SYDNEY NORTH PLANNING PANEL ASSESSMENT REPORT

Panel Reference	2016SYW107
DA Number	DA0223/16
LGA	Ku-ring-gai
Proposed Development	Construction of a residential flat building comprising 96 apartments, basement parking and associated landscaping works
Street Address	101 Eton Road, Lindfield
Applicant/Owner	City Projects and Development Pty Ltd (Gil Candido) / Eon Development Pty Ltd
Number of Submissions	Seven (7)
Regional Development Criteria (Schedule 4A of the Act)	General development with a CIV of greater than $20 million
List of all relevant s79C(1)(a) matters	• Threatened Species Conservation Act 1995 • SEPP 55 – Remediation of Land • SREP (Sydney Harbour Catchment) 2005 • SEPP (Infrastructure) 2007 • SEPP 65 • Apartment Design Guideline • Ku-ring-gai LEP 2015 • Ku-ring-gai DCP

	• Development Contributions Plan 2010
Is a Clause 4.6 variation request required?	No
Does the DA require Special Infrastructure Contributions conditions (S94EF)?	No
Have draft conditions been provided to the applicant for comment? Have any comments been considered by council in the assessment report?	The conditions were provided to the applicant at the same time that the report was provided to the Panel, accordingly no comments from the applicant have been considered in the assessment report.
List all documents submitted with this report for the Panel's consideration	Attachment A: Zoning extract Attachment B: Assessment letter dated 20/10/2016 Attachment C: Plans and elevations
Recommendation	Approval
Report prepared by	Jonathan Goodwill – Executive Assessment Officer
Report date	8 March 2017

PURPOSE OF REPORT

To determine Development Application DA0223/16 for construction of a residential flat building comprising 96 apartments, basement parking and associated landscaping works.

INTEGRATED PLANNING AND REPORTING

Places, Spaces & Infrastructure

Community Strategic Plan Long Term Objective	**Delivery Program Term Achievement**	**Operational Plan Task**
P2.1 A robust planning framework is in place to deliver quality design outcomes and maintain the identity and character of Ku-ring-gai	Applications are assessed in accordance with State and local plans	Assessments are of a high quality, accurate and consider all relevant legislative requirements

SITE HISTORY

The site was owned by the Commonwealth of Australia from 1915 to 2015, being the former Screen Australia Site. The film studios which previously occupied the site were constructed in the 1960s.

In 2008, the NSW Minister for Planning under the now repealed Part 3A of the *Environmental Planning and Assessment Act 1979* granted consent for a Concept Plan that facilitated redevelopment of the UTS Ku-ring-gai Campus for medium density residential development of up to 345 dwellings in the form of apartments, attached dwellings (townhouses) and detached single dwellings. In accordance with the Ku-ring-gai DCP, the subject site 101 Eton Road Lindfield is to form a transition between the low density residential neighbourhoods of

Lindfield and the higher density Crimson Hill Development on the former UTS Ku-ring-gai Campus.

On 2 April 2015 the site was rezoned from Special Uses 'Commonwealth Purposes' to R2 Low Density Residential and R1 General Residential by Ku-ring-gai LEP 2015. The associated Development Control Plan included site specific controls and an Urban Structure Plan.

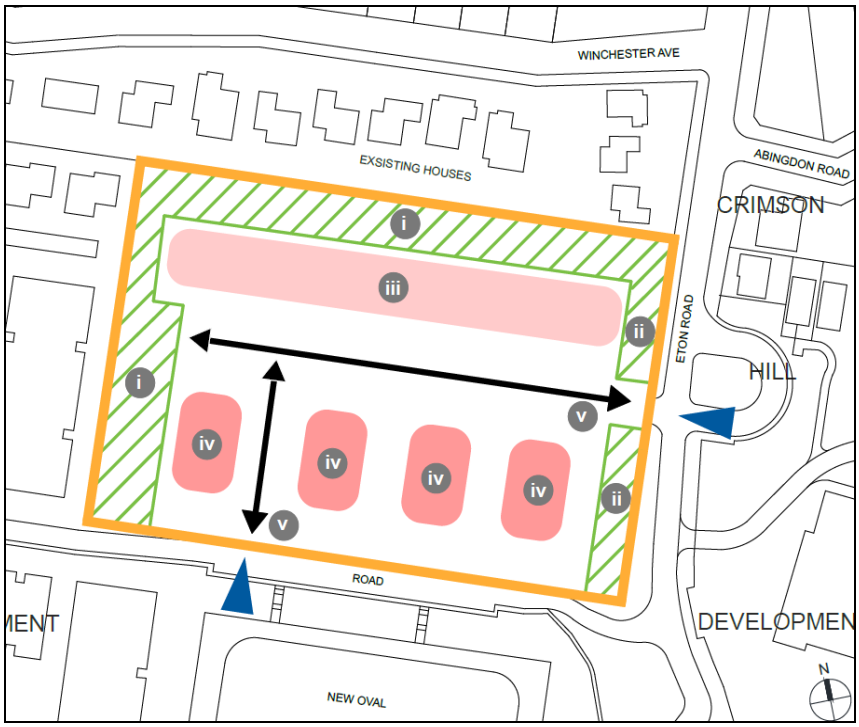


Figure 1 - Urban Structure Plan

The film studio buildings were demolished in 2016 under a complying development certificate.

On 14 November 2016 a development application (DA0093/16) to, 'Demolish existing structures, Community title subdivision into 10 housing lots, one road lot, one superlot, new access road and associated landscaping works - Integrated Development (NSW Rural Fire Service under the RFS Act 1997)' was approved via a deferred commencement consent. The terms of the deferred commencement were satisfied on 23/02/2017. The subject application relates to the 'superlot' (AKA Lot 12) created under DA0093/16.

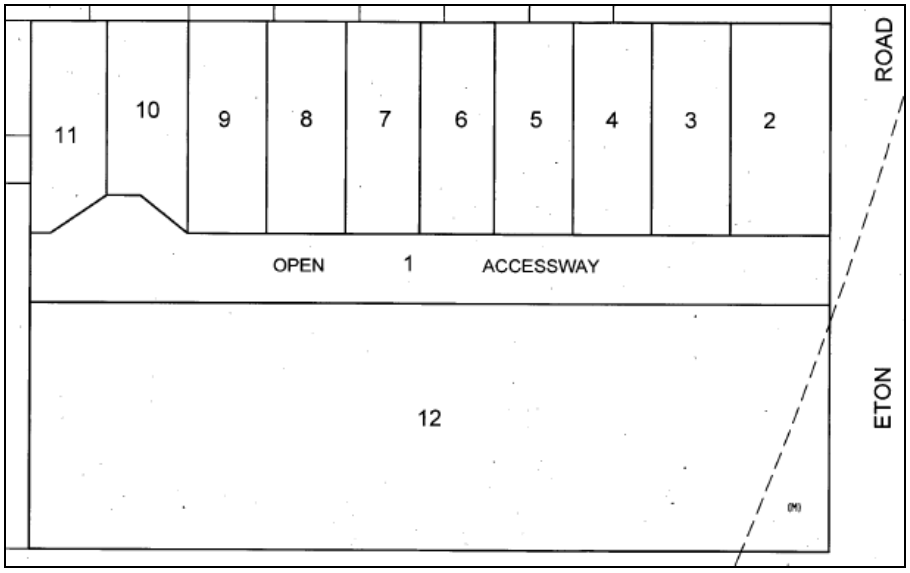


Figure 2 - the approved subdivision plan

Pre-DA

PRE0153/15

A Pre DA consultation was held on 25 November 2015 in respect of a proposal for:

- demolition of the existing buildings
- civil works
- subdivision of the site to create 13 Torrens title residential allotments and 1 lot for residential flat buildings
- community road

Council officers identified the following issues:

- bushfire
- minimum lot size (width)
- circulation through development
- setbacks to preserve existing trees

- access to the RFB site from Eton Road is not encouraged, access should be from the proposed road or Shout Ridge
- a phase 1 (and potentially a phase 2) contamination report will be required

PRE0170/15

A follow-up Pre DA consultation was held on 18 December 2015 in relation to a proposal for:

- demolition of the existing buildings
- civil works
- subdivision of the site to create 13 Torrens title residential allotments and 1 lot for residential flat buildings
- community road

The differences from the proposal in the previous Pre DA included:

- more detailed plans for the RFB prepared

Council officers identified the following issues:

- subdivision is to maintain and retain significant trees
- vehicular access to the RFB from Eton Road is not encouraged
- the merits of the proposed pedestrian link between the dwelling houses through the residential flat buildings and to Shout Ridge needs to be justified against the DCP requirement for a road
- justification for not complying with the 55% deep soil control would be required and, in any event, a minimum deep soil of 50% would be required
- deep soil for the RFB has been calculated at 46%
- existing remnant bushland vegetation along the new road from Eton Road is to be retained and maintained

DA History

DATE	EVENT
23/05/2016	The DA was lodged.
3/06/2016	The DA was notified and advertised for 30 days.
9/06/2016	Sydney Trains requested further information under the provisions of SEPP (Infrastructure) 2007.
10/06/2016	The Sydney Trains request for information was sent to the applicant.
19/06/2016	The applicant sent additional information to Sydney Trains.
20/10/2016	A letter (Attachment B) was sent to the applicant requesting amended plans and additional information. The issues identified in the letter included: FSR, building height, car parking, deep soil landscaping, location of access driveway, Shout Ridge setback variation, courtyard encroachments, apartment mix, adaptable apartment design, storage, corridor width, natural ventilation, balcony depth, balcony area, engineering, landscaping, tree removal/impacts, bushfire certification, vegetation management plan.
16/11/2016	The applicant requested and was granted an extension of time to respond to Council's letter.
29/11/2016	The applicant submitted amended plans including revised architectural plans, response to issues and additional documentation. The principal amendments include an additional

	level of basement carparking, the relocation of the access driveway from Eton Road to the private road and the conversion of 2 X 2 bedroom apartments on the ground floor level of each building to 1 X 1 bedroom and 1 X 3 bedroom apartments.
9/12/2016	The applicant was asked to confirm that all the information required by Sydney Trains has been provided as they have only issued concurrence for the subdivision DA.
14/12/2016	The applicant provided further documentation to Sydney Trains.
20/12/2016	The applicant is forwarded Council's Landscape Officer's review of the amended plans which advises that issues relating to deep soil, communal open space, excessive fill, courtyard encroachments, insufficient landscape plan details, BASIX inconsistencies and inadequate Bushfire assessment have not been adequately addressed.
23/12/2016	The assessing officer advised the applicant that the amended plans have not adequately addressed issues relating to FSR, building height and adaptable apartments.
3/02/2017	The applicant provided a response to Council's review of the amended plans.
6/02/2017	The assessing officer advised the applicant that garbage rooms are not plant rooms and cannot be excluded from the gross floor area calculation.

6/02/2017	The assessing officer asks the applicant to explain why the adaptable apartments have not been re-designed in accordance with AS4299.
6/02/2017	The applicant e-mails a response to the outstanding issues.
7/02/2017	The assessing officer advised the applicant that as they have refused to amend the plans to comply with AS4299 the design of the apartments will need to be rectified by condition.
8/02/2017	The applicant submitted a revised geotechnical investigation report.
15/02/2017	The assessing officer provided an update to the applicant on the status of the assessment.
23/02/2017	The applicant submitted further amended plans including revised architectural plans, response to issues and amended documentation. The principal amendments include conversion of above ground garbage rooms to plant rooms, reduction in the height of the air conditioning platform on the roof of Building A and landscaping/communal open space amendments.
1/03/2017	The applicant was advised that the elevations and floor plan are inconsistent and that the east elevation for Buildings A/B is missing from the drawing set.
1/03/2017	The applicant was asked to provide a copy of the Bushfire Certificate for the

	proposal.
3/03/2017	A Bushfire Certificate was submitted.
7/03/2017	Architectural plans to address the issues identified on 1/03/2017 were submitted.

THE SITE AND SURROUNDING AREA

Visual character study category:	N/A
Easements/rights of way:	No
Heritage Item:	No
Heritage conservation area:	No
In the vicinity of a heritage item:	Yes – former UTS buildings over 100m to the south of the site – no impacts
Bush fire prone land:	Yes
Threatened species:	Yes – Darwinia biflora in the south-eastern corner of the site is listed as vulnerable under the Threatened Species Conservation Act 1995
Urban bushland:	No
Contaminated land:	Yes
Biodiversity land:	No
Riparian land:	No

Site description

The subject site is the R1 General Residential zoned portion of Lot 3 in DP 32292. The site is proposed Lot 12 in an approved but unregistered Community Title subdivision and has a total site area of 10,427m^2, depth of 57m and width of

182.93m. It is a large, rectangular shaped allotment with street frontages to Eton Road to the east, Shout Ridge to the south and an approved private road to the north. The site does not contain any structures. Significant canopy trees are situated near the western boundary of the site, adjacent to the southern boundary and near the south-eastern corner where a patch of vulnerable vegetation known as *Darwinia biflora* is found. The eastern end of the site falls away to Eton Road, the remainder of the site is relatively flat and slightly elevated above the road surface of Shout Ridge.

The locality

Surrounding development to the north of the site includes a mixture of low density residential development, predominantly located within Winchester Avenue. Development to the west of the site on the private road Hamilton Corner includes residential flat buildings and single dwelling houses on small allotments. Development to the south of the site includes residential flat buildings and buildings associated with the former UTS campus. The southern boundary of the site is opposite the Charles Bean Sports Field.

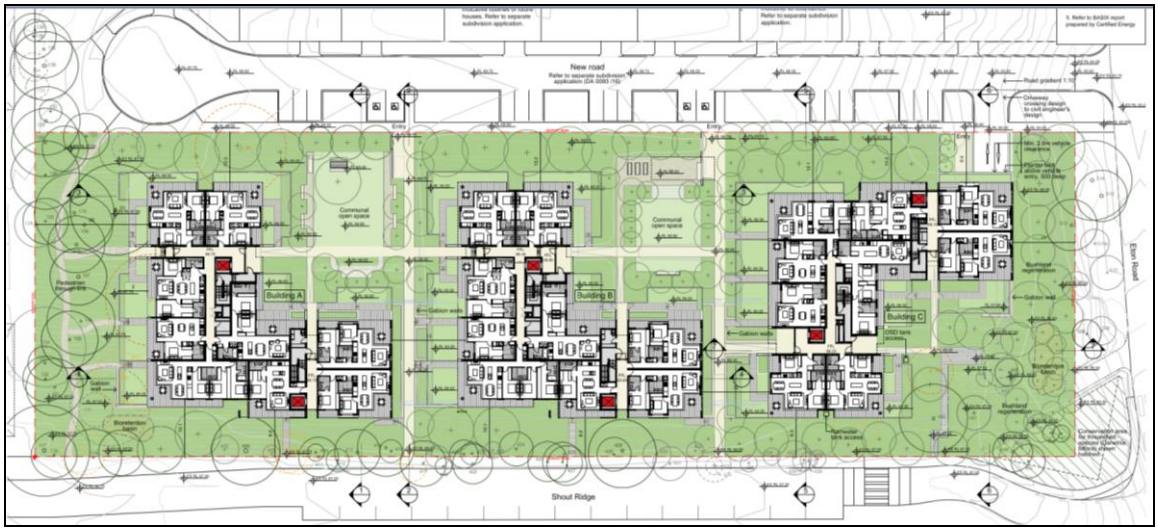
THE PROPOSAL

The application proposes the construction of a residential flat building development containing 96 apartments over 4 levels, with 2 levels of basement car parking containing 153 car spaces including 129 resident car spaces and 24 visitor car spaces. Vehicular access to the development is provided from a proposed private road that was approved as part of a subdivision consent known as DA0093/16.

The development comprises three four storey 'L' shaped buildings known as Building A, Building B and Building C. Buildings A and B share identical floor plans and orientation. Building C has a different orientation and mirrored floor plan. Each building has two cores which maximises the number of corner apartments and promotes good solar access and natural ventilation. All lobbies are glazed to allow for views through the building and improved wayfinding. For ground floor apartments on the southern side of Buildings A & B which face Shout Ridge privacy is to be achieved through a raised floor level rather than tall courtyard fences. The materials palette includes:

- grey corrugated sheet metal roofing
- plywood soffits
- painted fibre cement
- dark grey aluminium window frames
- clear glazing
- compressed fibre cement
- rendered concrete painted white
- aluminium lourvres with vertical slats
- dry pressed clay bricks
- sandstone
- off-form concrete

The general arrangement of the development is described below:



The proposed apartment mix is:

- 12 x 1 bedroom apartments (55-59m^2)
- 69 x 2 bedroom apartments (73-89m^2)
- 15 x 3 bedroom apartments (102-123m^2)

Six of the larger 2 bedroom apartments (89m^2) include a study. All buildings have a mix of 1, 2 and 3 bedroom apartments at the ground floor level. Ten adaptable

apartments are proposed. The adaptable apartments include 1 x 1 bedroom, 6 x 2 bedroom and 3 x 3 bedroom. All apartments have private open space in the form of a balcony, terrace or courtyard. All apartments have internal storage space and basement level storage cages.

CONSULTATION

Community

In accordance with the notification controls of the Ku-ring-gai Development Control Plan, owners of surrounding properties were given notice of the application. In response, submissions from the following were received.

1. James Dwyer, 4 Winchester Avenue Lindfield
2. Richard Singleton, 57 Winchester Avenue Lindfield
3. Ki Chae Lee, 12 Winchester Avenue Lindfield
4. Lisa Gray (no address provided)
5. Suzi O'Brien, 344/7 Dustan Grove Lindfield
6. Peter Shellie – Defence Housing Australia
7. Tim Chan, Hamilton Corner Lindfield

The submissions raised the following issues:

The height should not exceed two storeys.

The proposal complies with the applicable building height development standard of 14.5m.

Dust pollution during construction must be appropriately managed

Standard conditions of consent to control noise and dust pollution during construction have been included in the recommendation.

The top floors of the apartment building will overlook the backyards of the houses in Winchester Avenue.

The northern elevations of the buildings have a setback of more than 70m from the rear boundaries of the dwelling-houses on the southern side of Winchester Avenue. The substantial separation distance will minimise privacy impacts.

The proposed number of dwellings is excessive.

The number of dwellings on the site is limited by the floor space ratio development standard and the minimum apartment size controls. The proposal complies with these requirements.

The amount of tree removal will impact the tree canopy and the attractiveness of the area.

The proposal does not require substantial tree removal as the site was previously occupied by buildings, car spaces and access driveways that covered a high proportion of the site. The proposal retains significant trees on the western end of the site in the 20m setback zone, trees adjacent to Shout Ridge and trees in the street setback to Eton Road.

The proposed development will increase traffic, despite there being no plans to widen any roads.

The proposed development will increase traffic however increased traffic is unlikely to exceed the carrying capacity of local roads as this issue was considered in the Planning Proposal which rezoned the site to allow for residential flat buildings.

The apartments will increase noise impacts.

Noise from any mechanical plant or equipment will be controlled by conditions of consent. The separation distance between the site and existing dwelling houses will also minimise noise impacts.

Provision needs to be made for evacuation in the event of a bushfire.

The bushfire risk assessment report advises that the site is subject to a low Bushfire Attack Level. Existing roads are adequate for the purposes of evacuation.

The proposal includes no local shops or retail outlets, this will increase traffic and local pollution. A train station at the site should be constructed.

The planning controls do not require the construction of any shops or retail outlets. Should demand for local retail services exists, neighbourhood shops (i.e. corner stores) are permitted in the R1 and R2 zones which apply to the subject and neighbouring sites.

The adequacy of the proposed number of car spaces should be reviewed particularly in light of the proximity of the site to the public sportsfield and the high demand for on street car parking during sports training/matches.

The number of car spaces in the original DA was 46 less than the minimum requirement. The amended DA includes the construction of an additional level of basement parking. The number of car spaces is now compliant with the parking requirements specified in the DCP.

The number of visitor car spaces in the basement and the roadway is inadequate.

The amended DA complies with the parking requirements specified in the DCP. All visitor and resident parking spaces are located in the basement.

Play equipment for children has not been provided.

Communal open space areas have been provided within the development in accordance with the requirements of the Apartment Design Guideline. Whilst no fixed play equipment has been provided the outdoor spaces will be available for use by residents for various forms of outdoor recreation.

The setbacks do not comply with the requirements of the Development Control Plan.

The variations to the setback requirements of the Development Control Plan are consistent with the objectives of the controls.

The provision of 4 smaller buildings as required by the DCP will reduce size, bulk scale and solar access to Charles Bean Oval.

The Urban Structure Plan in the DCP which shows 4 separate buildings is not a design control, it is an indicative design response to the Planned Future Character statement and controls. The provision of 3 buildings in lieu of 4 buildings is consistent with the DCP as view corridors through the site have been provided and scale impacts to the oval have been minimised through a 3/4 storey building form. The shadow diagrams demonstrate that shadowing impacts to the oval are minimal, notwithstanding the fact that the oval has an artificial grass surface which does not require sunlight.

The through road between Eton Road and Should Ridge should be provided for bushfire evacuation .

The Urban Structure Plan includes a north/south orientation road for the purpose of secondary access. The north/south orientated road is not required for traffic management or bushfire evacuation purposes, therefore there is no objection to its omission.

The proposed driveway is opposite an existing intersection and off a road which is to provide access for a government school. The driveway is also close to the area of Darwinia Biflora.

In the amended DA the proposed driveway is relocated from Eton Road to the private road within the northern part of the development site. The relocated driveway will not impact on Darwinia biflora.

Amended plans submitted 29/11/2016 and 23/02/2017

The amended plans were not notified to surrounding residents as the proposed amendments do not result in a greater environmental impact than the original

proposal.

Urban design

Council's urban design consultant commented on the amended proposal submitted 29/11/2016 as follows:

> *PRINCIPLE 1: CONTEXT AND NEIGHBOURHOOD CHARACTER*
>
> *The site location, shape, dimensions, size, fall and zoning has been described previously.*
>
> *The development, zoning and land use of neighbouring sites has been described previously.*
>
> *The issue of the site layout departing from the Urban Structure Plan, and the design and accessibility of the 'pedestrian through-links' to the public, has been discussed previously. It is considered that the two central 'pedestrian throughlinks,' as well as the westernmost 'pedestrian through-link,' (DA 02.00B) should be made to provide unimpeded public access in order to achieve the level of access envisaged by the controls. This aspect could be conditioned.*
>
> *The issue of departure from the Urban Structure Plan to provide three 'L-shaped' 3-4 storey buildings rather than four rectangular 4 storey buildings has been discussed previously. It is considered that this aspect is positive, on balance, from an urban design perspective.*
>
> *PRINCIPLE 2: BUILT FORM AND SCALE*
>
> *The issue of lift overruns and compliance with the maximum building height appears to have been resolved. The rooftop plant area and lift overruns of each building do not appear to exceed the maximum height of building in relation to the survey (Design Amendments Report 2.0). If*

the RLs nominated in the Design Amendments Report are used, this aspect is now considered acceptable. It is noted that the amended drawings (for example DA03.04B, DA0701B) still show the Building A rooftop plant area as RL82.60, rather than RL82.20, which would result in non-compliance. This aspect should be addressed by altering these RLs to match those shown in the Design Amendments Report.

PRINCIPLE 3: DENSITY

The issue of gross floor area remains. The gross floor area has been adjusted and redistributed (Design Amendments Report 1.1 and 1.2). The gross floor area has be recalculated as 8,862m2 (DA06.01B) which gives a floor space ratio of 0.85:1. This meets the maximum floor space ratio exactly. This aspect should be verified. Areas to check include: waste rooms and chutes not within the basement; the thickness of walls enclosing common vertical circulation areas; and the thickness of walls enclosing plant rooms and areas used for mechanical services and ducting.

Whilst potentially noncompliant, in terms of the built form, the bulk and scale of the proposal is considered appropriate. This aspect is considered acceptable from an urban design perspective. The issue of car parking appears to have been resolved. The proposal now provides for 153 car parking spaces on site, including 24 visitor spaces, over two basement levels. The basement car parking levels are primarily consolidated under the building footprints. This aspect is now considered acceptable.

PRINCIPLE 4: SUSTAINABILITY

The issue of external clothes drying areas remains. External clothes drying areas should be accommodated within the private open space of each apartment, be collapsible, and preferably screened behind a solid portion of balcony. This aspect could be conditioned.

PRINCIPLE 5: LANDSCAPE

Deep soil is stated as 55.5% (Design Amendments Report 4.0). This meets the 55% required by the controls, and appears to be a substantial improvement on the previous submission, however this aspect should be verified. Areas to check include: areas of 'unbound permeable gravel' which are not soft landscape (Landscape Report p5-9); 'raised open/permeable deck' which is not soft landscape (Landscape Report p9); and the pedestrian through link within the western setback which appears to be greater than 1.2m wide (Landscape Report p5). This aspect should be referred to Council's landscape section for comment.

PRINCIPLE 6: AMENITY

The issue of natural cross ventilation has been resolved. Openable clerestory windows have been added to the single orientation unit on the third floor of each building. 60 of 96 (63%) of apartments are now naturally cross ventilated. This aspect is now considered acceptable.

The proposed area of Unit C3.5 is 73m2. This does not meet the 75m2 required by ADG Design Criteria 4D-1 1. This issue has been discussed previously. This aspect is considered acceptable. Five ground floor apartments (A0.5, A0.6, B.05, B.06 and C.05) do not provide courtyards at 3m wide for a minimum of 15m2 as required by ADG Design Criteria 4E-1 2. However, each courtyard provided is considered to be furnishable, and the total amount of courtyard space (including areas less than 3m wide) will exceed 15m2. In this instance, it is considered that the courtyards meet the objective to 'provide appropriately sized private open space to enhance residential amenity.' This aspect is considered acceptable.

The issue of balcony width of Units A2.3, B2.3 and C2.3 has been partially resolved. Units A2.3 and B2.3 have been amended to reduce the length of the planter box and increase the width of the balcony. This aspect is now

considered acceptable. However, unit C2.3 has not been amended (DA03.12B). This balcony does not meet the 2.4m width required by ADG Design Criteria 4E-1 1. This aspect should be addressed. This aspect could be conditioned so that the balcony of C2.3 repeats the same design as the balcony of unit C1.3.

The issue of balcony area to unit C3.5 has been resolved. The balcony to unit C3.5 now provides a minimum area of 10m2 at a minimum of 1m wide including a space at least 2m x 2m. This meets ADG Design Criteria 4E-1 1.

The issue of natural ventilation to corridors has been resolved. All third floor corridors are now shown with a 'ventilated skylight' which will provide natural ventilation as well as natural light.

The issue of corridor width has been resolved. All corridor areas outside of lifts are now 1.8m wide.

The issue of storage volumes appears to have been resolved. It is difficult to scale from the 1:200 plans provided, and it is noted that the storage volume in all one bedroom apartments may be marginally under, but if this is correct, the shortfall is marginal. Assuming all storage indicated is full height to the ceiling (2.7m), all units now appear to meet the storage volume required within the apartment by ADG Design Criteria 4G-1 1.

The master bedrooms of 18 apartments (typical units A0.4, A0.5, A1.4, A1.5, A2.4, A2.5, B0.4, B0.5, B1.4, B1.5, B2.4, B2.5, C0.4, C0.5, C1.4, C1.5, C2.4, and C2.5) scale at 3m x 3m giving an area of 9m2. This does not meet the 10m2 required by ADG Design Criteria 4D-3 1. This has occurred due to changes to increase storage volumes in the apartment. One solution would be to shorten the wardrobe to the minimum length of 1.8m to gain additional floor area within the room. This aspect should be addressed.

PRINCIPLE 7: SAFETY

The issue of wayfinding signage to the building entry of Building A and B remains. Whilst the path leading to the entry is clear and well designed, it is considered that signage should be considered to enhance wayfinding. This aspect could be conditioned.

PRINCIPLE 8: HOUSING DIVERSITY AND SOCIAL INTERACTION

The issue of unit mix on the ground floor has been resolved. A mix of one, two and three bedroom apartments is now located on the ground floor of each building.

PRINCIPLE 9: AESTHETICS

The appearance, massing and materials of the proposal has been described positively previously. This aspect should be commended.

The proposed length of the southern elevations of Buildings A and B, and the northern elevation of Building C, are approximately 43m in length. Similarly, the western elevations of each building is approximately 39.4m in length. This does not meet the maximum 36m required by the controls. This issue has been discussed previously. This aspect is considered acceptable.

CONCLUSION

This proposal is acceptable with minor changes. There are no major issues. Minor issues include: the public accessibility of the two central 'pedestrian through-links'; amending the rooftop RLs to Building A in the architectural documentation; the calculation of gross floor area (to be verified); the inclusion of external clothes drying areas to private open spaces; deep soil

calculation (to be verified); the balcony width to unit C2.3; master bedroom areas; and wayfinding signage.

PLANNING COMMENT:

The issues identified by Council's Urban Design Consultant are discussed below:

the north-south pedestrian pathways should be publicly accessible	The site is part of an approved community title subdivision. The east/west road approved under DA0093/16 is a private road. There would be no public benefit in providing access through the site to a private road which is not subject to a right of carriageway for public access.
building height is non-compliant	The plans have been amended to comply with the building height development standard.
signage at the entrances from the private road should be provided for wayfinding purposes	The landscape plans advise that signage at the entrances from the private road will be provided.
deep soil landscaping does not comply	The plans have been amended to comply.
the depth of the balcony to Apartment C2.3 does not comply	The plans have been amended to comply.
the floor space ratio does not appear to comply	The plans have been amended to comply with the floor space ratio development standard.
clothes drying facilities have not been provided	**Condition 21** requires the provision of appropriately designed clothes drying facilities.
the master bedrooms are undersized	The plans have been amended to comply.

The issues identified by Council's Urban Design Consultant have been satisfactorily addressed through amended plans and conditions. The proposal demonstrates adequate regard to the design quality principles of SEPP 65 and the objectives specified in the Apartment Design Guide.

Landscaping

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

> ***Significant existing trees***
>
> *An Arboricultural Assessment, prepared by Naturally Trees dated 27/11/16, was been submitted with the application. Tree numbers refer to this report. The proposal requires 14 trees to be removed.*
>
> - *Trees 91, 96-100, 416, 433, 434, 441, 442, 444, 448, 511*
>
> *Having regard to the provisions in Part 21.2 'Landscape Design' of the DCP there is no objection to the removal of these trees. The tree protection plan is to be amended by condition to indicate Tree 519 and 520 (located within the subdivision lot) as retained.*
>
> ***Trees to be retained***
>
> *Tree 94 is a Eucalyptus paniculata (Grey Ironbark) located within the north western building set back at the north-east corner of Building A. The tree is 5.5m from the building and within the public domain. The impacts on the tree are acceptable.*
>
> ***Setback to Eton Road***
>
> *Design control 1 in Part 14B.1 of the DCP states:*

The vegetation along Eton Road is retained and enhanced to reinforce the historical Bushland Entry Area of the UTS Ku-ring-gai Campus

To satisfy the objectives of the concept approval (MP06_0130), planting along the entry road from Eton Road is to be retained. This includes a bushland regeneration program within the public road of the existing degraded bushland on both sides of the Eton Road entry (Section 3.6 Landscape Management Plan DEM).

These objectives are reinforced by the primary vehicle access points to the subject site and the associated landscape objectives indicated within the Urban Precinct controls for the subject site (14B.1 and 14B.3 Section B Ku-ring-gai DCP 2015).

The proposed vehicular access driveway to the residential flat building is consistent with the objectives for the Bushland Entry Area in the DCP.

Deep soil calculation

Land zoned R1 General Residential is to provide a minimum 55% deep soil area. The application documentation advises that the deep soil area is 55.5% of the site area.

Areas to be excluded:

- *Areas of paving greater than 1.2m width*
- *Timber seating deck associated with Building C*
- *Gabion retaining walls to private courtyards*

Excluding the above, the proposal will comply with the minimum deep soil zone requirement.

Communal open space

Evergreen tree planting on the northern sides of communal open space will compromise solar access. ***Condition 18*** *which requires the evergreen planting to be substituted for more appropriate deciduous species has been included in the recommendation.*

Landscape plan

The proposed filling and associated gabion wall of up to approximately 2 metres in height for the private courtyard of Unit C04 is to be screened by additional shrub planting by ***Condition 18****.*

The landscape plans contain insufficient details and are required to be amended by ***Condition 18****.*

BASIX Certificate

The Basix Certificate is consistent with the landscape plan.

Bushfire

The landscape plans have been endorsed by the Bushfire Consultant.

Engineering

Council's Development Engineer commented on the amended proposal as follows:

Water management

The plans still refer to DCP 47 which has been superseded, ***Condition 16*** *requires that the Construction Certificate documentation be amended to specifically address Part 24 of the Ku-ring-gai DCP.*

An on site detention tank of 114 cubic metres and a rainwater tank of 120 000 litres are shown on the plan, as well as the two bioretention basins. The Bonacci report has not been amended, so it is understood that re-use of the rainwater is still intended to be for irrigation and car washing. A proprietary stormwater treatment system is shown on the plans, which is essential in this sensitive location so close to the bush, and compliant with the DCP.

The submission of a model to confirm that Council's target of a 50% reduction in runoff days will be achieved is a requirement of ***Condition 16****.*

Traffic and parking

The total number of units proposed is 96 (12x1br, 69x2br and 15x3br). Under Part 22R.1 of the DCP, the development requires 129 resident and 24 visitor spaces. The correct number of parking spaces is shown on the Revision D plans.

Vehicular manoeuvring areas, ramps and transitions appear to comply with AS2890.1:2004 Off street car parking.

Waste management

An amended Waste Management Plan was not submitted, although the basement plans have been amended (Revision D).

The waste storage areas are distributed throughout the upper basement. The traffic report submitted in relation to the Revision B plans only gives swept paths for the small vehicle to turn in the loading bay, which is under Building C. However the standing area under Building A has now been enlarged, so that the small waste collection vehicle will be able to turn around.

The design relies on beams and overhead services not encroaching into the required head clearance for the entire length of Basement 1. If this turns out to be impractical, then the basement layout will have to be modified to

combine the waste collection areas nearer to the basement entry. This is a matter for the applicant in the preparation of the Construction Certificate plans.

Geotechnical investigation

A subsurface investigation has now been carried out. As expected, the site is underlain by medium to high strength sandstone at shallow depth. The report contains recommendations for excavation methods and support, vibration monitoring and supervision of excavation works, and is satisfactory for DA assessment.

Ecology

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

Ecology comments

No endangered ecological communities listed under either the Threatened Species Conservation Act 1995 (TSC Act) or under the Environmental Protection & Biodiversity Act 1999 (EPBC Act) have been recorded at the subject property.

Native vegetation within and close proximity to the subdivision is Sydney Sandstone Ridgetop Woodland (SSRW). The SSRW community provides suitable habitat for a number of threatened species.

Darwinia biflora a vulnerable species listed under the TSC Act was recorded from the south-eastern corner of the subject property.

Amended Vegetation Management Plan

The amended Vegetation Management Plan IVMP) is now considered to be satisfactory having addressed my previous comments. The VMP is sufficient to ensure the enhancement, protection and ensure the long-term viability of the SSRW community and the threatened Darwinia biflora upon the site.

STATUTORY PROVISIONS

Environmental Planning and Assessment Act - Section 79BA

In accordance with the provisions of section Part 1(b) of Section 79BA of the Environmental Planning and Assessment Act 1979, Council has *been provided with a certificate by a person who is recognised by the NSW Rural Fire Service as a qualified consultant in bush fire risk assessment stating that the development conforms to the relevant specifications and requirements.* As such, the application does not require a referral to Rural Fire Services.

The certificate advises:

1. Bushfire is unlikely to affect the residential flat buildings.
2. Asset protection zones are not required.
3. The BAL level required is BAL LOW.

Appropriate conditions (**Conditions 1 & 83**) that adopt the recommendations of the bush fire risk assessment report and certificate have been included in the recommendation.

State Environmental Planning Policy No. 55 – Remediation of Land

The provisions of SEPP 55 require Council to consider the potential for a site to be contaminated. The contamination report submitted by the applicant indicates that a number of tanks are present at the site, including three grease traps, two disused fuel storage tanks and one above ground concrete liquid waste tank. The report notes that the disused fuel storage tanks were decommissioned by a

special contractor in a process that included the removal of remaining fuel and filling the tanks with inert foam.

In 2013, soil samples were collected and analysed for contaminants and no exceedance of the adopted site criteria were reported, however further investigation will be required after the tanks have been removed as the earlier testing was limited in scope.

The report identified removal and disposal of contaminated soil as the most suitable method of remediating the site. The report states that the removal and disposal of contaminated soil is likely to take days or weeks (depending on the extent of contamination) and is category 2 remediation work (work not needing consent). Compliance with the requirements of the Remedial Action Plan is required (**Condition 1**) and independent certification of the remediation process (**Condition 67**) has been included as requirements of the development consent.

Sydney Regional Environmental Planning Policy (Sydney Harbour Catchment) 2005

Matters for consideration under SREP 2005 include biodiversity, ecology and environmental protection, public access to and scenic qualities of foreshores and waterways, maintenance of views, control of boat facilities and maintenance of a working harbour. The proposal is not subject to the provisions that apply to the assessment of development applications as the site is not located within the Foreshores and Waterways area.

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

A valid BASIX certificate has been submitted. The certificate demonstrates compliance with the provisions of the SEPP and adequately reflects all amendments to the application.

State Environmental Planning Policy (Infrastructure) 2007

The application is located above an underground rail corridor (Epping-Chatswood rail tunnel). Clause 86 applies to development that involves the penetration of ground to a depth of at least 2m below ground level (existing) on land:

> *(a) within or above a rail corridor, or*
> *(b) within 25m (measured horizontally) of a rail corridor. or*
> *(c) within 25m (measured horizontally) of the ground directly above an underground rail corridor.*

The proposal is for excavation up to a depth of approximately 6m within 25m (measured horizontally) of the ground directly above an underground rail corridor. Accordingly, the application was referred to Sydney Trains for concurrence on 2 June 2016. On 10 June 2016 Sydney Trains responded by advising that they were not in a position to make a decision on the granting of concurrence until Geotechnical and Structural documentation that meets Sydney Trains requirements have been submitted for review. Sydney Trains requested the following additional information:

1. Geotechnical and Structural report/drawings.
2. Construction methodology with details pertaining to structural support during excavation.
3. Cross sectional drawings showing ground surface, rail tracks, sub soil profile, proposed basement excavation and structural design of sub ground support adjacent to the Rail Corridor.
4. Detailed Survey Plan showing the relationship of the proposed development with respect to RailCorp's land and infrastructure.

The applicant provided the following information to Sydney Trains on 14 December 2016:

- Assessment and Recommendations letter prepared by GeoEnvironmental
- Plan and Section showing location of tunnels in relation to the project prepared by Bates Smart architects

The applicant provided the following information to Sydney Trains on 6 March 2017:

- additional survey information

At the time of writing this report Sydney Trains have not provided their concurrence

to the proposal. Clause 86 (5) of the SEPP states that consent may be granted to development to which clause 86 applies if 21 days have passed since notice of the application was given and concurrence has not been granted or refused. Considerably more than 21 days have passed since the proposal was referred to Sydney Trains, accordingly, the application may be determined in the absence of concurrence.

State Environmental Planning Policy No.65 - Design Quality of Residential Flat Development

SEPP 65 aims to improve the design quality of residential flat buildings across NSW and provides an assessment framework, the Apartment Design Guide, for assessing 'good design'.

Clause 50(1A) of the Environmental Planning and Assessment Regulation 2000 requires the submission of a design verification statement from the building designer at lodgement of the development application. This documentation has been submitted and is satisfactory.

The SEPP requires the assessment of any development application for residential flat development against the design quality principles contained in the SEPP which has been undertaken by Council's Urban Design Consultant. The SEPP also requires consideration of the matters contained in the publication Apartment Design Guide. As such, the following consideration has been given to the requirements of the Apartment Design Guide.

Apartment Design Guide

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 Apartment Design Guide (ADG). The following table is an assessment of the proposal against the guidelines provided in the ADG.

ADG COMPLIANCE TABLE	
Guideline	**Compliance**

Objective 3A-1 Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	YES
Objective 3B-1 Building types and layouts respond to the streetscape and site while optimising solar access within the development	YES
Objective 3B-2 Overshadowing of neighbouring properties is minimised during mid-winter	YES
Objective 3C-1 Transition between private and public domain is achieved without compromising safety and security	YES
Objective 3C-2 Amenity of the public domain is retained and enhanced	YES
Objective 3D-1 An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping	YES
Design criteria	
1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid-winter)	YES YES
Objective 3D-2 Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	YES
Objective 3D-3 Communal open space is designed to maximise safety	YES
Objective 3D-4 Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	N/A

<table>
<tr><td colspan="3">Objective 3E-1
Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality</td><td>YES</td></tr>
<tr><td colspan="4">Design criteria</td></tr>
<tr><td colspan="3">Deep soil zones are to meet the following minimum requirements:

Site area | Minimum dimensions | Deep soil zone (% of site area)
less than 650m^2 | - | 7%
650m^2 - 1,500m^2 | 3m | 7%
greater than 1,500m^2 | 6m | 7%
greater than 1,500m^2 with significant existing tree cover | 6m | 7%</td><td>55%</td></tr>
<tr><td colspan="3">Objective 3F-1
Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy</td><td>YES</td></tr>
<tr><td colspan="4">Design criteria</td></tr>
</table>

<table>
<tr><td>Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows:

<table>
<tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th><th>Proposal</th></tr>
<tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td><td>20m</td></tr>
<tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td><td>N/A</td></tr>
<tr><td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td><td>N/A</td></tr>
</table>

Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)
Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties</td><td>YES</td></tr>
<tr><td>Objective 3F-2
Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space</td><td>YES</td></tr>
<tr><td>Objective 3G-1
Building entries and pedestrian access connects to and addresses the public domain</td><td>YES</td></tr>
<tr><td>Objective 3G-2
Access, entries and pathways are accessible and easy to identify</td><td>YES</td></tr>
<tr><td>Objective 3G-3
Large sites provide pedestrian links for access to streets and connection to destinations</td><td>YES</td></tr>
<tr><td>Objective 3H-1
Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes</td><td>YES</td></tr>
<tr><td colspan="2">Design guidance</td></tr>
</table>

Car park access should be integrated with the building's overall facade. Design solutions may include: • the materials and colour palette to minimise visibility from the street • security doors or gates at entries that minimise voids in the facade • where doors are not provided, the visible interior reflects the facade design and the building services, pipes and ducts are concealed	YES
Objective 3J-1 1. Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas	N/A
Design criteria	
1. For development in the following locations: • on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or • on land zoned, and sites within 400 metres of land zoned, B3 Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less The car parking needs for a development must be provided off street	N/A
Objective 3J-2 Parking and facilities are provided for other modes of transport	YES
Objective 3J-3 Car park design and access is safe and secure	YES
Objective 3J-4 Visual and environmental impacts of underground car parking are minimised	YES

Objective 3J-5 Visual and environmental impacts of on-grade car parking are minimised	N/A
Objective 3J-6 Visual and environmental impacts of above ground enclosed car parking are minimised	N/A
Objective 4A-1 To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space	YES
Design criteria	
1 Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid-winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas	YES (81%)
2 In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid-winter	N/A
3 A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid-winter	YES (9%)
Objective 4A-2 Daylight access is maximised where sunlight is limited	N/A
Objective 4A-3 Design incorporates shading and glare control, particularly for warmer months	YES
Objective 4B-1 All habitable rooms are naturally ventilated	YES
Objective 4B-2 The layout and design of single aspect apartments maximises natural ventilation	YES

Objective 4B-3 The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents	YES
Design criteria	
1 At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed	YES (69%)
2 Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line	N/A
Objective 4C-1 Ceiling height achieves sufficient natural ventilation and daylight access	YES
Design criteria	

Measured from finished floor level to finished ceiling level, minimum ceiling heights are: **Minimum ceiling height for apartment and mixed use buildings** — **Proposal** Habitable rooms — 2.7m Non-habitable — 2.4m For 2 storey apartments — 2.7m for main living area floor; 2.4m for second floor, where its area does not exceed 50% of the apartment area Attic spaces — 1.8m at edge of room with a 30 degree minimum ceiling slope If located in mixed used areas — 3.3m for ground and first floor to promote future flexibility of use	YES (2.7m)
Objective 4C-2 Ceiling height increases the sense of space in apartments and provides for well-proportioned rooms	YES
Objective 4C-3 Ceiling heights contribute to the flexibility of building use over the life of the building	YES
Objective 4D-1 The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity	YES
Design criteria	

Apartments are required to have the following minimum internal areas: **Apartment type** **Minimum internal area** **Proposal** Studio 35m^2 N/A 1 bedroom 50m^2 55m^2 2 bedroom 70m^2 73m^2 3 bedroom 90m^2 102m^2	YES
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m^2 each	NO- Apartment C3.5 does not comply with the 75m^2 requirement for a two bedroom two bathroom apartment.
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each	N/A
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms	YES
Objective 4D-2 Environmental performance of the apartment is maximised	YES
Design criteria	
1 Habitable room depths are limited to a maximum of 2.5 x the ceiling height 2 In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window	YES YES
Objective 4D-3 Apartment layouts are designed to accommodate a variety of household activities and needs	YES
Design criteria	

1 Master bedrooms have a minimum area of $10m^2$ and other bedrooms $9m^2$ (excluding wardrobe space) 2 Bedrooms have a minimum dimension of 3m (excluding wardrobe space) 3 Living rooms or combined living/dining rooms have a minimum width of: • 3.6m for studio and 1 bedroom apartments • 4m for 2 and 3 bedroom apartments 4 The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts	YES YES YES N/A
Objective 4E-1 Apartments provide appropriately sized private open space and balconies to enhance residential amenity	YES
Design criteria	
All apartments are required to have primary balconies as follows: **Dwelling type** / **Minimum area** / **Minimum depth** Studio apartments / $4m^2$ / - 1 bedroom apartments / $8m^2$ / 2m 2 bedroom apartments / $10m^2$ / 2m 3+ bedroom apartments / $12m^2$ / 2.4m **The minimum Balcony depth to be counted as contributing to the balcony area is 1m**	All apartments meet or exceed these requirements
For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of $15m^2$ and a minimum depth of 3m	NO
Objective 4E-2 Primary private open space and balconies are appropriately located to enhance liveability for residents	YES
Objective 4E-3 Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building	YES

<table>
<tr><td>Objective 4E-4
Private open space and balcony design maximises safety</td><td>YES</td></tr>
<tr><td>Objective 4F-1
Common circulation spaces achieve good amenity and properly service the number of apartments</td><td>YES</td></tr>
<tr><td colspan="2">Design criteria</td></tr>
<tr><td>1. The maximum number of apartments off a circulation core on a single level is eight
2. For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40</td><td>YES</td></tr>
<tr><td>Objective 4F-2
Common circulation spaces promote safety and provide for social interaction between residents</td><td>YES</td></tr>
<tr><td>Objective 4G-1
Adequate, well designed storage is provided in each apartment</td><td>YES</td></tr>
<tr><td colspan="2">Design criteria</td></tr>
<tr><td>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:

<table>
<tr><th>Dwelling type</th><th>Storage size volume</th><th>Proposal</th></tr>
<tr><td>Studio apartments</td><td>4m^3</td><td>N/A</td></tr>
<tr><td>1 bedroom apartments</td><td>6m^3</td><td>9m^3</td></tr>
<tr><td>2 bedroom apartments</td><td>8m^3</td><td>12m^3</td></tr>
<tr><td>3+ bedroom apartments</td><td>10m^3</td><td>13.5m^3</td></tr>
</table>
</td><td>YES</td></tr>
</table>

At least 50% of the required storage is to be located within the apartment. **Dwelling type** / **Storage size volume** / **Proposal** Studio apartments — $4m^3$ — N/A (min.) 1 bedroom apartments — $3m^3$ — $1.3m^3$ (min.) 2 bedroom apartments — $4m^3$ — $3m^3$ (min.) 3+ bedroom apartments — $5m^3$ — $>5m^3$	NO
Objective 4G-2 Additional storage is conveniently located, accessible and nominated for individual apartments	YES
Objective 4H-1 Noise transfer is minimised through the siting of buildings and building layout	YES
Objective 4H-2 Noise impacts are mitigated within apartments through layout and acoustic treatments	YES
Objective 4J-1 In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings	N/A
Objective 4J-2 Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission	YES
Objective 4K-1 A range of apartment types and sizes is provided to cater for different household types now and into the future	YES
Objective 4K-2 The apartment mix is distributed to suitable locations within the building	YES
Objective 4L-1 Street frontage activity is maximised where ground floor apartments are located	YES

Objective 4L-2 Design of ground floor apartments delivers amenity and safety for residents	YES
Objective 4M-1 Building facades provide visual interest along the street while respecting the character of the local area	YES
Objective 4M-2 Building functions are expressed by the facade	YES
Objective 4N-1 Roof treatments are integrated into the building design and positively respond to the street	YES
Objective 4N-2 Opportunities to use roof space for residential accommodation and open space are maximised	N/A
Objective 4N-3 Roof design incorporates sustainability features	YES
Objective 4O-1 Landscape design is viable and sustainable	YES
Objective 4O-2 Landscape design contributes to the streetscape and amenity	YES
Objective 4P-1 Appropriate soil profiles are provided	YES
Objective 4P-2 Plant growth is optimised with appropriate selection and maintenance	YES
Objective 4P-3 Planting on structures contributes to the quality and amenity of communal and public open spaces	YES
Objective 4Q-1 Universal design features are included in apartment design to promote flexible housing for all community members	YES

Objective 4Q-2 A variety of apartments with adaptable designs are provided. Adaptable housing should be provided in accordance with the relevant council policy.	NO
Objective 4Q-3 Apartment layouts are flexible and accommodate a range of lifestyle needs	YES
Objective 4R-1 New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place	N/A
Objective 4R-2 Adapted buildings provide residential amenity while not precluding future adaptive reuse	N/A
Objective 4S-1 Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement	N/A
Objective 4S-2 Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents	YES
Objective 4T-1 Awnings are well located and complement and integrate with the building design	N/A
Objective 4T-2 Signage responds to the context and desired streetscape character	N/A
Objective 4U-3 Development incorporates passive environmental design	YES
Objective 4U-1	
Objective 4U-2 Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer Adequate natural ventilation minimises the need for mechanical ventilation	YES

Objective 4V-1 Potable water use is minimised	YES
Objective 4V-2 Urban stormwater is treated on site before being discharged to receiving waters	YES
Objective 4V-3 Flood management systems are integrated into site design	YES
Objective 4W-1 Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents	YES
Objective 4W-2 Domestic waste is minimised by providing safe and convenient source separation and recycling	YES
Objective 4X-1 Building design detail provides protection from weathering	YES
Objective 4X-2 Systems and access enable ease of maintenance	YES
Objective 4X-3 Material selection reduces ongoing maintenance costs	YES

The variations to the ADG controls are considered below:

Private open space – ground floor apartments

Five ground floor apartments (A0.5, A0.6, B.05, B.06 and C.05) do not provide courtyards at 3m wide for a minimum of 15m^2 as required by ADG Design Criteria 4E-1 2. Council's Urban Design Consultant reviewed this aspect of the proposal and provided the following advice:

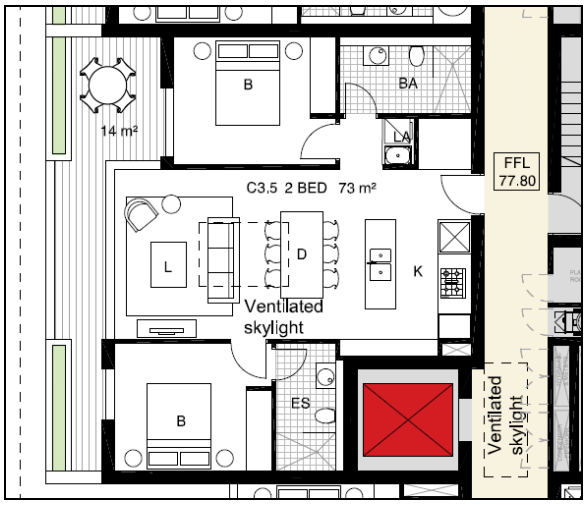
> *Each courtyard provided is considered to be furnishable, and the total amount of courtyard space (including areas less than 3m wide) will exceed 15m^2. In this instance, it is considered that the courtyards meet the objective to, 'provide appropriately sized private open space to enhance residential amenity.' This aspect is considered acceptable from an urban*

design perspective.

On the basis of the above it is considered that the variation to the Design Criteria is acceptable in this instance.

Minimum apartment area

Apartment C3.5 on the top storey of Building C is a two bedroom and two bathroom apartment with a floor area of 73m^2 which does not comply with the 75m^2 requirement.



The architect has provided the following justification for the non-compliance:

> *The efficiency of the design and absence of circulation corridors allow the apartment to provide a high degree of amenity. Further, the apartment is provided with 13m² of balcony area (excluding balcony planter beds) which further contributes to usability and functionality of the space.*

Council's Urban Design Consultant reviewed the layout of Apartment C3.5 and provided the following advice:

> *The proposed two bedroom two bathroom unit C3.5 is 73m2 in area. This does not meet the 75m^2 required by ADG Design Criteria 4D-1 1. In this instance, it is considered that the design of this unit is efficient and well*

planned, with adequate room dimensions and storage volumes. This aspect is considered acceptable from an urban design perspective.

The objective of Part 4D 'Apartment size and layout' of the ADG is:

The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.

Apartment C3.5 is located on the top storey of the building, has generous glazing that will receive good solar access, compliant dimensions for the living room and bedrooms, compliant internal storage ($6m^3$) and a balcony that exceeds the minimum $10m^2$ requirement. The variation to the design criteria is minor and acceptable in this instance.

Minimum internal storage

The ADG requires that at least 50% of the storage requirement be located inside the apartment. The ADG only includes storage that is in addition to storage located in kitchens, bathrooms and bedrooms. The storage provision for all 1 bedroom apartment and the $78m^2$ and $89m^2$ 2 bedroom apartments does not comply with the 50% internal storage requirement if the storage in the master bedroom wardrobe is disregarded. The master bedroom wardrobes have a minimum storage area of $4.4m^3$ which is double the minimum wardrobe requirement of $2.2m^3$. It is considered reasonable to add the 'excess' storage space in the master bedroom wardrobes to the overall storage provision. Subject to the inclusion of this storage space all apartments will exceed the minimum 50% internal storage requirement. The variation to the design criteria is acceptable.

Adaptable apartments

The ADG states that adaptable apartments should be provided in accordance with the relevant Council policy. The design of the nominated adaptable apartments is not compliant with the adaptable housing controls specified in the DCP. This issue is discussed in greater detail under the Ku-ring-gai Development Control Plan compliance table below.

Ku-ring-gai LEP 2015

Zoning and permissibility:

The site is zoned R1 General Residential. The proposed development is defined as a *residential flat building,* a form of development permissible in the zone.

The zone objectives are:

1. *To provide for the housing needs of the community.*
2. *To provide for a variety of housing types and densities.*
3. *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
4. *To provide for development that is compatible with the environmental and heritage qualities of the locality.*
5. *To promote a high standard of urban and architectural design of development,*
6. *To promote the establishment of a sustainable community.*

The proposal will provide additional housing in the form of 96 apartments. A mix of 1 bedroom, 2 bedroom and 3 bedroom apartments is proposed. The three bedroom apartments at the ground floor level have generous courtyards and will provide an alternative form of housing for larger households including those with children. The proposal complies with the development standards for building height and floor space ratio, retains existing trees and significant vegetation. The proposal achieves a high standard of urban and architectural design and is supported by a BASIX certificate which demonstrates the achievement of sustainability objectives. The proposed development therefore upholds the zone objectives.

Development standards:

Development standard	Proposed	Complies
Height of buildings: 14.5m	14.5m	**YES**
Floor space ratio (FSR): 0.85:1	0.85:1	**YES**

Development standard	Proposed	Complies
Site requirements for multi dwelling housing and residential flat buildings: minimum 1200m^2 site area. Depth and width of 30m for sites ≥1800m^2.	10,427m^2 182.93m x 57m	**YES** **YES**

Part 5 Miscellaneous provisions

Development near zone boundaries

Not applicable.

Controls relating to miscellaneous permissible uses

Not applicable.

Clause 5.9 – Preservation of trees or vegetation

Council's Landscape and Tree Assessment Officer is satisfied that the proposed tree removal is acceptable and that the development will not unduly impact upon any existing significant trees or vegetation that is to be retained, subject to conditions.

Clause 5.10 – Heritage conservation

The site is not in the immediate vicinity of any heritage items or heritage conservation areas.

Part 6 Additional local provisions

Clause 6.1 – Earthworks

The proposed development will not restrict the existing or future use of the site, adversely impact on neighbouring amenity, the quality of the water table or disturb any known relics. Additionally, the fill to be removed will be disposed of appropriately.

Clause 6.2 - Stormwater and water sensitive urban design

The proposal incorporates stormwater detention, rainwater storage and re-use and bio-retention basins for stormwater treatment. The MUSIC model demonstrates that the water quality objectives of the DCP will be achieved by the development. Council's Development Engineer is satisfied that the proposed development has been designed to manage urban stormwater as per the requirements of the LEP, subject to conditions.

Clause 6.5 – Site requirements for multi dwelling housing and residential flat buildings

The subject site has an area of 10,427m^2 and a frontage of 182.93 metres to Shout Ridge and 57 metres to Eton Road. The site meets the 1200m^2 minimum site area requirement and the minimum 30 metres width and depth requirement for sites with an area of 1800m^2 or more.

Clause 6.10 - Crimson Hill Residential Development, Lindfield

The site is not subject to this clause as it is not included on the Key Sites Map.

Policy Provisions (DCPs, Council policies, strategies and management plans)

Ku-ring-gai Development Control Plan

Part 14B 'Screen Australia Site' of the KDCP contains site specific provisions which apply to the proposed development.

The description of the Planned Future Character is:

> *The site at 101 Eton Road, Lindfield, which is currently occupied by Screen Australia is zoned for a combination of low density detached residential dwellings and residential flat buildings. The site provides a transitional role*

between the low-density residential neighbourhoods and the higher density Crimson Hill Development on the adjoining UTS Ku-ring-gai campus. Both sites are set within the bushland setting of the Lane Cove National Park. The planned future character of the site seeks to retain and enhance the existing features of the site and integrating them within the planned scale and density of the proposed residential development.

The objectives of the controls are:

1. To reinforce the bushland character of the site.
2. To retain significant vegetation.
3. To provide a transition between the low density residential neighbourhoods and the higher density Crimson Hill Development and adjoining UTS Ku-ring-gai campus
4. To ensure the development complements surrounding residential areas

The proposal has been assessment against the design controls which are designed to achieve the above objectives and has been found to be acceptable in this regard.

An assessment of the proposal against the design controls in Part 14B.1 of the DCP is provided below:

Planned Future Character		
Control	**Proposed**	**Complies**
Existing vegetation is retained along the northern and western boundaries, establishing a landscaped buffer between the site and adjacent residential development.	The 20m setback from the western boundary allows for the retention of significant trees.	**YES**
The vegetation along Eton road is retained and enhanced to reinforce the historical Bushland Entry Area of the	The setback to the Eton Road boundary allow for tree	**YES**

UTS Ku-ring-gai Campus.	retention and vegetation enhancement.	
Higher density development will be focused to the south of the site transitioning up to four storey residential flat buildings which will be oriented towards the sporting fields.	YES	**YES**
Vehicle and pedestrian access to the site will continue to be gained from Eton Road to the east. Secondary access will be gained from the south.	The north/south access road is not proposed.	**NO**
New development is orientated towards street frontages and open spaces to reduce passive and inactive edges to the streetscape.	YES	**YES**
Higher density development is oriented north/south to present a less dominating visual impact overlooking the oval and providing view corridors through the site both from the oval and the main UTS campus building.	The long axis of the buildings is orientated east/west, rather than north-south, however the four storey component of each building is oriented north/south.	**NO**
The design of the residential flat building within this area is to be consistent with those in within the adjoining Crimson Hill development to achieve a unified development character	YES	**YES**
Public Domain and Pedestrian Access		
The primary vehicle and pedestrian access to the site is to be from Eton	The driveway is connected to the	**YES**

Road to the east and should be integrated with existing movement network ensuring that congestion along Eton Road is minimised and patronage of the bus service is maximised.	approved private road within the subdivision approved under DA0093/16.	
Secondary access will be gained from the south	Secondary access from the south is not proposed.	**NO**
The road corridors are to be included as a part of the site for FSR calculations	The north/south access road is not proposed.	**N/A**
The new east/west and north/south road corridors are to have a width of 16m the dimensions of the carriage way and verges are to be in accordance with 14B.3.1 both streets should accommodate two way traffic and one lane of on street parking.	The east/west road was approved under DA0093/16. The north/south road is not proposed.	**YES**
The siting of new roadways is to consider the location of major trees with existing significant trees to be retained where possible	No new roads are proposed as part of the application.	**YES**
New trees should be planted and integrated with the design proposal, as part of the public and private domain.	The proposal includes tree planting	**YES**
New streets and verges are to incorporate appropriate landscaping and water sensitive urban design (WSUD) to support stormwater management including elements such as permeable paving, rain gardens, tree pits and swales.	The east/west road was approved under DA0093/16	**N/A**
All power lines and utilities are to be	Capable of	**YES**

underground	compliance by condition	
Building setbacks		
Objective 1: To provide building setbacks that allows retention of existing established vegetation and maintaining the established bushland character of the site.	YES	**YES**
Objective 2: To create cohesive streetscapes defined by a landscaped setback on both sides with consistent building alignments.	Landscaping has been provided/retained in all setback areas.	**YES**
Setbacks of 12m to Eton Road and Shout Ridge	11m (Eton Road), 7.2m (Shout Ridge)	**NO**
Setbacks of 9m to the new internal east/west road	9.4m (min.)	**YES**
Setbacks of 6m to the new north/south road	N/A – the road is not proposed	**N/A**
A setback of 20m to the western boundary of the site to retain existing vegetation between the new R1 Zoned Residential development and the adjacent Crimson Hill site;	20m (min.)	**YES**
Land Zoned R1 General Residential is to provide a minimum 55% deep soil area.	55%	**YES**

An assessment of the proposal against the general provisions of Ku-ring-gai Development Control Plan (KDCP) is provided in the table below, where a site specific control overrides a general control the site specific control has been substituted:

COMPLIANCE TABLE		
Development control	**Proposed**	**Complies**

Part 7 Residential Flat Buildings		
7A.1 – Local character and streetscape		
Provide a garden setting with buildings surrounded by landscaped gardens, including canopy trees, on all sides.	The landscape plan demonstrates that a garden setting with buildings surrounded by landscaped gardens with canopy trees on all sides will be achieved.	**YES**
7A.2 – Site layout		
Site layout responds to site analysis	YES	YES
Buildings with a frontage to the street must address the street	YES	
Buildings address and provide building entry points to all site frontages	YES	
Soft landscaping, including canopy trees, provided between onsite buildings, fences and courtyard walls	YES	
Hard surface areas minimised to maximise landscaping	YES	
No long straight driveways and designed to minimise visual impact	YES	
Single pedestrian entry point provided from each street	Multiple entry points provided.	
Three hours of direct sunlight between 9am and 3pm on 21st June is maintained to: • existing residential flat buildings and	YES	

multi-dwelling housing on adjoining lots • residential development in adjoining lower density zones Overshadowing does not compromise the development potential of adjoining sites.	All adjoining sites that are overshadowed have already been development.	
7A.3 Building setbacks		
Part 14 Urban Precincts and Sites: • 12m to Eton Road and Shout Ridge • 9m to the internal east/west road • 20m to the western boundary • 6m to the north/south Road	11m (Eton Road), 7.2m (Shout Ridge) 9.4m (min) 20m (min.) N/A (road not proposed)	**NO** **YES** **YES** **N/A**
A minimum of 8m from the street boundary to the fourth storey and above	Buildings A & B: 8.7m (min.) Building C: 6.8m (min.)	**YES** **NO**
2m articulation zone behind street setback and <40% occupied by building	NO	**NO**
Building line to street parallel, or stepped for angled sites	YES	**YES**
Driveway set back a minimum of 6m from the side boundary within the street setback to allow for deep soil planting	11m driveway setback	**YES**
Side and rear setbacks at a zone interface • minimum 9m up to the 4th storey • greater setbacks where proposal is located upslope from a lower density zone	The minimum setback from R2 zoned land is 9.4m. The proposal is not located upslope from the lower density zone.	**YES**
Encroachments		
Basements are not to encroach into any		

setback areas	The basement encroaches into the Shout Ridge setback by 2.2m and the Eton Road setback by 1m.	**NO**
Ground floor terrace/courtyards may encroach into the setback area provided there is a minimum setback to the terrace edge/courtyard wall of: o 8m to street boundary o 4m to rear & side boundaries o 7m from side and rear boundaries of land zoned for lower density	Ground floor terraces facing Shout Ridge encroach up to 1.7m (min. setback 6.3m)	**NO**
No encroachments where site area is < 1800m^2	N/A	**N/A**
No encroachments where minimum setbacks have not been achieved.	Minimum setbacks to Eton Road and Shout Ridge have not been achieved.	**NO**
<15% of the street setback area occupied by terraces/courtyards	553m^2 / 2193m^2 = 25%	**NO**
7A.4 Building separation		
The minimum separation between residential buildings on the development site and the adjoining sites is: Up to 4th storey: • 12m between habitable rooms/balconies • 9m between habitable rooms/balconies and non-habitable rooms • 6m between non-habitable rooms	The minimum internal separation is compliant at 12m. The minimum separation to an adjoining building is >20m which is also compliant.	**YES**
7A.5 Site coverage		

Max 30% of the site area and less 30% of the access handle/s	27.5%	**YES**
7A.6 Deep soil landscaping		
Site specific control: A minimum deep soil landscaping area of 55% is required.	>55%	**YES**
Tree replenishment and planting: 35 tree required	>35 trees retained proposed	**YES**
7B – Access and parking		
7B.1 Car parking provision		
Design All parking within basement	YES	**YES**
Car parking does not project more than 1 metre above natural ground level	The eastern end of the basement projects 2.5m above the natural ground level.	**NO**
Single lane aisles, straight ramps and tunnels max 12.0m in length.	YES	**YES**
Direct and continuous internal pedestrian access from basement car park is provided to each level of the building	YES	**YES**
Car parking to comply with AS2890.1	YES	**YES**
Car parking rates: Studio 0.5 spaces One bedroom 1 space Two bedrooms 1.25 spaces Three or more bedrooms 2 spaces Visitors: 1 per 4 units		**YES**
At least one car share space is provided.	This control was introduced after the lodgement of the application.	**NO**

Temporary service/removalist vehicle space provided	YES	**YES**
Adaptable units have at least one disabled parking space each	YES	**YES**
7B.2 Bicycle parking and support facilities provision		
- A minimum of 1 bicycle space per 5 units provided within the residential car park area - A minimum of 1 bicycle space per 10 units provided for visitors in the visitor car park area	YES YES	**YES** **YES**
7C – Building design and sustainability		
7C.2 – Communal open space		
At least 10% of the site area must be provided as communal open space	>10%	**YES**
A single parcel of communal open space with a minimum area of 80m^2, minimum dimensions of 8m and 3 hours solar access to 50% of the space on 21 June is provided	To the eastern side of each building is a communal open space with an area of more than 80m2. The communal open space areas of Buildings A and B have a north-east aspect and will receive more than 3 hours solar access.	**YES**
Communal open space located behind building line at ground level Secondary communal open space has a minimum dimension of 5.0m and may be located on roof tops.	YES Secondary communal open space is not required.	**YES** **N/A**
Shared facilities such as BBQs, shade structures, play equipment and seating	The three communal open space areas have been designed to have	**YES**

provided in the communal open space	different functions. Building A has a picnic lawn with perimeter seating, Building B has a covered outdoor seating area with a BBQ and Building C has a 'contemplative garden' with a timber deck and views over retained and enhanced native landscaping.	
Access for people with a disability is provided to and within communal open space	YES	**YES**
Capable of surveillance from 2 apartments, no entrapment areas and well lit	YES	**YES**
Garden maintenance storage, water and drainage connections provided	As maintenance is likely to be undertaken by a contractor storage for equipment is not required. The provision of taps for irrigation is a requirement of the BASIX Certificate.	**YES**
7C.3 Ground floor apartments		
Gates from each ground floor apartment private open space into common areas	YES	**YES**
No subterranean rooms to any part of any apartment	YES	**YES**
No ground floor apartments created as a result of excessive excavation.	YES	**YES**
No dwelling walls have direct contact to soil and below the adjacent ground level	YES	**YES**
Internal finished floor level and private open space is not to be more than 0.9m	YES	**YES**

below existing ground level		
Ground level adjacent to the building levelled to the finished floor level for a distance of 3.0m from the building line	YES	**YES**
7C.4 Apartment mix and accessibility		
Range of apartment sizes included within the development	YES	**YES**
Mix of 1, 2 & 3 bedroom apartments located on the ground level.	Each building has 1, 2 and 3 bedroom apartments at the ground floor level.	**YES**
All apartments meet the Silver Level under the Livable Housing Design Guidelines	17% - The application was submitted prior to the commencement of this requirement.	**NO**
15% of the dwellings meet the Platinum Level under the Livable Housing Design Guidelines.	NO	**NO**
At least 70% of all dwellings are visitable	YES	**YES**
7C.5 – Building entries		
Buildings address the street either: • with main entrances to lift lobbies directly accessible and visible from the street; or • with the path to the building entry readily visible from the street where site configuration is conducive to having a side entry.	The main pedestrian access points to the site are at the northern boundary to the private road. Three access points are provided and identified by a paved area with letterboxes, a sandstone feature wall incorporating signage and letterboxes and waiting area with bench seating.	**YES**
Entry foyers no more than 1m above ground level.	YES	**YES**
All entry areas are well lit and designed	Capable of compliance via	**YES**

to avoid any concealment or entrapment areas; with no light spill.	**Conditions 20 and 84**.	
Lockable mail boxes are provided close to the street; at 90 degrees to the street, meet Australia Post standards and integrated with front fences or building entries.	The mailboxes are at 90 degrees to the street and integrated with the entry points off the private road.	**YES**
Large development sites provide clear entries, sight lines and way finding signs	YES	**YES**
Both street frontages are addressed with entry points and direct level access	Three building entry points are provided on the northern boundary. All provide direct and level access from the private road to the internal footpath network. Three building entry points on the southern boundary are also proposed.	**YES**
Building entry paths min 1.2m wide, within the common area with 1.2m on either side for landscape planting	YES	**YES**
1.5m wide common circulation corridors and 1.8m wide at lifts	YES	**YES**
7C.6 Building form and facades		
• Designed to avoid entrapment areas • Modulated and designed to avoid: o large flat walls undifferentiated o window openings applied treatments o one single predominant finish	No entrapment areas. No large flat walls Windows do not appears as applied treatments or relied upon to break up facades A generous palette of materials has	**YES**

<table>
<tr><td>or material
• No single wall plane exceeds 81m^2
• Air conditioning units not located on building façade or within private open space
• No balconies run full length of building façade
• Balconies do not project more than 1.5m
• Corner buildings address both frontages</td><td>been selected.
No single wall plane exceeds 30m2
All air conditioning units are roof mounted.
No balconies run the full length of any façade.
No balconies project more than 1.5m beyond the façade
All buildings address their respective street frontages</td><td></td></tr>
<tr><td>Continuous length of any elevation does not exceed 36m.</td><td>The northern elevation of Building C southern elevations of Buildings B and C and the western elevation of Building C exceed 36m.</td><td>NO</td></tr>
<tr><td colspan="3">7C.7 – Building storeys</td></tr>
<tr><td>Maximum number of stores above the basement:
<table><tr><th>Maximum building height</th><th>Maximum number of storeys</th></tr><tr><td>11.5m</td><td>3</td></tr><tr><td>14.5m</td><td>4</td></tr><tr><td>17.5m</td><td>5</td></tr><tr><td>23.5m</td><td>7</td></tr></table></td><td>14.5m – 4 storeys</td><td>YES</td></tr>
<tr><td colspan="3">7C.8 – Top storey design and roof forms</td></tr>
<tr><td>GFA does not exceed 60% of the floor below</td><td>Building A: 61%
Building B: 61%
Building C: 60.8%</td><td>NO
NO
NO</td></tr>
<tr><td>The top storey of a building is to be set back a minimum of 2.4m from the outer face of the floors below on all sides.</td><td>The minimum setback of 2.4m is not achieved at all points of the building</td><td>NO</td></tr>
<tr><td>Service elements (plant, air conditioning,</td><td>YES</td><td>YES</td></tr>
</table>

solar panels, lift overruns etc.) integrated into overall design		
Roof design is to respond to solar access and prevailing weather with the use of eaves, skillion roof, awnings and the like with a minimum overhang of 0.6m	A minimum roof overhang of 1.7m is proposed.	**YES**
7C.9 – Laundry and air clothes drying facilities		
Each apartment has access to an external air clothes drying area, e.g. a screened balcony, a terrace or common area	Capable of compliance by condition	**YES**
External air clothes drying areas are screened from public and common open space areas	Capable of compliance by condition	**YES**
7C.10 – Fencing		
Front boundary fences and walls (to a public street) and side boundary fences within the street setback are not to be higher than: - 0.9m if of solid construction - 1.2m if of open construction	YES	**YES**
Solid front fence maximum 1.8m and set back minimum 2m on busy roads or from noise sources only	N/A	
Fences stepped to follow natural contours	YES	
Hedges/shrubs along the entire front boundary do not exceed 1.2m and 1.8m on busy roads	YES YES	

External finishes are robust and graffiti resistant Fence heights to ground floor private open space, courtyards etc. do not exceed: • 1.2m to any street frontage • 1.8m to any side or rear boundary (max 1.2m high solid and a minimum 30% transparent component above).	YES	

An assessment of the variations to the design controls identified in the compliance table is provided below.

Part 14B.3 Screen Australia Site – Planned Future Character

Design control viii) states:

> *Higher density development is oriented north/south to present a less dominating visual impact overlooking the oval and providing view corridors through the site both from the oval and the main UTS campus building.*

The relevant objectives for this control are:

> *3. To provide a transition between the low density residential neighbourhoods and the higher density Crimson Hill Development and adjoining UTS Ku-ring-gai campus*
> *4. To ensure the development complements surrounding residential areas.*

The Urban Structure Plan suggests that this control viii) could be achieved through the provision of 4 X four storey buildings with their long axis oriented in a north/south direction. The proposal is for three 'L' shaped buildings with a maximum

height of 4 storeys. The 4 storey portion of each building has a north/south orientation. The three storey component is attached to the eastern side of each building. The proposal provides a 20m wide view corridor at the western end of the site, 12m wide view corridors between Buildings A & B and Buildings B and C and a 12m wide view corridor to the east of Building C. The applicant's architect prepared a DA Design Report which examined the DCP controls and identified several issues with the Urban Structure Plan, including that it does not take into consideration the existing vegetation in the south-eastern corner of the site, would result in some apartments looking directly into other apartments, compromises communal open space and solar access in comparison to buildings with an east-west orientation. The applicant's modelling of the structure plan used four 20m x 36m buildings and retained the north/south road. If the structure plan layout was applied to a site that did not have the north/south road, it would result in a minimum separation of 24m between buildings which is double the ADG requirement and would address the overlooking/outlook concern but would not resolve the issue of a high proportion of single aspect east and west facing apartments.

Council's Urban Design consultant reviewed the applicant's rationale and provided the following comments:

> *A second significant difference between the proposed site layout and the Urban Structure Plan required under Figure 14B.1-1 is the proposal of three 'L-shaped' 3-4 storey buildings rather than four rectangular 4 storey buildings. It is considered that this departure from the controls is a generally positive move which still meets the objectives of the controls. The varied heights and open spaces of the proposed 'L-shaped' buildings will provide a 'softer' transition from the lower density residential areas to the north to the higher density residential development of Crimson Hill, as well as a more interesting streetscape which does not dominate the Oval. Amenity will be improved by offering better opportunities for communal open space, increased building separations, improvement in outlook for all dwellings, and better solar access. It is noted however that the proposal will reduce the number and width of view corridors*
> *through the site. On balance, this aspect is considered acceptable from an urban design perspective.*

Design control viii) is not particularly prescriptive, the dimensions of the view corridors have not been defined by reference to a minimum standard and the difference between a building with a north/south orientation vs an east/west orientation may be decided by an imperceptible difference between the width and depth of the building. In the subject case, the width of the buildings (east/west) is approximately 3m greater than the depth (north/south). Of benefit to the proposal is that Building C has been designed with a variable setback of 8.3-31.5m to the Shout Ridge boundary. If Building C had its floor plate oriented in the same position as Buildings A & B and presented a 41.5m long elevation with a maximum setback of 10.1m it would be difficult to conclude that the visual impact on the oval was acceptable and consistent with the objective of providing an appropriate transition in density between the subject site and the lower density zoned land to the north.

Whilst it appears likely that the applicant has overstated the design shortfalls of the Urban Structure Plan layout, it is considered that the objectives of the control are achieved, the visual impact of the development on the oval is acceptable and that suitable view corridors through the site have been provided.

The north/south access road

Design control v) in Part 14B.1 states:

> *Vehicle and pedestrian access to the site will continue to be gained from Eton Road to the east. Secondary access will be gained from the south.*

Design control 2 in Part 14B.2 states:

> *Secondary access will be gained from the south.*

Part 14B.1 of the DCP does not contain an objective that specifically relates to design v), however Part 14B.2 has the following objectives:

> *1. To provide for good vehicle access and pedestrian permeability through the site that integrates with the surrounding road networks and activities.*

2. To provide new intimately scaled residential streets that reinforce and enhance the unique leafy, green landscape character of Ku-ring-gai.

The Urban Design Study considered by Council when determining the Planning Proposal to rezone the site included a north/south road. The road appears to be for the purposes of splitting the site into smaller components and providing street frontages for dwelling house lots. The Study examined four development scenarios including 100% dwelling house lots and a mix of dwelling house lots plus 2 or 4 storey residential flat buildings. All of these scenarios retained the north/south road however none of the residential flat building schemes utilised the north/south road for vehicle access. The Study was informed by the following Design Principle:

Access: Vehicular access to the site should be integrated with existing movement network ensuring that congestion along Eton Road is minimised and patronage of the bus service is maximised.

The proposal is for all vehicular access to be from the private east/west road that has an intersection with Eton Road. The traffic generated by the subject development and the approved subdivision is 47 trips in the AM & PM peak hours. This volume of traffic is not predicted to result in congestion at the Eton Road intersection. The proposed north/south pedestrian pathways direct access to the oval. As the site is part of a community title subdivision residents of the approved subdivision will also benefit from these pathways. Visual permeability through the site is achieved through compliance with the deep soil landscaping, site coverage and building separation controls. As there is no traffic management or urban design reason for retaining the north/south road, its omission is considered acceptable.

Part 7A.3 Building Setbacks and Part 14B.3 – Screen Australia Site - Building Setbacks

The proposed minimum setbacks of 11m to the Eton Road boundary and 7.4m to the Shout Ridge boundary do not comply with the 12m requirement specified by the DCP.

The objectives of the 12m control are:

1. To provide building setbacks that allows retention of existing established vegetation and maintaining the established bushland character of the site.
2. To create cohesive streetscapes defined by a landscaped setback on both sides with consistent building alignments.

The applicant has provided the following justification for the departure from the 12m control:

Eton Road
The setback variation to Eton Road is 1.1m (9%) and is considered minor. Notwithstanding, the existing bushland frontage to Eton Road will be extended and improved through additional planting of compatible indigenous species. The setback will ensure the new development will be viewed within a bushland setting from Eton Road;
The proposal provides a 33.5m setback to Eton Road and a 32m setback to Shout Ridge in the south eastern corner of the site which significantly exceeds the DCP requirements;
The variation to the setback control for part of Building C is only limited to 28% of the boundary whilst the average setback is compliant at 22.2m.
Shout Ridge
The majority of trees on the southern boundary adjacent to Shout Ridge will be maintained. These trees are considered to be Category A and worthy of retention, whereas the trees proposed to be removed on Shout Ridge (as part of DA 0093/2016) are categorised as Z less important.
The building setbacks will still allow for the retention of existing established vegetation and maintain the bushland character of the site. The retention of trees within the setback adjacent to Shout Ridge will reduce the visual bulk of the buildings when viewed from Charles Bean Oval.

Building C has a variable setback of 11-33.5m to Eton Road which provides for approximately 1300m^2 of deep soil landscaping to the eastern side of the building and also provides for the retention of trees located on the site (Trees 443, 445, 446, 448, 449, 450, 452-454, 512) and adjacent to the site in the road reserves of Eton Road and Shout Ridge. If compliance with the 12m control was adopted without

regard to existing trees it would likely require the removal of many of the retained trees in the south-eastern corner of the site and would provide for a smaller area of deep soil landscaping (approximately 680m2).

The proposal has variable setbacks of 7.4-10.1m from Shout Ridge. The buildings previously located on the site had a minimum setback to Shout Ridge of approximately 5.5m. This setback area contained shallow landscaped beds directly adjacent to the boundary with the balance of setback area occupied by bitumen and concrete access driveways. For these reasons, there are few significant trees adjacent to the Shout Ridge boundary and those trees situated near this boundary do not require a substantial setback to facilitate their retention and future growth. The variable setbacks of 7.4-10.1m are consistent with the control objectives as they provide for the retention of existing vegetation and areas for the planting of new vegetation including 14 new canopy trees.

Part 7A.3 – Building Setbacks – Encroachments

The proposal also exhibits departures from the following design controls:

> 2. ii). A minimum setback of 8m from the street boundary to the fourth storey and above (6.8m min. setback for Building C)
> 12. Ground floor private terraces/courtyards have a minimum setback of 8m to Shout Ridge (6.3m proposed)
> 14. No encroachments into setback zones if the minimum setbacks are not achieved
> 15. Maximum 15% of street setback area occupied by private terraces/courtyards (25% of the setback area is occupied by terraces or building)

The above variations predominantly relate to the setbacks from Shout Ridge. At the Pre DA stage (PRE0153/15) a proposal for a 6m (min.) setback from Shout Ridge was considered. The applicant was given the following advice:

> *The reduced setbacks to Shout Ridge would be considered provided that the significant trees along that frontage are retained, the minimum 55% of*

the sites deep soil was provided for and that the through site link from the residential lots to Shout Ridge is provided for. Further, compliance with the maximum FSR is strictly necessary.

The proposal complies with this advice. The proposal retains significant trees, complies with the 55% deep soil control, the FSR development standard and the through site link from the private road to Shout Ridge has been provided. The Shout Ridge setback has also been increased from 6m (min.) to 7.2m (min.).

The objectives of the above controls include:

1 To ensure buildings are situated within a garden setting dominated by canopy trees.
2 To soften the built form and maintain the garden character of Ku-ring-gai.
3 To provide effective deep soil areas that are able to create a garden setting, including substantial trees and canopy, to all sides of the building.
4 To reduce the visual bulk of buildings from the street.
7 To ensure adequate separation space between neighbouring sites to enable effective deep soil landscaping and tree planting which enhances the Ku-ring-gai landscape character.
10 To ensure building setbacks at all levels respond to site conditions, and the local topography.
12 To ensure common area is retained to all boundaries, and that they are viable for deep soil landscaping.
13 To minimise bulk and scale impacts on neighbouring development.
14 To ensure setback areas limit elements that compromise deep soil planting and growth of canopy trees.
15 To ensure that new development is of a scale that supports the desired area character with appropriate massing and spaces between buildings.
16 To protect existing trees.

The underlying purpose of the design controls and objectives of the DCP is best represented by objective 1, '*To ensure buildings are situated within a garden setting dominated by canopy trees.* Despite the variations to the design controls, the proposal achieves this objective by retaining existing significant trees adjacent to

Shout Ridge and providing generously dimensioned deep soil areas in the front and to the sides of the buildings. The deep soil area to the south-east of Building C has dimensions of approximately 33m X 30m and the area to the west of Building A dimensions of 20m X 57m. The consolidated areas of deep soil landscaping are larger than those typically found in the setbacks area of residential flat buildings. For the aforementioned reasons, the proposal is consistent with the objectives of the design controls.

7B.1 Car parking provision

Design control 4 of the DCP states:

> *4. The basement car park is not to project more than 1.0m above existing ground level.*
> ***Note:*** *Basements greater than 1m above the natural existing ground level are counted as a storey for the purposes of this DCP and will be included in the floor space ratio calculation as well as any control based on the number of storeys.*

The objectives for this control include:

> *1. To locate and design car parking which is integrated with the site and building design and which does not increase the bulk and scale of the building.*
> *2. To ensure car parking does not detract from the landscape character of Ku-ring-gai and supports the garden setting of the residential flat building.*

The eastern end of the basement projects approximately 2.5m above the existing ground level. The projection is a consequence of the existing slope of the site and the need to provide adequate clearance height (2.6m) at the entry for the waste collection vehicle. The eastern end of the basement contains the access and egress ramps and no car parking spaces. All the car parking spaces are located in parts of the basement that do not project more than 1m above the existing ground level. By definition, access to car parking and basement 'vehicular access' is not included as gross floor area. Accordingly, the eastern end of the basement does not constitute

gross floor area as it only contains access to car parking.

The objectives of the control seek to avoid basement designs that increase bulk and scale and detract from the landscape character. The proposal avoids these outcomes by providing three habitable floors above the basement projection and a building height of 12.2m. Impacts on the landscape character are minimised by a sandstone finish for the external above ground level wall of the basement and the enhancement of the existing landscaping adjacent to the elevation.

7C.4 Apartment mix and accessibility

At the time the application was lodged the DCP required 10% of apartments to be design as adaptable housing Class C pursuant to AS4299. None of the adaptable apartments comply with the Class C requirements as they do not comply with the 1550mm separation requirement for opposing base cabinets in the kitchen. The plans submitted by the applicant would require demolition of the island benches and reconstruction to comply with the 1550mm requirement. The intent of the 1550mm separation requirement is so that a person in a wheelchair can make a 180 degree turn in the kitchen. The applicant has criticised the requirement to comply with AS4299 due to their belief that the standard is outdated and it would be unreasonable to apply these types of design requirements to peoples homes. The applicant's criticisms are not considered to justify a departure from the standard as:

i. Clause 4.5.2 of AS4299 clearly states that minimum clearances in front of appliances and between opposing base cabinets, 'shall be provided from the outset'.
ii. A high proportion of apartments are purchased as investment properties and are made available for lease in the rental market.
iii. Apartments are likely to accommodate numerous different household types during their economic life.
iv. Compliance with the standard would not have an adverse impact on the internal planning of the apartments or the utility of the apartments to a person who did not have a disability.
v. The recently developed Livable Housing Guidelines have retained the 1550mm separation requirement for kitchens. These guidelines were formulated in

conjunction with industry groups, government and developers. The applicants claim that this requirement is outdated is not supported by the available evidence.

Condition 24 requires that compliance with AS4299 or the Livable Housing Guidelines be demonstrated prior to the issue of the construction certificate.

7C.6 Building Forms and Facades – Building length

The DCP contains two design controls:

> *16.The continuous length of a single building on any elevation is not to exceed 36m.*
> *17.The length of a single building elevation facing the side or rear boundary may exceed 36m provided that:*
> > *i) the façade is recessed in depth and width to appear as distinctive and separate building bays or wings; and*
> > *ii) the recess is retained as common area with landscaping which includes at least one medium tree (at least 8m canopy diameter at maturity).*

The proposal does not comply with these controls as the northern elevation of Building C has a length of 41m, the southern elevations of Buildings B and C have lengths of 41m and the western elevation of Building C has a length of 36.5m. The objectives of the design controls include:

> *1 To promote well designed buildings of high architectural quality that contribute to the desired local character.*
> *2 To ensure the 3-dimensional built form and the setback is clearly articulated to reduce the bulk and scale of the building.*
> *3 To limit the unarticulated length of buildings.*

Despite the numerical non-compliance the proposal is consistent with the control objectives for the following reasons:

1. The proposed 'L-shaped' buildings provide an interesting streetscape which does not dominate Shout Ridge.
2. All elevations have been broken down into smaller components to minimise visual bulk and provide an aesthetically pleasing outcome. This has been achieved through the use of framing elements with a rendered finish, landscaping at upper levels and recessed walls at building entries.
3. An appropriate palette of materials and finishes has been selected. The palette has been applied in a logical and consistent fashion across the elevations. Dry-pressed clay bricks and aluminium vertical louvres have been used to enhance the visual effect of the recesses.
4. The walls of the top storey are to be clad in painted fibre cement. The top storey appears as a recessive element rather than a continuation of the floor below.
5. Flat wall planes have been limited to a maximum area of approximately $30m^2$, which is significantly less than the control requirement of $81m^2$. This has been achieved by wrapping the balconies around the elevations, varying the depth of the balconies and using both glass and compressed fibre cement as the balustrade material. The design of the balconies breaks down the massing and provides depth, shadows lines and visual interest.
6. The extensive use of glass and minimal use of rendered and painted concrete as a wall finish minimises visual bulk.

7C.8 Top Storey Design and Roof Forms

The DCP requires that the top storey has a minimum setback of 2.4m from the floor below. The proposal is for a varied setback of 1-4.3m from the floor below. The DCP requires that the floor area of the top storey does not exceed 60% of the floor area of the floor below. The proposal exhibits a minor departure from this control, with the floor area of the top storeys of Buildings A & B being 61% of the floor below and Building C being 60.8% of the floor below.

The objectives of the design controls include:

1. To ensure that the design of the top floor of buildings minimises visual bulk.
2. To ensure that the design and location of the top floor minimises overshadowing.
3. To contribute to the overall design and environmental performance of buildings.
4. To differentiate the visual appearance of the top floor of the residential flat building from the floors below.

The above objectives have been addressed by:

i. Varied setbacks of 1-4.3m from the floors below in lieu of a consistent setback of 2.4m.
ii. A painted fibre cement wall finish with a low pitch corrugated sheet metal roof, which suitably integrates the top storeys with the floors below.
iii. Generous eave overhangs which exceed the 0.6m requirement, strongly define the eaves line of the top storeys and provide covered private open space and window shading for the apartments on the top storey.
iv. Overshadowing of adjacent/nearby residential land is limited to a brief period in the morning of 21 June.

Ku-ring-gai Development Control Plan

Part 15 – Land Contamination

Refer to SEPP 55 comments.

Part 16 – Bushfire Risk

Refer to Section 79BA comments.

Ku-ring-gai Development Control Plan

Section C

Development control	Proposed	Complies
Part 21 General Site Design		
Earthworks and slope		
Development consider site topography, drainage, soli landscapes, flora, fauna and bushfire hazard by: • Stepping buildings down the site • Locate finished ground level as close to the natural ground level as practicable • Level changes to occur primarily within building footprint • Minimum 0.6 metres width between retaining walls • Maintain existing ground level within 2m from any boundary • Limit slope for embankments to 1:6 (grassed) and 1:3 (soil stabilising vegetation) • No fill and excavation within sensitive environments • Minimise altered groundwater flows	YES	**YES**
Landscape Design		
Appropriate and sensitive site planning and design	YES	**YES**
Existing appropriate screen planting is retained	Significant trees and vegetation retained	**YES**
Bushland Protection – buffer zone adjacent to bushland	YES	**YES**
Planting within 100m of bushland • 70% local native species • 30% local native understorey species	YES	**YES**
Planting between 100m – 300m from bushland	N/A	**N/A**

• 50% of trees and shrubs local native species		
Planting more than 300m from bushland • 25% of trees and shrubs local native species	N/A	**N/A**
Part 22 – General access and parking		
Equitable Access		
Compliance with DDA demonstrated	YES	**YES**
Entry access ramps located within the site and does not dominate the front façade	N/A	**N/A**
Access ways for pedestrians and for vehicles are separated	YES	**YES**
Residential only Multi Dwelling Housing, Residential Flat Buildings and Shop Top Housing within Mixed Use developments provide access to, and between, dwellings and parking in accordance with the Livable Housing Guidelines as stipulated in Part 6 Multi Dwelling Housing, Part 7 Residential Flat Buildings and Part 8 Mixed Use Development.	The Access Report indicates that compliance will be achieved subject to further detail at construction certificate stage. A standard condition of consent has been included in the recommendation.	**YES**
General vehicle access		
• Minimise width and number of vehicle access points	One vehicle access point is provided.	**YES**
• Access driveways set back at least 10m from street intersections and 3m from pedestrian entrances	YES	**YES**
• Vehicle and pedestrian access to buildings clearly distinguished and separated	YES	**YES**
• Vehicle crossing width is acceptable for intensity of use proposed	YES	**YES**

• Vehicles must exit in a forward direction • Vehicle entries are integrated into the external façade and are finished in a high quality material • Retaining walls associated with driveways maximum height of 1.2m • No driveways are longer than 30m unless a passing bay is provided	YES YES 1.2m YES	**YES** **YES** **YES** **YES**
Basement car parking		
Logical and efficient basement design AS2890.1	YES	**YES**
Appropriate ceiling floor to ceiling heights and ventilation provided: • 2.5m for parking area for people with a disability; • 2.6m for residential waste collection and manoeuvring area • 4.5m for commercial waste collection and manoeuvring area	YES	**YES**
Basement is fully tanked	The site is located on a ridge and the Geotechnical Investigation report found no groundwater. Accordingly a tanked basement is not required.	**NO**
Unimpeded access to visitor parking and waste recycling rooms	YES	**YES**
Ventilation grilles and screening devices are integrated into the landscape design	N/A	**YES**
Vehicles access ways are not in close proximity to doors and windows of habitable rooms	YES	**YES**

Safe and accessible intercom access provided	YES	**YES**
Visitor parking		
Visitor parking located behind a security grille with an intercom system to gain entry At least one visitor space is accessible and designed in accordance with AS2890.6	Provision for an intercom system has been made Three accessible spaces	**YES** **YES**
Parking for people with a disability		
Accessible spaces are signposted and have a continuous path of travel to the principal entrance or a lift	Capable of compliance subject to conditions.	**YES**
Pedestrian Movement within Car Parks		
Pathways designed in accordance with AS1428.1	Capable of compliance subject to conditions.	**YES**
Marked pedestrian pathways have clear sightlines, appropriate lighting, are visible, conveniently located and constructed of non-slip material	YES	**YES**
Bicycle Parking and facilities		
Bicycle parking and storage facilities satisfy AS2890.3	Capable of compliance subject to conditions	**YES**
Bicycle access paths have a minimum width of 1.5metres	YES	**YES**
Part 23 – Building Design and Sustainability		
3.1 Green Buildings		

For all non-residential development: • >5000m^2 GLA must achieve a five star rating or equivalent if GBCA rating tool is not available • 2000-5000m^2 GLA must achieve a four star rating or equivalent if GBCA rating tool is not available	N/A	**N/A**
3.2 Social Impact		
Social Impact Statement required/lodged	A social impact statement is not required.	**N/A**
3.3 Building Services		
Services and related structures are appropriately located to minimise streetscape impact	YES	**YES**
In mixed use precincts substations and fire hydrants are not visible from the primary and principal street frontages	N/A	**N/A**
Air-conditioning units are well screened and do not create adverse noise impacts	Screened roof level platforms for the air-conditioning units are proposed.	**YES**
3.4 Waste Management		
Efficient, effective and sustainable waste management practices	YES	**YES**
3.5 Acoustic Privacy		
Design minimises impact of internal and external noise sources	YES	**YES**
3.6 Visual Privacy		
Visual privacy maintained for occupants and for neighbouring dwellings	Adequate separation distances and screening devices have been provided as required by Part 7 of the DCP and the ADG.	**YES**

3.7 Materials, Finishes and Colours		
External walls constructed of high quality and durable materials	YES	**YES**
Use of materials and colours creates well-proportioned facades and minimises visual bulk	YES	**YES**
3.8 Roof Terraces and Podiums		
Podiums and roof terraces are trafficable and support landscaping	Podium landscaping proposed. Three roof level terraces that include planter beds are proposed.	**YES**
Roof & terrace common areas design encourage usage	YES	**YES**
3.9 Construction, Demolition and Disposal		
Satisfactory Environmental Site Management Plan	YES	**YES**

Part 24 – Water management

Council's Development Engineer is satisfied that the proposed development can be designed to manage urban stormwater as per the requirements of the DCP, subject to conditions.

Part 25 – Notification

The application has been notified in accordance with the requirements of the DCP. The submissions received are addressed above.

Section 94 Development Contributions Plan 2010

The development contribution amount has been based on the following:

- 12 X 1 bedroom apartments
- 69 X 2 bedroom apartments
- 15 X 3 bedroom apartments

The development attracts a section 94 contribution of $1,492,206.90 which is required to be paid prior to the issue of the Construction Certificate (**Condition 36**).

LIKELY IMPACTS

The likely impacts of the development have been considered within this report and are deemed to be acceptable, subject to conditions.

SUITABILITY OF THE SITE

The site is suitable for the proposed development.

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 relevant environmental planning instruments and is deemed to be acceptable. On this basis, the proposal is considered to uphold the public interest.

CONCLUSION

Having regard to the provisions of section 79C of the Environmental Planning and Assessment Act 1979, the proposed development is considered to be satisfactory.

RECOMMENDATION

PURSUANT TO SECTION 80(1) OF THE ENVIRONMENTAL PLANNING AND

ASSESSMENT ACT, 1979

THAT the Sydney North Planning Panel, as the consent authority, being satisfied that the proposed development will be in the public interest, grant development consent to DA0223/16 for construction of a residential flat building development on land at 101 Eton Road Lindfield. This consent lapses if the approved works are not physically commenced within five (5) years of the date of the Notice of Determination.

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
DA 02.B2 Revision D	Bates Smart	17/02/2017
DA 02.B1 Revision D	Bates Smart	17/02/2017
DA 02.00 Revision D	Bates Smart	17/02/2017
DA 02.01 Revision D	Bates Smart	17/02/2017
DA 02.02 Revision D	Bates Smart	17/02/2017
DA 02.03 Revision D	Bates Smart	17/02/2017
DA 02.04 Revision D	Bates Smart	17/02/2017
DA 03.00 Revision D	Bates Smart	17/02/2017
DA 03.01 Revision D	Bates Smart	17/02/2017
DA 03.02 Revision D	Bates Smart	17/02/2017
DA 03.03 Revision D	Bates Smart	17/02/2017
DA 03.04 Revision D	Bates Smart	17/02/2017
DA 03.10 Revision D	Bates Smart	17/02/2017
DA 03.11 Revision D	Bates Smart	17/02/2017
DA 03.12 Revision D	Bates Smart	17/02/2017

DA 03.13 Revision D	Bates Smart	17/02/2017
DA 03.14 Revision D	Bates Smart	17/02/2017
DA 03.20 Revision D	Bates Smart	17/02/2017
DA 05.01 Type 1 Revision C	Bates Smart	3/02/2017
DA 05.01 Type 2 Revision C	Bates Smart	3/02/2017
DA 05.01 Type 3 Revision C	Bates Smart	3/02/2017
DA 07.01 Revision D	Bates Smart	7/03/2017
DA 07.02 Revision D	Bates Smart	7/03/2017
DA 07.03 Revision D	Bates Smart	7/03/2017
DA 08.01 Revision D	Bates Smart	7/03/2017
DA 08.02 Revision D	Bates Smart	17/02/2017
DA 08.03 Revision C	Bates Smart	3/02/2017
DA 08.04 Revision C	Bates Smart	3/02/2017
DA 08.05 Revision C	Bates Smart	3/02/2017
C100 Revision P3	Bonacci Group Pty Ltd	5/05/2016
C105 Revision P3	Bonacci Group Pty Ltd	5/05/2016
C106 Revision P3	Bonacci Group Pty Ltd	5/05/2016
C110 Revision P4	Bonacci Group Pty Ltd	24/11/2016
C111 Revision P4	Bonacci Group Pty Ltd	24/11/2016
C112 Revision P4	Bonacci Group Pty Ltd	24/11/2016
C120 Revision P3	Bonacci Group Pty Ltd	5/05/2016
C121 Revision P5	Bonacci Group Pty Ltd	24/11/2016
C135 Revision P4 Sheet 1 of 2	Bonacci Group Pty Ltd	24/11/2016
C136 Revision P3 Sheet 2 of 2	Bonacci Group Pty Ltd	5/05/2016
C173 Revision P2	Bonacci Group Pty Ltd	24/11/2016
Landscape Development Application Report, Issue D	Turf Design Studio	22/02/2017
Dwg A-001 Issue D - Environmental Site Management Plan	City Projects and Developments	24/11/2016

Document(s)	**Dated**

Vegetation Management Plan prepared by ACS Environmental Pty Ltd	November 2016
BASIX Certificate No. 723880M_06	13/01/2017
Bushfire risk assessment and compliance assessment for proposed residential flat building/s at 101 Eton Rd Lindfield prepared by Travers Bushfire and Ecology	3/03/2017
SEPP 65 Design Verification Statement	16/05/2016
Details of facade and materials - extract from the Development Application Design Report prepared by Bates Smart	undated
Remedial Action Plan prepared by Greencap for project number J142129	26/05/2016
Deep soil plan, page 8 of Development Application Design Report prepared by Bates Smart	24/11/2016
Arboricultural Assessment prepared by Naturally Trees	27/11/2016
Civil Design Report prepared by Bonacci	6/05/2016
Geotechnical Investigation for Eon Lindfield Development Pty Ltd prepared by Sts GeoEnvironmental Pty Ltd. Report No: 17/0012	January 2017

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.

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

3. Asbestos works

All work involving asbestos products and materials, including asbestos-cement-sheeting (ie. Fibro), must be carried out in accordance with the guidelines for asbestos work published by WorkCover Authority of NSW.

Reason: To ensure public safety

4. Vegetation Management Plan (VMP)

The Vegetation Management Plan, prepared by **ACS Environmental P/l**, dated Revised November 2016, is endorsed in its entirety.

i. All works detailed within the VMP-revegetation, weed removal, weed techniques, environmental protection measures and proposed planting are to be carried out in accordance with the VMP.

ii. All noxious and environmental weeds are to be removed from within the VMP area.

iii. All works detailed within the VMP area are to be conducted by a suitably qualified bush regenerator. The minimum qualifications minimum qualifications and experience (for bush regenerator) are a TAFE Certificate 2 in Bushland Regeneration and one year demonstrated experience (for other personnel). In addition the site supervisor is to be eligible for full professional membership of the Australian Association of Bush Regenerators (AABR).

Reason: To ensure the protection and enhancement of Sydney Sandstone Ridgetop Woodland which contains threatened *Darwinia biflora* a vulnerable species listed under the *Threatened Species Conservation Act 1995*.

5. 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.

6. 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.

7. Notice of proposed work (contaminated land)

A notice of proposed work form must be given to Council's Development Assessment Officer, in accordance with SEPP 55, Clause 16. Note: At least 30 days notice is required, except in the case of work required to be carried out immediately under the terms of remediation order (in which case, at least 1 days notice is required).

SEPP 55, Clause 16 requires that the notice must:

- be in writing
- provide the name, address and telephone number of the person who has the duty of ensuring that the notice is given
- briefly describe the remediation work
- show why the person considers that the work is category 2 remediation work by reference to Clause 9, 14 and (if it applies) 15(1)

- specify, by reference to its property description and street address (if any), the land on which the work is to be carried out
- provide a map of the location of the land
- provide estimates of the dates for the commencement and completion of the work

The following additional information must be submitted with the notice to Council:

- contact details for the remediation contractor and any other party responsible for ensuring compliance of remediation work with regulatory requirements

Reason: Protection of the environment and compliance with SEPP 55.

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

- Grosvenor Road, Austral Avenue, Eton Road (Austral Avenue to site entrance).

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. 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:
1-17 Hamilton Corner
Any residences which may have been constructed on the lots created under DA0093/16.

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.

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

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

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:

- Excavation
- Concrete pour

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.

11. 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". 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.

12. Marking of trees to be removed

All trees that are to be removed within the development area, are to be clearly marked on site by the Project Arborist in accordance with the approved plans. All other trees are to be retained.

Reason: To protect existing trees during the construction phase.

13. Tree protection fencing/ground protection

To preserve existing trees no work shall commence until the area beneath their canopy is fenced off as per the approved Environmental Site Management Plan, Dwg A-001 Issue D, dated 24/11/16, prepared by City Projects and Developments and ground protection installed in accordance with approved Arboricultural Assessment prepared by Naturally Trees, dated 27/11/16 to prevent any activities, storage or the disposal of materials within the fenced area. The fencing/ground protection shall be maintained intact until the completion of all demolition/building work on site.

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. Ground protection shall be in accordance with AS4970-2009 Protection of trees on development sites.

Reason: To protect existing trees during construction phase

14. 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.

15. Noise and vibration management plan

Prior to the commencement of any works, a noise and vibration management plan is to be prepared by a suitably qualified expert addressing the likely noise and vibration from demolition, excavation and construction of the proposed development and provided to the Principal Certifying Authority. The management plan is to identify amelioration measures to achieve the best practice objectives of AS 2436-2010 and NSW Environment Protection Authority Interim Construction Noise Guidelines. The report shall be prepared in consultation with any geotechnical report that itemises equipment to be used for excavation works.

The management plan shall address, but not be limited to, the following matters:

- identification of the specific activities that will be carried out and associated noise sources;
- identification of all potentially affected sensitive receivers, including residences, commercial premises and properties containing noise sensitive equipment;
- the construction noise objective specified in the conditions of this consent;
- the construction vibration criteria specified in the conditions of this consent;
- determination of appropriate noise and vibration objectives for each identified sensitive receiver;
- noise and vibration monitoring, reporting and response procedures;
- assessment of potential noise and vibration from the proposed demolition, excavation and construction activities, including noise from construction vehicles and any traffic diversions;
- description of specific mitigation treatments, management methods and procedures that will be implemented to control noise and vibration during construction;
- construction timetabling to minimise noise impacts including time and duration restrictions, respite periods and frequency;
- procedures for notifying surrounding occupants of construction activities

that are likely to affect their amenity through noise and vibration;

- contingency plans to be implemented in the event of non-compliances and/or noise complaints;

Reason: To protect the amenity of surrounding residents and other properties during the construction process.

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

16. Amendments to approved engineering plans and documents

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that the approved engineering document(s), 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	Dated
Civil Design Report	Bonacci Group	6/05/2016
C136 P3	Bonacci Group	5/05/2016

The above plans/documents shall be amended as follows:

1. The Civil Design Report is to be amended to refer to Part 24 of Ku-ring-gai DCP. Re-use of retained roofwater is to be nominated to achieve Council's target of a 50% reduction in runoff days.
2. To preserve the biodiversity of the site, excavation for the bioretention basin located at the south-east corner of the site is not to encroach within 2 metres of the northern edge of the conservation area.
3. To preserve the existing landscape buffer including existing trees and rock outcrops along the Eton Road frontage, excavation for the bioretention basin located at the south-east corner of the site is not to encroach within 1 metre of the eastern boundary.

4. Existing trees to be retained are to be numbered on all stormwater plans in accordance with the approved arborist report and conditions of consent.

Reason: To ensure compliance with the requirements of Part 24 'Water Management' of the DCP and minimise impacts on existing vegetation.

17. 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.

18. Amendments to approved landscape plans

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that the approved landscape plans referred to in condition 1 have been amended in accordance with the requirements of this condition.

1. Planting plans for the entire site are to be prepared at minimum scale of 1:100 and are to be numbered and dated. The plans are to be compliant with the controls in Part 21.2 'Landscape Design' of the Ku-ring-gai DCP and the requirements for Landscape Plans specified in Ku-ring-gai Council's DA Guide.
2. Levels are to be provided to the private courtyards on the western side of Building A. To preserve the health and condition of Tree 94, levels west of the building line of Apartment A01 of the western elevation are to be retained at existing grade (no filling permitted). The path to common open space is to be at grade and the stair relocated to the edge of the deck off the living room.

3. Retaining walls are to be consistent with architectural sections. All top of wall levels are to be provided.
4. The proposed tree plantings within the western planters between Buildings A and B and Buildings B and C are to be deleted. The proposed row of *Banksia serrata* and Acacia *fimbriata* located along the eastern side of the path are to be substituted with *Elaeocarpus reticulatus* as per adjacent units to north. Soil depths are to be amended to comply with the minimum soil depths for planting on structures in Part 4P of the Apartment Design Guide, Department of Planning 2015.
5. All levels to bioretention basins and associated pits and tanks are to be shown on the landscape levels plan. The levels are to match the approved stormwater plans.
6. Proposed 1:3 batter to base of gabion wall to private courtyard of Apartment C04 is to be deleted and replaced with a border of Mix 4 species that can attain and be maintained at 1.5 metre in height.
7. The Planting Plan - Ground Floor is to be amended by identifying proposed tree planting and shrub and groundcover planting by symbols rather than coloured circles and hatching. All ground floor apartments are to be numbered in accordance with architectural plans.
8. Proposed planting of *Brachychiton acerifolius, Hynospernum flavum, Toona ciliata* and *Ficus superba* along the northern edge of the communal open space are to be substituted with the equivalent number of deciduous canopy trees (minimum mature height of 6-8m) to provide winter sun such as Pyrus calleryana, Lagerstroemia indica, or similar.

Reason: To ensure that the landscape plans contain sufficient detail and are compliant with the requirements of the DCP and Council's DA Guide.

19. Amendments to architectural plans

Prior to the issue of a Construction Certificate, the Certifying Authority shall be satisfied that the approved architectural plans prepared by Bates Smart and referred to in condition 1 have been amended in accordance with the

requirements of this condition.

1. Sections 3A and 4A are to be amended to indicate the reduced courtyards to Apartments A01, A07, A08 and A09.
2. Section 4 is to include the proposed gabion wall and section 3 is to indicate the relationship with Tree 94.
3. A 1:200 scale plan for the north elevation of Building A which matches the approved floor plans is to be prepared.

Reason: To ensure that there are no inconsistencies between the floor plans and the elevations & sections.

20. 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.

21. Air drying facilities

Prior to the issue of the Construction Certificate, the Certifying Authority shall be satisfied that a common open space area dedicated for open air drying of clothes has been provided for each building or that all apartments have a private clothes drying area with a collapsible clothesline that is screened from the public domain and communal open space.

Reason: Amenity & energy efficiency.

22. External service pipes and the like prohibited

Proposed water pipes, waste pipes, stack work, duct work, mechanical ventilation plant and the like must be located within the building. Details confirming compliance with this condition must be shown on construction certificate plans and detailed with construction certificate specifications. Required external vents or vent pipes on the roof or above the eaves must be shown on construction certificate plans and detailed with construction certificate specifications. External vents or roof vent pipes must not be visible from any place unless detailed upon development consent plans. Where there is any proposal to fit external service pipes or the like this must be detailed in an amended development (S96) application and submitted to Council for determination.

Vent pipes required by Sydney Water must not be placed on the front elevation of the building or front roof elevation. The applicant, owner and builder must protect the appearance of the building from the public place and the appearance of the streetscape by elimination of all external services excluding vent pipes required by Sydney Water and those detailed upon development consent plans.

Reason: To protect the streetscape and the integrity of the approved development.

23. 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, foyers/lift lobbies and accessible car spaces, 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 Certifying Authority prior to the issue of the Construction Certificate. All details shall be prepared in consideration of the Disability Discrimination Act, Access to Premises Standards 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.

24. 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 [Units A1.2, A2.2, A3.4, B1.2, B2.2, B3.4, C.09, C1.2, C2.2 & C3.4], have been designed as Class C adaptable housing in accordance with the provisions of Australian Standard AS4299-1995: Adaptable Housing OR achieve a Platinum Level performance rating in accordance with the Livable Housing Guidelines.

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: To ensure that the adaptable units comply with the relevant design criteria.

25. 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.

26. Noise from plant in residential zone

Prior to the issue of the Construction Certificate an acoustic design report shall be prepared by an appropriately qualified acoustic consultant identifying all mechanical ventilation equipment and other noise generating plant including, but not limited to car park and garbage room exhaust, roller shutter doors, air conditioners and lifts proposed as part of the development. The report shall provide acoustic design detailing and recommendations to address any potential noise impacts to ensure that the operation of an individual piece of equipment or operation of equipment in combination will not exceed more than 5dB above the background (LA90, 15 min) level during the day when measured at the balcony or external living area of the nearest residential occupancy and shall not be audible within a habitable room in any residential occupancy between the hours of 10.00pm and 7.00am.

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

27. 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 in the areas nominated for these purposes on the approved 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.

28. Driveway grades - basement carparks

Prior to the issue of the Construction Certificate, 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 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.

29. Basement car parking details

Prior to issue of the Construction Certificate, 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 is provided over all 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.

30. Car parking allocation

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

Resident car spaces	129
Visitor spaces	24
Total spaces	153

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 three visitor car spaces 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.

31. Number of bicycle spaces

Bicycle spaces within the basement car park shall comply with the bicycle parking requirements specified in Part 7B.2 'Bicycle Parking Provision' of the Ku-ring-gai Development Control Plan. The bicycle parking spaces shall be designed in accordance with AS2890.3. Details shall be submitted to the satisfaction of the Certifying Authority prior to the issue of a Construction Certificate.

Reason: To provide alternative modes of transport to and from the site.

32. Energy Australia requirements

Prior to issue of the Construction Certificate, 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.

33. 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.

34. Underground services

All electrical services (existing and proposed) shall be undergrounded from the proposed building on the site to the appropriate power pole(s) or other connection point. Undergrounding of services must not disturb the root system of existing trees and shall be undertaken in accordance with the requirements of the relevant service provided. Documentary evidence that the relevant service provider has been consulted and that their requirements have been met are to be provided to the Certifying Authority prior to the issue of the Construction Certificate. All electrical and telephone services to the subject property must be placed underground and any redundant poles are to be removed at the expense of the applicant.

Reason: To provide infrastructure that facilitates the future improvement of the streetscape by relocation of overhead lines below ground.

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

35. Infrastructure damage security bond and inspection fee

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

(a) All work or activity undertaken pursuant to this development consent 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 consent 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 damage security bond and infrastructure inspection fee must be paid to 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 damage security bond and infrastructure inspection fee, Council will undertake such inspections of Council Property as Council considers necessary and will 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 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 damage security bond 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 damage security bond and infrastructure inspection fee" means the Infrastructure damage security bond and infrastructure inspection fee as 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.

36. Section 94 development contributions - other than identified centres

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 recreation and cultural facilities; Local social facilities	$189,700.92
Local parks and local sporting facilities	$1,302,505.98
Total:	**$1,492,206.90**

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 may vary at the time of payment 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.

Copies of Council's Contribution Plans can be viewed at Council Chambers, 818 Pacific Hwy Gordon or on Council's website at www.kmc.nsw.gov.au.

Contributions outside the designated centres may be subject to a maximum

contribution total in accordance with the s94E Direction issued by the Minister for Planning dated 21 August 2012, for so long as it remains legally in force. If the total amount above is an exact multiple of $20,000 then the contributions calculated in accordance with Ku-ring-gai Contributions Plan 2010 exceeded the maximum contribution payable and have been capped. If the process of inflation carries the contribution above over the maximum amount permitted by the s94E Direction prior to payment, the amount will be limited at time of receipt. Please contact Council to verify the total contributions payable prior to payment.

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:

37. 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.

38. 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.

39. Hours of work

Demolition, 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 using machinery must be limited to between 7.00am and 5.00pm Monday to Friday, with a respite break of 45 minutes between 12 noon and 1.00pm. No excavation using machinery is to occur on Saturdays, Sundays or public holidays.

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.

40. Temporary irrigation

Temporary irrigation within the Tree protection fencing is to be provided where necessary during all stages of works. Irrigation volumes are to be determined by the Project Arborist.

Reason: To protect trees to be retained on site.

41. Vibration

Vibration emitted from activities associated with the demolition, excavation, construction and fitout of buildings and associated infrastructure shall satisfy the values referenced in Table 2.2 of the Environment Protection Authority Assessing Vibration - a Technical Guideline.

Reason: To protect the amenity of surrounding residents and other properties during the construction process.

42. 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.

43. Construction noise

During excavation, demolition and construction phases, noise generated from the site shall be controlled in accordance with best practice objectives of AS 2436-2010 and NSW Environment Protection Authority Interim Construction Noise Guidelines and the recommendations of the approved noise and vibration management plan.

Reason: To protect the amenity of surrounding residents and other properties during the construction process.

44. 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.

45. 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.

46. 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 **STS Geoenvironmental dated January 2017**. 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.

47. 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 **STS Geoenvironmental dated January 2017**. 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.

48. Use of road or footpath

During excavation, demolition and construction phases, no building materials, plant or the like are to be stored on the road or footpath without written

approval being obtained from Council beforehand. The pathway shall be kept in a clean, tidy and safe condition during building operations. Council reserves the right, without notice, to rectify any such breach and to charge the cost against the applicant/owner/builder, as the case may be.

Reason: To ensure safety and amenity of the area.

49. Guarding excavations

All excavation, demolition and construction works shall be properly guarded and protected with hoardings or fencing to prevent them from being dangerous to life and property.

Reason: To ensure public safety.

50. 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.

51. Recycling of building material (general)

During demolition and construction, the Principal Certifying Authority shall be satisfied that building materials suitable for recycling have been forwarded to an appropriate registered business dealing in recycling of materials. Materials to be recycled must be kept in good order.

Reason: To facilitate recycling of materials.

52. Construction signage

All construction signs must comply with the following requirements:

- are not to cover any mechanical ventilation inlet or outlet vent
- are not illuminated, self-illuminated or flashing at any time
- are located wholly within a property where construction is being undertaken
- refer only to the business(es) undertaking the construction and/or the site at which the construction is being undertaken
- are restricted to one such sign per property
- do not exceed 2.5m^2
- are removed within 14 days of the completion of all construction works

Reason: To ensure compliance with Council's controls regarding signage.

53. 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.

54. 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.

55. 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.

56. 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.

57. 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 <http://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.

58. 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**
As shown on Tree Management Plans, TMP01 Sheets 1- 3, prepared by Naturally Trees and dated 14/09/12	As per Programme of arboricultural input, Appendix 7, Arboricultural Impact Appraisal and Method Statement, Naturally Trees, 27/11/16.

Reason: To ensure protection of existing trees.

59. Canopy/root pruning

Canopy and/or root pruning of tree(s) as 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.

Reason: To protect the environment.

60. 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.

61. Hand excavation

All excavation within the specified radius of the trunk/s of the following tree/s shall be hand dug:

Schedule

Tree/Location	**Radius from trunk**
Tree 94/ *Eucalyptus saligna* (Sydney Blue Gum) located within the western building setback	6.0m
Tree 113/ *Eucalyptus punctata* (Grey Gum) located at the southwest corner of the site	4.8m
Tree 406/ *Eucalyptus saligna* (Sydney Blue Gum) located within the southern building setback	8.4m
Tree 414/ *Eucalyptus haemastoma* (Scribbly Gum) located within the southern building setback	4.8m
Tree 429/ *Eucalyptus microcorys* (Tallowood) located within the southern building setback	6.0m

Tree 443/ *Eucalyptus pilularis* (Blackbutt) located within the eastern building setback	6.0m
Tree 447/ *Eucalyptus paniculata*(Grey Ironbark) located within the eastern building setback	6.0m
Tree 512/ *Eucalyptus saligna* (Sydney Blue Gum) located within the eastern building setback	6.0m
Tree 514/ *Ficus 'HIllii'* (Hills Fig) located within the Eton Road nature strip	6.0m

Reason: To protect existing trees.

62. 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.

63. 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.

64. 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.

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

At the stage when formwork for the 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 **and along the entire path of travel of the small waste collection vehicle,**
- 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.

66. 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:

67. Site audit statement

An occupation certificate shall not be issued unless a site audit statement prepared by an Accredited Site Auditor in accordance with the requirements of the Contaminated Land Management Act 1997 has been provided to Council. The site audit statement is to verify that the site has been remediated in accordance with the approved Remedial Action Plan and is suitable for residential use.

Reason: To ensure that the adequacy of the remediation work is independently verified.

68. Completion of access road

Prior to the issue an Occupation Certificate, the Principal Certifying Authority shall be satisfied that construction of the road approved in the development consent to DA0093/16 has been completed.

Reason: To provide satisfactory vehicular access to the development.

69. Easement for waste collection

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that an easement for waste collection has been created under Section 88B of the Conveyancing Act 1919. 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.

70. 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 Certificate No. 723880M_06 have been complied with.

Reason: Statutory requirement.

71. Mechanical ventilation

Following completion, installation and testing of all the mechanical ventilation systems and other noise generating plant, the Principal Certifying Authority shall be satisfied of the following prior to the issue of any Occupation Certificate:

1. The installation and performance of the mechanical ventilation systems complies with:

- The Building Code of Australia, and Australian Standard AS1668 Australian Standard AS3666 where applicable

2. The operation of the mechanical ventilation systems and other noise generating plant in isolation or in association with other equipment will not be

audible within a habitable room in any residential occupancy between the hours of 10.00pm and 7.00am. The operation of the equipment outside these restricted hours shall emit a noise level of not greater than 5dB above background when measured at the balcony or external living area of the nearest residential occupancy. The background (LA90, 15 min) level is to be determined without the source noise present.

Note: Written confirmation from an acoustic engineer that the development achieves the above requirements is to be submitted to the Principal Certifying Authority prior to the issue of the Occupation Certificate.

Reason: To protect the amenity of occupants.

72. 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.

73. 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.

74. Accessibility

Prior to the issue of an Occupation Certificate, the Principal Certifying Authority shall be satisfied that:

- the lift design and associated functions are compliant with AS 1735.12 & AS 1428.2
- the level and direction of travel, both in lifts and lift lobbies, is audible and visible
- the controls for lifts are accessible to all persons and control buttons and lettering are raised
- international symbols have been used with specifications relating to signs, symbols and size of lettering complying with AS 1428.2
- the height of lettering on signage is in accordance with AS 1428.1 – 1993
- the signs and other information indicating access and services incorporate tactile communication methods in addition to the visual methods

Reason: Disabled access & services.

75. Retention and re-use positive covenant

If internal re-use of rainwater is proposed, then prior to issue of the Occupation Certificate, the applicant must create a positive covenant and restriction on the use of land under Section 88E of the Conveyancing Act 1919, burdening the property with the requirement to maintain the site stormwater retention and re-use facilities on the property.

The terms of the instruments are to be generally in accordance with the Council's "draft terms of Section 88B instruments for protection of retention and re-use facilities" and to the satisfaction of Council (refer to Part 24R.8 of Ku-ring-gai Development Control Plan). 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 reuse and retention 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 to and approved by the Principal Certifying Authority prior to issue of an Occupation Certificate.

Reason: To protect the environment.

76. Certification of drainage works

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

- the stormwater drainage works have been satisfactorily completed in accordance with the approved Construction Certificate drainage plans
- the minimum retention and on-site detention storage volume requirements of Ku-ring-gai Development Control Plan have been achieved
- retained water is connected and available for use
- 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

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.

Reason: To protect the environment.

77. WAE plans for stormwater management and disposal

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

78. OSD positive covenant/restriction

Prior to issue of the Occupation Certificate, 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 Part 24R.8 of Ku-ring-gai DCP). 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.

79. 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.

80. Certification of as-constructed driveway/carpark

Prior to issue of an Occupation Certificate, 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** 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.

81. Infrastructure repair

Prior to issue of the Occupation Certificate, the Principal Certifying Authority must be satisfied that any damaged public infrastructure caused as a result of construction works (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 Development Engineer and at no cost to Council.

Reason: To protect public infrastructure.

82. Fire safety certificate

Prior to the issue of the Occupation Certificate, the Principal Certifying Authority shall be satisfied that a Fire Safety Certificate for all the essential fire or other safety measures forming part of this consent has been completed and provided to Council.

Note: A copy of the Fire Safety Certificate must be submitted to Council.

Reason: To ensure suitable fire safety measures are in place.

CONDITIONS TO BE SATISFIED AT ALL TIMES:

83. Compliance with bush fire assessment report

In accordance with the recommendations listed in the bush fire risk assessment report below the landscaping of the site is to be maintained in accordance with Appendix 5 of Planning for Bushfire Protection at all times.

Document title	Prepared by	Dated
Bushfire risk assessment	Travers Bushfire and Ecology	3/03/2017

Reason: To protect against bush fire.

84. 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: 2005 Pedestrian Area (Category P) Lighting and AS4282: 1997 Control of the Obtrusive Effects of Outdoor Lighting.

Reason: To protect the amenity of surrounding properties.

85. No door restricting internal waste collection in basement

At all times, the basement garbage storage and collection area is to be accessible by Council's Waste Collection Services. No doors, grilles, gates or other devices shall be provided in any location which would prevent this service. Where a gate, door or the like is to be erected, unimpeded access to the garbage collection point is to be provided by other means through written agreement with Council's Waste Collection Services.

Reason: To facilitate access to the garbage collection point.

86. Noise control - plant and machinery

All noise generating equipment associated with mechanical ventilation systems, plant and machinery shall be located and/or soundproofed so the equipment is not audible within a habitable room in any residential premises between the hours of 10.00pm and 7am. The operation of the equipment outside these restricted hours shall emit a noise level of not greater than 5dB above the background when measured at the balcony or external living area of the nearest residential occupancy. The background (LA90, 15 min) level is to be determined without the source noise present.

Reason: To protect the amenity of surrounding residents and occupants of the development.

87. Noise control - rainwater re-use system

All noise generating equipment, such as pumps, associated with any proposed rainwater re-use system/s shall be located and/or soundproofed so the equipment is not audible within a habitable room in any other residential premises before 7am and after 10pm Monday to Friday and before 8am and after 10pm Saturday, Sunday and public holidays. The operation of the pump/s outside these restricted hours shall emit a noise level of not greater than 5dbA above the background when measured at the nearest boundary.

Reason: To protect the amenity of surrounding residents.

88. Annual Fire Safety Statement

Each 12 months after the installation of essential fire or other safety measures, the owner of a building must cause the Council to be given an Annual Fire Safety Statement for the building. In addition a copy of the statement must be given to the NSW Fire Commissioner and a copy displayed prominently in the building.

Reason: To ensure statutory maintenance of essential fire safety measures.

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