

JRPP No	2012SYW006
DA Number	DA0619/11
Local Government Area	Ku-ring-gai Council
Proposed Development	Demolition of existing dwellings and construction of three residential flat buildings comprising 124 units, landscaping and associated works.
Street Address	212-216 Mona Vale Road, 5A & 13 Memorial Avenue, St Ives
Applicant/Owner	Village Building Company / Canberra Estates Consortium No. 24 Pty Ltd
Number of Submissions	Seven
Recommendation	Approval
Report by	Jonathan Goodwill, Executive Assessment Officer

SUMMARY SHEET

REPORT TITLE:	212-216 Mona Vale Road, 5A & 13 Memorial Avenue, St Ives
LOT & DP:	Lot 13 DP 29167, Lot 14 DP 631319, Lot 15 DP 631319, Lot 4 DP 29167, Lot 1 DP 512730
PROPOSAL:	Demolition of existing dwellings and construction of three residential flat buildings comprising 124 units, landscaping and associated works.
DEVELOPMENT APPLICATION:	DA0619/11
WARD:	St Ives
APPLICANT:	Village Building Company
OWNER:	Canberra Estates Consortium No. 24 Pty Ltd
DATE LODGED:	24 November 2011
ESTIMATED COST OF DEVELOPMENT:	\$30,542,292
ISSUES:	Single aspect south-facing apartments, number of apartments per common corridors, building separation, apartment depth, width of street elevation
PRE-DA MEETING:	Yes
SUBMISSIONS:	Yes
LAND & ENVIRONMENT COURT:	N/A
RECOMMENDATION:	Approval

Legislative requirements

Zoning	Residential 2(d3) under Ku-ring-gai Planning Scheme Ordinance
Permissible Under	Ku-ring-gai Planning Scheme Ordinance
Relevant legislation	SEPP 55 – Remediation of land SEPP 65 – Design quality of residential flat development SEPP (Sydney Harbour Catchment) 2005 SEPP (BASIX) 2004 SEPP (Infrastructure) 2007 Ku-ring-gai Planning Scheme Ordinance DCP 40 – Construction and Waste Management DCP 47 – Water Management DCP 55 – Multi-Unit Housing DCP 56 – Notification Residential Flat Design Code

Integrated Development No

PURPOSE FOR REPORT

To determine Development Application No. 0619/11 for the demolition of existing dwellings and construction of three residential flat buildings comprising 124 units, landscaping and associated works at Nos 212 to 216 Mona Vale Road and 5A & 13 Memorial Avenue, St Ives.

The application is required to be reported to the Joint Regional Planning Panel as the capital investment value (CIV) exceeds \$20 million.

HISTORY

Previous development applications

24 October 2006	DA0338/06, for amalgamation of three lots, and construction of two five storey residential flat buildings containing 52 dwellings at Nos 212-216 Mona Vale Road was approved by Council on 24 October 2006.
29 November 2011	DA0021/11, for the demolition of existing dwellings and construction of three residential flat buildings comprising 124 units, landscaping and associated works at Nos. 212 to 216 Mona Vale Road and 5A & 13 Memorial Avenue, St Ives was withdrawn.

Current development application

31 October 2010 A Pre DA consultation took place and the following advice was provided to the applicant:

- i. the proposal did not comply with the height control
- ii. building separation did not comply with minimum standards outlined in DCP 55 and the RFDC.
- iii. solar access to apartments did not comply with the RFDC.
- iv. undersized apartments
- v. insufficient information

24 November 2011 DA0619/11 lodged

9 December 2011 Application notified

14 February 2012 Council officers advised the applicant of outstanding issues relating to:

- top floor area
- site coverage
- solar access
- apartment layouts
- window design for apartments A04 and A05 on Levels 1-3
- consistency in design language
- adequacy of justification for single aspect south facing apartments
- landscaping
- engineering

22 February 2012 Council officers met with applicant to discuss the issues identified in the preliminary assessment letter

8 March 2012 Council officers brief the JRPP on the DA

8 March 2012 Amended plans submitted

11 April 2012 Amended plans submitted

THE SITE

Zoning:	Residential 2(d3)
Visual Character Study Category:	1945-1968
Lot Number:	Lot 13 DP 29167, Lot 14 DP 631319, Lot 15 DP 631319, Lot 4 DP 29167, Lot 1 DP 512730
Area:	7,462m ²
Side of Street:	Northern

Cross Fall:	East to west
Stormwater Drainage:	By gravity to Mona Vale Road
Heritage Affected:	No
Integrated Development:	No
Bush Fire Prone Land:	No
Endangered Species:	No
Urban Bushland:	No
Contaminated Land:	No
Draft biodiversity zone:	No
Draft riparian zone:	No
Draft heritage conservation area:	No

THE SITE AND SURROUNDING AREA

The site is located on the northern side of Mona Vale Road, opposite the intersection of Mona Vale Road and Stanley Street, St Ives. The St Ives Shopping Village is located to the south-west and Stanley Street shops to the south.

The site comprises five properties identified as 212, 214, and 216 Mona Vale Road, and 5A & 13 Memorial Avenue, St Ives. Together they form an irregularly shaped allotment with a total area of 7,462m². Nos 212 and 214 Mona Vale Road have direct vehicular access to Mona Vale Road. Vehicular access to 216 Mona Vale Road, a battleaxe allotment, is via a 48m long driveway situated between 214 Mona Vale Road and the recently constructed 5 storey residential flat development at 220-222 Mona Vale Road. The site has a combined frontage of 57.6 metres to Mona Vale Road.

The site contains five detached residences and associated structures, including two tennis courts and four swimming pools. Nos 212-216 Mona Vale Road are in a dilapidated condition and do not appear to have been occupied for some time.

The site is relatively flat, with only a slight fall to Mona Vale Road. Reference to the Sydney 1:100 000 Geological Sheet indicates that the site is underlain by Ashfield Shale of Triassic age. The geotechnical report advises that the groundwater level has been measured at depths of 4.7 m and 4.8 m (RL 151.7 – 151.8).

The site adjoins a Council car park to the south-west (No. 208-210 Mona Vale Road), five storey residential flat buildings to the north and east (No. 220-222 Mona Vale Road and No. 17-19 Memorial Avenue/No. 102-118 Killeaton Street). The properties to the east of the site contain single dwellings. All adjoining properties are zoned Residential 2(d3).

A total of thirty nine trees are found on the site. The principle tree cover is generally forward of the existing dwellings along the Mona Vale Road frontage and along the common boundary with the Council car park. Two mature *Cedrus deodara* (Himalayan Cedar) located forward of the existing dwelling

on No. 214 Mona Vale Road are readily visible from the street. Two mature *Lophostemon confertus* (Brushbox) are located to the rear of the existing dwelling at No. 214 and are to be retained.

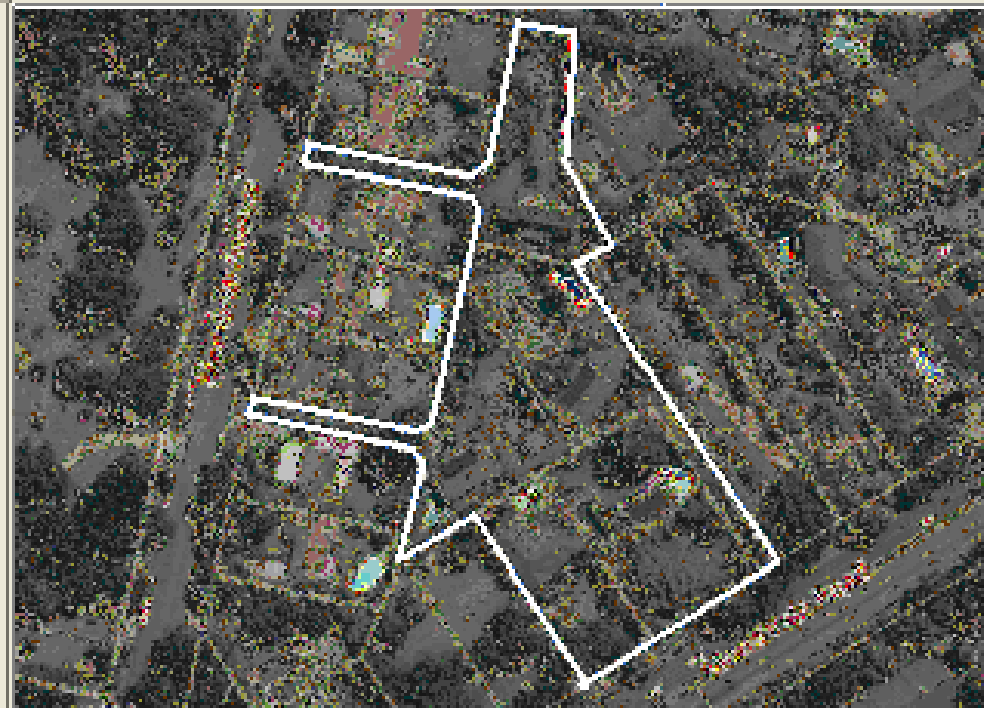


Figure 1 - Site Plan (*Source: Statement of Environmental Effects prepared by CBRE*)

THE PROPOSAL

The proposal is for the demolition of existing structures, and the construction of three residential flat buildings, comprising 124 units, a two level basement car park for 163 vehicles and associated landscaping. Details of the proposed development are as follows:

- Demolition of the existing residences situated on each allotment, including the removal of outbuildings, four swimming pools, two tennis courts, the removal of trees and the removal of driveways and other paved areas. The existing sandstone fence fronting Mona Vale Road is to be retained and rebuilt as part of the development.
- Consolidation of existing allotments
- Construction of three x five storey residential flat buildings comprising a total of 124 residential units. The residential flat buildings are described in the plans as Block A, Block B, and Block C. The development will be constructed in three stages. The first stage is the construction of Block A, the second stage is the construction of Block B and the third stage is the construction of Block C. Further details of the construction staging are

provided on the drawings prepared by ACOR Appleyard, sheets C2 to C5.

- The two level basement car park contains 163 car spaces, bicycle parking, service vehicle parking, garbage rooms, and storage space. Access to the basement car park is via a two way ramp connected to Mona Vale Road and the access handles of 5A and 13 Memorial Avenue.
- Proposed Block A will have its primary frontage to Mona Vale Road. Block B will be located on the central part of the site and Block C will be located within the northern part of the site. Block A contains 46 units, Block B 45 units, and Block C 33 units. The proposed dwelling mix is 60 X 1 bedroom apartments, 61 X 2 bedroom apartments, and 3 X 2 bedroom plus study apartments.

COMMUNITY CONSULTATION

In accordance with the requirements DCP 56 - Notification, owners of surrounding properties were given notice of the original application and amended application. In response, Council received seven submissions from the following:

- | | | |
|----|----------------------|------------------------------------|
| 1. | Mr Steven Ding | 15 Memorial Avenue, St Ives |
| 2. | Mr Steven MacJohn | 11 Memorial Avenue, St Ives |
| 3. | Mrs A MacJohn | 15A Memorial Avenue, St Ives |
| 4. | Dr A M Babu | 7A Memorial Avenue, St Ives |
| 5. | Mr James Brogan | 349/17-19 Memorial Avenue, St Ives |
| 6. | Mr Russel Goh | 436/17-19 Memorial Avenue, St Ives |
| 7. | Councillor Tony Hall | 818 Pacific Highway, Gordon |

The submissions raised the following issues:

The development will reduce solar access to Unit 436/17-19 Memorial Avenue, St Ives between the hours of 4pm to 5pm

The planning controls in DCP 55 and the RFDC address the issue of solar access between the hours of 9am to 3pm. These are the times during which solar access is most beneficial to the occupants of an apartment. As the planning controls do not protect solar access after 3pm the application could not be refused on the basis on loss of solar access to Unit 436/17-19 Memorial Avenue, St Ives.

The development involves the removal of trees which will effect the environment and wildlife on the site

The site is zoned Residential 2(d3) and currently contains five dwellings. The site has not been occupied for some time and is heavily overgrown. The zoning of the site allows for significantly higher density development than that which is currently located on the site. The development of the site for the

purposes of five storey residential flat buildings will inevitably result in the removal of trees. To protect the landscape character of the area the Ku-ring-gai Planning Scheme Ordinance requires that 50% of the site area for this development be dedicated to deep soil landscaping. The proposal complies with the 50% deep soil landscaping control and significant new tree planting is proposed to offset the removal of existing trees. The application has been reviewed by Council's Landscape Assessment Officer and no significant concerns have been raised regarding tree removal.

The development will result in a significant increase in people and population in the St Ives area

The development contains 124 apartments and will increase the number of people living in the locality. The site has been zoned Residential 2(d3) since 2004 and five storey residential flat buildings have been permissible on the site since this rezoning occurred. DCP 55 limits the size of residential flat buildings by imposing a maximum floor space ratio control of 1.3:1. A floor space ratio control also limits the number of apartments in a development and the population of the development. The floor space ratio of the proposed development is less than the maximum permitted by the controls. An increase in population and traffic that is directly attributed to the zoning of the site could not be used as basis to refuse the application.

The development will reduce privacy for the apartment known as Unit 349/17-19 Memorial Avenue, St Ives and block views of Memorial Avenue from this apartment

The development is compliant with the side setback control of 6 metres and the minimum separation distance between the proposed development and the apartment buildings at 17-19 Memorial Avenue is over 22 metres. The separation distance proposed is considerably greater than the minimum separation distances specified by the Residential Flat Design Code. Whilst it is acknowledged that the development will impact on the privacy of the apartments at 17-19 Memorial Avenue, these impacts are consistent with the type of development permitted on the site and the requirements of the planning controls for setbacks and separation distances.

The development will reduce solar access for the apartment known as unit 349/17-19 Memorial Avenue, St Ives

The development is located to the south-west of 17-19 Memorial Avenue St Ives and will not cast any shadows over this site between the hours of 9am and 3pm on the winter solstice.

Vehicular access to the development from the access handle of 13 Memorial Avenue is inappropriate as it will have adverse impacts on the amenity of the dwellings which adjoin the access handle

An acoustic report, prepared by SLR Consulting Australia Pty Ltd, was submitted with the development application. Part 4.2 'Memorial Avenue

Access Driveways' of the acoustic report includes an assessment of the likely noise impacts of the driveways and concludes that the impacts will be within acceptable limits subject to the installation of 1.8 metres high lapped and capped timber fences on both sides of the access handles with all gaps sealed.

The truck wash down area in front of 15 Memorial Avenue should be deleted

The truck wash down areas are proposed in practical locations having regard to the day to day operations of a construction site. Use of the wash down areas is restricted to the hours permitted for construction work.

Trees 72, 73, and 74 are located within 15 Memorial Avenue. The developer should be required to prune Tree 72 and remove Trees 73 and 74.

This is a civil matter as Trees 72, 73, and 74 are not located on the development site and do not form part of the proposal. Council's Landscape Officer has reviewed the application, investigated whether the development will impact on the health of these trees and concluded that the development will not have an unacceptable impact on the trees.

The access handle of 13 Memorial Avenue should be used for pedestrian access to the development only and security measures should be implemented including security cameras, electronic gate, swipe card system

There is no evidence that the use of the access handle of 13 Memorial Avenue as an egress driveway and footpath for the development will have an unacceptable impact on the amenity of adjoining dwellings either now or in the future. The site is located in a low crime area and the implementation of security devices such as CCTV, electronic gates and swipe cards is unnecessary. The use of the access handle of 13 Memorial Avenue as an egress driveway and footpath for the proposed development is appropriate having regard to the likely future character of the area.

Screening trees with a minimum container size of 100 litres should be planted along the access handle of No. 13 Memorial Avenue

Council's Landscape Officer has reviewed the application and no concerns have been raised with the species and container size selected for the planting within the access handles. The proposed species and container size identified on the landscape plan will provide an appropriate landscape character for the access handle.

The construction staging plans and economic conditions could result in a prolonged construction period with no remedial measures available between the stages

The conditions of consent require that the construction site be secured to prevent unauthorised access and that erosion and sediment control devices be maintained for the duration of the construction phase. There is potential for all developments to encounter difficulties which may prolong the construction period, this issue is not unique to the subject development and could not be used as a reason to refuse the application.

Drainage details for the new driveway in the access handle of 13 Memorial Avenue should be provided as stormwater from the existing driveway flows into adjoining properties

Council's Development Engineer has reviewed the application and is satisfied that the drainage details for the new driveway in the access handle of 13 Memorial Avenue are acceptable.

The electricity pole and timber structure in the access handle of 13 Memorial Avenue should be removed

The relocation of electricity assets is a matter between the developer and the provider of the assets. The timber structure in the access handle will be removed to allow for the construction of the new driveway in the access handle.

Waste collection vehicles should not be allowed to use the access handle of 13 Memorial Avenue

The basement has been designed so that waste collection vehicles use the Mona Vale Road driveway and collect waste from the service vehicle parking area under Block A. The ceiling height for the upper level basement under Block A is over 3m, whereby the remainder the upper level basement has a ceiling height of 2.65m. The entry to the basement from Memorial Avenue has a clearance height of 2.2m which is not sufficient for a waste collection vehicle. Waste collection vehicles will not be using the access handle of 13 Memorial Avenue.

The length of Block C should be reduced and the setback of Block C from the western boundary increased

Block C will be partially visible from Memorial Avenue, however it does not have direct frontage to the street and will be obscured by future development on 7-11 Memorial Avenue which is also zoned Residential 2(d3). The DCP control which restricts the length of an elevation facing the street to 36 metres does not apply to Block C. The setback of Block C from the western boundary complies with the 6m requirement specified by DCP 55. The length of Block C is the same or less than 5 storey buildings located on adjoining sites which do not have frontage to the street.

The air conditioning units located on the balconies of Block C will generate unacceptable noise

All air conditioning units for the development are located in basement level plant rooms and roof level air conditioning platforms. The air conditioning units will not generate excessive noise.

The proposal will have an adverse effect on the development potential of adjoining allotments to the west of the site which contain single dwellings

Part 6 'Consideration of isolated sites' of DCP 55 requires that development is to avoid single detached dwellings on lots in a 2(d3) zone smaller than 1200m² or with street frontages less than 23 metres being left underdeveloped. The development complies with these controls as the allotments on Memorial Avenue which share a common boundary with the development site are able to be consolidated to create sites that are larger than 1200m² in area and have a frontage of more than 23 metres.

The development should provide additional privacy to adjoining single dwelling allotment to the west to avoid future objections from residents of the proposed development to development on these sites

The setback controls of DCP 55 ensure that the separation between residential flat buildings on adjoining sites achieves the minimum separation distance requirements of the DCP and the Residential Flat Design Code. Building C has a 6 metres setback from the western boundary and operable screens designed for solar protection can also be used as privacy screening. The development complies with the planning controls which anticipate that development will occur on adjoining sites, additional privacy screening is unnecessary.

The elevated pedestrian walkway to the north-west of Block C is elevated above the ground and will affect the privacy of adjoining properties to the west of the development site

The pedestrian walkway over the basement entry ramp is elevated 1.56 metres above the existing ground level. The walkway cannot be lowered as its height is determined by the minimum vehicle clearance height requirement of 2.2m for the basement ramp. The walkway is set back from the side boundaries and overlooking will be minimised by the proposed landscaping. As both the development site and adjoining properties are zoned Residential 2(d3) it is expected that some overlooking will occur and levels of privacy associated with land use zonings that allow only single dwelling cannot be achieved.

Comprehensive 3D shadow modelling should be submitted with the application in order to assess the impact of the development on adjoining land

Submitted with the application was a solar access analysis report which includes 3D and plan view shadow modelling of the proposed development in context with existing development on adjoining land.

The solar access analysis report does not address the impact of the development on the development potential of adjoining sites due to overshadowing

The solar access analysis report shows that the proposed development will only cast a shadow over adjoining properties to the west between the hours of 9am and 10.30am on the winter solstice. From 10am to 10.30am the shadow cast by the proposed building over the backyards of 7-11 Memorial Avenue will fall within the shadow cast by a 1.8m high boundary fence. The impact of the development on solar access to the properties to the west of the site is consistent with the scale of development permitted by the planning controls. It will be the responsibility of the developer of 7-11 Memorial Avenue to demonstrate that the shadows cast by adjoining buildings have been considered in the design of the development and that it achieves sufficient solar access.

The bulk excavation for the basement ramp is located too close to Nos 11 and 15 Memorial Avenue

Excavation for the construction of basement ramps is required for the vast majority of developments which have basements. Damage to adjoining properties caused by construction work is a civil matter and conditions have been imposed requiring the preparation of dilapidation reports to assist in the resolution of any disputes regarding property damaged caused by construction work.

Pathways should be well set back from side boundaries to preserve the intent of deep soil landscaping requirements

The development complies with the deep soil landscaping requirements of the KPSO. Pathways are sufficiently set back from side boundaries where a setback is required for the establishment of screen planting and/or canopy trees.

The excavation required for the development will result in the death of the Trees 72-75

The application has been reviewed by Council's Landscape Officer who is satisfied that, subject to conditions, the development will not result in the death of Trees 72-75.

The development will adversely affect the privacy of Nos 11, 15 and 15A Memorial Avenue

The impact of the development on the privacy of Nos 11, 15 and 15A Memorial Avenue was anticipated with the zoning of the site which allows for the construction of 5 storey residential flat buildings. Standard methods of privacy protection have been incorporated into the development by way of a 6m setback from the western boundary of the aforementioned properties and

a landscape plan which incorporates screen planting. The proposal is acceptable in this regard.

The developer must engage an independently approved and certified structural engineer to conduct proper dilapidation reports and submit same to Council and all adjoining land owners for review and approval prior to the commencement of any works on site

Council has a standard condition which sets out the requirements for the preparation of dilapidation reports. The development does not present any unique circumstances which warrant the imposition of a non standard condition. A standard condition (**Condition 10**) which requires the preparation of dilapidation reports prior to the commencement of works has been recommended.

Site boundary fencing must be provided to ensure security and privacy for adjoining dwellings

Council has a standard condition of consent which outlines the requirements for the installation of construction fencing. This condition is imposed on all development consents which involve building work. The issue of permanent boundary fencing is a civil matter subject to the provisions of the Dividing Fences Act.

The current proposed buildings and urban design, articulation and façade detailing are poorly conceived and just simply “re-dress” the architectural facadism of the previous DA

The materials palette includes a mix of painted cement render, face bricks, metal cladding and sandstone. Window heads will be expressed through colour selection and multi-pane windows add visual interest to the façades. Construction joints will be expressed to break up wall planes and break down the bulk and scale of the development. The development is well grounded through the selection of a dark face brick for the base of each building with the top row of bricks arranged in a vertical fashion to provide depth to the facade. Feature elements, consisting of a vertical cladding element bordered by fin walls, have been used to unify the development through a cohesive design language. High window head heights have been used to maximise light inside the apartments. The proposal will achieve a high standard of design consistent with recent residential flat building development in the area.

The FSR, height, bulk, building envelope (especially Block C), sun access, setbacks and all others should be further qualified, scaled back drastically, reduced in bulk scale and height with a potential rebalance / remix of units to provide a more positive outcome for residential properties and owners of adjoining land including the people of the St Ives areas

The development standards for height, site coverage and landscaping are non discretionary development standards. As the application complies with these

development standards the application cannot be refused on the basis of height, site coverage or landscaping. The application documentation demonstrates that the scale of the redevelopment is consistent with residential flat development on adjoining sites.

The mix of apartment types proposed is responsive to the predicted housing needs of the area having regard to demographic trends and the current shortage of 1 bedroom apartments in the LGA.

The application documentation does not address the issues of flooding and overland flow

Concept stormwater management plans were submitted with the application. The application has been reviewed by Council's Development Engineer and has been found to be acceptable subject to conditions. The development complies with the requirements of DCP 47 – Water Management.

The proposal should be subject to a design excellence competition

In the absence of a statutory or policy requirement for a design excellence competition, it would be unreasonable for the applicant to be required to undertake this process.

The access handle of 5A Memorial Avenue is common access to 5 and 7 Memorial Avenue and cannot be one way

The access handle of 5A Memorial Avenue is part of the allotment, it is not a right of carriageway over another allotment. The title documents for 5A Memorial Avenue have been checked and neither 5 nor 7 Memorial Avenue benefit from any easements over 5A Memorial Avenue.

The developer has sought to develop the sites without regard to the controls provided under LEP194/SEPP 65/DCP55 to take as much advantage of the FSR that can be squeezed onto the subject lots

The development exhibits few departures from the requirements of the Residential Flat Design Code and DCP 55. The departures from the requirements of the Residential Flat Design Code and DCP 55 have been investigated and, in the circumstances of the case, the departures can be supported. The development complies with all the development standards stipulated by the KPSO.

The DA has excessive FSR, building bulk and height detrimental to the amenity of surrounding properties.

The development is compliant with the FSR and setbacks controls of the DCP. The building facades have been broken down into smaller portions in accordance with the requirements of DCP 55. The height of the development is fully compliant with the height controls in Part IIIA of the KPSO.

I also raise concern regarding the uses of Right of way from 5A and 13 Memorial Avenue for traffic from the subject site. Those two ROW's were provided for single lot access not for 200 cars each day. I recall a similar medium density application of 8 Fern Street Pymble which sought the use of the existing ROW and which was rejected on appeal to the Land & Environment Court due to the restriction of title of the users of the ROW. While the ROW's in this DA have been rezoned also there must be a legal recognition of the limitations of vehicular access in respect of 5A and 13 Memorial Avenue where all traffic should be diverted to the Mona Vale Road access point and plans requested to be redrawn to allow this change

The access handles of 5A & 13 Memorial Avenue form part of the allotments known as Lot 4 DP 29167 and Lot 1 DP 512730. The access handles are not rights of carriageway over adjoining allotments, they are part of the development site and are owned by the developer. The suitability of the access handles for use as ingress/egress driveways has been assessed by Council's Development Engineer and has been found to be acceptable. The provision of access from both Mona Vale Road and Memorial Avenue is consistent with the public interest as Mona Vale Road is a major arterial road and avoiding direct access to classified road is consistent with the requirements of clause 101 of SEPP (Infrastructure) 2007.

The JRPP should inspect the site before making any decision and invite the objectors to the site meeting to meet procedural fairness

The procedures manual for the JRPP does not permit the attendance of applicants and objectors at site inspections/meetings. All objectors are advised of the date and time of the JRPP meeting and have the opportunity to address the JRPP at the meeting.

AMENDED PLANS

The amended plans submitted on 8 March 2012 and 11 April 2012 were not notified as they did not increase the environmental impact of the development.

INTERNAL REFERRALS

Urban design

Council's Urban Design Consultant commented on the proposal as follows:

Conclusion

The proposed development for Village Building Company is for three residential flat buildings containing 124 apartments to be located at 5A-13 Memorial Avenue and 212-216 Mona Vale Rd, St Ives. The density is appropriate for the location and reflects the aspirations of the zoning and DCP. Designed by DEM architects, the development is the result of a simplistic response to the controls rather than an understanding of the context.

The site is inappropriate for the residential flat typology because of the lack of street frontage and irregular shape combined with setbacks. The street and block pattern is too large for an apartment typology without the introduction of a finer grain street pattern. The floor space is organised into three buildings that are located one behind the other. The building form and organisation of the buildings on the site is unsatisfactory. This is the result of convoluted floor plans; poor site circulation and a failure to set up a positive spatial system between the buildings on the site and with those around the site.

The height is appropriate and relates to the apartment blocks in the area and the other controls of density, set-backs and site coverage. The height does not have any adverse impacts on other development within or around the site. Circulation is poor within the buildings and within many apartments. The proposal lacks a strong idea about space and the organisation of the buildings on the ground. The site requires a comprehensive master-plan which deals with the street and block pattern and the organisation of buildings. Ideally in urban design terms the project should be redesigned to address:

- *the absence of street frontage to Blocks B and C*
- *the size and shape of the street block*
- *the design of the buildings as separate object buildings and not as a coherent whole with a positive spatial system within the site and with the potential to create a positive spatial system with the neighbouring buildings*
- *the convoluted form of the buildings in plan and section*
- *the external circulation*
- *the poor internal planning of some units*
- *the use of the landscaping as a structural element not just as an ornamental element*
- *the integration of the courtyards / balconies at ground level where possible to create a variety of external conditions and not just a variety of internal conditions and to create a better relationship between the ground plane and the ground level*

Recommendations

The DA submission has been through a long process and most of the sites in the block have been developed. To improve the current proposal I recommend the following:

1) External circulation

Rationalise the external circulation by creating a direct pathway system to access the buildings

- *create a wide and direct path into Block A from the street*
- *create wide and direct paths from the street along the southern and northern boundaries of the site*
- *provide direct routes off the northern and southern pathways to connect with Blocks A, B and C. On the southern pathway this will require the reconfiguration to the end of Block B.*
- *reconfigure the design at the intersection of the garage exit and the pedestrian pathway. Consider using a share-way for the exit or paths on either side.*

- *use an access from the northern pathway as the main pedestrian entrance to the Block C.*

2) Built form

Plan

rationalise the plans into more regular plan form at ground.

- *Block A eastern façade – remove stepping in G-05 and relate to G-06 or similar if there is an alternative workable solution*
- *Block B southern façade – remove G-08 to provide a clear edge aligning with Block A*
- *Block C northern façade – redesign G-01 to align with building on adjacent site and Block B or similar if there is an alternative workable solution*

During this process where possible rationalise the internal planning to be clear and direct both of the units or the internal circulation.

Level five fenestration

remove the “hole in the wall” fenestration and organise the fenestration in glazing and panels to extend to the underside of the roof line on the upper levels of all buildings so that the tops of the buildings read as contiguous horizontal elements

3) Landscape

rationalise the planting to relate the above reconfigured pathways and built form so that the spaces are well defined and the pathways are clear and direct

4) Boundary fencing

Design all boundary fencing as courtyard walling and not as a timber paling and / or colour-bond fence

The full comments of Council's Urban Design Consultant are enclosed as **Attachment 9.**

Assessing Officer's Comments

The concerns raised by the Urban Design Consultant fall into two categories:

- concerns regarding the strategic planning and vision for the area
- concerns arising out of conflicts between the planning controls and the Urban Designer's opinion on what is the best outcome for the site

The assessment of a development application is not an opportunity to revisit the strategic planning for the precinct. DCP 55 does, in fact, contain a master plan for the precinct which includes the establishment of a new road between Stuart Place and Memorial Avenue which would have provided a street address for buildings located at the centre of the street block. It is

unnecessary to examine why the master plan was not implemented, and sufficient to state that the master plan vision cannot be achieved given that the development of the precinct is nearing completion.

Many of the concerns raised are in relation building form and pedestrian circulation within the site. The Urban Designer suggests that the buildings should be simplified in plan and section, however, the detailing of the façade is a direct response to the building plane requirements of the DCP. The requirements of the DCP must prevail over the opinion of the Urban Designer. With respect to internal circulation, the developer has limited scope to increase the width of footpaths because footpaths that are greater than 1m wide are not permitted in areas used for deep soil landscaping.

The Urban Designer has recommended that the stepping of Apartment AG-05 be removed and redesigned to reflect Apartment AG-06. This option was investigated by the Assessing Officer but considered impractical, as the stepping in apartments AG-05 is specifically designed to facilitate the protection and retention of Tree 29.

The Urban Designer has recommended the deletion of Apartment BG-08 to bring the building into alignment with Block A. Apartment BG-08 cannot be deleted without Apartments B1/2/3-08 and the kitchen and bathroom of Apartment B4-04 also being deleted. These apartments have an outlook towards Council's car park at 208-210 Mona Vale Road, and have a setback of 53 metres from the street boundary. The assessing officer does not share the Urban Designer's concerns regarding the design of Block B and considers that the apartments on the southern end of the building provide beneficial surveillance both within the development site and towards the Council car park. If the development did not comply with the floor space ratio control or the apartments intruded into setbacks zones, the argument for deletion would be much stronger.

The Urban Designer has recommended that Apartment CG-01 be redesigned to align with the building on the adjacent site and Block B. The deletion of Apartment CG-01 would necessitate the deletion of the four apartments located above this apartment. The deletion of five apartments would open up the views from the apartments on northern side of Block B, improve the amenity of the communal open space between Blocks B & C, enhance the feeling of space within the development and improve solar access to Block B. However, in light of the fact that the development is compliant with separation distance, floor space ratio and solar access controls, there is insufficient planning justification for the deletion of the five apartments.

The Urban Designer has recommended that the hole in the wall fenestration at the upper level be changed to glazing which extends to the underside of the roof line so that the tops of the buildings read as contiguous horizontal elements. In the Assessing Officer's opinion such a redesign is unnecessary because the overhang of the skillion roof on the fourth floor level of each building is a strong horizontal element which successfully terminates the view lines at the upper levels of the buildings. The addition of glazing that sits

directly under the eaves has the potential to significantly compromise the energy efficiency of the apartments on the fourth floor level and therefore is not recommended.

The Urban Designer is of the opinion that the planting should be amended so that it relates to the reconfigured pathways and built form so that the spaces are well defined and the pathways are clear and direct. Council's Landscape Officer has assessed the application and is of the opinion that the landscape scheme for the site is well designed and compliant with the planning controls. The network of pathways within the sites takes into consideration the location of desirable entry and exit points, is logical and easy to navigate.

The Urban Designer is of the opinion that boundary fencing should be designed as courtyard walling and not as a timber paling and / or colour-bond fencing. None of the side boundaries to the site will act as the walls to private courtyards. For residential flat building development Council places much emphasis on the protection and enhancement of the tree canopy for which Ku-ring-gai is known. The privatisation of side setback areas by their inclusion in private courtyard is contrary to this objective as private courtyards are unlikely to contain canopy trees. Private courtyards are more likely to contain paving, shrubs and lawn which will not provide the scale of landscaping required to soften the built form of five storey residential flat buildings.

The concerns raised by the Urban Design Consultant in relation to apartment planning and the lack of unity in the design language were forwarded to the applicant with an invitation to submit additional information and/or amended plans in response. The applicant provided furniture layouts for selected apartments and amended the design of the eastern elevation to Block A. The furniture layouts demonstrate that the apartments will be easy to furnish. The amended design of the eastern elevation to Block A has been successful in unifying the design language and reducing the bulkiness of this elevation.

Landscaping

Council's Landscape Assessment Officer commented on the amended proposal as follows:

Recommendations

The proposal is considered acceptable, subject to conditions.

Site characteristics

The site (7462m²) fronts onto Mona Vale Road and includes two access handles to Memorial Avenue. Existing mature exotic trees provide landscape amenity to Mona Vale Road and neighbouring properties. The site adjoins a Council carpark to the south.

Deep soil

The proposal provides 50.1% (3543.3m²) of the site area as deep soil landscape area. The proposal complies with the development standard for deep soil landscape area.

Tree removal and impact assessment

An Arboricultural Assessment, prepared by Earthscape Horticultural Services and dated November 2011, has been submitted with the application. Tree numbers refer to this report. The following abbreviations have been used to describe the size of existing trees in metres: height (H), canopy spread(S), diameter at breast height (DBH), diameter immediately above root buttress (D), tree protection zone (TPZ) and structural root zone (SRZ).

Trees to be retained

Tree 7/Pinus patula (Mexican Pine) TPZ 6.2m. The tree is located within the front setback on the south western boundary. The proposed demolition of the existing masonry walls and driveway is within the structural root zone of the tree.

Tree 8/Melaleuca quinquenervia (Broad Leaved Paperbark) TPZ 4.3m. The tree is located within the front setback on the south western boundary. The proposed excavation for the pedestrian path and stormwater line is within the tree protection zone. The incursion is less than 10% of tree protection zone and will have no adverse impacts.

Tree 12/Araucaria columnaris (Cook's Pine) TPZ 5.3m. The tree is located within the front setback on the south western boundary. The proposed pedestrian path and stormwater line is within the tree protection zone. The incursion (15%) is greater than 10% of the tree protection zone, however this species should tolerate the impact if the path and stormwater line are installed in accordance with the arborist recommendations.

Tree 25/Pinus patula (Mexican Pine) TPZ 6.6m. The tree is located within the front setback. The proposed basement is offset 8.2m from the tree and the building is offset 8.2m from the tree. The incursion is less than 10% of the tree protection zone and will have no adverse impacts. Some canopy pruning is required for building and scaffolding clearance and for construction access, on north-west and south-east side of tree. The proposed construction stage haulage road is located 3.8m east of the tree. Ground protection measures are to be conditioned in accordance with Clause 4.5.3, AS4970-2009.

Tree 28/Cedrus deodara (Himalayan Cedar) TPZ 7.8m. The tree is located within the front setback. The tree is in good condition and is visually prominent on Mona Vale Road. The tree has been crown-lifted to 3m. The tree is 6.8m north and 7.2 m north-east of the proposed building and basement. The tree is 6.7m west of the excavations for the driveway ramp. The incursion is less than 10% of the tree protection zone and will have no adverse impacts. Minor canopy reduction on the north-west side of the tree for building clearance, is considered acceptable.

Tree 29/Cedrus deodara (Himalayan Cedar) TPZ 8.3m. The tree is located within the front setback. The tree is in good condition and is visually prominent on Mona Vale Road. The tree has been crown-lifted to 3m. The tree is 6.5m north-west and 9.7 m south-west of the proposed basement and building.

Pedestrian access to front of building is of suspended construction. The incursion is less than 10% of the tree protection zone and will have no adverse impacts. Minor canopy reduction on the north-west side of the tree for building clearance, is considered acceptable. The proposed construction stage haulage road is located 3.4m east of the tree. Ground protection measures are to be conditioned in accordance with Clause 4.5.3, AS4970-2009.

Tree 33b/Liquidambar styraciflua (Liquidambar) TPZ 7.8m. The tree is located on the adjoining property adjacent to the front setback. The tree is in good condition and is visually prominent. The tree is 6.2m north of the excavations for the driveway ramp. The proposed excavation for the pedestrian path and stormwater line is within the tree protection zone. The incursion is less than 10% of the tree protection zone.

Tree 35/Lophostemon confertus (Brushbox) TPZ 7.8m. The tree is located 6.4 m from the basement to the north-west, 6.1m from basement to the south-east. The arborist calculates basement encroachment to 7% of the tree protection zone. Minor pruning of tree required for building clearance and scaffolding. The proposed excavation for the pedestrian path and stormwater line is 4.1m from tree and within the tree protection zone. To preserve the health of the tree, the pipe is to be thrust-bored within the TPZ.

Tree 36/Lophostemon confertus (Brushbox) TPZ 9.0m. The tree is located 6.6m from the basement to the north-west, 5.8m from basement to the south-east and 4.9m to south-west. Total encroachment within the tree protection zone is 20%. This level of incursion is acceptable considering the tree species and their tolerance to root disturbance. Minor pruning required for scaffolding.

Tree 64/Archontophoenix cunninghamiana (Bangalow Palm) TPZ 2.0m – The proposed excavation for the stormwater line is 0.25m from the tree and within the tree protection zone. To preserve the health of the tree, the pipe is to be thrust-bored within the TPZ.

Tree 66a/Franklinia axillaris (Gordonia) TPZ 4.5m. There are minor works proposed within the tree protection zone. Tree protection conditions are recommended.

Tree 72/Jacaranda mimosifolia (Jacaranda) TPZ 8.4m. The tree is located on the adjoining property adjacent to the northern entry access road. Pedestrian access within tree protection zone to the communal open space is to be of suspended construction. The proposed construction stage haulage road is located 2.9m from the tree. Ground protection measures are to be conditioned in accordance with arborist recommendations.

North western access handle – entry from Memorial Avenue

Tree 73/Celtis occidentalis (Hackberry) TPZ 4.2m. The tree is located within the adjoining property on the north side of the access handle (entry from Memorial Avenue). The proposed excavation for the driveway ramp is approximately 4.3m from the tree. The proposed driveway is offset 1.2m from the tree. To preserve the health and condition of the tree, the proposed depth of driveway is to be constructed at grade. To preserve the health of the tree, the pipe is recommended by the arborist to be thrust-bored within the TPZ.

Tree 74/Celtis occidentalis (Hackberry) TPZ 4.5m. The tree is located within the adjoining property on the north side of the proposed driveway (entry from Memorial Avenue) The proposed driveway is offset 1.8m from the tree. To preserve the health and condition of the tree, the proposed depth of driveway is to be constructed at grade. To preserve the health of the tree, the pipe is recommended by the arborist to be thrust-bored within the TPZ.

Tree 75/Schinus areira (Peppercorn Tree) TPZ 4.2m. The tree is located on the adjoining property, 3.0m south of the proposed driveway (entry from Memorial Avenue) The proposed excavation for the driveway ramp is approximately 3.3m from the tree. The incursion is less than 10% of the tree protection zone and will have no adverse impacts. The proposed Stage 2 and 3 temporary construction haulage road is located 2.9m east of the tree. Ground protection measures are to be conditioned in accordance with arborist recommendations.

Tree 76/Stenocarpus sinuatus (Firewheel Tree) TPZ 7.2m. The tree is located within the adjoining property on the western boundary. The proposed basement is offset 6.7m east of the tree. The proposed excavation for the pedestrian path and stormwater line is within the tree protection zone. To preserve the health of the tree, the pipe is recommended by the arborist to be thrust-bored within the TPZ. The proposed construction stage haulage road is located 1.9m east of the tree. Ground protection measures are to be conditioned in accordance with Clause 4.5.3, AS4970-2009.

Western access handle – exit to Memorial Avenue

Tree 87/Liquidambar styraciflua (Liquidambar) TPZ 8.4m. The tree is located on the adjoining property, south of the proposed driveway (exit to Memorial Avenue). The proposed excavation for the driveway ramp is approximately 3.5m from the tree. The proposed driveway is offset 3.2m and associated footpath is offset 2m north of the tree.

Tree 87a/Agonis flexuosa (Willow Myrtle) TPZ 4.2m. The tree is located on the adjoining property, south of the proposed driveway (exit to Memorial Avenue). The proposed excavation for the driveway ramp is approximately 3.2m from the tree. The proposed driveway is offset 1.2m and associated footpath is offset 0.4m north of the tree. To preserve the health and condition of the tree, the proposed depth of driveway is to be constructed at grade. The proposed excavation for the stormwater line is 0.4m from the tree. To preserve the tree, the pipe connecting to Pit 18 should be located minimum 1000mm from the site boundary, by way of condition. The proposed Stage 1 construction haulage road is located 1.4m east of the tree. Ground protection measures are conditioned in accordance with Clause 4.5.3, AS4970-2009.

Tree 87b/Lagerstroemia indica (Crepe Myrtle) TPZ 4.5m. The tree is located on the adjoining property, south of the proposed driveway (exit to Memorial Avenue). The proposed excavation for the pedestrian path is 2.6m from the tree and for the stormwater line is 2.7m from the tree. The incursion is less than 10% of the tree protection zone and will have no adverse impacts.

Street trees to be retained – Mona Vale Road

Tree 1/ Ginkgo biloba (Maiden-hair Tree) TPZ 5.2m. The tree is located on the Mona Vale Road nature strip and is in good condition. The tree is to be retained for streetscape amenity. Excavation for front fence within tree protection zone

of tree is to be hand dug. The proposed Stage 1 construction haulage road is located 3.8m west of the tree. Ground protection measures are conditioned in accordance with Clause 4.5.3, AS4970-2009.

Tree 3/ *Eucalyptus microcorys* (Tallowood) TPZ 8.4m. The tree is located on the nature strip and is in good condition and provides effective streetscape amenity. The proposed driveway excavation is approximately 3.7m to south to driveway entry and 6.2m to north of the tree. The proposed excavation for the stormwater line is 3.7m from the tree. The proposed development will encroach within 26% of the TPZ. The proposed construction stage haulage road is located 3.0m west of the tree. Ground protection measures are conditioned in accordance with Clause 4.5.3, AS4970-2009.

Tree removal

The proposed development requires the removal of 77 existing trees. The trees are considered to be in poor condition, of low landscape significance or exempt under Council's Tree Preservation Order. A mature *Magnolia x soulangiana* (*Magnolia*) of 9 metres height is proposed to be removed for the site sheds while providing a useable open grass area for communal open space. The trees that are proposed to be removed can be summarised as follows,

- Trees exempt from Council's Tree Preservation Order - T18, T22, T33, T39, T53a, T56, T59, T61, T90
- Trees that are in poor condition - T23, T35a, T37, T38, T47, T70, T81.
- Trees that are in healthy condition that are not visually prominent T9, T10:*Jacaranda mimosifolia* (*Jacaranda*) of 9 metres height, T11:*Cupressus macrocarpa* 'Brunniana' (Golden Cypress) of 12 metres height, T16, T17, T19, T20, T21, T24, T26, T27, T30:*Thuja* sp. (*Arborvitae*) of 11 metres height, T31:*Cupressus sempervirens* 'Stricta' (*Slender Italian Cypress*) of 14 metres height, T32:*Jacaranda mimosifolia* (*Jacaranda*) of 12 metres height, T33, T34, T40-6 *Cupressus torulosa* (*Bhutan Cypress*), T41, T42-10 *Cupressus torulosa* (*Bhutan Cypress*), T44, T45, T46, T53, T57, T58, T60, T62, T71:*Magnolia x soulangiana* (*Magnolia*) of 9 metres height, T78:*Cupressus torulosa* (*Bhutan Cypress*) of 11 metres height, T79, T80, T82, T83, T84 (Row of 7), T85, T86, T88, T89, T89a, T90a, T91.

Street trees to be removed – Mona Vale Road
Ginkgo biloba (*Maiden-hair Tree*) Tree 2/7H. This tree is to be removed for the proposed driveway. Removal is supported.

Eucalyptus microcorys (Tallowood) Tree 4/18H. This tree is to be removed for the proposed driveway. Removal is supported.

Landscape plan Communal open space

Three areas of communal open space have been identified on the Landscape Plan.

A level lawn area (173m²) with seating has been provided to the south-west of Block B. The area is subject to casual surveillance opportunities from at least two apartments.

A level paved area (202m²) with a water feature and seating has been provided between Block B and C. This area is accessible from the central path linking Block B and C and linking to the southern access driveway to Memorial Avenue.

A level area of lawn and existing trees (574m²) with proposed BBQ and seating areas has been provided to the north of Block C. Disabled access within this area has been provided. This area provides an opportunity for consolidated deep soil zone for the provision of landscape treatment that provides habitat for locally occurring plants and animals. This area receives adequate solar access.

In addition, there is an area of communal open space located between Blocks A and B with a water feature, lawn and seating. The communal open space provision on the site is considered satisfactory.

Screen planting

Northeast boundary – Photinia glabra ‘Rubens’ 3m. Pittosporum revolutum 3m, Breynia oblonga 2m, Kunzea ambigua 2m

Western boundary – Melaleuca armillaris 2.5m. Camellia japonica 3m. Layered screen planting to communal open space to south of Block B to be provided. This can be conditioned.

*Southwest boundary - Camellia japonica 3m.
The screen planting proposed provides effective landscaping within the side and rear setbacks of the development.*

Tree replenishment

A minimum of 25 trees are required for the site. Planting in excess of this number has been provided. 50% of tree species planted are to be locally occurring native species representative of Sydney Turpentine Ironbark Forest. Eucalyptus punctata (Grey Gum) should be substituted with canopy tree species representative of Sydney Turpentine Ironbark Forest community such as Eucalyptus resinifera (Red Mahogany) or Angophora costata (Sydney Red Gum). This can be conditioned.

Basix

Three Basix certificates have been lodged with the application, one for each building.

The Landscape Plan- areas of common area lawn and garden and indigenous low water use, dwg la-0505 rev A02 and Landscape Planting Plan Level 4, dwg la-0504, prepared by DEM and dated 6/03/12 rev A05, reflect the areas specified for common areas and individual areas nominated in the Basix certificates for Blocks A, B and C.

Stormwater plan

The stormwater plan is considered acceptable.

Environmental site management plan

The environmental site management plans are considered acceptable, subject to conditions.

Front fence

The existing 600mm high stone front fence is to be rebuilt in part to match the existing along Mona Vale Road frontage.

Conclusion

The proposal is considered acceptable, subject to conditions.

The conditions recommended by Council's Landscape and Tree Assessment Officer are included in the recommendation.

Engineering

Council's Team Leader Engineering Assessment commented on the amended proposal as follows:

Water management

The stormwater management plans show three combined on site detention/retention tanks adjacent to the entry driveway, linked by a 300mm diameter balance pipe. Discharge is to the underground pipe in Mona Vale Road. The full on site detention volume as required under DCP 47 has been provided. This system is satisfactory. It will be constructed as part of the Stage 1 works, so the positive covenant requiring the property owner(s) to maintain the system should be created prior to the issue of the Occupation Certificate for Stage 1. This is included in the recommended engineering conditions.

The BASIX commitments include 60 cubic metres of rainwater retention, with re-use for irrigation and car washing. The correct volume of rainwater storage is shown on the stormwater management plans.

Connection to the street drainage system will be by means of a new kerb inlet pit over the street drainage pipe. This work will also have to be completed prior to the issue of the Occupation Certificate for Stage 1.

Each of the two access handles from Memorial Avenue is provided with a grated pit at the eastern end. Design details are not provided for these driveways, however it is expected that a one way crossfall would be adopted, with a kerb and gutter along the low side to convey runoff into the grated pits. The recommended engineering conditions require this information to be demonstrated on the Construction Certificate plans.

Traffic and parking

The site is further than 400 metres from a railway station, so under Clause 25J of the KPSO 124 resident and 31 visitor parking spaces are required. The

correct number of spaces is shown (some surplus tandem spaces may be allocated to 2 bedroom units), with the distribution proportional between the stages of the development.

Disabled parking has been provided, with shared zones in accordance with AS2890.6:2009.

Access to the site will be via a new vehicular crossing from Mona Vale Road, with separated entry and exit, as well as a one way entry driveway via the handle of 13 Memorial Avenue and one way exit via the handle of 5a Memorial Avenue. These handles are each 4.57 metres wide and, since one way traffic is proposed, are of adequate width under AS2890.1:2004 Off street car parking.

The access driveways from Memorial Avenue are shown on the landscape plans and will have 3 metres wide pavements. The exit will also have a 1 metre wide pathway beside it.

Waste management

The development requires a total of 124 x 240 litres containers (62 for garbage and 31 each for paper and mixed recycling). It is proposed to provide 660 litres containers for garbage and 240 litres containers for mixed and paper recycling. These will be stored in Bin Rooms 01, 02 and 03, as shown on the basement plan, and the caretaker will move the containers from Bin Rooms 02 and 03 to the Transit Room on collection days.

This arrangement has been reviewed by Council's Manager Waste Drainage and Cleansing and is satisfactory. An easement for waste collection will be required prior to occupation of the development.

Section 01 on Drawing AR-2301/A02 demonstrates that the required headroom of 2.6 metres and maximum gradient of 20% will be provided for access by the small waste collection vehicle from Mona Vale Road.

Construction traffic management

It is proposed to construct the development in three stages, commencing with Block A at the Mona Vale Road frontage. Conventional equipment may be used for the Stage 1 works, however it is proposed that construction for Stages 2 and 3 be accessed via Memorial Avenue which will limit the size of vehicles which can be used. This is demonstrated on the ACOR Appleyard drawings, and the restricted size of construction vehicles will be conditioned as well.

Geotechnical investigation

The site is underlain by shale and sandstone of the Mittagong Formation. The report recommends vibration monitoring and dilapidation survey of surrounding buildings. This would be conditioned. The excavation will be supported by temporary shoring.

The geotechnical report identifies groundwater inflow at about 4.7 metres depth and states "It is suggested that monitoring of flow during the early phases of excavation below the groundwater table be undertaken to assess long term pumping requirements".

The supplementary letter states that the geotechnical engineer does not consider a temporary dewatering licence under Part V of the Water Act 1912 would be applicable. NSW Office of Water has advised that, once the Aquifer Interference Policy has been released, licensing will be under the Water Management Act 2000. This could happen at short notice. Conditions are recommended which allow for the licensing to be addressed prior to the issue of the Construction Certificate.

STATUTORY PROVISIONS

State Environmental Planning Policy No. 55 - Remediation of Land

The provisions of SEPP 55 require consideration of the potential for a site to be contaminated. A Waste Classification Report prepared by Douglas Partners was submitted with the application. The Report includes the results from the testing of fill samples that were taken from the site. The subject site has a history of residential use and, as such, it is unlikely to contain any contamination. The results of the testing confirm that the site is not contaminated and that further investigation is not required.

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

Amended BASIX certificates were submitted with the amended plans. The application documentation is consistent with the commitments identified in the BASIX certificates.

State Environmental Planning Policy (Infrastructure) 2007

Pursuant to clause 101 of the SEPP, a consent authority is required to consider the impact of development on traffic flows along classified roads. This clause is relevant to the proposal because Mona Vale Road is a classified road.

The application was referred to Roads and Maritime Services (previously RTA) for review and comment. The RMS advised, via letter dated 22 December 2011, that they have no objection to the proposal, subject to the imposition of conditions. The requirements of RMS have been incorporated into the conditions of consent. On the basis of there being no objection to the development from RMS it is considered that the development will have an acceptable impact on traffic flows along Mona Vale Road.

Clause 101 also states that a consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that where practicable, vehicular access to the land is provided by a road other than the classified road. The development has vehicular access to Memorial Avenue and Mona Vale Road. The provision of vehicle access to Memorial Avenue is consistent with the requirements of clause 101 as it will reduce usage of the Mona Vale Road access point and the potential for the development to obstruct the passage of traffic along this classified road.

An acoustic report and an air quality report have been submitted. These reports address the requirements of clause 101(2)(c) of the SEPP.

State Environmental Planning Policy No. 65 - Design quality of residential flat development

In accordance with Clause 50 of the *Environmental Planning and Assessment Regulation 2000*, a design verification statement was submitted with the application. The statement was prepared by Rudi Valla (Registered Architect No. 6583).

The primary objective of SEPP 65 is to improve the design quality of residential flat development in NSW. In determining a development application for consent to carry out residential flat development, a consent authority must take into consideration the design quality of the residential flat development when evaluated in accordance with the design quality principles. A consent authority must also consider provisions of the Residential Flat Design Code. The proposal has been comprehensively assessed in this regard by Council's Urban Design Consultant and has been found to be unsatisfactory in part. The proposal does exhibit some non compliances with the rules of thumb stipulated in the Residential Flat Design Code. Where a non compliance with a rule of thumb exists there is strong planning justification to support the variation. In the Assessing Officer's opinion, the design quality of the development is consistent with the ten design quality principles of SEPP 65.

1. Context

The site is located in close proximity to St Ives shopping centre and associated services and public transport. Surrounding sites are zoned Residential 2(d3) and many contain five storey residential flat buildings. The site is located to the south-east of the St Ives Village Green. To the immediate north-east, is a recently completed five storey residential flat building. To the south-west, is a car park. Detached dwellings are located fronting Memorial Avenue on site which are zoned Residential 2(d3) and are likely to be developed in the future. The proposed development is compatible with the likely future character of the area.

2. Scale

Land around the subject site is zoned Residential 2(d3) with many sites already developed. The planning controls allow for development with a maximum height of five storeys. The scale of the proposal complies with the planning controls and is appropriate for the local area.

3. Built form

Block A addresses Mona Vale Road and is articulated to reduce its perceived bulk and scale. The modelling of the built form has largely resulted from the aim to capture sunlight into the living spaces of the proposed apartments.

Block B fronts internal semi-private and private spaces between Blocks A and B. The landscape plan shows how the delineation of semi-private and private spaces will be achieved through the use of fencing and plantings. The landscape scheme has been designed to encourage the use of semi-private space for passive recreational activities.

Block C has a north-west/south-east orientation which maximises solar access to the apartments inside the building and minimises overshadowing and overlooking of Block B. The substantial setback from the rear (northern) boundary allows for the establishment of a large communal open space area at the rear of the site.

4. Density

The planning controls provide for a maximum floor space ratio of 1.3:1. The development has a floor space ratio of 1.295:1. The density of the development is also controlled by the boundary setback requirements. The development is wholly compliant with the setback controls and Block A has a street setback which is greater than the minimum required which allows for the retention of existing canopy trees. The density of the development is appropriate for the site.

5. Resource, energy and water efficiency

Valid BASIX certificates were submitted with the application. Stormwater retention tanks have been provided for toilet flushing and landscape irrigation. The upper level basement has both natural and mechanical ventilation. More than the 70% of the apartments in the development will receive at least 3 hours solar access on the winter solstice.

6. Landscape

More than 50% of the site area will be deep soil landscaping. The planting of 38 trees which will achieve a minimum height of 13 metres is proposed. The landscape scheme will allow for a significant tree canopy to be established in the site. The tree canopy will enhance the character of the neighbourhood, minimise the visual impact of the buildings and provide habitat for local fauna.

7. Amenity

The size of the apartments complies with the minimum standards stipulated by the Residential Flat Design Code. Dimensions of bedrooms, living rooms and balconies are compliant with the minimum standards set by DCP 55. All apartments have floor layouts that are easy for furnish. To address the issue of traffic noise, apartments on levels 1-3 of Block A, which have frontage to Mona Vale Road, have enclosed balconies which will allow for the enjoyment of the outdoors whilst maintaining a suitable level of acoustic amenity. More than 60% of the apartments in the development can be naturally cross ventilated.

8. Safety and security

A CPTED assessment and lighting plan were submitted with the development application. The site is located in an area with low incidences of crime. Casual surveillance of communal open space areas will be provided from the balconies of the apartments inside the site and on adjoining allotments.

9. Social dimensions

The mix of 1 and 2 bedroom apartments responds to the existing shortage of 1 bedroom apartments in the LGA and the predicted demand for smaller apartments due to declining household sizes and a greater proportion of lone person and couple with no children households. The proposed apartments mix is consistent with the demographic forecasts contained in the Ku-ring-gai Development & Demographic Forecasts report which was prepared by SGS Economics on behalf of Ku-ring-gai Council.

No less than 10% of the apartments in the development are adaptable dwellings that have been designed in accordance with the requirements of Australian Standard 4299. All apartments in the development have an accessible entrance and 70% of apartments have an accessible bathroom.

10. Aesthetics

The selected materials complement the existing context and landscape setting. Materials and colours selected are durable, appropriate to the building types and use, and in keeping with residential flat building located on adjoining sites. Each building has been broken down into a defined base, middle and top in order to reduce the appearance of bulk. The aesthetics of the development are of a high standard and are consistent with the desired future character of the area.

Residential Flat Design Code Compliance Table

Pursuant to Clause 30(2) of SEPP 65 in determining a development application for a residential flat building, the consent authority is to take into consideration the Residential Flat Design Code (RFDC). The following table is an assessment of the proposal against the guidelines provided in the RFDC.

	<i>Guideline</i>	<i>Consistency with Guideline</i>
PART 02 SITE DESIGN		
Site Configuration		
<i>Deep Soil Zones</i>	A minimum of 25 percent of the open space area of a site should be a deep soil zone; more is desirable. Exceptions may be made in urban	YES

	areas where sites are built out and there is no capacity for water infiltration. In these instances, stormwater treatment measures must be integrated with the design of the residential flat building.	
<i>Fences + walls</i>	Define the edges between public and private land to provide privacy and security and contribute positively to the public domain.	YES
<i>Open Space</i>	The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger sites and brown field sites may have potential for more than 30 percent.	YES
	The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as on a podium or car park, is 25m ² .	YES
<i>Orientation</i>	Optimise solar access, contribute positively to desired streetscape character, support landscape design with consolidated open space areas, protect amenity of existing development and improve thermal efficiency.	YES
<i>Planting on Structures</i>	<p>In terms of soil provision there is no minimum standard that can be applied to all situations as the requirements vary with the size of plants and trees at maturity. The following are recommended as minimum standards for a range of plant sizes:</p> <p>Medium trees (8 metres canopy diameter at maturity)</p> <ul style="list-style-type: none"> - minimum soil volume 35 cubic metres - minimum soil depth 1 metre - approximate soil area 6 metres x 6 metres or equivalent 	N/A

<i>Stormwater management</i>	Minimise impact on the health and amenity of natural waterways, preserve existing topographic and natural features and minimise the discharge of sediment and other pollutants to the stormwater drainage system.	YES
<i>Safety</i>	Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings.	YES
	Ensure Residential flat developments are safe and secure for residents and visitors.	YES
<i>Visual Privacy</i>	Refer to Building Separation minimum standards up to four storeys/12 metres - 12 metres between habitable rooms/balconies - 9 metres between habitable/balconies and non-habitable rooms - 6 metres between non-habitable rooms five to eight storeys/up to 25 metres - 18 metres between habitable rooms/balconies - 13 metres between habitable rooms/balconies and non-habitable rooms - 9 metres between non-habitable rooms	NO
<i>Building Entry</i>	Create entrances which provide a desirable residential identity, provide clear orientation for visitors and contribute positively to the streetscape and building façade design.	YES
<i>Parking</i>	Provide adequate parking for occupants, visitors and disabled.	YES
<i>Pedestrian Access</i>	Identify the access requirements from the street or car parking area to the apartment entrance.	YES

	<p>Follow the accessibility standard set out in Australian Standard AS 1428 (parts 1 and 2), as a minimum.</p> <p>Provide barrier free access to at least 20 percent of dwellings in the development.</p>	YES
PART 03 BUILDING DESIGN		
Building Configuration		
<i>Apartment layout</i>	Single-aspect apartments should be limited in depth to 8 metres from a window.	NO – 37 apartments do not comply
	The back of a kitchen should be no more than 8 metres from a window.	NO – 31 apartments do not comply
	The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts.	<p>N/A</p> <p>No cross-over or cross-through apartments are proposed.</p>
	<p>If Council chooses to standardise apartment sizes, a range of sizes that do not exclude affordable housing should be used. As a guide, the Affordable Housing Service suggest the following minimum apartment sizes, which can contribute to housing affordability: (apartment size is only one factor influencing affordability)</p> <ul style="list-style-type: none"> - 1 bedroom apartment 50m² - 2 bedroom apartment 70m² - 3 bedroom apartment 95m² 	YES
<i>Apartment Mix</i>	Include a mixture of unit types for increased housing choice.	YES
<i>Balconies</i>	Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context-	YES

	noise, wind – can be satisfactorily mitigated with design solutions.	
<i>Ceiling Heights</i>	<p>The following recommended minimum dimensions are measured from finished floor level (FFL) to finished ceiling level (FCL).</p> <ul style="list-style-type: none"> - in residential flat buildings or other residential floors in mixed use buildings: - in general, 2.7 metres minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non-habitable rooms, however 2.25m is permitted. 	YES
<i>Ground Floor Apartments</i>	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.	YES
	Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	YES
<i>Internal Circulation</i>	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.	NO – Blocks A & B have a maximum of 10 apartments per single core/corridor
<i>Storage</i>	<p>In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates:</p> <ul style="list-style-type: none"> - studio apartments 6m³ - one-bedroom apartments 6m³ - two-bedroom apartments 8m³ - three plus bedroom apartments 10m³ 	YES
Building Amenity		
<i>Acoustic</i>	Ensure a high level of amenity by	YES

<i>Privacy</i>	protecting the privacy of residents within apartments and private open space	
<i>Daylight Access</i>	Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter.	YES
	Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10% of the total units proposed.	NO – 16% of total units proposed are single-aspect with a southerly aspect
<i>Natural Ventilation</i>	Building depths, which support natural ventilation typically, range from 10 to 18 metres.	NO
	Sixty percent (60%) of residential units should be naturally cross ventilated.	YES
	Twenty five percent (25%) of kitchens within a development should have access to natural ventilation.	YES
Building Performance		
<i>Waste Management</i>	Supply waste management plans as part of the development application submission as per the NSW Waste Board.	YES
<i>Water Conservation</i>	Rainwater is not to be collected from roofs coated with lead- or bitumen-based paints, or from asbestos- cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.	YES

Visual privacy

The separation distance of 16.4 metres between the balcony of B4-03 and A4-05/A4-06 is less than the requirement of 18 metres. To address this issue the balcony of Apartment B4-03 is surrounded by a planter bed in which the planting of 700mm high shrubs is proposed. The proposed shrubs will form a privacy screen with a height of approximately 1.7m above the floor of the balcony. As the variation from the design control is in order of only 8.8% it is considered appropriate for additional screening to be provided by way of

vegetation rather than a permanent structure such as a privacy screen. The screening effect of the proposed shrubs will offset the minor non compliance with the separation distance control whilst maintaining the amenity of the balcony. The variation to the separation distance control is acceptable in this instance.

Apartment layout – depth of apartments

Thirty-seven single aspect apartments (29.83%) have a depth of more than 8m (AG-09, AG-10, BG-01, BG-05, BG-06, BG-09, BG-10, CG-03, CG-04, CG-05, A1/2/3-10, B1/2/3-01, B1/2/3-05, B1/2/3-06, B1/2/3-09, B1/2/3-10, C1/2/3-03, C1/2/3-04, C1/2/3-05).

The Residential Flat Design Code compliance table submitted with the application advises that all single aspect apartments have a maximum internal plan depth of 8 metres from room glass line to internal face of habitable area. The difference between Council's assessment and the applicant's assessment is explained by the applicant's interpretation of what constitutes a dual aspect apartment. The applicant considers a dual aspect apartment to include apartments which have a secondary elevation to a lightwell which includes a window that will not receive any sunlight, i.e. the highlight window to the bedrooms in Apartments B1/2/3-01 and B1/2/3-10.

Whilst it is agreed that this arrangement may enable cross ventilation of the apartment, the apartment depth control is designed to enhance both ventilation and daylight access, and the proposed arrangement does not enhance daylight access. Despite the differences between Council's and the applicant's interpretation of the control, the variation from the rule of thumb is not substantial with single aspect apartments having a maximum depth of approximately 9 metres and some of the apartments have only non habitable rooms in the area that is more than 8 metres from the glass line. All the single aspect apartments which have a depth of greater than 8 metres have at least two windows/glazed doors to the living area, and a glazed area of more than 10% of the floor area of the living area. In this regard the variation of the rule of thumb can be supported, as other measures adopted in the design will ensure that the amenity of the apartments is acceptable in terms of daylight access.

Apartment layout – kitchen ventilation

The rule of thumb states that the back of a kitchen should be no more than 8 metres from a window. There are 31 apartments (25%) which have kitchens that are more than 8m from a window (AG-09, BG-01, BG-05, BG-06, BG-07, CG-03, CG-04, A1/2/3-02, A1/2/3-08, B1/2/3-01, B1/2/3-05, B1/2/3-06, B1/2/3-07, C1/2/3-03, C1/2/3-04).

As with the single aspect apartment depth non compliance, the variation from the control is not significant, with the worst case scenario being a kitchen that is 9 metres from a window. The variation to the rule of thumb is not substantial and previous comments regarding the adequacy of daylight access to the

apartments remain valid. Most of the apartments have open plan living areas which include a kitchen whilst others have internalised kitchens. Despite the variation to the rule of thumb, it is only the highly internalised kitchens which will have poor access to daylight (i.e. B1/2/3-07, B1/2/3-06, A1/2/3-02). It is considered that having 9 of 124 (7.25%) apartments with kitchens that are likely to receive poor access to daylight is not an issue of such significance that would warrant refusal of application.

Internal circulation

The rule of thumb states that a maximum of 8 apartments should be accessed from a single core/corridor. In Blocks A & B a maximum of 10 apartments are accessed per single core/corridor. A variation to the rule of thumb can be considered where:

- developments can demonstrate the achievement of the desired streetscape character and entry response; and
- developments can demonstrate a high level of amenity for common lobbies, corridors and units, (cross over, dual aspect apartments).

Block A achieves the desired streetscape character as it presents to the street as two separate buildings and has deep setbacks in the centre of the building to provide for the protection and retention of existing canopy trees.

All common lobbies are provided with natural light and ventilation and comply with the minimum dimensions standards set by DCP 55. The lobbies to Blocks A & B have generously proportioned north and south facing windows and the lobbies in Block C have west facing windows. The lifts have 1m wide entry doors and the internal dimensions of the lifts make them suitable for the transportation of large furniture. The proposed apartments comply with the minimum floor area, ventilation and solar access requirements of the Residential Flat Design Code and the variation to the rule of thumb is supported.

Daylight access – single aspect south facing apartments

The RFDC states that single aspect south-facing apartments should be limited to a maximum of 10% of the total number of units in a development. The proposal does not comply with the rule of thumb as 16.12% of the apartments in the development are single aspect south-facing apartments. This rule of thumb is in addition to the requirement that 70% of apartments receive 3 hours solar access. The objective of the rule of thumb is to limit the number of apartments in a development which do not receive any solar access. The applicant has provided the following justification in support of the variation from the rule of thumb:

Council has identified 20 of the 124 units proposed to be single aspect and have a southerly aspect (as defined by Council ie SW to SE), which equates to approximately 16% of the total number of units proposed. This represents a non-compliance of 6% or 8 units overall. The RFDC rule of thumb states that

'developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed.'

The single aspect units with southerly orientation receive a good level of amenity when assessed against key criteria such as minimum area requirements, room sizes, unit depths, natural ventilation and energy efficiency. Whilst the units receive less than 3 hours solar access during the winter solstice, the non compliance is offset by a design which promotes good ventilation and energy efficiency, particularly in relation to thermal comfort. It is important to note that the proposed design achieves the minimum requirement of 3 hours of solar access on 21 June to over 70% of units within the overall development.

Site constraints & orientation

The orientation of the site is predominately northwest to southeast, and the width of the Mona Vale Road frontage is 57.61 metres. The configuration of the site has largely influenced the siting of all buildings which has effectively resulted in two building facades having a south easterly aspect. It is important to note that where the site has a north-south orientation (ie. Building C - the north part of the site) the proposed design incorporates a north-south building alignment thereby ensuring that all the units in this building (Building C) achieve at least 3 hours of solar access during the winter solstice.

DCP 55 requires buildings to align with the street frontage and building alignment to be parallel to the street alignment. The façade of Building A is aligned parallel with Mona Vale Rd as required by DCP 55 and is orientated 36 degrees east of direct south. As a consequence, the siting and orientation of Building B replicates that of Building A, whereby both buildings have their long axis running in a northeast - southwest direction.

Whilst the buildings align and respond effectively to the Mona Vale Road streetscape, the resultant orientation of the buildings to the street is considered to be a significant constraint with respect to maximising solar access to the individual units.

It is noted that the proposed unit mix predominantly comprises 1 or 2 bedroom apartments. The mix has been deemed acceptable in previous discussions with Council officers. The majority of one bedroom units in Buildings A & B have been located on the northern side of these buildings in order to maximise the number of units achieving a minimum of 3 hours solar access during the winter solstice.

The arrangement of the buildings with regard to the Mona Vale Road streetscape inevitably results in single aspect units with a southerly aspect. This outcome cannot be avoided without adopting an alternate design scheme which would otherwise be highly unreasonable and likely to result in a development that fails to respond to the Mona Vale Road streetscape and the controls contained in Sections 2.1.2 & 4.3 of DCP 55.

Site frontage and impact of adjoining sites

In addition to the southerly orientation of the site to Mona Vale Road, the site frontage is significantly wider than adjoining sites. The width of the frontage is considered to be a significant site constraint as it greatly influences the length of the building footprints. The 57.61 metre wide frontage to Mona Vale Road restricts the potential of a building footprint to run east-west and would ultimately fail to address the street.

The adjacent development to the north (Verde), comprises of a building footprint of 5 storeys that runs east-west from Mona Vale Road given the lesser width of the frontage compared to the subject site. This arrangement ultimately results in a building that creates substantial overshadowing impacts to the subject site to the south given that the major façade of the building has a northerly aspect. Consequently, if the design were to be mirrored on the subject site, the building would be significantly impacted in relation to solar access due to the footprint and orientation to the existing building to the north and likely to result in an increased number of westerly facing apartments. As detailed above, the east-west orientation would also present an undesirable streetscape outcome as the building would fail to address the street which is further exacerbated by the width of the street frontage.

Existing trees and vegetation

The two significant trees (Tree No's 28 & 29) that are being retained within the front setback to Mona Vale Road impose significant constraints in the ability to orient the buildings in a north-south orientation. The location of the trees in combination restrict a reasonable building footprint on either the northern and southern side of the trees running in a north-south direction and would provide a highly undesirable and imbalanced streetscape presentation.

Having regard to the constraints of the site, the good level of amenity achieved to the southerly single aspect units and that more than 70% of the apartments within the overall development achieve at least 3 hours solar access, a variation to the control regarding single aspect south-facing apartments should be supported by Council.

The variation to the rule of thumb has been considered in terms of how compliance could be achieved and how this would affect the quality of the final outcome in broader terms. In this respect, it is agreed that the basic planning of the development with regard to the location and orientation of the buildings is sound and that alternative options which may result in fewer single aspect south-facing apartments would result in a development that has an inappropriate presentation to Mona Vale Road. The applicant has also stated that the amenity of the south facing single aspect apartments is acceptable in terms of floor area, room sizes, natural ventilation and BASIX compliance. In isolation, it is not considered that these factors would warrant the variation from the Rule of Thumb, however considered in the context of the site constraints and desirable streetscape presentation it is agreed that the good

amenity of the apartments lends support to the argument that a variation of the rule of thumb is appropriate.

As the overall performance of the development with respect to solar access complies with the rule of thumb and the non compliance arises out of the site constraints rather than a design failure the variation to the single aspect apartment control is considered to be acceptable.

Natural ventilation - building depth

The rule of thumb states that building depths which support natural ventilation typically range from 10-18 metres. The depths of Block A at 23 metres and Block B at 20 metres, do not comply with the rule of thumb. The Code states that a variation of the rule of thumb for freestanding buildings may be supported only if the buildings achieve satisfactory daylight and natural ventilation. The development complies with the 70% solar access and 60% cross ventilation controls of the RFDC. Compliance with these requirements demonstrates that satisfactory daylight and natural ventilation is achieved and the variation to the rule of thumb for building depth is acceptable.

Ku-ring-gai Planning Scheme Ordinance (KPSO)

Zoning and permissibility:

The site is zoned Residential 2(d3).

Under clause 25B (definitions) of the KPSO a residential flat building is defined as 'a building containing three or more dwellings.' The proposed development is consistent with the definition of residential flat building and is permissible with consent pursuant to the development control table under clause 23 of the KPSO.

Residential zone objectives:

The development is consistent with the aims and objectives prescribed under clauses 25C(2) and 25D(2) of the Ku-ring-gai Planning Scheme Ordinance and the heads of consideration detailed in Clause 25I(1) of the Ku-ring-gai Planning Scheme Ordinance

Development standards:

Development standard	Proposed	Complies
Clause 25E(1) - Site area (min): 1200m ²	7462m ²	YES
Clause 25I(2) - Deep soil landscaping (min): 50%	50.1% (3543.3m ²)	YES
Clause 25I(3) - Street frontage (min): 30m for sites >1800m ²	57.61m	YES
Clause 25I(5) - Number of storeys	5 storeys	YES

(max): buildings on sites with an area of 2400m ² or more may have a maximum height of 5 storeys		
Clause 25I(6) - Site coverage (max): 35%	35%	YES
Clause 25I(7) - Top floor area (max): 60% of level below	Block A = 57.11% Block B = 59.93% Block C = 59.74%	YES
Clause 25I(8) – Building Height: 4 th storey must have a maximum perimeter ceiling height of 13.4m	<13.4m	YES
Clause 25J – Car parking: 1 car space per dwelling plus an additional car space for each 3 bedroom dwelling (129) 1 visitor car space for every 4 dwellings (31)	163	YES
Clause 25L(2) - Zone interface The 3 rd and 4 th storey must have a minimum setback of 9m from any land (other than a road) that is not zoned 2(d3)	All adjoining sites are zoned 2(d3)	YES
Clause 25L(3) - Zone interface Landscaping required to screen development from any adjoining property must be provided on the site and must not rely on landscaping on the adjoining property.	Landscaping for screening purposes is located on the site	YES
Clause 25N(2)(a) - Manageable housing: at least one dwelling comprises manageable housing for each 10 dwellings (or part thereof) comprising the multi-unit housing,	13 of 124 apartments (10.4%) comply with the requirements for manageable housing	YES
Clause 25N(2)(b) – Manageable housing: wheelchair access is provided to all dwellings comprising the manageable housing.	Wheelchair access is provided to all dwellings comprising the manageable housing.	YES
Clause 25N(3) – A lift must be provided in all multi-unit housing of more than 3 habitable storeys in Zone No. 2(d3).	Lift access proposed	YES

POLICY PROVISIONS

Development Control Plan No. 55 – Railway/Pacific Highway Corridor & St Ives Centre

COMPLIANCE TABLE		
Development control	Proposed	Complies
Part 4.1 Landscape design:		
Deep soil landscaping (min)		
<ul style="list-style-type: none"> At least one area 150m² per 1000m² of site area of deep soil landscaping = 559m 	574m ² to the north of Block C	YES
No. of tall trees required (min): 25	>25 trees	YES
Part 4.2 Density:		
Floor space ratio (max):		
<ul style="list-style-type: none"> 1.3:1 (9194.9m²) 	1.295:1 (9159.2m ²)	YES
Part 4.3 Setbacks:		
Street boundary setback (min):		
<ul style="list-style-type: none"> Setback zone between 10-12m from boundary, no more than 40% of this zone may be occupied by building footprint 	Building setback is a minimum of 13.59m. No part of the building is located inside the 10-12m setback zone.	YES
Rear boundary setback (min):		
<ul style="list-style-type: none"> 6m 	38.6m	YES
Side boundary setback (min):		
<ul style="list-style-type: none"> 6m 	6m	YES
Setback of ground floor courtyards to street boundary (min):		
<ul style="list-style-type: none"> 8m 	11.6m	YES
Maximum portion of the front setback area occupied by private courtyards (max):		
<ul style="list-style-type: none"> 15% 	<15%	YES
Part 4.4 Built form and articulation:		
Façade articulation:		
<ul style="list-style-type: none"> Wall plane depth >600mm 	>600mm	YES
<ul style="list-style-type: none"> Wall plane area <81m² 	<81m ²	YES
Built form:		

<ul style="list-style-type: none"> The width of a single building on any elevation facing the street shall not exceed 36 metres 	45.61metres for Block A	NO
<ul style="list-style-type: none"> Balcony projection <1.2m 	<1.2m	YES
Part 4.5 Residential amenity		
Solar access:		
<ul style="list-style-type: none"> 70% of apartments shall receive a minimum of 3 hours direct sunlight on the winter solstice 	70.97%	YES
<ul style="list-style-type: none"> At least 50% of the principal area of common open space of the development shall receive direct sunlight for at least 3 hours between 9am and 3pm on the winter solstice 	>50% of the communal open space receives 3 hours solar access.	YES
<ul style="list-style-type: none"> Entry lobbies and common corridors should be naturally lit and ventilated 	All entry lobbies and common corridors are naturally lit and ventilated.	YES
<ul style="list-style-type: none"> No single-aspect units shall have a southern orientation 	20 of 124 apartments (16.12%) are single aspect with a southern orientation.	NO
<ul style="list-style-type: none"> Not more than 15% of the total units shall be single aspect with a western orientation 	13 of 124 apartments (10.48%) are single aspect apartments with a western orientation.	YES

<ul style="list-style-type: none"> The development shall allow the retention of at least 3 hours of sunlight between 9am and 3pm on the winter solstice to the habitable rooms and the principal portion of the outdoor living area of adjoining house in single house zones (2(c1) and 2(c2)). Where existing overshadowing is greater than this sunlight is not to be reduced by more than 20% 	All sites adjoining the development site are zoned Residential 2(d3).	YES
Visual privacy:		
Separation b/w windows and balconies of a building and any neighbouring building on site or adjoining site:		
Storeys 1 to 4 <ul style="list-style-type: none"> 12m b/w habitable rooms 9m b/w habitable and non-habitable rooms 6m b/w non-habitable rooms 	YES	YES
5th Storey <ul style="list-style-type: none"> 18m b/w habitable rooms 13m b/w habitable and non-habitable rooms 9m b/w non-habitable rooms 	16.4 metres between balcony of B4-03 and balconies of A4-05 and A4-06	NO
Roof terraces are to be designed to avoid overlooking of neighbours' principal outdoor living areas (e.g. roof terraces facing side boundaries are generally inappropriate).	Roof terraces are for clothes drying purposes. Screening is proposed.	YES
Acoustic privacy:		

All dwellings are to meet the sound insulation provisions and standards of the Building Code of Australia.	Compliance with this requirement could be achieved through a condition of consent.	YES
Buildings shall be designed such that noise-generating rooms (such as living rooms) are located adjacent to (ie, sharing common walls / floors) those in adjoining units.	Rooms adjacent to common walls are to be used for similar purposes, i.e. study adjoining bedroom, living room adjoining living room, etc.	YES
Bedrooms and private open space shall be located away from noise sources including active garages, driveways, mechanical equipment and recreation areas.	Where possible bedroom windows are located away from noise sources, bedroom windows which require protection from traffic noise will be treated in accordance with the recommendations of the acoustic report.	YES
Where physical separation from noise sources cannot be achieved, windows are to be located away from noise sources or buffers used.	Where possible, windows are located away from noise sources. Living room windows facing Mona Vale Road are protected by the enclosed balconies.	YES
Mechanical equipment, such as pumps, lifts or air conditioners shall not be located next to bedrooms or living rooms of dwellings on adjoining properties unless separated from such noise sources by buffers such as storage, wardrobes and circulation areas.	Air conditioning units are located in basement level plant rooms and mechanical platforms on the roof.	YES

<p>Development located adjacent to major roads or other sources of high noise generation shall be designed in accordance with the <i>EPA Environmental Criteria for Road Traffic Noise 1999</i>, with:</p> <ul style="list-style-type: none"> i. noise-insensitive areas such as kitchens, storage areas and laundries located towards the noise source; ii. noise sensitive uses (i.e. bedrooms) located away from the noise source; and iii. appropriate noise shielding or attenuation techniques incorporated into the design and construction of the building. 	<p>An acoustic report which addresses the impact of traffic noise on the development has been submitted. The report advise that if the recommendations of the report are adopted the development will comply with the requirements of the relevant Australian Standards.</p>	<p>YES</p>
<p>Balconies and other external building elements are to be designed, located to minimise infiltration and reflection of noise onto the facade.</p>	<p>The acoustic report includes detailed recommendations regarding the types of glazing that must be used to achieve the appropriate internal noise levels.</p>	<p>YES</p>
<p>Internal amenity:</p>		
<ul style="list-style-type: none"> • Habitable rooms have a minimum floor to ceiling height of 2.7m 	<p>Minimum 2.7m</p>	<p>YES</p>
<ul style="list-style-type: none"> • Non-habitable rooms have a minimum floor to ceiling height of 2.4m 	<p>Minimum 2.7m</p>	<p>YES</p>
<ul style="list-style-type: none"> • 1-2 bedroom units have a minimum plan dimension of 3m in all bedrooms 	<p>>3m</p>	<p>YES</p>
<ul style="list-style-type: none"> • Single corridors: <ul style="list-style-type: none"> - serve a maximum of 8 units - >1.5m wide - >1.8m wide at lift lobbies 	<p>10 units</p> <p>1.5m</p> <p>1.8m</p>	<p>NO</p> <p>YES</p> <p>YES</p>

<ul style="list-style-type: none"> Storage space shall be provided for each unit at the following minimum volumes: <ul style="list-style-type: none"> 6m³ for studio and one bedroom unit 8m³ for two bedroom units 10m³ for units with three or more bedrooms <p>At least 50% of the required storage space must be provided inside the dwelling.</p>	Storage in accordance with these requirements will be provided	YES
Outdoor living:		
<ul style="list-style-type: none"> ground floor apartments have a terrace or private courtyard greater than 25m² in area 	25m ² min.	YES
<ul style="list-style-type: none"> Balcony sizes: <ul style="list-style-type: none"> 10m² – 1 bedroom unit 12m² – 2 bedroom unit 	10m ² min. 12m ² min.	YES YES
<ul style="list-style-type: none"> Primary outdoor space must be directly accessible from the main living area 	All outdoor spaces are accessed from the main living area	YES
<ul style="list-style-type: none"> primary outdoor space has a minimum dimension of 2.4m 	Min. 2.4m	YES
<ul style="list-style-type: none"> At least 30% of the site area is to be common open space principally for tall tree planting. 	More than 30% of the site area is common open space	YES
Part 4.7 Social dimensions:		
Each adaptable dwelling must be provided with at least one disabled car parking space designed in accordance with AS2890.1	Disabled car spaces have been provided	YES

At least 70% of dwellings are to be 'visitable' in accordance with the definition prescribed in appendix F	Min. 70%	YES
A range of unit sizes and types is to be provided	Mix of 1, 2 and 2 bedroom plus study units	YES
Part 5 Parking and vehicular access:		
Car parking (min):		
<ul style="list-style-type: none"> • 129 resident spaces • 31 visitor spaces • 160 spaces in total 	163 spaces in total	YES

Part 3 Local context

3.3 Landscape and visual character

The proposal is generally consistent with the requirements of this part of the DCP. Council's Landscape Officer has not raised any concerns regarding the proposed tree removal or the proportion of new plantings that are local indigenous trees.

Part 4 Design principles and controls

4.4 Built form and articulation

The southern elevation of Block A faces Mona Vale Road and has a width of 45.61 metres. The southern elevation of the residential flat building at 1-3 Sturt Place and 230-232 Mona Vale Road has a street elevation with a width of 49.5 metres. The residential flat building at 220-222 Mona Vale Road has a street elevation with a width of 28 metres. The residential flat building at 226 Mona Vale Road has a street elevation with a width of 38 metres.

As nearby residential flat buildings have street elevations greater than 36 metres in width, there is no in principle objection to a building width greater than 36 metres. The DCP states that where an applicant has justified a building width greater than 36 metres the portion of the building in excess of 36 metres must be sufficiently recessed and/or articulated so as to present to the street as a separate building.

To create the appearance of two buildings, the alignment of the southern wall of Block A has been staggered in plan. The centre of Block A is recessed 12.8 metres from outer face of the southern side of the building and 11.6 metres from the outer face of northern side of the building. Canopy trees located directly in front of the recessed area of the building will enhance the effect and Block A will read as two buildings from Mona Vale Road.

4.5 Residential amenity

4.5.1 Solar access

The DCP requires that there are to be no single aspect apartments with a southern orientation. This control is a more onerous requirement than a similar control in the Residential Flat Design Code which limits single aspect south facing apartments (SE-SW) to a maximum of 10% of the apartments in a development. The proposal does not comply with either requirement as 20 of 124 apartments (16.12%) are single aspect with a southern orientation. The non compliance is a result of several factors, which include; the solar orientation of the allotment, the width of the development site, and the proposed housing mix.

The long axis of the site runs in a north-south direction, and the appropriate streetscape response is for the buildings to be orientated across the site with their long axis running in an east-west direction. This arrangement inevitably results in single aspect apartments with a southerly orientation. The width of the development site is 57.61m. The width of the site results in increased building length, fewer dual aspect corner apartments and a higher proportion of single aspect south-facing apartments. The proposed housing mix, predominantly comprising 1 and 2 bedroom apartments, is always going to result in less dual aspect apartments than a development comprising of 2 and 3 bedroom apartments which have more floor area and occupy a greater proportion of the external walls.

Having regard to the constraints of the site, the dwelling mix, and that more than 70% of the apartments achieve at least 3 hours solar access a variation to the control regarding single aspect south-facing apartments can be supported.

4.5.2 Visual privacy

The separation distance of 16.4 metres between the balcony of B4-03 and A4-05/A4-06 is less than the requirement of 18 metres. To address this issue the balcony of apartment B4-03 is surrounded by a planter bed in which the planting of 700mm high shrubs is proposed. The proposed shrubs will form a privacy screen with a height of approximately 1.7m above the floor of the balcony. As the variation from the design control is in order of only 8.8% it is considered appropriate for additional screening to be provided by way of vegetation rather than a permanent structure such as a privacy screen. The screening effect of the proposed shrubs will offset the minor non compliance with the separation distance control whilst maintaining the amenity of the balcony. The variation to the separation distance control is acceptable in this instance.

4.5.4 Internal amenity

Twenty apartments (16.12%) are single aspect with a southern orientation. This exceeds the 10% rule of thumb specified by the RFDC. As the overall performance of the development with respect to solar access complies with the rule of thumb and the non compliance arises out of the site constraints

rather than a design failure the variation to the single aspect apartment control is acceptable. This issue has been discussed in detail above.

The DCP limits that maximum number of apartments per single core/corridor to 8. In blocks A & B a maximum of 10 apartments are accessed per single core/corridor. The objective of this control is to ensure a high level of internal living amenity for all occupants of the development.

All common lobbies are provided with natural light and ventilation and comply with the minimum dimensions standards set by the DCP. The lobbies to Blocks A & B have generously proportioned north and south facing windows and the lobbies in Block C have west facing windows. The lifts have 1m wide entry doors and the internal dimensions of the lifts make them suitable for the transportation of large furniture. The proposed apartments comply with the minimum floor area, ventilation and solar access requirements of the Residential Flat Design Code. A high level of internal living amenity for all occupants of the development will be achieved and the variation to the design control is supported.

7.3 Memorial Avenue Precinct - St Ives

This section of the DCP contains specific design controls for the Memorial Avenue precinct. The design controls include, desirable amalgamation patterns, building envelopes, setbacks, basement car parking locations, and pedestrian and vehicular access through the site. A central component of these controls are two diagrams that represent Council's vision for the development of the precinct. A significant number of residential flat developments have been completed in the precinct since the DCP was adopted in 2004.

Much of the development in the precinct is not consistent with the requirements of the DCP, in particular the amalgamation patterns and position of buildings is significantly different. The link between Memorial Avenue and Sturt Place has not and could not be constructed as residential flat buildings now occupy the area that was to be used for the link. In light of these circumstances, it is considered that minimal determinative weight can be attributed to the highly prescriptive controls outlined in the diagrams. The following objectives are considered to be relevant to the proposal:

- i. The new buildings in Mona Vale Road and Killeaton Street / Link Road are placed in a landscape setting with appropriate breaks between the buildings.*
- ii. The retention of significant trees along the edge of the precinct and internally.*

The proposal is consistent with these objectives. The proposal has been designed to ensure the protection and retention of existing trees in both the street frontage and deeper within the site. Sufficient space for the planting of new trees is provided and there are adequate breaks between the proposed development and existing residential flat development.

Development Control Plan No. 40 - Construction and Demolition Waste Management

A detailed waste management plan was submitted with the application and is considered acceptable.

A construction traffic management plan was submitted with the application and is considered acceptable.

Development Control Plan No. 43 - Car Parking

Matters for assessment under DCP 43 have been taken into account in the assessment of this application against KPSO, and DCP 55. The number of car spaces in the development exceeds the requirements of the KPSO and DCP 55.

Development Control Plan No. 47 - Water Management

Matters for consideration under DCP 47 have been taken into account in the assessment of this application against KPSO and DCP 55 and the proposal is satisfactory in this regard.

Ku-ring-gai Contributions Plan 2010

The development site contains 5 dwellings all of which have 3 or more bedrooms. Accordingly the section 94 contributions are based on the charges raised by 60 X 1 bedroom units, 64 X 2 bedroom units and a credit for the existing 5 X 3 bedroom dwellings. The contributions payable for the development will be split into stages which reflect the development staging plan:

Stage 1 = \$914,943.74

Stage 2 = \$874,982.03

Stage 3 = \$706,317.76

The total contribution is \$2,496,243.53.

LIKELY IMPACTS

The above assessment demonstrates that the proposal complies with the requirements of SEPP 65, KPSO, and DCP 55. Where there is a variation to a design control or rule of thumb, suitable justification has been provided. The proposal will provide a high quality living environment for future residents. The aesthetics of the development are consistent with recent development on adjoining sites and the development will make a positive contribution to the character of the area.

SUITABILITY OF THE SITE

The site is zoned Residential 2(d3) and multi-unit housing is permissible. The site is considered suitable for the proposed residential flat development.

ANY SUBMISSIONS

The submissions have been considered in the above assessment.

PUBLIC INTEREST

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are minimised. The proposal has been assessed against the provisions of the relevant Environmental Planning Instruments and is deemed to be acceptable. On this basis, the proposal is considered to be consistent with the public interest.

OTHER RELEVANT MATTERS

There are no other matters for consideration.

CONCLUSION

This application has been assessed under the heads of consideration of Section 79C of the *Environmental Planning and Assessment Act* 1979 and all relevant instruments and policies. The proposal achieves compliance with the requirements of the relevant instruments and policies.

RECOMMENDATION

PURSUANT TO SECTION 80(1) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

THAT the Sydney West Joint Regional Planning Panel, as the consent authority, grant development consent to Development Application No. 0619/11 for the demolition of the five dwellings and construction of three residential flat buildings containing 124 units as shown on plans prepared by DEM Architects, subject to the following conditions:

The conditions of consent are as follows:

CONDITIONS THAT IDENTIFY APPROVED PLANS:

1. Approved architectural plans and documentation (new development)

The development must be carried out in accordance with the following plans and documentation listed below and endorsed with Council's stamp, except

where amended by other conditions of this consent:

Plan no.	Drawn by	Dated
AR-CV01 Revision A02	DEM	6/03/2012
AR-0102 Revision A02	DEM	6/03/2012
AR-1200 Revision A02	DEM	6/03/2012
AR-1201 Revision A02	DEM	6/03/2012
AR-1202 Revision A02	DEM	6/03/2012
AR-1203 Revision A02	DEM	6/03/2012
AR-1204 Revision A02	DEM	6/03/2012
AR-1701 Revision A02	DEM	6/03/2012
AR-1703 Revision A01	DEM	11/04/2012
AR-1801 Revision A01	DEM	6/03/2012
AR-2101 Revision A02	DEM	6/03/2012
AR-2301 Revision A02	DEM	6/03/2012
AR-2500 Revision A02	DEM	6/03/2012
AR-2501 Revision A02	DEM	6/03/2012
AR-2502 Revision A02	DEM	6/03/2012
AR-2701 Revision A01	DEM	18/11/2011
LA-CV00 Revision A05	DEM	6/03/2012
LA-2401 Revision A07	DEM	29/02/2012
LA-0501 Revision A11	DEM	29/02/2012
LA-0502 Revision A09	DEM	29/02/2012
LA-0503 Revision A09	DEM	6/03/2012
LA-0504 Revision A05	DEM	6/03/2012
LA-0505 Revision A02	DEM	6/03/2012
AR9052 Revision A01	DEM	11/11/2011
AR9053 Revision A01	DEM	18/11/2011
AR9054 Revision A01	DEM	18/11/2011
Specialist Lighting Concept (5 sheets)	Webb Australia Group	undated
SY100003/E1 Issue 5	Acor Appleyard	11/2011
SY100003/E2 Issue 5	Acor Appleyard	11/2011
SY100003/E3 Issue 5	Acor Appleyard	11/2011
SY100003/E4 Issue 5	Acor Appleyard	11/2011
SY100003/E5 Issue 7	Acor Appleyard	02/2012
SY100003/E6 Issue 8	Acor Appleyard	03/2012
SY100003/E7 Issue 7	Acor Appleyard	02/2012
SY100003/E8 Issue 7	Acor Appleyard	02/2012
SY100003/C1 Issue 11	Acor Appleyard	02/2012
SY100003/C2 Issue 11	Acor Appleyard	02/2012
SY100003/C3 Issue 12	Acor Appleyard	03/2012
SY100003/C4 Issue 12	Acor Appleyard	03/2012
SY100003/C5 Issue 11	Acor Appleyard	02/2012
SY100003/C6 Issue 4	Acor Appleyard	02/2012
SY100003/F1 Issue 5	Acor Appleyard	11/2011
SY100003/F2 Issue 5	Acor Appleyard	11/2011
SY100003/D1 Issue 4	Acor Appleyard	11/2011

SY100003/D2 Issue 5	Acor Appleyard	11/2011
SY100003/D3 Issue 5	Acor Appleyard	11/2011
SY100003/D4 Issue 5	Acor Appleyard	11/2011
SY100003/D5 Issue 5	Acor Appleyard	11/2011
SY100003/D6 Issue 2	Acor Appleyard	11/2011

Document(s)	Dated
SEPP 65 Design Verification Statement prepared by Rudi Valla	undated
Development Impact Assessment Report prepared by Earthscape Horticultural Services	November 2011
Basix certificate No. 367598M_04	7/03/2012
Basix certificate No. 404354M_04	7/03/2012
Basix certificate No. 404379M_03	7/03/2012
Rosedale Unit Type, Area & Storage Schedule	6/03/2012
Letter from ERBAS RE: Confirmation of Equipment Installation Location	1/11/2011
Report on Geotechnical Investigation Project 72026.00	9/10/2010
Access Report prepared by Mark Relf	17/11/2011
Waste Management Plan prepared by EMF Griffiths Sustainability Consultants. Issue 11.	6/03/2012
DA Acoustic Assessment prepared by SLR. Revision 2.	7/11/2011
Letter from Roads and Maritime Services	22/12/2011

Reason: To ensure that the development is in accordance with the determination.

2. Inconsistency between documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

Reason: To ensure that the development is in accordance with the determination.

3. Approved landscape plans

Landscape works shall be carried out in accordance with the following landscape plan(s), listed below and endorsed with Council's stamp, except where amended by other conditions of this consent:

Plan no.	Drawn by	Dated
LA-CV00 Revision A05	DEM	6/03/2012
LA-2401 Revision A07	DEM	29/02/2012
LA-0501 Revision A11	DEM	29/02/2012
LA-0502 Revision A09	DEM	29/02/2012
LA-0503 Revision A09	DEM	6/03/2012

LA-0504 Revision A05	DEM	6/03/2012
LA-0505 Revision A02	DEM	6/03/2012

Reason: To ensure that the development is in accordance with the determination.

CONDITIONS TO BE SATISFIED PRIOR TO DEMOLITION, EXCAVATION OR CONSTRUCTION:

4. Road opening permit

The opening of any footway, roadway, road shoulder or any part of the road reserve shall not be carried out without a road opening permit being obtained from Council (upon payment of the required fee) beforehand.

Reason: Statutory requirement (Roads Act 1993 Section 138) and to maintain the integrity of Council's infrastructure.

5. Groundwater inflow predictions

1. The predicted instantaneous inflow rate (expressed in litres per second) and the predicted total groundwater extraction volume (expressed in megalitres) for the defined period of construction (expressed in months) of the development shall be determined and advised to the NSW Office of Water. The treatment, management and disposal of the pumped groundwater will be subject to the approval of the appropriate regulatory authority.
2. The predicted instantaneous inflow rate (expressed in litres per second) and the predicted total groundwater extraction volume (expressed in megalitres per year) for the long-term operation of the development shall be determined and advised to the NSW Office of Water. The treatment, management and disposal of the pumped groundwater will be subject to the approval of the appropriate regulatory authority.

Reason: To protect the environment.

6. Notice of commencement

At least 48 hours prior to the commencement of any development (including demolition, excavation, shoring or underpinning works), a notice of commencement of building or subdivision work form and appointment of the principal certifying authority form shall be submitted to Council.

Reason: Statutory requirement.

7. Notification of builder's details

Prior to the commencement of any development or excavation works, the Principal Certifying Authority shall be notified in writing of the name and

contractor licence number of the owner/builder intending to carry out the approved works.

Reason: Statutory requirement.

8. Dilapidation survey and report (public infrastructure)

Prior to the commencement of any development or excavation works on site, the Principal Certifying Authority shall be satisfied that a dilapidation report on the visible and structural condition of all structures of the following public infrastructure, has been completed and submitted to Council:

Public infrastructure

- Mona Vale Road northbound, including kerb and gutter, over the site frontage.
- Memorial Avenue between Mona Vale Road and Killeaton Street, including kerb and gutter opposite the site entry and exit.

The report must be completed by a consulting structural/civil engineer. Particular attention must be paid to accurately recording (both written and photographic) existing damaged areas on the aforementioned infrastructure so that Council is fully informed when assessing any damage to public infrastructure caused as a result of the development.

The developer may be held liable to any recent damage to public infrastructure in the vicinity of the site, where such damage is not accurately recorded by the requirements of this condition prior to the commencement of works.

Note: A written acknowledgment from Council must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Principal Certifying Authority prior to the commencement of any excavation works.

Reason: To record the structural condition of public infrastructure before works commence.

9. Archival recording of buildings

Prior to the commencement of any development or excavation works on site, the Principal Certifying Authority shall be satisfied that an archival report has been submitted to Council's Heritage Advisor.

The report must consist of an archival standard photographic record of the building (internally and externally), its garden and views of it from the street illustrating its relationship to neighbouring properties and the streetscape. Recording shall be undertaken in accordance with the guidelines for "Photographic Recording of Heritage Items Using Film or Digital Capture (2006)" prepared by the New South Wales Heritage Office.

Information shall be bound in an A4 report format. It shall include copies of photographs, referenced to plans of the site. Two (2) copies (one (1) copy to include negatives or CD of images shall be submitted to Council's Heritage Advisor. The recording document will be held in the local studies collection of Ku-ring-gai Library, the local historical society and Council's files.

Note: A written acknowledgment from Council must be obtained (attesting to this condition being appropriately satisfied) and submitted to the Principal Certifying Authority prior to the commencement of any works.

Reason: To ensure the proper management of historical artefacts and to ensure their preservation.

10. Dilapidation survey and report (private property)

Prior to the commencement of any demolition or excavation works on site, the Principal Certifying Authority shall be satisfied that a dilapidation report on the visible and structural condition of all structures upon the following lands, has been completed and submitted to Council:

Address

- 5, 7, 11 and 15 Memorial Avenue
- 220-222 Mona Vale Road

The dilapidation report must include a photographic survey of adjoining properties detailing their physical condition, both internally and externally, including such items as walls ceilings, roof and structural members. The report must be completed by a consulting structural/geotechnical engineer as determined necessary by that professional based on the excavations for the proposal and the recommendations of the submitted geotechnical report.

In the event that access for undertaking the dilapidation survey is denied by a property owner, the applicant must demonstrate in writing to the satisfaction of the Principal Certifying Authority that all reasonable steps have been taken to obtain access and advise the affected property owner of the reason for the survey and that these steps have failed.

Note: A copy of the dilapidation report is to be provided to Council prior to any excavation works been undertaken. The dilapidation report is for record keeping purposes only and may be used by an applicant or affected property owner to assist in any civil action required to resolve any dispute over damage to adjoining properties arising from works.

Reason: To record the structural condition of likely affected properties before works commence.

11. Construction and traffic management plan

The applicant must submit to Council a Construction Traffic Management Plan

(CTMP), which is to be approved prior to the commencement of any works on site.

The maximum size of vehicles to service the Stages 2 and 3 construction sites is 11 metres for Stage 2 and 9 metres for Stage 3.

The plan is to consist of a report with Traffic Control Plans attached.

The report is to contain commitments which must be followed by the demolition and excavation contractor, builder, owner and subcontractors. The CTMP applies to all persons associated with demolition, excavation and construction of the development.

The report is to contain construction vehicle routes for approach and departure to and from all directions.

The report is to contain a site plan showing entry and exit points. Swept paths are to be shown on the site plan showing access and egress for an 11 metre long heavy rigid vehicle (9 metres for Stages 2 and 3).

The Traffic Control Plans are to be prepared by a qualified person (red card holder). One must be provided for each of the following stages of the works:

- Demolition
- Excavation
- Concrete pour
- Construction of vehicular crossing and reinstatement of footpath
- Traffic control for vehicles reversing into or out of the site.

Traffic controllers must be in place at the site entry and exit points to control heavy vehicle movements in order to maintain the safety of pedestrians and other road users.

When a satisfactory CTMP is received, a letter of approval will be issued with conditions attached. Traffic management at the site must comply with the approved CTMP as well as any conditions in the letter issued by Council. Council's Rangers will be patrolling the site regularly and fines may be issued for any non-compliance with this condition.

Reason: To ensure that appropriate measures have been considered during all phases of the construction process in a manner that maintains the environmental amenity and ensures the ongoing safety and protection of people.

12. Erosion and drainage management

Earthworks and/or demolition of any existing buildings shall not commence until an erosion and sediment control plan is submitted to and approved by the Principal Certifying Authority. The plan shall comply with the guidelines set out in the NSW Department of Housing manual "Managing Urban Stormwater:

Soils and Construction" certificate. Erosion and sediment control works shall be implemented in accordance with the erosion and sediment control plan.

Reason: To preserve and enhance the natural environment.

13. Tree protection fencing

To preserve the following tree/s, no work shall commence until the area beneath their canopy is fenced off as shown on the following plans, to prevent any activities, storage or the disposal of materials within the fenced area. The fence/s shall be maintained intact until the completion of all demolition/building work on site.

Plan no.	Drawn by	Date
Tree Protection Plan – Demolition Plan – dwgs S1 to S5, Appendix 6, Arborist Report	Earthscape Horticultural Services	19/10/2011
Tree Protection Plan – Construction Plan – dwgs S1 to S5, Appendix 7, Arborist Report	Earthscape Horticultural Services	19/10/2011

The tree protection fencing shall be constructed of galvanised pipe at 2.4 metre spacings and connected by securely attached chain mesh fencing to a minimum height of 1.8 metres in height prior to work commencing.

Reason : To protect existing trees during construction phase.

14. Tree protection signage

Prior to works commencing, tree protection signage is to be attached to each tree protection zone, displayed in a prominent position and the sign repeated at 10 metres intervals or closer where the fence changes direction. Each sign shall contain in a clearly legible form, the following information:

Tree protection zone.

- This fence has been installed to prevent damage to the trees and their growing environment both above and below ground and access is restricted.
- Any encroachment not previously approved within the tree protection zone shall be the subject of an arborist's report.
- The arborist's report shall provide proof that no other alternative is available.
- The Arborist's report shall be submitted to the Principal Certifying Authority for further consultation with Council.
- The name, address, and telephone number of the developer.

Reason: To protect existing trees during the construction phase.

15. Tree protection mulching

Prior to works commencing and throughout construction, the area of the tree protection zone is to be mulched to a depth of 100mm with composted organic material being 75% Eucalyptus leaf litter and 25% wood.

Reason: To protect existing trees during the construction phase.

16. Tree protection – avoiding soil compaction

To preserve the following tree/s and avoid soil compaction, no work shall commence until temporary measures to avoid soil compaction and damage to surface roots (eg rumble boards) as shown on the following plans, is/are installed. The ground protection is to be maintained throughout the construction period:

Plan no.	Drawn by	Date
Tree Protection Plan – Construction Plan dwgs S1 to S5, Appendix 7, Arborist Report	Earthscape Horticultural Services	19/10/2011

Reason: To protect existing trees during the construction phase.

17. Tree fencing inspection

Upon installation of the required tree protection measures, an inspection of the site by the Principal Certifying Authority is required to verify that tree protection measures comply with all relevant conditions.

Reason: To protect existing trees during the construction phase.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE:

18. Amendments to Environmental Site Management Plan

Prior to the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that the approved plans, listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

Plan no.	Drawn by	Date
SY100003/E5, E7, E8 Issue 7 SY100003/E6 Issue 8	Acor Appleyard	March 2012

The following changes are required to the Environmental Site Management Plan:

1. To prevent adverse canopy impacts, all scaffolding in the vicinity of trees to be retained to be shown. Scaffolding to be limited to 1 metre wide within the canopy spread of the following trees in accordance with Section 9.1.9, Arborist Report, Earthscape Horticultural Services, dated November 2011 and as indicated on Tree Protection Plan Construction Phase, Appendix 7, Arborist Report, Earthscape Horticultural Services, dated November 2011.

Schedule	
Tree/location	Radius from trunk
Tree 25/ <i>Pinus patula</i> (Mexican Pine) located within the front setback	4.2m
Tree 28/ <i>Cedrus deodara</i> (Himalayan Cedar) located within the front setback.	4.5m
Tree 29/ <i>Cedrus deodara</i> (Himalayan Cedar) TPZ 8.3m The tree is located within the front setback.	8.4m
Tree 35/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	Minor pruning for building clearance
Tree 36/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	Minor pruning for building clearance
Tree 55/ <i>Celtis sinensis</i> (Chinese Nettle Tree) located on eastern boundary, east of proposed Block C	Minor pruning for building clearance

2. To prevent root damage and soil compaction within the tree protection zone of following trees, ground protection for the driveway access along the access handles to Memorial Avenue is to be shown as to be constructed in accordance with Section 4.5.3, AS4970-2009.

Schedule	
Tree/location	Radius from trunk
Tree 73/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the access handle (entry from Memorial Road).	4.2m
Tree 74/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the proposed driveway (entry from Memorial Road)	4.5m
Tree 87/ <i>Liquidambar styraciflua</i> (Liquidambar) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	8.4m

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that the environmental site management plan has been submitted as required by this condition.

Note: A site management plan shall be submitted to the Certifying Authority.

Reason: To ensure that the development is in accordance with the determination.

19. Consolidation of lots

Prior to the issue of the Construction Certificate, the applicant is to consolidate the existing lots. Evidence of the consolidation, in the form of a plan registered with Department of Lands, is to be submitted to the Principal Certifying Authority prior to issue of the Construction Certificate.

Reason: To ensure that development does not occur across property boundaries.

20. Basement entry ramp from Memorial Avenue

Prior to the issue of the Construction Certificate the architectural plans are to be amended in accordance with the concept plan (AR-1703 Revision A01) for the redesign of the basement entry ramp as referred to in the list of approved plans.

Reason: To ensure that sufficient clearance height is provided between the basement entry ramp and the underside of the footpath above the ramp.

21. Amendments to approved landscape plan

Prior to the issue of a Construction Certificate, the Principal Certifying Authority shall be satisfied that the approved landscape plans, listed below and endorsed with Council's stamp, have been amended in accordance with the requirements of this condition as well as other conditions of this consent:

Plan no.	Drawn by	Date
Landscape Plan Planting Plan Ground Floor Plan Ia-0502 Rev A09	DEM	29/02/12

The following changes are required to the Landscape Plan:

1. To preserve the biodiversity of the site, the proposed planting of *Eucalyptus punctata* (Grey Gum) shall be substituted with *Eucalyptus resinifera* (Red Mahogany) or *Angophora costata* (Sydney Red Gum). Proposed planting of *Melaleuca armillaris* shall be substituted with *Acacia falcata*, *Melaleuca decora* or *Bursaria spinosa*.
2. To preserve neighbour amenity, two additional canopy trees are to be located on the northern boundary of the communal open space located to the south-west of Block B.

The above landscape plan(s) shall be amended in the following ways:

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that the landscape plan has been amended as required by this condition.

Note: An amended plan, prepared by a landscape architect or qualified landscape designer shall be submitted to the Certifying Authority.

Reason: To ensure adequate landscaping of the site

22. Long service levy

In accordance with Section 109F(i) of the Environmental Planning and Assessment Act a Construction Certificate shall not be issued until any long service levy payable under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 (or where such levy is payable by instalments, the first instalment of the levy) has been paid. Council is authorised to accept payment. Where payment has been made elsewhere, proof of payment is to be provided to Council.

Reason: Statutory requirement.

23. Builder's indemnity insurance

The applicant, builder, developer or person who does the work on this development, must arrange builder's indemnity insurance and submit the certificate of insurance in accordance with the requirements of Part 6 of the Home Building Act 1989 to the Certifying Authority for endorsement of the plans accompanying the Construction Certificate.

It is the responsibility of the applicant, builder or developer to arrange the builder's indemnity insurance for residential building work over the value of \$20,000. The builder's indemnity insurance does not apply to commercial or industrial building work or to residential work valued at less than \$20,000, nor to work undertaken by persons holding an owner/builder's permit issued by the Department of Fair Trading (unless the owner/builder's property is sold within 7 years of the commencement of the work).

Reason: Statutory requirement.

24. Outdoor lighting

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that all outdoor lighting will comply with AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

Note: Details demonstrating compliance with these requirements are to be submitted prior to the issue of a Construction Certificate.

Reason: To provide high quality external lighting for security without adverse affects on public amenity from excessive illumination levels.

25. Access for people with disabilities (residential)

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that access for people with disabilities to and from and between the public domain, residential units and all common open space areas is provided. Consideration must be given to the means of dignified and equitable access.

Compliant access provisions for people with disabilities shall be clearly shown on the plans submitted with the Construction Certificate. All details shall be provided to the Principal Certifying Authority prior to the issue of the Construction Certificate. All details shall be prepared in consideration of the Disability Discrimination Act, and the relevant provisions of AS1428.1, AS1428.2, AS1428.4 and AS 1735.12.

Reason: To ensure the provision of equitable and dignified access for all people in accordance with disability discrimination legislation and relevant Australian Standards.

26. Adaptable units

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that the nominated adaptable units within the development application, [as shown on the approved architectural plans], are designed as adaptable housing Class C in accordance with the provisions of Australian Standard AS4299-1995: Adaptable Housing.

Note: Evidence from an appropriately qualified professional demonstrating compliance with this control is to be submitted to and approved by the Certifying Authority prior to the issue of the Construction Certificate.

Reason: Disabled access & amenity.

27. Stormwater management plan

Prior to issue of the Construction Certificate, the applicant must submit, for approval by the Principal Certifying Authority, scale construction plans and specifications in relation to the stormwater management and disposal system for the development. The plan(s) must be based on **ACOR Appleyard Stormwater Management Plans Drawings SY100003/C1/11, C2/11, C3/12, C4/12, C5/11 and C6/4** and must include the following detail:

- exact location and reduced level of discharge point to the public drainage system
- layout of the property drainage system components, including but not

limited to (as required) gutters, downpipes, spreaders, pits, swales, kerbs, cut-off and intercepting drainage structures, subsoil drainage, flushing facilities and all ancillary stormwater plumbing - all designed for a 235mm/hour rainfall intensity for a duration of five (5) minutes (1:50 year storm recurrence)

- location(s), dimensions and specifications for the required rainwater storage and reuse tanks and systems and where proprietary products are to be used, manufacturer specifications or equivalent shall be provided
- specifications for reticulated pumping facilities (including pump type and manufacturer specifications) and ancillary plumbing to fully utilise rainwater in accordance with Ku-ring-gai Council Development Control Plan 47 and/or BASIX commitments
- details of the required on-site detention tanks required by Ku-ring-gai Water Management DCP 47, including dimensions, materials, locations, orifice and discharge control pit details as required (refer Chapter 6 and Appendices 2, 3 and 5 of DCP 47 for volume, PSD and design requirements)
- the required basement stormwater pump-out system is to cater for driveway runoff and subsoil drainage (refer appendix 7.1.1 of Development Control Plan 47 for design)
- how runoff will be collected from the access handles and conveyed into Pits P17 and P18 - eg one way crossfall and kerb on lower side.

The above construction drawings and specifications are to be prepared by a qualified and experienced civil/hydraulic engineer in accordance with Council's Water Management Development Control Plan 47, Australian Standards 3500.2 and 3500.3 - Plumbing and Drainage Code and the Building Code of Australia.

Reason: To protect the environment.

28. Excavation for services

Prior to the issue of the Construction Certificate, the Principal Certifying Authority shall be satisfied that no proposed underground services (ie: water, sewerage, drainage, gas or other service) unless previously approved by conditions of consent, are located beneath the canopy of any tree protected under Council's Tree Preservation Order, located on the subject allotment and adjoining allotments.

Note: A plan detailing the routes of these services and trees protected under the Tree Preservation Order shall be submitted to the Principal Certifying Authority.

Reason: To ensure the protection of trees.

29. Recycling and waste management

Prior to the issue of the Construction Certificate, the Certifying Authority shall

be satisfied that the development provides a common garbage collection/separation area sufficient in size to store all wheelie garbage bins and recycling bins provided by Council for the number of units in the development in accordance with the approved waste management plan. The garbage collection point is to be accessible by Council's Waste Collection Services.

The responsibility for:

- the cleaning of waste rooms and waste service compartments; and
- the transfer of bins within the property, and to the collection point once the development is in use;

shall be determined when designing the system and clearly stated in the Waste Management Plan.

Note: The architectural plans are to be amended and provided to the Certifying Authority.

Reason: Environmental protection.

30. Noise from road and rail (residential only)

Prior to the issue of the Construction Certificate, the Certifying Authority shall submit evidence to Council demonstrating that the development will be acoustically designed and constructed to ensure that the following LAeq levels are not exceeded:

- (a) in any bedroom in the building—35 dB(A) at any time between 10 pm and 7 am,
- (b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.

Plans and specifications of the required acoustic design shall be prepared by a practicing acoustic engineer and shall be submitted to the Principal Certifying Authority.

Reason: To minimise the impact of noise from the adjoining road or rail corridor on the occupants of the development.

31. Noise from plant in residential zone

Where any form of mechanical ventilation equipment or other noise generating plant is proposed as part of the development, prior to the issue of the Construction Certificate the Certifying Authority, shall be satisfied that the operation of an individual piece of equipment or operation of equipment in combination will not exceed more than 5dB(A) above the background level during the day when measured at the site's boundaries and shall not exceed the background level at night (10.00pm –6.00 am) when measured at the boundary of the site.

Note: A certificate from an appropriately qualified acoustic engineer is to be submitted with the Construction Certificate, certifying that all mechanical ventilation equipment or other noise generating plant in isolation or in combination with other plant will comply with the above requirements.

Reason: To comply with best practice standards for residential acoustic amenity.

32. Location of plant (residential flat buildings)

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that all plant and equipment (including but not limited to air conditioning equipment) is located within the basement and/or the roof level mechanical equipment platforms that are identified on the approved architectural plans.

Note: Architectural plans identifying the location of all plant and equipment shall be provided to the Certifying Authority.

Reason: To minimise impact on surrounding properties, improved visual appearance and amenity for locality.

33. Driveway crossing levels

Prior to issue of the Construction Certificate, driveway and associated footpath levels for any new, reconstructed or extended sections of driveway crossings between the property boundary and road alignment must be obtained from Ku-ring-gai Council. Such levels are only able to be issued by Council under the Roads Act 1993. All footpath crossings, laybacks and driveways are to be constructed according to Council's specifications "Construction of Gutter Crossings and Footpath Crossings".

Specifications are issued with alignment levels after completing the necessary application form at Customer Services and payment of the assessment fee. When completing the request for driveway levels application from Council, the applicant must attach a copy of the relevant development application drawing which indicates the position and proposed level of the proposed driveway at the boundary alignment.

This development consent is for works wholly within the property. Development consent does not imply approval of footpath or driveway levels, materials or location within the road reserve, regardless of whether this information is shown on the development application plans. The grading of such footpaths or driveways outside the property shall comply with Council's standard requirements. The suitability of the grade of such paths or driveways inside the property is the sole responsibility of the applicant and the required alignment levels fixed by Council may impact upon these levels.

The construction of footpaths and driveways outside the property in materials other than those approved by Council is not permitted.

Reason: To provide suitable vehicular access without disruption to pedestrian and vehicular traffic.

34. Driveway grades – basement carparks

Prior to the issue of the Construction Certificate for each stage, longitudinal driveway sections are to be prepared by a qualified civil/traffic engineer and be submitted for to and approved by the Certifying Authority. These profiles are to be at 1:100 scale along both edges of the proposed driveway, starting from the centreline of the frontage street carriageway to the proposed basement floor level. The traffic engineer shall provide specific written certification on the plans that:

- vehicular access can be obtained using grades of 20% (1 in 5) maximum (Stage 1) or 25% (1 in 4) maximum (Stages 2 and 3) and
- all changes in grade (transitions) comply with Australian Standard 2890.1 – “Off-street car parking” (refer clause 2.5.3) to prevent the scraping of the underside of vehicles.

If a new driveway crossing is proposed, the longitudinal sections must incorporate the driveway crossing levels as issued by Council upon prior application.

Reason: To provide suitable vehicular access without disruption to pedestrian and vehicular traffic.

35. Basement car parking details

Prior to issue of the Construction Certificate for each stage, certified parking layout plan(s) to scale showing all aspects of the vehicle access and accommodation arrangements must be submitted to and approved by the Certifying Authority. A qualified civil/traffic engineer must review the proposed vehicle access and accommodation layout and provide written certification on the plans that:

- all parking space dimensions, driveway and aisle widths, driveway grades, transitions, circulation ramps, blind aisle situations and other trafficked areas comply with Australian Standard 2890.1 – 2004 “Off-street car parking”
- a clear height clearance of **2.6 metres** (required under DCP40 for waste collection trucks) is provided over the designated garbage collection truck manoeuvring areas within the basement
- no doors or gates are provided in the access driveways to the basement carpark which would prevent unrestricted access for internal garbage collection at any time from the basement garbage storage and collection area
- the vehicle access and accommodation arrangements are to be

constructed and marked in accordance with the certified plans

Reason: To ensure that parking spaces are in accordance with the approved development.

36. Car parking allocation

Car parking within the development shall be allocated in the following way:

Resident car spaces	132
Visitor spaces	31
Total spaces	163

Each adaptable dwelling must be provided with car parking complying with the dimensional and location requirements of AS2890.1 – parking spaces for people with disabilities.

At least one visitor space shall also comply with the dimensional and location requirements of AS2890.1 – parking spaces for people with disabilities.

Consideration must be given to the means of access from disabled car parking spaces to other areas within the building and to footpath and roads and shall be clearly shown on the plans submitted with the Construction Certificate.

Reason: To ensure equity of access and appropriate facilities are available for people with disabilities in accordance with federal legislation.

37. Design of works in public road (Roads Act approval)

Prior to issue of the Construction Certificate for Stage 1, the Certifying Authority shall be satisfied that engineering plans and specifications prepared by a qualified consulting engineer have been approved by Council's Development Engineer. The plans to be assessed must be to a detail suitable for construction issue purposes and must detail the following infrastructure works required in Mona Vale Road:

- 300mm diameter pipe connection across the footpath and new 1.8 metre extended kerb inlet pit over existing drainage pipe in Mona Vale Road.

Development consent does not give approval to these works in the road reserve. The applicant must obtain a separate approval under sections 138 and 139 of The Roads Act 1993 for the works in the road reserve required as part of the development. The Construction Certificate must not be issued, and these works must not proceed until Council has issued a formal written approval under the Roads Act 1993.

The required plans and specifications are to be designed in accordance with the General Specification for the Construction of Road and Drainage Works in Ku-ring-gai Council, dated November 2004. The drawings must detail existing

utility services and trees affected by the works, erosion control requirements and traffic management requirements during the course of works. Survey must be undertaken as required. Traffic management is to be certified on the drawings as being in accordance with the documents SAA HB81.1 – 1996 – Field Guide for Traffic Control at Works on Roads – Part 1 and RTA Traffic Control at Work Sites (1998). Construction of the works must proceed only in accordance with any conditions attached to the Roads Act approval issued by Council.

A minimum of three (3) weeks will be required for Council to assess the Roads Act application. Early submission of the Roads Act application is recommended to avoid delays in obtaining a Construction Certificate. An engineering assessment and inspection fee (set out in Council's adopted fees and charges) is payable and Council will withhold any consent and approved plans until full payment of the correct fees. Plans and specifications must be marked to the attention of Council's Development Engineers. In addition, a copy of this condition must be provided, together with a covering letter stating the full address of the property and the accompanying DA number.

Reason: To ensure that the plans are suitable for construction purposes.

38. Energy Australia requirements

Prior to issue of the Construction Certificate for Stage 1, the applicant must contact Energy Australia regarding power supply for the subject development. A written response detailing the full requirements of Energy Australia (including any need for underground cabling, substations or similar within or in the vicinity the development) shall be submitted to the Principal Certifying Authority for approval prior to issue of the Construction Certificate.

Any structures or other requirements of Energy Australia shall be indicated on the plans issued with the Construction Certificate, to the satisfaction of the Principal Certifying Authority and Energy Australia. The requirements of Energy Australia must be met in full prior to issue of the Occupation Certificate.

Reason: To ensure compliance with the requirements of Energy Australia.

39. Utility provider requirements

Prior to issue of the Construction Certificate, the applicant must make contact with all relevant utility providers whose services will be impacted upon by the development. A written copy of the requirements of each provider, as determined necessary by the Certifying Authority, must be obtained. All utility services or appropriate conduits for the same must be provided by the developer in accordance with the specifications of the utility providers.

Reason: To ensure compliance with the requirements of relevant utility providers.

**CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF THE
CONSTRUCTION CERTIFICATE OR PRIOR TO DEMOLITION,
EXCAVATION OR CONSTRUCTION (WHICHEVER COMES FIRST):**

40. Infrastructure restorations fee

To ensure that damage to Council Property as a result of construction activity is rectified in a timely matter:

- a) All work or activity taken in furtherance of the development the subject of this approval must be undertaken in a manner to avoid damage to Council Property and must not jeopardise the safety of any person using or occupying the adjacent public areas.
- b) The applicant, builder, developer or any person acting in reliance on this approval shall be responsible for making good any damage to Council Property, and for the removal from Council Property of any waste bin, building materials, sediment, silt, or any other material or article.
- c) The Infrastructure Restoration Fee must be paid to the Council by the applicant prior to both the issue of the Construction Certificate and the commencement of any earthworks or construction.
- d) In consideration of payment of the Infrastructure Restorations Fee, Council will undertake such inspections of Council Property as Council considers necessary and also undertake, on behalf of the applicant, such restoration work to Council Property, if any, that Council considers necessary as a consequence of the development. The provision of such restoration work by the Council does not absolve any person of the responsibilities contained in (a) to (b) above. Restoration work to be undertaken by the Council referred to in this condition is limited to work that can be undertaken by Council at a cost of not more than the Infrastructure Restorations Fee payable pursuant to this condition.
- e) In this condition:

“Council Property” includes any road, footway, footpath paving, kerbing, guttering, crossings, street furniture, seats, letter bins, trees, shrubs, lawns, mounds, bushland, and similar structures or features on any road or public road within the meaning of the Local Government Act 1993 (NSW) or any public place; and

“Infrastructure Restoration Fee” means the Infrastructure Restorations Fee calculated in accordance with the Schedule of Fees & Charges adopted by Council as at the date of payment and the cost of any inspections required by the Council of Council Property associated with this condition.

Reason: To maintain public infrastructure.

41. Roads and Maritime Services Requirements

1. The design and construction of the proposed new entry and exit driveway along Mona Vale Road shall be in accordance with AS2890.1 - 2004 and RMS requirements. Details of these requirements should be obtained from RMS Project Services Manager, Traffic Projects Section, Parramatta (telephone 02 8849 2496).

Detailed design plans of the proposed modified driveway are to be submitted to RMS for approval prior to the commencement of any road works.

A plan checking fee (amount to be advised) and lodgement of a performance bond may be required from the applicant prior to the release of the approved road design plans by RMS.

All redundant driveways on Mona Vale Road shall be removed and replaced with kerband gutter to match existing.

2. All vehicles shall be wholly contained on site before being required to stop.
3. The required sight lines to pedestrians, other vehicles and cyclists shall not be compromised by landscaping, signage, fencing or display materials.
4. The swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan showing the swept path of service vehicles entering and exiting the site shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.
5. The layout of vehicle parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements and parking bay dimensions) should be in accordance with AS 2890.1- 2004.
6. Council should ensure that post-development storm water discharge from the subject site into the RMS drainage system does not exceed the pre-development discharge. Should there be changes to RMS drainage system then detailed design plans and hydraulic calculations of the stormwater drainage system are to be submitted to RMS for approval, prior to the commencement of any works.

Details should be forwarded to:

The Sydney Asset Management
Roads and Maritime Services
PO Box 973 Parramatta CBD 2124.

7. A plan checking fee will be payable and a performance bond may be required before RMS approval is issued. With regard to the Civil Works requirement please contact the RMS Project Engineer, External Works Ph: 88492114 or Fax: 8849 2766.
8. The proposed development should be designed such that road traffic noise from Mona Vale Road, is mitigated by durable materials, in accordance with Office of Environment and Heritage criteria for new land use developments (The NSW Road Noise Policy, July 2011). The RTA's Environmental Noise Management Manual provides practical advice in selecting noise mitigation treatments.
9. During construction, all demolition and construction vehicles should be contained wholly within the site and vehicles must enter the site before stopping. If this is not possible for all construction activities, the applicant will be required to obtain a Road Occupancy Licence.
10. All demolition and construction vehicles should be contained wholly within the site as a work zone permit will not be approved on Mona Vale Road.
11. All works associated with the proposed development shall be borne by the developer and at no cost to Roads and Maritime Services.

Reason: The concurrence of Roads and Maritime Services under Section 138 of the Roads Act is required for this development. The concurrence of Roads and Maritime Services is subject to the requirements listed above.

42. Section 94 Contributions – Stage 1

This development is subject to a development contribution calculated in accordance with Ku-ring-gai Contributions Plan 2010, being a s94 Contributions Plan in effect under the Environmental Planning and Assessment Act, as follows:

Key Community Infrastructure	Amount
Local parks and local sporting facilities	\$503,277.09
Local recreation and cultural facilities;	\$67,306.00
Local social facilities	
Local roads, local bus facilities & local drainage facilities (new roads and road modifications)	\$29,247.74
Local roads, local bus facilities & local drainage facilities (townscape, transport & pedestrian facilities)	\$315,112.91
Total:	\$914,943.74

The contribution shall be paid to Council prior to the issue of any Construction Certificate, Linen Plan, Certificate of Subdivision or Occupation Certificate whichever comes first in accordance with Ku-ring-gai Contributions Plan 2010.

The contributions specified above are subject to indexation and will continue to be indexed to reflect changes in the consumer price index and housing price index until they are paid in accordance with Ku-ring-gai Contributions Plan 2010 to reflect changes in the consumer price index and housing price index. Prior to payment, please contact Council directly to verify the current payable contributions.

Ku-ring-gai Contributions Plan 2010 may be viewed at www.kmc.nsw.gov.au and at the Council Chambers.

Note: For development staging details refer to the approved Environmental & Construction Site Management Plans prepared by ACOR Appleyard and identified as Drawing Nos. SY100003/E6 Issue 8, SY100003/E7 Issue 7 and SY100003/E8 Issue 7.

Reason: To ensure the provision, extension or augmentation of the Key Community Infrastructure identified in Ku-ring-gai Contributions Plan 2010 that will, or is likely to be, required as a consequence of the development.

43. Section 94 Contributions – Stage 2

This development is subject to a development contribution calculated in accordance with Ku-ring-gai Contributions Plan 2010, being a s94 Contributions Plan in effect under the Environmental Planning and Assessment Act, as follows:

Key Community Infrastructure	Amount
Local parks and local sporting facilities	\$481,182.03
Local recreation and cultural facilities;	\$64,351.09
Local social facilities	
Local roads, local bus facilities & local drainage facilities (new roads and road modifications)	\$28,170.22
Local roads, local bus facilities & local drainage facilities (townscape, transport & pedestrian facilities)	\$301,278.69
Total:	\$874,982.03

The contribution shall be paid to Council prior to the issue of any Construction Certificate, Linen Plan, Certificate of Subdivision or Occupation Certificate whichever comes first in accordance with Ku-ring-gai Contributions Plan 2010.

The contributions specified above are subject to indexation and will continue to be indexed to reflect changes in the consumer price index and housing price index until they are paid in accordance with Ku-ring-gai Contributions Plan 2010 to reflect changes in the consumer price index and housing price index. Prior to payment, please contact Council directly to verify the current payable contributions.

Ku-ring-gai Contributions Plan 2010 may be viewed at www.kmc.nsw.gov.au and at the Council Chambers.

Note: For development staging details refer to the approved Environmental & Construction Site Management Plans prepared by ACOR Appleyard and identified as Drawing Nos. SY100003/E6 Issue 8, SY100003/E7 Issue 7 and SY100003/E8 Issue 7.

Reason: To ensure the provision, extension or augmentation of the Key Community Infrastructure identified in Ku-ring-gai Contributions Plan 2010 that will, or is likely to be, required as a consequence of the development.

44. Section 94 Contributions – Stage 3

This development is subject to a development contribution calculated in accordance with Ku-ring-gai Contributions Plan 2010, being a s94 Contributions Plan in effect under the Environmental Planning and Assessment Act, as follows:

Key Community Infrastructure	Amount
Local parks and local sporting facilities	\$388,709.97
Local recreation and cultural facilities;	\$51,984.28
Local social facilities	
Local roads, local bus facilities & local drainage facilities (new roads and road modifications)	\$22,243.62
Local roads, local bus facilities & local drainage facilities (townscape, transport & pedestrian facilities)	\$243,379.89
Total:	\$706,317.76

The contribution shall be paid to Council prior to the issue of any Construction Certificate, Linen Plan, Certificate of Subdivision or Occupation Certificate whichever comes first in accordance with Ku-ring-gai Contributions Plan 2010.

The contributions specified above are subject to indexation and will continue to be indexed to reflect changes in the consumer price index and housing price index until they are paid in accordance with Ku-ring-gai Contributions Plan 2010 to reflect changes in the consumer price index and housing price index. Prior to payment, please contact Council directly to verify the current payable contributions.

Ku-ring-gai Contributions Plan 2010 may be viewed at www.kmc.nsw.gov.au and at the Council Chambers.

Note: For development staging details refer to the approved Environmental & Construction Site Management Plans prepared by ACOR Appleyard and identified as Drawing Nos. SY100003/E6 Issue 8, SY100003/E7 Issue 7 and SY100003/E8 Issue 7.

Reason: To ensure the provision, extension or augmentation of the Key Community Infrastructure identified in Ku-ring-gai Contributions Plan 2010 that will, or is likely to be, required as a consequence of the development.

CONDITIONS TO BE SATISFIED DURING THE DEMOLITION, EXCAVATION AND CONSTRUCTION PHASES:

45. Prescribed conditions

The applicant shall comply with any relevant prescribed conditions of development consent under clause 98 of the Environmental Planning and Assessment Regulation. For the purposes of section 80A (11) of the Environmental Planning and Assessment Act, the following conditions are prescribed in relation to a development consent for development that involves any building work:

- The work must be carried out in accordance with the requirements of the Building Code of Australia
- In the case of residential building work for which the Home Building Act 1989 requires there to be a contract of insurance in force in accordance with Part 6 of that Act, that such a contract of insurance is in force before any works commence.

Reason: Statutory requirement.

46. Hours of work

Demolition, excavation, construction work and deliveries of building material and equipment must not take place outside the hours of 7.00am to 5.00pm Monday to Friday and 8.00am to 12 noon Saturday. No work and no deliveries are to take place on Sundays and public holidays.

Excavation or removal of any materials using machinery of any kind, including compressors and jack hammers, must be limited to between 7.30am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon 1.00pm.

Where it is necessary for works to occur outside of these hours (ie) placement of concrete for large floor areas on large residential/commercial developments or where building processes require the use of oversized trucks and/or cranes that are restricted by the RTA from travelling during daylight hours to deliver, erect or remove machinery, tower cranes, pre-cast panels, beams, tanks or service equipment to or from the site, approval for such activities will be subject to the issue of an "outside of hours works permit" from Council as well as notification of the surrounding properties likely to be affected by the proposed works.

Note: Failure to obtain a permit to work outside of the approved hours will result in on the spot fines being issued.

Reason: To ensure reasonable standards of amenity for occupants of neighbouring properties.

47. Temporary irrigation

Temporary irrigation within the Tree Protection Fencing is to be provided. Irrigation volumes are to be determined by the Project Arborist.

Reason: To protect trees to be retained on site.

48. Demolition of existing site structures

To preserve the health and condition of existing trees to be retained, all demolition of existing building and landscape structures including tree removal, are to be undertaken within the access restricted to the existing driveways and building platforms and be in accordance with Section 13.17 of Arborist Report, prepared by Earthscape Horticultural Services, dated November 2011. Where vehicular access is required across existing soft landscape area, temporary ground protection capable of supporting the vehicles is to be constructed in accordance with approved temporary driveway shown on the tree Protection Plan, Appendix 7, Arborist Report, Earthscape Horticultural Services, dated November 2011, and Environmental Site Management Plans, dwg SY100003/E5, E7, E8 Issue 7 and SY100003/E6 Issue 8, Acor Appleyard, March 2012 and as per Section 4.5.3, AS4970-2009 Protection of trees on development sites.

Reason: To protect trees to be retained on site.

49. Reduction or elimination of groundwater impact

If, during the detailed design of the development or during construction, significant quantities of groundwater are identified or encountered, the NSW Office of Water shall be consulted. Any measures as directed or agreed to by the NSW Office of Water to reduce or eliminate the inflow of groundwater to the construction site shall be incorporated into the detailed design and/or construction of the development.

Reason: To protect the environment.

50. Approved plans to be on site

A copy of all approved and certified plans, specifications and documents incorporating conditions of consent and certification (including the Construction Certificate if required for the work) shall be kept on site at all times during the demolition, excavation and construction phases and must be readily available to any officer of Council or the Principal Certifying Authority.

Reason: To ensure that the development is in accordance with the determination.

51. Construction noise

During excavation, demolition and construction phases, noise generated from the site shall be controlled in accordance with the recommendations of the approved noise and vibration management plan.

Reason: To ensure reasonable standards of amenity to neighbouring properties.

52. Site notice

A site notice shall be erected on the site prior to any work commencing and shall be displayed throughout the works period.

The site notice must:

- be prominently displayed at the boundaries of the site for the purposes of informing the public that unauthorised entry to the site is not permitted
- display project details including, but not limited to the details of the builder, Principal Certifying Authority and structural engineer
- be durable and weatherproof
- display the approved hours of work, the name of the site/project manager, the responsible managing company (if any), its address and 24 hour contact phone number for any inquiries, including construction/noise complaint are to be displayed on the site notice
- be mounted at eye level on the perimeter hoardings/fencing and is to state that unauthorised entry to the site is not permitted

Reason: To ensure public safety and public information.

53. Dust control

During excavation, demolition and construction, adequate measures shall be taken to prevent dust from affecting the amenity of the neighbourhood. The following measures must be adopted:

- physical barriers shall be erected at right angles to the prevailing wind direction or shall be placed around or over dust sources to prevent wind or activity from generating dust
- earthworks and scheduling activities shall be managed to coincide with the next stage of development to minimise the amount of time the site is left cut or exposed
- all materials shall be stored or stockpiled at the best locations
- the ground surface should be dampened slightly to prevent dust from becoming airborne but should not be wet to the extent that run-off occurs
- all vehicles carrying spoil or rubble to or from the site shall at all times be covered to prevent the escape of dust
- all equipment wheels shall be washed before exiting the site using

- manual or automated sprayers and drive-through washing bays
- gates shall be closed between vehicle movements and shall be fitted with shade cloth
- cleaning of footpaths and roadways shall be carried out daily

Reason: To protect the environment and amenity of surrounding properties.

54. Further geotechnical input

The geotechnical and hydro-geological works implementation, inspection, testing and monitoring program for the excavation and construction works must be in accordance with the report by Douglas Partners. Over the course of the works, a qualified geotechnical/hydro-geological engineer must complete the following:

- further geotechnical investigations and testing recommended in the above report(s) and as determined necessary
- further monitoring and inspection at the hold points recommended in the above report(s) and as determined necessary
- written report(s) including certification(s) of the geotechnical inspection, testing and monitoring programs

Reason: To ensure the safety and protection of property.

55. Compliance with submitted geotechnical report

A contractor with specialist excavation experience must undertake the excavations for the development and a suitably qualified and consulting geotechnical engineer must oversee excavation.

Geotechnical aspects of the development work, namely:

- appropriate excavation method and vibration control
- support and retention of excavated faces
- hydro-geological considerations

must be undertaken in accordance with the recommendations of the geotechnical report prepared by Douglas Partners. Approval must be obtained from all affected property owners, including Ku-ring-gai Council, where rock anchors (both temporary and permanent) are proposed below adjoining property(ies).

Reason: To ensure the safety and protection of property.

56. Toilet facilities

During excavation, demolition and construction phases, toilet facilities are to be provided, on the work site, at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

Reason: Statutory requirement.

57. Approval for rock anchors

Approval is to be obtained from the property owner for any anchors proposed beneath adjoining private property. If such approval cannot be obtained, then the excavated faces are to be shored or propped in accordance with the recommendations of the geotechnical and structural engineers.

Reason: To ensure the ongoing safety and protection of property.

58. Maintenance period for works in public road

A maintenance period of six (6) months applies to all work in the public road reserve carried out by the applicant - after the works have been completed to the satisfaction of Ku-ring-gai Council. In that maintenance period, the applicant shall be liable for any section of the public infrastructure work which fails to perform in the designed manner, or as would reasonably be expected under the operating conditions. The maintenance period shall commence once the applicant receives a formal letter from Council stating that the works involving public infrastructure have been completed satisfactorily.

Reason: To protect public infrastructure.

59. Road reserve safety

All public footways and roadways fronting and adjacent to the site must be maintained in a safe condition at all times during the course of the development works. Construction materials must not be stored in the road reserve. A safe pedestrian circulation route and a pavement/route free of trip hazards must be maintained at all times on or adjacent to any public access ways fronting the construction site. Where public infrastructure is damaged, repair works must be carried out when and as directed by Council officers. Where pedestrian circulation is diverted on to the roadway or verge areas, clear directional signage and protective barricades must be installed in accordance with AS1742-3 (1996) "Traffic Control Devices for Work on Roads". If pedestrian circulation is not satisfactorily maintained across the site frontage, and action is not taken promptly to rectify the defects, Council may undertake proceedings to stop work.

Reason: To ensure safe public footways and roadways during construction.

60. Road repairs necessitated by excavation and construction works

It is highly likely that damage will be caused to the roadway at or near the subject site as a result of the construction (or demolition or excavation) works. The applicant, owner and builder (and demolition or excavation contractor as appropriate) will be held responsible for repair of such damage, regardless of the Infrastructure Restorations Fee paid (this fee is to cover wear and tear on Council's wider road network due to heavy vehicle traffic, not actual major

damage).

Section 102(1) of the Roads Act states “A person who causes damage to a public road is liable to pay to the appropriate roads authority the cost incurred by that authority in making good the damage.”

Council will notify when road repairs are needed, and if they are not carried out within 48 hours, then Council will proceed with the repairs, and will invoice the applicant, owner and relevant contractor for the balance.

Reason: To protect public infrastructure.

61. Services

Where required, the adjustment or inclusion of any new utility service facilities must be carried out by the applicant and in accordance with the requirements of the relevant utility authority. These works shall be at no cost to Council. It is the applicants' full responsibility to make contact with the relevant utility authorities to ascertain the impacts of the proposal upon utility services (including water, phone, gas and the like). Council accepts no responsibility for any matter arising from its approval to this application involving any influence upon utility services provided by another authority.

Reason: Provision of utility services.

62. Temporary rock anchors

If the use of temporary rock anchors extending into the road reserve is proposed, then approval must be obtained from Council and/or the Roads and Traffic Authority in accordance with Section 138 of the Roads Act 1993. The Applicant is to submit details of all the work that is to be considered, and the works are not to commence until approval has been granted. The designs are to include details of the following:

- How the temporary rock anchors will be left in a way that they will not harm or interfere with any future excavation in the public road
- That the locations of the rock anchors are registered with Dial Before You Dig
- That approval of all utility authorities likely to use the public road has been obtained. All temporary rock anchors are located outside the allocations for the various utilities as adopted by the Streets Opening Conference.
- That any remaining de-stressed rock anchors are sufficiently isolated from the structure that they cannot damage the structure if pulled during future excavations or work in the public road.
- That signs will be placed and maintained on the building stating that de-stressed rock anchors remain in the public road and include a contact number for the building manager. The signs are to be at least 600mm x 450mm with lettering on the signs is to be no less than 75mm high. The signs are to be at not more than 60m spacing. At least one sign must be

visible from all locations on the footpath outside the property. The wording on the signs is to be submitted to Council's Director Technical Services for approval before any signs are installed.

Permanent rock anchors are not to be used where any part of the anchor extends outside the development site into public areas or road reserves.

All works in the public road are to be carried out in accordance with the Conditions of Construction issued with any approval of works granted under Section 138 of the Roads Act 1993.

Reason: To ensure the ongoing safety and protection of property.

63. Drainage to street

Stormwater runoff from all new impervious areas and subsoil drainage systems shall be piped to the street drainage system. New drainage line connections to the street drainage system shall conform and comply with the requirements of Sections 5.3 and 5.4 of Ku-ring-gai Water Management Development Control Plan No. 47.

Reason: To protect the environment.

64. Sydney Water Section 73 Compliance Certificate

The applicant must obtain a **Section 73 Compliance Certificate** under the *Sydney Water Act 1994*. An application must be made through an authorised Water Servicing CoOrdinator. The applicant is to refer to "Your Business" section of Sydney Water's web site at www.sydneywater.com.au then the "e-develop" icon or telephone 13 20 92. Following application a "Notice of Requirements" will detail water and sewer extensions to be built and charges to be paid. Please make early contact with the CoOrdinator, since building of water/sewer extensions can be time consuming and may impact on other services and building, driveway or landscape design.

Reason: Statutory requirement.

65. Arborist's report

The trees to be retained shall be inspected, monitored and treated by a Project Arborist who must be a qualified (AQF) Level 5 arborist in accordance with AS4970-2009 Protection of trees on development sites. Regular inspections and documentation from the Project Arborist to the Principal Certifying Authority are required including at the following times or phases of work. All monitoring shall be recorded and provided to the Principal Certifying Authority prior to completion of the works.

Schedule	
Tree/location	Time of inspection

Tree 7/ <i>Pinus patula</i> (Mexican Pine) located within the front setback on the south western boundary	Demolition of masonry walls and driveway within TPZ
Tree 8/ <i>Melaleuca quinquenervia</i> (Broad Leaved Paperbark) located within the front setback on the south western boundary	Commencement of excavation for pedestrian path and stormwater line within TPZ
Tree 12/ <i>Araucaria columnaris</i> (Cook's Pine) located within the front setback on the south western boundary	Commencement of excavation for pedestrian path and stormwater line within TPZ
Tree 25/ <i>Pinus patula</i> (Mexican Pine) located within the front setback	Installation of ground protection for haulage roads and erection of scaffolding, excavation for substation within TPZ
Tree 28/ <i>Cedrus deodara</i> (Himalayan Cedar) located within the front setback.	Installation of ground protection for haulage roads and excavation for basement and entry path posts within TPZ
Tree 29/ <i>Cedrus deodara</i> (Himalayan Cedar) TPZ 8.3m The tree is located within the front setback.	Installation of ground protection for haulage roads and excavation for basement and driveway within TPZ
Tree 33b/ <i>Liquidambar styraciflua</i> (Liquidambar) located on the adjoining property adjacent to the front setback.	Installation of ground protection for haulage roads and excavation for stormwater lines and driveway within TPZ
Tree 35/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	Excavation for basement and thrust boring stormwater line within TPZ, installation of scaffolding

Tree 36/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	Excavation for basement, installation of scaffolding
Tree 64/ <i>Archontophoenix cunninghamiana</i> (Bangalow Palm) located on eastern boundary, east of proposed Block C	Thrust boring for stormwater line within TPZ
Tree 66a/ <i>Franklinia axillaris</i> (Gordonia) located on eastern boundary, east of proposed Block C	Thrust boring for stormwater line within TPZ
Tree 72/ <i>Jacaranda mimosifolia</i> (Jacaranda) located on north-west boundary, north of northern access handle, within adjoining property	Demolition of existing pavement, installation of ground protection for haulage roads
Tree 73/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the access handle (entry from Memorial Road).	Demolition of existing pavement, installation of ground protection for haulage roads
Tree 74/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the proposed driveway (entry from Memorial Road)	Demolition of existing pavement, installation of ground protection for haulage roads
Tree 75/ <i>Schinus areira</i> (Peppercorn Tree) TPZ 4.2 The tree is located on the adjoining property, 3.0m south of the proposed driveway (entry from Memorial Road)	Demolition of existing pavement, installation of ground protection for haulage roads
Tree 76/ <i>Stenocarpus sinuatus</i> (Firewheel Tree) TPZ 7.2 The tree is located within the adjoining property on the western boundary.	Installation of ground protection for haulage roads, thrust boring for stormwater lines within TPZ
Tree 87/ <i>Liquidambar styraciflua</i> (Liquidambar) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	Demolition of existing pavement, installation of ground protection for haulage roads, excavation for driveway, footpath and stormwater lines within TPZ
Tree 87a/ <i>Agonis flexuosa</i> (Willow Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	Demolition of existing pavement, installation of ground protection for haulage roads,

	excavation for driveway, footpath and stormwater lines within TPZ
Tree 87b/ <i>Lagerstroemia indica</i> (Crepe Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	Installation of ground protection for haulage roads, excavation for footpath and stormwater lines within TPZ
Tree 1/ <i>Ginkgo biloba</i> (Maiden-hair Tree) located on the Mona Vale Road nature strip	Installation of ground protection for haulage roads, excavation for front fence within TPZ
Tree 3/ <i>Eucalyptus microcorys</i> (Tallowood) located on the Mona Vale Road nature strip	Installation of ground protection for haulage roads, excavation for stormwater lines and driveway within TPZ

Reason: To ensure protection of existing trees.

66. Canopy/root pruning

Canopy and/or root pruning of the following tree(s) which is necessary to accommodate the approved building works shall be undertaken by an experienced AQF level 3 Arborist under the supervision of the Project Arborist and in accordance with the reduction pruning clause of AS4373-2007. All other branches are to be tied back and protected during construction, under the supervision of a qualified arborist.

Schedule	
Tree/location	Tree works
Tree 25/ <i>Pinus patula</i> (Mexican Pine) located within the front setback	Minor pruning for building clearance
Tree 28/ <i>Cedrus deodara</i> (Himalayan Cedar) located within the front setback.	Minor pruning for building clearance
Tree 29/ <i>Cedrus deodara</i> (Himalayan Cedar) TPZ 8.3m The tree is located within the front setback.	Minor pruning for building clearance
Tree 35/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	Minor pruning for building clearance
Tree 36/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	Minor pruning for building clearance
Tree 55/ <i>Celtis sinensis</i> (Chinese Nettle Tree) located on eastern boundary, east of proposed Block C	Minor pruning for building clearance

Reason: To protect the environment.

67. Treatment of tree roots

If tree roots are required to be severed for the purposes of constructing the approved works, they shall be cut cleanly by hand, by an experienced Arborist/Horticulturist with a minimum qualification of Horticulture Certificate or Tree Surgery Certificate. All pruning works shall be undertaken as specified in Australian Standard 4373-2007 – Pruning of Amenity Trees.

Reason: To protect existing trees.

68. Cutting of tree roots

No tree roots of 30mm or greater in diameter located within the specified radius of the trunk(s) of the following, tree(s) shall be severed or injured in the process of any works during the construction period.

Schedule	
Tree/location	Radius from trunk
Tree 7/ <i>Pinus patula</i> (Mexican Pine) located within the front setback on the south western boundary	6.2m
Tree 8/ <i>Melaleuca quinquenervia</i> (Broad Leaved Paperbark) located within the front setback on the south western boundary	4.3m
Tree 12/ <i>Araucaria columnaris</i> (Cook's Pine) located within the front setback on the south western boundary	5.3m
Tree 25/ <i>Pinus patula</i> (Mexican Pine) located within the front setback	6.6m
Tree 28/ <i>Cedrus deodara</i> (Himalayan Cedar) located within the front setback.	7.8m
Tree 29/ <i>Cedrus deodara</i> (Himalayan Cedar) TPZ 8.3m The tree is located within the front setback.	8.3m
Tree 33b/ <i>Liquidambar styraciflua</i> (Liquidambar) located on the adjoining property adjacent to the front setback.	7.8m
Tree 35/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	7.8m
Tree 36/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	9.0m
Tree 64/ <i>Archontophoenix cunninghamiana</i> (Bangalow Palm) located on eastern boundary, east of proposed Block C	2.0m
Tree 66a/ <i>Franklinia axillaris</i> (Gordonia) located on eastern boundary, east of proposed Block C	4.5m
Tree 72/ <i>Jacaranda mimosifolia</i> (Jacaranda) located on north-west boundary, north of northern access handle, within adjoining property	8.4m
Tree 73/ <i>Celtis occidentalis</i> (Hackberry) located within	4.2m

the adjoining property on the north side of the access handle (entry from Memorial Road).	
Tree 74/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the proposed driveway (entry from Memorial Road)	4.5m
Tree 75/ <i>Schinus areira</i> (Peppercorn Tree) TPZ 4.2 The tree is located on the adjoining property, 3.0m south of the proposed driveway (entry from Memorial Road)	4.2m
Tree 76/ <i>Stenocarpus sinuatus</i> (Firewheel Tree) TPZ 7.2 The tree is located within the adjoining property on the western boundary.	7.2m
Tree 87/ <i>Liquidambar styraciflua</i> (Liquidambar) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	8.4m
Tree 87a/ <i>Agonis flexuosa</i> (Willow Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	4.2m
Tree 87b/ <i>Lagerstroemia indica</i> (Crepe Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	4.5m
Tree 1/ <i>Ginkgo biloba</i> (Maiden-hair Tree) located on the Mona Vale Road nature strip	5.2m
Tree 3/ <i>Eucalyptus microcorys</i> (Tallowood) located on the Mona Vale Road nature strip	8.4m

Reason: To protect existing trees.

69. Excavation near trees

No mechanical excavation shall be undertaken within the specified radius of the trunk(s) of the following tree(s) until root pruning by hand to minimum 700mm depth along the perimeter line of such works, is completed:

Schedule	
Tree/location	Radius from trunk
Tree 7/ <i>Pinus patula</i> (Mexican Pine) located within the front setback on the south western boundary	6.2m
Tree 8/ <i>Melaleuca quinquenervia</i> (Broad Leaved Paperbark) located within the front setback on the south western boundary	4.3m
Tree 12/ <i>Araucaria columnaris</i> (Cook's Pine) located within the front setback on the south western boundary	5.3m
Tree 25/ <i>Pinus patula</i> (Mexican Pine) located within the front setback	6.6m
Tree 28/ <i>Cedrus deodara</i> (Himalayan Cedar) located within the front setback.	7.8m
Tree 29/ <i>Cedrus deodara</i> (Himalayan Cedar) TPZ 8.3m The tree is located within the front setback.	8.3m
Tree 33b/ <i>Liquidambar styraciflua</i> (Liquidambar) located	7.8m

on the adjoining property adjacent to the front setback.	
Tree 35/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	7.8m
Tree 36/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	9.0m
Tree 64/ <i>Archontophoenix cunninghamiana</i> (Bangalow Palm) located on eastern boundary, east of proposed Block C	2.0m
Tree 66a/ <i>Franklinia axillaris</i> (Gordonia) located on eastern boundary, east of proposed Block C	4.5m
Tree 72/ <i>Jacaranda mimosifolia</i> (Jacaranda) located on north-west boundary, north of northern access handle, within adjoining property	8.4m
Tree 73/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the access handle (entry from Memorial Road).	4.2m
Tree 74/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the proposed driveway (entry from Memorial Road)	4.5m
Tree 75/ <i>Schinus areira</i> (Peppercorn Tree) TPZ 4.2 The tree is located on the adjoining property, 3.0m south of the proposed driveway (entry from Memorial Road)	4.2m
Tree 76/ <i>Stenocarpus sinuatus</i> (Firewheel Tree) TPZ 7.2 The tree is located within the adjoining property on the western boundary.	7.2m
Tree 87/ <i>Liquidambar styraciflua</i> (Liquidambar) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	8.4m
Tree 87a/ <i>Agonis flexuosa</i> (Willow Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	4.2m
Tree 87b/ <i>Lagerstroemia indica</i> (Crepe Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	4.5m
Tree 1/ <i>Ginkgo biloba</i> (Maiden-hair Tree) located on the Mona Vale Road nature strip	5.2m
Tree 3/ <i>Eucalyptus microcorys</i> (Tallowood) located on the Mona Vale Road nature strip	8.4m

Reason: To protect existing trees.

70. Hand excavation

All excavation within the specified radius of the trunk(s) of the following tree(s) shall be hand dug under the supervision of the Project Arborist.

Schedule	
Tree/location	Radius from trunk
Tree 7/ <i>Pinus patula</i> (Mexican Pine) located within the	6.2m

front setback on the south western boundary	
Tree 8/ <i>Melaleuca quinquenervia</i> (Broad Leaved Paperbark) located within the front setback on the south western boundary	4.3m
Tree 12/ <i>Araucaria columnaris</i> (Cook's Pine) located within the front setback on the south western boundary	5.3m
Tree 25/ <i>Pinus patula</i> (Mexican Pine) located within the front setback	6.6m
Tree 28/ <i>Cedrus deodara</i> (Himalayan Cedar) located within the front setback.	7.8m
Tree 29/ <i>Cedrus deodara</i> (Himalayan Cedar) TPZ 8.3m The tree is located within the front setback.	8.3m
Tree 33b/ <i>Liquidambar styraciflua</i> (Liquidambar) located on the adjoining property adjacent to the front setback.	7.8m
Tree 35/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	7.8m
Tree 36/ <i>Lophostemon confertus</i> (Brushbox) located between Block A and Block B	9.0m
Tree 64/ <i>Archontophoenix cunninghamiana</i> (Bangalow Palm) located on eastern boundary, east of proposed Block C	2.0m
Tree 66a/ <i>Franklinia axillaris</i> (Gordonia) located on eastern boundary, east of proposed Block C	4.5m
Tree 72/ <i>Jacaranda mimosifolia</i> (Jacaranda) located on north-west boundary, north of northern access handle, within adjoining property	8.4m
Tree 73/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the access handle (entry from Memorial Road).	4.2m
Tree 74/ <i>Celtis occidentalis</i> (Hackberry) located within the adjoining property on the north side of the proposed driveway (entry from Memorial Road)	4.5m
Tree 75/ <i>Schinus areira</i> (Peppercorn Tree) TPZ 4.2 The tree is located on the adjoining property, 3.0m south of the proposed driveway (entry from Memorial Road)	4.2m
Tree 76/ <i>Stenocarpus sinuatus</i> (Firewheel Tree) TPZ 7.2 The tree is located within the adjoining property on the western boundary.	7.2m
Tree 87/ <i>Liquidambar styraciflua</i> (Liquidambar) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	8.4m
Tree 87a/ <i>Agonis flexuosa</i> (Willow Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	4.2m
Tree 87b/ <i>Lagerstroemia indica</i> (Crepe Myrtle) located within the adjoining property, south of the proposed driveway (exit to Memorial Road).	4.5m
Tree 1/ <i>Ginkgo biloba</i> (Maiden-hair Tree) located on the Mona Vale Road nature strip	5.2m

Tree 3/ <i>Eucalyptus microcorys</i> (Tallowood) located on the Mona Vale Road nature strip	8.4m
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Reason: To protect existing trees.

71. No storage of materials beneath trees

No activities, storage or disposal of materials shall take place beneath the canopy of any tree protected under Council's Tree Preservation Order at any time.

Reason: To protect existing trees.

72. Removal of refuse

All builders' refuse, spoil and/or material unsuitable for use in landscape areas shall be removed from the site on completion of the building works.

Reason: To protect the environment.

73. Canopy replenishment trees to be planted

The canopy replenishment trees to be planted shall be maintained in a healthy and vigorous condition until they attain a height of 5.0 metres whereby they will be protected by Council's Tree Preservation Order. Any of the trees found faulty, damaged, dying or dead shall be replaced with the same species.

Reason: To maintain the treed character of the area.

74. Removal of noxious plants & weeds

All noxious and/or environmental weed species shall be removed from the property prior to completion of building works.

Reason: To protect the environment.

75. Survey and inspection of waste collection clearance and path of travel

At the stage when formwork for the Stage 1 ground floor slab is in place and prior to concrete being poured, a registered surveyor is to:

- ascertain the reduced level of the underside of the slab at the driveway entry,
- certify that the level is not lower than the level shown on the approved DA plans; and
- certify that the minimum headroom of 2.6 metres will be available for the full path of travel of the small waste collection vehicle from the street to the collection area.
- This certification is to be provided to Council's Development Engineer

- prior to any concrete being poured for the ground floor slab.
- No work is to proceed until Council has undertaken an inspection to determine clearance and path of travel.

At the stage when formwork for the ground floor slab is in place and prior to concrete being poured, Council's Development Engineer and Manager Waste Services are to carry out an inspection of the site to confirm the clearance available for the full path of travel of the small waste collection vehicle from the street to the collection area. This inspection may not be carried out by a private certifier because waste management is not a matter listed in Clause 161 of the Environmental Planning and Assessment Regulation 2000.

Reason: To ensure access will be available for Council's contractors to collect waste from the collection point.

76. On site retention of waste dockets

All demolition, excavation and construction waste dockets are to be retained on site, or at suitable location, in order to confirm which facility received materials generated from the site for recycling or disposal.

- Each docket is to be an official receipt from a facility authorised to accept the material type, for disposal or processing.
- This information is to be made available at the request of an Authorised Officer of Council.

Reason: To protect the environment.

CONDITIONS TO BE SATISFIED PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE:

77. Easement for waste collection

Prior to issue of the Occupation Certificate for Stage 1, an easement for waste collection is to be created under Section 88B or 88E of the Conveyancing Act 1919. This is to permit legal access for Council, Council's contractors and their vehicles over the subject property for the purpose of collecting waste from the property. The terms of the easement are to be generally in accordance with Council's draft terms for an easement for waste collection and shall be to the satisfaction of Council's Development Engineer.

Reason: To permit legal access for Council, Council's contractors and their vehicles over the subject site for waste collection.

78. Compliance with BASIX Certificate

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that all commitments listed in BASIX Certificates numbered 367598M_04, 404354M_04, and 404379M_03 have been complied with.

Reason: Statutory requirement.

79. Completion of landscape works

Prior to the release of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that all landscape works, including the removal of all noxious and/or environmental weed species, have been undertaken in accordance with the approved plan(s) and conditions of consent.

Reason: To ensure that the landscape works are consistent with the development consent.

80. Completion of tree works

Prior to the release of the Occupation Certificate, the Principal Certifying Authority is to be satisfied that all tree works, including pruning in accordance with AS4373-2007 or remediation works in accordance with AS4370-2009, have been undertaken in accordance with the approved plan(s) and conditions of consent.

Reason: To ensure that the tree works are consistent with the development consent.

81. Certification of drainage works (dual occupancies and above)

Prior to issue of the Occupation Certificate for each stage, the Principal Certifying Authority is to be satisfied that:

- the stormwater drainage works for the relevant stage have been satisfactorily completed in accordance with the approved Construction Certificate drainage plans
- the minimum retention and on-site detention storage volume requirements of BASIX and Ku-ring-gai Water Management Development Control Plan No. 47 respectively, have been achieved (Stage 1)
- retained water is connected and available for use
- basement and subsoil areas are able to drain via a pump/sump system installed in accordance with AS3500.3 and Appendix 7.1.1 of Ku-ring-gai Water Management Development Control Plan No. 47
- all grates potentially accessible by children are secured
- components of the new drainage system have been installed by a licensed plumbing contractor in accordance with the Plumbing and Drainage Code AS3500.3 2003 and the Building Code of Australia
- all enclosed floor areas, including habitable and garage floor levels, are safeguarded from outside stormwater runoff ingress by suitable differences in finished levels, gradings and provision of stormwater collection devices

The rainwater certification sheet contained in Appendix 13 of the Ku-ring-gai

Water Management Development Control Plan No. 47, must be completed and attached to the certification. Where an on-site detention system has been constructed, the on-site detention certification sheet contained in Appendix 4 of DCP 47 must also be completed and attached to the certification. These certifications are required for Stage 1 only.

Note: Evidence from a qualified and experienced consulting civil/hydraulic engineer documenting compliance with the above is to be provided to Council prior to the issue of an Occupation Certificate for each stage.

Reason: To protect the environment.

82. WAE plans for stormwater management and disposal (dual occupancy and above)

Prior to issue of the Occupation Certificate for each Stage, a registered surveyor must provide a works as executed survey of the completed stormwater drainage and management systems for that building. The survey must be submitted to and approved by the Principal Certifying Authority prior to issue of each Occupation Certificate. The survey must indicate:

- as built (reduced) surface and invert levels for all drainage pits
- gradients of drainage lines, materials and dimensions
- as built (reduced) level(s) at the approved point of discharge to the public drainage system
- as built location and internal dimensions of all detention and retention structures on the property (in plan view) and horizontal distances to nearest adjacent boundaries and structures on site
- the achieved storage volumes of the installed retention and detention storages and derivative calculations
- as built locations of all access pits and grates in the detention and retention system(s), including dimensions
- the size of the orifice or control fitted to any on-site detention system
- dimensions of the discharge control pit and access grates
- the maximum depth of storage possible over the outlet control
- top water levels of storage areas and indicative RL's through the overland flow path in the event of blockage of the on-site detention system

The works as executed plan(s) must show the as built details above in comparison to those shown on the drainage plans approved with the Construction Certificate prior to commencement of works. All relevant levels and details indicated must be marked in red on a copy of the Principal Certifying Authority stamped construction certificate stormwater plans.

Reason: To protect the environment.

83. Basement pump-out maintenance

Prior to issue of the Occupation Certificate for Stage 1, the Principal Certifying Authority shall be satisfied that a maintenance regime has been prepared for the basement stormwater pump-out system.

Note: A maintenance regime specifying that the system is to be regularly inspected and checked by qualified practitioners is to be prepared by a suitable qualified professional and provided to the Principal Certifying Authority.

Reason: To protect the environment.

84. OSD positive covenant/restriction

Prior to issue of the Occupation Certificate for Stage 1, the applicant must create a positive covenant and restriction on the use of land under Section 88E of the Conveyancing Act 1919, burdening the owner with the requirement to maintain the on-site stormwater detention facilities on the lot.

The terms of the instruments are to be generally in accordance with the Council's "draft terms of Section 88B instrument for protection of on-site detention facilities" and to the satisfaction of Council (refer to appendices of Ku-ring-gai Council Water Management DCP 47). For existing titles, the positive covenant and the restriction on the use of land is to be created through an application to the Land Titles Office in the form of a request using forms 13PC and 13RPA. The relative location of the on-site detention facility, in relation to the building footprint, must be shown on a scale sketch, attached as an annexure to the request forms.

Registered title documents, showing the covenants and restrictions, must be submitted and approved by the Principal Certifying Authority prior to issue of an Occupation Certificate.

Reason: To protect the environment.

85. Sydney Water Section 73 Compliance Certificate

Prior to issue of an Occupation Certificate the Section 73 Sydney Water Compliance Certificate must be obtained and submitted to the Principal Certifying Authority

Reason: Statutory requirement.

86. Certification of as-constructed driveway/carpark – RFB

Prior to issue of an Occupation Certificate for each building, the Principal Certifying Authority is to be satisfied that:

- the as-constructed car park complies with the approved Construction Certificate plans
- the completed vehicle access and accommodation arrangements comply

with Australian Standard 2890.1 – 2004 “Off-Street car parking” in terms of minimum parking space dimensions

- finished driveway gradients and transitions will not result in the scraping of the underside of cars
- no doors, gates, grilles or other structures have been provided in the access driveways to the basement carpark, which would prevent unrestricted access for internal garbage collection from the basement garbage storage and collection area
- the vehicular headroom requirements of:
 - Australian Standard 2890.1 – “Off-street car parking”,
 - **2.6 metres** height clearance for waste collection trucks (refer DCP 40) are met from the public street into and within the applicable areas of the basement carpark.

Note: Evidence from a suitably qualified and experienced traffic/civil engineer indicating compliance with the above is to be provided to and approved by the Principal Certifying Authority prior to the issue of an Occupation Certificate.

Reason: To ensure that vehicular access and accommodation areas are compliant with the consent.

87. Reinstatement of redundant crossings and completion of infrastructure works

Prior to issue of the Occupation Certificate for each Stage, and upon completion of all works on site which may cause damage to Council's infrastructure, the Principal Certifying Authority must be satisfied that he or she has received a signed inspection form from Council which states that the following works in the road reserve have been completed (Mona Vale Road for Stage 1 and Memorial Avenue for Stages 2 and 3) :

- new concrete driveway crossing in accordance with levels and specifications issued by Council
- removal of all redundant driveway crossings and kerb laybacks (or sections thereof) and reinstatement of these areas to footpath, turfed verge and upright kerb and gutter (reinstatement works to match surrounding adjacent infrastructure with respect to integration of levels and materials)
- full repair and resealing of any road surface damaged during construction
- full replacement of damaged sections of grass verge to match existing

This inspection may not be carried out by the Private Certifier because restoration of Council property outside the boundary of the site is not a matter listed in Clause 161 of the Environmental Planning and Assessment Regulation 2000.

All works must be completed in accordance with the General Specification for the Construction of Road and Drainage Works in Ku-ring-gai Council, dated

November 2004. The Occupation Certificate must not be issued until all damaged public infrastructure caused as a result of construction works on the subject site (including damage caused by, but not limited to, delivery vehicles, waste collection, contractors, sub contractors, concrete vehicles) is fully repaired to the satisfaction of Council. Repair works shall be at no cost to Council.

Reason: To protect the streetscape.

88. Construction of works in public road – approved plans

Prior to issue of the Occupation Certificate for Stage 1, the Principal Certifying Authority must be satisfied that all approved road, footpath and/or drainage works have been completed in the Mona Vale Road road reserve in accordance with the Council Roads Act approval and accompanying drawings, conditions and specifications.

The works must be supervised by the applicant's designing engineer and completed and approved to the satisfaction of Ku-ring-gai Council.

The supervising consulting engineer is to provide certification upon completion that the works were constructed in accordance with the Council approved stamped drawings. The works must be subject to inspections by Council at the hold points noted on the Roads Act approval. All conditions attached to the approved drawings for these works must be met prior to the Occupation Certificate being issued.

Reason: To ensure that works undertaken in the road reserve are to the satisfaction of Council.

CONDITIONS TO BE SATISFIED AT ALL TIMES:

89. Outdoor lighting

At all times for the life of the approved development, all outdoor lighting shall not detrimentally impact upon the amenity of other premises and adjacent dwellings and shall comply with, where relevant, AS/NZ1158.3: 1999 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

Reason: To protect the amenity of surrounding properties.

90. Car parking

At all times, the visitor car parking spaces are to be clearly identified and are to be for the exclusive use of visitors to the site. On site permanent car parking spaces are not to be used by those other than an occupant or tenant of the subject building. Any occupant, tenant, lessee or registered proprietor of the development site or part thereof shall not enter into an agreement to lease, license or transfer ownership of any car parking spaces to those other

than an occupant, tenant or lessee of the building. These requirements are to be enforced through the following:

- restrictive covenant placed on title pursuant to Section 88B of the Conveyancing Act, 1919
- restriction on use under Section 68 of the Strata Schemes (Leasehold Development) Act, 1986 to all lots comprising in part or whole car parking spaces

Reason: To ensure adequate provision of visitor parking spaces.

Jonathan Goodwill
**Executive Assessment Officer–
South**

Shaun Garland
**Team Leader Development
Assessment - South**

Corrie Swanepoel
**Manager
Development Assessment Services**

Michael Miocic
**Director
Development & Regulation**

- Attachments:**
1. Location Sketch
 2. Zoning Extract
 3. Basement Plans
 4. Site Plans
 5. Floor Plans
 6. Elevations
 7. Sections
 8. Landscape Plans
 9. Urban Design Consultant comments