JOINT REGIONAL PLANNING PANEL
(Sydney West Region)

JRPP No	2013SYW031
DA Number	883/2013/JP
Local Government Area	THE HILLS SHIRE COUNCIL
Proposed Development	DEMOLITION OF EXISTING STRUCTURES AND CONSTRUCTION OF TWO RESIDENTIAL FLAT BUILDINGS CONTAINING 112 UNITS
Street Address	LOTS B & C DP 367737, LOT A DP 371036, LOTS X & Y DP 102830, LOTS 24 & 25 DP 8001 – 27 - 29 JENKINS ROAD & 16 – 24 THALLON STREET, CARLINGFORD
Applicant/Owner	DECON AUSTRALIA PTY LTD
Number of Submissions	One
Regional Development Criteria (Schedule 4A of the Act)	• General development with a CIV of over $20 million.
List of All Relevant s79C(1)(a) Matters	• List all of the relevant environmental planning instruments: s79C(1)(a)(i): - The Hills Local Environmental Plan 2012 - State Environmental Planning Policy (State and Regional Development) 2011. - State Environmental Planning Policy No. 65- Design Quality of Residential Flat Development • List any proposed instrument that is or has been the subject of public consultation under the Act and that has been notified to the consent authority: s79C(1)(a)(ii) - Nil • List any relevant development control plan: s79C(1)(a)(iii) - DCP 2012 Part D, Section 12 – Carlingford Precinct. - DCP 2012 Part B Section 5 – Residential Flat Buildings - DCP 2012 Part C, Section 1 – Parking - DCP 2012 Part C, Section 3 – Landscaping • List any relevant planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F: s79C(1)(a)(iv) - Nil • List any coastal zone management plan: s79C(1)(a)(v) - Nil • List any relevant regulations: s79C(1)(a)(iv) eg. Regs 92, 93, 94, 94A, 288 - Environmental Planning and Assessment Act Regulation 2000.
List all documents submitted with	• One submission

this report for the panel's consideration	
Recommendation	Refusal
Report by	SENIOR TOWN PLANNER SHANNON BUTLER

EXECUTIVE SUMMARY

The Development Application originally lodged with Council was for the demolition of seven dwellings and ancillary structures and the construction of two, nine storey apartment buildings containing 147 units comprising 12 one bedroom units, 125 two bedroom units and 10 three bedroom units. Basement car parking was proposed over five levels, with a total of 342 spaces provided. The proposed buildings were 31.3 metres in height, being nine storey and including rooftop architectural features/lift overruns.

The original proposal resulted in a Floor Space Ratio (FSR) of 2.63:1. The maximum FSR permitted on the site is 1.99:1. The proposal involved a variation to the floor space ratio standard under Clause 4.4 of LEP 2012. Clause 4.6 of LEP 2012 provides a mechanism for Council to consider exceptions to LEP development standards. The applicant provided a written request to consider a variation to this development standard.

During the assessment process (in response to Council Officers' concerns relating to excessive FSR), the application was amended to comply with the maximum allowable FSR and which consequently reduced the height of the building on the Post Office Road (Building A) frontage to six storeys and Building B to eight storeys. A total of 112 units are now proposed. The amended unit mix is 9 one bedroom units, 95 two bedroom units and 8 three bedroom units. Basement car parking has been reduced to four levels and provides for 279 parking spaces.

The proposal has been assessed against the requirements of DCP 2012 Part D Section 12-Carlingford Precinct and non-compliances have been identified in relation to unit floor areas, building separation and building depth. The proposed extent of building separation and the building depth are considered satisfactory.

Unit floor areas are not satisfactory. Only eight of the 112 units comply with the DCP minimum apartment area standard. Further, only 73 of the 112 units (65%) comply with the recommended internal areas referred to in Clause 30A of SEPP No. 65, which refers to the Residential Flat Design Code. This is inconsistent with the principles of providing a diversity of housing choice and will lead to an unsatisfactory level of amenity for future residents.

The application was notified and advertised for 14 days and one submission was received. The issues raised in the submission relate to infrastructure, traffic and access to public transport. These issues are addressed in the body of the report.

The application is recommended for refusal on the basis of unsatisfactory unit sizes.

BACKGROUND **MANDATORY REQUIREMENTS**

Owner:	Mc JV P/L, Parktron P/L, Manisada P/L & Mr J Liaros	1. 2.	LEP 2012 – Satisfactory. SEPP No. 65 – Design Quality of Residential Flat Development – Unsatisfactory.

		3.	SEPP (State and Regional Development) 2011 – Complies.
Zoning:	R1 General Residential	4. 5.	DCP 2012 Part D, Section 12 – Carlingford Precinct – Unsatisfactory, see report. DCP 2012 Part B Section 5 – Residential Flat Buildings – Unsatisfactory.
Area:	5553m^2	6.	DCP 2012 Part C, Section 1 – Parking – Complies.
Existing Development:	Dwelling houses and associated structures	7.	DCP 2012 Part C, Section 3 – Landscaping – Complies.
		8.	Residential Flat Design Code – Unsatisfactory, see report.
		9.	Section 79C (EP&A Act) – Unsatisfactory.
		10.	Section 94 Contribution – $1,409,850.88

SUBMISSIONS **REASON FOR REFERRAL TO JRPP**

1. Exhibition:	Yes, 14 days.	1.	Capital Investment Value is in excess of $20 million.
2. Notice Adj Owners:	Yes, 14 days.		
3. Number Advised:	152		
4. Submissions Received:	One		

HISTORY

28/02/2013 Subject Development Application lodged with Council.

02/04/2013 Letter sent to the applicant raising concerns in relation to the proposed FSR variation, compliance with DCP 2012 Part D Section 12- Carlingford Precinct, engineering issues, tree management and waste management issues.

14/05/2013 Amended plans and additional information submitted by the applicant. The response did not adequately address Council Officers' concerns in relation to FSR and compliance with DCP 2012 Part D Section 12- Carlingford Precinct.

11/06/2013 Meeting held between Council Officers and the applicant. The purpose of the meeting was to discuss the FSR variation and DCP compliance issues.

15/08/2013 Email sent to the applicant seeking an update in relation to the progress in preparing amended plans.

22/10/2013 Preliminary amended plans submitted by the applicant for discussion/review. The plans detailed a reduced FSR of 2.36:1.

05/11/2013 Email sent to the applicant providing a summary of Council's review of the preliminary amended plans. The applicant was advised that the proposed amended FSR of 2.36:1 still represented too much of a departure from the required 1.99:1

and that the proposal cannot be supported in that regard.

12/02/2014	Amended plans submitted by the applicant seeking a reduced FSR of 2.15:1. The non-compliances with the requirements of DCP 2012 Part B Section 12 – Carlingford Precinct were not eliminated.
26/02/2014	Meeting held between Council Officers and the applicant. The applicant was advised that the proposal still could not be supported given the cumulative impact of the FSR and DCP variations proposed. It was advised that Council would prepare an assessment report based on the latest plans, with a view for refusal.
11/03/2014	Email received from applicant advising that amended plans would be submitted demonstrating compliance with the maximum permitted FSR of 1.99:1.
25/03/2014	Amended plans submitted, achieving compliance with the 1.99:1 FSR. However, compliance with DCP 2012 Part D Section 12- Carlingford Precinct was not demonstrated in relation to unit floor area, building separation and building depth.
13/05/2014	Amended BASIX Certificate and table addressing Page No. 69 of the Residential Flat Design Code submitted by the applicant.
08/07/2014	Report considered by Council outlining intended amendments to Council's Development Control Plans in relation to unit floor areas. The proposed controls are discussed in Section 2 of this report.

SUBJECT SITE

The subject site comprises seven allotments and is bounded by Post Office Street to the north, Thallon Street to the east and Jenkins Road to the west. The site has a frontage of 92.8 metres to Post Office Street, 91.2 metres to Thallon Street and 30.2 metres to Jenkins Road. The site is bounded to the south west by a three storey residential flat building, fronting Jenkins Road and to the south east by a single storey dwelling fronting Thallon Street, however, consent has been granted by the JRPP for the construction of an 18 storey residential flat building development on this site (known as 2-14 Thallon Street and 7-13 Jenkins Road, Carlingford). This consent has not been acted on to date.

PROPOSAL

The Development Application originally lodged with Council was for the demolition of seven dwellings and ancillary structures and the construction of two, nine storey apartment buildings containing 147 units comprising 12 one bedroom units, 125 two bedroom units and 10 three bedroom units. Basement car parking was proposed over five levels, with a total of 342 spaces provided. The proposed buildings were 31.3 metres in height, being nine storey and including rooftop architectural features/lift overruns.

The original proposal resulted in a Floor Space Ratio (FSR) of 2.63:1. The maximum FSR permitted on the site is 1.99:1. The proposal involved a variation to the floor space ratio standard under Clause 4.4 of LEP 2012. Clause 4.6 of LEP 2012 provides a mechanism for Council to consider exceptions to LEP development standards. The applicant provided a written request to Council to consider a variation to this development standard.

During the assessment process (in response to Council Officers' concerns relating to excessive FSR), the application was amended to reduce the height of the building on the Post Office Road (Building A) frontage to six storeys and Building B has been reduced in height to eight storeys. A total of 112 units are now proposed. The amended unit mix is 9 one bedroom units, 95 two bedroom units and 8 three bedroom units. Basement car parking has been reduced to four levels and 279 parking spaces are now proposed.

Vehicular access is proposed via a two-way access driveway from Thallon Street. The driveway is located to the south of the site and will service both buildings.

The proposed residential flat building development has a capital investment value of $40.15 million.

ISSUES FOR CONSIDERATION

1. Compliance with Local Environmental Plan 2012

The subject site is zoned R1 General Residential under the provisions of Local Environmental Plan (LEP) 2012. Development for the purpose of Residential Flat Buildings is permissible with consent in this zone.

The maximum permitted FSR for the subject site is 1.99:1. The proposal was amended during the development assessment process to comply with this FSR.

The maximum permitted building height for the site is 28 metres. The maximum proposed height is 28 metres for Building B.

The minimum site area required for residential flat buildings is 4000m². The subject site is 5553m².

Accordingly, the amended proposal is considered satisfactory with regard to the numerical requirements of LEP 2012.

2. Compliance with DCP 2012 Part D Section 12- Carlingford Precinct

The proposal has been assessed against the requirements of Development Control Plan (DCP) 2012 Part D Section 12- Carlingford Precinct and the following non-compliances have been identified:

DEVELOPMENT STANDARD	DCP REQUIREMENTS	PROPOSED DEVELOPMENT	COMPLIANCE
Apartment size	The following minimum areas are a guide for the developments in southern Precinct (south of Post Office Street) for a maximum of 10% of the total number of units within any individual development: - 1 bedroom apartment 65m² - 2 bedroom apartment 90m²	The proposed apartment sizes are within the following ranges: - 1 bedroom apartments: 57m² - 74m². - 2 bedroom apartments: 79.5m² - 88.6m². - 3 bedroom apartments: 94.2m² - 119.6m².	No. Only eight (or 7%) of all units achieve compliance with the DCP minimum apartment areas specified (meeting the lesser standard permitted for up to 10% of units only). The proposed unit sizes do not achieve compliance with the Residential Flat Design Code also, and are

DEVELOPMENT STANDARD	DCP REQUIREMENTS	PROPOSED DEVELOPMENT	COMPLIANCE
	- 3 bedroom apartment 110m² The remaining 90% of units are required to comply with the apartment sizes required by DCP 2012 Part B Section 5- Residential Flat Buildings, as follows: - 1 bedroom units: 75m². - 2 bedroom units: 110m². - 3 bedroom units: 135m².		considered unsatisfactory.
Building separation and treatment	The minimum dimensions within a development, for internal courtyards and between adjoining sites shall be: **Buildings from 5 to 8 storeys** - 18 metres between habitable rooms/balconies; - 12 metres between habitable rooms/balconies and non-habitable rooms; and - 9 metres between non-habitable rooms.	The proposed separation between buildings within the development reduces to 11.8 metres (at the lowest) between habitable rooms, a variation of 6.2 metres.	No, the proposed extent of building separation is considered satisfactory and affects only a small number of units.
Building depth	In general, a residential flat building depth of approximately 18 metres from glass line to glass line is appropriate.	The maximum proposed building depth of Building B is 22m from glass line to glass line.	No, however the proposed building depth is considered satisfactory.

a) Apartment Sizes

Part 4.6 of DCP 2012 Part D Section 12- Carlingford Precinct states the following in relation to required apartment sizes:

> *(f) The following minimum areas are a guide for the developments in southern Precinct (south of Post Office Street) for a maximum of 10% of the total number of units within any individual development:*
> - *1 bedroom apartment 65m²*
> - *2 bedroom apartment 90m²*
> - *3 bedroom apartment 110m²*

The remaining 90% of units are required to comply with the apartment sizes required by DCP 2012 Part B Section 5- Residential Flat Buildings, as follows:

- 1 bedroom units: 75m².
- 2 bedroom units: 110m².
- 3 bedroom units: 135m².

The proposed apartment sizes are within the following ranges:

- 1 bedroom apartment: 57m² - 74m²
- 2 bedroom apartment: 79.5m² - 88.6m²
- 3 bedroom apartment: 94.2m² - 119.6m²

Only eight of the proposed units (or 7% of all units) achieve compliance with the DCP minimum apartment areas specified.

It is noted that a report was considered by Council on 8 July 2014 outlining intended amendments to Council's relevant Development Control Plans (including DCP 2012 Part D Section 12- Carlingford Precinct) in relation to unit floor areas. Council resolved as follows:

"The Draft The Hills Development Control Plan 2012 (Part B Section 5 – Residential Flat Buildings, Part D Section 6 – Rouse Hill Regional Centre, Part D Section 8 – Norwest Residential Precinct, Part D Section 12 – Carlingford Precinct, Part D Section 14 – Target Site Corner Windsor Road and Seven Hills Road, Baulkham Hills) be publicly exhibited."

The recommended controls are as follows:

Apartment Size Category	Apartment Size	Source
Type 1		
1 bedroom	50m²	Affordable Housing (SEPP 65)
2 bedroom	70m²	
3 or more bedrooms	95m²	
Type 2		
1 bedroom	65m²	Mid-Point
2 bedroom	90m²	
3 or more bedrooms	120m²	
Type 3		
1 bedroom	75m²	The Hills DCP 2012
2 bedroom	110m²	
3 or more bedrooms	135m²	

- Type 1 apartments shall not exceed 30% of the total number of 1, 2 and 3 bedroom apartments.
- Type 2 apartments shall not exceed 30% of the total number of 1, 2 and 3 bedroom apartments.
- All remaining apartments are to comply with the Type 3 apartment sizes.
- No more than 25% of the dwelling yield is to comprise either studio or one (1) bedroom apartments; and
- No less than 10% of the dwelling yield is to comprise apartments with three (3) or more bedrooms.

Council resolved that the amendments be publicly exhibited.

An assessment of the proposal against the draft controls finds that 105 of the 112 units (93.7%) comply with the type 1 apartment size category and 7 of the 112 units (6.3%) comply with the type 2 apartment size category. There are no units that would meet the type 3 apartment size category. In addition, only 8 of the 112 units (7%) comprise

apartments with three or more bedrooms. Whilst these are draft controls only, it is considered that the level of compliance is unsatisfactory when reviewed on merit.

Part 4.6 of DCP 2012 Part D Section 12- Carlingford Precinct is based on the following objectives:

> *(i) To provide a diversity of residential flat building/ apartment types, which cater for different household requirements now and in the future; and*
> *(ii) To maintain equitable access to new housing by cultural and socio-economic groups.*

The applicant has addressed the proposed variation as follows:

- *The majority of the proposed apartments fall within the prescribed ranges.*
- *The minor shortfall is not significant enough to refuse development consent.*
- *Whilst a number of large units are recommended to cater for the market demand there is a growing need for more affordable housing, which meets the financial constraints of the community.*
- *Affordable housing must remain low in net floor areas to maintain the range acceptable for such a market.*

The applicant's justification is noted however, Clause 30A of SEPP No. 65- Design Quality of Residential Flat Development states the following:

> *"(1) A consent authority must not refuse consent to a development application for the carrying out of residential flat development on any of the following grounds:*
> *(a)* ***ceiling height:*** *if the proposed ceiling heights for the building are equal to, or greater than, the minimum recommended ceiling heights set out in Part 3 of the Residential Flat Design Code,*
> *(b)* ***apartment area:*** *if the proposed area for each apartment is equal to, or greater than, the recommended internal area and external area for the relevant apartment type set out in Part 3 of the Residential Flat Design Code."*

The effect of this is that the consent authority is entitled to refuse a Development Application if it does not comply with the unit types outlined on Page No. 69 of the RFDC.

Comment:

The proposed unit sizes are considered unsatisfactory for the following reasons:

- The applicant has provided a table addressing the unit typologies outlined on Page No. 69 of the Residential Flat Design Code (RFDC). The table demonstrates that only 65% of the units (73 out of 112) comply with the unit size areas required by Page No. 69 (see Attachment No. 9 for the full table).

- Only eight of the proposed units achieve compliance with the DCP minimum apartment areas specified. The applicant seeks to rely on the RFDC, however, only partial compliance with the RFDC has been demonstrated.

- The proposed apartment sizes will result in a poor level of amenity for future residents and conflict with the development intent of the DCP.

Accordingly, the proposed unit floor areas are considered unsatisfactory.

b) Building Separation

Part 4.8 of DCP 2012 Part D Section 12- Carlingford Precinct states the following in relation to building separation:

(a) The minimum dimensions within a development, for internal courtyards and between adjoining sites shall be:

Buildings from 5 to 8 storeys
- 18 metres between habitable rooms/balconies;
- 12 metres between habitable rooms/balconies and non-habitable rooms; and
- 9 metres between non-habitable rooms.

The proposed separation between buildings within the development reduces to 11.8 metres (at the lowest) between habitable rooms, a variation of 6.2 metres. It is noted that Building A is up to six storeys in height and Building B is eight storeys in height.

Part 4.8 of DCP 2012 Part D Section 12- Carlingford Precinct is based on the following objectives:

(i) To ensure that new development is scaled to support the desired area character with appropriate massing and spaces between buildings;
(ii) To provide visual and acoustic privacy for existing and new residents;
(iii) To control overshadowing of adjacent properties and private or shared open space;
(iv) To allow for the provision of open space of an appropriate size and proportion for recreational activities for building occupants; and
(v) To provide deep soil zones for stormwater management and tree planting.

The applicant has addressed the proposed variation as follows:

- *The design of the residential units within each building recognises the location of the adjacent development and minimises the windows opposite the adjacent development.*
- *Windows are minimised or located to avoid any direct views and thus reduce the impacts on visual and acoustic privacy.*
- *Separation of the buildings will provide solar access to units from the east and west rather than relying on the northerly aspect.*
- *The reduction in building separation enables the development to reduce overshadowing to the southern residential three storey development by maintaining a compact development in the north-eastern corner of the site rather than expanding to the west.*

Comment:

The proposed building separation is considered satisfactory for the following reasons:

- The non-compliance occurs for a 20 metre wide portion where Building A is adjacent to Building B. The non-compliant building separation will affect only of 22 of the proposed units and primarily affects bedrooms, which are low traffic rooms.

- In the areas where the non-compliant separation occurs, the number of windows are minimised thereby reducing the impacts on future residents.

- The proposed separation will result in satisfactory and compliant levels of solar access for both buildings.

Accordingly, the proposed extent of building separation is considered satisfactory.

c) Building Depth

Part 4.9 of DCP 2012 Part D Section 12- Carlingford Precinct states the following in relation to building depth:

(a) In general, a residential flat building depth of approximately 18 metres from glass line to glass line is appropriate.

The maximum proposed building depth of Building B is 22m from glass line to glass line.

Part 4.9 of DCP 2012 Part D Section 12 – Carlingford Precinct is based on the following objectives:

(i) To ensure that the scale of the development is in consistent with the existing or desired future context;
(ii) To provide adequate amenity for building occupants in terms of solar access and natural ventilation; and
(iii) To provide for dual aspect apartments.

The applicant has addressed the proposed variation as follows:

"The slight increase in the depth of the unit is considered to be minor and is generated by the need to articulate the facades and provide appropriate projections and indentations. These increase the overall depth of residential units but do not diminish the solar penetration and natural ventilation achievable in dual-aspect configurations.

The design should ensure sufficient daylight access to habitable rooms, without the need for artificial lighting. The maximum depth for adequate daylight penetration is approximately 18 to 20 metres.

The design generally adopts these guidelines and proposes residential floor plans with dual aspect and overall dimensions of between 8 metres and 17 metres overall (excluding balconies). With balconies included the depth of the building must increase and thus increases the overall depth."

Comment:

The proposed building depth is considered satisfactory for the following reasons:

- The proposed depth will still allow the units to achieve satisfactory solar penetration and natural ventilation resulting in a high level of amenity.
- The building depth does not result in unreasonable building bulk. There are no significant overshadowing impacts created as a result of the proposed depth.

Accordingly, the proposed building depth is considered satisfactory.

3. Compliance with SEPP No. 65- Design Quality of Residential Flat Buildings and Residential Flat Design Code (RFDC)

The required Design Verification Statement was prepared by Robert Del Pizzo of Architex, a qualified and registered architect.

This statement has addressed the 10 matters for consideration under SEPP 65, which are as follows:

i) Principle 1: Context

Good design responds to 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.

Comment:
The subject site is located in an area zoned R1 General Residential to facilitate high density residential flat buildings. The proposed residential flat buildings would integrate with the 'desired future character' of the area that is responding to the growing need for high density residential dwellings in proximity to major centres. The site is in close proximity to Pennant Hills Road.

The *'desired future character'* of the site is defined by DCP 2012 Part D Section 12-Carlingford Precinct. The proposed development will integrate with the *'desired future character'* of the area that is responding to the growing need for higher density residential development in this part of the Shire.

The proposed development provides setbacks to the street, to the rear and to the side appropriate to its context. Adequate solar access is available in mid-winter which provides a high level of amenity for all the units. It is noted that the proposal is recommended for refusal based on unit floor areas.

ii) 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.

Comment:
The scale and height of the proposed development is appropriate within the context of the *'desired future character'* of the area. The proposed heights of the buildings maintain a transition in built form from the single dwellings on the opposite side of Post Office Street to the approved 18 storey residential flat building development to the south of the site.

The heights of the buildings are appropriate to the width of the street and landscaping is proposed within the front setback to soften the impacts of bulk and scale on the streetscape.

The proposal is well set back from the street frontage which provides satisfactory visual and acoustic privacy for future occupants. There is a clear delineation between the public and private domain. The setback allows for the landscape to complement the existing streetscape which helps to minimise the appearance of building mass when viewed from the street.

The proposed deep-soil planting zone and provision of landscape throughout the site will help reduce the scale of the proposed building and integrate the proposed development with the surrounding environment.

iii) 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 their views and vistas, and provides internal amenity and outlook.

Comment:
The proposed built form is broken into two separate buildings with adequate building separation. Setbacks to the boundaries are maintained to achieve a satisfactory building separation with surrounding residential development.

The proposed built form is of a mass and scale which maintains considerable solar access to the proposed common open space, ground floor private open space and adjoining properties.

The buildings are well articulated and achieve a high level of natural ventilation, optimise solar access and provide opportunities for casual surveillance of common open spaces as well as the street.

The side and rear setbacks provide sufficient open space for the retention of vegetation and deep soil zones around the periphery.

The orientation of layout of the built form maximises solar access and eliminates any south facing single aspect units.

iv) 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.

Comment:
The site is located in a high density residential zone and is located adjacent to a site to the south which enjoys a higher FSR than allowed on the subject site. The proposal meets the required area of common open space at ground level.

v) 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.

Comment:
The Development Application is accompanied by a BASIX Certificate. There are no single aspect units facing south. All single aspect units have a generous northern aspect and are wide apartments with adequate daylight penetration.

A waste management plan has been prepared and submitted with the development application and is considered satisfactory.

Triple A fixtures are proposed for bathroom, kitchen laundry, urinals, showerheads, dishwashers and toilet cisterns. Appropriate landscaping has been provided to reduce the quantity of urban stormwater runoff.

vi) 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 existing 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 useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

Comment:
Deep soil planting is provided at the periphery of the site to accommodate suitable screen planting. Combinations of deep soil planting and impervious areas are proposed at the ground floor level to allow for a good landscape outcome and usable private spaces. Proposed fencing has been designed to create a satisfactory interface with the public domain.

vii) 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.

Comment:
The proposed apartment layout demonstrates satisfactory spatial arrangement of rooms, circulation between rooms and the degrees of privacy of each room that will allow for good amenity for all the units in the development. The articulation of the building and provision of open space will ensure a high standard of residential amenity.

As stated above, the solar access for the development is considered satisfactory. There are no single aspect apartments facing south. The development also achieves a high degree of cross-ventilation.

As discussed in Section 2 of this report, the proposed unit floor areas are considered unsatisfactory and the proposal is recommended for refusal on this basis.

viii) 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.

Comment:
The following security measures are included in the design of the development:

- The entrances are clearly identified from the street and clear sightlines are established from the front entry to the street;
- There is casual surveillance of the communal open spaces on the site, including the main entrances, from the units. Corner balconies/windows and balconies provide a wider degree of casual surveillance along the street;
- The design has aimed to avoid dark alcoves and provide well-lit routes through the development (especially at main entrances and in common areas). Lighting details will be furnished in accordance with Australian Standards.

ix) Principle 9 - Social Dimensions

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities.

New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

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.

Comment:
The proposal includes a mix of one, two and three bedroom units which will accommodate a range of different ages and professions from single professionals requiring single bedrooms, young families that only require two bedroom units and mature couples without children that may require one or two bedroom units.

As discussed in Section 2 of this report, the proposed unit floor areas are considered unsatisfactory and the proposal is recommended for refusal on this basis.

x) 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.

Comment:
The character and aesthetics of the new buildings is sympathetic to the adjacent built environment. It is modern in style and form and utilises a combination of materials.

The landscape treatment seeks to soften the built form and integrate with the development and the site's context. Deep root planting zones provide the opportunity to have denser and taller trees that partially screen the proposed building from the road.

The material, colours and textures of the proposed development will integrate with the desired character of the locality. This includes the use of a variety of cladding and painted render of varying colours.

The relevant rules of thumb of the Residential Flat Design Code are addressed below:

Primary Controls Part 1 – Local Context	**Guideline**	**Compliance**
Building Height	Where there is an existing floor space ratio (FSR), test height controls against it to ensure a good fit Test heights against the number of storeys and the minimum ceiling heights required for the desired building use.	The proposal has been amended to achieve compliance with the maximum permitted FSR of 1.99:1. The proposal also achieves compliance with the maximum permitted building height of 28 metres.
Building Depth	In general, an apartment building depth of 10-18m is appropriate. Developments that propose wider than 18m must demonstrate how satisfactory daylight and natural ventilation are to be achieved.	As discussed in Section 2 of this report, building B exceeds the maximum depth of 18m. The maximum width proposed is 22m. The proposed building depth is considered satisfactory.
Building Separation	Design and test building separation controls in plan and section. 9 storeys and above: 24m between habitable rooms/balconies 18m between habitable rooms/balconies and non habitable rooms 12m between non habitable rooms. 5 to 8 storeys 18m between habitable rooms/balconies. 13m between habitable rooms/balconies and non-habitable rooms. 9m between non-habitable rooms Up to 4 storey: 12m between habitable rooms/balconies 9m between habitable/balconies and non-habitable rooms 6m between non-habitable.	The separation requirements for 5 to 8 storey buildings apply. The proposal does not achieve compliance, given a separation of 11.8 metres between habitable rooms from building A to B. This matter is addressed in detail in Section 2 of this report.
Street Setbacks	Identify the desired streetscape character, the common setback of buildings in the street, the accommodation of street tree planting and the height	The proposed street setbacks achieve compliance with the requirements of DCP 2012 Part D Section 12- Carlingford Precinct and are consistent with adjoining and surrounding

	of buildings and daylight access controls. Test street setbacks with building envelopes and street sections. Test controls for their impact on the scale, proportion and shape of building facades.	development in the precinct.
Side & rear setbacks	Relate side setbacks to existing streetscape patterns.	The proposed side and rear setbacks are consistent with those in the locality and achieve compliance with DCP 2012.
Floor Space ratio	Test the desired built form outcome against proposed floor space ratio to ensure consistency with building height – building footprint and three dimensional building envelope open space requirements	The proposal achieves compliance with the maximum permitted FSR of 1.99:1. It provides a suitable transition from the approved 18 storey development to the south and the lower densities permitted on the opposite side of Post Office Street.
Part 2 – Site Design **Site Configuration**		
Deep Soil Zones	A minimum of 25% 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	33% is provided. The development has adequate stormwater detention tanks and rainwater tanks below ground to deal with run off.
Open Space	The area of communal open space required should generally be at least between 25 and 30 percent of the site area. Larger sites and brownfield sites may have potential for more than 30 percent The minimum recommended area of private open space for each apartment at ground level or similar space on a structure, such as on a	35% is provided. A combination of public open space and communal open space within the developable portion of the site are designed for with facilities. Ground level private open space is a minimum of 26.2m² all with a minimum dimension exceeding 4m.

	podium or car park is 25m²; the minimum preferred dimension in one direction is 4m.	
Planting on structures	In terms of deep 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: Large trees such as figs (canopy diameter of up to 16m at maturity) – minimum soil volume 150 cubic metres – minimum soil depth 1.3m – minimum soil area 10mx 10m area or equivalent Medium trees (8m canopy diameter at maturity) – minimum soil volume 35 cubic metres – minimum soil depth 1m – approximate soil area 6m x 6m or equivalent Small trees (4m canopy diameter at maturity) – minimum soil volume 9 cubic metres – minimum soil depth 800mm – approximate soil area 3.5m x 3.5m or equivalent Shrubs – minimum soil depths 500- 600mm Ground cover – minimum soil depths 300- 450mm Turf – minimum soil depths 100-300mm Any subsurface drainage requirements are in addition to the minimum soil depths	Adequate site landscaping is provided.
Site Amenity		
Safety	Carry out a formal crime risk assessment for all residential developments of more than 20 new dwellings	Assessment carried out and Police have assessed the proposal and made recommendations.

Visual privacy	Refer to building separation minimum standard	See above.
Site Access		
Pedestrian access	Identify the access requirements from the street or car parking area to the apartment entrance Follow the accessibility standard set out in AS 1428 (parts 1 and 2), as a minimum Provide barrier free access to at least 20 percent of dwellings in the development	Ground level entrances provided and lift access to each floor is available from all basement levels. Accessibility report submitted demonstrating compliance. Complies.
Vehicle access	Generally limit the width of driveways to a max. of 6m Locate vehicle entries away from main pedestrian entries and on secondary frontages	Provided. Vehicular access is proposed off Thallon Street (a secondary street) and is separated from the pedestrian entry points.
Part 3 – Building Design		
Building Configuration		
Apartment layout	Single-aspect apartments should be limited in depth to 8m from a window The back of a kitchen should be no more than 8m from a window Buildings not meeting the minimum standards listed above, must demonstrate how satisfactory day lighting and natural ventilation can be achieved, particularly in relation to habitable rooms (see Daylight Access and Natural Ventilation)	All single aspect apartments have a depth not exceeding 8m from a window. Complies. Demonstrated.
Apartment mix	If Council chooses to standardise apartment sizes, a range of sizes that do not exclude affordable housing should be used. As a guide, the Affordable Housing Service suggest the following minimum apartment sizes, which can	The proposal does not comply with the unit size requirements of DCP 2012 and the table on Page No. 69 of the RFDC. This matter is addressed in detail in Section 2 of this report.

	contribute to housing affordability; (apartment size is only one factor influencing affordability) • 1 bedroom apartment 50m^2 • 2 bedroom apartment 70m^2 • 3 bedroom apartment 95m^2	
Balconies	Provide primary balconies for all apartments with a minimum depth of 2m.	Provided.
Ceiling Heights	Finished floor level (FFL) to finished ceiling level (FCL) of 2.7m for living areas and 2.4m to non-habitable areas. These are minimums only and do not preclude higher ceilings, if desired.	Provided.
Ground Floor Apartments	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. Provide ground floor apartments with access to private open space, preferably as a terrace or garden.	Provided.
Internal Circulation	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	Proposal designed to maximise residential amenity.

	aspect apartments).	
Storage	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	Provided as required in relevant units.
Building Amenity		
Daylight Access	Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter. In dense urban areas a minimum of two hours may be acceptable. Limit the number of single-aspect apartments with a southerly aspect (SWSE) 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).	87% of units achieve a minimum 3 hours. Northern orientation has been maximised. No single aspect units have a southerly elevation.
Natural Ventilation	Building depths, which support natural ventilation typically range from 10m to 18m.	Generally unit depths are less than 18m however max building depth is 22m. The proposed depths are satisfactory as the development is of a scale that is consistent with the desired existing and future context in that most apartments are dual aspect with habitable rooms situated at the

	Sixty percent (60%) of residential units should be naturally cross-ventilated.	periphery of the buildings. It is noted that the proposal has achieved the solar performance intent of the code. 75% of units are cross ventilated.
Building Performance		
Waste Management	Supply waste management plan as part of the development application submission as per the NSW Waste Board.	Plan provided.
Water Conservation	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.	Satisfactory.

4. Issues Raised in Submissions

The application was notified and advertised for 14 days in accordance with Council's policy and one submission was received. The issues raised in the submission are addressed as follows:

ISSUE / OBJECTION	COMMENT	OUTCOME
The location is not suitable for a nine storey building. Carlingford is zoned for high density development, however there has been no improvements in infrastructure for years and traffic has worsened in the last two years due to surrounding development.	The subject site is zoned R4 High Density Residential and development for the purpose of Residential Flat Buildings is permissible with consent. The proposal is consistent with the style of development envisaged for the site under the Carlingford Precinct DCP. The existing and proposed infrastructure in the precinct was considered during the preparation of the DCP. However, the application is recommended for refusal given that it does not comply with the Residential Flat Design Code with respect to unit sizes.	Issue addressed. The application is recommended for refusal.
Carlingford has poor public transport and it is not understood why a nine storey building would be constructed in the proposed location.	DCP 2012 Part D Section 12-Carlingford Precinct is based on a number of strategic planning studies and Carlingford was identified as a locality suitable for accommodating increased	Issue addressed. The application is recommended for refusal.

	density. The proposal has been amended, providing a maximum height of eight storeys. However, the application is recommended for refusal given non-compliances with DCP 2012 Part D Section 12- Carlingford Precinct.	

ENGINEERING COMMENTS

The application has been assessed by Council's Subdivision Engineer and no objection is raised.

TRAFFIC COMMENTS

The proposal has been assessed by Council's Principal Coordinator Traffic and Transport and the following comments were provided:

"The proposed development is consistent with the planning objectives of the Carlingford Precinct DCP in terms of traffic generation and access. Provided the appropriate Section 94 contributions are levied against the applicant for traffic facilities there are no objections to the proposal."

TREE MANAGEMENT COMMENTS

The application has been assessed by Council's Senior Tree Management Officer and no objection is raised.

ENVIRONMENTAL HEALTH & SUSTAINABILITY COMMENTS

The application has been assessed by Council's Environmental Health Officer and no objection is raised.

RESOURCE RECOVERY COMMENTS

The application has been assessed by Council's Resource Recovery Projects Officer and no objection is raised.

CONCLUSION

The proposal has been assessed having regard to the provisions of SEPP No. 65- Design Quality of Residential Flat Buildings, Local Environmental Plan 2012, DCP 2012 Part D Section 12 – Carlingford Precinct and DCP 2012 Part B Section 5 – Residential Flat Buildings.

The proposal seeks variations to the requirements of DCP 2012 Part D Section 12- Carlingford Precinct in relation to unit floor areas, building separation and building depth. The proposed unit floor areas are considered unsatisfactory as they do not achieve compliance with the requirements of the Residential Flat Design Code and SEPP No. 65. The proposed extent of building separation and building depth are considered satisfactory.

The application was notified and advertised for 14 days and one submission was received. The issues raised in the submission relate to infrastructure, traffic and public transport and have been addressed in the body of the report.

Accordingly, the application is recommended for refusal.

RECOMMENDATION

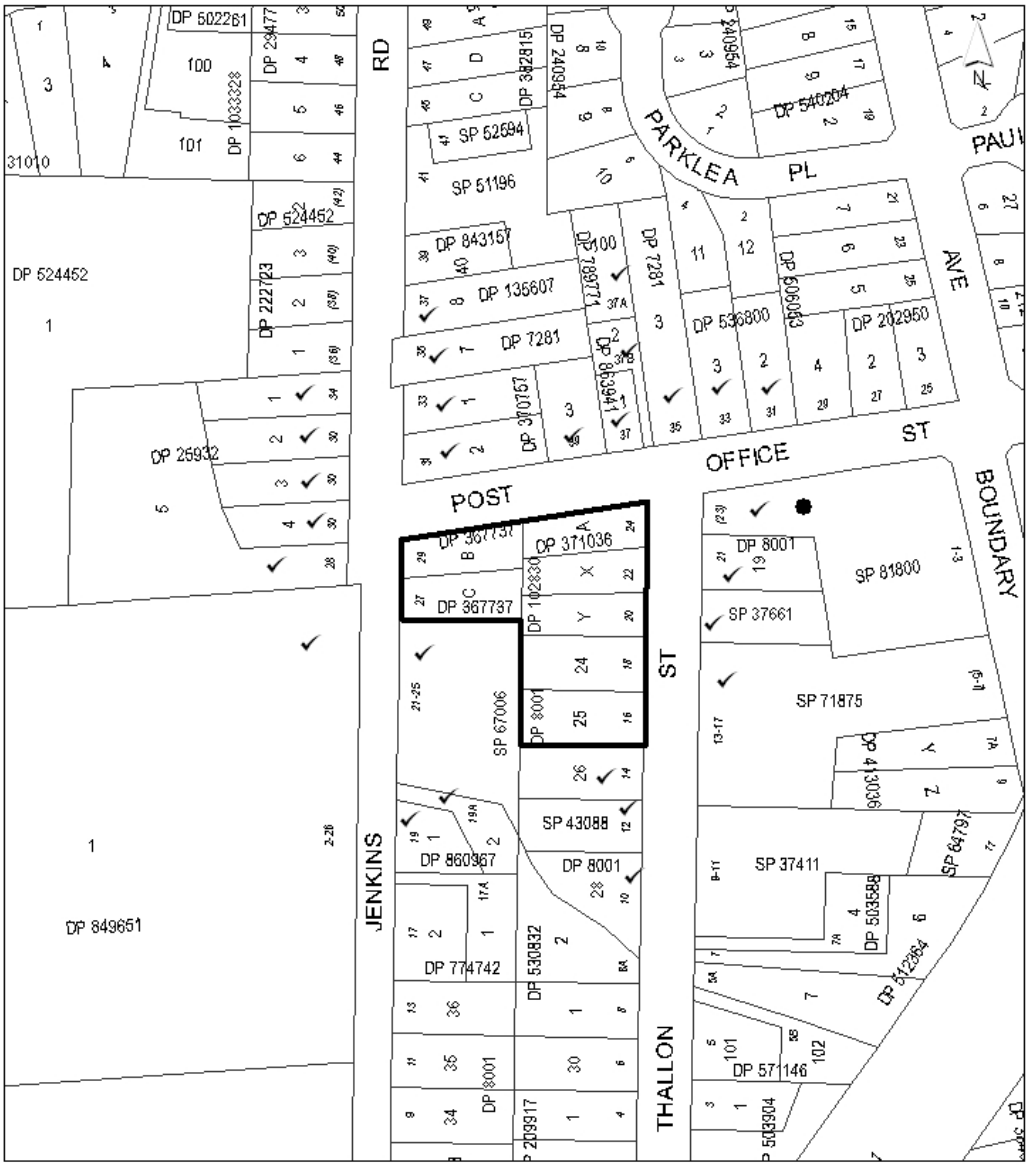
The Development Application be refused for the following reason:

1. The development does not comply with the unit typologies on Page No. 69 of the Residential Flat Design Code, in addition, the development does not comply with the apartment size requirements of DCP 2012 Part D Section 12- Carlingford Precinct and is considered unsatisfactory, resulting in a poor level of amenity for future residents.
   (Section 79C(a)(i) & (iii) of the Environmental Planning and Assessment Act 1979).

ATTACHMENTS

1. Locality Plan
2. Aerial Photograph
3. Site Plan
4. Elevations
5. Sections
6. Landscaping Plan
7. Shadow Diagrams
8. Photomontages
9. Table Addressing Page No. 69 of RFDC

ATTACHMENT 1 – LOCALITY PLAN



SUBJECT SITE

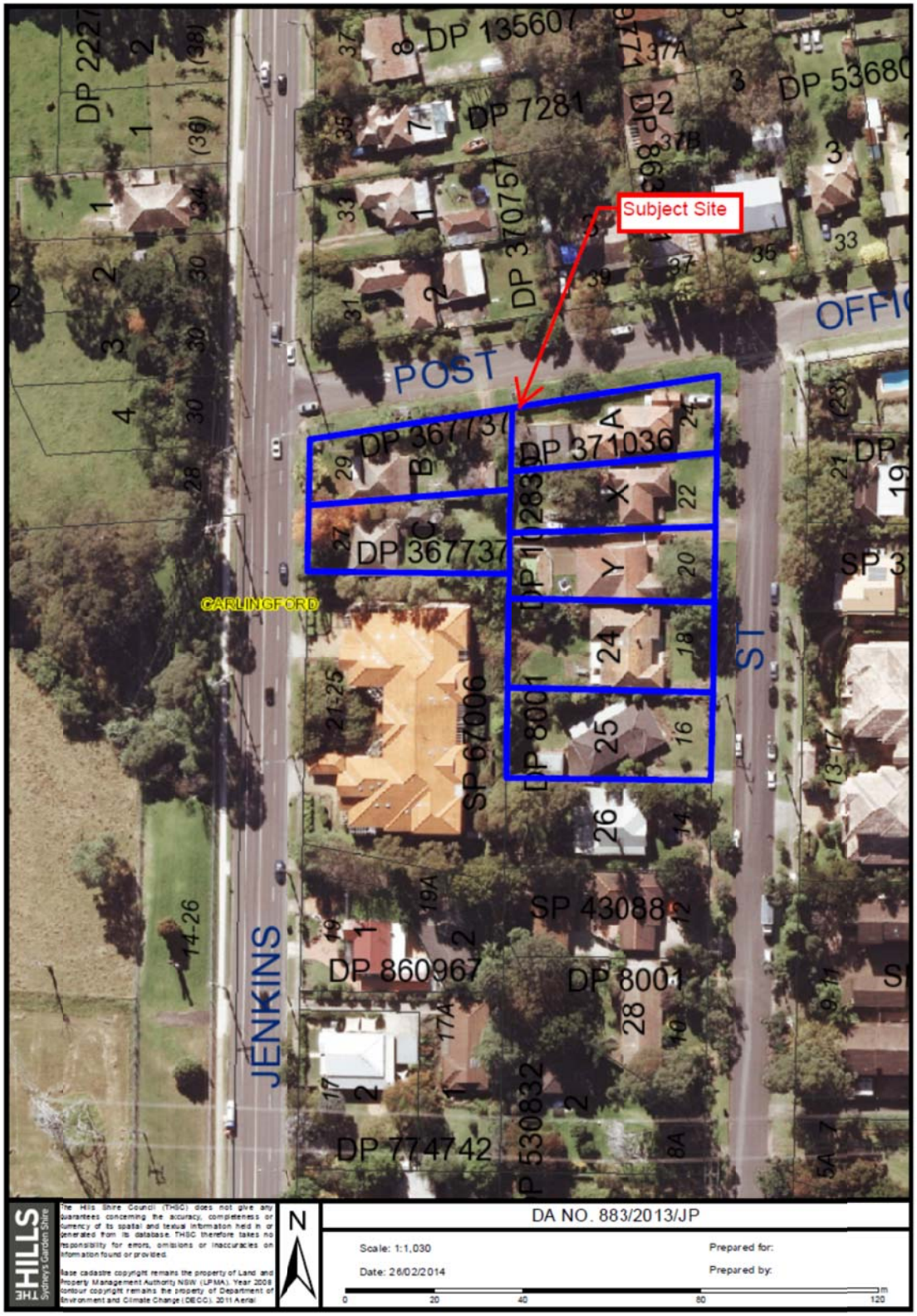
✓ PROPERTIES NOTIFIED

● SUBMISSION RECEIVED

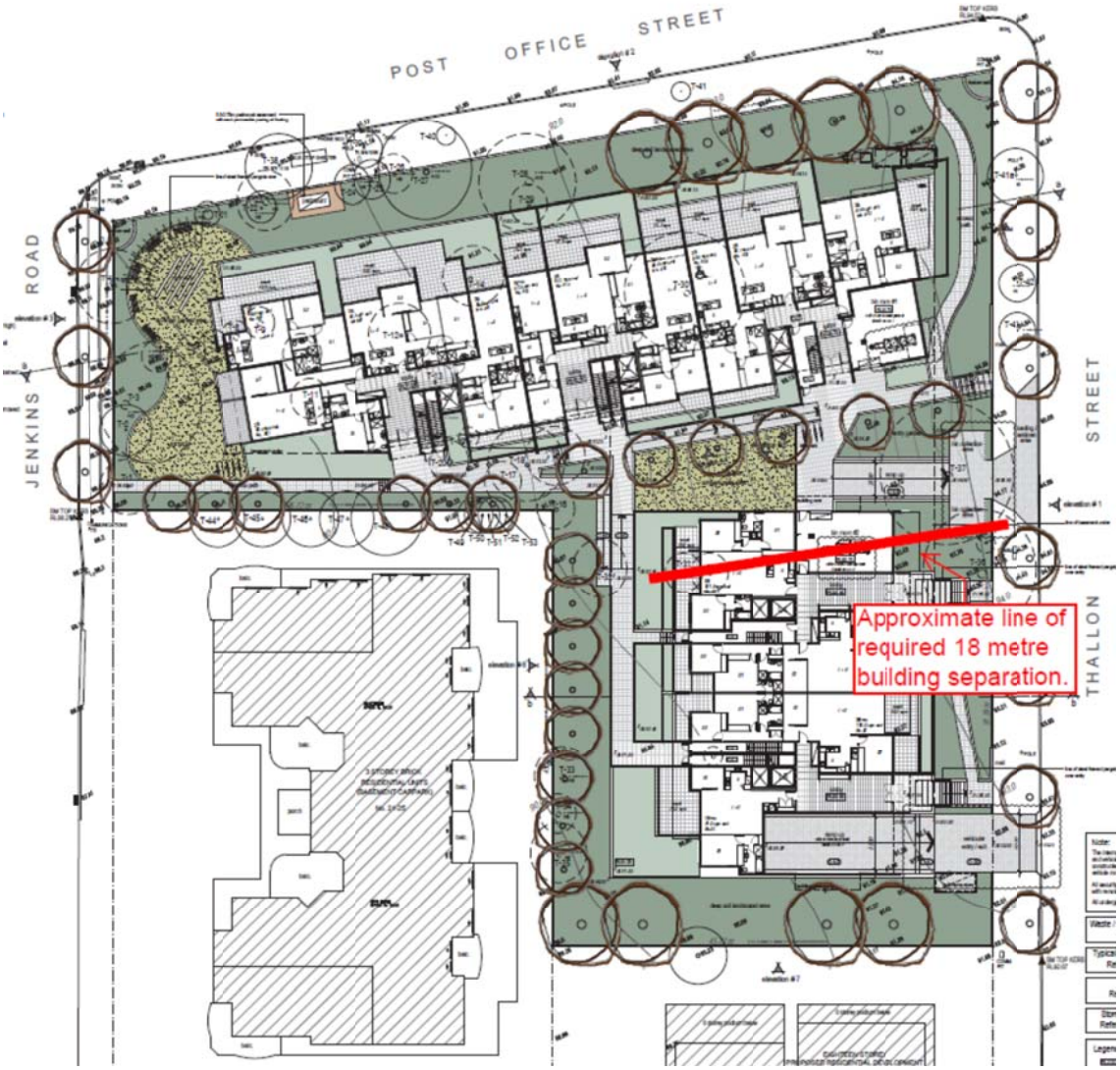
THE HILLS Sydney's Garden Shire

THE HILLS SHIRE COUNCIL

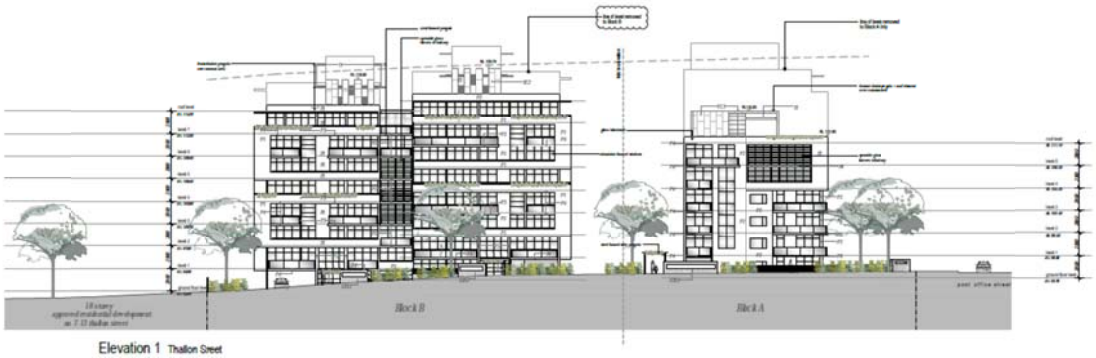
ATTACHMENT 2 – AERIAL PHOTOGRAPH



ATTACHMENT 3 – SITE PLAN



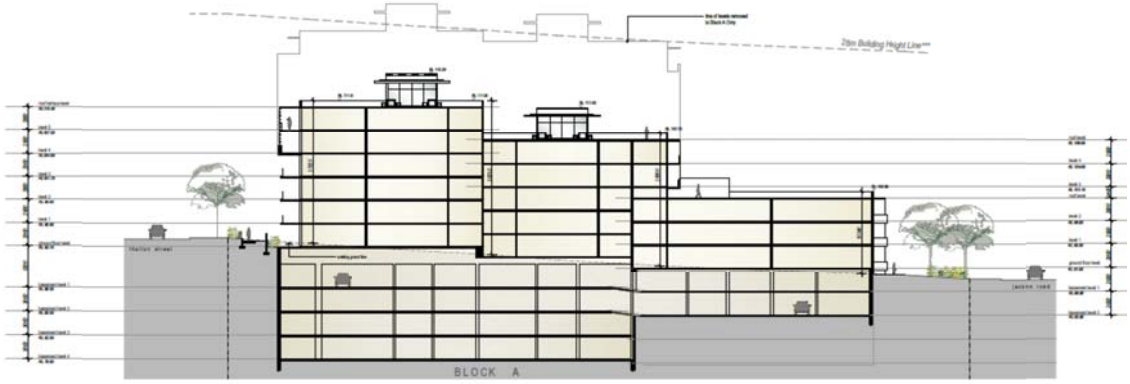
ATTACHMENT 4 – ELEVATIONS



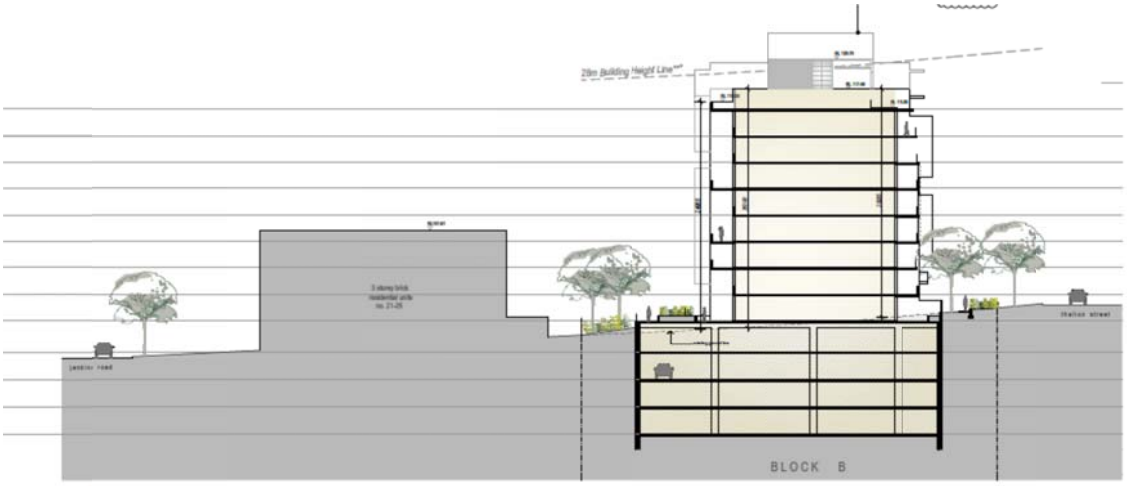
Elevation 1 Thallon Sreet

Elevation 3 Jenkins Road

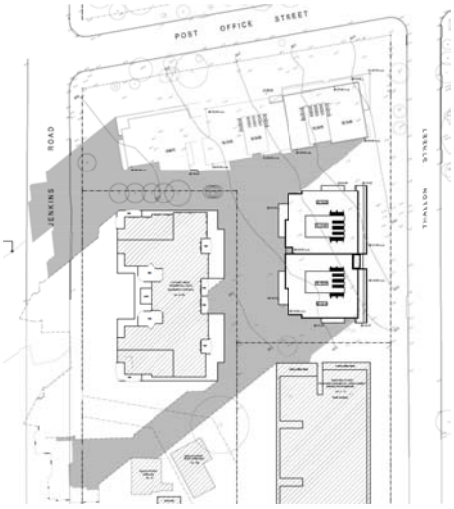
Elevation 4



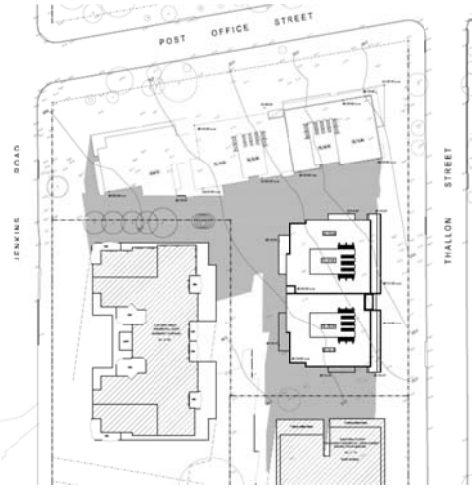
Section A-A



Secton B-B



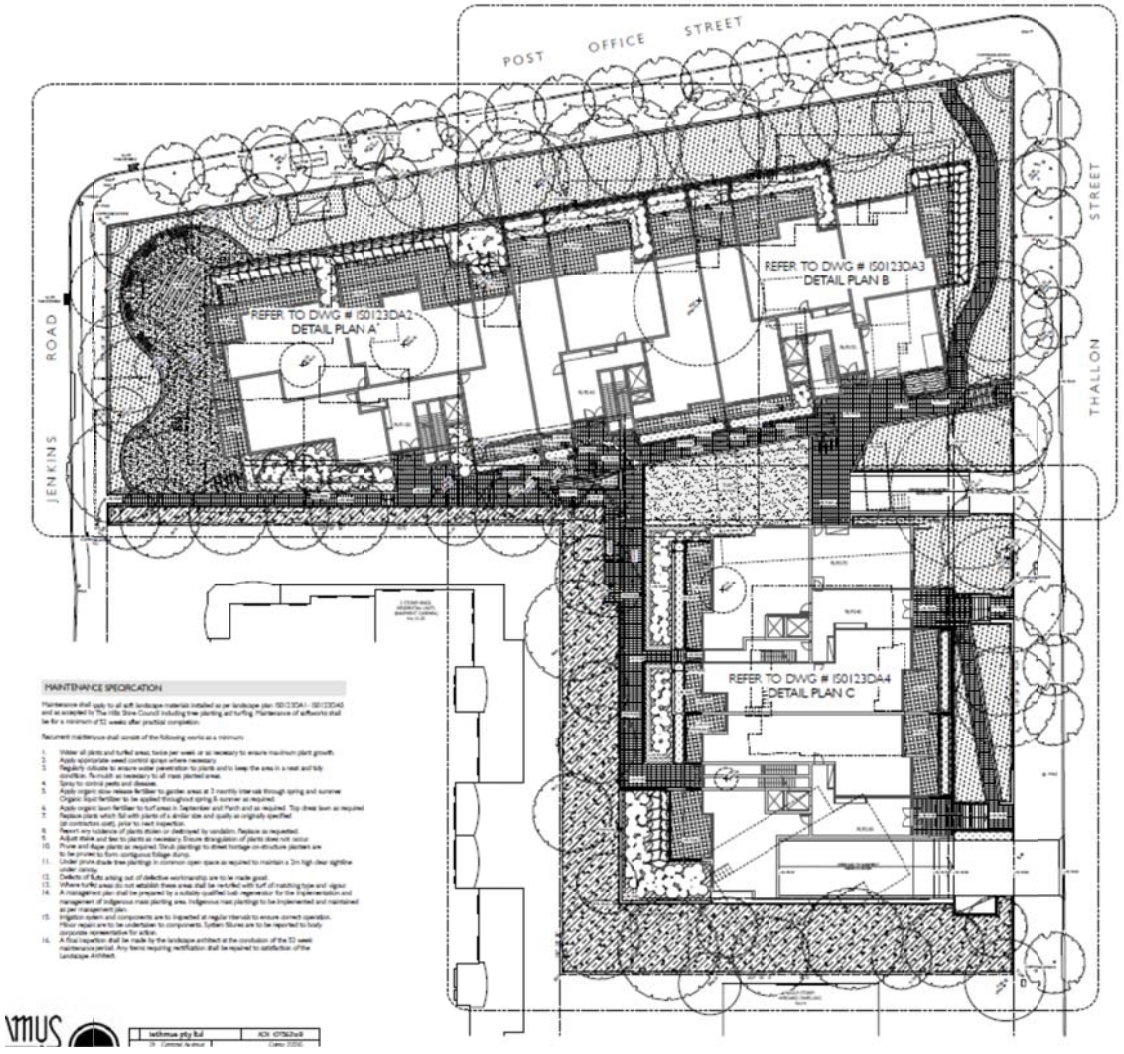
9am on 21 June



12 noon on 21 June

3pm on 21 June

ATTACHMENT 7 – LANDSCAPING PLAN



View from Thallon Street

View from Jenkins Road

APPENDIX "B" - SCHEDULE OF UNITS - STAGE 1 - BLOCK A

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
A1	Two-bed corner – 80 sqm	2	83.4	16.0	W – 3+	Y	Y	Y
A2	Two-bed corner – 80 sqm	2	88.6	43.4	N – 4+	Y	Y	Y
A3	Three-bed – 124 sqm	3	94.2	60.6	N – 4+	N	N	N
A4	Two-bed – cross through – 89 sqm	2	79.5	10.0	N – 4+	Y	N	N
A5	Two-bed corner – 80 sqm	2	84.8	10.0	W – 3+	Y	Y	Y
A6	Three-bed – 124 sqm	3	101.8	24.4	N – 4+	Y	N	N
A7	Three-bed – 124 sqm	3	94.2	15.0	N – 4+	N	N	N
A8	Two-bed – cross through – 89 sqm	2	79.5	10.0	N – 4+	Y	N	N
A9	Two-bed corner – 80 sqm	2	84.8	10.0	W – 3+	Y	Y	Y
A10	Three-bed – 124 sqm	3	101.8	24.4	N – 4+	Y	N	N
A11	Three-bed – 124 sqm	3	94.2	15.0	N – 4+	N	N	N
A12	Two-bed – cross through – 89 sqm	2	79.5	10.0	N – 4+	Y	N	N
A13	One-bed – cross through – 50 sqm	1 + M	57.2	26.2	N – 4+	Y	N	Y
A14	Two-bed – 80 sqm	2	82.1	20.0	N – 4+	N	N	Y
A15	Two-bed – cross through – 89 sqm	2 + M	85.0	26.2	N – 4+	Y	N	N
A16	Two-bed – cross through – 89 sqm	2	83.6	12.0	N – 4+	Y	N	N
TOTAL	16							Y - 6

STAGE 1 - BLOCK A

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
A17	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	N	N	Y
A18	Two-bed – cross through – 89 sqm	2 + M	85.0	15.0	N – 4+	Y	N	N
A19	Two-bed – cross through – 89 sqm	2	83.6	12.0	N – 4+	Y	N	N
A20	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	N	N	Y
A21	Two-bed – cross through – 89 sqm	2 + M	85.0	15.0	N – 4+	Y	N	N
A22	Two-bed corner – 80 sqm	2 + M	85.9	25.0	N + W – 3+	Y	Y	Y
A23	Two-bed corner – 80 sqm	2	82.5	25.0	N – 4+	Y	Y	Y
A24	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	Y	N	Y
A25	Two-bed – cross through – 89 sqm	2 + M	79.8	15.0	N – 4+	N	N	N
A26	Two-bed corner – 80 sqm	2 + M	85.9	25.0	N + W – 3+	Y	Y	Y
A27	Two-bed corner – 80 sqm	2	82.5	25.0	N – 4+	Y	Y	Y
A28	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	Y	N	Y
A29	Two-bed – cross through – 89 sqm	2 + M	79.8	15.0	N – 4+	N	N	N
A30	Two-bed – cross through – 89 sqm	2	79.5	26.2	N – 4+	Y	N	N
A31	Two-bed – 80 sqm	2	82.1	57.3	N – 4+	Y	N	Y
A32	Two-bed corner – 80 sqm	2	81.6	48.4	N – 4+	N	N	Y
TOTAL	16							Y - 10

APPENDIX "B" - SCHEDULE OF UNITS - STAGE 1 - BLOCK A

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
A33	Two-bed – cross through – 89 sqm	2	83.6	15.0	N – 4+	Y	N	N
A34	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	Y	N	Y
A35	Two-bed corner – 80 sqm	2	81.2	20.0	N – 4+	N	N	Y
A36	One-bed – cross through – 50 sqm	1 + M	67.5	10.0	E – 2+	Y	Y	Y
A37	Two-bed – cross through – 89 sqm	2	83.6	15.0	N – 4+	Y	N	N
A38	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	Y	N	Y
A39	Two-bed corner – 80 sqm	2	81.2	20.0	N – 4+	N	N	Y
A40	One-bed – cross through – 50 sqm	1 + M	67.5	10.0	E – 2+	Y	Y	Y
A41	Two-bed – cross through – 89 sqm	2	83.6	15.0	N – 4+	Y	N	N
A42	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	Y	N	Y
A43	Two-bed corner – 80 sqm	2	81.2	20.0	N – 4+	N	N	Y
A44	One-bed – cross through – 50 sqm	1 + M	67.5	10.0	E – 2+	Y	Y	Y
A45	Two-bed – cross through – 89 sqm	2	83.6	15.0	N – 4+	Y	N	N
A46	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	Y	N	Y
A47	Two-bed corner – 80 sqm	2	81.2	20.0	N – 4+	N	N	Y
A48	One-bed – cross through – 50 sqm	1 + M	67.5	10.0	E – 2+	Y	Y	Y
TOTAL	16							Y - 12

APPENDIX "B" - SCHEDULE OF UNITS - STAGE 1 - BLOCK A

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
A49	Two-bed – cross through – 89 sqm	2	83.6	15.0	N – 4+	Y	N	N
A50	Two-bed – 80 sqm	2	82.1	24.4	N – 4+	Y	N	Y
A51	Two-bed corner – 80 sqm	2	81.2	20.0	N – 4+	N	N	Y
A52	One-bed – cross through – 50 sqm	1 + M	67.5	10.0	E – 2+	Y	Y	Y
TOTAL	4							Y - 3

APPENDIX "B" - SCHEDULE OF UNITS - STAGE 2 - BLOCK B

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
B1	Three-bed – 124 sqm	3	101.8	38.9	E+W - 3+	Y	N	N
B2	Three-bed – 124 sqm	3 + M	119.6	36.5	E+W - 3+	Y	N	N
B3	Two-bed corner – 80 sqm	2	88.7	25.0	E+W - 3+	Y	Y	Y
B4	Two-bed corner – 80 sqm	2	80.0	15.0	E+W - 3+	Y	Y	Y
B5	Two-bed – 80 sqm	2	82.1	15.0	E - 3	N	N	Y
B6	Two-bed – cross through – 89 sqm	2	87.8	20.0	E+W - 3+	Y	N	N
B7	Two-bed corner – 80 sqm	2	88.7	25.0	E+W - 3+	Y	Y	Y
B8	Two-bed corner – 80 sqm	2	80.0	15.0	E+W - 3+	Y	Y	Y
B9	Two-bed – 80 sqm	2	82.1	15.0	E - 3	N	N	Y
B10	Two-bed – cross through – 89 sqm	2	87.8	20.0	E+W - 3+	Y	N	N
B11	Two-bed corner – 80 sqm	2	88.7	25.0	E+W - 3+	Y	Y	Y
B12	Two-bed corner – 80 sqm	2	80.0	15.0	E+W - 3+	Y	Y	Y
B13	Two-bed – 80 sqm	2	82.1	15.0	E - 3	N	N	Y
B14	Two-bed – cross through – 89 sqm	2	87.8	20.0	E+W - 3+	Y	N	N
B15	Two-bed corner – 80 sqm	2	88.7	25.0	E+W - 3+	Y	Y	Y
B16	Two-bed corner – 80 sqm	2	80.0	15.0	E+W - 3+	Y	Y	Y
TOTAL	16							Y - 11

APPENDIX "B" - SCHEDULE OF UNITS - STAGE 2 - BLOCK B

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
B17	Two-bed – 80 sqm	2	82.1	15.0	E - 3	N	N	Y
B18	Two-bed – cross through – 89 sqm	2	87.8	20.0	E+W - 3+	Y	N	N
B19	Two-bed corner – 80 sqm	2	88.7	25.0	E+W - 3+	Y	Y	Y
B20	Two-bed corner – 80 sqm	2	80.0	15.0	E+W - 3+	Y	Y	Y
B21	Two-bed – 80 sqm	2	82.1	15.0	E - 3	N	N	Y
B22	Two-bed – cross through – 89 sqm	2	87.8	20.0	E+W - 3+	Y	N	N
B23	Two-bed corner – 80 sqm	2	88.7	25.0	E+W - 3+	Y	Y	Y
B24	Two-bed corner – 80 sqm	2	80.0	15.0	E+W - 3+	Y	Y	Y
B25	Two-bed – 80 sqm	2	82.1	15.0	E - 3	N	N	Y
B26	Two-bed – cross through – 89 sqm	2	87.8	20.0	E+W - 3+	Y	N	N
B27	Two-bed corner – 80 sqm	2	88.7	25.0	E+W - 3+	Y	Y	Y
B28	Two-bed corner – 80 sqm	2	80.0	15.0	E+W - 3+	Y	Y	Y
B29	Two-bed – 80 sqm	2	82.1	15.0	E - 3	N	N	Y
B30	Two-bed – cross through – 89 sqm	2	87.8	20.0	E+W - 3+	Y	N	N
TOTAL	14							Y - 9

APPENDIX "B" - SCHEDULE OF UNITS - STAGE 2 - BLOCK B

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
B31	One-bed – 63.4 sqm	1 + M	74.6	29.3	E+W - 3+	Y	N	Y
B32	Three-bed – 124 sqm	3	119.6	36.5	E+W - 3+	Y	N	N
B33	Two-bed corner – 80 sqm	2	87.8	20.0	E+W - 3+	Y	Y	Y
B34	Two-bed – cross through – 89 sqm	2	87.8	15.0	E+W - 3+	Y	Y	N
B35	Two-bed – 80 sqm	2	82.1	20.0	E - 2+	N	N	Y
B36	Two-bed corner – 80 sqm	2	80.0	15.0	E+S - 2+	Y	Y	Y
B37	Two-bed corner – 80 sqm	2	80.0	15.0	E+S - 2+	Y	Y	Y
B38	Two-bed corner – 80 sqm	2	87.8	20.0	E+W - 3+	Y	Y	Y
B39	Two-bed – cross through – 89 sqm	2	87.8	15.0	E+W - 3+	Y	Y	N
B40	Two-bed – 80 sqm	2	82.1	20.0	E - 2+	N	N	Y
B41	Two-bed corner – 80 sqm	2	80.0	15.0	E+S - 2+	Y	Y	Y
B42	Two-bed corner – 80 sqm	2	87.8	20.0	E+W - 3+	Y	Y	Y
B43	Two-bed – cross through – 89 sqm	2	87.8	15.0	E+W - 3+	Y	Y	N
B44	Two-bed – 80 sqm	2	82.1	20.0	E - 2+	N	N	Y
B45	Two-bed corner – 80 sqm	2	87.8	20.0	E+W - 3+	Y	Y	Y
B46	Two-bed – cross through – 89 sqm	2	87.8	15.0	E+W - 3+	Y	Y	N
TOTAL	16							Y - 11

APPENDIX "B" - SCHEDULE OF UNITS - STAGE 2 - BLOCK B

UNIT	Type of Unit as per RFDC Table on Page 69	BED ROOM	NET FLOOR AREA (sqm)	COURT/ BALCONY (sqm)	ORIENTED North, South, East or West	CROSS-VENTED Yes/ No	KITCHEN External Yes/No	COMPLIES
B47	Two-bed – 80 sqm	2	82.1	20.0	E - 2+	N	N	Y
B48	Two-bed corner – 80 sqm	2	80.0	15.0	E+S - 2+	Y	Y	Y
B49	Two-bed corner – 80 sqm	2	87.8	20.0	E+W - 3+	Y	Y	Y
B50	Two-bed – cross through – 89 sqm	2	87.8	15.0	E+W - 3+	Y	Y	N
B51	Two-bed – 80 sqm	2	82.1	20.0	E - 2+	N	N	Y
B52	Two-bed corner – 80 sqm	2	80.0	15.0	E+S - 2+	Y	Y	Y
B53	Two-bed corner – 80 sqm	2	87.8	20.0	E+W - 3+	Y	Y	Y
B54	Two-bed – cross through – 89 sqm	2	87.8	15.0	E+W - 3+	Y	Y	N
B55	Two-bed – 80 sqm	2	82.1	20.0	E - 2+	N	N	Y
B56	Two-bed corner – 80 sqm	2	80.0	15.0	E+S - 2+	Y	Y	Y
B57	Two-bed corner – 80 sqm	2	80.0	15.0	E+S - 2+	Y	Y	Y
B58	Two-bed corner – 80 sqm	2	87.8	20.0	E+W - 3+	Y	Y	Y
B59	Two-bed – cross through – 89 sqm	2	87.8	15.0	E+W - 3+	Y	Y	N
B60	Two-bed – 80 sqm	2	82.1	20.0	E - 2+	N	N	Y
TOTAL	14							Y - 11