SEPP 65 Assessment
for Ku-ring-gai Council

DA 0738/12 AMENDED
5-11 and 15 Lamond Drive, Turramurra
Report Date: 27.04.2013

INTRODUCTION

Amended plans have been received that have sought to address SEPP 65 areas of non-compliance (on technical grounds and/or merit-based grounds) identified in the DA scheme previously submitted to Council. This report has reviewed the amended scheme in context of changes from the previous DA and on its own merit.

The site is located just west of Turramurra Railway Station within a 5 to 10 minute walk to the shops and facilities of the Turramurra village centre. It consists of 5 allotments zoned 2(d3) comprising a total of 5908.6m2. Adjacent sites are zoned 2(d3) to the north-west and north-east, while to the south-west, adjacent lots are zoned 2(c2).

Of particular note is the dramatic topography along the Pacific Highway ridgeline that characteristically falls very steeply along the western side along its path through the north shore. The subject site, therefore, sees a cross-fall of 30 metres from its high point at the current driveway of 5 Lamond Drive to its low point along the mid-section of the south-western boundary where a very steep, weed-infested gully of disturbed blue gum high forest (BGHF) is found. The head of the gully forms the upper reaches of a riparian zone that eventually drains to Lane Cove National Park to the south-west. There is a further cross-fall along the street boundary from the high point at 5 Lamond Drive to the low point at 15 Lamond Drive of approximately 5.5 metres.

Views to the south and south-west of the city are, however, expansive and currently experienced through the canopy of existing trees.

It was observed on visiting the site that although the Pacific Highway is in very close proximity (some 50 metres to the east), the topography, existing and current construction of residential flat buildings, and remaining detached houses provides a surprisingly quiet environment (notwithstanding the possible masking effect of construction noise on the neighbouring site).

The proposed amended development is for 83 apartments (a decrease of 3 units numerically from the original DA scheme). Dwellings are accommodated within two separate buildings, of four (4) and partly five (5) and six (6) storeys (with a small component exceeding 6 storeys).

One of which is articulated into two components (Blocks A + B). Three lifts provide vertical transport, one for each block. Accommodation mix is as follows:

1 bedroom	37 units	44.5% representing an increase of 9 units
2 bedroom	43 units	51.8% representing a decrease of 15 units
3 bedroom	3 units	3.0% representing an increase of 3 units

Challenging topography results in vehicle access to basements beneath each block being from Lamond Drive at RL177.0 via a spiral or winding ramp (beneath Block A) that descends to visitor parking and garbage storage at RL165.0 (some 4 storeys below). The remaining visitor and all residential parking is then accommodated over a further three (3) storeys of basements split across 5 levels that are linked via a tunnelled ramp.

There is no change to car parking being for 112 spaces comprising 90 resident spaces and 22 visitor spaces that include provision of accessible parking for 9 resident and 3 visitor spaces. Parking bays for a small garbage truck and recycling trailer are also provided as well as bicycle storage at three locations for a total of 27 bikes.

Principle 1 - Context

SEPP 65 : *Good design responds and contributes to its context…….Responding to context involves identifying the desirable elements of a location's current character, or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies.*

Proposed context is consistent with the zoning and changing character of the precinct. This is seeing lot amalgamation and the demolition of existing one and two storey brick and timber housing stock (in varying condition) for construction of much larger-scale residential flat buildings generally to five (5) storeys. Construction has been recently completed on the neighbouring site at 17 Lamond Drive (1-3 Duff Street) and is currently under construction at 1440-1444 Pacific Highway in very close proximity.

This precinct is dominated by the dramatic steeply sloping topography that presents significant challenges (to solar amenity and vehicle access) as well as opportunities (such as a vertically articulated building form of stepped rooftops for sunny communal spaces and expansive views). The topography and existing vegetation also result in more specific impacts to the significantly smaller-scaled 2c(2) existing residential houses to the south-west. On the one hand being sheltered beneath the tree canopy while, on the other, potentially dwarfed by the natural and changing urban environment up-slope. Additional information indicates the single storey detached housing downslope of the site is expected to maintain satisfactory amenity due to the distance of the proposed residential flat buildings and established vegetation.

It was observed that the large development of 60 recently constructed apartments at 17 Lamond Drive (1-3 Duff Street) is showing signs of weathering on parts of the painted finishes as well as brickwork. While difficult for Council to control, developers are urged to demand design detailing, materials selection and build-quality during construction that befits both the anticipated life expectancy of their

large developments and the requirement that weathering and thus on-going maintenance of buildings be considered throughout the design and construction phases. As a general comment, poor construction outcomes and/or insufficiently considered design detailing cannot be deemed an acceptable expression of the new urban context.

Construction Certificate detail will be required to address issues of maintenance and weathering to satisfy the SEPP 65 requirement for contributing to a positive urban context.

Furthermore, the responsibility to deliver landscape outcomes that maximise communal amenity, outlook to/from apartments and promotes the regeneration of previously low quality or highly disturbed vegetation is critical to achieving high quality urban outcomes.

As an observation of surrounding character, it is noted that the building mass of 17 Lamond Drive (the neighbouring site to the east) demonstrates minimal articulation of its western elevation that has resulted in a significant large-scaled wall element within 6 metres of the subject site boundary. This type of architectural massing and language is discouraged as it inevitably contributes to poor urban context outcomes. In this case, the impact to the subject site is further exaggerated by the steeply falling topography between the two sites and what appears to be insufficient RFDC building separation requirements for buildings above 4 storeys side given the side boundary setbacks of the neighbouring residential flat building. This presents some additional contextual challenges for the proposed development. The proposed setbacks along the eastern boundary (Block C) will assist in addressing building separation issues between the sites in combination with the proposed internal arrangement of units that minimises the number that are oriented to the neighbouring site. The scheme proposes a significant amount of articulation along the eastern face of Block C that will also assist in lessening impacts of bulk from the subject site to the neighbouring site.

The subject site is intimately defined around the steep gully through its centre forming an amphitheatre-like setting that has the potential to deliver a considered interface between the built form and dramatic landscape as well as improve the health of flora and fauna if executed well. Proposed residential building typology as discussed in Principle 2 is not supported as providing a desirable context – Block B presenting an excessively deep floor plate. (This was identified in the previous scheme and has not been addressed by the applicant.)

Landscape treatment such as the height and expression of walls and materials; balustrade type, height and materials; how screening is provided (predominantly planted so there is less reliance on solid screens); relationship of ground floor units to natural ground level are all paramount to the success of the project and providing a positive contribution to the surrounding context.

While the rooftop communal areas are supported (notwithstanding the requirement for very high quality waterproofing), the scheme proposes significant ground disturbance due to the extent of

proposed excavation, bulk of building footprints, and units proposed below natural ground level (all discussed elsewhere in this report). This is unacceptable as a future context.

The site's unique topographic and vegetative characteristics require a more sensitive design approach to built form. Poor urban outcomes on neighbouring sites cannot be accepted as providing acceptable context for benchmarks of proposed new development.

Principle 2 – Scale

SEPP 65 : *Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing transition proposed bulk and height needs to achieve the scale identified for the desired future character of the area.*

Elevations indicate that from Lamond Drive, the proposal will generally present as three-storeys. Street address to Lamond Drive will be characterised by the steeply sloping topography that sees the ground floor of Block A (North East Elevation) approximately 5 meters below street level (and 3 meters below natural ground level (NGL), Block C around 8 metres below street level (and approximately 2.5 meters below NGL).

The proposal seeks a variation to permitted height to allow an additional one-storey under the provisions of steeply sloping sites. However, the development in real terms has a component equating to 7 storeys due to the extent of excavation from NGL. This is not addressed in the SEPP 1 application and requires justification as it exceeds the additional height even allowing for steeply sloping sites. While the amenity of units on the top levels is the best enjoyed in the proposed development, it results in units below natural ground level that are not supported. The units specifically affected are A01, B01, B02, B05, C01, C02, C03, C04, C05 and C12.

As identified in the submitted documents, the topography presents challenges. The expression of built form requires careful consideration to adequately address bulk due to the combination of steep topography, the site being located near the top of a ridge, environmental sensitivities, and building type which, inherently, requires more site disturbance than single detached dwellings. This is made particularly challenging with the economic realities of maximising yield balanced with the extent of proposed excavation. Achieving yield is not accepted as justification for poor urban outcomes. More comment is made on this in Principle 4 Density and elsewhere.

Additional supporting information has been provided in terms of possible solar and privacy impacts to adjoining sites downslope. This information satisfies us that there is sufficient separation between sites and existing dwellings such that there are acceptable levels of amenity for down slope properties.

The development proposes 3-dimensional form expressed as two separate buildings one of which is clearly articulated into two distinct massings connected by a glazed walkway at the second and third storeys of Block A linking the fourth and fifth storeys of Block B.

Internal elevations (South-East Elevation) for Blocks A + B demonstrate a significant proportion of Block A will equate to a height equivalent above 7 storeys (from proposed finished external ground levels). The amended scheme shows no change to proposed wall height of Block A at approximately 21 metres above the communal area to the parapet and overall building height of 23 metres.

While dramatic, the quality of the limited ground level communal space does not justify the extensive excavation (of up to approximately 5 metres below NGL) required to achieve it, nor the resultant tall retaining walls with fencing on top (often not shown on architectural drawings). Given that this area will achieve no solar access during the winter months as indicated by additional solar diagrams, the extent of site disturbance required to achieve this part of communal space is not justified.

Notwithstanding the challenging topography, the extent of excavation that has been required to accommodate up to 10 units is not supported. While it is acknowledged that amendments to internal layout of these units and some retaining walls have helped address this, best practice urban design principles do not support excessive excavation to accommodate units below natural ground level particularly where breaches of building height are proposed as a result.

Building depth for Blocks B and C are well outside the provisions of the RFDC (p27) that recommends 10-18 metres as appropriate unless all amenity can be otherwise demonstrated. Building depths of approximately 17 metres for Block A comfortably achieve adequate amenity. Block C proposes a depth of approximately 19 metres and relies on predominantly single orientation units; while Block B still proposes a depth of 26.5 metres.

Block A is within the RFDC RoT and demonstrates that most units achieve *true* cross ventilation with dual aspect achieved for 9 of the 14 units (64%). A north-east aspect for the remaining 5 single orientation units (36%) and deeply articulated internal layout assists in achieving light sources from two aspects if not achieving true cross ventilation. For instance, actual unit depth of 10 metres for the single orientation units is above the recommended RoT depth of 8 metres to the rear wall (RFDC p69) but is generally adequate in providing access to the external face at approximately 6 metres from the rear wall when combined with the favourable north-east orientation and street setback as there are no impacts from other buildings.

Block B is more problematic seeking both a variation to KPSO building height and exceeding the building depth by approximately 10 metres above the maximum recommended RFDC RoT (p26) and DCP 55. Dual orientation is achieved in 10 of the 33 units (30.3%)* leaving the remaining 23 (69.7%) as single orientation - 12 oriented to north-west and it is accepted that internal planning achieves an orientation closer to north in 8 of those. The remaining 2 units are oriented to south-east. This is below the RFDC RoT to achieve a *minimum* 60% of cross-ventilated units. A further 12% of units could be argued do not achieve sufficient cross ventilation due to proximity of walls opposite a window that present a barrier to breezes.*

Furthermore, Units B03, B04, B09, B10, B11, B17, B18, B24, 25, B26, B27 and B31 (14.4%) receive no solar access during winter solstice. All these units are oriented to south-east and are attributed to excessive building depth leading to single orientation and poor orientation. This exceeds the maximum RoT RFDC (p85) for units oriented around south-east to south west. The requirement to demonstrate site constraints necessitate an excess of 10% of units with adverse orientation cannot be supported given the excessive breach of building depth proposed.

Block C building depth may be accepted at approximately 19 metres, however, the predominance of single orientation units oriented to west-west-nor-west is not supported. This represents 18 units (21.6%) RFDC Rot p84-85 requires single orientation units be oriented to north with no single orientation units to west. A further 5 single orientation units are articulated to achieve an orientation from near west to north which is satisfactory.

While adequate solar amenity can be demonstrated in the majority of these units, this is achieve through unacceptable orientation to west and the requirement for cross ventilation is not met.

We have calculated a total of 45.7% of units across the proposal achieve cross ventilation. This is well below the RFDC RoT (p87) of 60%. It is considered this poor result can be attributed to excessive building depth that relies on single orientation unit types. Therefore, scale is not supported on grounds of excessive height, excessive excavation (site disturbance) and predominance of single orientation unit types.

* These comprise 4 units (12% - B04 typical) that have bedroom windows located within a 1.75m slot from the opposing wall. We interpret these as not qualifying as true dual orientation units as the opposing wall, the building mass of Block A and topography are all barriers to breezes. Therefore, it is considered that only 30.3% of units in Block B achieve cross ventilation using the RFDC pp86-87 as a guide to unit layouts that achieve cross ventilation.

Principle 3 - Built Form

SEPP 65 : *Good design achieves an appropriate built form for a site and the buildings purpose, in terms of building alignments, proportions, building type and the manipulation of building elements…… The built form is a response to both the regulatory controls and the neighbouring built fabric.*

Site arrangement has sought to enable the regeneration of the degraded remnant BGHF and retained vegetation by arranging the buildings around the steeply sloping gully that presents significant challenges to development. The arrangement of buildings is generally perpendicular to the contours (rather than parallel) thus creating an amplified expression of the natural steep gully formation.

Setbacks are generally acceptable. However, it is noted that for buildings above 12 metres high (4 storeys), the RFDC (p28-29) states a building separation of 18 metres between habitable rooms and balconies. While this has been achieved within the proposed development, it presents an issue for the neighbouring building at 17 Lamond Drive (1-3 Duff Street) being part 4 and 6 storey building. Setbacks for the neighbouring building in this context are inadequate to achieve required separations

equitably with setbacks off the boundary of only 6 metres resulting in an unfair burden on the subject site to achieve the required 18 metre separation. It is, therefore, accepted that some variation may be acceptable, however, this would need to be assessed after building B addresses issues of excessive building depth (which may enable required separations to be achieved). Blocks A and B achieve satisfactory 9 metre side setbacks.

Variations to building height are proposed that exceed the provisions granted for steep sites. This is not supported on grounds of inadequate amenity to some ground level units, excessive building depth, excessive number of single orientation units and predominance of those units with adverse solar orientation.

The articulation of building mass to create the separate Blocks A and B is supported. Composition of facades generally seeks to rationally group elements vertically. However, there is some lack of rigor demonstrated in the articulation of built form that appears to result from three-dimensional expression being driven by internal-planning layout rather than a rigorous dialogue between the internal planning and a well-composed three-dimensional form. An example of this would be with location of external openings and articulation of balconies that appear unrelated and a lack of cohesion of penthouse massings that bear little relationship to lower level layouts. This is a particular consideration for this development due to the falling topography that results in the rooftop elements being fully visible from the street and thus forming the streetscape character on the approach to the development. Arrangement of massing, selection of materials and architectural expression of rooftop elements therefore require specific consideration in this development.

Proposed building depth is not supported for Block B. Block C can be supported where all issues of amenity are addressed. Therefore, Built Form is currently unsatisfactory.

Principle 4 - Density

SEPP 65: *Good design has a density appropriate to its site and its context, in terms of floor space yields (or numbers of units or residents)…*

Proposed density is unacceptable when viewed in context of the following contributing factors:

- **level of amenity** achieved in many ground level units – relationship of floor level to natural ground. The amended proposal achieves adequate solar amenity in only 4 of the 10 (40%) ground floor units (as staggered over levels relative to contours). This is in part due to excessive excavation to locate units below NGL and partly due to overshadowing within the development. Topography provides the challenge but with fewer units and reduced building bulk to Block B, an improved relationship to ground could be achieved.
- **topography** - steeply sloping to the south-west. Topography is accepted as relevant to the height variations sought.
- **variation to height -** of itself, additional height can be justified on such a steeply sloping site where satisfactory levels of amenity are demonstrated, and site disturbance is minimised. The

amended application has sought to address some (but not all) of the issues raised in the previous urban design review. Excessive excavation that further exacerbates breaches of height is not supported.

- **variation to building depth** - Block B in particular is significantly outside that recommended under SEPP 65 RFDC and is not supported. The applicant has made localised amendments to internal unit layout to address issues raised but has not made any amendments to address excessive building depth. Proposed building depth of Block B is not supported in achieving desired density.
- **variation to FSR** - is significantly outside that permitted under Draft LEP (Local Centre) 2012 of 0.85:1 (not withstanding compliance with 1.3:1 FSR provisions in KPSO noted as "NOT the sole determinant of built form and density"). FSR must be seen in light of specific site conditions. Site analysis must be undertaken for each proposed development that identifies real constraints to achieving permissible density. The subject site presents physical constraints that are not adequately addressed in the proposed development and hence permitted FSR may not be achievable. This must be seen in context of the LEP that has recognised those site specific issues and thus reduced permitted FSR.
- **proportion of single orientation units as a type -** the reliance on single orientation units as a unit type at 42 of the total 83 (50.6%) is not supported. This does not include a further 4 units (4%) Unit B04 typical, that are unlikely to achieve cross ventilation as identified previously. Of these units 14.4% (more than the maximum permitted RFDC p85 of 10%) are orientated SE-SW.

For these reasons, proposed density is not supported in the amended proposal.

Principle 5 - Resources, Energy and Water Efficiency

SEPP 65 : *Sustainability is integral to the design process. Aspects include…layouts and built form, passive solar design principle…..soil zones for vegetation and re-use of water.*

The extent of site disturbance requires detailed technical review by Council's landscape, environmental and engineering officers.

The extent of proposed excavation is not accepted as previously detailed. The extent of retaining walls, deep excavation, excessive building footprints combined with site specific topographic and landscape conditions present as unacceptable environmental outcomes for the site in the current proposal.

Size of building footprints need to be considered in terms of disturbance to water flows (surface and ground water). Water flows, hydraulic pressures, gully erosion are all major factors for the proposal particularly during construction.

Based on our experience and while accepted as a matter for the developer, it is noted that the extent of resources required to construct the proposal given the excessive number of basement levels, will likely place unacceptable pressure on build quality and yield when considered in terms of achieving positive urban outcomes.

It is acknowledged that the proposal has sought to optimise the opportunities to orientate units as close to north as possible given the boundary alignments and topography steeply sloping to the south-west. This strategy is generally supported. However, complex issues of amenity arise given the reliance on single orientation units that are often claimed by applicants to provide cross-ventilation if articulated around the single orientation. The reliance on this type is not acceptable nor in units whose dominant orientation is between south-east to south west.

Air-conditioning of units is proposed. There appears no provision indicated on drawings for location of A/C units such that they are considered design issue. This needs to be addressed to avoid the situation that often occurs where A/C is an afterthought resulting in units being highly visible on balconies.

Principle 6 - Landscape

SEPP 65 : *Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.*

The outdoor communal area at ground level will not achieve solar amenity during winter months. In principle, the provision of terraced landscape areas may be supported particularly where coordinated with access paths and landings. However, where excessive excavation and retaining walls are required, these are not supported. The provision of communal rooftop gardens and terraces satisfies the need to provide high quality outdoor spaces that achieve excellent solar access that can be enjoyed by all residents and is supported.

The site falls outside a categorised riparian zone. However, a riparian zone has been established on the site as the head of a gully that forms a categorised riparian zone. The management and regeneration of the site is supported. Additional information has been provided and is supported on urban design grounds but may have implications to ground water management to be reviewed by Council's landscape, environmental and engineering officers. The extent of building footprint for Block B is apparent on Vegetation Management Plan diagrams as is the lack of continuity between the upper BGHF and lower riparian zone that is impacted by excavation.

Previous urban design review noted the Impact Assessment by Keystone Ecological had identified the upper section of the site for possible rehabilitation that may provide a potential future habitat for the endangered red-crowned toadlet. Connectivity between the upper BGHF regeneration and lower section adjacent to the riparian zone is desirable. This needing to be balanced with the impact to surface and ground water movement that will be caused by the proposed large-scale excavation and

new construction. It was noted that from Lamond Drive, 6 levels of excavation were required beneath Block A and part Block B. This is closer to 7 levels when the extent required for Unit A01 is taken into account. There have been no amendments proposed that address extent of excavation although internal planning amendments have occurred to individual units. As commented in previous review, there may be opportunities to reduce excavation if units thus affected were not constructed and replaced by carparking. This would also negate the extensive excavation for the upper level outdoor communal area and address ongoing issues of amenity.

Accessible, useable communal open space is difficult to achieve at ground level on this site. Open space will be more characterised by passive BGHF canopy setting, ground planting and slope stabilisation. The limited opportunity for ground level communal space (located between the two buildings) is proposed as two terraces linked by stairs and an inclinator between the 3-metre height differential.

Creating these terraces involves a trade-off between the benefit of achieving a useable ground level outdoor area and the negative impacts resulting from the amount of excavation required, resultant increased height of buildings (Blocks A+B) and that impact on the quality of the central communal spaces as well as coordinating floor levels between the two buildings. While generous landscape spaces should be provided particularly as the entry to Building C is only possible from the central courtyard spaces some 13 metres below street level, it should not be achieved by the use of extensive excavation.

Supporting documentation has demonstrated that the central communal area does not achieve adequate solar access during the winter solstice period given topography, orientation of the slope, and extent of excavation. This further reinforces the view that proposed excavation is disproportionate to amenity achieved. However, it is noted that the provision of rooftop terraces as communal open space will achieve accessible areas with high levels of solar access and enable the expansive city views to be enjoyed by all residents. These are supported.

No amendments to the path of accessible travel from Lamond Drive to Block A are proposed as previously suggested. This is the main entry for the development and a 1:14 ramp at the minimum 1 metre clear width will appear mean. It is suggested this path be increased to 1.2m and preferably 1.5 metres clear width. This is the only directly visible pedestrian entry (via a bridge) from the street into the entire development. The pathway to Block C disappears down the gully with no visible building entry from the street. Disabled access to Bocks B and C is via an inclinator to the ground level common areas below. It would be preferable to create a visible street address for Building C.

Building entry to Block B has been amended to connect to Block A main entry and is supported. The secondary entry is approximately 12 metres below street level and recessed approximately 8 metres from the building face and 12.5 metres including balconies. A bedroom window to Unit B04 also opens into this space that was not previously supported. This has been addressed in the amended

proposal by including privacy screens and will be a highlight window. We adhere to the principle that where permanent, fixed privacy screens are proposed to openings, the level of amenity achieved by the opening is negated and indicates alternative design solutions should be sought.

The strategy for clear landscape management zones throughout the site is supported as promoting the regeneration and repatriation of native flora and fauna and thus to reduce the release of noxious weeds down-stream of the site. There are unique opportunities to create a really spectacular landscape setting for this site.

It was observed on the site visit that private courtyard screening of translucent infill to a height of approximately 1.8 metres on the neighbouring development at 17 Lamond Drive creates an unpleasant interface with communal landscape and misses opportunities for private outdoor spaces to engage with perimeter landscape that could have doubled as privacy screening. Similar devices will not be supported within this proposed development.

While the orientation of balconies and courtyards for Block C of the proposal will mostly avoid overlooking between developments, it is noted that a high level of engagement between the proposed development and site landscape needs to be achieved. The potential beauty of the site will be in the ability of the development to engage with the site landscape, to have a sensitive relationship to existing ground levels and to the tree canopy beyond the site. This has not been adequately achieved in the amended proposal..

Amendments are required to adequately address the relationship of several ground floor units to natural ground levels (NGL) as discussed in detail elsewhere in this report.

Insufficient spot levels have been provided on landscape and architectural documents around the perimeter of all buildings.

Insufficient ToW heights have been provided on landscape and architectural documents. All walls are to have heights identified and adjacent existing and finished ground levels.

The retaining wall ToW RL168.0 in the vicinity of Unite B11 and car park ramp retains existing ground levels of RL 170.5 which needs clarification as to how this is possible. The configuration of this wall and topography indicates surface water would be running into Block A/B in this vicinity with basement and retaining walls forming a dam. This needs to be clarified and reviewed as it has the potential for adverse consequences for Units B05 and B11 in severe rain events.

Principle 7 - Amenity

SEPP 65 : *Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts, and service areas, outlook and ease of access for all age groups and degrees of mobility.*

The following elements are supported:

- Lifts lobbies providing natural light and ventilation, and clear lines of sight to unit entries
- Balconies that allow for direct access both from the living room and bedroom
- Unit types achieving true dual and triple orientation
- Floor plans that make efficient use of space by minimising the need for hallways thus optimising space available to be utilised in habitable rooms
- The majority of kitchens have access to windows.

The following items require amendments to satisfactorily address amenity:

- Ten units remain below ground level are not supported where excavation, excessive retaining walls, and excessive site disturbance are required. Those affected are A01, B01, B02, B05, C01, C02, C03, C04, C05 and C12.
- Units that rely upon high quality waterproofing to address walls being between 1 and 1.5m below ground are unacceptable Units B05, B11, C04, C05, C11 and C12.
- Bedrooms in C11 and C12 rely on permanent screening (inoperable?) that will achieve unacceptable internal amenity.
- Kitchens in many 1-bedroom units provide inadequate bench-top preparation areas such as B01, B04, C01, C02 typical.
- Galley style kitchens are not supported in this proposal as they generally provide insufficient bench-space unless kitchens are very large.
- Units B03, B09, B17, and B24 have potential to provide a window to the ensuite for natural light (if not ventilation due to required separations).
- It is preferable to have the door swing to ensuite bathrooms (as well as internal layout) that obscures a view of the toilet from the bed see Units A04, B26.
- RFDC p85 and p93 recommends a maximum of 10% of units may be oriented SE-SW. We have found approximately 14.4% of single orientation units have this orientation which is unacceptable. While adverse site orientation has been considered, excessive building depth is seen as a contributing factor and not supported.
- Where units cannot achieve optimal orientation, they need to provide other amenity such as corner units receiving natural light from two orientations and achieving good cross ventilation.
- B02, B08, B16, B23 were previously found to have a view from the front entry 10 metres down a hall straight into the kitchen sink. Rather than amending the kitchen layout, a sliding door to the kitchen has been proposed. While it is acknowledged this may provide residents with an option to screen the kitchen, it would be preferable to solve such issues through design considerations such as moving the sink location rather than implementing additional devices to avoid address the design issue.
- All openings should indicate operable leaves on elevations.
- Cross-sections should nominate Unit numbers through which the section is cut.

Solar Access: Amended solar analysis prepared by Steve King provided 3-dimensional ‘Views from the sun’ as requested showing the buildings on a site model. This clearly demonstrates solar access

within the proposed development that is accepted although modelling of terrain and retaining walls was somewhat ambiguous as identified by the report.

Orientation of units: A total of 18 of 83 units (21.6%) of units are oriented to west (or just off west) far exceeding the RFDC that requires no single orientation units be oriented to west and should be oriented to north or east and exceeds DCP 55 that not more than 15% or units be oriented to west. Amenity of these units is impacted and exacerbated by the type being predominately single-orientation. Additionally, 12 of the 83 units (14.4%) are orientated SE (as previously noted) which exceeds the RFDC maximum 10% as permitted. While it is accepted that topography is an issue, the decision to rely upon single orientation unit types is not the result of topography, rather design decisions and building depth so are, therefore, unaccepted.

RFDC p85 – maximum 10% of units oriented SE to SW
DCP 55 C-4 no single orientation units to south and C-5 not more than 15% of units single aspect to west

Principle 8 - Safety and Security

SEPP 65 : *good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising activity on the streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.*

A Traffic and Parking Assessment Report provided by Varga Traffic Planning provides one sentence stating the car park design is to AS2890.1. This is both inadequate and unsatisfactory documentation for a development of this size, proposing a basement configuration that requires residents to descend up to 7 storeys, linked by a tunnel element.

Additional supporting information was requested in the previous application as to the real functionality and safety of the spiralled/winding car park ramp. This goes to management in the event of a breakdown or other emergency, kerb separations, swept paths demonstrating passing vehicles, functionality of the ramp when the garbage truck is using it, access to and from the single car spaces proposed within the ramp spiral having limited visibility. No information has been provided to date. From an urban design perspective, there are an excessive number of levels residents are expected to negotiate even for short trips to the shops that raises issues of safety, convenience and comfort in day-to-day use.

Visibility for cars using the single car space within the ramp spiral also requires detailed comments from Council's engineers. It is unclear how these can be safely used as the single ramp for the entire development is blocked each time these spaces are entered and exited.

Clear sightlines from building entries to lifts are achieved for Blocks A, B and C. Amendments have been made to Block B entry lift lobby that now achieves clearer sightlines for pedestrian entry. Building C has not addressed this as previously requested.

Topography makes furtive outdoor spaces difficult to avoid, but we are satisfied the level of passive surveillance that can be achieved over the site will assist in minimising opportunities for uninvited entry to the site.

Much comment has been made on the quality of ground level communal spaces. The excessive amount of excavation required to achieve them, as well as heights of retaining walls and limited solar access makes the proposed ground level communal spaces difficult to justify and unlikely to be used other than for passive landscape.

Principle 9 - Social dimensions

SEPP 65 : *Good design responds to the social context and needs of the local community in terms of lifestyles, affordability and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood, or, in the case of precincts undergoing transition, provide for the desired future community.*

Council will need to confirm whether projected social mix is achieved in this development. It is noted that a slight improvement has been made to unit mix that is supported. There is a variety of floor plan offered, and there have been some changes to apartment mix that sees an increase of 1 bedroom units, a decrease of 2 bedroom units and the inclusion of some 3 bedroom units.

The predominance of single orientation unit types is unsatisfactory particularly as an excessive number have adverse solar orientation even when considering the specific site characteristics.

Further consideration may be required to ascertain the possible influence of excavation and basement construction costs driving the unit mix as previously discussed. It is considered unsatisfactory to achieve a Development Approval that is used to on-sell if it is not able to be realised commercially – this can be the case where excessive excavation and resultant construction costs outweigh ability to deliver returns on unit price.

Impact of the development upon the site is a heavy-handed solution as demonstrated by the extent of excavation and resultant wall heights, building bulk, units below NGL. Opportunities for a more sympathetic relationship between the dramatic setting and ground floor units have not been satisfactorily explored. As such, the quality of amenity for future residents of these units is unacceptable on grounds of social dimension.

Principle 10 - Aesthetics

SEPP 65 : *Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.*

The proposed aesthetic is consistent with similar developments within the precinct.

Selection of materials is consistent with similar developments as is the composition and use of those materials.

Materials selection and colour appear to be rationally applied to the architectural elements in elevations.

As observed elsewhere, the quality of construction and final detailing will play an important role in the successful resolution of built form particularly at the rooftop levels that are highly visible.

Streetscape character will read as articulated 3-storey residential flat buildings. Rational planning and alignments of materials between the middle levels and rooftop elements needs consideration so a cohesive streetscape character is achieved.

The reliance on overly high retaining walls around ground floor units is a poor aesthetic response regardless of the topographical challenges. These are required in this proposal where excessive excavation is proposed to enable more units to be built below natural ground level.

Remaining issues are around shade and weather protection of windows, and architectural detailing sufficient to provide a positive future urban character and which addresses reasonable ongoing maintenance of the buildings. No weather protection of openings has been indicated on facades orientated to prevailing weather and solar conditions (if not protected by balconies above and eaves of penthouses).

It is worth noting that many developments completed in recently years have been poorly received by the community due in part to issues of poor weathering, building performance (by a lack of care in construction) and a perceived lack of character that is often attributed to inadequate consideration being given to architectural detailing. Further information on drawings is required to address protection of openings. Fixed, inoperable louvres will be unacceptable.

While there are examples of recent apartment developments in the Ku-ring-gai LGA that have not optimised urban outcomes, it is unsatisfactory to accept these as precedents for appropriate future development.

Conclusion

The proposal is not supported on urban design grounds for the following major design issues that have been unsatisfactorily addressed:

- excessive density on basis of identified issues of scale, amenity, resources and sustainability
- excessive number of basements and excavation
- units proposed below natural ground level on a steeply sloping south to south-west site

- excessive retaining walls
- excessive building depth (Block B)
- reliance on single orientation units
- number of single orientation units to adverse orientation

Additional information on an amended scheme is required as follows:

- Supporting traffic information to provide information as requested (notwithstanding the number of proposed basements is not supported)
- Elevations to show shadowing to better express proposed articulation
- Documents to nominate storeys/floors on drawing titles not just RLs on plans
- Operable leaves of windows and doors to be indicated on elevations
- Unit numbers to be identified on cross-sections
- Spot levels immediately around all retaining walls and building perimeters
- all Top of Wall levels
- Provision of A3 copies of architectural documents is to be provided in future with A0 drawings.