed given the established satisfaction of these controls in 3H Vehicle Access above.

4K Apartment mix - was not deemed relevant to be addressed given the established compliance with these controls in the SEE.

4L Ground floor apartments - was not deemed relevant to be addressed given the steep site topography.

4M Facades

Design solutions for front building facades may include: a composition of varied building elements, a defined base, middle and top of buildings, revealing and concealing certain elements, changes in texture, material, detail and colour to modify the prominence of elements.

Building facades should be well resolved with an appropriate scale and proportion to the streetscape and human scale. Design solutions may include: well composed horizontal and vertical elements, variation in floor heights to enhance the human scale, elements that are proportional and arranged in patterns.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> The base, middle and top of the buildings are not well defined. The composition and expression of these components should be differentially addressed. 	<ul style="list-style-type: none"> The different horizontal components of the buildings have been treated differentially, leading to a more pleasing composition. 	✓
<ul style="list-style-type: none"> The facades are largely monochromatic in materiality, giving a "cold" appearance. Variation in building elements, textures and colours should be introduced to add warmth and character to the building. 	<ul style="list-style-type: none"> Timber look screens and use of bricks warms up the facades and provides a contrast of materials which helps to break up the built form. 	✓

<ul style="list-style-type: none"> Currently the residential building facades are largely horizontal in expression, without vertical elements to break up the scale of the building, resulting in a built form proportion which is not in human scale. Vertical elements should be introduced to break up the scale of the facade and give balance to the largely horizontal expression. 	<ul style="list-style-type: none"> Timber look slatted aluminium screens add a finer scale vertical proportion to the facades. Vertical expression of the built form also breaks up the mass of the building. BHI is of the opinion that a greater quantity of screens are required to achieve the desired effect. BHI recommends that a condition of consent be included requiring installation of at least 3 movable screens per primary balcony to buildings A, B & C. 	Justified
---	--	-----------

4N Roof design - was not deemed relevant to be addressed given general compliance with these controls.

4O Landscape design - was not deemed relevant to be addressed given general compliance with these controls.

4P Planting on structures - was not deemed relevant to BHI's role as reviewing the architecture and the overall urban design outcome of the development.

4Q Universal design - was not deemed relevant to be addressed given general compliance with these controls.

4R Adaptive reuse - was not deemed relevant to this development.

4S Mixed use - was not deemed relevant to be addressed given general compliance with these controls.

4T Awnings and signage - was not deemed relevant to be addressed given general compliance with these controls.

4U Energy efficiency - was not deemed relevant to BHI's role as reviewing the architecture and the overall urban design outcome of the development.

4V Water management and conservation - was not deemed relevant to BHI's role as reviewing the architecture and the overall urban design outcome of the development.

4W Waste Management

Communal waste and recycling rooms are in convenient and accessible locations related to each vertical core. Circulation design allows bins to be easily manoeuvred between storage and collection points.

Temporary storage should be provided for large bulk items such as mattresses

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> All residential waste is concentrated in one room rather than being associated with each vertical core. Residents must travel excessive distances to convey waste and recycling to the communal residential waste area. A waste area should be provided to Building D/E directly adjacent to the vertical circulation cores. Collection could occur in Loading Zone 1. 	<ul style="list-style-type: none"> A separate waste storage room has been allocated to building D/E in the basement. BHI is supportive of this arrangement. 	✓
<ul style="list-style-type: none"> Bulk waste storage should be provided for residents. 	<ul style="list-style-type: none"> Bulky waste storage has been provided. 	✓

4X Building maintenance - was not deemed relevant to BHI's role as reviewing the architecture and the overall urban design outcome of the development.

4. GENERAL ARCHITECTURAL/URBAN DESIGN COMMENTS

BHI Architects considers the Apartment Design Guide to be a comprehensive document which successfully addressed the key architecture and urban design identified by both the JRPP and BHI Architects. Minor additional matters are outlined in the table below.

BHI NOTES	BHI REVIEW (ISSUE Z, SEP 2018)	✓ / ✗
<ul style="list-style-type: none"> The amenity of the retail arcade would be greatly increased by integration of skylights within the loading zone above. It is recommended that a turning circle analysis is undertaken to determine where skylights could bring light into the arcade below. 	<ul style="list-style-type: none"> Snorkel skylights have been proposed in the roof of the retail arcade to provide natural light. 	✓
<ul style="list-style-type: none"> It is recommended that colour elevations, with greater detail, are provided along Akuna Street to emphasise the fulfilment of the requested design quality outcomes and to provide adequate detail for a complete assessment. 	<ul style="list-style-type: none"> A greater level of detail is provided to elevations, as well as additional perspective views. Deemed adequate to assess the design. 	✓

5. CONCLUSION

BHI Architects has provided Architecture and Urban Design guidance to the applicant, including specific guidance regarding the recommendations of the JRPP issued on

We consider that the amended plans, labelled Issue Z, September 2018, presents an improved urban design response in line with the JRPP's recommendations, as well as the specific advice provided by BHI in relation to architecture, SEPP 65 and the overall design outcome.

Some aspects of the design are not strictly compliant with the recommendations of the JRPP or SEPP 65, however we believe that these departures are justified, or could be acceptable with specific conditions being addressed in the development consent. The following conditions of consent are recommended:

- BHI recommends that a condition of consent be included requiring the further development of the walkway presentation to Akuna Street so as to read as a commercial element separate from the residential building, achieved through differential architectural detailing and materiality.
- BHI recommends that a condition of consent be included requiring planting to the Residential Parking Floor Plan (A-104) on the Western boundary, to the North of the raised planter box.
- BHI recommends that a condition of consent be included requiring installation of at least 3 movable screens per primary balcony to buildings A, B & C.
- BHI recommends that a condition of consent be included requiring that visual and acoustic treatments are installed to all North facing bedrooms from Residential Level 1 to Residential Level 3. These could include a combination of the following: using double or acoustic glazing, acoustic louvres or enclosed balconies (wintergardens), solid balcony balustrades, external screens and soffits.