GAT & Associates Pty Ltd

Statement of Environmental Effects

November 2017

71 – 75 Cabramatta Avenue, Miller

Demolition of all Existing Structures and the Development of a 6 Storey Residential Flat Building Comprising of 8 x 1 Bedroom Units and 31 x 2 Bedroom Units to be Used Wholly For the Purposes of Affordable Rental Housing

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1. INTRODUCTION

This Statement of Environmental Effects (SEE) has been prepared in support of an application for the proposed demolition of all existing structures and the construction of a six storey residential flat building on land known as 71 – 75 Cabramatta Avenue, Miller. The proposal will provide for a total of 39 units pursuant to the provisions of SEPP (Affordable Rental Housing) 2009. Upon its completion, the development will be managed by St George Community Housing who are also the owners of the land.

Our clients are a dedicated not for profit organisation who seek to provide high quality, affordable residential housing options. In their research, they have identified a growing demand for affordable residential accommodation within the Liverpool local government area.

This development application follows an earlier Design Excellence Panel meeting held on the 19th of October. The Panel expressed their overall support of the proposed development with only simple design solutions suggested. These elements have been reflected as part of the submitted documentation and includes:

- The partial redesign of the at grade car park to enable tree planting between car spaces 12/13 and 17/18. The provision of the trees within the car park will contribute towards a pleasant setting and outlook from the north facing units.

- The north-eastern and north-western corner units at Levels 1, 2 and 3 have been provided with kitchen windows.

- A fin wall has been provided between the two central south facing units at Levels 1, 2 and 3 to promote privacy and minimise transfer of noise.

GAT & Associates have been engaged by St George Community Housing to prepare a Statement of Environmental Effects to accompany the development application for Council's consideration.

This Statement of Environmental Effects is based on information and details shown on the following plans prepared by Smith & Tzannes, Project No. 17-037;

- Drawing No. DA-A-010 Site Plan
- Drawing No. DA-A-050 Demolition Plan
- Drawing No. DA-A-100 Level 0
- Drawing No. DA-A-101 Level 1
- Drawing No. DA-A-102 Level 2-3
- Drawing No. DA-A-103 Level 4
- Drawing No. DA-A-104 Level 5
- Drawing No. DA-A-105 Roof Plan
- Drawing No. DA-A-150 Adaptable Unit Plans
- Drawing No. DA-A-200 South (Street) Elevation
- Drawing No. DA-A-201 East & West Elevation
- Drawing No. DA-A-202 North Elevation
- Drawing No. DA-A-203 Section 01
- Drawing No. DA-A-204 Section 02

- Drawing No. DA-A-800 GFA Calculations
- Drawing No. DA-A-801 Landscape Calculations
- Drawing No. DA-A-803 Cross Vent & Solar Access
- Drawing No. DA-A-804 Storage Calculations
- Drawing No. DA-A-850 Shadows 3D – Winter Solstice
- Drawing No. DA-A-851 Shadows 3D – Winter Solstice
- Drawing No. DA-A-852 Shadows Equinox – March
- Drawing No. DA-A-853 Shadows – Summer Solstice
- Drawing No. DA-A-854 Shadows – Equinox September
- Drawing No. DA-A-855 C.O.S. Winter Solar Access
- Drawing No. DA-A-900 Materials and Finishes

In addition to the above plans, the following reports and documents have also been considered and should be read in conjunction with this Statement of Environmental Effects:

- Acoustic Report prepared by Acoustic Logic;
- Access Report prepared by Morris Goding Accessibility Consulting;
- Arboricultural Impact Assessment prepared by Tree IQ;
- BASIX certificate including ABSA Certificates, NatHERS Summary and NathERS Schedule prepared by Northrop;
- BCA Capability Statement prepared by Technical Inner Sight;
- Preliminary Contamination Assessment prepared by Ideal Geotech;
- Quantity Surveyor Report prepared by Mitchell Brandtman;
- Design Verification Statement prepared by Smith & Tzannes;
- Erosion and Sediment Control Plan prepared by Bonacci;
- Landscape Plan prepared by Stitch Design Studio;
- Civil and Stormwater Strategy Report prepared by Bonacci;
- Survey Plan prepared by Norton Survey Partners;
- Traffic Report prepared by Colston Budd Rogers & Kafes Pty. Ltd.; and
- Waste Management Plan (Proposed Demolition and Construction Work) prepared by LID Consulting Pty Ltd, inclusive of a Demolition Statement prepared by Smith & Tzannes;
- Waste Management Plan prepared by Elephant's Foot Recycling Solutions.

This Statement of Environmental Effects has been prepared in support of the proposed application. This report is based on the submitted plans, inspections of the site and general knowledge of the site and locality, with the aim of:

- Assessing the proposal against relevant statutory controls.

- Determining whether the proposal is acceptable within the existing and likely future context of the area.
- Considering whether the proposal is acceptable within the broader planning controls.
- Addressing any likely environmental and external impacts (positive and negative).

The proposed development has been assessed in relation to:

- Section 79C Considerations under the Environmental Planning & Assessment Act, 1979.
- Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment.
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
- State Environmental Planning Policy (Affordable Rental Housing) 2009.
- State Environment Planning Policy No.55 – Remediation of Land.
- State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development.
- Liverpool Local Environmental Plan 2008.
- Liverpool Development Control Plan 2008.

2. SITE CONTEXT

The subject site is commonly known as Nos. 71 – 75 Cabramatta Avenue, Miller and is legally described as Lots 115, 116 and 117 in Deposited Plan 222754.The subject site is located on the northern side of Cabramatta Avenue and is bounded by properties to the east and west. Abutting the subject sites are properties with a frontage to Romney Crescent. The site provides for a frontage of approximately 48 metres and an overall site area of approximately 1,728m^2. Refer to Figure 1 below.

Figure 1 Site Location Map, Source: SIX Maps

Located on the subject site at present are detached dwellings with associated outbuildings. An inground swimming pool is located to the rear of the No. 73 Cabramatta Avenue. All existing structures will be demolished as part of the proposed works.

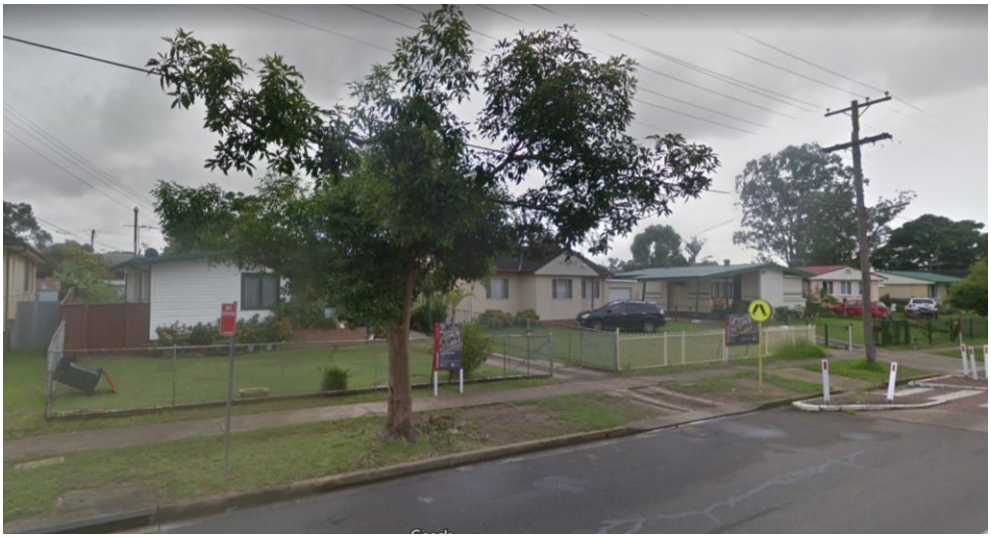
A pedestrian crossing is located immediately in front of the site.

Development to the north, east and west is typically low density residential in nature though there are examples of older two – three storey apartment blocks further to the east of the site. In view of the R4 High Density Residential zone afforded to the site, the area will inevitably undergo a transition to higher density building forms with the proposed development representative of this desired future character.

The scale of the proposal is consistent with recent approvals in the area evident in the development consent issued for the redevelopment of the Miller Shopping Centre as a shop top housing development comprising of 145 residential units.

Located on the southern side of Cabramatta Avenue, development is varied in its form comprising of Miller Technology High School immediately opposite the site and the Michael Wenden Aquatic Leisure Centre to the south east. The South Western TAFE Campus is located to the south west of the site. Cartwright Avenue to the east of the site or Banks Road to the west of the site link the subject property to Hoxton Park Road and nearby local infrastructure. Bus stops are located on

Cabramatta Avenue within walking distance of the site and provides for links to Liverpool Station. Refer to Figure 2 on the following page for a series of photographs of the site and surrounds.



The subject site, Nos. 71, 73 and 75 Cabramatta Avenue.

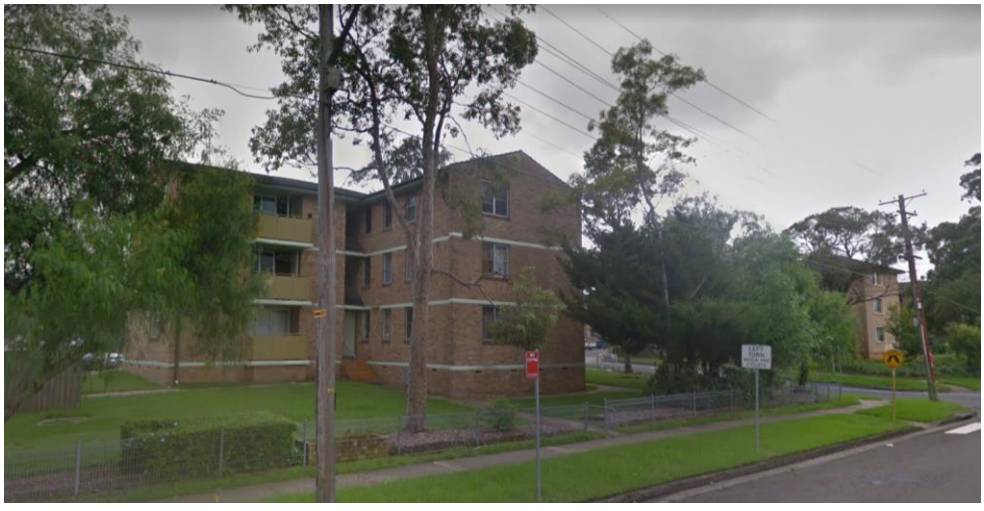
Adjoining development to the west of the subject site is primarily low density in nature and of an older housing stock.

Miller Technology High School is located immediately opposite the subject site.

Adjoining development to the east of the subject site is also low density in scale.

A number of bus stops are located along Cabramatta Avenue, servicing the site.

To the east of Romney Crescent, development changes in scale, comprising of two – three storey residential flat buildings including this example at No. 97 Cabramatta Avenue.



A residential flat building at No. 82 Cabramatta Avenue (left) and No. 105 Cabramatta Avenue (right, in distance). These buildings are located opposite the Michael Wenden Aquatic Leisure Centre.

Figure 2 Photographs of Site and Surrounds

3. PROPOSAL

The proposal before Council seeks the demolition of all existing structures over the subject land and the redevelopment of the site as a six storey residential flat building.

The proposal comprises of a total of 39 units including 8 x 1 bedroom units and 31 x 2 bedroom unit layouts. A detailed summary of the proposal is provided in the comments below:

Ground Floor Plan/Level 0:

- Vehicular access is proposed from the western end of the subject site and provides access to an at grade car park at the rear of the site. A total of 19 car spaces are proposed, including 6 accessible spaces. 14 bicycle spaces are also proposed. The proposed car and bicycle spaces will not be readily viewed from Cabramatta Avenue given their siting immediately behind the building.
- An area of communal open space is proposed to the north-eastern corner of the site consisting of an area that is part paved and part soft landscaping. The footprint of Level 1 will cantilever over the communal open space in part creating a sheltered space.
- Three residential units are proposed at this level fronting Cabramatta Avenue. Each unit has been designed to provide for direct access from the street.
- The remainder of the ground level will comprise of lobby; plant/switch rooms; caretaker's facilities; garbage room; fire stairs and central lifts. Two central lifts will service all levels of the building. Two sets of fire stairs are also proposed in accordance with BCA requirements.
- A substation is proposed in the south-eastern corner of the site.

Level 1:

- 8 x 2 bedroom units are proposed.

Levels 2-3:

- 3 x 1 bedroom units and 6 x 2 bedroom units are proposed at each level.

Level 4:

- 5 x 2 bedroom units are proposed.

Level 5:

- 5 x 2 bedroom units are proposed.

The balconies to each unit has been orientated either to the street or rear setback to minimise any overlooking between the subject site and adjoining properties and to promote casual surveillance to the entrance of the building and communal spaces.

As part of the submitted application, the 2 bedroom layouts have been designed to demonstrate how two single beds could be incorporated to accommodate a family. In this regard, the proposal promotes flexible living conditions to accommodate different households.

All of the proposed residential units will be nominated as affordable housing.

Reference should be made to the submitted plans prepared by Smith & Tzannes.

Drawing Nos. 200 – 202 provide for elevations of the proposed development and demonstrate the proposed finishes and materials. The external walls will generally comprise of face brick and precast concrete, with the two upper levels being in a darker colour face brick to provide for visual interest. A combination of flat and skillion roof forms compliments the modern design of the building which is further realised through the use of aluminium batten screening to the balconies and glass balustrades at the lower levels.

Mailboxes servicing the development will be located at the centre of the site's frontage adjacent to the main building entry path with a pergola style entry canopy over to allow for weather protection and a landscape feature.

The proposal also seeks the removal of six existing trees, four of which are contained within the subject site as well as two street trees. Reference should be made to Section 4.3.1 (a) of this report, the submitted Arborist Report and Landscape Plan for an assessment of these trees.

A BASIX certificate has been prepared with respect to the proposed residential units and nominates criteria to achieve the respective Water, Thermal and Energy targets. As part of the proposed development, a 5000 litre rainwater tank has been nominated and will service common area landscaping on the site. A copy of the BASIX certificate and associated thermal documents are provided under a separate cover.

The following are objectives, which were considered in formulating the proposed development:

- To implement the outcomes of the following planning documents:
  - Section 79C Considerations under the Environmental Planning & Assessment Act, 1979.
  - Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment.
  - State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
  - State Environmental Planning Policy (Affordable Rental Housing) 2009.
  - State Environment Planning Policy No.55 – Remediation of Land.
  - State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development.
  - Liverpool Local Environmental Plan 2008.
  - Liverpool Development Control Plan 2008.
- To provide for a high quality residential development that complements the desired future character of the area.
- To ensure that the proposed development does not create any unreasonable impacts to adjoining properties.

4. SECTION 79C CONSIDERATIONS

The following section provides an assessment of the proposed development in accordance with the provisions of Section 79C of the Environmental Planning and Assessment Act, 1979.

(1) Matters for consideration – general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development, the subject of the development application.

The provisions of:

4.1 Relevant State, Regional and Local Environmental Planning Instruments

4.1.1 Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment

The proposed development accords with the outcomes and objectives of the Greater Metropolitan Regional Environmental Plan No.2. Appropriate sediment and control devices will be placed on the site during site works to ensure that pollutants and runoff from the site will not impact upon the Georges River. Reference is to be made to the Erosion and Sediment Control Plan prepared by Bonacci as part of this application.

4.1.2 State Environmental Planning Policy – Building Sustainability Index (BASIX)

The proposal has been assessed against the provisions of State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004. The modified proposal satisfies the targets set by the Policy in relation to water, thermal and energy.

A BASIX Certificate has been prepared by Northrop for the proposed residential flat building and is attached under separate cover. The certificate demonstrates compliance with the required Water, Thermal and Energy provisions under BASIX.

4.1.3 State Environmental Planning Policy (Affordable Rental Housing) 2009

This proposal has been designed to meet the provisions of the State Environmental Planning Policy (Affordable Rental Housing) 2009 (SEPP ARH). Accordingly, Appendix A provides for an assessment of the proposal against the controls contained under Division 1 In-fill Affordable Housing.

Reference is to be made to Appendix A within this Statement of Environmental Effects.

Floor Space Ratio

Under Clause 13(a)(i) of the SEPP (ARH) 2009 , the proposal is entitled to a bonus floor space ratio of 0.5:1, given that 100% of the gross floor area of the development will be used for affordable housing. Therefore, the proposal is entitled to a maximum floor space ratio of 1.7:1.

As detailed within this SEE, the proposed gross floor area of the development will be 2,928m^2 or an FSR of 1.69:1. Therefore, the proposal is fully compliant with the FSR, pursuant to the provisions under SEPP (ARH) 2009.

4.1.3.(a) Landscaped Area

The proposal has been prepared on behalf of St George Community Housing, a registered social housing provider. Based on the provisions of Clause 14(c)(i), a landscaped area of 35m^2 per dwelling is to be provided. As the proposal seeks 39 units this is equivalent to a landscaped area of 1,365m^2.

The proposal provides for 519m^2 of the subject site as landscaped area, representing a shortfall of 846m^2.

To comply with the standard is considered to be completely unreasonable given that the required 1,365m^2 of landscaping is equivalent to 79% of the total site area. The irrationality of the standard is even more apparent when one considers that Clause 14(c)(ii) requires a private developer to set aside just 30% of a site as landscaping.

As the SEPP is not clear in this matter, we can only assume that the control therefore applies in the case of a townhouse development whereby the 35m^2 could be provided as a courtyard/rear yard to each dwelling. In the case of a residential flat building, particularly in a high density zone such as the subject site, the control simply doesn't make sense.

The current proposal is notably compliant with the 30% requirement that would otherwise apply to a private developer. The application also includes various hard paved areas at ground level which although not technically landscaped area, positively contribute to the landscaped setting and communal open space. A variation is therefore considered to be reasonable in this instance.

4.1.3.(b) Solar Access

As demonstrated in the submitted plans the proposal falls short of the 70% requirement by just 0.8% or 0.3 units. Given the minor variation sought, the proposed variation is considered to be reasonable in this instance. The variation is attributable to the north-south orientation of the site, which has resulted in some south facing units. Where possible, units are provided with a dual aspect to maximise solar/daylight access.

The site is located within a high density residential zone and to a certain extent solar access is harder to achieve in these circumstances. The variation is equivalent to just 0.3 units and is considered to be reasonable given the context of the site.

4.1.3.(c) Character of Local Area

- Locality and Street Character:

The site is located within a high density residential zone, though development immediately adjoining the site to the north, east and west comprises of predominantly single storey and fibro dwellings that are of an older housing stock. There are however examples of older two – three storey apartment blocks further to the east of the site as depicted in Figure 2 of this report.

In view of the R4 High Density Residential zone afforded to the site, the area will inevitably undergo a transition to higher density building forms with the proposed development representative of this desired future character.

Located on the southern side of Cabramatta Avenue, development is varied in its form comprising of Miller Technology High School immediately opposite the site and the Michael Wenden Aquatic Leisure Centre to the south east. Bus stops are located on Cabramatta Avenue within walking distance of the site and provides for links to Liverpool Station. The South Western TAFE Campus is located to the south west of the site. Cartwright Avenue to the east of the site or Banks Road to the west of the site link the subject property to Hoxton Park Road and nearby local infrastructure.

The scale of the proposed development is considered to be consistent with the desired future character of the area acknowledging that the proposal complies with the maximum floor space ratio. The current application follows the development approval (DA-62/2015)of Miller Shopping Centre (90 Cartwright Avenue, Miller) located to the north-east of the subject site. The application sought the demolition of existing car parking and removal of trees within carpark; relocation of Telstra communications tower; construction of ground floor retail car parking and residential shop top housing (26 x 1 bedroom, 107 x 2 bedrooms and 12 x 3 bedrooms); two floors of basement residential car parking; and associated works. The proposal is indicative of the revitalisation of the precinct that will be further assisted through the proposed development.

It is considered that the proposed building is in keeping with the desired future character of the area.

- Landform:

The proposed building will be provided with good setbacks, allowing deep soil planting along all boundaries given that no basement parking is proposed. As suggested by the Design Excellence Panel, two trees have been integrated within the car park to create a pleasant outlook from north facing units and to soften the overall car park area. The topography of the site will not substantially change with only minor cut and fill works sought.

- Street patterns:

Existing street and subdivision patterns of the area are reflective of the areas initial character. The proposal satisfies Council's minimum allotment size and frontage controls through the consolidation of Nos. 71, 73 and 75 Cabramatta Avenue.

Parking is proposed at grade, to the rear of the site and will generally be concealed from the street by the proposed built form. Landscaping works are proposed either side of the driveway to soften its appearance to the street.

- Views and Vistas:

There are no substantial views attainable from the subject site.

- Conclusion:

Based on the above, it is our view that the proposed development is in keeping with the existing and future character of the area.

The presentation of the building is modern in its form complemented through the selected materials and finishes which comprise of predominantly face brick and precast concrete panels to the external walls, with a darker palette used at Levels 4 and 5 to provide for visual interest. A combination of flat and skillion roof forms compliments the modern design of the building which is further realised through the use of aluminium batten screening to the balconies and glass balustrades at the lower levels.

The proposal will be consistent with the desired future character of the area evident through its zoning and emerging development applications such as the redevelopment of the Miller Shopping Centre.

The proposed development will greatly benefit the local community by providing for affordable rental housing in an area well serviced by local amenities and public transport facilities.

4.1.4 State Environmental Planning Policy No. 55 – Remediation of Land

Clause 7 of the State Environmental Planning Policy No. 55 – Remediation of Land requires Council to consider whether land is contaminated prior to granting consent to the carrying out of any development on that land.

Should the land be contaminated Council must be satisfied that the land is suitable in a contaminated state for the proposed use. If the land requires remediation to be undertaken to make the land suitable for the proposed use, Council must be satisfied that the land will be remediated before the land is used for that purpose.

A Preliminary Contamination Assessment has been prepared by Ideal Geotech which states that the site does not present a risk to human health or the environment and is considered suitable for the site's development. The report does however recommend further sampling and chemical testing be undertaken once demolition of the existing dwellings and garages has been undertaken. This may form a condition of consent by Council.

4.1.5 State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development

This State Policy aims to improve the design quality of residential flat buildings of three or more storeys, incorporating four or more dwellings.

The policy sets out a series of design principles for Local Council or other consent authorities to consider when assessing development proposals for flats.

The SEPP 65 underwent a comprehensive review and the changes were notified on the NSW legislation website on 19 June 2014 and will commence on 17 July 2014. For development applications lodged after 19 June 2014 and determined after 17 July 2014, the Apartment Design Guide, along with the changes to SEPP 65 will apply.

The proposed apartments are designed and accord with the design principles as stipulated in this State Environmental Planning Policy. All information and details shown within this Statement of Environmental Effects is based on the submitted plans prepared by Smith & Tzannes.

State Environmental Planning Policy No. 65 specifies nine design quality principles for residential flat buildings. These principles are as follows:

Principle 1 Context and Neighbourhood Character

Principle 2 Built Form and Scale

Principle 3 Density

Principle 4 Sustainability

Principle 5 Landscape

Principle 6 Amenity

Principle 7 Safety

Principle 8 Housing Diversity and Social Interaction

Principle 9 Aesthetics

The aims and objectives of this policy are:

(1) "This policy aims to improve the design quality of residential apartment development in New South Wales.

(2) This policy recognises that the design quality of residential apartment development is of significance for environmental planning for the state due to the economic, environmental, cultural and social benefits of high quality design.

(3) Improving the design quality of residential apartment buildings aims:

(a) to ensure that they contribute to the sustainable development of New South Wales;

(i) by providing sustainable housing in social and environmental terms; and

(ii) by being a long term asset to their neighbourhood; and

(iii) by achieving the urban planning policies for their regional and local contexts; and

(b) to achieve better built form and aesthetics of buildings and the streetscapes and the public places they define; and

(c) to better satisfy the increasing demand, the changing social and demographic profile of the community, and the needs of the widest range of people from childhood to old age, including those with disabilities; and

(d) to maximise amenity, safety and security for the benefit of their occupants and the wider community; and

(e) to minimise the consumption of energy from non-renewable resources, to conserve the environment and to reduce greenhouse gas emissions, and

(f) to contribute to the provision of a variety of dwelling types to meet population growth, and

(g) to support housing affordability, and

(h) to facilitate the timely and efficient assessment of applications for development to which this Policy applies.

(4) This Policy aims to provide:

(a) consistency of policy and mechanisms across the State; and

(b) a framework for local and regional planning to achieve identified outcomes for specific places."

The SEPP notes that good design is a creative process which, when applied to towns and cities, results in the development of great urban places, buildings, streets, square 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.

Furthermore, good design serves the public interest and includes appropriate innovation to respond to technical, social, aesthetic, economic, and environmental challenges.

These nine 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. These principles are addressed under Appendix B of this report.

4.1.5.(a) Visual Privacy

Minor variations are sought at each level.

At ground level, to the eastern setback a minimum 5m setback is proposed. As the unit is sited at ground level, the proposed side boundary fencing is considered to provide for adequate visual privacy.

At Level 1 – 3, a minimum 5.4m is proposed to the west and minimum 4.4m setback to the east. To the west, the proposed variation primarily relates to a living area where it is worthy to note the primary orientation is to the street (south) rather than the western setback. The additional window has been designed to maximise natural light into the room given the south-western siting of the affected units.

To the east, the variation relates to a balcony where a blade wall is proposed disrupting sight lines to promote visual privacy.

To the rear, a minimum 5.0m setback is proposed. This occurs primarily off the proposed north facing balconies. Should Council require, privacy screens can be provided to mitigate any privacy concerns.

Similarly, at Levels 4 – 5, minor variations are sought to the east, west and rear of the site. As per the lower levels the variations to the east and west have been designed to maximise daylight into the units. To the rear, where balconies encroach into the setback, privacy screens can be provided if required.

4.1.5.(b) Common Circulation and Spaces

Levels 2 and 3 will provide for a total of nine (9) units off a circulation core. Though a maximum of 8 units is specified under ADG as part of the design criteria, the design guidance notes that where this criteria is not achieved, no more than 12 units should be provided off a circulation core on a single level. The proposal therefore achieves the design guidance.

4.1.6 Liverpool Local Environmental Plan 2008

A comprehensive assessment of the proposal against the controls can be found in Appendix C.

Additional comments are provided below.

4.1.6.(a) Land Zoning & Objectives

The subject site is zoned R4 High Density Residential under the LLEP 08. Refer to Figure 2 below.

As residential flat buildings are listed as permissible development, the proposal may be carried out with the consent of Council.

The objectives of the R4 High Density Residential Zone are as follows:

- *To provide for the housing needs of the community within a high density residential environment.*
- *To provide a variety of housing types within a high density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*
- *To provide for a high concentration of housing with good access to transport, services and facilities.*
- *To minimise the fragmentation of land that would prevent the achievement of high density residential development.*

The following comments are provided with respect to the zone objectives:

- The proposed residential flat building will replace the existing three dwellings on the site with 39 proposed units to provide for the housing needs of the community within a high density environment.
- The proposal comprises of a mix of 1 and 2 bedroom units, including adaptable designs ensuring a variety of housing types are available.
- No other land uses are proposed.
- The site is readily accessible by public transport with a bus stop located just 40m from the development. The site is also located in proximity to Miller Shopping Centre to the north-east of the site.

- The proposal will not result in the fragmentation of land.

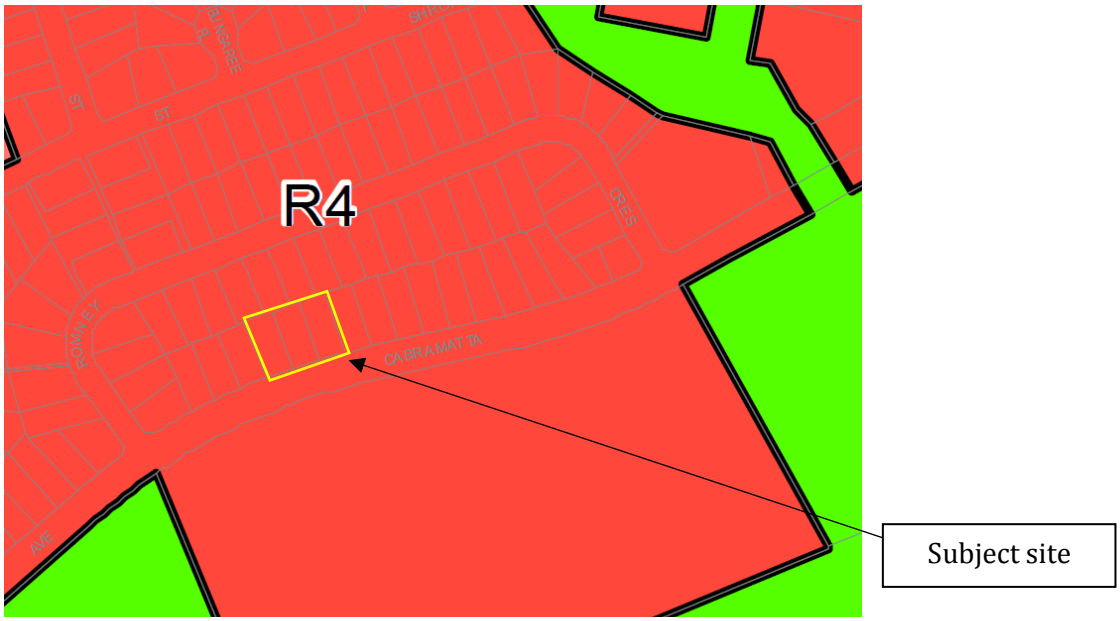


Figure 3 Land Zoning Map, Source: NSW Legislation

4.1.6.(b) Height of buildings

The proposal will result in a maximum building height of 19.80 metres, exceeding the control by 1.80m. The variation is a result of the natural fall of the land. Refer to figure below prepared by Smith & Tzannes.

It is worthy to note that the greatest variation being 1.80m occurs only at the centre of the site and is in part attributable to the lift overrun. To the edges of the building, the variation is significantly less.

The proposal is notably compliant in terms of floor space ratio and in this respect reference is made to the decision of the Land & Environment Court: Abdul-Rahman v Ashfield Council [2015] NSWLEC 112 (28 April 2015). The case established that where additional FSR is proposed to facilitate the provision of affordable rental housing, an increased building envelope is likely. This is evident in the current proposal acknowledging compliance with the FSR control has been achieved.

Reference should be made to the submitted Clause 4.6 Variation.

4.2 Draft Relevant State, Regional and Local Environmental Planning Instruments

The site falls outside the scope of the *Draft Liverpool LEP 2008 Amendment No. 52 and Draft Liverpool DCP 2008 Part 4 Liverpool City Centre 16-06-16.*

Therefore, there are no draft plans to be considered.

4.3 Development Control Plans

4.3.1 Liverpool Development Control Plan 2008

A comprehensive assessment of the proposal against the controls can be found in Appendix D.

4.3.1.(a) Tree Preservation

Trees 1 and 2 have been identified as the street trees located on the Cabramatta Avenue road reserve. Tree 3 is a guava tree located within No. 71 Cabramatta Avenue while Trees 4 – 6 (*Ailanthus altisissima x 2 and Citrus sp.*) are located within No. 75 Cabramatta Avenue.

The report concludes that Trees 1 and 3 will need to be removed to accommodate the proposed development. These trees, as well as Tree 2, are identified as having a low landscape significance and are considered a priority for removal.

The report recommends that Tree 1 and Tree 2 could be replaced with better quality, alternative, smaller species to ensure appropriate clearance with the overhead power lines is achieved, minimising the need for future lopping.

Tree 3 has also been recommended for removal.

Trees 4, 5 and 6 have been assessed as not sufficiently large to be covered by Council's tree management controls. As these trees will be impacted by the proposed building envelope, they have also been marked for removal.

The submitted Landscape Plan however nominates new tree plantings across the site to replace those trees being removed.

4.3.1.(b) Social Impact Assessment

LDCP08 identifies the proposed development as one which requires a Social Impact Comment (SIC). This is due to the number of residential units proposed (39) being above the threshold (20) requiring a Social Impact Comment/Assessment. Accordingly, we make the following comments:

Accommodation:

The proposal will provide for 39 well designed units which will appeal to a range of different sized family groups. As part of the submitted application, the 2 bedroom layouts have been designed to demonstrate how 2 single beds could be incorporated to accommodate a family. In this regard, the proposal promotes flexible living conditions to accommodate different households.

Health and Wellbeing:

The units will provide for good amenity. The proposal achieves good levels of both solar access and natural ventilation. The close proximity of this site to public transport will reduce the reliance upon private vehicles.

Security and Safety:

As detailed within this report, there are ample opportunities within the development for casual surveillance of public areas which is to the public benefit.

Values and Expressions:

The proposed development is of a high architectural standard and will set a tone for this neighbourhood. In this regard, the attention to detail in the design of the façade of the building, particularly defining the communal and private open spaces convey a sense of 'ownership' and connection between the future occupants and precinct.

4.4 Regulations

There are no prescribed matters which hinder the development.

4.5 Likely Impacts

Consideration must be made to the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

4.5.1 Impact on the Natural Environment

The proposed development will not have an adverse impact on the natural environment. The site does not contain any significant vegetation. New plantings will be introduced as per the proposed landscape plan. The proposed landscape plan will improve the amenity of the site and the surrounding streetscape.

4.5.2 Impact on the Built Environment

The works proposed are consistent with the built form and desired future character of the area.

4.5.3 Social and Economic Impacts on the Locality

Housing affordability in Sydney is becoming increasingly difficult. Our client is a recognised social housing provider who strive to provide for quality affordable housing developments.

It is important to acknowledge that unlike SEPP (Affordable Rental Housing) 2009, which requires that up to 50% of the dwellings be offered as affordable housing for a period of 10 years, all of the proposed 39 units will be nominated as affordable housing to be managed by our client, St George Community Housing.

The proposal therefore provides a social benefit to the community providing for new, affordable accommodation in an area well serviced by public transport services and local infrastructure.

The proposed development is considered to be of a high architectural standard promoting solar access and cross ventilation. A mix of units is proposed ranging between one and two bedroom units including adaptable designs. The proposal therefore addresses lifestyle and affordability issues of the immediate area.

The proposal will therefore provide for a positive economic impact as the site is in a location that is close to good public transport infrastructure, businesses, schools, shops and services, which benefits the future residents of the property who want to live, study, work and play in the South West area.

4.6 Suitability of the Site

The land is appropriately zoned to permit the proposed development and meets the long terms objectives of the zone and the objectives of the Liverpool Local Environmental Plan 2008.

4.7 Submissions made in accordance with this Act or the regulations

Not relevant.

4.8 The Public Interest

The interest of the public will be served by approval of this development.

As stated, the proposed development will increase the housing choice available in this location, which is well serviced by public transport, services and shops. The proposal provides for a mix of one and two bedroom apartments, as well as adaptable apartments.

The site is well serviced by public transport, making access to and from the site easy for the future occupants. Notwithstanding this, the site also provides for adequate on-site parking.

5. CONCLUSION

The proposed development has made regard to the surrounding land uses. It is considered that all reasonable measures to mitigate any adverse environmental effects have been taken into consideration in relation to the proposed residential flat building.

The proposal has been assessed in accordance with the provisions of Section 79C of the Environmental Planning and Assessment Act, 1979, and found to be satisfactory. The proposal is permissible with the consent of Council.

The beneficial aspects of the proposal include:

- The proposed residential units will contribute to the supply of affordable rental housing within the Liverpool local government area;
- The proposed units are well designed and provide for excellent internal amenity and outlook, whilst maintaining privacy between neighbours.
- The proposal for off street car parking in accordance with the provisions of SEPP (ARH) 2009 reducing the reliance to on street car parking.
- The proposed development is considered to be of a scale and mass that is consistent with the future character of the area.
- The proposal is compatible with Council's planning objectives and controls for the site and locality.

The proposed development will have no significant impact on the air or water quality in the locality.

The proposed works do not result in any unreasonable impact to adjoining properties and are conducive to Council's policies and accordingly, it is sought that Council approve the application.

Appendix A State Environmental Planning Policy (Affordable Rental Housing) 2009

Division 1 In-Fill Affordable Housing

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
10 Development to which Division applies	• This Division applies to development for the purposes of dual occupancies, multi dwelling housing or residential flat buildings if: (a) the development concerned is permitted with consent under another environmental planning instrument, and (b) the development is on land that does not contain a heritage item that is identified in an environmental planning instrument, or an interim heritage order or on the State Heritage Register under the Heritage Act 1977.	• Complies.
	• Despite subclause (1), this Division does not apply to development on land in the Sydney region unless all or part of the development is within an accessible area.	• The site is located approximately 40m away from an appropriately serviced bus stop on Cabramatta Avenue. Complies.
	• Despite subclause (1), this Division does not apply to development on land that is not in the Sydney region unless all or part of the development is within 400 metres walking distance of land within Zone B2 Local Centre or Zone B4 Mixed Use, or within a land use zone that is equivalent to any of those zones.	• N/A.
11, 12	**(Repealed)**	• N/A.
13 Floor Space Ratios	• This clause applies to development to which this Division applies if the percentage of the gross floor area of the development that is to be used for the purposes of affordable housing is at least 20 per cent.	• All of the proposed 39 units will be used as affordable housing. Complies.
	• The maximum floor space ratio for the development to which this clause applies is the existing maximum floor space ratio for any form of residential accommodation permitted on the land on which the development is to occur, plus: (a) if the existing maximum floor space ratio is 2.5:1 or less: (i) 0.5:1—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or (ii) Y:1—if the percentage of the gross floor area of the development that is used for affordable housing is less than 50 per cent, where: AH is the percentage of the gross floor area of the development that is used for affordable housing.	• 1.2:1 under LLEP 08. A bonus of 0.5:1 applies under SEPP (ARH) 2009. Therefore maximum 1.7:1.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	Y = AH ÷ 100 or	Site area: 1,728m^2 Max GFA permissible: 2,937.6m^2 Proposed GFA: 2,928m^2 or 1.69:1. Complies.
	(b) if the existing maximum floor space ratio is greater than 2.5:1: (i) 20 per cent of the existing maximum floor space ratio—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or (ii) Z per cent of the existing maximum floor space ratio—if the percentage of the gross floor area of the development that is used for affordable housing is less than 50 per cent, where: AH is the percentage of the gross floor area of the development that is used for affordable housing. Z = AH ÷ 2.5	• N/A.
	• In this clause, gross floor area does not include any car parking (including any area used for car parking). **Note.** Other areas are also excluded from the gross floor area, see the definition of gross floor area contained in the standard instrument under the Standard Instrument (Local Environmental Plans) Order 2006.	
14 Standards that cannot be used to refuse consent	• **Site and solar access requirements**: A consent authority must not refuse consent to development to which this Division applies on any of the following grounds: (a) (Repealed) (b) **site area**: :if the site area on which it is proposed to carry out the development is at least 450 square metres, (c) **landscaped area** if: (i) in the case of a development application made by a social housing provider—at least 35 square metres of landscaped area per dwelling is provided, or (ii) in any other case—at least 30 per cent of the site area is to be landscaped, (d) **deep soil zones** if, in relation to that part of the site area (being the site, not only of that particular development, but also of any other associated development to which this Policy applies) that is not built on, paved or otherwise sealed: (i) there is soil of a sufficient depth to support the growth of trees and shrubs on an area of not less than 15 per cent of the site area (the deep soil zone), and (ii) each area forming part of the deep soil zone has a minimum dimension of 3 metres, and (iii) if practicable, at least two-thirds of the deep soil zone is located at the rear of the site area,	• 1,728m^2. Complies. • Variation is sought. 1,365m^2 required. 519m^2 proposed. **Refer to Part 4.1.3(a) of this SEE.** • N/A. • 260m^{2}or 15%. Complies.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	(e) **solar access** if living rooms and private open spaces for a minimum of 70 per cent of the dwellings of the development receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter.	• 27/39 or 69.2%. **Refer to Part 4.1.3(b) of this SEE.** • 8x 1 bedroom = 3.2 31 x 2 bedroom = 15.5 TOTAL REQUIRED = 18.7 TOTAL PROPOSED = 19. Complies Reference should also be made to the submitted report prepared by Colston Budd Rogers & Kafes Pty. Ltd.
	• **General**: A consent authority must not refuse consent to development to which this Division applies on ay of the following grounds: (a) **Parking** if: (i) in the case of a development application made by a social housing provider for development on land in an accessible area—at least 0.4 parking spaces are provided for each dwelling containing 1 bedroom, at least 0.5 parking spaces are provided for each dwelling containing 2 bedrooms and at least 1 parking space is provided for each dwelling containing 3 or more bedrooms, or (ii) in any other case—at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom, at least 1 parking space is provided for each dwelling containing 2 bedrooms and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms, (b) **dwelling size** if each dwelling has a gross floor area of at least: (i) 35 square metres in the case of a bedsitter or studio, or (ii) 50 square metres in the case of a dwelling having 1 bedroom, or (iii) 70 square metres in the case of a dwelling having 2 bedrooms, or (iv) 95 square metres in the case of a dwelling having 3 or more bedrooms. • A consent authority may consent to development to which this Division applies whether or not the development complies with the standards set out in subclause (1) or (2).	• N/A. • Complies. • Noted.
15 Design Requirements	• A consent authority must not consent to development to which this Division applies unless it has taken into consideration the provisions of the Seniors Living Policy: Urban Design Guidelines for Infill Development	• N/A.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	published by the Department of Infrastructure, Planning and Natural Resources in March 2004, to the extent that those provisions are consistent with this Policy. • This clause does not apply to development to which clause 4 of the *State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development* applies.	• Noted.
16 Continued application of SEPP 65	• Nothing in this policy affects the application of *State Environmental Planning Policy No 65—Design Quality of Residential Flat Development t*o any development to which this Division applies.	• Noted.
16A Character of local area	• A consent authority must not consent to development to which this Division applies unless it has taken into consideration whether the design of the development is compatible with the character of the local area.	• **Refer to Part 4.1.3(c) of this SEE.**
17 Must be used for affordable housing for 10 years	• A consent authority must not consent to development to which this Division applies unless conditions are imposed by the consent authority to the effect that: (a) for 10 years from the date of the issue of the occupation certificate: (i) the dwellings proposed to be used for the purposes of affordable housing will be used for the purposes of affordable housing, and (ii) all accommodation that is used for affordable housing will be managed by a registered community housing provider, and (b) a restriction will be registered, before the date of the issue of the occupation certificate, against the title of the property on which development is to be carried out, in accordance with section 88E of the Conveyancing Act 1919, that will ensure that the requirements of paragraph (a) are met. • Subclause (1) does not apply to development on land owned by the Land and Housing Corporation or to a development application made by, or on behalf of, a public authority.	• Noted.
18 Subdivision	• Land on which development has been carried out under this Division may be subdivided with the consent of the consent authority.	• Noted.

Appendix B 9 Principles of State Environmental Planning Policy No. 65 – Design Quality of Residential Apartment Development

The following comments are provided to address the 9 Design Principles:

Principle 1 Context and Neighbourhood Character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

Comment:

The site is located on the northern side of Cabramatta Avenue and is bounded by Romney Crescent to the east and west. Development in the area is typically low density in scale particularly to the north, east and west though there are examples of older two – three storey residential flat buildings further to the east of the site. Development on the southern side of Cabramatta Avenue however is varied and includes Miller Technology High School immediately opposite the site and the Michael Wenden Aquatic Leisure Centre to the south east. The site is located within the R4 High Density Residential zone with the proposed development reflective of the current zoning. The proposal is considered to be an 'infill' development that responds to the desired future character of the area. Where possible, the proposal has made considerable effort to achieve the objectives and controls of the Apartment Design Guide as detailed in this report.

Principle 2 Built Form and Scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation 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:

Development in the area is generally low density residential in nature comprising of predominantly single storey and fibro dwellings, being typically of an older housing stock. To the east of Romney Crescent however, there are example of two and three storey residential flat buildings though these are also of an older stock.

A recent development application however has been approved by Council with respect to the redevelopment of the Miller Shopping Centre located further to the north east of the site. The application (DA-62/2015) approved amongst other works, 145 residential units in the form of shoptop housing.

The current proposal endeavours to represent a scale appropriate to the desired future character of the area as identified by the LEP and DCP. The scale of the proposal has also been carefully designed to provide a balance between the amenity for the future occupants and that of existing properties adjoining the site.

Principle 3 Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Comment:

The development provides for new residential accommodation in a location where there is a demand for such accommodation. The proposed 39 units sought on the site is considered to be suitable, given the site is well located to public transport, shops, services and amenities and is consistent with Council's planning instruments. Cartwright Avenue to the east of the site or Banks Road to the west of the site link the subject property to Hoxton Park Road and nearby local infrastructure. The recent approval of DA-62/2015 will also see the redevelopment of nearby Miller Shopping Centre in the coming years. Bus stops located on Cabramatta Avenue are within walking distance of the site provide links to Liverpool Station.

Principle 4 Sustainability

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

Comment:

The Water, Thermal and Energy performance of the proposed residential flat building has been assessed as part of the submitted BASIX certificate prepared by Northrop. Where possible, the principles of environmentally sensitive design have been incorporated into the development and is evident through the proposed dual aspect units sought maximising natural cross ventilation and promoting solar access. The inclusion of repetitious floor plates, notably at Levels 2 and 3 allows for upper levels to cantilever over balconies below providing for passive shading. These passive design principles reduce energy consumption.

Energy and water efficiency parameters prescribed by the BASIX Certificate such as 3 star (>4.5 but <= 6/L min) showerheads, 4 star toilets and 5 star kitchen/bathroom taps will ensure that the development meet the required targets.

The building itself integrates a number of sustainable features exceeding the minimum standards prescribed by BASIX. In fact, it is intended that the building be designed and built to a 4 star Green Star initiatives.

Principle 5 Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and

contextual fit of well-designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

Comment:

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.

The proposal and site appearance will be improved by the careful use of landscaping within and around the site. Deep soil areas have been incorporated throughout the perimeter of the site, allowing for plantings along the boundaries and providing for visual benefit to the street frontages. As suggested by the Design Excellence Panel, the at grade car park to the rear of the site has been redesigned to provide for two tree plantings to create a pleasant setting and outlook from the north facing units.

Principle 6 Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing.

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

Comment:

Careful consideration has been given to the orientation and positioning of the development and the design and layout of units to ensure a high level of visual and acoustic privacy is maintained between neighbouring properties. This has been further demonstrated in the architectural plans prepared by Smith & Tzannes.

The proposal provides future occupants with a high level of amenity in terms of solar access and good outlook to habitable areas, as well as to balconies and private open space.

Careful planning of the proposed built form provides 61% of apartments to achieve cross ventilation due to their aspect, design and internal layout planning.

The development has been formed to achieve solar access to 69.2% of its units. Living areas and balconies have been designed with a northern orientation as much as possible with passive shading measures, such as repetitive floor plans, designed to prevent excessive heat load on apartments during the summer period.

An Acoustic Report has been prepared by Acoustic Logic with respect to the proposed development and provides for recommendations to achieve noise emission goals which are summarised under Sections 4.3 and 5.2 of this report. The report acknowledges that the site is not located on a classified road and therefore typical Australian Standards have been applied with respect to criteria. All windows in the development are operable with specific glazing constructions and acoustic seals

nominated as part of the report. The proposed building materials were generally found to be appropriate with insulation specified where light weight materials are utilised.

All apartments have a private balconies adjacent to living areas, consistent with this policy.

All dwellings achieve 2700mm ceiling heights to all habitable rooms. Generous amount of private storage is provided for each dwelling.

Other amenity issues include the provision of lifts servicing all floors of the development. Six adaptable units with associated parking spaces are also provided.

Principle 7 Safety

Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

Comment:

The proposed development has had regard to the principles of 'Safer by Design'. Aspects such as natural surveillance and controlled access have all been taken into consideration.

The proposed development has made provisions for natural surveillance for both communal and public areas. The common areas will be appropriately lit to ensure safety and visibility after dark.

The entrance to the development, including private entries to the ground floor dwellings, are clearly visible from the street. Access to the building will be through a controlled security system. An intercom system will be provided adjacent to the main entry lobby for visitor access.

The street numbering and the identification of the building will be clear to prevent unintended access and to assist persons trying to find the building.

Principle 8 Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

Comment:

Housing affordability in Sydney is becoming increasingly difficult. Our client is a recognised social housing provider who strive to provide for quality affordable housing developments.

It is important to acknowledge that unlike SEPP (Affordable Rental Housing) 2009, which requires that up to 50% of the dwellings be offered as affordable housing for a period of 10 years, all of the proposed 39 units will be nominated as affordable housing to be managed by our client, St George Community Housing.

The proposal therefore provides a social benefit to the community providing for new, affordable accommodation in an area well serviced by public transport services and local infrastructure.

The proposed development is considered to be of a high architectural standard promoting solar access and cross ventilation. A mix of units is proposed ranging between one and two bedroom units.

As part of the submitted application, the 2 bedroom layouts have been designed to demonstrate how 2 single beds could be incorporated to accommodate a family. In this regard, the proposal promotes flexible living conditions to accommodate different households.

The proposal therefore addresses lifestyle and affordability issues of the immediate area.

Principle 9 Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of well-designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

Comment:

It is considered that the proposed development incorporates the composition of building elements, textures, materials and finishes which all contribute to an overall high quality and aesthetically appealing development. The location of the site, and bulk and scale of surrounding existing and potential future developments have been considered in the design of the development. The internal functions and structure have been clearly expressed through the articulation and massing of the facades.

Design Verification Statement:

A Design Verification Statement has been prepared by Smith & Tzannes and is submitted with this development application in accordance with State Environmental Planning Policy No. 65.

Further to the above design quality principles, Clause 30(2) of State Environmental Planning Policy No. 65 also requires residential apartment development to be designed in accordance with the Department of Planning's publication entitled *Apartment Design Guide*. The following table outlines compliance with the Apartment Design Guide, where numerical requirements are specified.

State Environmental Planning Policy No. 65 – Apartment Design Guide

STANDARD	OBJECTIVE	COMPLIANCE
Site Analysis	3A-1 - Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context.	Reference should be made to Drawing No. DA-A-010 prepared by Smith & Tzannes.
Orientation	3B-1 - Building types and layouts respond to the streetscape and site while optimising solar access within the development.	Yes
	3B-2 - Overshadowing of neighbouring properties is minimised during mid-winter.	Complies. Given the proposed north-south orientation of the site, the bulk of the proposed shadow will fall across Cabramatta Avenue.
Public Domain Interface	3C-1 – Transition between private and public domain is achieved without compromising safety and security.	Complies
	3C-2 – Amenity of the public domain is retained and enhanced.	Complies
Communal And Public Open Space	3D-1 – An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping *Design criteria:* Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3pm on 21 June (mid winter).	 444m^2 or 25.7%. Yes. Complies between 9am – 11am. Refer to Drawing No. DA-A-855.1
	3D-2 – Communal open space is design to allow for a range of activities, respond to site conditions and be attractive and inviting.	Complies
	3D-3 – Communal open space is designed to maximise safety.	Complies
	3D-4 – Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood.	N/A

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td>Deep Soil Zones</td><td>3E-1 - Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality

Design criteria:
Deep soil zones are to meet the following minimum requirements:
<table>
<tr><th>Site area</th><th>Minimum dimensions</th><th>Deep soil zone (% of site area)</th></tr>
<tr><td>less than 650m²</td><td>-</td><td rowspan="4">7%</td></tr>
<tr><td>650m² - 1,500m²</td><td>3m</td></tr>
<tr><td>greater than 1,500m²</td><td>6m</td></tr>
<tr><td>greater than 1,500m² with significant existing tree cover</td><td>6m</td></tr>
</table></td><td>Minimum required: 120.96m², 6m dimension.

146m² is provided within the north eastern corner of the site with an additional 114m² within the front setback.</td></tr>
<tr><td>Visual Privacy</td><td>3F-1 - Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy

Design criteria:
Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances between building to the side and rear boundaries are as follows:
<table>
<tr><th>Building height</th><th>Habitable rooms and balconies</th><th>Non-habitable rooms</th></tr>
<tr><td>up to 12m (4 storeys)</td><td>6m</td><td>3m</td></tr>
<tr><td>up to 25m (5-8 storeys)</td><td>9m</td><td>4.5m</td></tr>
<tr><td>over 25m (9+ storeys)</td><td>12m</td><td>6m</td></tr>
</table>
Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room (see figure 3F.2)

Gallery access circulation should be treated as habitable space when measuring privacy separation distances between neighbouring properties.</td><td>Level 0: no relationship to east, min 18m (rear), min 5m (east)

Level 1 – 3: (5.4m (west). 5.0, (rear), 4.4m (east)

Level 4 – 5: 8.4m (west), 5.0m (rear), 8m (east).

Refer to Part 4.1.5(a) of this SEE.</td></tr>
</table>

STANDARD	OBJECTIVE	COMPLIANCE
	3F-2 - Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.	Complies
Pedestrian Access And Entries	3G-1 - Building entries and pedestrian access connects to and addresses the public domain.	Complies
	3G-2 - Access, entries and pathways are accessible and easy to identify.	Complies
	3G-3 - Large sites provide pedestrian links for access to streets and connection to destinations	N/A
Vehicle Access	3H-1 - Vehicle access points are designed and located to achieve safety, minimise conflicts between pedestrians and vehicles and create high quality streetscapes.	Complies
Bicycle And Car Parking	3J-1 - Car parking is provided based on proximity to public transport in metropolitan Sydney and centres in regional areas *Design criteria:* *For development in the following locations:* *on sites that are within 800 metres of a railway station or light rail stop in the Sydney Metropolitan Area; or* *on land zoned, and sites within 400 metres of land zoned, b# Commercial Core, B4 Mixed Use or equivalent in a nominated regional centre* *the minimum car parking requirement for residents and visitors is set out in the Guide to Traffic Generating Developments, or the car parking requirement prescribed by the relevant council, whichever is less* *The car parking needs for a development must be provided off street.*	Refer to comments under SEPP (ARH) 2009. Reference should also be made to the submitted report prepared by Colston Budd Rogers & Kafes Pty. Ltd. Complies
	3J-2 – Parking and facilities are provided for other modes of transport	Complies – 14 bicycle spaces are proposed
	3J-3 – Car park design and access is safe and secure.	Complies
	3J-4 – Visual and environmental impacts of underground car parking are minimised.	N/A
	3J-5 – Visual and environmental impacts of on-grade car parking are minimised.	Complies
	3J-6 – Visual and environmental impacts of above ground enclosed car parking are minimised	N/A
Solar And Daylight Access	4A-1 - To optimise the number of apartments receiving sunlight to habitable rooms, primary windows and private open space.	27/39 or 69.2%.

STANDARD	OBJECTIVE	COMPLIANCE
	Design criteria: *Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am and 3 pm at mid winter in the Sydney Metropolitan Area and in the Newcastle and Wollongong local government areas* *In all other areas, living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 3 hours direct sunlight between 9 am and 3 pm at mid winter* *A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3 pm at mid winter*	**Refer to Part 4.1.3(b) of this SEE.** 6/39 or 15% of the units will achieve no direct sunlight. Complies.
	4A-2 – Daylight access is maximised where sunlight is limited.	As detailed above, 27 of the proposed units will receive 2 hours of solar access while only 6 will receive no direct sunlight. The remaining 6 units, although short of the 2 hours, will receive some solar access at mid winter.
	4A-3 – Design incorporates shading and glare control, particularly for warmer months.	Complies
Natural Ventilation	4B-1 – All habitable rooms are naturally ventilated.	Complies
	4B-2 – The layout and design of single aspect apartments maximises natural ventilation.	Complies
	4B-3 - The number of apartments with natural cross ventilation is maximised to create a comfortable indoor environment for residents *Design criteria:* *At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building. Apartments at ten storeys or greater are deemed to be cross ventilated only if any enclosure of the balconies at these levels allows adequate natural ventilation and cannot be fully enclosed* *Overall depth of a cross-over or cross-through apartment does not exceed 18m, measured glass line to glass line.*	24/39 or 61%. Yes.
Ceiling Heights	4C-1 - Ceiling height achieves sufficient natural ventilation and daylight access *Design criteria:*	Complies

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>Measured from finished floor level to finished ceiling level, minimum ceiling heights are:
<table>
<tr><th colspan="2">Minimum ceiling height
for apartment and mixed use buildings</th></tr>
<tr><td>Habitable rooms</td><td>2.7m</td></tr>
<tr><td>Non-habitable</td><td>2.4m</td></tr>
<tr><td>For 2 storey apartments</td><td>2.7m for main living area floor
2.4m for second floor, where its area does not exceed 50% of the apartment area</td></tr>
<tr><td>Attic spaces</td><td>1.8m at edge of room with a 30 degree minimum ceiling slope</td></tr>
<tr><td>If located in mixed used areas</td><td>3.3m for ground and first floor to promote future flexibility of use</td></tr>
</table>
These minimums do not preclude higher ceilings if desired.</td><td></td></tr>
<tr><td></td><td>4C-2 - Ceiling height increases the sense of space in apartments and provides for well proportioned rooms.</td><td>Complies</td></tr>
<tr><td></td><td>4C-3 - Ceiling heights contribute to the flexibility of building use over the life of the building.</td><td>Complies</td></tr>
<tr><td>Apartment Size And Layout</td><td>4D-1 - The layout of rooms within an apartment is functional, well organised and provides a high standard of amenity.

Design criteria:
Apartments are required to have the following minimum internal areas:
<table>
<tr><th>Apartment type</th><th>Minimum internal area</th></tr>
<tr><td>Studio</td><td>35m²</td></tr>
<tr><td>1 bedroom</td><td>50m²</td></tr>
<tr><td>2 bedroom</td><td>70m²</td></tr>
<tr><td>3 bedroom</td><td>90m²</td></tr>
</table>
The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.
A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m2 each.
Every habitable room must have a window in an external wall with a total minimum glass area of not less than 10% of the floor area of the room. Daylight and air may not be borrowed from other rooms</td><td>Yes. Refer to comments under SEPP (ARH) 2009.</td></tr>
</table>

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>4D-2 – Environmental performance of the apartment is maximised.

Design criteria:
Habitable room depths are limited to a maximum of 2.5 x the ceiling height
In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window.</td><td>Refer to submitted plans.</td></tr>
<tr><td></td><td>4D-3 – Apartment layouts are designed to accommodate a variety of household activities and needs

Design criteria:
Master bedrooms have a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space)
Bedrooms have a minimum dimension of 3m (excluding wardrobe space)
Living rooms or combined living/dining rooms have a minimum width of:
3.6m for studio and 1 bedroom apartments
4m for 2 and 3 bedroom apartments
The width of cross-over or cross-through apartments are at least 4m internally to avoid deep narrow apartment layouts.</td><td>Refer to submitted plans.</td></tr>
<tr><td>Private Open Space And Balconies</td><td>4E-1 – Apartments provide appropriately sized private open space and balconies to enhance residential amenity.

Design criteria:
All apartments are required to have primary balconies as follows:
<table>
<tr><th>Dwelling type</th><th>Minimum area</th><th>Minimum depth</th></tr>
<tr><td>Studio apartments</td><td>4m²</td><td>-</td></tr>
<tr><td>1 bedroom apartments</td><td>8m²</td><td>2m</td></tr>
<tr><td>2 bedroom apartments</td><td>10m²</td><td>2m</td></tr>
<tr><td>3+ bedroom apartments</td><td>12m²</td><td>2.4m</td></tr>
</table>
The minimum balcony depth to be counted as contributing to the balcony area is 1m.
For apartments at ground level or on a podium or similar structure, a private open space is provided instead of a balcony. It must have a minimum area of 15m² and a minimum depth of 3m.</td><td>Complies</td></tr>
<tr><td></td><td>4E-2 - Primary private open space and balconies are appropriately located to enhance liveability for residents.</td><td>Complies</td></tr>
</table>

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>4E-3 - Private open space and balcony design is integrated into and contributes to the overall architectural form and detail of the building.</td><td>Complies</td></tr>
<tr><td></td><td>4E-4 - Private open space and balcony design maximises safety</td><td>Complies</td></tr>
<tr><td>Common Circulation And Spaces</td><td>4F-1 - Common circulation spaces achieve good amenity and properly service the number of apartments

Design criteria:
The maximum number of apartments off a circulation core on a single level is eight.
For buildings of 10 storeys and over, the maximum number of apartments sharing a single lift is 40.</td><td>Variation is sought.
Refer to Part 4.1.5(b) of this SEE</td></tr>
<tr><td></td><td>4F-2 - Common circulation spaces promote safety and provide for social interaction between residents</td><td>Yes</td></tr>
<tr><td>Storage</td><td>4G-1 - Adequate, well designed storage is provided in each apartment

Design criteria:
In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:

<table><tr><th>Dwelling type</th><th>Storage size volume</th></tr><tr><td>Studio apartments</td><td>4m³</td></tr><tr><td>1 bedroom apartments</td><td>6m³</td></tr><tr><td>2 bedroom apartments</td><td>8m³</td></tr><tr><td>3+ bedroom apartments</td><td>10m³</td></tr></table>At least 50% of the required storage is to be located within the apartment.</td><td>Complies</td></tr>
<tr><td></td><td>4G-2 - Additional storage is conveniently located, accessible and nominated for individual apartments.</td><td>Complies</td></tr>
<tr><td>Acoustic Privacy</td><td>4H-1 - Noise transfer is minimised through the siting of buildings and building layout</td><td>Complies</td></tr>
<tr><td></td><td>4H-2 - Noise impacts are mitigated within apartments through layout and acoustic treatments.</td><td>Complies
The submitted Acoustic Report prepared by Acoustic Logic provides for glazing/mechanical plant recommendations.</td></tr>
</table>

STANDARD	OBJECTIVE	COMPLIANCE
Noise And Pollution	4J-1 - In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.	Complies As confirmed by the Traffic and Acoustic Reports, the site is not located on a Classified Road.
	4J-2 - Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.	Complies
Apartment Mix	4K-1 - A range of apartment types and sizes is provided to cater for different household types now and into the future.	Complies
	4K-2 - The apartment mix is distributed to suitable locations within the building.	Complies
Ground Floor Apartments	4L-1 - Street frontage activity is maximised where ground floor apartments are located	Complies
	4L-2 - Design of ground floor apartments deliver amenity and safety for residents	Complies
Facades	4M-1 - Building facades provide visual interest along the street while respecting the character of the local area.	Complies
	4M-2 - Building functions are expressed by the façade.	Complies
Roof Design	4N-1 – Roof treatments are integrated into the building design and positively respond to the street.	Complies
	4N-2 - Opportunities to use roof space for residential accommodation and open space are maximised	N/A
	4N-3 – Roof design incorporates sustainability features.	None proposed.
Landscape Design	4O-1 – Landscape design is viable and sustainable	Where possible indigenous and low water species plants have been nominated.
	4O-2 – Landscape design contributes to the streetscape and amenity.	The front setback will be densely landscaped using a combination of native

STANDARD	OBJECTIVE	COMPLIANCE
		grasses, hedges and shrubs as well as two new trees (watergum) which will grow to a mature height of 8m. The two existing street trees will be retained.
Planting On Structures	4P-1 – Appropriate soil profiles are provided.	This may be conditioned.
	4P-2 – Plant growth is optimised with appropriate selection and maintenance.	Of the 12 plant species proposed, 7 are native species.
	4P-3 - Planting on structures contributes to the quality and amenity of communal and public open spaces	N/A
Universal Design	4Q-1 - Universal design features are included in apartment design to promote flexible housing for all community members.	Refer to submitted Access Report.
	4Q-2 - A variety of apartments with adaptable designs are provided.	Six adaptable units are proposed in total (spread over Levels 1, 2 and 3).
	4Q-3 - Apartment layouts are flexible and accommodate a range of lifestyle needs.	As detailed, the proposed two bedroom apartments have been shown to accommodate two single beds to cater to families.
Adaptive Reuse	4R-1 - New additions to existing buildings are contemporary and complementary and enhance an area's identity and sense of place.	N/A
	4R-2 - Adapted buildings provide residential amenity while not precluding future adaptive reuse.	N/A
Mixed Use	4S-1 - Mixed use developments are provided in appropriate locations and provide active street frontages that encourage pedestrian movement.	N/A

STANDARD	OBJECTIVE	COMPLIANCE
	4S-2 - Residential levels of the building are integrated within the development, and safety and amenity is maximised for residents.	N/A
Awnings And Signage	4T-1 - Awnings are well located and complement and integrate with the building design.	N/A
	4T-2 - Signage responds to the context and desired streetscape character.	N/A
Energy Efficiency	4U-1 - Development incorporates passive environmental design.	Complies
	4U-2 - Development incorporates passive solar design to optimise heat storage in winter and reduce heat transfer in summer.	Complies
	4U-3 - Adequate natural ventilation minimises the need for mechanical ventilation.	Complies
Water Management And Conservation	4V-1 - Potable water use is minimised.	Water efficient fixtures are specified by the submitted BASIX certificate.
	4V-2 - Urban stormwater is treated on site before being discharged to receiving waters.	Refer to submitted Stormwater Plans.
	4V-3 – Flood management systems are integrated into site design.	Refer to submitted Stormwater Plans.
Waste Management	4W-1 - Waste storage facilities are designed to minimise impacts on the streetscape, building entry and amenity of residents.	Complies Reference should be made to the submitted Waste Management Plan prepared by Elephant's Foot Recycling Solutions.
	4W-2 - Domestic waste is minimised by providing safe and convenient source separation and recycling.	Complies
Building Maintenance	4X-1 – Building design detail provides protection from weathering.	Complies
	4X-2 – Systems and access enable ease of maintenance.	Complies
	4X-3 – Material selection reduces ongoing maintenance costs.	Complies

Appendix C Liverpool Local Environmental Plan 2008

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
Zoning	• Zone R4 High Density Residential *"2 Permitted without consent* *Home-based child care; Home occupations* *3 Permitted with consent* *Attached dwellings; Bed and breakfast accommodation; Boarding houses; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Dwelling houses; Educational establishments; Environmental facilities; Environmental protection works; Exhibition homes; Exhibition villages; Flood mitigation works; Home businesses; Home industries; Hostels; Hotel or motel accommodation; Kiosks; Multi dwelling housing; Neighbourhood shops; Places of public worship; Public administration buildings; Recreation areas; Residential care facilities; Residential flat buildings; Respite day care centres; Roads; Secondary dwellings; Serviced apartments; Shop top housing* *4 Prohibited* *Any development not specified in item 2 or 3".*	Residential flat building is proposed. Complies. **Refer to Part 4.1.3(a) of this SEE.**
Clause 2.7 Demolition	• Development consent required.	Demolition of all existing structures is proposed.
Clause 4.1 Minimum Subdivision Lot Size	• 1,000m^2	1,728m^2 Complies.
Cl 4.3 Height of Buildings	• 18m.	Maximum 19.80m proposed. Variation is sought. **Refer to Part 4.1.3(b) of this SEE.**
Cl 4.4 Floor Space Ratio	• 1.2:1 under LLEP 08. A bonus of 0.5:1 applies under SEPP (ARH) 2009. Therefore maximum 1.7:1.	Site area: 1,728m^2 Max GFA permissible: 2,937.6m^2

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
		Proposed GFA: 2,928m^2 or 1.69:1. Complies.
Cl 5.10 Heritage Conservation	• The objectives of this clause are as follows: ○ to conserve the environmental heritage of Liverpool, ○ to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views, ○ to conserve archaeological sites, ○ to conserve Aboriginal objects and Aboriginal places of heritage significance.	N/A.
Cl 7.6 Environmentally Significant Land	• Before determining an application to carry out development on environmentally significant land, the consent authority must consider such of the following as are relevant: (a) the condition and significance of the vegetation on the land and whether it should be substantially retained in that location, (b) the importance of the vegetation in that particular location to native fauna, (c) the sensitivity of the land and the effect of clearing vegetation, (d) the relative stability of the bed and banks of any waterbody that may be affected by the development, whether on the site, upstream or downstream, (e) the effect of the development on water quality, stream flow and the functions of aquatic ecosystems (such as habitat and connectivity), (f) the effect of the development on public access to, and use of, any waterbody and its foreshores.	N/A.
Cl 7.7 Acid Sulfate Soils	• The objective of this clause is to ensure that development not disturb, expose or drain acid sulfate soils and cause environmental damage.	N/A.
Cl 7.8 Flood Planning	• This clause applies to land at or below the flood planning level.	N/A.
Cl 7.14 Minimum building street frontage	• A residential flat building requires a street frontage of at least 24 metres to a public street (excluding service lanes).	Approximately 48 metres along Cabramatta Avenue. Complies.

Appendix D Liverpool Development Control Plan 2008

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Part 1 General Controls for all Development		
Tree Preservation	• Any approvals to remove or prune trees issued with a development consent shall lapse when the development consent lapses or becomes invalid or void. • Council may refuse an application to remove a tree(s) under certain circumstances (refer to clause) but may give conditional consent for the appropriate remedial "branch or root pruning" for that tree(s). • An application to remove a tree may consented to by Council under certain circumstances (refer to clause). • Applications for trees that have Aboriginal marking and/or constitute an item of Aboriginal significance shall be referred to DECC. • Pruning must accord with AS 4373/2007. • All existing indigenous trees shall be retained or replaced. Where approval is given to remove trees, appropriate replacement planting will be required. • Significant trees that are identified as having habitat value shall not be relocated or removed.	• Six trees are to be removed from the site. Refer to Section 4.3.1(a) of this report, the submitted Arborist Report and Landscape Plan.
Landscaping And Incorporation Of Existing Trees	• Existing trees and native vegetation are to be retained, protected and incorporated into the development proposal. • Prior to the commencement of the design of a development existing trees should be identified. The design of the development should consider options to retain existing trees • Existing indigenous trees within any building setback should be retained where possible, as an integral component of the site's landscaping, and to protect local habitats. • Prior to the commencement of the design of a development existing street trees should be identified. The design of a development should consider options to retain existing street trees.	• Six trees are to be removed from the site. Refer to Section 4.3.1(a) of this report, the submitted Arborist Report and Landscape Plan.
Bushland And Fauna Habitat Preservation	• Refer to DCP.	• N/A.
Bushfire Risk	• Construction of single dwellings on or adjacent to bushfire prone land is to be carried out in accordance NSW Rural Fire Service's Single Dwelling Application Kit • All development shall comply with provisions of the Rural Fires and Assessment Act 2002 and Planning for Bushfire Protection 2006 • Asset Protection Zones shall be provided within the boundary of the land on which a development is proposed but may include public streets located between the land and bushland.	• N/A.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Water Cycle Management	• For developments that require construction of stormwater drainage, a SDCP shall be submitted with the Development Application demonstrating the feasibility of the proposed drainage system within the site and connection to Council's system.	• Refer to submitted Stormwater Plans prepared by Bonacci..
Development Near A Watercourse	• If any works are proposed near a water course, the Water Management Act 2000 may apply, and you may be required to seek controlled activity approval from the NSW Office of Water.	• N/A.
Erosion And Sediment Control	• The development application shall be accompanied by either a Soil and Water Management Plan (SWMP) or an Erosion and Sediment Control Plan (ESCP) as shown in Table 1.	• Reference should be made to the submitted Erosion & Sediment Control Plan prepared by Bonacci.
Flooding Risk	• Reduce the risk to human life and damage to property caused by flooding through controlling development on land affected by potential floods.	• N/A.
Contaminated Land Risk	• To identify the presence of contamination at an early stage of the development process and to manage the issues of land contamination to ensure protection of the environment and that of human health is maintained. • Ensure that proposed developments or changes of land use will not increase the risk to human health or the environment	• Refer to Section 4.1.4 of this report.
Salinity Risk	• To prevent further spread of urban salinity and remedy, where possible, existing areas of salinity.	• The submitted Contamination Report has not identified the presence of saline soils.
Acid Sulfate Soils Risk	• Identify areas of acid sulfate soil risk to prevent any unnecessary impact on the environment.	• N/A.
Demolition Of Existing Developments	• All demolition work must comply with the *Australian Standard AS2601 – 1991, The Demolition of Structures*.	• Complies.
Aboriginal Archaeology	• Identify and where possible preserve relics of the occupation of the land by Aboriginal communities	• N/A.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Heritage And Archaeological Sites	• Conserve the heritage significance of heritage items and heritage conservation areas of Liverpool including associated fabric, setting, curtilage and views; and conserve archaeological sites.	• N/A.
Subdivision Of Land And Buildings	• Refer to DCP.	• N/A.
Water Conservation	• New dwellings, including a residential component within a mixed-use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with *State Environmental Planning Policy – Building Sustainability Index (BASIX)*.	• Refer to submitted BASIX Certificate.
Energy Conservation	• Dwellings, including multi-unit development within a mixed use building and serviced apartments intended or capable of being strata titled, are to demonstrate compliance with *State Environmental Planning Policy – Building Sustainability Index (BASIX).* A complying BASIX report is to be submitted with all development applications containing residential activities.	• Refer to submitted BASIX Certificate.
Waste Disposal & Re-Use Facilities	• A Waste Management Plan (WMP) shall be submitted with a Development Application for any activities generating waste, and be provided in three sections: - Demolition - Construction - On-going waste management. • In the case of multi dwelling housing of 9 or more dwellings and residential flat buildings one or more garbage and recycling enclosures (bin bays) are to be provided within the site. • Bin bays or waste service rooms are to be sufficiently open and well lit. • A hose cock for hosing the garbage bin bay and a sewered drainage point are to be provided in or adjacent to the bin storage area. • Bin bays are to be adjacent to a street frontage, or if not possible then at a designated point adjacent to the common access driveway provided sufficient level areas (<5% grade) is available for bin collection. The bin bay is to be located so that distance from bin bay to the nearest waste collection point accessible by the collection vehicle is no further than 15m. The bin bay position is to minimise noise impacts on residents from the usage of bins and waste or recycling collection.	• Reference should be made to the submitted Waste Management Plan prepared by Elephant Recycling Solutions.
Outdoor Advertising And Signage	• Refer to DCP provisions.	• N/A.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Social Impact Assessment	• A social impact assessment shall be submitted with a development application for all types of development listed in Table 21. The social impact assessment shall take the form of a Social Impact Comment or a Comprehensive Social Impact Assessment, as specified in Table 21.	• **Refer to Part 4.3.1(b) of this SEE.**
Part 3.7 Residential Flat Buildings in the R4 Zone (Outside of Liverpool City Centre)		
Frontage And Site Area	• Minimum lot width: 24m. • Minimum site area: Refer to LLEP08.	• 48m approximately. Complies. • 1,000m^2 required. 1,728m^2 proposed. Complies.
Site Planning	• The building should relate to the site's topography with minimal earthworks, except for basement car parking. • Siting of buildings should provide usable and efficient spaces, with consideration given to energy efficiency in the building design. • Site layout should provide safe pedestrian, cycle and vehicle access to and from the street. • Siting of buildings should be sympathetic to surrounding development, taking specific account of the streetscape in terms of scale, bulk, setbacks, materials and visual amenity. • Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Where stormwater drains directly to the street, there may also be a need to incorporate on-site detention of stormwater where street drainage is inadequate. Refer to Water cycle management in Part 1. • The development will need to satisfy the requirements of State Environmental Planning Policy No 65—Design Quality of Residential Flat Development. • Note*: A Site Analysis Plan is required for each development application.*	• Minor cut and fill works are proposed. There is no proposed basement. • Where possible, units are orientated to the north. • Separate vehicle and pedestrian access points are proposed. • Complies as detailed in this SEE. • Refer to submitted Stormwater Plans prepared by Bonacci. • Refer to Appendix B of this report. • Refer to Drawing No. DA-A-010.
Setbacks	**Front and Secondary Setbacks:**	• Front setback of 5.5m proposed. Complies.

<table>
<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>
Table 1
<table>
<tr><th>Road</th><th>Front Setback</th><th>Secondary Setback</th></tr>
<tr><td>Classified Roads</td><td>7.0m</td><td>7.0m</td></tr>
<tr><td>Other Streets</td><td>5.5m</td><td>5.5m</td></tr>
</table>
• Verandahs, eaves and other sun control devices may encroach on the front and secondary setback by up to 1m.
• The secondary setback is along the longest length boundary.

Side and Rear Setbacks:

Table 2
<table>
<tr><th>Item</th><th>Side Setback</th><th>Rear Setback</th></tr>
<tr><td>Boundary to land in R2 & R3 zones</td><td>10m</td><td>10m</td></tr>
<tr><td>Boundary to land in R2 & R3 zones (no windows to habitable rooms)</td><td>10m</td><td>10m</td></tr>
<tr><td>Boundary to land in R4 zone (First 10m in height, excluding roof/attic)</td><td>3m</td><td>8m</td></tr>
<tr><td>Boundary to land in R4 zone (Greater than 10m in height)</td><td>8m</td><td>8m</td></tr>
<tr><td>Boundary to public open space</td><td>6m</td><td>6m</td></tr>
</table>
• Consideration will need to be given to existing and approved setbacks of residential flat buildings on adjoining buildings.
</td><td>Secondary setback N/A.

• Refer to comments made under SEPP 65/ADG.</td></tr>
<tr><td>Landscaped Area And Private Open Space</td><td>Landscaped area (deep soil area):
• A minimum of 25% of the site area shall be landscaped area.</td><td>• Refer to comments under SEPP (ARH) 2009.</td></tr>
</table>

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY

	• A minimum of 50% of the front setback area shall be landscaped area.
	
	• Optimise the provision of consolidated landscaped area within a site by:
	  ○ The design of basement and sub-basement car parking, so as not to fully cover the site.
	
	  ○ The use of front and side setbacks.
	  ○ Optimise the extent of landscaped area beyond the site boundaries by locating them contiguous with the landscaped area of adjacent properties.
	• Promote landscape health by supporting for a rich variety of vegetation type and size.
	
	• Increase the permeability of paved areas by limiting the area of paving and/or using pervious paving materials.
	
	Open Space
	• Provide communal open space, which is appropriate and relevant to the context and the building's setting.
	• Where communal open space is provided, facilitate its use for the desired range of activities by:
	  ○ Locating it in relation to buildings to optimise solar access to dwellings.
	  ○ Consolidating open space on the site into recognisable areas with reasonable space, facilities and landscape.
	  ○ Designing its size and dimensions to allow for the range of uses it will contain.
	  ○ Minimising overshadowing.
	  ○ Carefully locating ventilation duct outlets from basement car parking.
	• Locate open space to increase the potential for residential amenity.
		• Complies.
		
		• No basement level proposed.
		• Landscaping is proposed to all boundaries.
		• A variety of plant species are proposed.
		• The proposal provides for adequate deep soil planting/
		
		• Refer to comments under SEPP 65/ADG.

<table>
<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>Private Open Space
Table 3
<table><tr><th>Dwelling Size</th><th>Private Open Space Area</th><th>Minimum Width</th></tr><tr><td>Small < 65 sqm</td><td>10sqm</td><td>2m</td></tr><tr><td>Medium 65 – 100</td><td>12sqm</td><td>2m</td></tr><tr><td>Large > 100 sqm</td><td>12sqm</td><td>2m</td></tr></table>• Private open space may be provided as a courtyard for ground floor dwellings or as balconies for dwellings above the ground floor
• Private open space areas should be an extension of indoor living areas and be functional in size to accommodate seating and the like.
• Private open space should be clearly defined for private use.

Drying Areas
• Clothes drying facilities must be provided at a rate of 5 lineal m of line per unit. Clothes drying areas should not be visible from a public place and should have solar access.</td><td>• Refer to comments under SEPP 65/ADG.

• Refer to submitted plans. Drying areas are proposed to the balconies.</td></tr>
<tr><td>Building Design, Streetscape And Layout</td><td>Building Height
• Refer to LLEP08.

Building Appearance and Streetscape
• Residential Flat Buildings shall comply with State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development, and should consider the Residential Flat Design Code.
• Building facades shall be articulated and roof form is to be varied to provide visual variety.

• The pedestrian entrance to the building shall be emphasised.</td><td>• Variation is sought. Refer to Part 4.1.6(b) of this SEE.

• Refer to Appendix B of this report.
• Complies. Refer to Part 3 of this report.
• A clearly defined landscaped path is</td></tr>
</table>

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
		proposed framed by the pergola over the mailboxes.
	• A sidewall must be articulated if the wall has a continuous length of over 14 m.	• No side wall will exceed 14m in length.
	• Where possible vehicular entrances to the basement car parking shall be from the side of the building. As an alternative a curved driveway to an entrance at the front of the building may be considered if the entrance is not readily visible from the street.	• N/A.
	• Driveway walls adjacent to the entrance of a basement car park are to be treated so that their appearance is consistent with the basement or podium walls.	• N/A.
	• Sensitive design of basement car parking areas can assist in ensuring that podiums and vehicle entry areas do not dominate the overall design of the building or the streetscape and optimise areas for deep soil planting.	• N/A.
	• The integration of podium design should be an integral part of the design of the development, and as far as possible should not visibly encroach beyond the building footprint.	• The proposed development has been found to be acceptable by DEP.
	• A master antenna shall be provided for any development of more than three dwellings and be located so that it is not visible from the street or any public open space.	• This may be conditioned.
	• Consider the relationship between the whole building form and the facade and /or building elements. The number and distribution of elements across a façade determine simplicity or complexity. Columns, beams, floor slabs, balconies, window openings and fenestrations, doors, balustrades, roof forms and parapets are elements, which can be revealed or concealed and organised into simple or complex patterns.	• The proposed building is of a modern design which has been reflected through material selection.
	• Compose facades with an appropriate scale, rhythm and proportion, which respond to the building's use and the desired contextual character. This may include but are not limited to: o Defining a base, middle and top related to the overall proportion of the building. o Expressing key datum lines in the context using cornices, a change in materials or building set back o Expressing the internal layout of the building, for example, vertical bays or its structure, such as party wall-divisions. o Expressing the variation in floor-to-floor height, particularly at the lower levels. o Articulating building entries with awnings, porticos, recesses, blade walls and projecting bays.	• The proposed development has been found to be acceptable by DEP.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	○ Selecting balcony types which respond to the street context, building orientation and residential amenity. ○ Cantilevered, partially recessed, wholly recessed, or Juliet balconies will all create different facade profiles. ○ Detailing balustrades to reflect the type and location of the balcony and its relationship to the façade detail and materials.	
	• Design facades to reflect the orientation of the site using elements such as sun shading, light shelves and bay windows as environmental controls, depending on the facade orientation.	• Refer to comments under Appendix B of this report.
	• Express important corners by giving visual prominence to parts of the facade, for example, a change in building articulation, material or colour, roof expression or increased height.	• The site is not a corner property.
	• Co-ordinate and integrate building services, such as drainage pipes, with overall facade and balcony design.	• Capable of being complied with.
	• Co-ordinate security grills/screens, ventilation louvres and car park entry doors with the overall facade design	• N/A.
	Roof Design	
	• Relate roof design to the desired built form. This may include: ○ Articulating the roof, or breaking down its massing on large buildings, to minimise the apparent bulk or to relate to a context of smaller building forms. ○ Using a similar roof pitch or material to adjacent buildings, particularly in existing special character areas or heritage conservation areas. ○ Minimising the expression of roof forms gives prominence to a strong horizontal datum in the adjacent context, such as an existing parapet line. ○ Using special roof features, which relate to the desired character of an area, to express important corners.	• The proposal includes a mix of flat and skillion roof forms to complement the modern form of the building.
	• Design the roof to relate to the size and scale of the building, the building elevations and three-dimensional building form. This includes the design of any parapet or terminating elements and the selection of roof materials.	
	• Design roofs to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access.	
	• Minimise the visual intrusiveness of service elements by integrating them into the design of the roof. These elements include lift over-runs, service plants, chimneys, vent stacks, telecommunication infrastructures, gutters, downpipes and signage.	• The lift overrun will centred over the

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		building to minimise its visibility.
	• Where habitable space is provided within the roof optimise residential amenity in the form of attics or penthouse dwellings.	• N/A.
	Building Entry	
	• Improve the presentation of the development to the street by: o Locating entries so that they relate to the existing street and subdivision pattern, street tree planting and pedestrian access network. o Designing the entry as a clearly identifiable element of the building in the street. o Utilising multiple entries-main entry plus private ground floor dwelling entries-where it is desirable to activate the street edge or reinforce a rhythm of entries along a street.	• The development provides for multiple entries including private entrance to ground floor dwellings.
	• Provide as direct a physical and visual connection as possible between the street and the entry.	• Pedestrian paths are clearly defined through paved pathways and breaks in the landscaping.
	• Achieve clear lines of transition between the public street, the shared private, circulation spaces and the dwelling unit.	• The proposed landscaping and building finishes will clearly articulate the different zones across the site.
	• Ensure equal access for all.	• The proposal includes a lift servicing all levels.
	• Provide safe and secure access by: o Avoiding ambiguous and publicly accessible small spaces in entry areas. o Providing a clear line of sight between one circulation space and the next. o Providing sheltered well-lit and highly visible spaces to enter the building, meet and collect mail.	• Communal areas may be accessed via clear, direct paths and will be well lit.
	• Generally provide separate entries from the street for: o Pedestrians and cars. o Different uses, for example, for residential and commercial users in a mixed use development.	• Complies.

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	○ Ground floor dwellings, where applicable. • Design entries and associated circulation space of an adequate size to allow movement of furniture between public and private spaces. • Provide and design letterboxes to be convenient for residents and not to clutter the appearance of the development from the street by: ○ Locating them adjacent to the major entrance and integrated into a wall, where possible. ○ Setting them at 90 degrees to the street, rather than along the front boundary. **Balconies** • Balconies may project up to 1m from the façade of a building. • Balustrades must be compatible with the façade of the building. • Ensure balconies are not so deep that they prevent sunlight entering the dwelling below. • Design balustrades to allow views and casual surveillance of the street. • Balustrades on balconies at lower levels shall be of solid construction. • Balconies should where possible should be located above ground level to maximise privacy for occupants, particularly from the street. • Solid or semi solid louvres are permitted.	• Complies. • Complies. • Balconies have been designed in accordance with ADG requirements. • A combination of glazed and concrete balustrades are proposed in keeping with the modern architecture of the building. • Varied floor plates are provided with the exception of Levels 2 and 3. • Complies. • No change to plans as presented to DEP. • Complies. Only three units provide for ground level courtyards. • Aluminium screens are proposed.

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	• Noise attenuation measures on balconies facing a Classified Road should be considered.
	• Balconies should be located on the street frontage, boundaries with views and onto a substantial communal open space.
	• Primary balconies should be:
	  ○ Located adjacent to the main living areas, such as living room, dining room or kitchen to extend the dwelling living space;
	  ○ Sufficiently large and well proportioned to be functional and promote indoor/outdoor living. A dining table and two chairs (smaller dwelling) and four chairs (larger dwelling) should fit on the majority of balconies in any development.
	• Consider secondary balconies, including Juliet balconies or operable walls with balustrades, for additional amenity and choice in larger dwellings, adjacent to bedrooms or for clothes drying, site balconies off laundries or bathrooms.
	• Design and detail balconies in response to the local climate and context thereby increasing the usefulness of balconies. This may be achieved by:
	  ○ Locating balconies facing predominantly north, east or west to provide solar access.
	  ○ Utilising sunscreens, pergolas, shutters and operable walls to control sunlight and wind.
	  ○ Providing balconies with operable screens, Juliet balconies or operable walls/sliding doors with a balustrade in special locations where noise or high winds prohibit other solutions - along rail corridors, on busy roads or in tower buildings - choose cantilevered balconies, partially cantilevered balconies and/or recessed balconies in response to daylight, wind, acoustic privacy and visual privacy.
	• Provide primary balconies for all dwellings with a minimum depth of 2m.
	• Ensuring balconies are not so deep that they prevent sunlight entering the dwelling below.
	• Design balustrades to allow views and casual surveillance of the street while providing for safety and visual privacy. Design considerations may include:
	  ○ Detailing balustrades using a proportion of solid to transparent materials to address site lines from the street, public domain or adjacent development. Full glass balustrades do not provide privacy for the balcony or the dwelling's interior, especially at night.
	  ○ Detailing balustrades and providing screening from the public, for example, for a person seated looking at a view, clothes drying areas, bicycle storage or air conditioning units.
	• Operable screens increase the usefulness of balconies by providing weather protection, daylight control and privacy screening.
		• N/A.
		• Balconies are orientated to the front and rear of the site.
		• Complies.
		• Balconies are designed as per ADG requirements.
		• None proposed.
		• Complies.
		• Complies.
		• Refer to comments above.
		• Refer to comments above.
		• Refer to comments above.

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	Daylight Access	
	• Plan the site so that new residential flat development is oriented to optimise northern aspect.	• Complies. Refer to Appendix B.
	• Ensure direct daylight access to communal open space between March and September and provide appropriate shading in summer.	
	• Optimise the number of dwellings receiving daylight access to habitable rooms and principal windows:	
	• Ensure daylight access to habitable rooms and private open space, particularly in winter - use skylights, clerestory windows and fanlights to supplement daylight access.	
	• Promote two-storey and mezzanine, ground floor dwellings or locations where daylight is limited to facilitate daylight access to living rooms and private open spaces.	
	• Ensure single aspect, single-storey dwellings have a northerly or easterly aspect: ○ Locate living areas to the north and service areas to the south and west of the development.	
	• Avoid south facing dwellings.	

	• Design for shading and glare control, particularly in summer:
	  ○ Using shading devices, such as eaves, awnings, colonnades, balconies, pergolas, external louvres and planting.
	  ○ Optimising the number of north-facing living spaces.
	  ○ Providing external horizontal shading to north-facing windows
	  ○ Providing vertical shading to east or west windows.
		• The residential units have been assessed under BASIX and achieve the thermal targets.

	• Consider higher ceilings and higher window heads to allow deeper sunlight penetration.	
	• On west facing windows, vertical louvre panels or sliding screens protect from glare and low afternoon sun.	
	• On north facing windows, projecting horizontal louvres admit winter sun while shading summer sun.	
	• Using high performance glass but minimising external glare off windows.	
	• Avoid reflective films.	• This may be conditioned.
	• Use a glass reflectance below 20%.	• This may be conditioned.
	• Consider reduced tint glass.	• Refer to BASIX certificate.
	• Limit the use of lightwells as a source of daylight by prohibiting their use as the primary source of daylight in habitable rooms. Where they are used:	• None proposed.
	• Relate lightwell dimensions to building separation, for example, if nonhabitable rooms face into a light well less than 12m high, the lightwell should measure 6 x 6 m.	
	• Conceal building services and provide appropriate detail and materials to visible walls.	

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	• Ensure light wells are fully open to the sky. • A combination of louvres provides shading for different times of the day. **Internal design** • All staircases should be internal. • Minimise the length of common walls between dwellings.	• Complies. • Where common walls are proposed, they have been designed adjacent to like uses to minimise noise disturbance.
	• Basement car parking shall be located beneath the building footprint. • Where possible natural ventilation shall be provided to basement car parking. • Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings.	• N/A. • N/A. • Windows and balconies have been primarily designed to address the street frontage or rear setback. Where windows are proposed to the side boundaries, they have been offset.
	• Minimise the location of noise sensitive rooms such as bedrooms adjoining noisier rooms such as bathrooms or kitchens or common corridors and stairwells.	• Where possible, common walls have been designed to adjoin like uses.
	• Where a site has frontage to a Classified Road, locate bedrooms away from the front of the site. • Where common walls are provided they must be carried to the underside of the roof and be constructed in accordance with *Part F5 of the Building Code of Australia*. • Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).	• N/A. • Capable of being complied with. • The balconies of upper level units will

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		overlook the entry points to the building and north eastern communal open space.
	Ground Floor Dwellings	
	• Design front gardens or terraces, which contribute to the spatial and visual structure of the street while maintaining adequate privacy for dwelling occupants. This can be achieved by animating the street edge, for example, by promoting individual entries for ground floor dwellings.	• The front setback will be landscaped. Private entrances are proposed to ground floor dwellings.
	• Create more pedestrian activity along the street and articulate the street edge by: o Balancing privacy requirements and pedestrian accessibility. o Providing appropriate fencing, lighting and/ or landscaping to meet privacy and safety requirements of occupants while contributing to a pleasant streetscape. o Utilising a change in level from the street to the private garden or terrace to minimise site lines from the streets into the dwelling for some dwellings. o Increasing street surveillance with doors and windows facing onto the street.	• The proposal will include appropriate fencing, lighting and landscaping to address the privacy and safety requirements of occupants. Street surveillance has been maximised with doors and windows facing onto the street.
	• Planting along the terrace edge contributes to a quality streetscape.	• None proposed.
	• Ground floor dwellings are special because they offer the potential for direct access from the street and on-grade private landscape areas. They also provide opportunities for the dwelling building and its landscape to respond to the streetscape and the public domain at the pedestrian scale. Ground floor dwellings also support housing choice by providing accessibility to the elderly and/or disabled and support families with small children.	• Three ground floor units are proposed.
	• Optimise the number of ground floor dwellings with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.	• All ground floor dwellings are provided with a separate entry.

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	• Provide ground floor dwellings with access to private open space, preferably as a courtyard.	• Complies.
	Security	
	• Entrances to buildings should be orientated towards the front of the site and facing the street.	• Pedestrian paths lead from the street frontage to individual ground level units and to the centre of the building where the residential lobby is sited.
	• The main entrance to dwellings or other premises should not be from rear lanes and should be designed with clear directions and signage.	• N/A.
	• Blank walls in general that address street frontages or public open space are discouraged. Where they are unavoidable building elements or landscaping must be used to break up large expanses of walls. In some cases an anti-graffiti coating will need to applied to the wall to a height of 2 metres.	• None proposed.
	• Minimise the number of entry points to buildings.	• Three access points are proposed to the central lobby. An intercom permits visitor access.
	• Reinforce the development boundary to strengthen the distinction between public and private space by o Employing a level change at the site and/or building threshold (subject to accessibility requirements) o Signage. o Entry awnings. o Fences, walls and gates. o Change of material in paving between the street and the development.	• Appropriate fencing/gates will be provided.
	• Optimise the visibility, functionality and safety of building entrances by: o Orienting entrances towards the public street. o Providing clear lines of sight between entrances, foyers and the street. o Providing direct entry to ground level dwellings from the street rather than through a common foyer. o Direct and well-lit access between car parks and dwellings, between car parks and lift lobbies and to all unit entrances.	• The development includes clear lines of sight between entrances and the street. As stated direct entry is

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		proposed to ground level dwellings rather than through a common foyer. The car park, lift lobbies and common areas will be well lit and designed as clear, direct paths.
	• Improve the opportunities for casual surveillance by: o Orienting living areas with views over public or communal open spaces, where possible. o Using bay windows and balconies, which protrude beyond the main façade and enable a wider angle of vision to the street. o Using corner windows, which provide oblique views of the street. o Providing casual views of common internal areas, such as lobbies and foyers, hallways, recreation areas and car parks.	• The living areas of upper level units are provided with views over the communal open space. The proposed south facing balconies will enable sightlines to the street.
	• Minimise opportunities for concealment by: o Avoiding blind or dark alcoves near lifts and stairwells, at the entrance and within indoor car parks, along corridors and walkways. o Providing well-lit routes throughout the development. o Providing appropriate levels of illumination for all common areas. o Providing graded illumination to car parks and illuminating entrances higher than the minimum acceptable standard.	• The development does not include any blind or dark alcoves near lifts and stairwells, or along corridors and walkways. Well-lit routes will be provided throughout the development.
	• Control access to the development by: o Making dwellings inaccessible from the balconies, roofs and windows of neighbouring buildings. o Separating the residential component of a development's car parking from any other building use and controlling car park access from public and common areas. o Providing direct access from car parks to dwelling lobbies for residents.	• Intercom access limits visitors to the site.

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	Natural Ventilation
	• Utilise the building layout and section to increase the potential for natural ventilation. Design solutions may include:
	  ○ Facilitating cross ventilation by designing narrow building depths and providing dual aspect dwellings, for example, cross through dwellings and corner dwellings.
	  ○ Facilitating convective currents by designing units, which draw cool air in at lower levels and allow warm air to escape at higher levels, for example, maisonette dwellings and two-storey dwellings.
	• Select doors and windows (that open) to maximise natural ventilation opportunities established by the dwelling layout.
	• Provide narrow building depths to support cross ventilation.
	• Avoid single-aspect dwellings with a southerly aspect.
	• Design the internal dwelling layout to promote natural ventilation by:
	  ○ Minimising interruptions in air flow through a dwelling.
	  ○ Grouping rooms with similar usage together, for example, keeping living spaces together and sleeping spaces together. This allows the dwelling to be compartmentalised for efficient summer cooling or winter heating.
	  ○ Select doors and operable windows to maximise natural ventilation opportunities established by the dwelling layout.
	
	Building Layout
	• The layout of dwellings within a residential flat building should minimise the extent of common walls.
	
	Storage Areas
	• A secure storage space is to be provided for each dwelling with a minimum volume 8 m3 (minimum dimension 1m2). This must be set aside exclusively for storage as part of the basement or garage.
	• Storage areas must be adequately lit and secure. Particular attention must be given to security of basement and garage storage areas.
		• Refer to Appendix B of this report.
		
		• Common walls have been minimised as much as possible.
		
		• Refer to Appendix B of this report.

Landscaping And Fencing	• The setback areas are to be utilised for canopy tree planting. The landscape design for all development must include canopy trees that will achieve a minimum 8 m height at maturity within front and rear setback areas.	• Reference should be made to the submitted Landscape

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	• Landscape planting should be principally comprised of native species to maintain the character of Liverpool and provide an integrated streetscape appearance. Species selected in environmentally sensitive areas should be indigenous to the locality. However, Council will consider the use of deciduous trees.
	• The landscaping shall contain an appropriate mix of canopy trees, shrubs and groundcovers. Avoid medium height shrubs (600 – 1800mm) especially along paths and close to windows and doors.
	• Landscaping in the vicinity of a driveway entrance should not obstruct visibility for the safe ingress and egress of vehicles and pedestrians.
	• Tree and shrub planting alongside and rear boundaries should assist in providing effective screening to adjoining properties.
	• Landscaping on any podium level or planter box shall be appropriately designed, and irrigated. Landscaping on podium levels and planter boxes should be accessible from habitable areas of dwellings or elsewhere as appropriate for gardener access in other forms of development.
	• The development must be designed around significant vegetation on the site.
	• It is important to retain significant vegetation to maintain an existing streetscape and enhance the visual appearance of new dwellings.
	• Trees adjacent to private open space areas and living rooms should provide summer shade and allow winter sun entry.
	• Where landscaping is used to control overlooking, species selected are to be a kind able to achieve privacy within 3 years.
	• All species of trees and shrubs should be drought resistant.
	• Advanced tree species are to be used for key elements with the landscape design concept.
	• Any tree with a mature height over 8m should be planted a minimum distance of 3m from the building or utility services.
	• Contribute to streetscape character and the amenity of the public domain by:
	  ○ Relating landscape design to the desired proportions and character of the streetscape.
	  ○ Using planting and landscape elements appropriate to the scale of the development.
	  ○ Mediating between and visually softening the bulk of large development for the person on the street.
	• Improve the energy efficiency and solar efficiency of dwellings and the microclimate of private open spaces.
	• Planting design solutions include:
	  ○ Trees for shading low-angle sun on the eastern and western sides of a dwelling.
	  ○ Trees that do not cast a shadow over solar collectors at any time of the year.
	  ○ Deciduous trees for shading of windows and open space areas in summer.
	• Design landscape which contributes to the site's particular and positive characteristics, for example by:
		Plan prepared by Stitch Design Studios.
		
		The proposed landscape design includes the provision of new trees which will grow to a mature height of between 8 – 9m.
		
		A combination of exotic and native shrub, hedge, grasses and tufted plants will further complement the landscaped areas of the development.

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	○ Enhancing habitat and ecology. ○ Retaining and incorporating trees, shrubs and ground covers endemic to the area, where appropriate. ○ Retaining and incorporating changes of level, visual markers, views and any significant site elements. **Planting on Structures** • Design for optimum conditions for plant growth by: • Providing soil depth, soil volume and soil area appropriate to the size of the plants to be established. • Providing appropriate soil conditions and irrigation methods. • Providing appropriate drainage. • Design planters to support the appropriate soil depth and plant selection by: • Ensuring planter proportions accommodate the largest volume of soil possible. Minimum soil depths will vary depending on the size of the plant. • However, soil depths greater than 1.5 m are unlikely to have any benefits for tree growth. Providing square or rectangular planting areas rather than long narrow linear areas. • Refer to DCP for minimum standards for plant sizes. **Fencing – Primary frontage** • The maximum height of a front fence is 1.2m. • The front fence may be built to a maximum height of 1.5m if the fence is setback 1m from the front boundary with suitable landscaping in front of the proposed fence. • Fences should not prevent surveillance by the dwelling's occupants of the street or communal areas. • The front fence must be 30% transparent. • Front fences shall be constructed in masonry, timber, metal pickets and/or vegetation and must be compatible with the proposed design of the dwelling. • The front fence may be built to a maximum of 1.8m only if ○ The primary frontage is situated on a Classified Road. ○ The fence is articulated by 1m for 50% of its length and have landscaping in front of the articulated portion. ○ The fence does not impede safe sight lines from the street and from vehicles entering and exiting the site. **Fencing – Secondary frontage** • Fences and walls must be a maximum of 1.8m in height, and constructed of masonry, timber and/or landscaped.	• None proposed. • A low part brick, part open design fence is proposed as detailed on the submitted elevations. • This may be conditioned.

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	• For side walls or fences along the secondary frontage, a maximum height of 1.2m is required for the first 9m measured from the front boundary, the remaining fence / wall may then be raised to a maximum of 1.8m. The secondary setback is the longest length boundary. **Boundary Fences** • The maximum height of side boundary fencing within the setback to the street is1.2m. • Boundary fences shall be lapped and capped timber or metal sheeting.	• This may be conditioned.
Car Parking And Access	**Car Parking** • Visitor car parking shall be clearly identified and may not be stacked car parking. • Visitor car parking shall be located between any roller shutter door and the front boundary. • Pedestrian and driveways shall be separated. • Driveways shall be designed to accommodate removalist vehicles. • Where possible vehicular entrances to the basement car parking shall be from the side of the building. As an alternative a curved driveway to an entrance at the front of the building may be considered if the entrance is not readily visible from the street. • Give preference to underground parking, whenever possible by: o Retaining and optimising the consolidated areas of deep soil zones. o Facilitating natural ventilation to basement and sub-basement car parking areas, where possible. o Integrating ventilation grills or screening devices of car park openings into the facade design and landscape design. o Providing safe and secure access for building users, including direct access to residential dwellings, where possible. o Providing a logical and efficient structural grid. There may be a larger floor area for basement car parking than for upper floors above ground. Upper floors, particularly in slender residential buildings, do not have to replicate basement car parking widths. • Where above ground enclosed parking cannot be avoided, ensure the design of the development mitigates any negative impact on streetscape and street amenity by: o Avoid exposed parking on the street frontage. o Hiding car parking behind the building facade. Where wall openings (windows, fenestrations) occur, ensure they are integrated into the overall facade scale, proportions and detail. **Pedestrian Access** • Utilise the site and it's planning to optimise accessibility to the development.	• Refer to SEPP (ARH) 2009 and the submitted Traffic Report prepared by Colston Budd Rogers & Kafes Pty. Ltd. There is no basement parking proposed. The proposal includes at grade car parking that is sited towards the rear of the site. • Complies.

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	• Provide high quality accessible routes to public and semi-public areas of the building and the site, including major entries, lobbies, communal open space, site facilities, parking areas, public streets and internal roads.
	• Promote equity by:
	  ○ Ensuring the main building entrance is accessible for all from the street and from car parking areas.
	  ○ Integrating ramps into the overall building and landscape design.
	  ○ Design ground floor dwellings to be accessible from the street, where applicable, and to their associated private open space.
	• Maximise the number of accessible and adaptable dwellings in a building by:
	  ○ Providing more than one accessible entrance where a development contains clusters of buildings.
	  ○ Separating and clearly distinguish between pedestrian accessways and vehicle accessways.
	  ○ Locating vehicle entries away from main pedestrian entries and on secondary.
		• Complies.
		• Refer to submitted Access Report prepared by Morris-Goding Accessibility Consulting.
		• Refer to submitted Access Report prepared by Morris-Goding Accessibility Consulting.

Amenity And Environmental Impact	**Overshadowing**
	• Adjoining properties must receive a minimum of three hours of sunlight between 9am and 5pm on 21 June to at least:
	  ○ One living, rumpus room or the like; and
	  ○ 50% of the private open space
	
	Privacy
	• Building siting, window location, balconies and fencing should take account of the importance of the privacy of onsite and adjoining buildings and outdoor spaces.
	• Windows to habitable rooms should be located so they do not overlook such windows in adjoining properties, other dwellings within the development or areas of private open space.
	• Landscaping should be used where possible to increase visual privacy between dwellings and adjoining properties.
	• Where possible the ground floor dwellings should be located above ground level to ensure privacy for occupants of the dwellings.
	• Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings by:
	  ○ Balconies to screen other balconies and any ground level private open space.
	  ○ Separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms.
		• Refer to SEPP 65/ADG.
		
		• Refer to SEPP 65/ADG.

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	○ Changing the level between ground floor dwellings with their associated private open space, and the public domain or communal open space. • Use detailed site and building design elements to increase privacy without compromising access to light and air by: ○ Offsetting windows of dwellings in new development and adjacent development windows. ○ Recessed balconies and/or vertical fins between adjacent balconies. ○ Solid or semi-solid balustrades to balconies - louvres or screen panels to windows and/or balconies. ○ Fencing. ○ Vegetation as a screen between spaces. ○ Incorporating planter boxes into walls or balustrades to increase the visual separation between areas. ○ Utilising pergolas or shading devises to limit overlooking of lower dwellings or private open space. **Acoustic Impact** • Noise attenuation measures should be incorporated into building design to ensure acoustic privacy between on-site and adjoining buildings. • Buildings having frontage to a Classified Road or a railway and impacted upon by rail or traffic related noises must incorporate the appropriate noise and vibration mitigation measures into the design in terms of the site layout, building materials and design, orientation of the buildings and location of sleeping and recreation areas. • The proposed buildings must comply with the Environment Protection Authority criteria and the current relevant Australian Standards for noise and vibration and quality assurance. • Arrange dwellings within a development to minimise noise transition between dwellings by: ○ Locating busy, noisy areas next to each other and quieter areas next to other quiet areas, for example, living rooms with living rooms, bedrooms with bedrooms ○ Using storage or circulation zones within an dwelling to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas ○ Minimising the amount of common walls with other dwellings. ○ Design the internal dwelling layout to separate noisier spaces from quieter spaces by: ▪ Grouping uses within a dwelling - bedrooms with bedrooms and service areas like kitchen, bathroom, and laundry together.	• Complies. Careful consideration has been made to separate noisier spaces from quieter spaces by grouping uses within a dwelling - bedrooms with bedrooms and service areas like kitchen, bathroom, and laundry together. Where possible, similar uses adjoin each other between units to minimise noise transfer. The design has sought to minimise the amount of common

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		walls with other dwellings to further reduce the potential for noise transfer. Reference should also be made to the submitted Acoustic Report.
Site Services	**Letterboxes** • Letterboxes shall to be provided for each dwelling on site, easily accessible from the street, able to be securely locked and provided in accordance with Australia Post's requirements. • Freestanding letterbox structures should be designed and constructed of materials that relate to the main building. • Residential numbering should be attached to the letterbox so that it is clearly visible from the street frontage. Numbers should be 75mm in height, reflective and in contrast to the backing material. **Waste Management** • Waste disposal facilities shall be provided for development. These shall be located adjacent to the driveway entrance to the site. • Any structure involving waste disposal facilities shall be located as follows: o Setback 1 m from the front boundary to the street. o Landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape. o Not be located adjacent to an adjoining residential property. o Details of the design of waste disposal facilities are shown in Part 1 of the DCP. **Frontage works and damage to Council infrastructure** • Where a footpath, road shoulder or new or enlarged access driveway is required to be provided this shall be provided at no cost to Council.	• Complies. • Complies. • This may be conditioned. • Bin room is located off the central lobby, adjacent to the carpark. • The bin room will not be visible to the street. • This may be conditioned.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	• Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure. • Where there are no existing street trees in front of the site and contributions have not been collected for street tree planting it may be a condition of consent that street trees be provided in the footpath area immediately in front of the site. **Electricity Sub Station** • In some cases it may be necessary to provide an electricity substation at the front of the development adjacent to the street frontage. This will involve dedication of the area as a public road to allow access by the electricity provider. The front boundary treatment used elsewhere on the street frontage.	• This may be conditioned. • This may be conditioned. • A substation is proposed in the south eastern corner of the site. Refer to submitted documentation provided by Bonacci and Northrop.