

JRPP No	2011SYW031
DA Number	0091/11
Local Government Area	Ku-ring-gai Council
Proposed Development	Demolition of existing structures and construction of two residential flat buildings comprising 50 units and car parking for 63 vehicles with associated site works and landscaping.
Street Address	1147, 1149 Pacific Highway and 2 Bobbin Head Road Pymble
Applicant Owner	Mackenzie Architects John Shi Sheng Zhang Marly Zhi Dong Shang
Number of Submissions	Twenty eight (28)
Recommendation	Refusal
Report by	Grant Walsh, Executive Assessment Officer

Assessment Report and Recommendation

SUMMARY SHEET

REPORT TITLE:	Demolition of existing structures and construction of two residential flat buildings comprising 50 units and car parking for 63 vehicles with associated site works and landscaping.
WARD:	Wahroonga
DEVELOPMENT APPLICATION:	DA0091/11
SUBJECT LAND:	1147, 1149, Pacific Highway and 2 Bobbin Head Road Pymble
APPLICANT:	Mackenzie Architects
OWNER:	John Shi Sheng Zhang Marly Zhi Dong Shang
DESIGNER:	Mackenzie Architects
PRESENT USE:	Residential
ZONING:	Residential 2(d3)
HERITAGE:	No
PERMISSIBLE UNDER:	Ku-ring-gai Planning Scheme Ordinance (KPSO)
COUNCIL'S POLICIES APPLICABLE:	KPSO DCP 31 - Access DCP 40 – Waste Management DCP 43 – Car Parking DCP 47 – Water Management DCP 55 – Railway / Pacific Highway Corridor and St Ives Centre DCP 56 Notification
COMPLIANCE WITH CODES/POLICIES:	NO

**GOVERNMENT POLICIES
APPLICABLE:**

SEPP 55 – Remediation of Land
SEPP 65 – Design Quality of Residential Flat
Development
SEPP BASIX 2004
SEPP Infrastructure 2007
SREP 2005 – (Sydney Harbour Catchment)

**COMPLIANCE WITH GOVERNMENT
POLICIES:**

NO

DATE LODGED:

2 March 2011

40 DAY PERIOD EXPIRED:

11 April 2011

PROPOSAL:

Demolition of existing structures and
construction of two residential flat buildings
comprising 50 units and car parking for 63
vehicles with associated site works and
landscaping.

RECOMMENDATION:

Refusal

PURPOSE FOR REPORT

To determine Development Application No. 0091/11, for the demolition of
existing structures and construction of two residential flat buildings comprising
50 units and car parking for 63 vehicles, with associated site works and
landscaping.

The application is required to be reported to the Joint Regional Planning
Panel as the stated cost of works (CIV) of \$15.25 million exceeds \$10 million.

EXECUTIVE SUMMARY

Issues:

Building separation, apartment layouts, building
depth/natural ventilation, solar access, façade
articulation, water management and BASIX
inconsistencies

Submissions:

Yes (28)

Land & Environment Court Appeal:

No

Recommendation:

Refusal

HISTORY

2 March 2011	The application was lodged with Council.
8 March 2011	External referrals were sent to Energy Australia and the Roads and Traffic Authority (RTA) of NSW.
17 March -18 April 2011	The application was notified.
28 April 2011	Council Officers briefed the JRPP on the application.
7 May 2011	Council officers held a meeting with the applicant to discuss outstanding issues.
11 May 2011	Council requests amended plans to address the issues raised.
22 July-3 August 2011	Additional information was lodged which consisted of amended architectural, landscape and stormwater plans, a revised arborist's report, a revised solar access report, a revised access report and an updated BASIX certificate.

THE SITE

Zoning:	Residential 2(d3)
Lot Number:	Lots A, B, C, D in DP 359718
Area:	3834m ²
Side of Street:	Northern side of the Pacific Highway and Western side of Bobbin Head Road
Cross Fall:	east/west
Stormwater Drainage:	To street
Heritage Affected:	Nearby heritage items
Integrated Development:	No
Bush Fire Prone Land:	No
Endangered Species:	Yes – Blue Gum High Forest Endangered Ecological Community
Urban Bushland:	No
Contaminated Land:	No

THE SITE AND SURROUNDING AREA

The site

The subject site consists of four (4) lots, being identified as Lots A, B, and C, of DP 359718, which are known as 1147 and 1149 Pacific Highway, and Lot D of DP 359718, which is known as 2 Bobbin Head Road Pymble. The combined site has an area of 3,834m² and contains the following boundary dimensions: 62.52 metres south (Pacific Highway frontage), 84.33 metres east (Bobbin Head Road frontage), 58.6 metres west, and 55.295 metres north.

The site is a corner allotment with frontages to the Pacific Highway (south) and Bobbin Head Road (east). Development which currently exists on site consists of the following:

- a tennis court and carport being located on Lot C
- a one and two storey single dwelling house with garage, carport and associated paved courtyard on Lot B
- a two storey dwelling house on Lot A
- a one storey dwelling house with in-ground swimming pool on Lot D.

The site slopes gently in an east-west direction, with the eastern boundary being approximately 4.0 metres lower than the western boundary.

Significant vegetation is located along the street frontages and within the site and includes Blue Gum High Forest Endangered Ecological Community species.

Surrounding development

Development on adjoining sites consists of a five storey residential flat building to the north and west on a single site being a large “L” shaped allotment identified as Lot 100 of DP 1099440 and known as 4-8 Bobbin Head Road. A school is located on the opposite side of Bobbin Head Road to the east of the site, whilst development to the south of the site on the opposite side of the Pacific Highway (1234-1244 Pacific Highway) generally consists of one and two storey dwelling houses set in established gardens.

The Pymble Town Centre and railway station are located approximately 800 metres south of the subject site.

THE PROPOSAL

The proposal is for the demolition of existing structures and construction of two residential flat buildings comprising fifty (50) units and car-parking for sixty three (63) vehicles, with associated site works and landscaping.

The proposal is configured as follows:

- 22 x 1 bedroom dwellings (8 of the 1 bedroom dwellings contain studies)
- 28 x 2 bedroom dwellings (3 of the 2 bedroom dwellings contain studies)
- two levels of basement car parking containing 63 parking spaces inclusive of 13 visitor car parks and 6 disabled car parks
- vehicular access is to be obtained from a two way driveway from Bobbin Head Road
- pedestrian access is to be obtained from separate entries on the Pacific Highway and Bobbin Head Road
- a landscaped and paved communal area is located between the two buildings which includes seating areas and disabled access
- removal of 29 trees
- replacement planting of 124 trees consisting of native canopy trees (30), deciduous trees (31), private courtyard trees (12) and small native trees (51)
- shrubs, feature trees and groundcovers are also proposed

Amended plans/documentation dated 22 July 2011

The amended plans proposed the following modifications:

- revised architectural plans to address non-compliances with the BCA, disabled access, building form, minimum private open space areas and urban design issues
- revised landscape plans to address non-compliances with deep soil area, the location of courtyards within close proximity to the northern side boundary and the location of the proposed electrical sub-station
- revised arborist report to provide a further detailed assessment of trees 3 and 16 (Sydney Blue Gums)
- revised stormwater plans
- revised solar access report to provide 3d modelling of the proposal
- revised access report to demonstrate compliant disabled access to the letterbox area and the street entry points
- updated BASIX certificate

COMMUNITY CONSULTATION

In accordance with Development Control Plan No. 56, owners of surrounding properties were given notice of the application. In response, submissions from the following were received:

1. Elliot and Jessica Miller 53/4-8 Bobbin Head Road Pymble
2. Lionel and Berenice Maraney 45/4-8 Bobbin Head Road Pymble
3. Merv and Jackie Rosen 12/4-8 Bobbin Head Road Pymble
4. Peter and Eileen Wood 59/4-8 Bobbin Head Road Pymble
5. The owners Corporation of Strata Plan 80282 4-8 Bobbin Head Road Pymble
6. Mrs Jackie Rosen 12/4-8 Bobbin Head Road Pymble

7. Dr Rebecca Roach 41/4-8 Bobbin Head Road Pymble
8. Ms Jung Yeong Sue 67/4-8 Bobbin Head Road Pymble
9. Mr Peter McCarthy 37/4-8 Bobbin Head Road Pymble
10. A and LA Faulds 56/4-8 Bobbin Head Road Pymble
11. Mrs Susan Sales 1/4-8 Bobbin Head Road Pymble
12. Mr Kristian Zadro 13/4-8 Bobbin Head Road Pymble
13. Mrs Denese O'Brien 14/4-8 Bobbin Head Road Pymble
14. Ms Jackie Earl 16/4-8 Bobbin Head Road Pymble
15. Ms Cheryl Earl 16/4-8 Bobbin Head Road Pymble
16. Mr Yongzhen Xiao 26/4-8 Bobbin Head Road Pymble
17. Herbert and Agnes Kwan 32/4-8 Bobbin Head Road Pymble
18. Mrs Beverley Harcourt 33/4-8 Bobbin Head Road Pymble
19. Mr Ambrose Pang 40/4-8 Bobbin Head Road Pymble
20. Bo Sun Lee and Kyung Im Lee Bae 51/4-8 Bobbin Head Road Pymble
21. Mr Maurice Tarabay 52/4-8 Bobbin Head Road Pymble
22. Mr Yan Chak Pun 66/4-8 Bobbin Head Road Pymble
23. Sang eun Lee 68/4-8 Bobbin Head Road Pymble
24. Mr Albert Suseno 39/4-8 Bobbin Head Road Pymble
25. Mr Babak Fazel 22/4-8 Bobbin Head Road Pymble
26. Mr Adam Ward 31/4-8 Bobbin Head Road Pymble
27. Mr Daryl Tan 52/4-8 Bobbin Head Road Pymble
28. David and Lorraine Le Claire 17/4-8 Bobbin Head Road Pymble

The submissions raised the following issues:

Loss of visual privacy

The proposal complies with front and side setbacks and building separation requirement from the adjoining property at 4-8 Bobbin Head Road, with the exception of Unit 48 which does not meet the 18 metres separation requirement (for a 5th storey level). The applicant is aware of the issue and has successfully addressed it via mitigation techniques such as privacy screens. The proposal is considered satisfactory in this respect.

Overshadowing

The adjoining building to the west at 4-8 Bobbin Head Road will be overshadowed for less than half an hour between 9 and 9:30am on the winter solstice. However, the proposal complies with the requirements of DCP 55 and the Residential Flat Design Code as it maintains at least 3 hours of solar access to the adjoining properties.

Excessive bulk and scale and an overdevelopment of the site

The proposal complies with height, FSR, front and side setbacks, deep soil area and building footprint controls. Council's Urban Design Consultant has also advised that the scale of the proposal is appropriate for the site. The proposal does, however, result in impacts as a result of non-compliances with

façade articulation and its stepped design fronting the Pacific Highway. Refer below for further comments.

Increased traffic congestion with safety concerns relating to the nearby school

A traffic assessment report prepared by a qualified traffic engineer was submitted with the development application. The report concludes that the proposal will result in a satisfactory outcome for the local road network resulting in an additional 12 vehicle trips per hour in peak times. The report has been reviewed by Council's Development Engineer and determined to be satisfactory.

It is acknowledged that the construction management plan has considered the school which is opposite the site and has indicated that there will be no heavy vehicle activity (except during the concrete pour) during peak school drop off and pick up times. Refer to Council's Development Engineer's assessment below for further details.

The proposed driveway is too close to the Pacific Highway

The proposed driveway is situated approximately 51 metres from the intersection of Bobbin Head Road and the Pacific Highway. Council's Development Engineer has reviewed the proposal and deemed it to be satisfactory in this respect.

Loss of vegetation generally and particularly associated with the northern common boundary

Council's Landscape Assessment Officer has reviewed the proposal and has indicated that the proposed tree loss is considered to be acceptable. Refer below.

Concerns with potential for cranes to be used over the adjoining properties

Any consent issued for the subject site relates directly to the subject site and does not authorise works to be carried out within or over an adjoining property. Should the applicant be required to utilise a crane outside of the subject property, permission will have to be obtained from the relevant property owner's or strata organisation.

Insufficient setbacks to property boundaries

The proposal complies with the required 6.0 metres side setback and the 10-12 metres front setback to the Pacific Highway and the 13-15 metres front setback to Bobbin Head Road as stipulated by DCP 55.

Insufficient building separation

The proposal is compliant with the building separation requirements to the adjoining property at 4-8 Bobbin Head Road with the exception of the penthouse level of the northern block (Unit 48). The non-compliance specifically relates to the balcony associated with Unit 48 and the southern facade of the adjoining development. The applicant has responded to this issue by adding privacy screens in the location where the 18m separation is not met.

Request for vibration monitoring during construction

It is agreed that should consent be granted, vibration monitoring during construction would be required.

Request for dust and debris netting during construction

It is agreed that should consent be granted, dust and sedimentation control devices would be required.

Request the erection of a 3.3 metres high acoustic wall during construction

Should consent be granted the hours of construction can be restricted, but, it is not considered that a 3.3 metres high acoustic wall is required.

The proposed finishes of the building include too much metal cladding which is uncharacteristic to the area

Council's Urban Design Consultant and Heritage Advisor have indicated that the proposed finishes are satisfactory.

Amended plans dated 22 July 2011

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.

CONSULTATION – EXTERNAL TO COUNCIL

INTERNAL REFERRALS

Urban design

Council's Urban Design Consultant reviewed the application against the provisions of SEPP 65 and provided the following comments:

“Introduction to the principles

Good design is a creative process which, when applied to towns and cities, results in the development of great urban places: buildings, streets, squares and parks. Good design is inextricably linked to its site and locality, responding to the landscape, existing built form, culture and attitudes. It provides sustainable living environments, both in private and public areas. Good design serves the public interest and includes appropriate innovation to respond to technical, social, aesthetic, economic and environmental challenges. The design quality principles do not generate design solutions, but provide a guide to achieving good design and the means of evaluating the merit of proposed solutions.

Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area. Responding to context involves identifying the desirable elements of a location’s current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

The site is located at the acute north-western corner of the intersection of Pacific Highway and Bobbin Head Road, Pymble and is zoned 2(d3) under Ku-ring-gai LEP 194. The site is 3843m² in area, has a frontage of 56.52m to Pacific Highway, a frontage of 79.41, to Bobbin Head Road, falls generally from west to east, and is approximately 820m walk to Pymble Station. To the north and west, the site is bounded solely by the L-shaped amalgamated lot known as 4-8 Bobbin Head Road which is also zoned 2(d3) and has been recently been redeveloped. To the east across Bobbin Head Road is the Mt. St. Bernard School and to the southwest across Pacific Highway are single detached houses zoned 2(c2). The location of the site on the south east corner of its block, the width of busy Pacific Highway and Bobbin Head Road and the local topographic condition means that the proposed development is likely to have little or no environmental impact on neighbouring properties, including nearby heritage items.

The site is considered suitable for residential flat development and is unlikely to create impact on neighbouring properties.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings. Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts

undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

The solution of highlight windows to ameliorate privacy concerns is poor, particularly for penthouse bedrooms, where this will be the primary window. Other than the inclusion of an additional highlight window to Unit 48, it does not appear that any other changes to the top floor have been made.

The setback of the top floor from the storey below scales as little as 700mm in several instances. The intention of the setback of the uppermost floor is to have this storey read as recessive in order to minimise the appearance of the top floor as viewed from the street.

The top floor condition is exacerbated by the method of calculation used to determine the gross floor area of the top level being 60% of the gross floor area of the level below. The penthouse FSR compliance diagram (SK23) indicates that for this level only, the corridor spaces are not included as floor area as they are unenclosed not glazing. Whilst this interpretation is correct, here there is a question of extent. 48% (5m of 10.5m) of the corridor length of the northern building is open which is considered marginal (as open as it is closed), whilst only 26% (2.7m of 10.2m) of the corridor length of the southern building is open which is considered to be more closed than open.

This should be verified by Council as the floor area of the top levels of both the southern and northern buildings are stated as being 59.9% of the floor below. A reduction in floor space on the top storeys would be beneficial for setbacks.

Principle 3: Built form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including views and vistas, and provides internal amenity and outlook.

The southern building scales at up to 22.2m deep and the northern building scale at up to 19.3m deep. Both are in excess of the maximum depth of 18m. This affects the depth of apartments and environmental performance of the building, to be discussed further below under Principle 7: Amenity.

The proposal has been amended with regards to the treatment of the corner of Pacific Highway and Bobbin Head Road. The revised design provides a stronger urban design response to the corner and is an improvement.

The south-western most units remain too broken down and give the impression that the Pacific Highway frontage is a side, rather than a highly visible front, elevation. The design of the corner would benefit from following the street alignment (in the same way that the western walls of the proposal largely follow the angle of the subdivision) and the remaining portion could be rationalised and stepped in larger, more coherent, volumes. The lift shaft and its overrun is also prominent on this facade, as seen in the perspective, and is undesirable. No architectural detail has been provided with regards to rainwater collection (that is, gutters and down pipes) which may also affect this facade given the pitch of the roof.

Whilst visually articulated, the northern elevations of both buildings are very flat, with single planes measuring more than 300m², well in excess of the maximum 81m² required by DCP control 4.4 C-2. Whilst not facing directly on to the street, these walls will still be visible from the public domain and would benefit from a minimum of 600mm articulation to break down the facades. The largest wall plane of the eastern facade of the northern building also measures over 81m² as the volumetric articulation is only 300mm not the specified 600mm. This would be easy to adjust.

Principle 4: Density

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents). Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

The proposal appears to comply with the building footprint, deep soil and total floor space ratio controls.

With regard to the accessible car spaces and the application of AS2890.6, the same accessibility consultant has advised on another application (see 1-21 Woniora Avenue, Wahroonga - Memo July 2011) that AS4299 is preferable for residential, ie 3800mm car spaces rather than 2400mm with a shared zone. This approach would remove the possibility of gaining additional car spaces through reorganisation.

Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction.

Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

The cross ventilation is non-compliant and the solar access is marginal and needs to be verified. Both of these factors are directly related negatively to energy consumption. A lack of solar access requires additional heating in winter. Lack of cross ventilation requires reliance on mechanical systems to move air. Whilst the Statement of Environmental Effects asserts that ‘the building design ensures environmental sustainable measures are achieved and residential amenity is maximised’ (p31) this is not the case. The design has much room for improvement in these terms.

Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain. Landscape design builds on the site’s natural and cultural features in responsible and creative ways. It enhances the development’s natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character. Landscape design should optimise usability, privacy and social opportunity, equitable access and respect for neighbour’s amenity, and provide for practical establishment and long term management.

As previously noted, the architectural and landscape plans should take precedence over the perspective with regard to fencing and trees on the Bobbin Head Road frontage.

No planters have been incorporated to perimeter of fifth floor terraces of the southern building to soften the building edges.

OSD Tank 2 encroaches into the front setback and should be relocated beneath the building footprint.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development. Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

Graphic substantiation of the solar access to apartments has not been provided as requested. Sun angles in plan are not sufficient. Whilst 39 of 50 (78%) apartments are stated as complying, which is acceptable, several apartments are shown as having a marginal compliance of 3 hours and should be verified.

The site shadow diagrams provided (SK30) remain inadequate for the reasons previously described. The topography is significant on this site and surrounds and should also be modelled. The current shadow diagrams appear to have been cast on a flat site as shadow edges are not distorted.

The principle open space has been clarified on the architectural plans (SK03) with a larger note as being located within the south-western the side setback. Depending on its extent, which is not defined, this communal space appears to be able to receive 3 hours mid-winter sun to 50% of its area, as demonstrated by additional diagrams in the solar impact report.

Cross ventilation does not comply. Cross ventilation diagram (SK29) indicates that a marginal 30 of 50 apartments (60%) comply, however Unit 49 is a single orientation apartment and does not receive cross ventilation. Cross ventilation through operable skylights is not considered to be adequate or acceptable. Skylights do not provide the same practicality and functionality as windows do.

21 of 50 apartments (42%) are single orientation and all are between 11.2-12.2m in depth. This is in excess of the 8m recommended by the Residential Flat Design Code (p69). In this instance, the open plan living areas extend to the full depth of the apartment with kitchens located on the rear wall (the DCP definition includes kitchens as habitable spaces). This creates deep, dark apartments and is considered unacceptable.

Compliance with the maximum 8m depth by using a perpendicular sliding glass door is not the intention of SEPP 65. SEPP 65 emphasises that buildings should have a narrow depth to provide

optimal light and air to the habitable spaces of apartments to reduce energy consumption and cost.

The location of the terraces in front of the bedrooms, to the side of the living rooms, is also undesirable as it makes all of the outdoor living area impinge on the privacy of the bedroom. This is a particular issue in the 2 bedroom units where more than one household group may be living. An apartment of the same area and lesser depth would require a wider frontage and could provide greater amenity. This issue is linked to the building depth in excess of 18m as identified in Principle 3: Built form.

The fully internalised rooms labelled as studies on the penthouse level remain and are not acceptable. Operable skylights are not considered to be adequate or acceptable to gain light and air.

The common corridors on Levels 1, 2 and 3 of the northern building have been amended to provide natural light and ventilation to them. This is a good improvement.

Principle 8: Safety and security

Good design optimises safety and security, both internal to the development and for the public domain. This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

It does not appear that a lighting plan indicating the level of illumination from the street to the entries and within the communal open space has been submitted.

Principle 9: Social dimensions and housing affordability

Good designs respond to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities. New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community. New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

The proposal is comprised solely of 1 and 2 bedroom units. A broader range in mix of units is desirable and the provision of a number of 3 bedroom units would be beneficial. Redistributing the

same floor space into less, though larger, units could also assist to improve the cross ventilation and solar access statistics.

With regard to accessibility issues, the ramp and letterboxes have been addressed. The response to door widths is that they will be dealt with at construction certificate stage. The column between car space 60 and 61 has not.

Principle 10: Aesthetics

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

The materials palette is appropriate. The treatment of the corner has been positively addressed, however, the western portion of the southern-most elevation has not, including the lift shaft. The flatness of the northern facades has not been addressed.

Conclusion/recommendation

This proposal should not be approved in its present form. The proposal is non-compliant on points of: building depth; top floor setback; articulation of facades (particularly northern facing elevations); single orientation apartment depth; and cross ventilation. Solar access to units should be verified.

It is considered that the related issues of top floor setback; highlight windows; measurement of the top storey GFA; internalised studies; and cross ventilation of Unit 49 could be resolved without significant impact to other floors of the building. Similarly, the articulation of facades is a design issue that could be resolved through minor reworking of facades without affecting the overall plans.

The issues with building depth and single orientation apartment depth are not considered to be addressable without a substantial reworking of the proposal ie a different strategy for the site. Whilst the controls for building depth are looser than others, hence why they are often subverted (particularly so in Ku-ring-gai it seems), they are fundamental to building amenity. It is a simple geometric principle that as a building of the same floor area gets deeper (approaching a square), more of the floor area is further from a window and less perimeter wall is available for the same area. The 18m depth is regarded as the maximum because it is a figure that requires buildings to have (uncompromised) acceptable amenity. This includes that all habitable rooms are of reasonable depth (8m, not 12m deep), plus the opportunity for circulation and a proportion

of service rooms to also have access to natural light and air. Also, as the building envelope gains amenity directionally from solar access (and this preferences the north, east and west sides over the south), depths over 18m lead to apartments on the side of the building without sunlight. This can be seen with Units 6, 17, 28, and 39 of the present proposal.

Assessment Officer's comments

Council's Urban Design Consultant has questioned the calculation of the top floor ratio rating to FSR and whether the corridor should be entirely or partly included in the calculation. Technically, the applicant is correct in their calculation relating to the definition of the method of calculation for Gross Floor Area (GFA) as the corridor is not entirely enclosed at a height of greater than 1.4 metres above the finished floor level. Whilst the calculation meets the definition, it is arguable as to whether it meets the intention of the control in terms of calculating bulk and mass. It is the assessing officer's opinion that this issue is required to be considered in the context of the overall development and as this proposal has a FSR of 1.16:1 (less than the maximum) it is considered acceptable in this instance.

The Urban Design consultant has raised concern with the extent of setbacks associated with the top (or penthouse) level. C-9 of DCP 55 does not specify a minimum numerical setback to that of the lower floor and the proposal generally has greater setbacks where it addressed the street with the exception of elements of the south-west corner where it is agreed further amendments are required and the use of planters may assist in minimising impacts.

The issue of cross ventilation and its compliance relates specifically to one unit (Unit 49) utilising an operable skylight to achieve cross ventilation and thus achieving the minimum 60% of units being cross ventilated. It is agreed that the use of a skylight is not a preferred method of cross ventilation and attempts should be made for a better outcome in this respect.

The use of an onsite detention tank being located under the driveway and within the front setback is a common practice and results in no impacts as it is below ground level and will not diminish the ability for landscaping (due to the driveway). This aspect of the proposal is considered acceptable.

The issues relating to the basement carpark arrangement has been discussed with Council's Development Engineers and it has been determined that the proposal complies with the Australian Standards in this respect.

Heritage

Council's Heritage Advisor commented on the proposal as follows:

Heritage status

The site is not identified as having any significant buildings and does not directly adjoin a heritage item. It is within the vicinity of several items and within the National Trust UCA No 19 – Bobbin Head.

Nearby items

11 Bobbin Head Road – Federation period house located opposite side of road and further to the east.

1228 Pacific Highway - "Mountview" Federation period house that has been adapted to commercial uses and is a local landmark located on opposite side of Pacific Highway and slightly to the south.

Houses at 1161 & 1163 Pacific Highway – Two Inter War period Mediterranean style houses located further to the north along the Pacific Highway.

National Trust UCA No 19 – Bobbin Head

The UCA is centred on Bobbin Head Road from the Pacific Highway to Warrangi Street and includes a collection of Federation and Inter War houses. The school opposite the site is not included in the UCA. As such this site is on a key entrance to the UCA and has some landmark values.

Demolition of existing houses

The existing houses on the site are not considered to have significant heritage values and given rezoning of the site, demolition is acceptable. Photographic archival recording is required before any works on site commence. Materials salvaged from the site particularly stone, should be retained on the site and reused in future landscaping works.

DCP 55

Council has prepared specific design objectives and design controls to assist applicants in preparing applications for medium density development within the vicinity of heritage items. Chapter 3.4 & 3.5 applies.

DCP 55 Issues – Chapter 3.4 - Development within a UCA

UCA Design Controls

C – 1 New medium density housing should respect the predominant architectural character and should have reference to predominant design elements.

Comment: The site is on a busy corner and relatively isolated from the lower scale buildings in the UCA. An existing 5 storey development is located on the east and north side of the site. The proposed building is a contemporary design and relates to the adjoining development.

C – 2 Facades should be well articulated and avoid long continuous facades to relate to existing lot pattern

Comment: The development is two buildings which has some relationship to the existing lot pattern. It is generally articulated with horizontal and vertical elements.

C – 3 Scale and massing of new buildings should be proportioned to respect and enhance the scale and character of nearby development

Comment: The scale and massing of the proposed development relates to the nearby medium density sites.

C – 4 Form and outlines should respect the complexity and pattern of roof shapes and skylines in the UCA

Comment: The sloping roof is related to other medium density development both existing and under construction and contrasts with the more traditional elements in the UCA, particularly the complex roof forms.

C – 5 New developments should respect existing setbacks and not be located forward of adjacent buildings

Comment: This scheme complies with the minimum setbacks in DCP 55 and relates to the adjoining medium density development.

C – 6 New buildings should not be located across the sites contrary to existing lot patterns

Comment: This scheme generally relates to the existing lot pattern although the footprint is larger than the existing buildings.

C – 7, C – 8 & C – 9 New buildings should incorporate modern designs and materials sympathetic to the UCA. Combinations of modern materials are acceptable. Colours and textures should blend the massing of new development into the streetscape.

Comment: The finishes are a combination of face brick, rendered and painted masonry, metal cladding – unknown colour, “hardie” weatherboard cladding, metal colourbond roof and slat type metal fences. The colours are generally recessive and do not conflict with the Federation and Inter War houses in the UCA.

C – 10, C – 11 & C – 12. Significant fences should be retained and new fences to be compatible with the heritage context of the UCA.

Comment: There appears to be no significant fences on the site. The proposed fencing is metal colourbond slat type fences for both the front fences (1200mm high) and courtyard fences. These are considered acceptable.

Design Controls - Chapter 3.5 - Development within the vicinity of a heritage item

C – 1 – Setbacks.

Minimum setback distance from closest point of heritage item is 10m for first and second levels and 15m for third and fourth level. Top level should be set back further and be 60% of floor area of lower floor.

The development should not be sited closer to the street boundary than the adjacent heritage item. Note: a heritage item means any building on the site of a heritage item, including secondary structures such as garages or sheds.

Comment – This control can not be applied to the site as the nearby items are not adjoining and are located on the opposite side of the Pacific Highway.

C- 2 – Screen plantings should achieve screening between sites

Comment – Retention of the substantial tree plantings around the front boundary of the site will assist in screening development. New plantings generally provide sufficient screening.

C – 3 – Respect aesthetic character of heritage items

Comment: There appears to be little consideration of the nearby heritage items in the design of the scheme.

C – 4 – Colours should be complimentary to heritage items

Comment – The Federation period heritage items have mid to dark face brickwork red tile roofs and lighter painted timber work. The colours and materials selected for the scheme are generally recessive and do not conflict with the nearby heritage items.

C – 5 – Fences should be no higher than the fence of the item.

Comment – The site is on a corner site and not directly adjoining any heritage items. The proposed fence is low and largely transparent.

C – 6 – Heritage impact statement to discuss impacts on the item including its garden and setting.

Comment – The application is supported by a HIS prepared by an experienced consultant. It concludes that the scheme is consistent with the changing character of this corner of the UCA. The proposed new buildings fit with the pattern of orientation, setback, massing, scale and architectural design being developed on surrounding sites. No important view corridors to and from heritage items in the vicinity, or to and from the UCA, will be impacted upon.

Comments

This site has some landmark values as it is located on a busy street corner which is a key entry point into the UCA. The site is relatively prominent when viewed travelling north along the Pacific Highway although the existing trees on the corner do provide a level of visual screening. The nearby heritage items are on the opposite corner and further north along the Pacific Highway and east along Bobbin Head Road.

The site is constrained by the adjoining medium density development which forms an L- shaped development on its northern and eastern boundaries. Considering this, the proposed development fills in the one site that is undeveloped between Bobbin Head Road and Warrangi Street and is relatively isolated from the UCA and nearby heritage items.

Conclusion and recommendation

The proposed development largely complies with the heritage objectives and controls for sited in a UCA and within the vicinity of a heritage item.

Landscaping

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

Site characteristics

The corner site is characterised by a neglected established landscape setting, with mature trees, including weed species within overgrown garden beds and grassed areas. The corner of the site is dominated by the existing tennis court and tree species associated with the critically endangered Sydney Bluegum High Forest plant community.

Tree impacts

The proposed development will result in the removal of numerous trees located on site, including three within the Bobbin Head Road nature strip. The most significant trees associated with the site are proposed to be retained. The nominated tree removal is considered acceptable.

Tree 3 Eucalyptus saligna (Sydney Bluegum) is located adjacent to the northeast site corner. The consulting arborist has provided further statements regarding the impact of the substation. It is noted that the substation has been relocated with a greater setback from Tree 3. The arborist's statements are not totally correct as substations are not constructed on slab. They are constructed on piers with an excavated area underneath (which is later backfilled with sand) to enable the installation of cabling on all sides as required. While the report is not truly accurate, the assessing landscape officer is satisfied that the relocated substation, subject to adherence with consent conditions, will not significantly adversely impact on the ongoing health and viability of Tree 3.

Tree 9 Eucalyptus saligna (Sydney Bluegum) located within the Bobbin Head Rd nature strip. The tree is dead. Its removal and replacement can be conditioned.

Tree 16 Eucalyptus saligna (Sydney Bluegum) located adjacent to the southeast site corner. The arborist's amended comments provide recommendations throughout construction to retain the tree as requested.

Trees 19 – 35 are various species located adjacent to the Pacific Highway site frontage. The development proposes the removal of existing weed species and the retention of a row of Cypress Pines in fair health and condition. Although the trees provide some visual amenity, they are in poor health and fair condition and a better medium to long term solution is to remove the trees and replace with advanced specimens of Blue Gum High forest species to complement neighbouring development sites. The tree removal will be conditioned and an amended landscape plan required prior to the CC release.

Landscape plan/tree replenishment

Refer principal communal open space comments.

Refer Tree Impacts comments regarding Tree's 19-35 (this can be conditioned, although an amended landscape plan is preferred).

Any other concerns are minor and can be conditioned.

Stormwater plan

No landscape concerns are raised.

BASIX

The submitted BASIX certificate #356814M_02, dated 21/07/2011, has made numerous landscape area commitments for private and common areas. The submitted architectural plans are inconsistent with the BASIX certificate, the areas in dispute include:

Common Areas

Lawn	416.8sqm
Garden	2124.1sqm
Indigenous	61.1sqm

The landscape (BASIX) plan is inconsistent with the BASIX certificate. An amended landscape plan is required, which includes identification of the nominated indigenous/low water use area, consistent with the BASIX certificate.

Private areas of garden and lawn

The areas of private garden and lawn for Units 1,9,10 &11 are inconsistent with the BASIX certificate.

An amended BASIX certificate is required to ensure consistency between the proposed development plans and the BASIX certificate. As BASIX is a SEPP it cannot be conditioned.

Deep soil

By the applicant's revised calculations, the proposed development will result in a deep soil landscape area of 2022.59sqm or 52.75% of the site area. The assessing officer concurs with the areas included within the calculable area.

Other issues and comments

It is noted that the principal communal open space is located between the two buildings, which during the winter months will be heavily overshadowed from the northern building. Shadow diagrams submitted indicate that there will be no direct sunlight within the principal communal open space during the winter solstice. This results in poor amenity for residents and does not encourage residents to utilise and socialise within the space.

Conclusion

The application is considered unacceptable on landscape grounds due to; Inconsistencies between the BASIX certificate and the proposed development plans.

Ecology

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

During the site inspection Remnant Blue Gum High Forest (BGHF) listed as a Critically Endangered Ecological Community (CEEC) under the Threatened Species Conservation Act 1995 was identified.

The BGHF community within the site is comprised of remnant canopy trees 3, 8, 9 & 16 - Eucalyptus saligna (Sydney Blue Gums) and sub-canopy trees 7, 10, & 19 Pittosporum undulatum (Sweet Pittosporum).

No native shrubs species were identified within the site. Native ground covers were sparse to absent throughout the site. The road verge along Bobbin Head Road contained a number of native groundcovers which forms part of Blue Gum High Forest, these groundcovers are to be retained and will protected by tree protection fencing surrounding tree 8 – Sydney Blue Gum.

As well as the CEEC Blue Gum High Forest suitable foraging habitat (foraging trees only) for threatened fauna species listed under the aforementioned act were also observed.

The proposal will result in the removal of one (1) tree T7 Pittosporum undulatum (Sweet Pittosporum) which forms part of remnant Blue Gum High Forest upon the site.

The Blue Gum High Forest impact assessment, prepared by Keystone Ecological, has adequately assessed the proposal in accordance with section 5A of the Environmental Planning and Assessment Act 1979.

The 7-part test prepared by Keystone Ecological is considered to be sufficient, provided suitable ameliorative measures to ensure the protection of Blue Gum High Forest and habitats for threatened fauna species known from the locality.

On this basis the development application is deemed satisfactory and is unlikely to compromise the existing Blue Gum High Forest within the site.

Engineering

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

Water management

The amendments previously requested have not been made, as detailed below this is an outstanding issue which has not been resolved.

The BASIX water commitments have not been amended. Roof runoff is collected from 200 square metres of roof area in a 5 000 litres tank, with re-use will be for toilet flushing in Building B.

The site has gravity drainage to the street drainage pit in Bobbin Head Road. Two on site detention tanks are proposed, with a total volume of 90 cubic metres, which is consistent with the Site Storage requirement under DCP 47.

The pumped system notes on Drawing DA3.04 still specify a design based on a 10 year Average Recurrence Interval, whereas Section A7.1.1 of Council's DCP 47 Water management requires an ARI of 100 years to be used. This volume does not include the likely groundwater seepage flows which will be collected by the subsoil drainage system.

The on site detention tank may not have the capacity to accommodate subsoil flows.

There is a kerb inlet pit in Bobbin Head Road and it is considered desirable for the outlet from the development to be connected to it rather than to the gutter.

Water quality targets are intended to be achieved by the provision of pollutant filters, a vegetation buffer and a proprietary treatment device. These are satisfactory.

Parking and traffic

The site is zoned 2(d3), so under the KPSO 50 resident and 13 visitor parking spaces are required.

DCP 55 requires 5 manageable units to be provided, so 5 disabled resident and 1 disabled visitor space are required.

The drawings show that the required number of spaces has been provided. Carpark dimensions comply with AS2890.1:2004, as well as AS2890.6:2009 for disabled parking. The parking arrangements are satisfactory.

The architectural drawings contain details of the required lowering of the footpath and nature strip at the new entry driveway. Although two additional steps are proposed in the public footpath, there are already steps in this section of footpath, so the accessibility of the path would not be made worse by the works. A Roads Act approval is required for these works, with the submission of detailed design drawings and their approval by Council prior to Construction Certificate.

Construction traffic management

The traffic engineer's report contains a section "Construction Traffic Management Plan".

A Works Zone will be required in Bobbin Head Road. Construction vehicle routes will be directly from the Pacific Highway for all directions.

Due to the school opposite the site, restrictions on construction vehicle movements are recommended, with the exception of large concrete pours, which will require notification to Council, the school and residents in advance.

Waste management

Section B-B' on Drawing SK13 shows that at least 2.6 metres of clear headroom will be available for the small waste collection vehicle to enter the basement. A waste storage area is provided, which is adequate for the required number of containers, and the service vehicle bay nearby is suitable for the small waste collection vehicle to stand during collection.

Geotechnical investigation

Excavation to depths of 5-8 metres is proposed. The site is underlain by deeply weathered shale, which will necessitate the use of anchored pile walls for excavation support. A water level was recorded in one borehole, at 7.5 metres depth, but this may not be truly indicative, and further monitoring is required for the final design of the subsoil drainage system and pump-out well.

The report states "Joints and bedding planes within the completed cut faces may be subject to localised groundwater seepage flows, particularly after periods of rainfall. Appropriate waterproofing requirements are therefore recommended for external building walls close to or in contact with the excavated areas." This would be expected to form part of the Construction Certificate design for the basement structure, however it can be conditioned as well.

The report recommends further investigation after demolition, dilapidation survey of neighbouring structures, and possibly vibration monitoring.

Building

Council's Building Officer commented on the proposal as follows:

The amended plans have addressed the BCA issues specified in the previous referral dated 10/03/2011. Disabled access from Bobbin Head Road via a platform lift complies with the BCA requirement.

STATUTORY PROVISIONS

Roads and Traffic Authority

The NSW Roads and Traffic Authority (RTA) responded to Council's letter indicating that they do not consider the proposal to be Integrated Development. The RTA did not raise any issues or provide any further comments.

State Environmental Planning Policy (Infrastructure) 2007

The property has a frontage to a classified road, being Pacific Highway, and consideration is required pursuant to Division 17 Clause 101 and 102 of the SEPP. Clause 101 of the SEPP states:

101 Development with frontage to classified road

(1) The objectives of this clause are:

(a) to ensure that new development does not compromise the effective and ongoing operation and function of classified roads, and

(b) to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads.

(2) The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that:

(a) where practicable, vehicular access to the land is provided by a road other than the classified road, and

(b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of:

(i) the design of the vehicular access to the land, or

(ii) the emission of smoke or dust from the development, or

(iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and

(c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road.

The proposed development is considered to be consistent with the above requirements. As noted previously in this report, a traffic report (which includes a Construction Traffic Management Plan) prepared by has been submitted with the application and has been considered acceptable by Council's Development Engineer.

Vehicular access to the development is from Bobbin Head Road.

Clause 102 of SEPP states:

102 Impact of road noise or vibration on non-road development

(1) This clause applies to development for any of the following purposes that is on land in or adjacent to the road corridor for a freeway, a tollway or a transitway or any other road with an annual average daily traffic volume of more than 40,000 vehicles (based on the traffic volume data published on the website of the RTA) and that the consent authority considers is likely to be adversely affected by road noise or vibration:

- (a) a building for residential use,*
- (b) a place of public worship,*
- (c) a hospital,*
- (d) an educational establishment or child care centre.*

(2) Before determining a development application for development to which this clause applies, the consent authority must take into consideration any guidelines that are issued by the Director-General for the purposes of this clause and published in the Gazette.

(3) If the development is for the purposes of a building for residential use, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:

- (a) in any bedroom in the building—35 dB(A) at any time between 10 pm and 7 am,*
- (b) anywhere else in the building (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.*
- (4) In this clause, **freeway**, **tollway** and **transitway** have the same meanings as they have in the Roads Act 1993.*

To address the above requirements, the applicant has submitted an acoustic assessment prepared by Acoustic logic. The report includes recommended construction techniques and states that the proposal will achieve the above mentioned noise guideline requirements, subject to those construction techniques. The proposal is therefore considered to be satisfactory in this respect.

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

SEPP 65 aims to improve the design quality of residential flat buildings across NSW and provides an assessment framework, the Residential Flat Design Code (RFDC), for assessing 'good design'.

Clause 50(1A) of the EPA 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 10 principles contained in Clauses 9-18 of the SEPP which has been undertaken by Council's Urban Design Consultant. The SEPP also requires consideration of the matters contained in the publication "Residential Flat Design Code".

As such, the following consideration has been given to the requirements of the SEPP and Design Code.

Residential Flat Design Code Compliance Table

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

COMPLIANCE TABLE

	<i>Guideline</i>	<i>Compliance</i>
PART 02 SITE DESIGN		
Site Configuration		
<i>Deep Soil Zones</i>	A minimum of 25 percent of the open space area of a site should be a deep soil zone; more is desirable. Exceptions may be made in urban areas where sites are built out and there is no capacity for water infiltration. In these instances, stormwater treatment measures must be integrated with the design of the residential flat building.	YES - 2022.59m ² or 52.75%
<i>Open Space</i>	The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger sites and brown field sites may have potential for more than 30 percent. (150.2m ²)	YES - 1250.0m ² or 32%

<i>Planting on Structures</i>	<p>In terms of soil provision there is no minimum standard that can be applied to all situations as the requirements vary with the size of plants and trees at maturity. The following are recommended as minimum standards for a range of plant sizes:</p> <p>Medium trees (8 metres canopy diameter at maturity)</p> <ul style="list-style-type: none"> - minimum soil volume 35 cubic metres - minimum soil depth 1 metre - approximate soil area 6 metres x 6 metres or equivalent 	YES
<i>Safety</i>	<p>Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings.</p> <p>Reinforce the development boundary to strengthen the distinction between public and private space</p> <p>Optimise the visibility, functionality and safety of building entrances</p> <p>Improve the opportunities for casual surveillance.</p> <p>Minimise opportunities for concealment</p> <p>Control access to the development.</p>	<p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p>
<i>Visual Privacy</i>	Refer to Building Separation minimum standards	NO
<i>Pedestrian Access</i>	Identify the access requirements from the street or car parking area to the apartment entrance.	YES
	<p>Follow the accessibility standard set out in Australian Standard AS 1428 (parts 1 and 2), as a minimum.</p> <p>Provide barrier free access to at least 20 percent of dwellings in the development.</p>	YES

<i>Vehicle Access</i>	Generally limit the width of driveways to a maximum of six (6) metres.	NO
	Locate vehicle entries away from main pedestrian entries and on secondary frontages.	YES
PART 03 BUILDING DESIGN		
Building Configuration		
<i>Apartment layout</i>	Single-aspect apartments should be limited in depth to 8 metres from a window.	NO
	The back of a kitchen should be no more than 8 metres from a window.	NO
	The width of cross-over or cross-through apartments over 15 metres deep should be 4 metres or greater to avoid deep narrow apartment layouts.	YES
<i>Apartment Mix</i>	Provide a diversity of apartment types, which cater for different household requirements now and in the future	NO
<i>Balconies</i>	Provide primary balconies for all apartments with a minimum depth of 2 metres. Developments which seek to vary from the minimum standards must demonstrate that negative impacts from the context-noise, wind – can be satisfactorily mitigated with design solutions.	YES
<i>Ceiling Heights</i>	The following recommended dimensions are measured from finished floor level (FFL) to finished ceiling level (FCL). These are minimums only and do not preclude higher ceilings, if desired. in residential flat buildings or other residential floors in mixed use buildings: in general, 2.7 metres minimum for all habitable rooms on all floors, 2.4 metres is the preferred minimum for all non-habitable rooms, however 2.25 metres is permitted. for two storey units, 2.4 metres minimum for second storey if 50 percent or more of the apartment has 2.7 metres minimum ceiling heights	YES

<i>Ground Floor Apartments</i>	Optimise the number of ground floor apartments with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.	NO
	Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	YES
<i>Internal Circulation</i>	In general, where units are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor should be limited to eight. Exceptions may be allowed: for adaptive reuse buildings where developments can demonstrate the achievement of the desired streetscape character and entry response where developments can demonstrate a high level of amenity for common lobbies, corridors and units, (cross over, dual aspect apartments).	YES
<i>Storage</i>	In addition to kitchen cupboards and bedroom wardrobes, provide accessible storage facilities at the following rates: - studio apartments 6m ³ - one-bedroom apartments 6m ³ - two-bedroom apartments 8m ³ - three plus bedroom apartments 10m ³	YES
Building Amenity		
<i>Daylight Access</i>	Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.	NO

	Limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10% of the total units proposed. Developments which seek to vary from the minimum standards must demonstrate how site constraints and orientation prohibit the achievement of these standards and how energy efficiency is addressed (see Orientation and Energy Efficiency).	YES
<i>Natural Ventilation</i>	Building depths, which support natural ventilation typically range from 10 to 18 metres.	NO
	Sixty percent (60%) of residential units should be naturally cross ventilated.	YES
	Twenty five percent (25%) of Kitchens within a development should have access to natural ventilation	YES
Building Performance		
<i>Waste Management</i>	Supply waste management plans as part of the development application submission as per the NSW Waste Board.	YES
<i>Water Conservation</i>	Rainwater is not to be collected from roofs coated with lead- or bitumen-based paints, or from asbestos- cement roofs. Normal guttering is sufficient for water collections provided that it is kept clear of leaves and debris.	YES

Visual privacy

The proposal fails to meet the building separation requirements contained in the Residential Flat Design Code and required by DCP 55 between the development itself and associated with Unit 48 in relation to the adjoining development at 4-8 Bobbin Head Road. The proposal does, however, include privacy techniques such as strategic positioning of windows, privacy screens, frosted glass, and landscape treatment, including fencing for ground floor apartments, which will result in a satisfactory level of privacy for each of the units and surrounding properties. As noted within the Urban Design Consultant's comments, the use of these privacy mitigation techniques, particularly with the penthouse apartments, results in poor amenity for those apartments.

Vehicle access

The proposal has a minor non-compliance in that the proposed driveway width is 6.1m as opposed to 6.0m. The proposal is considered acceptable in this instance due to the angle at which the driveway is required to meet the street front. It is not considered any adverse impacts will result from the non compliance.

Apartment layout

The proposal includes single aspect apartments with a length of greater than 8.0m (11.2 -12.2m depths proposed). Whilst it is noted that kitchens are located within 8.0m from a window, Council's Urban Design Consultant has indicated that "the use of a perpendicular sliding glass door is not the intention of SEPP 65" and the back of a kitchen should not be located more than 8.0m from an opposite window. This issue is exacerbated in that the perpendicular sliding glass doors which are being relied upon by the applicant are associated with covered terraces which limit the opportunity for solar access. The objectives of this control listed within the RFDC are as follows:

*"To ensure the spatial arrangement of apartments is functional and well organised;
To ensure that apartment layouts provide high standards of residential amenity;
To maximise the environmental performance of apartments;
To accommodate a variety of household activities and occupants needs."*

The rules of thumb within the RFDC indicate that, where buildings do not meet the minimum standards in this respect, it must be demonstrated how satisfactory daylight access and natural ventilation can be achieved, particularly, in relation to habitable rooms. It is yet to be demonstrated (as discussed below) that solar access and cross ventilation associated with the proposal complies with the SEPP requirement. Council's Urban Design Consultant has indicated that the proposal is unacceptable in providing satisfactory amenity to the single aspect units and it is therefore considered that the proposal cannot be supported in its current form.

Apartment mix

The RFDC requires the provision of a diversity of apartment types and indicates that a better design practice is to include studio, one, two, three, and three plus bedroom apartments to maintain equitable access to new housing by cultural and socio-economic groups. The proposal includes one and two bedroom apartment types. It is considered that the proposal should be altered to include 3 bedroom units within the development to provide a more equitable range of apartment types and potentially better internal amenity.

Ground floor apartments

The proposed development does not provide separate entries for ground floor units. As there are minimal units fronting the street in terms of access and the access points provided are well defined, the proposal is considered to be acceptable in this instance.

Daylight access

The solar impact report submitted with the development application indicates that 78% of units receive the required amount of 3 hours to their private open space and living rooms. The applicant was requested to provide elevational diagrams/3d modelling to demonstrate the proposal compliance particularly in relation to the northern elevations of the buildings. An updated solar impact assessment report was received which did include 3d modelling, however, it does not indicate the height of the shadow on the northern facades of the buildings or the shadow extent on the terraces of the proposal as a result of floors above. It therefore cannot be confirmed that the proposal complies in this respect and the issues therefore remains outstanding.

The submitted documentation has additionally failed to demonstrate that at least 50% of the principal communal open space associated with the development will achieve the required 3 hours of sunlight during the winter solstice.

Natural ventilation

The building depths in part exceed the 10-18m specified as a rule of thumb within the Residential Flat Design Code as the northern building is 19.3m (maximum) in depth and the southern building is 22.2m (maximum) in depth. This issue is interrelated with the apartment layout issue as discussed above and its associated amenity impacts.

It is noted that Council's Urban Design Consultant has assessed the number of units which are cross ventilated as non-compliant. This issue relates to one specific unit (Unit 49) which has utilised an operable skylight in order to achieve cross ventilation. It is not considered that this issue alone would warrant refusal (as it relates to one unit in order to meet the specified percentage) but it is also not preferable. It is considered that this issue should be addressed.

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

A valid BASIX certificate has been submitted. As noted above by Council's Landscape Officer, there are inconsistencies between the BASIX certificate and the submitted architectural and landscape plans. Council's Development Engineer has additionally indicated that the BASIX certificate has not been updated to reflect amendments in stormwater management for the site.

State Regional Environmental Planning 2005 – (Sydney Harbour Catchment)

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 within close proximity to any waterways and the scope of works is such that the proposal is considered to meet the requirements of the SREP.

KU-RING-GAI PLANNING SCHEME ORDINANCE (KPSO)

Zoning, permissibility and aims and objectives for residential zones

Under Clause 25B (definitions) of KPSO – LEP 194, a residential flat building is defined as ‘*a building containing three or more dwellings*’. The residential flat buildings proposed on the site satisfy this definition and are permissible with consent. The development is not considered to satisfy the zone aims and objectives under clause 25C and 25D of the KPSO as the development does not achieve a high level of residential amenity in relation to excessive depth of single aspect apartments, building depth generally, and has not demonstrated satisfactory solar access provision.

COMPLIANCE TABLE

Development standard	Proposed	Complies
Site area (min): 1200m ²	3834m ²	YES
Deep landscaping (min): 50% (2526.55m ²)	2022.59m ² (52.75%)	YES
Street frontage (min): 30m (SA>1800m ²)	62.52m Pacific Highway 84.33m Bobbin Head Road	YES
Number of storeys (max): 5	5	YES
Site coverage (max): 35% (1341.9m ²)	33%	YES
Top floor area (max): 60% of level below	59.9% 59.3%	YES YES
Storeys and ceiling height (max): 4 storey and 13.4m	4 storey and 13.4m	YES
Car parking spaces (min): 1 per 4 dwg = 13 (visitors) 1 per dwg + 2.0 per 3 & 4 bed (residents) = 50	13 visitor 53 residential Total 63	YES
Zone interface setback (min): 3 rd and 4 th storey setback of 9m	Not applicable	Not applicable
Manageable housing (min): 10% = 5 Dwellings	5 dwellings	YES

Lift access: required if greater than three storeys	Lifts have been provided in each of the buildings	YES
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Part B: Residential zone objectives:

The development does not satisfy the objectives for residential zones as prescribed in clause 25D as discussed above.

Clause 33 – Aesthetic appearance

The subject site fronts Pacific Highway which is a main road. The clause requires consideration of the aesthetic appearance of the proposed building when viewed from the Pacific Highway. It is noted that Council's Urban Design Consultant has indicated that the building could better address the Pacific Highway through less stepping of the south-western facade of the building and reads as if the proposal is addressing a side boundary which is not acceptable when fronting the Pacific Highway and the top floor would benefit from greater setbacks. The proposal is not supported in this respect.

Clause 61E – Development in the vicinity of heritage items

As noted previously in this report the proposal is within proximity of heritage items located at 11 Bobbin Head Road and 1228, 1161 and 1163 Pacific Highway. The application has been considered by Council's Heritage Advisor who has raised no concerns regarding the proposed development and impact upon these heritage items. The proposal is therefore considered satisfactory in this respect.

POLICY PROVISIONS

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

COMPLIANCE TABLE		
Development control	Proposed	Complies
Part 4.1 Landscape design:		
Consolidated Deep soil landscaping (min) 50% or 1921.5m²	2022.59m ² or 52.75%	YES
150m ² per 1000m ² of site area = 450m ²	>750m ²	YES
No. of tall trees required (min): 14	23	YES
Private outdoor space differentiation Up to 1.2m solid wall with at least 30% transparent component	1.2m timber fencing utilised	YES

Part 4.2 Density:		
Building footprint (max): 35% of total site area	35%	YES
Floor space ratio (max): 1.3:1 (4984.2m ²)	4478.941m ² or 1.16:1	YES
Part 4.3 Setbacks:		
Street boundary setback (min): 10-12m Pacific Highway 13-15m Bobbin Head Road	10-12m Pacific Highway	YES
	13-15m Bobbin Head Road	YES
Side and rear boundary setback (min): 6.0m Maximum 40% of building within setback zone	West 6.0m	YES
	North 6.0m	YES
Setback of ground floor courtyards to street boundary (min): 8.0m Pacific Highway 11.0m Bobbin Head Road	39.9%	YES
	No private open space fronting Pacific Highway	YES
% of total area of front setback occupied by private courtyards (max): 15%	11.0m Bobbin Head Road	YES
	<15	YES
Part 4.4 Built form and articulation:		
Façade articulation: Wall plane depth >600mm	<600mm minimum	NO
	Wall plane area <81m ²	NO
Built form: Building width < 36 metres	33.5m to Pacific Highway	YES
	33m and 26.7m Bobbin Head Road	YES
Balcony projection < 1.2 metres	0.5m	YES
Part 4.5 Residential amenity		
Solar access: >70% of units receive 3+ hours direct sunlight in winter solstice	The submitted documentation has not adequately verified compliance with the control.	NO
	The submitted documentation has not adequately verified compliance with the control.	NO
	<15%	YES
>50% of the principle common open space of the development receives 3+ hours direct sunlight in the winter solstice		
<15% of the total units are single aspect with a western orientation		

Visual privacy: Separation b/w windows and balconies of a building and any neighbouring building on site or adjoining site: Storeys 1 to 4 12 metres b/w habitable rooms 9 metres b/w habitable and non habitable 6m b/w two non habitable 5 th storey 18 metres b/w habitable 13 metres b/w habitable and non habitable 9 metres b/w two non habitable	Ground floor private open space area within 12.0m.	NO
	Proposed building separation is within 12m between habitable rooms.	NO
	The proposal is within 18.0m of the adjoining residential flat building at 4-8 Bobbin Head Road	NO
Internal amenity: Habitable rooms have a minimum floor to ceiling height of 2.7 metres Non-habitable rooms have a minimum floor to ceiling height of 2.4m 1-2 bedroom units have a minimum plan dimension of 3m in all bedroom 3+ bedroom units have a minimum plan dimension of 3m in at least two bedrooms Single corridors: - serve a maximum of 8 units 1.8m wide at lift lobbies Outdoor living: Ground floor apartments have a terrace or private courtyard greater than 25m ² in area	2.7m	YES
	2.7m	YES
	Minimum dimensions achieved	YES
	Minimum dimensions achieved	YES
	Maximum of 6 units accessed via single corridors.	YES
	Minimum dimensions met for lift lobbies	
	All ground floor apartments meet minimum 25m ²	YES
Balcony sizes: - 10m ² – 1 bedroom unit - 12m ² – 2 bedroom unit - 15m ² – 3 bedroom unit NB. At least one space >10m ²	>10m ² >12m ² N/A >2.4m	YES YES NA YES

primary outdoor space has a minimum dimension of 2.4m		
Common Open space (30%) Of the site area 1150.20m ²		
Private open space adjoining common open space not to be enclosed with high solid fences	Fences has been limited to 1.2m in height and are constructed of timber	YES
Part 4.7 Social dimensions:		
Visitable units (min): 70%	88% (44 units)	YES
Housing mix: Mix of sizes and types	14 x 1 bedroom 8 x 1 bedroom with study 25 x 2 bedroom 3 x 2 bedrooms with study	NO
Part 5 Parking and vehicular access:		
Car parking (min): 50 resident spaces 13 visitor spaces Total spaces 63	50 resident spaces 13 Visitor spaces Total spaces 63	YES

4.4 Built form and articulation

The proposal results in wall planes which are well in excess of the maximum 81m² as stipulated in DCP 55 in relation to the northern elevation of both buildings and the western facade of the northern building. This issue has further been identified and discussed by Council's Urban Design Consultant. It is considered that further articulation of the proposal is required in this respect as these elements are able to be viewed from the street and also from the adjoining development at 4-8 Bobbin Head Road and result in a large mass of building which is quite able to be readily modified to result in a better outcome for the site.

4.5.1 Solar access

The application has not demonstrated compliance with the RFDC and DCP 55 requirements as previously discussed. The proposal is not supported in this respect.

4.5.2 Visual privacy

The proposal is non-compliant with the building separation requirements of DCP 55 in relation to the adjoining developments at 4-8 Bobbin Head Road in relation to Unit 48 being at the penthouse level which requires a setback of 18.0m (14.3 metres minimum). As previously discussed, the applicant has utilised privacy screens in this location which result in a satisfactory outcome for the development.

The proposal is also non-complaint in terms of the building separation between the northern and southern buildings of the proposal at all levels. Where the non-compliances occur the applicant has provided highlight and frosted windows, privacy screens, landscape treatments and fencing. The proposal is considered to result in a satisfactory outcome in this respect.

4.7 Housing mix

The proposal does not include any 3 bedroom units as previously discussed and therefore limits the available housing choice within the development.

Development Control Plan No. 31 Access

Matters for assessment under DCP 31 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

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

Matters for assessment under DCP 40 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

Development Control Plan No. 43 - Car Parking

Matters for assessment under DCP 43 have been taken into account in the assessment of this application against DCP 55 and the proposal is satisfactory in this regard.

Development Control Plan No.47 - Water Management

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

Section 94 Plan

The development is subject to the Section 94 Contribution should consent be granted.

LIKELY IMPACTS

The likely impacts of the development have been considered within this report and it is considered that amendments are required to the design before consent can be granted due to impacts associated with issues discussed above.

SUITABILITY OF THE SITE

The site is zoned 2(d3). The proposed development is generally considered suitable for the site as it is permissible within the zone, and is compliant with height, setbacks and density controls. The proposal does however require further amendments before its impacts are considered to be satisfactory.

ANY SUBMISSIONS

The matters raised in the submissions have been addressed in this report.

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 impacts on the surrounding area are minimized. The proposal has been assessed against the relevant Environmental Planning Instruments and policy provisions and is deemed unsatisfactory in its current form.

This application has been assessed under the heads of consideration of Section 79C of the Environmental Planning and Assessment Act 1979 and all relevant instruments and policies.

The proposal complies with height, front and side setbacks, FSR, deep soil and car-parking/traffic requirements. Non-compliances associated with buildings separation/privacy are apparent, however, these issues are considered to result in a satisfactory outcome given the proposed design and how it relates to the site.

The proposal has unresolved issues with inconsistencies in documentation not meeting the requirements of BASIX and a non-compliance with apartment layouts and depths and façade articulation. The proposal has not demonstrated compliance with solar access provisions and remains to have outstanding water management issues. It is considered that consent should not be granted given these outstanding issues and the proposal is therefore recommended for refusal.

RECOMMENDATION

THAT the Sydney West Joint Regional Planning Panel, as the consent authority, refuse development consent to development application DA0091/11 for demolition of existing structures and construction of two residential flat buildings comprising 50 units and car parking for 63 vehicles with associated site works and landscaping at 1147, 1149 Pacific Highway and 2 Bobbin Head Road, Pymble, for the following reasons:

- 1. Inconsistencies between the BASIX certificate and the submitted architectural and landscape plans.**

Particulars

- (a) The BASIX certificate #356814M_02, dated 21/07/2011, has made numerous landscape area commitments for private and common areas. The architectural plans are inconsistent with the BASIX certificate.
 - (b) The landscape (BASIX) plan is inconsistent with the BASIX certificate as the areas of private garden and lawn for Units 1, 9, 10 & 11 are inconsistent with the BASIX certificate.
- 2. The proposal does not comply with apartment layout, building depth, daylight access, apartment mix and natural ventilation requirements of the Residential Flat Design Code (RFDC) and Clause 25C (2) and 25D (2) of the Ku-ring-gai Planning Scheme Ordinance**

Particulars

- (a) Single aspect apartments within the development have an overall depth greater than 8 metres, resulting in a poor residential amenity.
 - (b) Single aspect apartments within the development have their associated kitchens located at a depth greater than 8.0 metres from an acceptable window resulting in a poor residential amenity.
 - (c) The proposal has not demonstrated that compliant solar access and cross ventilation is achieved.
 - (d) The proposal does not include any 3 bedroom apartments and does not provide an appropriate apartment mix as required by the RFDC and DCP 55.
 - (e) The study rooms located within Units 47, 48 and 49 do not have access to adequate natural light or ventilation which results in poor residential amenity.
 - (f) The location of terraces directly adjacent to bedrooms results in unacceptable privacy and acoustic impacts.
 - (g) The extensive use of highlight windows, particularly in the penthouse apartments, results in poor amenity to those apartments.
- 3. The proposal is inconsistent with Part 2 "Elements of good design" of DCP 55.**

Particulars

- (a) The proposal does not comply with design controls C-1 and C-2 as the wall planes on the northern and western elevation of the northern building and the northern elevation of the southern building exceed 81m²

(approximately 260m² northern elevation of northern building, 127m² for the western elevation of the northern building and 100m² for the northern elevation of the southern building) and have a depth of less than 600mm resulting in unacceptable visual impacts on adjoining public and private land.

- (b) The proposal has not adequately demonstrated compliance with C-1 of DCP 55 in the provision of at least 3 hours of solar access to at least 70% of units.
- (c) The proposal has not adequately demonstrated compliance with C-2 of DCP 55 which requires at least 50% of the Principal Communal Open Space area to receive a minimum of 3 hours of solar access at the winter solstice.

4. Unacceptable visual impacts

Particulars

- (a) The south-western elevation of the building fronting the Pacific Highway is too stepped and reads as if the building is addressing a side boundary.
- (b) The lift shaft and overrun is too prominent on the south-western facade of the building which fronts the Pacific Highway.
- (c) No architectural detail has been provided in terms of rainwater collection (gutters and downpipes) to detail its impacts when viewed from the Pacific Highway.
- (d) The top floor (penthouse level) does not provide a sufficient setback to the level below to minimise visual impacts when viewed from adjoining public and private land.

5. The stormwater design does not comply with DCP 47 - Water Management

Particulars

- (a) The pump out system does not meet the requirements of section A7.1.1 of DCP 47 as it is based on a 10 year Average Recurrence Interval as opposed to a 100 year Average Recurrence Interval.
- (b) The on site detention tank may not have the capacity to accommodate subsoil flows based on the incorrect calculations above.
- (c) The BASIX water commitments are incorrect due to the non-compliance with the Average Recurrence Interval.
- (d) The stormwater design has not been connected to the Kerb inlet pipe on Bobbin Head Road (as oppose to the gutter).

6. The proposal has not demonstrated compliance with safety and security requirements of the RFDC and DCP 55

Particulars

- (a) A lighting plan has not been submitted to demonstrate illumination from the street to the entries and within communal open space within the development o demonstrate compliance with Principal 8 of the RFDC and 4.6 of DCP 55.

Grant Walsh
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Director Development and Regulation

- Attachments:**
1. Location sketch
 2. Ku-ring-gai Planning Scheme Zoning Extract
 3. Architectural plans
 4. Landscape plans
 5. Stormwater management plans
 6. Basix certificate