GAT & Associates Pty Ltd

Statement of Environmental Effects

July 2018

23-29 Harvey Avenue, Moorebank

Demolition of all Existing Structures and the Construction of a 6 Storey Residential Flat Building Comprising of 58 Units under the Provisions of SEPP (Affordable Rental Housing) 2009

TOWN PLANNERS

BASIX/ENERGY ASSESSORS

Sydney Office

Suite 15, Level 1
469-475 Parramatta Road
LEICHHARDT NSW 2040

Brisbane Office

3A Cambridge Street
WEST END QLD 4101

www.gatandassociates.com.au

Mail: PO Box 96, HABERFIELD NSW 2045
Email gat@gatassoc.com.au

Phone 61 2 9569 1100
Facsimile 61 2 9569 1103

Project Ref.	**P3069**		Draft	Final
Prepared By	Philip Tan	PT	✓	✓
Checked By	Gerard Turrisi	GT	✓	✓

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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 23-29 Harvey Avenue, Moorebank. The proposal will provide for a total of 58 units, with 45% of the development being allocated as affordable units pursuant to the provisions of SEPP (Affordable Rental Housing) 2009.

This development application follows two Design Excellence Panel meetings, with the most recent meeting held on the 24 April 2018 (PL-148/2017). 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 inclusion of a large canopy trees to the rear communal open space of the site;
- The opposite facing balconies belonging to units on Levels 3, 4, 5 have been staggered and provided with privacy screen to minimise amenity issues;
- Appropriate shading devices such as eaves and louvres have been included to provide year round protection;
- Detailed design features to the communal open spaces to provide for more functional and amenable spaces which includes a central forecourt.

A copy of the minutes to the Design Excellence Panel Meetings have been included under Appendix F of this SEE.

GAT & Associates have been engaged by GreenForest RE Pty Ltd 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 Pagano Architects, Job No. 1801, Sheet Number A00.01 – A10.01.

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:

- Access Compliance Report prepared by BCA Vision
- Design Compliance Assessment prepared by BCA Vision
- Landscape Plans prepared by Conzept Landscape Architects
- Waste Management Plan prepared by LOKA Consulting Engineers
- Stormwater Concept Plans prepared by LOKA Consulting Engineers
- BASIX Certificate prepared by LOKA Consulting Engineers
- Traffic Management Report prepared by LOKA Consulting Engineers
- Traffic and Transport Impact Assessment prepared by LOKA Consulting Engineers
- Quantity Surveyor Report prepared by Archi QS
- Photomontages prepared by TTA Studio.

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 4.15 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 site is commonly known as Nos. 23 – 29 Harvey Avenue, Moorebank and legally described as Lots 25, 26, 27 & 28 in Deposited Plan 236405.

The subject site is located on the southern side of Harvey Avenue and is bounded by Lucas Avenue to the east. The site provides for a frontage of approximately 75.06 metres and an overall site area of approximately 2,745.2m^2. Refer to Figure 1 below.

Located on the subject site at present are detached dwellings with associated outbuildings. All existing structures will be demolished as part of the proposed works.

Development to the north, east and west is typically low density residential in nature. 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.

Figure 1 Site Location Map

Source: Google Maps, 2017

Located to the south-west of the site is the Moorebank Shopping Centre providing access to local shops and services. The site is also located in proximity to the Nuwarra Public School and Moorebank Library.

In terms of public transport infrastructure, the site is within walking distance to bus stops located along Nuwarra Road, Newbridge Road, Maddecks Avenue and Stockton Avenue which provide links to Liverpool Station.

Development to the north, east and west is typically low density residential with single and double storey detached dwellings forming the existing character of the street. In view of the R4 High Density Residential zoning 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. This is also represented by the recent residential flat building development at 80-82

Lucas Avenue, Moorebank and the recent development application at 19 – 21 Harvey Avenue, Moorebank that is currently being assessed at Council.

Refer to Figure 2 on the following page for a series of photographs of the site and surrounds.

The existing dwellings on Nos. 23, 25, 27 and 29 Harvey Avenue (clockwise)

Photo taken from Astor Street looking down the view corridor to Harvey Avenue.

Photo looking to Astor Street from No. 25 Harvey Avenue.

The existing streetscape of McKay Avenue

The streetscape of Lucas Avenue, with the six storey residential flat building under construction at No. 80-82 Lucas Avenue seen in the background.

Figure 2 Photos of Site and Surround

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, with part of the development as affordable housing.

The proposal comprises of a total of 58 units including 2 x studio units, 14 x 1 bedroom units and 35 x 2 bedroom units and 7 x 3 bedroom units over two levels of basement parking.

The proposed development incorporates a modern contemporary design with a strong presentation to Harvey Avenue which includes generous landscaping and open space to the overall site.

A detailed summary of the proposal is provided in the paragraphs below:

Demolition

The proposal will involve the demolition of all existing dwellings and structures across all four allotments.

Proposed Development

Figure 3 Photomontage of the central forecourt

Following discussion and advice received by the Design Excellence Panel, the proposed development before Council is visually read as two six storey buildings on the site. Landscaped open spaces are provided to the front, side and rear setbacks, while a centralised communal open space with landscaping runs along the middle of the development.

Both buildings are joined at the rear portion on Levels 1 and 2, while the upper Levels 3 -5 are essentially two separate buildings.

The intent of the design is to create a break to the built form due to the length of the frontage. This break also provides for light and ventilation, given its northern orientation, to penetrate into the centre of the site, further benefiting the amenity of future residents and visitors.

Basement

The proposal involves two levels of basement parking accommodating 60 car spaces.

The basement levels include two sets of fire stairs and two sets of lifts. A services room is located on Basement Level 2. Two garbage rooms are located in Basement Level 1, with W/C amenities for cleaners. The proposed basement levels also provide for storage areas to the units.

Vechicular access into the basement level is via a ramp that is accessible off the vehicular crossing at Harvey Avenue that is proposed to be located at the north-western corner of the site

Ground Level

This floor consists of the following unit mix:

3 x 1 bedroom units

5 x 2 bedroom units

2 x 3 bedroom units

A pedestrian entrance is proposed to each of the lobby area of the eastern building and the western building. Therefore, the building proposes two formal pedestrian entries into the development and a landscaped forecourt with pedestrian entry located in the middle of the development.

Three of the four units that front Harvey Avenue have private individual entry gates to the street.

Landscaping is proposed along the boundaries of the site, with a centralised forecourt area with a direct connection to the rear landscaped communal open space, that includes a substantial feature tree to create an entry statement to the development. The front setback provides for landscaped open spaces which creates a garden setting to the street.

Levels 1 & 2

These two floors consist of the following unit mix to each floor:

1 x studio unit

4 x 1 bedroom units

6 x 2 bedroom units

1 x 3 bedroom units

Both levels are joined at the rear. The units have been designed with balconies that have their orientation to the street and to the rear communal open spaces. Where side balconies are proposed, being to Units 102 and 202, these have been appropriately screened to maintain privacy.

Levels 3, 4, 5

These two floors consist of the following unit mix to each floor:

1 x studio unit

4 x 1 bedroom units

6 x 2 bedroom units

1 x 3 bedroom units

These levels have floor plates which are repeated. The building presents itself as two buildings with a gap through the middle of the development.

The lobbies of these levels have been provided with openings at both ends to enable natural light and natural ventilation to penetrate into these spaces, reducing its reliance on mechanical lighting and ventilation.

Roof

Both buildings are provided with a roof top communal open space with landscaped areas, BBQ facilities and seating, contributing to the amenity of the development.

Reference should be made to the submitted plans prepared by Pagano Architects.

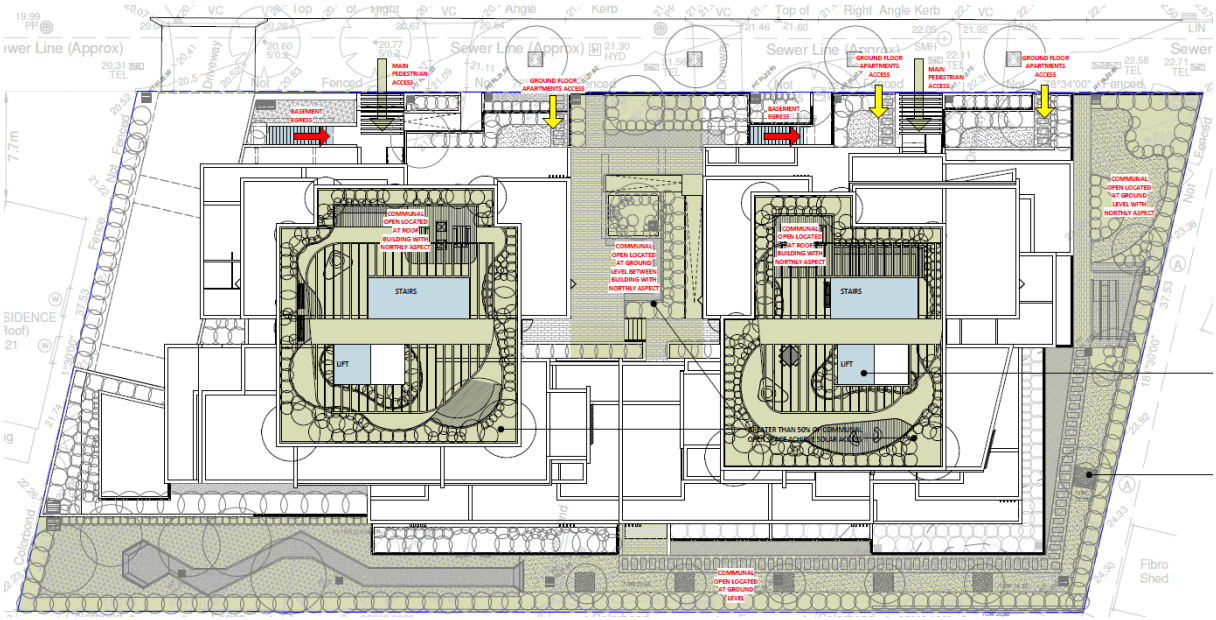


Figure 4 Communal Open Spaces on the Roof

Source: Pagano Architects 2018

Drawing No A10.01 provide for the proposed finishes and materials. These are further demonstrated in the elevation plans. The external walls will generally comprise of face brick to the basement and render to the upper component of the development, to provide for visual interest and to visually anchor the building. A combination of flat roof forms and pergolas to the roof top communal open spaces compliments the modern design of the building which is further realised through the use of metal screening to the balconies and glass balustrades.

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 to both entrances from the street to allow for weather protection and a landscape feature.

The proposal also seeks the removal of two existing trees, one being a street tree and another being on the existing No. 27 Harvey Avenue allotment. Replacement trees are provided to the development with a variation of plantings ranging from trees, shrubs and groundcovers to create a landscaped aspect to the street. Reference should be made to Section 4.3.1 (a) of this 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. 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 4.15 Evaluation 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 4.15 EVALUATION

The following section provides an assessment of the proposed development in accordance with the provisions of Section 4.15 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 Soil & Water Management Plan prepared by LOKA Consulting Engineers, under cover of the Stormwater Concept Plan.

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 LOKA Consulting Engineering 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 4,526.84m^2 or an FSR of 1.65:1. Therefore, the proposal is fully compliant with the FSR, pursuant to the provisions under SEPP (ARH) 2009.

4.1.3.(a) 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 and double storey detached dwellings that are of an older housing stock. There are however examples of a newer six storey apartment development further to the east of the site, located along Lucas Avenue, as depicted in Section 2 and under Figure 3 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.

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 and provides for a balance between built form and landscaped area. The current application follows the recent six storey residential flat building development of 80-82 Lucas Avenue and the development application for another six storey residential flat building under the provisions of SEPP Affordable Rental Housing at 19-21 Harvey Avenue. These developments are indicative of the future built environment of this neighbourhood. The current proposal for the subject site, being 23-29 Harvey Avenue is indicative of this changing landscape and sets the tone for the revitalisation of the precinct to align with the future desired character of the area envisioned by Council's development controls.

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. As suggested by the Design Excellence Panel, the proposal incorporates substantial trees to the rear setback, eastern side and to the front setback. Emphasis is placed in creating a landscaped outlook and a feature entry to the development through the centralised forecourt which is anchored by a feature tree. The topography of the site will not substantially change apart from the proposed basement and the area occupied by the building's footprint.

- Street patterns:

The 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 for residential flat building developments through the consolidation of Nos. 23, 25, 27 and 29 Harvey Avenue.

Parking is proposed within two levels of basement, with the car park entry ramp located along the western section of the site. The basement parking will be generally within the building's footprint and concealed from the street. 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. However, it is worth noting that the middle point of the overall consolidated site has a direct interface to Astor Street. The proposal seeks to provide for a centralised landscaped forecourt with a feature tree to create a entry statement for users travelling down Astor Street toward Harvey Avenue.

- Conclusion:

Based on the above, it is our view that the proposed development is in keeping with the future character of the area, while noting that existing character of the street will not be at a detriment as a result of this proposal.

The presentation of the building is modern in its form complemented through the selected materials and finishes which comprise of predominantly face brick and render to the external walls, with clean lines and a well defined base and upper components. The modern design of the building which is further realised through the use of aluminium screening to the balconies and glass balustrades.

Furthermore, generous amounts of landscaped areas are provided to the overall site, with the inclusion of new substantial tree throughout the site to create a landscaped setting. The proposed landscaping also maintains the existing landscaped character that is located at the rear of the subject site and adjoining properties.

The proposal will be consistent with the desired future character of the area evident through its zoning and emerging development applications such as the six storey residential flat building that is under construction at 80-82 Lucas Avenue. The future bulk and scale of developments in this area are established by the land zoning, floor space and the height controls under Council's LEP and DCP controls. Therefore, the bulk and scale expressed by the proposal is characteristic of the future desired character of this emerging high density area.

The proposed development will greatly benefit the local community by providing for the supply of new housing and 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.

The history of the site indicates a history of residential purposes. Therefore, it is not likely that the site has experienced any contamination.

In accordance with State Environmental Planning Policy No. 55, Council is able to conclude that no further assessment of contamination is necessary.

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 2015 and commenced on 17 July 2015. For development applications lodged after 19 June 2015 and determined after 17 July 2015, 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 Pagano Architects.

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 and an assessment of the development against the design objectives under the NSW Apartment Design Guide are addressed under Appendix B of this report.

The following design objectives under the NSW Apartment Design Guide such as Objective 3B-2 Orientation: Overshadowing and Objective 3F-1 Visual Privacy have been expanded below under the following sub-sections:

4.1.5.(a) Orientation: Overshadowing

The proposed development will result in overshadowing of the following properties in mid-winter:

- 21 Harvey Avenue
- 29 Harvey Avenue
- 31 Harvey Avenue
- 26 McKay Avenue
- 28 McKay Avenue
- 30 McKay Avenue
- 32 McKay Avenue
- 36 McKay Avenue
- 65 Lucas Avenue

In terms of 21 Harvey Avenue and 26 McKay Avenue, these sites will only be partially overshadowed at its eastern sections for less than 2 hours in the morning of June 21. Therefore, these properties will continue to achieve more than 3 hours of solar access in mid-winter in the afternoon hours.

The sites of 28, 30, 32 and 34 McKay Avenue will be overshadowed for more than 3 hours on June 21. It is inevitable that these sites would be overshadowed in mid-winter due to the orientation of the lots. The north-south orientation of the allotments renders any future development on the northern allotments to impact upon the southern allotments to an extent.

At 9am, 26, 28, and 30 McKay Avenue will be mostly overshadowed by the proposal, while only a portion of 32 McKay at its rear setback will be affected.

At 12pm, slightly over half of 28, 30, and 34 McKay Avenue will be overshadowed. Care and consideration is provided in the design of the development to create a gap in the middle of the building, reducing its overall impact on No. 32 McKay Avenue from 12noon onwards.

At 3pm, 32 and 34 McKay Avenue will be overshadowed.

At 3pm, 36 McKay Avenue and 65 Lucas Avenue will also see an impact to their solar access, nevertheless, these properties will continue to achieve more than 3 hours of solar access during the morning and noon hours on June 21.

While the above assesses the impact to the existing development, the proposal also takes into account the future impact what of what is likely to be built on adjoining sites.

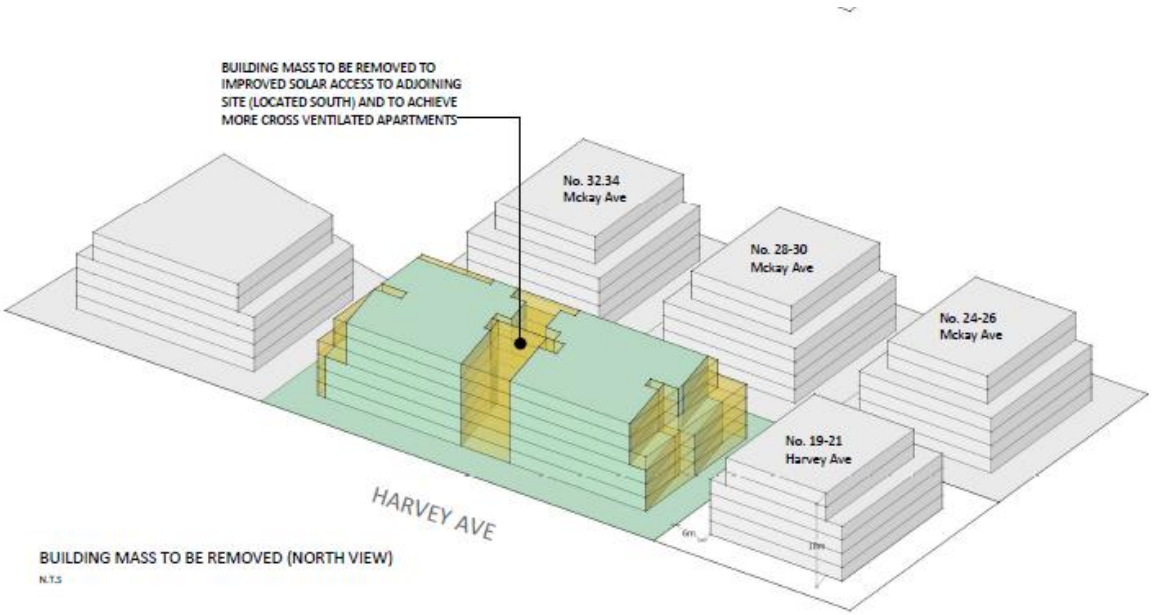
Due to the north-south orientation of the allotments and the densities that are encouraged by the development controls to this area, some overshadowing is inevitable. The planning principle established in the case *of The Benevolent Society v Waverley Council [2010] NSWLEC 1082* have acknowledged that it is harder to protect sunlight at higher densities [first dot point], as quoted below:

> "*The ease with which sunlight access can be protected is inversely proportional to the density of development. At low densities, there is a reasonable expectation that a dwelling and some of its open space will retain its existing sunlight. (However, even at low densities there are sites and buildings that are highly vulnerable to being overshadowed.) At higher densities sunlight is harder to protect and the claim to retain it is not as strong.*"

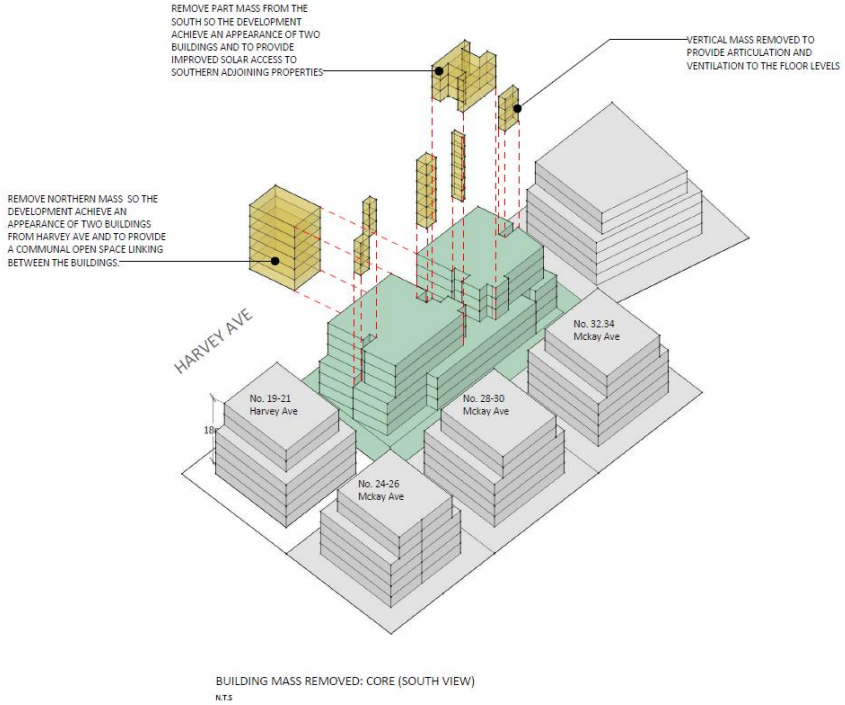
A Sun View Solar Study to the southern adjoining properties has been prepared by Pagano Architects (Sheet No. A07.03) which depict the possible future massing of developments which could occur on 28 – 34 McKay Avenue and their potential for achieving solar access. The diagrams provided under Sheet No. A0703 show the two southern lots being consolidated to provide for a six storey residential flat buildings, with Nos 28-30 McKay Avenue being one development and Nos. 32-34 McKay Avenue being another development. Reference should be made to the architectural plans attached under separate cover.

It is worthy to note that the design of the development had undergone two Design Excellence Panel meetings where the overall built form has been refined to its current state. In preparation for the most recent Design Excellence Panel meeting, a detailed architectural analysis of the site and its potential future surroundings was prepared. The overall massing was then further articulated to remove bulk and mass to improve sunlight and minimise visual bulk to the adjoining properties (see Sheet No. A01.04). The figures below provide an extract of the analysis undertaken by Pagano Architects.

The development begins with an overall mass which is compliant with the separation criteria under Objective 3F-1 of the NSW Apartment Design Guide.



The next step was to identify the areas of the building mass to be removed to provide for articulation and reduction of bulk and scale to the overall development. These include removal of the middle northern mass to create the appearance of two buildings, removal of the upper level mass on the southern section of the development and vertical mass on side elevations of the building to provide for articulation and ventilation. These work together in breaking up lengthy façade of the building envelope.



The final form ends up being a reduced bulk, thereby allowing improved solar access to the northern properties and that which also improves the overall visual interface of the building to adjoining neighbours.

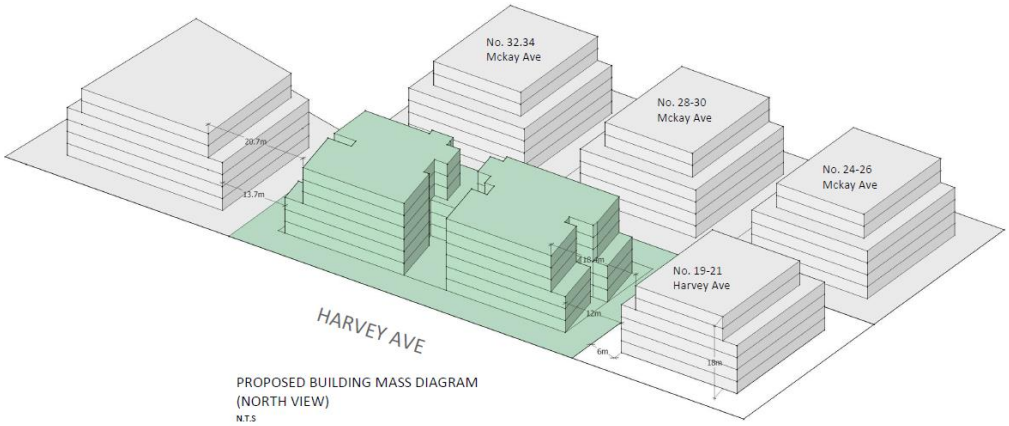


Figure 5 Massing Diagram Study

These diagrams above show building envelopes that is compliant with the ADG separation requirements on our subject site and to each of the abovementioned neighbouring sites.

Based on the assessment of the solar diagrams, the potential future developments to the rear may achieve at least 2 hours of solar access to 70% of future units with No. 32-34 McKay Avenue achieving this in the mornings in mid-winter and No. 28-30 McKay Avenue achieving this in the afternoon hours of mid-winter. The reduced bulk would marginally improve solar access to the southern properties as the overshadowing is largely a result of the orientation of the allotments and the proposed densities around the site.

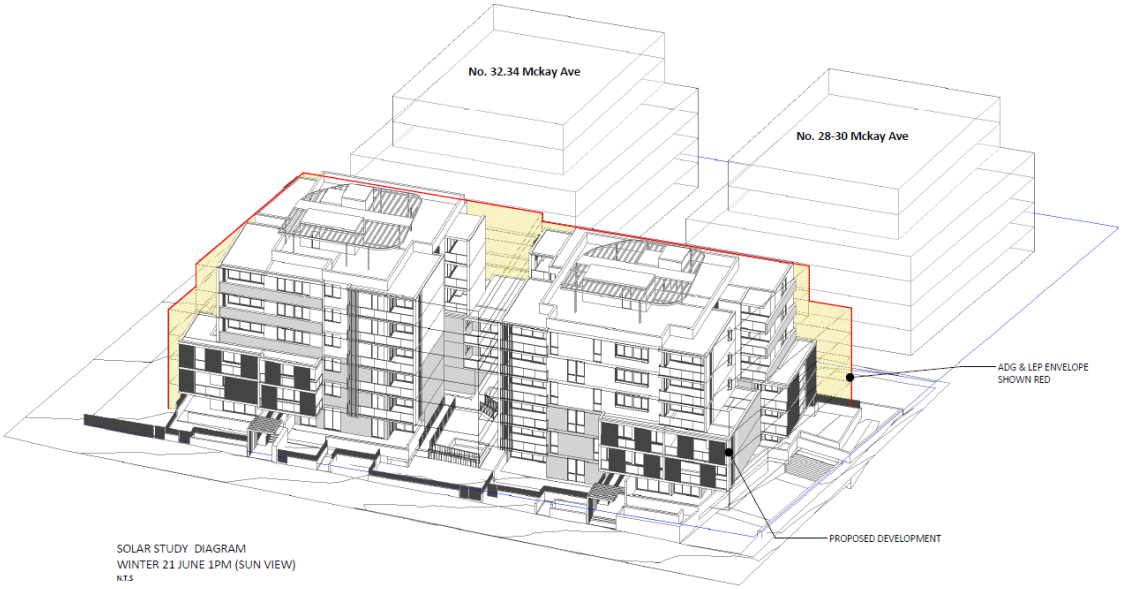


Figure 6 Solar Study Diagram

Based on the above, it is considered that the proposal represents a development that is suitable for the site and has taken considerable measures to reduce its bulk and overshadowing impact on adjoining properties. The proposal presents a six storey residential flat building which is in alignment with the desired future character of the area.

4.1.5.(b) Visual Privacy

Minor variations to the separation of buildings from its neighbouring boundaries are sought at each level above the Ground Floor.

At Level 1 – 2, a minimum 6m is proposed to the eastern side and rear setbacks. To the western side setback, the development generally complies with the minimum 6m setback. A minor protrusion occurs to the north-western corner of the balconies which belong to Unit 101 and Unit 201. This protrusion encroaches into the 6m setback by some 500mm, however it is deemed that this would not create an impact in terms of visual privacy nor bulk.

At Levels 3 -5 , the development is further recessed from the lower levels, in consideration of the ADG objectives. Level 3 is compliant with the ADG requirements.

At Levels 4 and 5, the eastern side and rear setbacks are compliant with the minimum 9m setback to the boundaries from habitable spaces. Minor encroachment occurs into the 9m setback on the western elevation due to the balcony forms where its corners protrude into the setback. These protrusions do not create a privacy impact nor would it cause any visual bulk as it relates to blade walls/minor corners of the balconies. Refer to Figure 7 below.

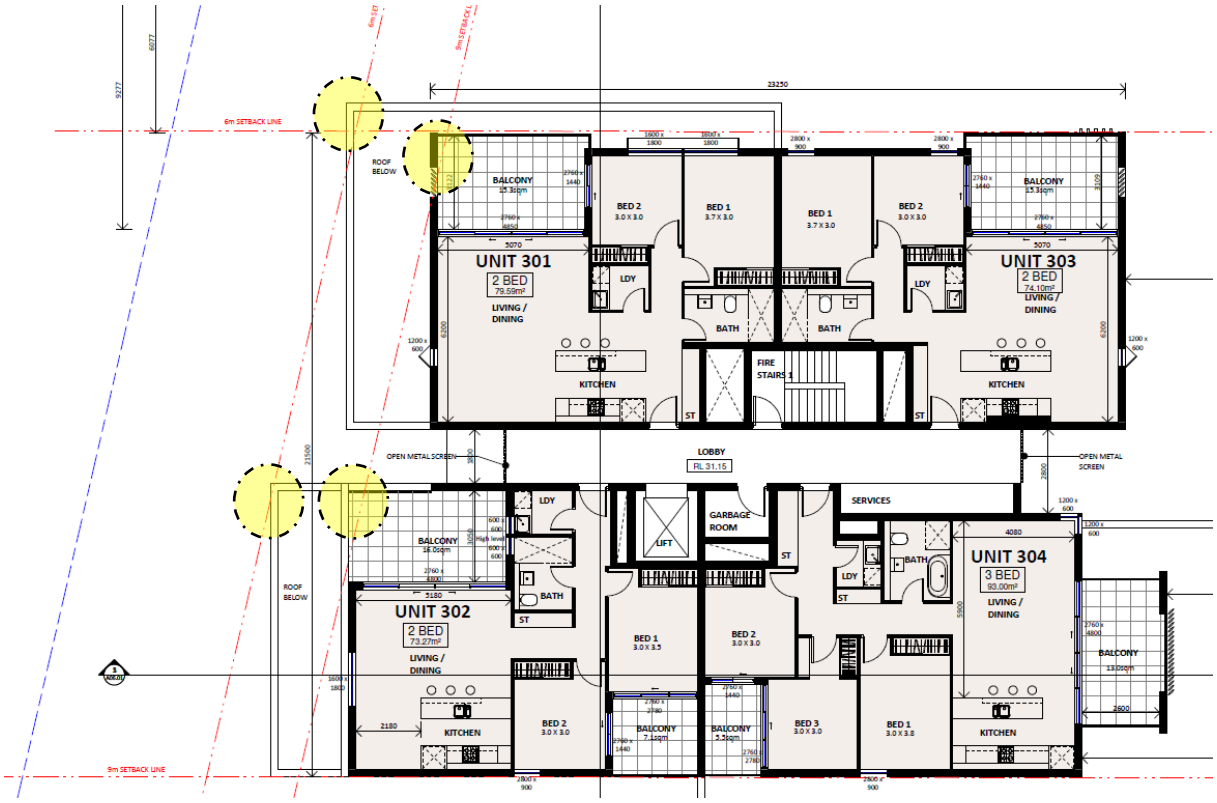


Figure 7 Areas of Protrusions (Circled)

It is therefore considered that the proposal meets the objectives of the criteria and that the minor variations is considered to be negligible.

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 8 below.

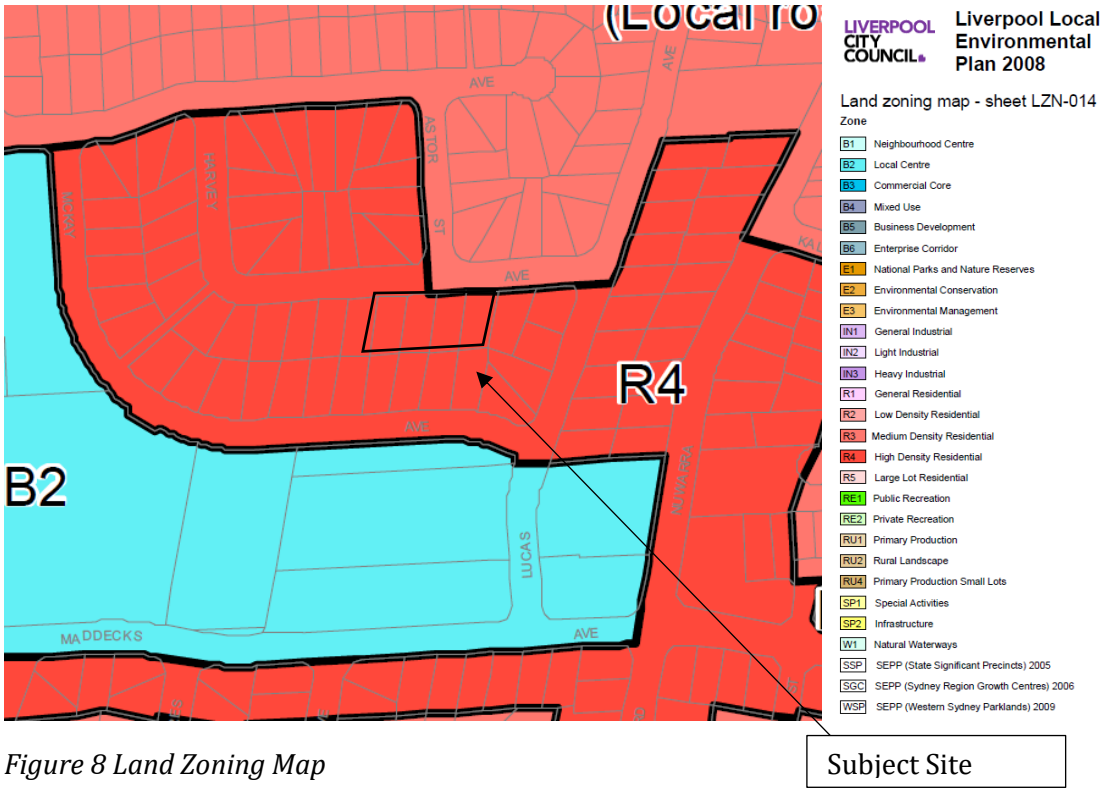


Figure 8 Land Zoning Map

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 four dwellings on the site with 58 proposed units to provide for the housing needs of the community within a high density environment.
- The proposal comprises of a well-proportioned mix of studios, 1, 2 and 3 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 stops located just 350m from the development. The site is also located in proximity to the Moorebank Shopping Centre to the south-east of the site.

The Streetscape Analysis prepared by Pagano Architects under Sheet No. A01.03 depicts the planning controls of sites within the vicinity of the proposed development and the potential amalgamation patterns of allotments in the vicinity. It is considered that the proposal will not result in the fragmentation of land or the future isolation of adjoining sites.

The proposal is therefore consistent with the zoning and objectives of the zone.

4.1.6.(b) Height of buildings

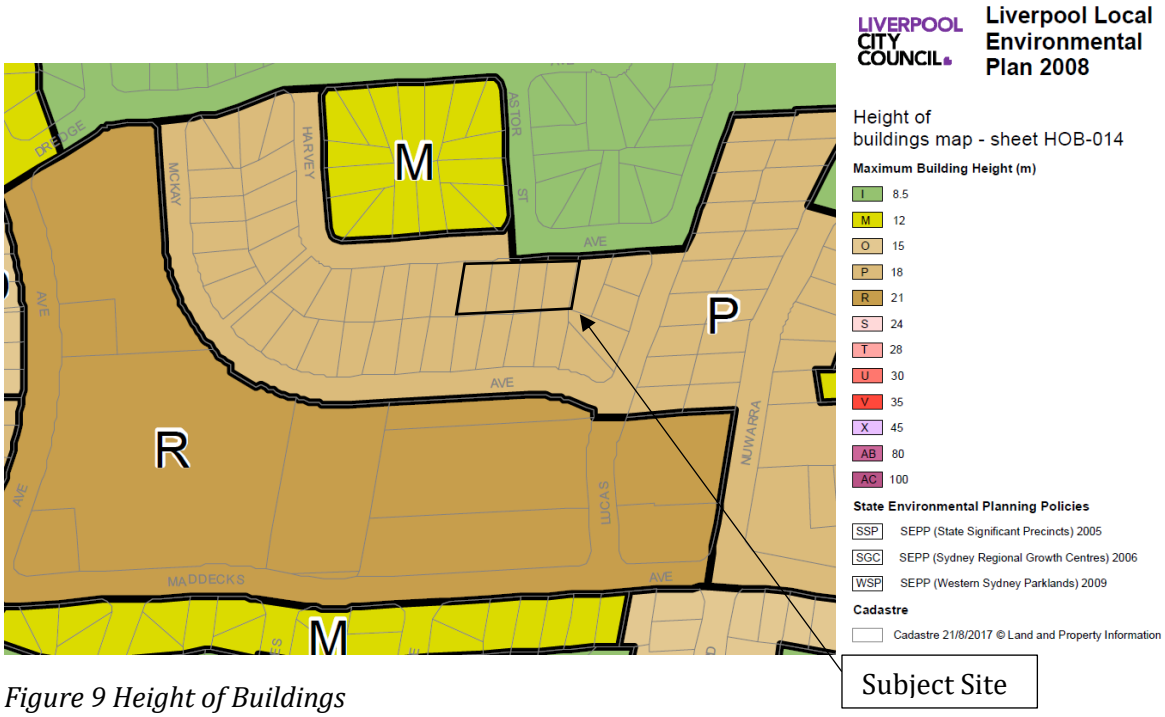


Figure 9 Height of Buildings

The subject site has a prescribe maximum building height of 18 metres.

The proposal will result in a maximum building height of 22 metres, exceeding the control by 4.00m. The variation is a result of the combination of the natural fall of the land and largely relates to the lift overruns and the proposed pergolas which are provided to the rooftop communal open spaces. Refer to Figure 10 below prepared by Pagano Architects and also detailed under Sheet No. A06.01.

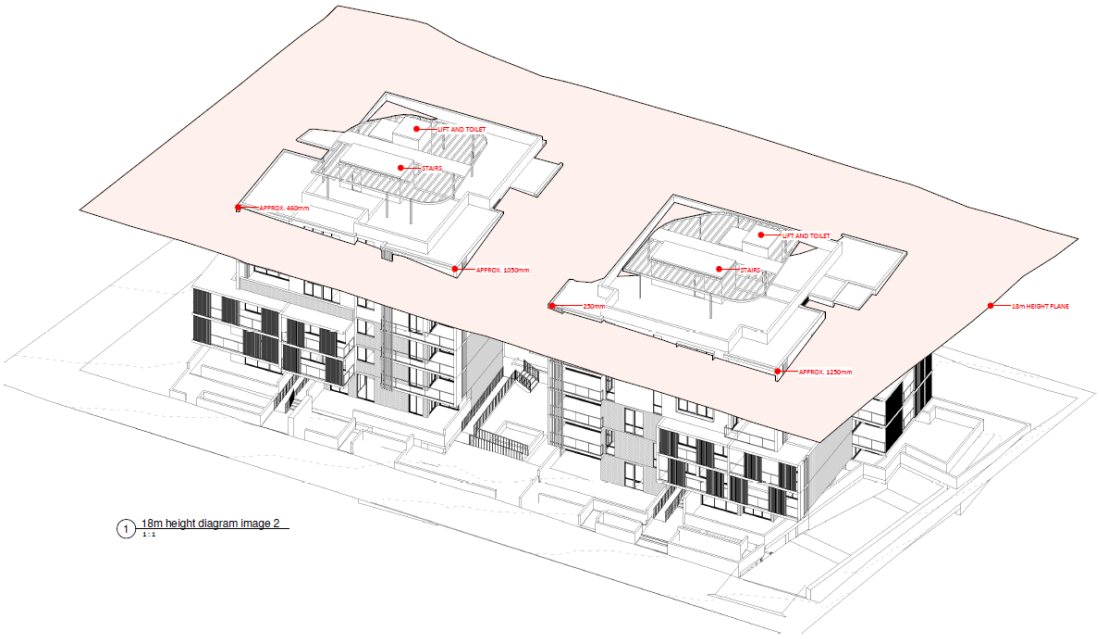


Figure 10 18m Height Diagram

Source: Pagano Architects 2018

It is worthy to note that the greatest variation being 4.00m occurs only at the centre of the site and to the eastern building and is in part attributable to the lift overrun and the pergola structure. The height variation to the western building is 3.66m. To the edges of the building and the upper-most storey of both buildings consisting habitable levels, the variation is significantly less. It is considered that the height breach is largely only to the lift overrun, pergola and toilets which all contribute to the amenity of the rooftop communal open space of each building. The provision of a communal open space on the roof is commonly found in many high density developments, therefore this proposal is characteristic of future developments in the area.

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.

It is worth noting that the breach resulting from rooftop communal open spaces, which aim to improve the amenity of future residents is far more positive than a breach resulting from habitable floor area which would add to the bulk and scale of the building. Furthermore, the exceedance of the allowable building height for the site was also considered acceptable by the Panel on the basis that the exceedance is attributed to the rooftop communal open space that include amenity facilities (toilet and shade structures).

Reference should be made to the submitted Clause 4.6 Variation under Appendix E.

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.*

4.2.1 Draft State Environmental Planning Policy (Environment)

In October 2017, the NSW Department of Planning and Environment begun its review of the State's planning policies to modernise and simplify the planning systems.

The planning provisions for waterways, catchments, world heritage and urban bushland are currently contained in seven State Environmental Planning Policies (SEPPs), the Standard Instrument – Principal Local Environmental Plan (Standard Instrument), and in Ministerial Directions for plan making issued under the Environmental Planning and Assessment Act 1979.

An Explanation of Intended Effect for the SEPP (Environment) was publicly notified between 31 October 2017 to 31 January 2018. The SEPP (Environment) will integrate provisions from seven existing SEPPs relating to catchments, waterways, urban bushland and world heritage, and to reduce the complexity and streamline the planning system.

The proposed SEPP (Environment) will:

- Encourage the proper management, development and conservation of natural resources and the protection of the environment, in line with the objectives of the Act
- Enable growth that maintains and enhances the health and integrity of our natural and cultural heritage for the benefit and enjoyment of the present community and for future generations
- Streamline development assessment by identifying and considering environmental values and constraints at the earliest possible stage in the development decision making process, using evidenced based planning methods
- Promote ecologically sustainable development that supports a balanced approach to the use of land and natural resources, and provides for long term environmental, economic and social wellbeing
- Adopt a risk based approach to minimise cumulative negative impacts of development on both the immediate site and on a surrounding area or region
- The proposed SEPP fits within a range of plans and strategies including A Plan for Growing Sydney, draft District Plans, Regional Plans, local environmental plans, Ministerial Directions, and development control plans

It is considered that the proposal would not be contrary to the provisions under the current Greater Metropolitan Regional Environmental Plan No. 2 Georges River Catchment which has been assessed under Section 4.1.1 of this SEE and determined to not cause any negative impacts to the Georges River Catchment.

Therefore, based on the information of the Explanation of Intended Effect of the SEPP (Environment), it is considered that the proposal has considered and is consistent with the draft planning instrument being, the proposed SEPP (Environment).

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

The development will retain the trees located on the eastern side of the site as requested by Council in the first Design Excellence Panel meeting advice, where it advised the following:

> *"Council requires the retention of the 2 x Brushbox trees and 1 x Crepe Myrtle tree within the front setback area. These trees are to be incorporated into the landscaping for the development."*

The Brushbox tree that is currently on 27 Harvey Avenue that was requested to be retained will be replaced by a substantial tree, being a Claret Ash which will reach a mature height of 10m and a canopy spread of 5m, in the landscaped forecourt located in the middle of the overall consolidated site. This will provide for a feature and entry statement to the development. This is ultimately a better location in the long term from a design perspective as it is positioned to be directly opposite Astor Street. This also aligns with the recent advice by the Design Excellence Panel:

> *"The ground level Communal Open Space at the centre of the site is in an excellent location in that it is located within a northern orientation. However, it should be supplemented with a decent sized tree. The Panel recommends that consideration be given to provide indented parking bay(s) within the basement car park directly below this central Communal Open Space so as to provide the required deep soil zone for the planting of a large canopy tree."*

A single Bottlebrush tree is proposed to be removed. This tree is located towards on the street and in front of the north-western section corner of the subject site. This Bottlebrush is considered an insignificant tree and its removal will facilitate the positioning of the proposed driveway and vehicular crossing on the north-western corner of the site. Given the site's context, it is considered that the proposed location of this driveway and vehicular crossing is placed logically in terms of traffic mitigation, given that the junction of Astor Street and Harvey Avenue is located directly in front of the middle of the site. This is also aligns with Council's DCP Part 3.7 Section 6 Control 5.

It is worth noting that this Bottlebrush tree already adjoins an existing vehicular crossing.

The submitted Landscape Plan however nominates new tree plantings across the perimeter of the site to replace those trees being removed. These also include four (4) new native trees, being "Snow in Summer" trees, along the front of the subject site.

The juxtaposition in colours created by the Claret Ash trees within the subject site and the "Snow in Summer" trees to the outside of the front boundary will add to the visual interest of the site.

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 (58) being above the threshold (20) requiring a Social Impact Comment/Assessment. Accordingly, we make the following comments:

Accommodation:

The proposal will provide for 58 well designed units which will appeal to a range of different sized family groups. As part of the submitted application, the proposal provides for a selection of studios, 1 bedrooms, 2 bedrooms and 3 bedroom layouts. 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, daylight and natural ventilation. The close proximity of this site to public transport will reduce the reliance upon private vehicles.

Furthermore, the proposal provides for generous open spaces along the perimeter of the site and additional communal open spaces to cater to different forms of recreation and resident interaction.

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.

An intercom security system is provided to the all common pedestrian entries and the basement car park.

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.

In addition, the landscaped features presented to the front of the site will create a positive visual contribution to the streetscape while the rear landscaping will continue to align with the rear private open spaces of the adjoining developments to the side and the rear landscaped private open spaces of the developments to the south of the site, which have their frontages to McKay Avenue; this ensures a landscaped corridor is maintained through the rear of the properties.

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 seeks to provide for a high quality part affordable housing development on the subject site.

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 studios, one bedrooms, two bedrooms and three 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 4.15 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 housing and 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 proposed development presents a well designed development that presents a positive visual contribution to the future desired character of the area.
- 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 350m walking distance away from an appropriately serviced bus stop on Newbridge Road and from the appropriately serviced bus stop on Maddecks Avenue with the following bus lines 902, 902, 903 and M90. Complies.(Refer also to the Traffic Management Report attached under separate cover)
	• 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.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
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.	• 45% of the development will be allocated 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. Y = AH ÷ 100 or	• 1.2:1 under LLEP 08. A bonus of 0.5:1 applies under SEPP (ARH) 2009. Therefore maximum FSR 1.7:1. Site area: 2,745.2m^2 Max GFA permissible: 4,666.84m^2 Proposed GFA: 4,526.84m^2 or 1.65:1. 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:	• 2,745.2m^2. Complies.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	(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,	• 823.56m^2 required. 858.75m^2 proposed on ground. (31.28%). Complies. It is also worth noting that the proposal provides for additional landscaping to the roof terraces, creating a total landscaped area of 1,045.99m^2
	(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,	• 411.78m^2 required. 703.44m^2 proposed (25.6%) Complies.
	(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.	• 44/58 or 75.86%. Complies.
	• **General**: A consent authority must not refuse consent to development to which this Division applies on any 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,	• Refer to Traffic Management Report attached under separate cover. TOTAL REQUIRED = 53.5 spaces or 54 spaces

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
		TOTAL PROPOSED = 60 spaces Complies. The proposal has provided for additional 4 spaces. Refer also to Council's DCP.
	(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.	• Complies.
	• 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).	• 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 published by the Department of Infrastructure, Planning and Natural Resources in March 2004, to the extent that those provisions are consistent with this Policy.	• N/A.
	• 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(a) 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	• Noted. May be conditioned by Council.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
	(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.	
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 southern side of Harvey Avenue. The development in the area is currently characterised by low density detached dwellings in scale. The site is zone R4 High Density Residential under the Liverpool LEP 2008 which reflects Council's desired future character for the area.

Change in the built landscape is seen with a rodent development to the east of the site, at 80-82 Lucas Avenue, with a six storey residential flat building with basement car parking currently being constructed at the time of writing this SEE. The proposal for a six storey residential flat building 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 SEE.

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:

As identified under Principle 1 above, the current development in the area is generally low density residential in nature comprising of predominantly single and double storey detached dwellings, being typically of an older housing stock.

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 58 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. Nuwarra Road to the east of the site and Newbridge Road to the north of the site link the subject property to nearby local infrastructure, to the Liverpool CBD and towards a wider transport network. In addition, the Moorebank Shopping Centre with local amenities is located just 210m walking distance from the subject site.

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 LOKA Consulting Engineers. 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 Levels1 and 2, and Levels 3 -5 allows for upper levels to cantilever over balconies below providing for passive shading. These passive design principles reduce energy consumption.

The building itself integrates a number of sustainable features exceeding the minimum standards prescribed by BASIX.

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 usability, 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 basement car park to the rear of the site has been reduced in its footprint to accommodate to deep soil sizes to allow for improved plantings on the site. The overall development creates a pleasant setting and outlook for residents and to the public domain.

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 Pagano Architects.

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 81% 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 75% of its units. Living areas and balconies have been designed with a northern orientation where possible with passive shading measures, such as repetitive floor plans, designed to prevent excessive heat load on apartments during the summer period.

All apartments have a private courtyards/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 entrances 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:

The proposal presents an appropriate mix of dwellings and layouts which can cater to people from different lifestyles and household sizes. The proposal provides for 58 units, adding to the supply of housing in the local government area.

Housing affordability in Sydney is becoming increasingly difficult. Our client seeks to provide for quality affordable housing to 50% of the overall units. 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 studios, one, two and three bedroom units. 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 Pagano Architects 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-01.02 prepared by Pagano Architects.
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.	Refer to Section 4.1.5(a) of this SEE.
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).	686.3m^2 required. 1,257.4m^2 or 45.8% proposed. Complies Complies.
	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
Deep Soil Zones	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:*	Minimum required: 192.16m^2, 6m dimension.

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>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>483.85m² with 6m dimension (17.6%) proposed.

Complies</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>Refer to Part 4.1.5(a) of this SEE.</td></tr>
<tr><td></td><td>3F-2 - Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space.</td><td>Complies</td></tr>
<tr><td></td><td>3G-1 - Building entries and pedestrian access connects to and addresses the public domain.</td><td>Complies</td></tr>
</table>

STANDARD	OBJECTIVE	COMPLIANCE
Pedestrian Access And Entries	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 traffic report prepared by LOKA Consulting Engineers Complies
	3J-2 – Parking and facilities are provided for other modes of transport	None provided.
	3J-3 – Car park design and access is safe and secure.	Complies
	3J-4 – Visual and environmental impacts of underground car parking are minimised.	Complies
	3J-5 – Visual and environmental impacts of on-grade car parking are minimised.	N/A
	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. *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*	44/58 or 75%. Complies.

STANDARD	OBJECTIVE	COMPLIANCE
	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*	
	4A-2 – Daylight access is maximised where sunlight is limited.	44 of the proposed units will receive 2 hours of solar access while only 7 units will receive no direct sunlight. All units have been provided with large expanses of glazing to the principal living areas to ensure that all units achieve daylight access.
	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.*	47/58 or 81%. Yes.
Ceiling Heights	4C-1 - Ceiling height achieves sufficient natural ventilation and daylight access *Design criteria:* *Measured from finished floor level to finished ceiling level, minimum ceiling heights are:*	Complies

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

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>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></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>
<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>
</table>

<table>
<tr><th>STANDARD</th><th>OBJECTIVE</th><th>COMPLIANCE</th></tr>
<tr><td></td><td>4E-4 - Private open space and balcony design maximises safety</td><td>Complies</td></tr>
<tr><td rowspan="2">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>Complies</td></tr>
<tr><td>4F-2 - Common circulation spaces promote safety and provide for social interaction between residents</td><td>Yes</td></tr>
<tr><td rowspan="2">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>4G-2 - Additional storage is conveniently located, accessible and nominated for individual apartments.</td><td>Complies</td></tr>
<tr><td rowspan="2">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>4H-2 - Noise impacts are mitigated within apartments through layout and acoustic treatments.</td><td>Complies</td></tr>
<tr><td rowspan="2">Noise And Pollution</td><td>4J-1 - In noisy or hostile environments the impacts of external noise and pollution are minimised through the careful siting and layout of buildings.</td><td>Complies</td></tr>
<tr><td>4J-2 - Appropriate noise shielding or attenuation techniques for the building design, construction and choice of materials are used to mitigate noise transmission.</td><td>Complies</td></tr>
</table>

STANDARD	OBJECTIVE	COMPLIANCE
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 grasses, hedges and shrubs as well as new trees. A single existing street tree will be retained while two existing trees on the site will be retained.
Planting On Structures	4P-1 – Appropriate soil profiles are provided.	This may be conditioned.

STANDARD	OBJECTIVE	COMPLIANCE
	4P-2 – Plant growth is optimised with appropriate selection and maintenance.	Of the25 varieties of plant species proposed, 16 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 each level).
	4Q-3 - Apartment layouts are flexible and accommodate a range of lifestyle needs.	Complies
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
	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	4V-1 - Potable water use is minimised.	Water efficient fixtures are specified by the

STANDARD	OBJECTIVE	COMPLIANCE
And Conservation		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 LOKA Consulting Engineers
	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	2,745.2m^2 Complies.
Cl 4.3 Height of Buildings	• 18m.	Maximum 22.25m proposed. This represents a breach of 4.25m, being to the lift overrun. Variation is sought. A Clause 4.6 Variation

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
		Statement has been prepared. **Refer to Part 4.1.3(b) of this SEE and Appendix E.**
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: 2,745.2m^2 Max GFA permissible: 4,666.84m^2 Proposed GFA: 4,523.84m^2 or 1.165:1. 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	• A residential flat building requires a street frontage of at least 24 metres to a public street (excluding service lanes).	Approximately 75.06 metres along Harvey Avenue.

CLAUSE	DEVELOPMENT STANDARD/CONTROL	COMPLIANCE
building street frontage		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.	• Two trees are to be removed, one from the site and the other being a street tree. The proposed removal of these trees will be provided with replacement plantings. Refer to Landscape Plans attached under separate cover of this SEE.
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.	• The existing trees that are to be retained will be incorporated into the proposed landscaping.
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	• N/A.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	• 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.	
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 and DRAINS Report prepared by LOKA Consulting Engineers.
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 Soil & Water Management Plan prepared by LOKA Consulting Engineers.
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.	• Should Council require, soil testing for salinity can be conducted prior to Construction Certificate. This may be conditioned.
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.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
Aboriginal Archaeology	• Identify and where possible preserve relics of the occupation of the land by Aboriginal communities	• N/A.
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.	• Reference should be made to the submitted Waste Management Plan prepared by LOKA Consulting Engineers.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	The bin bay position is to minimise noise impacts on residents from the usage of bins and waste or recycling collection.	
Outdoor Advertising And Signage	• Refer to DCP provisions.	• N/A.
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.	• 75.06m. Complies. • 1,000m^2 required. 2,745.2m^2 proposed. Complies.
Site Planning	• The building should relate to the site's topography with minimal earthworks, except for basement car parking.	• The proposal seeks to provide for two levels of basement car parking. To the areas outside of the basement's footprint, the proposal seeks to minimise the amount of cut and fill where possible. Due to the fall of the land, with the rear of the site being on higher ground, the proposal will seek a maximum cut and fill of 1 metre deep to allow for levelled floors and external private open space.
	• Siting of buildings should provide usable and efficient spaces, with consideration given to energy efficiency in the building design.	• Where possible, units are orientated to the north.
	• Site layout should provide safe pedestrian, cycle and vehicle access to and from the street.	• Separate vehicle and pedestrian access points are proposed.
	• 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.	• Complies as detailed in this SEE.

<table>
<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>• 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.</td><td>• Refer to submitted Stormwater Plans and DRAINS Report prepared by LOKA Consulting Engineers
• Refer to Appendix B of this report.
• Refer to Drawing No. A01.02.</td></tr>
<tr><td></td><td>•</td><td>•</td></tr>
<tr><td>Setbacks</td><td>Front and Secondary Setbacks:
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:</td><td>• Front setback of 6m proposed. Complies.

Secondary setback N/A.

• Refer to comments made under SEPP 65/ADG.</td></tr>
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<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>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></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.
• A minimum of 50% of the front setback area shall be landscaped area.
• Optimise the provision of consolidated landscaped area within a site by:
o The design of basement and sub-basement car parking, so as not to fully cover the site.
o The use of front and side setbacks.
o 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.</td><td>• Refer to comments under SEPP (ARH) 2009.
• Complies.
• Complies.
Landscaping is proposed to all boundaries.
• A variety of plant species are proposed to maintain contiguity with the landscaped areas of adjoining properties.
• The proposal provides for adequate deep soil planting/</td></tr>
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<tr><th>CHAPTER/ PLANNING GUIDELINE</th><th>DEVELOPMENT STANDARD/CONTROL</th><th>COMPLY</th></tr>
<tr><td></td><td>

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.

Private Open Space

Table 3

Dwelling Size	Private Open Space Area	Minimum Width
Small < 65 sqm	10sqm	2m
Medium 65 – 100	12sqm	2m
Large > 100 sqm	12sqm	2m

- 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.

</td><td>

- Complies. The proposal provides for different areas of communal open spaces and landscaped open spaces which contribute to the amenity of the development and suit a variety of activities.

- Refer to comments under SEPP 65/ADG.

</td></tr>
</table>

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	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.	• Refer to submitted plans. Drying areas are proposed to the balconies.
Building Design, Streetscape And Layout	**Building Height** • Refer to LLEP08.	• Variation is sought. Refer to Part 4.1.6(b) of this SEE.
	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.	• Refer to Appendix B of this report.
	• Building facades shall be articulated and roof form is to be varied to provide visual variety.	• Complies. Refer to Part 3 of this report.
	• The pedestrian entrance to the building shall be emphasised.	• Two (2) clearly defined entry paths are proposed and these are framed by metal entry structures over the mailboxes are provided. A single pedestrian entry located to the middle of the development accessing the central forecourt provides for a landscaped entry into the development. Individual entries are also proposed to the ground floor units which have direct access to Harvey Avenue.
	• A sidewall must be articulated if the wall has a continuous length of over 14 m.	• No side wall will exceed 14m in length without being articulated.
	• 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.	• Complies. The proposal provides for an entry driveway into the basement car park located along the western section of the site.
	• 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.	• Complies.

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	• 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.	• Complies.
	• 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. As detailed under Section 3 of this report, the proposal will result in a simple and clean contemporary façade with brickwork to the base and render to the top to create a built composition that is visually identifiable and pleasant.
	• 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. o Selecting balcony types which respond to the street context, building orientation and residential amenity.	• The proposed development, its scale and proportions have been found to be acceptable by DEP.

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	○ 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 flat roof with a rooftop communal open space with pergola structures that matches the contemporary built form and façade of the proposed development.
	• 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.	• Complies. The proposed roof matches the scale and minimalistic character of the façade.
	• Design roofs to respond to the orientation of the site, for example, by using eaves and skillion roofs to respond to sun access.	• Complies.
	• 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 building to minimise its visibility.

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	• 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:
	  ○ Locating entries so that they relate to the existing street and subdivision pattern, street tree planting and pedestrian access network.
	  ○ Designing the entry as a clearly identifiable element of the building in the street.
	  ○ 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 from Harvey Avenue, these include private entrances 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:
	  ○ Avoiding ambiguous and publicly accessible small spaces in entry areas.
	  ○ Providing a clear line of sight between one circulation space and the next.
	  ○ 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:
	  ○ Pedestrians and cars.
	  ○ Different uses, for example, for residential and commercial users in a mixed use development.
	  ○ Ground floor dwellings, where applicable.
		• Complies.

	• Design entries and associated circulation space of an adequate size to allow movement of furniture between public and private spaces.	• Complies.
	• Provide and design letterboxes to be convenient for residents and not to clutter the appearance of the development from the street by:	• Complies.

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	○ 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.	• Balconies have been designed in accordance with ADG requirements.
	• Balustrades must be compatible with the façade of the building.	• Glazed balustrades are proposed in keeping with the modern architecture of the building.
	• Ensure balconies are not so deep that they prevent sunlight entering the dwelling below.	• Varied floor plates are provided to the development in components, being the Ground Floor, Levels 1 and 2, and Levels 3-5. 75% of the development achieves solar access for more than 2 hours.
	• Design balustrades to allow views and casual surveillance of the street.	• Complies.
	• Balustrades on balconies at lower levels shall be of solid construction.	• Complies.
	• Balconies should where possible should be located above ground level to maximise privacy for occupants, particularly from the street.	• Complies.
	• Solid or semi solid louvres are permitted.	• Aluminium screens are proposed where required to maintain privacy and to provide passive shading.
	• Noise attenuation measures on balconies facing a Classified Road should be considered.	• N/A.
	• Balconies should be located on the street frontage, boundaries with views and onto a substantial communal open space.	• Balconies are orientated to the front and rear of the site. Where side balconies are proposed, these have been provided with screening and wing walls to prevent any overlooking opportunities.
	• Primary balconies should be:	• Complies.

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	○ 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.	• None proposed.
	• 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.	• Complies.
	• Provide primary balconies for all dwellings with a minimum depth of 2m.	• The balconies have been designed to comply with ADG.
	• Ensuring balconies are not so deep that they prevent sunlight entering the dwelling below.	• Refer to comments above.
	• 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.	• Refer to comments above.
	• Operable screens increase the usefulness of balconies by providing weather protection, daylight control and privacy screening.	• Refer to comments above.
	Daylight Access	

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	• Plan the site so that new residential flat development is oriented to optimise northern aspect.
	• 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.
	• 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.
	
	• Use a glass reflectance below 20%.
	• Consider reduced tint glass.
		• Complies. Refer to Appendix B.
		
		• The residential units have been assessed under BASIX and achieve the thermal targets.
		• This may be conditioned.
		• This may be conditioned.

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	• 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: • 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. • Ensure light wells are fully open to the sky. • A combination of louvres provides shading for different times of the day.	• No lightwells proposed.
	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 and/or provided with a window hood for privacy.
	• Minimise the location of noise sensitive rooms such as bedrooms adjoining noisier rooms such as bathrooms or kitchens or common corridors and stairwells. • 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).	• Where possible, common walls have been designed to adjoin like uses. • N/A. • Capable of being complied with. • The balconies of upper level units will overlook the entry points to the building and ground floor communal open spaces. •

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	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 as shown in the landscape plans. 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.	• The proposal provides for a landscaped frontage which will positively continue to the quality of the streetscape.
	• 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.	
	• 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.	• 10 ground floor units are proposed with 3 units having individual access from the street due to their location. This provides for increased human level of interaction in terms of the design of the development.
	• Provide ground floor dwellings with access to private open space, preferably as a courtyard.	• 3 of 10 ground floor units are provided with a separate entry due to their location.
	Security	
	• Entrances to buildings should be orientated towards the front of the site and facing the street.	• Complies.
	• The main entrance to dwellings or other premises should not be from rear lanes and should be designed with clear directions and signage.	• Pedestrian paths lead from the street frontage to individual ground level units

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		and to the centre of the building where the residential lobby is sited.
	• 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.	• No blank walls proposed.
	• Minimise the number of entry points to buildings.	• One access point is proposed to each building's lobby on the ground floor. 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 proposed to three 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.	• The living areas of upper level units are provided with views over the communal open space. The proposed north facing balconies will enable sightlines to the street. Furthermore, the balconies on the upper levels which are located in

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	○ Providing casual views of common internal areas, such as lobbies and foyers, hallways, recreation areas and car parks.	between both buildings have been designed to have an outlook to the street.
	• Minimise opportunities for concealment by: ○ Avoiding blind or dark alcoves near lifts and stairwells, at the entrance and within indoor car parks, along corridors and walkways. ○ Providing well-lit routes throughout the development. ○ Providing appropriate levels of illumination for all common areas. ○ 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: ○ Making dwellings inaccessible from the balconies, roofs and windows of neighbouring buildings. ○ 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. ○ Providing direct access from car parks to dwelling lobbies for residents.	• Intercom access limits visitors to the site.
	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.	• Refer to Appendix B of this report.

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	○ 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.	• 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. • 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.	• Reference should be made to the submitted Landscape Plan prepared by Conzept Landscape Architect. The proposed landscape design includes the provision of new trees which will grow to a mature height of between 6m – 10m, depending on the species. 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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	• 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:
	  ○ 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:
		• The rooftop communal open spaces will be provided with suitable landscaping and plantings.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	• 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 o The primary frontage is situated on a Classified Road. o The fence is articulated by 1m for 50% of its length and have landscaping in front of the articulated portion. o 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. • 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	• A low part solid, part open design fence is proposed as detailed on the submitted elevations. The fencing to the ground floor units which front Harvey Avenue ranges between 1.5m to 2.0m in height (given the fall of the land) with a part solid and part open design. This ensure that these courtyards are protected in terms of visual privacy. • This may be conditioned.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	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.	
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.	• Refer to SEPP (ARH) 2009 and the submitted Traffic Report prepared by LOKA Consulting Engineers. All parking is proposed to be within the basement level.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY

	Pedestrian Access
	• Utilise the site and it's planning to optimise accessibility to the development.
	• 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.
		• Refer to submitted Access Report prepared by BCA Vision.

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.
		• Refer to SEPP 65/ADG.
		
		• Refer to SEPP 65/ADG.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY

	• 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.
	  ○ 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:
		• 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.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	○ 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.	The design has sought to minimise the amount of common walls with other dwellings to further reduce the potential for noise transfer.
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: ○ Setback 1 m from the front boundary to the street. ○ Landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape. ○ Not be located adjacent to an adjoining residential property. ○ 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. • Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure.	• Complies. • Complies. • This may be conditioned. • The proposal includes 2 x bin rooms located within the basement car park. • The bin room will not be visible to the street, being within the basement level. • This may be conditioned. • This may be conditioned. • This may be conditioned.

CHAPTER/ PLANNING GUIDELINE	DEVELOPMENT STANDARD/CONTROL	COMPLY
	• 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.	• Should a substation be required, the front setback of the site has ample area to accommodate one. Plans detailing the substation can be prepared should this be required by Council.

Appendix E Clause 4.6 Variation to Clause 4.3 of the Liverpool Local Environmental Plan 2008 – Height of Buildings

CLAUSE 4.6 VARIATION TO CLAUSE 4.3 (HEIGHT OF BUILDINGS) OF THE LIVERPOOL LOCAL ENVIRONMENTAL PLAN 2008

1. INTRODUCTION

This submission seeks a variation to Clause 4.3 of the Liverpool Local Environmental Plan 2008 (LLEP08), which relates to building height.

This submission has been prepared with regards to a development application over Nos. 23 – 29 Harvey Avenue for the demolition of all existing structures and the development of a 6 storey residential flat building comprising 58 units over two levels of basement parking and landscaping works under the provisions of State Environmental Planning Policy (Affordable Rental Housing) 2009.

As detailed in this written request for a variation to building height being a development standard under LLEP08, the proposed development meets the requirements prescribed under Clause 4.6 of LLEP08.

This submission is made under clause 4.6 of the LLEP08 – Exceptions to development standards. Clause 4.6 states the following:

> ***"4.6 Exceptions to development standards***
>
> *(1) The objectives of this clause are as follows:*
> *(a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
> *(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*
>
> *(2) Development consent may, subject to this clause, be granted for a development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.*
>
> *(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:*
> *(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
> *(b) that there are sufficient environmental planning grounds to justify contravening the development standard.*
>
> *(4) Development consent must not be granted for development that contravenes a development standard unless:*
> *(a) the consent authority is satisfied that:*
> *(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
> *(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the*

objectives for development within the zone in which the development is proposed to be carried out, and

(b) the concurrence of the Director-General has been obtained.

(5) In deciding whether to grant concurrence, the Director-General must consider:

(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and

(b) the public benefit of maintaining the development standard, and

(c) any other matters required to be taken into consideration by the Director-General before granting concurrence.

(6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:

(a) the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or

(b) the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.

***Note.** When this Plan was made it did not include any of these Zones.*

(7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).

(8) This clause does not allow development consent to be granted for development that would contravene any of the following:

(a) a development standard for complying development,

(b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated,

(c) clause 5.4

(ca) clause 6.4, 6.5, 6.6, 7.22, 7.24, 7.25, 7.26, 7.26A, 7.27, 7.28, 7.29 or 7.30."

The use of Clause 4.6 to enable an exception to this development control is appropriate in this instance and the consent authority may be satisfied that all requirements of Clause 4.6 have been satisfied in terms of the merits of the proposed development and the content in this Clause 4.6 variation request report.

Clause 4.6 Exceptions to development standards establishes the framework for varying development standards applying under a local environmental plan. Subclause 4.6(3)(a) and 4.6(3)(b) requires that a consent authority must not grant consent to a development that contravenes a development standard unless a written request has been received from the applicant that seeks to justify the contravention of the standard by demonstrating that:

4.6(3)(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and

4.6(3)(b) that there is sufficient environmental planning grounds to justify contravening the development standard.

In addition, 4.6(4)(a)(i) and (ii) requires that development consent must not be granted to a development that contravenes a development standard unless the:

(a) the consent authority is satisfied that:
(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and
(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and

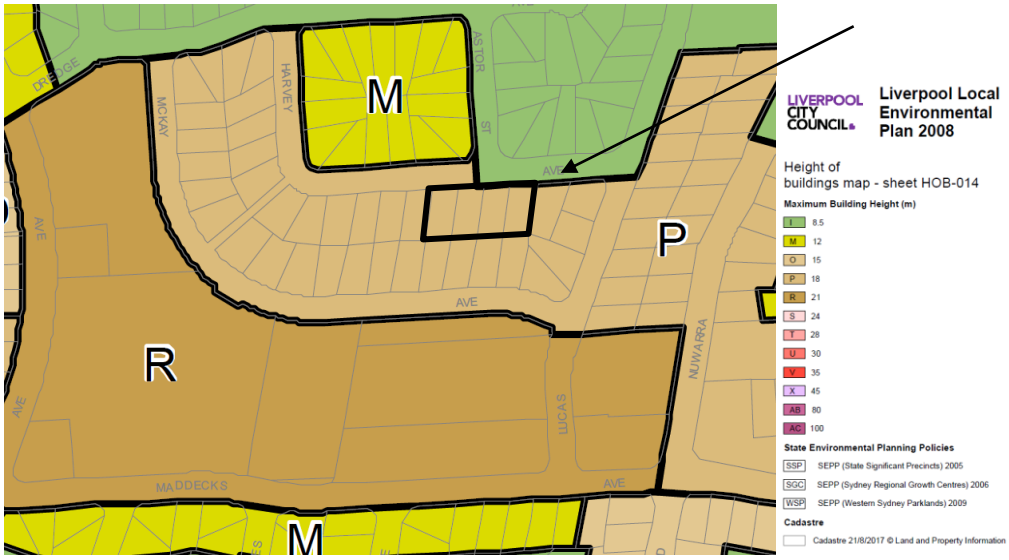
The Environmental Planning Instrument to which these variations relate to is the LLEP 08.

The development standard to which this variation relates to is Clause 4.3 – Height of Buildings, which reads as follows:

> *"(1) The objectives of this clause are as follows:*
> *(a) to establish the maximum height limit in which buildings can be designed and floor space can be achieved,*
> *(b) to permit building heights that encourage high quality urban form,*
> *(c) to ensure buildings and public areas continue to receive satisfactory exposure to the sky and sunlight,*
> *(d) to nominate heights that will provide an appropriate transition in built form and land use intensity.*
>
> *(2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.*
>
> ***Note.** Clauses 5.6, 7.2 and 7.5 provide for circumstances under which a building in the Liverpool city centre may exceed the maximum height shown for the land on the Height of Buildings Map".*

As demonstrated in Figure 1 below, the subject site is limited to a maximum building height of 18m.

Figure 1 – Height of Buildings Map



Source: NSW Legislation, LLEP 08

The proposed residential flat building will exceed the standard with a proposed building height of 22m as measured from ground level to the top of the lift overrun. The variation is equivalent to 4.00m to the highest point or 22.22%.

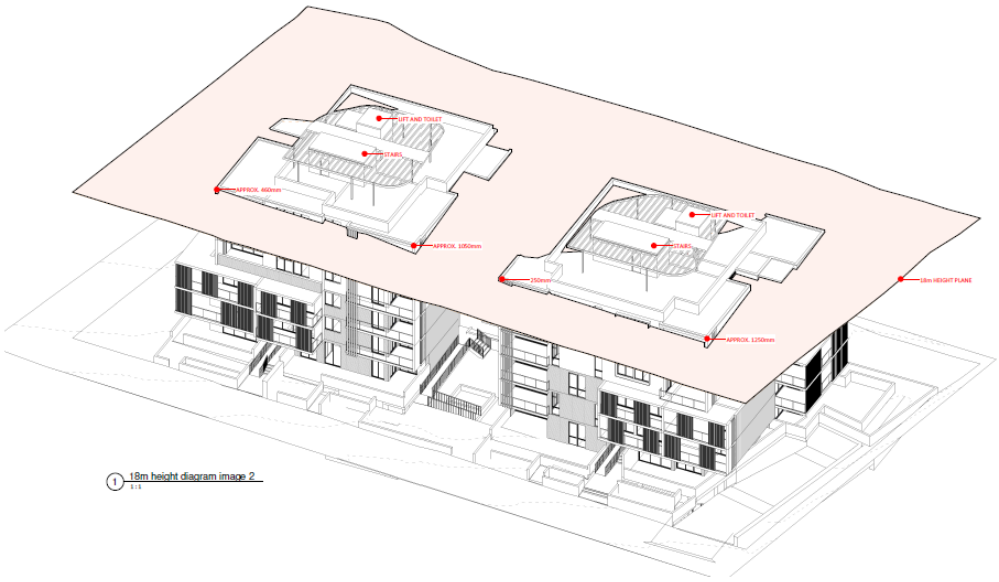
A written justification is therefore required for the proposed variation to the maximum building height development standard, in accordance with Clause 4.6 of the LLEP 08.

2. EXTENT OF NON-COMPLIANCE

As noted above Clause 4.3 of the LLEP 08 states that the maximum building height for the site is 18m.

The current proposal seeks a maximum building height of 22m. The proposal therefore exceeds the standard by 4.00m or 22.22%.

Figure 2:



It is our submission that the breach to the building height control, will not impact on the amenity of the development or adjoining properties, nor will the variation compromise the architecture of the building or the bulk and scale of the development.

A degree of flexibility is considered reasonable in this instance.

3. IS COMPLIANCE WITH THE DEVELOPMENT STANDARD UNREASONABLE OR UNNECESSARY IN THE CIRCUMSTANCES OF THE CASE?

The proposed variation from the development standard is assessed against the required tests in Clause 4.6. In addition, in addressing the requirements of Clause 4.6(3), the accepted five possible approaches for determining whether compliances are unnecessary or unreasonable established by the NSW Land and Environment Court in *Wehbe vs Pittwater Council (2007) LEC 827 are considered.*

In the matter of Four2Five, the Commissioner stated within the judgement the following, in reference to a variation:

"...the case law developed in relation to the application of SEPP 1 may be of assistance in applying Clause 4.6. While Wehbe concerned an objection under SEPP 1, in my view the analysis is equally applicable to a variation under Clause 4.6 where Clause 4.6 (3)(a) uses the same language as Clause 6 of SEPP 1."

In the decision of *Wehbe vs Pittwater Council (2007) LEC 827,* Preston CJ summarised the five (5) different ways in which an objection under SEPP 1 has been well founded and that approval of the objection may be consistent with the aims of the policy. The five possible ways are as set out below:

First	*The most commonly invoked way is to establish that compliance with the development standards is unreasonable or unnecessary because the*

	objectives of the development standard are achieved notwithstanding non-compliance with the standard. *The rationale is that development standards are not ends in themselves but means of achieving ends. The ends are environmental or planning objectives. If the proposed development proffers an alternative means of achieving the objective, strict compliance with the standard would be unnecessary and unreasonable.*
Second	*A second way is to establish that the underlying objective or purpose is not relevant to the development with the consequence that compliance is unnecessary. (not applicable)*
Third	*A third way is to establish that the underlying objective or purpose would be defeated or thwarted if compliance was required with the consequence that compliance is unreasonable. (not applicable)*
Fourth	*A fourth way is to establish that the development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable. (not applicable)*
Fifth	*A fifth way is to establish that "the zoning of particular land" was "unreasonable or inappropriate" so that "a development standard appropriate for that zoning was also unreasonable or unnecessary as it applied to that land" and that "compliance with the standard in that case would also be unreasonable or unnecessary. (not applicable)*

In respect of the building height standard, the first method is invoked.

The objectives supporting the maximum building height control identified in Clause 4.3 are discussed below. Consistency with the objectives and the absence of any environmental impacts, would demonstrate that strict compliance with the standards would be both unreasonable and unnecessary in this instance.

The discussion provided below demonstrates how the proposal is consistent with the objectives of Clause 4.3.

> *"(1) The objectives of this clause are as follows:*
> *(a) to establish the maximum height limit in which buildings can be designed and floor space can be achieved,*
> *(b) to permit building heights that encourage high quality urban form,*
> *(c) to ensure buildings and public areas continue to receive satisfactory exposure to the sky and sunlight,*
> *(d) to nominate heights that will provide an appropriate transition in built form and land use intensity".*

With respect to objective (a), the subject site is afforded a maximum building height limit of 22 metres and floor space ratio control of 1.2:1 under LLEP08. As the current proposal is made under State Environmental Planning Policy (Affordable Rental Housing) 2009, a bonus 0.5:1 is afforded, enabling a maximum floor space ratio of 1.7:1 to be achieved on the site.

The proposal seeks to provide for 45% of the gross floor area for residential accommodation under the provisions of affordable housing. Accordingly, the proposal seeks a maximum floor area of 1.65:1.

The proposal is notably compliant with the maximum floor space ratio control, however seeks a variation to the maximum height control as described in this letter. In a decision of the Land Environment Court, *Abdul-Rahman v Ashfield Council [2015] NSWLEC 1122,* Commissioner O'Neil stated,

> *"I accept the argument put by the applicant that the consequence of the SEPP ARH incentives, which seek to facilitate the effective delivery of new affordable rental housing by way of expanded zoning permissibility, floor space ratio bonuses and non-discretionary development standards, is to expand the permissible building envelope for a site in some way, although pursuant to cl 16A of SEPP ARH, any increase of the building envelope has to be compatible with the character of the local area. In this matter, the proposal complies with the FSR development standard in LEP 2013 and does not seek the benefit of the FSR incentive of SEPP ARH at cl 13, however the principle of an expanded building envelope in recognition of the contribution of affordable rental housing made by the proposal is still relevant".*

In keeping with the above, we submit that the proposed variation is attributable to the increased density available on the site. In view of the context of the site, it was not considered feasible to further encroach upon the setbacks of the adjoining developments and consequently the proposed height has exceeded the maximum standard.

It is worthy to note, that the greatest variation to the height control is seen only over the lift overruns, toilet and pergolas of both buildings, with only minor variations (0.25m – 0.35m) sought in respect to the habitable areas of Level 5. It is proposed that these areas are largely limited to the communal open spaces that are provided on the rooftops of both buildings which gives future residents and visitors additional areas of communal spaces to recreate and to socialise. It is worth noting that these rooftop communal open spaces have a northern orientation and achieves good sunlight in mid-winter.

The Design Excellence Panel advice (PL-148/2017) on 24 April 2018 have also acknowledged that the exceedance in height is considered acceptable:

> "*It is noted that the proposal exceeds the allowable building height for the site. This is considered acceptable by the Panel on the basis that the exceedance is attributed to the rooftop Communal Open Space that include amenity facilities (toilet and shade structures)."*

The area of breach is demonstrated in the image below and under the architectural plans, Sheet A06.01.

Figure 3:

Source: Pagano Architects

The greatest breach therefore spans a relatively short area of the proposed building, and relates to an element of the design (lift overrun, toilet and pergola) that has been centred over each building. Furthermore, the pergola is an open and lightweight structure.

Where the greatest variation is sought in relation to habitable floor area at level 5, we note that this is to the northern side of each building facing Harvey Avenue and would not cause an overshadowing impact on the adjoining neighbours. In fact, this breach at the habitable floor area would not be easily read when one is standing in front of the development and visually reading the built form.

In addition, the proposed development has been well articulated to the street frontage and proposes varying setbacks to both side boundaries to ensure that the actual and perceived bulk of the building is minimised not only from the street but also as viewed from the adjoining properties.

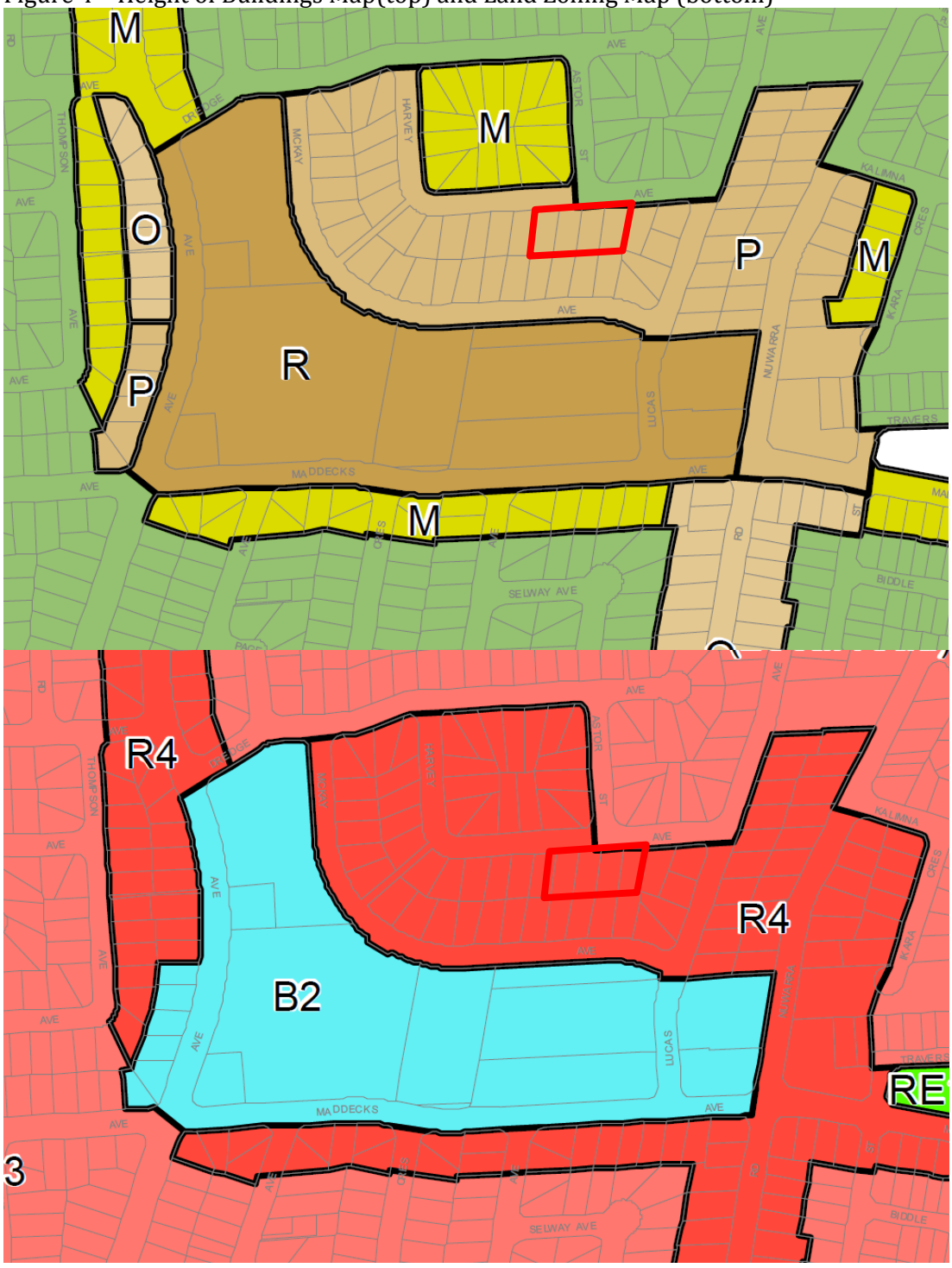
The proposed development has been carefully designed to project a highly articulated appearance to each of the facades. In response to the first Design Excellence Panel advice, the development has been provided with a gap through the middle of the building envelope to create a central break to the development. This allows for visual relief to the overall development due to the length of the site to Harvey Avenue. The central break is provided with a forecourt area that has been tastefully landscaped with the inclusion of feature tree which creates an entry statement to users travelling along Harvey Avenue and along Astor Street, while the site's overall landscaping with a vertical layering of plantings will achieve an overall softening of the built form.

The overall building have been carefully designed to allow for breaks in each elevation and articulation in the overall design. The use of balconies to the front, sides and rear of the building provides for visual relief and differentiation to the façade by creating recesses/overhangs and to break up the building mass. The proposal utilises building materials and finishes to create a distinct horizontal lines to the development, by proposing facebrick to the base and lighter concrete to the upper levels. Clean vertical elements to the facade such as aluminium louvres and panels create a minimalistic expression that blends in well with the modern design of the development.
The proposal therefore satisfies objective (b).

The proposed development has also been designed to maximise solar access with 75% of the proposed units across the entire development achieving a minimum of 2 hours solar

access. A total of 81% of units across the development will be naturally cross ventilated in keeping with objective (c).

Figure 4 – Height of Buildings Map(top) and Land Zoning Map (bottom)



In terms of objective (d), Council's building height control establishes a suitable transition from the subject site to its surroundings. The land in between Harvey Avenue and McKay Avenue has a height of 18m. Increased heights (21m) are envisioned to the area south of the subject site, being the B2 Local Centre zone, with currently consists of the school, the Moorebank Library, the Moorebank Hotel and the Moorebank Shopping Centre. The area to

the north-west of the site transitions to a lower height while maintaining the R4 High Density Residential zoning (12m) while the area to the north-east of the site, to the east of Astor Street has a maximum height of 8.5m, reflecting the R3 Medium Density Residential zoning. (Refer to Figure 4 above)

4. ARE THERE SUFFICIENT ENVIRONMENTAL PLANNING GROUNDS?

The assessment above demonstrates that the resultant environmental impacts of the proposal will be satisfactory.

The proposal addresses the site constraints, streetscape and relevant objectives of both the standards and the zone. The proposal will not result in any unreasonable amenity or environmental impacts.

We respectfully submit that the proposal will result in a better planning outcome as unlike SEPP (Affordable Rental Housing) 2009, which requires that up to 45% of the residential floor area be offered as affordable housing for a period of 10 years.

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.

Regular bus services are available along Maddecks Avenue and Newbridge Road. The site is also located in close proximity to the retail/commercial premises sited along Maddecks Avenue and Newbridge Road, with the Moorebank Shopping Centre and commercial premises along Newbridge Road providing for local amenities and services.

The development is also notably compliant with the maximum 1.7:1 FSR prescribed by SEPP (Affordable Rental Housing) 2009.

In this case, strict compliance with the development standard for height of buildings development standard of the LLEP 08 is unnecessary and unreasonable.

5. IS THE VARIATION IN THE PUBLIC INTEREST?

Clause 4.6 states that the development consent must not be granted for development that contravenes a development standard unless the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is to be carried out.

It is considered that this submission provides sufficient environmental planning grounds to justify contravening the development standard under Part 4.

The development as proposed will be in the public interest as it is consistent with the objectives of Clause 4.3.

The building contextually has regard to its surrounding properties and provides sufficient open space and landscaping for the amenity of future residents.

Furthermore, it is important to also consider the objectives of the R4 High Density Residential zone in relation to the development, which are as follows:

> ***Zone R4 High Density Residential***
>
> ***Objectives of zone***
> - *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.*

In response to the above the following is provided:

The proposed residential flat building will replace the existing four dwellings on the site with 58 proposed units to provide for the housing needs of the community within a high density environment.

The proposal comprises of a well-proportioned mix of studios, 1, 2 and 3 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 stops located just 350m from the development. The site is also located in proximity to Moorebank Shopping Centre to the south-east of the site

The proposal will not result in the fragmentation of land.

It is considered that this submission provides sufficient environmental planning grounds to justify contravening the development standards, noting the development will be in the public interest.

6. PUBLIC BENEFIT OF MAINTAINING THE STANDARD

It is considered that there is no benefit to the public or the community in maintaining the development standards. The proposed development will allow for the creation of a high quality residential development which as stated above meets the desired objectives of the standard.

The proposed works will also result in a well-designed development that provides for a feature landscaped frontage to Harvey Avenue through its central forecourt and generous amounts of tree cover to the front and rear setbacks.

Housing affordability in Sydney is becoming increasingly difficult. The development will seek to provide for 45% of the total residential floor area as affordable housing. The additional height sought on the site will enable additional units to be provided to the benefit

of the local government area. The area can support an increase in density and this is encouraged by Council as seen with the relevant planning standards.

It is not considered that the variation sought raises any matter of significance for State or regional environmental planning.

The departure from the height of buildings control within the LLEP 08 allows for the orderly and economic use of the site in a manner which achieves the outcomes and objectives of the relevant planning controls.

7. IS THE VARIATION WELL FOUNDED?

It is considered that this has been adequately addressed in Parts 4 and 5 of this submission. In summary, this Clause 4.6 Variation is well founded as required by Clause 4.6 of the LLEP 08 in that:

- Compliance with the development standards would be unreasonable and unnecessary in the circumstances of the development;
- There are sufficient environmental planning grounds to justify the departure from the standards;
- The development meets the objectives of the standard to be varied (height of buildings) and objectives of the R4 High Density Residential zoning of the land;
- The proposed development is in the public interest and there is no public benefit in maintaining the standard;
- The breach does not raise any matter of State of Regional Significance; and
- The development submitted aligns with the revitalisation of the formerly low density precinct.

Based on the above, the variation is considered to be well founded.

8. GENERAL

Clause 4.6 also states that:

> *"(6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:*
> *(a) the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or*
> *(b) the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.*
> ***Note.** When this Plan was made it did not include any of these zones.*

(7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).

(8) This clause does not allow development consent to be granted for development that would contravene any of the following:
(a) a development standard for complying development,
(b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 applies or for the land on which such a building is situated,
(c) clause 5.4,
(ca) clause 6.4, 6.5, 6.6, 7.22, 7.24, 7.25, 7.26, 7.26A, 7.27, 7.28, 7.29 or 7.30."

This variation does not relate to the subdivision of land. The variation sought is thus not contrary to subclause (6).

Should the exception to the development standard sought under this submission be supported by Council, the Council must retain a record of the assessment of this submission.

The development proposed is not complying development.

A BASIX certificate was provided for the development.

Clause 5.4 of the LLEP 08 does not apply to the proposal.

Clauses *6.4, 6.5, 6.6, 7.22, 7.24, 7.25, 7.26, 7.26A, 7.27, 7.28, 7.29 or 7.30.* of the LLEP 08 do not apply to the site.

9. CONCLUSION

The proposal does not strictly comply with the maximum building height control as prescribed by Clause 4.3 of the LLEP 08. Having evaluated the likely affects arising from this non-compliance, we are satisfied that the objectives of Clause 4.6 of the LLEP 08 are satisfied as the breach to the controls does not create any adverse environmental impacts.

As reiterated throughout this report, the proposal seeks to provide for a well-designed development that will add to the visual interest of the streetscape and with 45% of the development being allocated to affordable housing. The development will address a rising social issue in Sydney's housing market whereby rising prices are making affordable accommodation increasingly difficult to come by.

Consequently, strict compliance with this development standard is unreasonable and unnecessary in this particular instance and that the use of Clause 4.6 of the LLEP 08 to vary this development controls appropriate in this instance.

Based on the above, it is sensible to conclude that strict compliance with the maximum building height control is not necessary and that a better outcome is achieved for this development by allowing flexibility in the application.

Appendix F Design Excellence Panel Minutes

LIVERPOOL CITY COUNCIL

Ref No.: PL-148/2017
Contact: Marcus Jennejohn
Ph: 1300 36 2170
Date: 08-Jan-2018

GAT & ASSOCIATES
23 HARVEY AVENUE, MOOREBANK NSW 2170

Re. PL-148/2017 - Demolition of all existing structures over four sites, amalgamation of the four lots into one, the development of a residential flat building under the provisions of the SEPP (Affordable Rental Housing) 2009 at 23-29 Harvey Avenue, Moorebank.

Please find the attached Design Excellence Panel advice.

Additional landscaping advice:

Council requires the retention of the 2 x Brushbox trees and 1 x Crepe Myrtle tree within the front setback area. These trees are be incorporated into the landscaping for the development.

Yours faithfully

Marcus Jennejohn
Senior Development Planner

LIVERPOOL CITY COUNCIL

Minutes

MINUTES OF DEP MEETING
5th December 2017

DEP PANEL MEMBERS PRESENT:

Geoff Baker	Chairperson
Kim Crestani	Panel Member
Peter McGregor	Panel Member

OTHER ATTENDEES:

Nelson Mu	Convener
Marcus Jennejohn	Planner

APOLOGIES:

Nil

OBSERVERS:

Alfredo Pagano	Pagano – 0418-769-117
Qing (Jim) Shi	Pagano – 0430-484-523
Philip Tan	Gat & Associates – (02) 9569-1100

AGENDA:

Property Address:	23-29 Harvey Avenue, Moorebank
Application Number:	PL-148/2017
Item Number:	2

1. WELCOME, ATTENDANCE, APOLOGIES AND OPENING

The Liverpool Design Excellence Panel (the Panel) comments are to assist Liverpool City Council in its consideration of the development application.

The absence of a comment under any of the principles does not necessarily imply that the Panel considers the particular matter has been satisfactorily addressed, as it may be that changes suggested under other principles will generate a desirable change.

The 9 design quality principles will be grouped together where relevant, to avoid the unnecessary repetition of comments.

2. DECLARATIONS OF INTEREST

Nil

3. CONFIRMATION OF PREVIOUS MINUTES

No

4. PRESENTATION

The applicant presented their proposal for the demolition of all existing structures, amalgamation of four (4) lots into one, and the development of a residential flat building consisting of 2 towers being 6-storey in height with 2 levels of basement car parking, containing a total of fifty-eight (58) residential dwellings, pursuant to State Environmental Planning Policy (Affordable Rental Housing) 2009.

The applicant's architect explained the background and architectonics of the scheme as follows:

- The area is an emerging area for medium density form of development and the proposal is responding to the transition of the area from low density to medium density residential accommodation;
- The proposal is for an affordable rental housing development and is seeking bonus FSR as permitted by ARHSEPP;
- The site is located in an accessible area as per the ARHSEPP to qualify as an affordable rental housing proposal;
- Corner facing units provided on upper floors and north facing units provided on lower levels;
- Visual/privacy has been addressed in the layout of the units;
- Car parking meets the requirements with one and half levels of basement proposed;
- Long north facing orientation also presents some design challenges;
- Communal open space designed to wrap around the building to enhance solar access. This is supplemented with rooftop communal open space to further improve solar access; and
- Rouhgly 14 additional units proposed as a result of ARHSEPP FSR bonus.

5. DEP PANEL COMMENTS

The 9 design principles were considered by the panel in discussion of the development application. These are 1] **Context, 2] Built Form+ Scale 3] Density 4] Sustainability 5] Landscape 6] Amenity, 7] Safety 8] Housing Diversity +Social Interaction 9] Aesthetics.**

The Design Excellence Panel makes the following comments in relation to the project:

- The Panel thanks the proponent for bringing the scheme to the Panel at Pre-DA stage and commends the detailed documentation presented at the meeting.

- The additional floor area generated by the ARHSEPP creates design challenges in that whilst the bonus FSR is allowed, building height does not change. The typical resultant effects are bulky and squat buildings at the expense of residential amenity.

- The north façade is relentless along Harvey Avenue and should be broken up appropriately. A continuous building with no break is not considered a suitable urban design outcome. The option of a long horizontal mass or 2 discrete forms was discussed. Either might work but the applicant should show which one provides the most amenity to the rear neighbours.

- The proposed built form creates overshadowing impacts to the southern adjoining sites, as a consequence of the proposed long façade at ground level. The Panel questioned that the footprint of the building may be too large for the site.

- The proposed rooftop communal open space is supported, provided amenity facilities (e.g., toilet, barbeque and shading structures) are included.

- The proposed basement car park is inefficient, and considered unnecessarily wide. The Panel recommends rationalising the carpark to fit it under the building footprint, which would increase opportunities for the provision of deep soil zones and large canopy trees. Car parking entry should be under the building, not to the side of the building as proposed. At an absolute minimum, the driveway should be setback at least 1m from the boundary to allow for the provision of deep soil landscaping.

- The building should be organised and ordered into primary and secondary elements. The architecture elements should be simplified and uncomplicated.

- Consideration should be given to providing two separate buildings to allow sunlight into ground level communal open space and solar access to the southern adjoining sites. This strategy would also eliminate the currently awkward step down in the long elevations at the mid-point of the current design. The Panel suggests that alternative built form options that would resolve potential overshadowing of southern adjoining neighbours and communal open space should also be explored by the applicant. The Architects discussed the linear built form of the base/podium of the building and the benefits of an elongated northern façade. They should further explore this as a proposition and ensure, if this is an option, that the built form above is well proportioned appropriately. In this idea of an emphasised horizontal plinth the step down in the slab of the western end could relate to the balustrade of the eastern side. “Stream-line modern” buildings were cited in the meeting not for stylistic reasons but more for how they created simple unifying horizontal forms.

- Unventilated lobbies with no natural light on levels 1 and 2, are not supported by the Panel as they do not provide suitable internal amenity. It is a standard ADG requirement.

- Greater consideration should be given to improving the ground level communal open space of the scheme, which is located along the southern boundary of the site and would be overshadowed by the building. The Panel recommends that the applicant investigates removing the middle section of the building, at least above ground level, with a view to improved solar access. Alternatively, common open space area on the roof could also be provided.

- A sun study is required showing the proposal complying with required solar access to the apartments, communal open space and impact upon adjoining sites as per ADG requirements.

- A detailed landscape plan shall be provided as part of the DA documentation. The Panel encourages the planting of large trees in deep soil that will grow to provide significant canopy cover to provide shade, amenity and for environmental reasons.

- The internal layouts of some apartments are considered inefficient, including inboard and corner apartments. The Panel recommends the re-configuration of the kitchen and dining room area of these apartments, including the possibility of the introduction of linear or L Shaped kitchen layouts. The Applicant is of the view that linear kitchens are only appropriate for 1-bedroom or studio apartments; they are seldom employed in 2 or 3-bedroom apartments in their projects.

- Furniture layouts need to be shown on the drawings.

- Privacy/acoustic problems between diagonally facing corner apartments need to be resolved by redesign.

  South facing balconies to south and east facing corner apartments should be re-considered to gain better solar access. The rear apartments on the south east at Levels 3 to 5 of both

buildings have unnecessary blades to the east which cut off morning sun for no good reason.

- The Panel questioned the necessity of the proposed feature entry to the building at the expense of solar access to apartments. The entry can be more subtly marked by an inflection at the balustrade level above and or by a canopy coming out towards the street.

- The 2 top elements (levels 3, 4 and 5) could be more subtly articulated from the horizontal plinth of levels G,1 and 2). This would then emphasise the horizontal plinth and articulate the more minor masses of levels 3, 4 and 5.

- The Panel recommends the introduction of sun shading devices to north and west facing glazing. The long vertical north facing windows on the eastern level 3, 4 and 5 are especially vulnerable to hot summer sun.

- The sectional drawings show ground floor apartments which are below ground level. This needs to be resolved. Levels should be reassessed and shown on the drawings.

- Planter boxes above basement are not considered by the panel to be deep soil zones.

- The rear south west apartments on levels 3, 4 and 5 could be laid out so that the front door opens directly into the living area, which overlooks the terrace, which should be set back 2 or so metres from the its current position. Currently this terrace looks directly into the bedroom of the apartment to the north. This is unacceptable.

- In the eastern end of the eastern block on level 3, 4 and 5 there is an 1800 wide gap between the two apartments. The northern apartment has a window on the south. This should be removed and replaced by a window to the east, so that the southern apartment can have a corner window to catch sun / northern light and a view to the street.

- Generally, the architect should try to improve access to northern sunlight where possible.

General

- Note: All SEPP 65 apartment buildings must be designed by an architect and their registration number is to be on all drawings. The architect is to attend the DEP presentations.

Quality of construction and Material Selection

- Consideration must be given by the applicant to the quality of materials and finishes. All apartment buildings are to be made of robust, low maintenance materials and be detailed to avoid staining weathering and failure of applied finishes. Render is discouraged

Floor-to-floor height

- The panel recommends a minimum 3050 to 3100mm floor-to-floor height so as to comfortably achieve the minimum 2700mm floor-to-ceiling height as required by the ADG.

Sectional Drawings

- Sectional drawings at a scale of 1:20 of wall section through with all materials, brickwork, edging details to be submitted.

6. CLOSE

The proposal is not acceptable and must be referred to the Design Excellence Panel Again.

LIVERPOOL CITY COUNCIL

Ref No.: PL-148/2017
Contact: Rodger Roppolo
Ph: 1300 36 2170
Date: 12 May 2018

PHILIP TAN
GAT & ASSOCIATES
PO BOX 96
HABERFIELD NSW 2045

Re. PL-148/2017 - Demolition of all existing structures, amalgamation of four (4) lots into one, and the development of a residential flat building being 6-storey in height with 2 levels of basement car parking, containing a total of fifty-eight (58) residential dwellings, pursuant to State Environmental Planning Policy (Affordable Rental Housing) 2009.

Thank you for presenting your proposal to the Design Excellence Panel on 24 April 2018. Please find attached the minutes from the meeting outlining the recommended design changes to the proposal prior to the lodgement of a development application.

Council has reviewed the attached minutes and concur with the recommended design changes.

If you require any further information, please contact Rodger Roppolo by calling the number at the top of this page.

Yours faithfully,

Rodger Roppolo
Senior Development Planner
Development Assessment
Attachment 1: Liverpool Design Excellence Panel Minutes

LIVERPOOL CITY COUNCIL

Minutes

MINUTES OF DEP MEETING
24th April 2018

DEP PANEL MEMBERS PRESENT:

Lee Hillam	Chairperson
Kim Crestani	Panel Member
Geoff Baker	Panel Member

OTHER ATTENDEES:

Nelson Mu	Convener
Rodger Roppolo	Planner

APOLOGIES:

Nil

OBSERVERS:

Alfredo Pagano	Pagano Architects	alfredo@pagano.com.au
Thai Tran	Pagano Architects	
Valdis Aleidzans	GAT & Associates	valdis@gatassoc.com.au

AGENDA:

Property Address:	23-29 Harvey Avenue, Moorebank
Application Number:	PL-148/2017
Item Number:	1

1. WELCOME, ATTENDANCE, APOLOGIES AND OPENING

The Liverpool Design Excellence Panel (the Panel) comments are to assist Liverpool City Council in its consideration of the development application.

The absence of a comment under any of the principles does not necessarily imply that the Panel considers the particular matter has been satisfactorily addressed, as it may be that changes suggested under other principles will generate a desirable change.

The 9 design quality principles will be grouped together where relevant, to avoid the unnecessary repetition of comments.

2. DECLARATIONS OF INTEREST

Nil

3. CONFIRMATION OF PREVIOUS MINUTES

Yes

4. PRESENTATION

The applicant presented their proposal for the demolition of existing structures, amalgamation of 4 lots into one, and the construction of a 6-storey residential flat building above two levels of basement carpark, containing a total of 58 residential apartments. The aplication is to be made pursuant to SEPP (Affordable Rental Housing) 2009.

The applicant's architect briefed the Panel and outlined details of the proposal as follows:

- Bonus FSR is allowed by the SEPP, but the height does not change;
- Height encroachment is contained to the rooftop communal open space and amenity area;
- The building has been raised by up to 1m in places as a result of the previous DEP minutes;
- The building has been split into 2 well-defined buildings;
- Setback to the southern boundary has been increased;
- 2 rooftop communal open spaces proposed, one on top of each building;
- Basement car park reduced in size and deep soil zones increased;
- The building composition will consist of facebrick to the base and render at the top;
- All lobbies are now ventilated;
- Ground level communal open space provided on the northern side of the site facing the street;
- 77% of units achieve 2 or more hours sunlight in mid-winter; and
- Feature entry in the previous scheme has been deleted, as it prevented solar access to some of the units.

5. DEP PANEL COMMENTS

The 9 design principles were considered by the panel in discussion of the development application. These are 1] **Context, 2] Built Form+ Scale 3] Density 4] Sustainability 5] Landscape 6] Amenity, 7] Safety 8] Housing Diversity +Social Interaction 9] Aesthetics.**

The Design Excellence Panel makes the following comments in relation to the project:

- The Panel thanks the proponent for bringing the scheme back to the Panel for re-consideration and was pleased with the detailed documentation presented and the explanation provided by the architects on how the scheme has evolved in response to the Panel's previous minutes.

- The ground level Communal Open Space at the centre of the site is in an excellent location in that it is located with a northern orientation. However, it should be supplemented with a decent size tree. The Panel recommends that consideration be given to provide indented parking bay(s) within the basement car park directly below this central Communal Open Space so as to provide the required deep soil zone for the planting of a large canopy tree.

- Opposite facing balconies on levels 3, 4 & 5 could be staggered and may only require partial screening to minimise amenity problem.

- Appropriate shading devices should be incorporated into the scheme to provide protection from the elements all year round. The applicant indicated that their preference would be louvre hoods and these will be introduced when the scheme is further refined.

- Any sun shading devices to be implemented into the building should be calibrated to complement the buildings and ensure that the 2 buildings complement each other rather than being identical in appearance.

- The proposed 3 pedestrian access from the street is a positive element of the scheme that provide for individual entrances and intelligently modulate the building into smaller volumes. They are supported by the Panel.

- The Panel requires that the applicant engages the services of a landscape architect to assist in the development of the scheme.

- The gap introduced to the building is considered appropriate and is supported by the Panel.

- It is noted that the proposal exceeds the allowable building height for the site. This is considered acceptable by the Panel on the basis that the exceedance is attributed to the rooftop Communal Open Space that include amenity facilities (toilet and shade structures).

- The Panel recommends that additional design features be introduced to the communal open spaces to provide for more functional and amenable spaces.

- Landscaping and ground floor courtyards of the scheme to be designed to achieve compliance with the ADG requirements.

General

- Note: All SEPP 65 apartment buildings must be designed by an architect and their registration number is to be on all drawings. The architect is to attend the DEP presentations.

Quality of construction and Material Selection

- Consideration must be given by the applicant to the quality of materials and finishes. All apartment buildings are to be made of robust, low maintenance materials and be detailed to avoid staining weathering and failure of applied finishes. Render is discouraged

Floor-to-floor height

- The panel recommends a minimum 3050 to 3100mm floor-to-floor height so as to comfortably achieve the minimum 2700mm floor-to-ceiling height as required by the ADG.

Sectional Drawings

- Sectional drawings at a scale of 1:20 of wall section through with all materials, brickwork, edging details to be submitted.

6. CLOSE

The Panel appreciates that the applicant has taken into consideration the Panel's previous issues. The development is to be referred back to the Design Excellence Panel for a desktop review when the Development Application is lodged.