

PREFERRED PROJECT REPORT

Allengrove Crescent, North Ryde

May 2011

urbis

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Statement of Validity

Submission of Environment Assessment:

Prepared under Part 3A of the Environmental Planning and Assessment Act 1979

Environmental Assessment prepared by:

Name:	Ian Cady (Associate Director)
Qualifications	BA Geography and Planning (UNE) Diploma of Urban and Regional Planning (UNE)
Address:	Urbis Pty Ltd. Level 21, 321 Kent Street Sydney NSW 2000
In respect of:	1-9 Allengrove Crescent, North Ryde

Applicant and Land Details

Applicant:	EGC Custodian Services Pty Ltd
Applicant Address:	Level 14, 345 George Street Sydney NSW 2000
Subject Site / Land to be developed:	1-9 Allengrove Crescent, North Ryde
Lot and DP	Lot 9 on DP576484, 2 on DP371325, Lot 1 on DP845252, Lot 2 on DP524945, Lot 10 on DP739172, Lot 1 on DP504970, Lot 24 on DP869002, Lot 1 on DP656171, Lot 2 on DP656172, Lots 3-7 on DP28702.
Project Summary:	Concept Plan for the demolition of the existing 15 dwellings, excavation of three stepped basement levels and the construction of 196 residential units in three blocks:

Environmental Assessment

An Environmental Assessment is attached.

Declaration

We certify that the contents of the Environmental Assessment to the best of our knowledge, has been prepared as follows:

- In accordance with the requirements of the Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulations 2000; and
- The information contained in this report is true in all material particulars and is not misleading.

.....
Signature:



Name: Ian Cady

.....
Date: 24 May 2011

.....
Signature:



Name: Nicholas Dowman

.....
Date: 24 May 2011

Executive Summary

This project was determined by the Minister for Planning to be a project to which Part 3A of the Act applies on 21 April 2010. It relates to 116a - 122b Epping Road, 259 - 263 Lane Cove Road and 1 - 9 Allengrove Crescent, North Ryde (the site).

An Environmental Assessment was submitted for test of adequacy, followed by formal submission on 26 November 2010, and public exhibition by the Department of Planning from 1 to 31 December 2010.

Stakeholder consultation was undertaken on 29 November 2010, the outcomes of which have helped shape the current form of the Preferred Project Concept Plan including reduced height, density and rearrangement of open space on the site from the plans submitted for public exhibition.

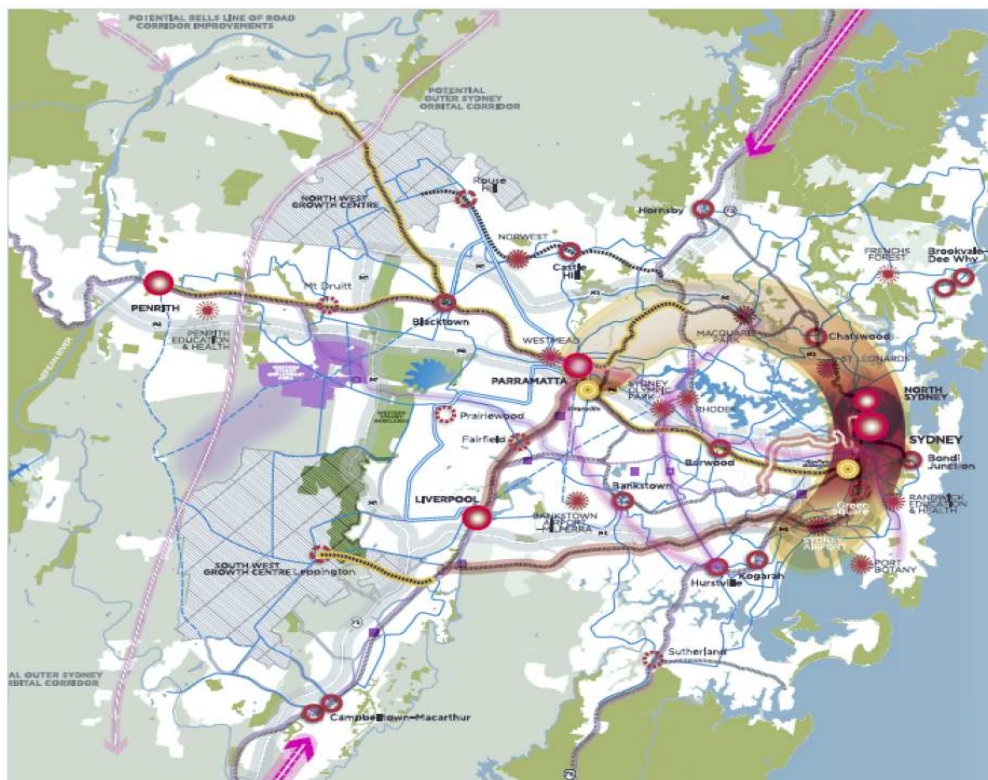
The original concept design comprised 269 dwellings within three rows of buildings ranging from four to eleven storeys, and above basement parking for 394 cars. In response to issues raised by various stakeholders, the scheme has been amended to comprise 196 apartments in a rearranged format, with building heights ranging from four to eight storeys, and above basement parking for 273 cars.

Therefore, the Preferred Project Report (PPR) comprehensively responds positively to the submissions received during the exhibition period and from the applicant's community consultation.

Strategic Planning Context

The Macquarie Park Corridor is the northern anchor of the "Global Economic Corridor" and will be a major focus of future employment growth, increasing by 23,000 jobs and 900,000sqm of commercial floor space by 2031. To support this growth, the recently completed Chatswood to Epping rail link provides three new rail stations within the corridor.

Global Economic Corridor



Source: The Metropolitan Plan for Sydney 2036 (Page 19)

While it is recognised that land within the corridor needs to be reserved for future employment purposes, this should be complimented by centre-supporting housing that allows people to live and work in the same locality

Opportunities to provide housing have recently been introduced to some areas within the Macquarie Park Corridor (i.e. adjacent to Macquarie University Station) which is a positive response by the Council, but Ryde LEP 2010 still prohibits residential uses in the vicinity of Macquarie Park Station. Consideration has not been given to opportunities outside the Corridor which are nevertheless still within walking distance of the new railway stations. This is contrary to a key action of the Metropolitan Plan for Sydney 2036 to *“locate 80% of all new housing within walking distance of centres of all sizes with good public transport”*. However, on 3 August 2010 Ryde City Council resolved to endorse the recommendations contained within the Draft Ryde Housing Study 2010 to inform the Draft Comprehensive LEP 2011 and Draft DCP 2011.

The Allengrove Crescent site is part of a limited supply of ‘transit-oriented’ land that has been consolidated into a viable site for higher density residential flat development and therefore represents a strategic opportunity to:

- Contribute to the achievement of housing targets.
- Enliven the Macquarie Park Corridor.
- Increase opportunities to live near jobs within the corridor.
- Increase the supply of transit oriented housing to shift transport movements from cars to public transport, walking or cycling, thereby reducing congestion and CO² emissions.
- Utilise existing spare capacity within the recently completed Chatswood to Epping rail link.

Walking Distance and Route from Site to Macquarie Park Station

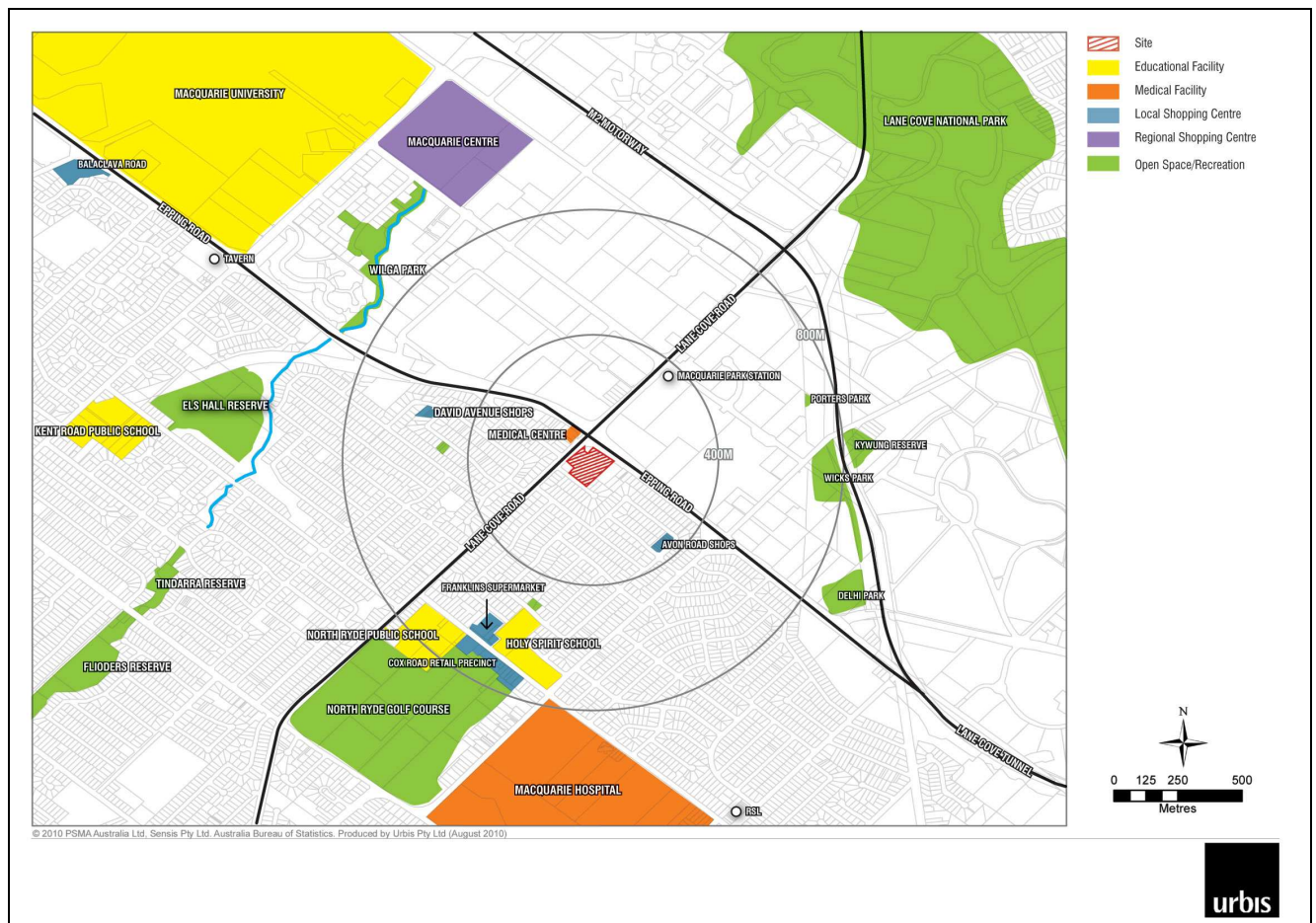


Local Context

The site is within walking distance of a range of services and amenities, including local shops, doctors, schools, employment, public transport, a regional cycleway and numerous parks. It is also accessible to the regional retail and entertainment facilities within the Macquarie Shopping Centre.

Whilst the site is currently zoned for, and surrounded by low density, predominantly detached housing, it is of sufficient size to accommodate multi-level buildings with suitable setbacks and lower scale buildings at the interface to surrounding properties to prevent adverse impacts on the local area.

Local Facilities



The Original Concept Plan

The original concept design contained within the publicly exhibited Environmental Assessment report comprised 269 dwellings within three rows of buildings ranging from four to eleven storeys, above basement parking for 394 cars. Lower scale buildings were located adjacent to adjoining low density housing, with height concentrated towards the intersection of Epping Road and Lane Cove Road.

Responses to Department of Planning assessment & public submissions

Key differences between the originally submitted Concept Plan and the Preferred Project Concept Plan are:

Density

- The overall floor space on the site has been reduced from 27,634m² (FSR 2.25:1) to 19,916m² (FSR 1.6:1) and the number of apartments has been reduced from 269 to 196 based on a further analysis of density options. The revised density will respond positively to the surrounding low scale residential context.

Height, site layout and setbacks

- The overall building heights in the Concept Plan have been reduced from heights ranging between 4-11 storeys to 4-8 storeys (i.e. deletion of all previously proposed levels above 8 storeys). This provides an effective transition in terms of reduced heights stepping down from Epping Road to Allengrove Crescent.
- The south-eastern end of central building has been deleted to provide a better interface with surrounding residential properties. Building form is now considerably set back from the south-east boundary to reduce impacts to adjoining properties.
- There is a reduction in height of the central building from 11 storeys to 7 storeys to create a better transition to the proposed communal open space.
- The proposed building adjacent to Allengrove Crescent has been split into 2 separate buildings with a space of 7 metres between them. This is to reduce the scale of the building to Allengrove Crescent.

Open space and amenity

- The proposed open space has been reconfigured to create a larger, central contiguous area of communal open space on the site, which incorporates a community garden. This provides opportunities for deep soil zones and enhanced landscaping.

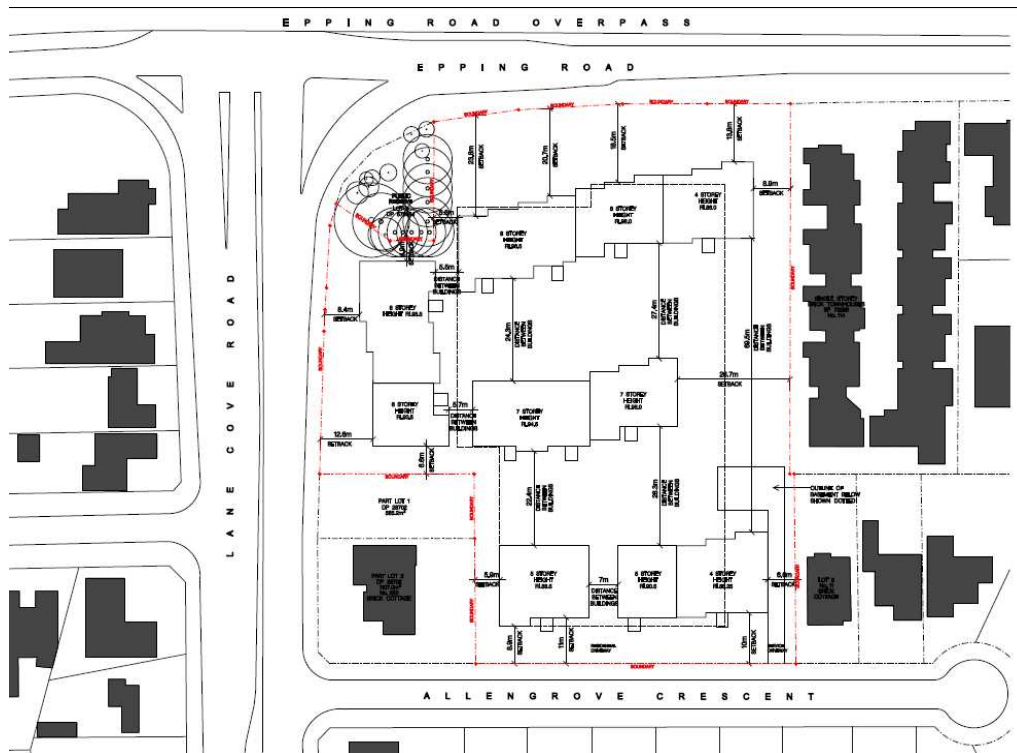
Traffic

- The number of car spaces has been reduced from 394 to 273 given the reduction in apartments and accessibility to public transport options.
- The proposed south east boundary service lane is to be replaced by a considerably shorter service vehicle access facility. The previously proposed access lane will be replaced with mounded landscaping to better screen the adjacent townhouses.

Preferred Project Concept Plan

This PPR Concept Plan represents an evolution of the original scheme proposed in the submitted and exhibited Environmental Assessment Report. Design evolution has occurred in direct response to issues raised in consultations undertaken by both the applicant and the Department of Planning, and technical assessments undertaken by the Department of Planning, Ryde City Council and various public authorities to which the Department of Planning referred the original application.

Preferred Project Concept Plan



Indicative Ground Floor & Landscape Plan



Photomontage of PPR Scheme



Part 3A of the EP&A Act

The project was declared one to which Part 3A of the *Environmental Planning and Assessment Act* (the Act) applies on 21 April 2010. The Minister has also authorised the submission of a Concept Plan that outlines key development parameters, such as land use, building envelopes, landscape concept, car parking numbers and vehicular access arrangements for the proposal. Subject to approval of the Concept Plan, separate Project Approval will be sought for the detailed design of the project.

The Director-General (DG) of Planning has also issued Environmental Assessment Requirements (EARs) for the preparation of the Environmental Assessment (EA) of the project. The Concept Plan and EA have been prepared in accordance with these requirements.

The NSW Government recently announced that it will introduce a Bill to repeal Part 3A of the EP&A Act. The Minister for Planning and Infrastructure has put in place a number of interim arrangements pending that repeal. Included in the arrangements is to amend the State Environmental Planning Policy (Major Development) 2005 to remove the following class of development:

“Development for the purpose of residential, commercial or retail projects with a capital investment of more than \$100 million.”

However, the Department has clarified that projects which have valid DGRs issued on or before 8 April 2011 (where the DGRs are less than two years old as of that date) will remain as Part 3A projects.

Therefore, while the project does fall within the above class of development, transitional arrangements ensure that Part 3A still applies. We understand that the Minister will delegate his Part 3A determination role to the Planning Assessment Commission (PAC) or senior officers of the Department for applications made on behalf of private proponents.

Planning Controls and Policies

While the project significantly exceeds the height and density provisions of the R2 Low Density Residential zone under Ryde Local Environmental Plan 2010, the proposed intensification of the site is directly consistent with the principles of a range of broader strategic planning considerations, such as the NSW State Plan 2010, the Draft Inner North Subregional Strategy, the Metropolitan Transport Plan 2010 and Integrating Land Use and Transport – A Planning Policy Package 2001.

Aside from the LEP controls, the project is consistent with all other relevant guidelines and controls, including the Residential Flat Design Code.

Built Form & Urban Design

The project has been designed to reconcile various competing design considerations and provides a high quality built form outcome that integrates with the surrounding environment.

The bulk, height and scale of the project have been carefully considered to address the surrounding properties and the scale of the street.

The Concept Plan provides for optimum amenity for the proposed dwellings. All units are orientated to the north east and more than 70% of proposed units will receive a minimum of three hours solar access to the living areas and private open spaces during mid winter.

Environmental and Residential Amenity

The project has been designed in accordance with SEPP 65 - Design Quality of Residential Flat Development and the Residential Flat Design Code (RFDC) and the range of guidelines therein to optimise solar access, acoustic privacy and visual privacy and provides for a high level of environmental and residential amenity.

The project has also been designed in accordance with the Department of Planning Interim Guidelines for Development near Rail Corridors and Busy Roads, and incorporates a range of measures to mitigate the effects of noise from traffic on Epping and Lane Cove Roads.

Isolated Sites

Whilst the project will 'isolate' the property on the corner of Allengrove Crescent and Lane Cove Road (253-257 Lane Cove Road), the proponent has made numerous documented offers to acquire this site over a considerable period of time. As these offers have all been declined, the scheme has been designed to step down towards this property to reasonably protect its amenity and the Concept Plan illustrates how a future redevelopment of this site could occur in a co-ordinated manner.

Transport and Accessibility

The site is ideally located to benefit from a range of transport options including train, bus, cycling and walking and therefore embodies the principles of transit oriented development.

In addition to being located within 400m of the Macquarie Park station, the site is serviced by a range of local and regional bus routes. A wide range of parks, shopping services and schools are located within walking distance and the site has immediate connectivity to the regional bicycle path network.

Located on the major intersection of Lane Cove Road and Epping Road, the site is also easily accessible by private vehicle.

Ecologically Sustainable Development (ESD)

The underlying principle of concentrating new development around major transport nodes in existing areas is one of the most important sustainability objectives for the future development of Sydney, and significantly contributes to:

- Containment of the urban footprint of Sydney.
- Better utilisation of existing infrastructure.
- Reduced private car use and associated congestion and CO² emissions.

In addition, the project adopts a number of measures to minimise water and energy use, and the discharge of pollution. To optimise the social sustainability of the project, a range of housing options is proposed, and the landscape concept has been designed around the use of food producing species, and includes a communal market garden to:

- Reflect the market gardening and orcharding history of the locality.
- Mitigate the environmental costs of food transport by allowing on-site food production.
- Increasing opportunities for community engagement, and reducing potential for social isolation in high density living.
- Create opportunities to positively engage the cultural diversity of the locality through productive gardening.

Drainage, Stormwater Management and Flooding Potential

Water quality is to be managed on site with the implementation of Water Sensitive Urban Design best practice principles including rainwater tanks, litter baskets, onsite detention tanks and bio-retention basins.

Summary

While the project will have a transformational effect on the local area and departs from the underlying low density zoning, it represents a strategic and very limited opportunity to provide transit oriented housing to complement future employment growth and significant existing transport infrastructure within the Macquarie Park Corridor.

While different in scale and form from its immediate neighbours, the design and massing of the project ameliorates potential boundary impacts, such that it will not result in any unreasonable environmental effects upon its neighbours.

Furthermore, revisions to the scheme incorporated in response to public submissions and assessment by the Department of Planning have further mitigated potential environmental effects of the project.

We therefore have no hesitation in recommending the proposed Concept Plan for approval, subject to the Statement of Commitments included at Appendix C.

1 Introduction

This Preferred Project Report (PPR) comprises part of an application for approval of a Concept Plan pursuant to Section 75M of the Environmental Planning and Assessment Act 1979 (the Act) and responds to the Director General's (DG's) Environmental Assessment Requirements (EARs) issued on 11 June 2010 under Section 75F of the Act.

The project was publicly exhibited by the Department of Planning from 1 to 31 December 2010. Submissions received were provided to the proponent and have been addressed in the design evolution of the Concept Plan.

The Concept Plan facilitates residential development at 116a - 122b Epping Road, 259 - 263 Lane Cove Road and 1 - 9 Allengrove Crescent, North Ryde (the site) and was determined by the Minister to be a project to which Part 3A of the Act applies on 21 April 2010.

In summary the project incorporates the construction of 196 residential apartments in several buildings, ranging from four to eight storeys, above basement parking for 273 cars.

The site currently accommodates 15 detached dwellings under the single ownership of EGC Custodian Services and will be amalgamated as part of the project.

The site is located in a strategic position on the corner of Epping Road and Lane Cove Road, within 400m of the Macquarie Park train station and adjacent to numerous local and regional bus routes and the wider Macquarie Park corridor. As detailed throughout this PPR and supporting information, the project represents a strategic opportunity to contribute to the housing targets for the Ryde LGA on a site in close proximity to a range of transport options and local facilities and services.

This PPR details:

- The site and context
- Background
- Stakeholder Consultation
- Strategic Context
- Response to Submissions
- The Concept Plan
- Response to the DGs EARs.

2 Site and Surrounding Development

2.1 Site Details

The site is known as 116a – 122b Epping Road, 259 – 263 Lane Cove Road and 1 – 9 Allengrove Crescent, North Ryde and is legally described as:

- Lot 9 on DP576484
- Lot 2 on DP371325
- Lot 1 on DP845252
- Lot 2 on DP524945
- Lot 10 on DP739172
- Lot 1 on DP504970
- Lot 24 on DP869002
- Lot 1 on DP656171
- Lot 2 on DP656172
- Lots 3-7 on DP28702

Located on the southern corner of Epping and Lane Cove Roads, the site is adjacent to the Epping Road overpass of Lane Cove Road. It also has a western frontage to Allengrove Crescent, a minor local cul-de-sac accessed directly from Lane Cove Road. It is irregularly proportioned, has an area of 12,297.1sqm, shares common property boundaries on its south-eastern and western sides and slopes gently down from south to north.

Most significantly, the site is within easy walking distance (380m) of the recently completed Macquarie Park train station and is well served by bus stops on adjoining arterials roads.

The site currently comprises 15 detached dwelling lots in accordance with its current R2 Low Density Residential zoning.

The site is illustrated in Figures 1 – 3 below.

Figure 1 – Aerial Photograph of the Site



Figure 2 – Local Cadastre

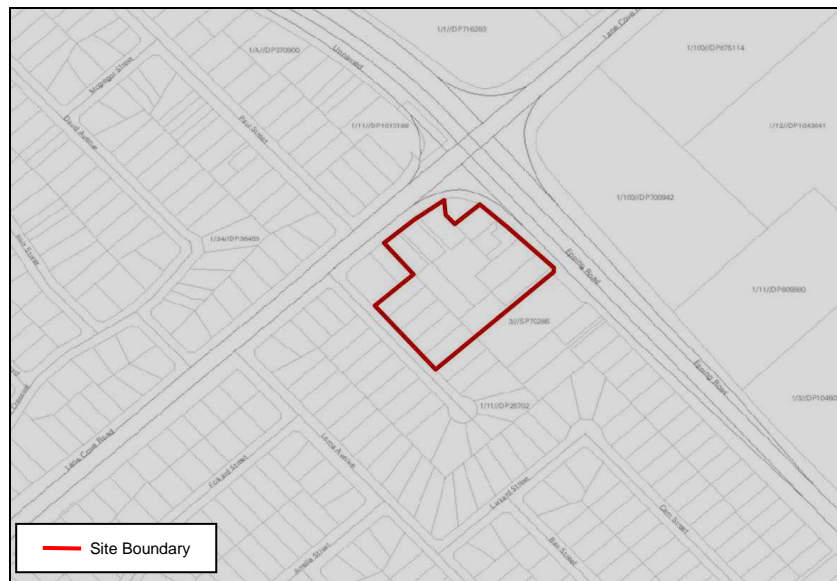


Figure 3 – Existing Development on the Site



Picture 1 – Existing Low Density Housing on Site – 118 Epping Road



Picture 2 – Existing Low Density Housing on Site – 263 Lane Cove Road



Picture 3 – Existing Low Density Housing on Site – 9 Allengrove Crescent



Picture 4 – Existing Low Density Housing on Site – 5 Allengrove Crescent

2.2 Vegetation

The site contains numerous trees consistent with a typical suburban environment. Most of these have been established in an uncoordinated manner given the previously fragmented ownership of the site. An Arboricultural Impact Assessment has been prepared by Footprint Green to assess the condition and significance of existing vegetation. The arborist's report identifies several trees to be removed to facilitate the development. A discussion of the significance of these trees is included in Section 8.2.9 and the full Arborist's Report is provided at Appendix J.

2.3 Geotechnical and Contamination

A Phase 1 Environmental Site Assessment undertaken by Environmental Investigation Services (Appendix O) has found that as the site and surrounding area has been used predominantly for residential purposes, no activities which could be expected to generate significant soil or groundwater contamination were obvious.

Whilst the results of some onsite tests showed elevated levels of contaminants in some soil samples it is not expected that these levels will inhibit the suitability of the site for residential development, subject to further assessment following the demolition of existing buildings on site.

2.4 Surrounding Development

The site is located on Epping Road, which forms a distinct boundary between low density housing to the south-west, and multi-level industrial and commercial development to the north-east. Surrounding development is described in Table 1 below and is illustrated in Figures 4 and 5:

Table 1 – Surrounding Development

Type	
Land Use – South West	Land to the south-west consists primarily of low rise detached houses interspersed with a number of town-house and duplex developments, and is primarily zoned R2 Low Density Residential under the Ryde Local Environmental Plan 2010 (the LEP).
Land Use – North East	Land to the north-east of Epping Road is primarily zoned for business and technology purposes. Significant intensification of employment generating uses is planned in this area.
Parks	Immediately to the north of the site, adjoining the northern boundary is a small public reserve. Whilst this reserve provides some degree of visual amenity it does not provide a usable amenity due to noise and safety issues. The wider locality contains numerous parkland reserves. Two pocket parks are located within 600m-800m of the site. The site is also within 1km of the open space network encompassing and connecting Wilga Park and ELS Hall Reserve. In addition the North Ryde Golf Course is located approximately 800m to the south-west and Lane Cove National Park lies beyond the M2 Motorway to the north-east (approximately 1 km from the site).
Shopping	The site is close to local convenience shopping, including the Avon Road shops, which include approximately eight commercial/retail tenancies providing neighbourhood services. A full range of local convenience retailing including a Franklins Supermarket is located on Cox Road, approximately 700m from the site. The regional Macquarie Shopping Centre is approximately 1km from the site.

Type	
Education	<p>There are a number of schools in the local area including North Ryde Public School and Holy Spirit School located approximately 600m – 800m south west of the site and Kent Road Public School approximately 1.6km to the west of the site. In addition Macquarie University is located approximately 1.6km to the north west.</p>
Medical	<p>A Medical Centre is located immediately across Lane Cove Road from the site (on the western corner of the Lane Cove Road and Epping Road intersection). The medical centre offers a comprehensive range of medical services including:</p> <ul style="list-style-type: none"> General Practice Pharmacy Physiotherapist Psychologist Pathologist Skin Cancer Clinic Dentist Podiatrist Chinese medicine Chiropractor <p>In addition, the Macquarie Hospital is situated approximately 1.8km to the south-east of the site. While Macquarie Hospital specialises in mental illness and disorder, Royal North Shore Hospital together with Ryde Hospital form the Royal North Shore and Ryde Health Service, which provide comprehensive hospital services, including emergency and inpatient care. Ryde Hospital is located 3 km south-west of the site and Royal North Shore Hospital is 8km to the south-east.</p>

Figure 4 – Local Facilities

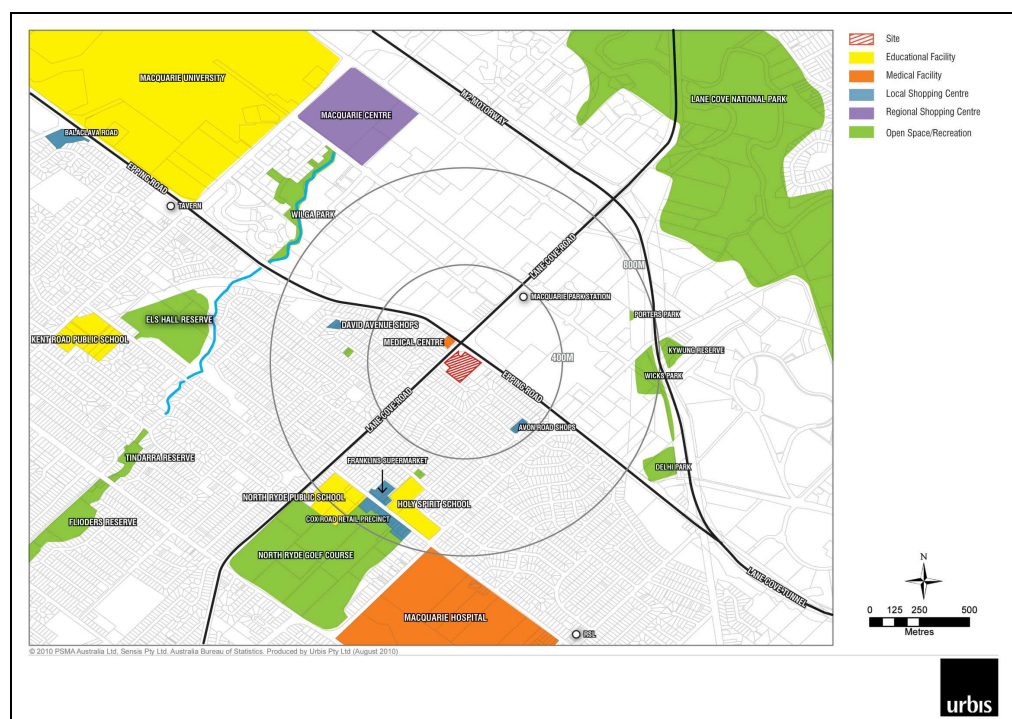


Figure 5 – Surrounding Development Context



Picture 5 – 114 Epping Road – immediately adjoining the site to the east



Picture 6 – Commercial development on Epping Road



Picture 7 – Epping Road overpass and commercial development within Macquarie Park



Picture 8 – Medical centre on the corner of Epping Road and Lane Cove Road



Picture 9 – Commercial / industrial development north of the site – Lane Cove Road



Picture 10 – View north along Lane Cove Road from the Lane Cove Road frontage of the site



Picture 11 – Development to the north of the site



Picture 12 – View west from the site



Picture 13 – 253-257 Lane Cove Road, immediately adjoining the site to the west



Picture 14 – Existing orchard and garden activity - 253-257 Lane Cove Road



Picture 15 – Council reserve – Corner Lane Cove Road and Epping Road



Picture 16 – 11 Allengrove Crescent, immediately adjoining the site to the east



Picture 17 – New residential development on Lorna Avenue, south of the site



Picture 18 – Avon Road neighbourhood shops, south east of the site

2.5 Demographics

There are 10,195 residents in the suburb of North Ryde based on data derived from the 2001 and 2006 ABS Census statistics. The following provides a brief discussion of the demographic characteristics of North Ryde in comparison with both the Ryde LGA and the Sydney Statistical Division (SD).

2.5.1 Age

The suburb has an older population and an above average median age of 40 years and a significantly higher proportion of residents aged 65 years and over (17.8%) than both Ryde LGA (14.5%) and Sydney Statistical Division (SD) (12.3%). In addition, the suburb represents a slightly lower than average percentage of persons that fall into the working age group of 25-54 years (41.8%) compared to the Sydney SD (44.1%).

2.5.2 Income and Affluence

The median household income of North Ryde is \$1,238 per week, which is higher than the average for Sydney.

2.5.3 Housing and Housing Tenure

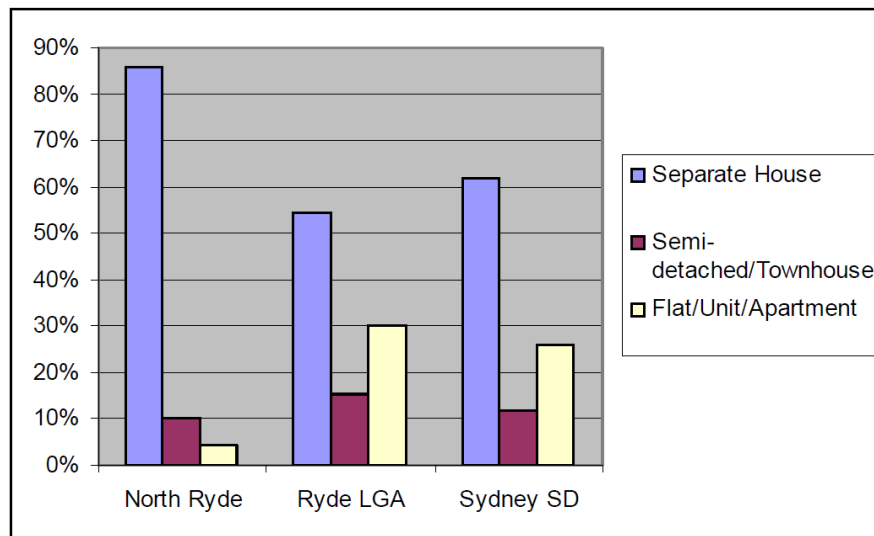
The majority (85.6%) of dwellings in North Ryde LGA are separate houses. This proportion is, significantly higher than the rest of the Ryde LGA (54.5%). Flats, units or apartments only make up 4.2% of the dwelling stock in North Ryde, compared to 30% across the LGA and 25.7% in the Sydney SD as illustrated in Figure 6).

Rates of home ownership are high in North Ryde with 70.4% of residents either owning their homes or being in the process of purchasing their home compared to only 60.4% across the Ryde LGA and 61.2% in the Sydney SD.

Housing densities in North Ryde reflect the national average, with an average of 1.1 persons per bedroom, although the average household size is slightly greater at 2.8 persons per household compared to 2.6 persons nationwide.

The majority of families in North Ryde are couples with children (51.1%), slightly higher than Sydney at 49.3%, while 33% of families in both North Ryde and across Sydney are couple families without children.

Figure 6 – Housing Stock in North Ryde



2.5.4 Employment

Unemployment in North Ryde is low at 3.5% compared to 5.3% in the Sydney SD. Employment profiles for the region reflects the prominence of Macquarie University, Ryde and Macquarie Hospitals, Macquarie Technology Centre and Riverside Corporate Park. 29.3% of Ryde LGA residents are employed as professionals, 17.7% as clerical and administrative workers and 13.7% as managers. The top three industries for these employment types are professional, scientific and technical services, education and training, and health care and social assistance. There is a lower than average number of persons employed in blue collar industries who reside in the LGA, possibly related to housing affordability in the area.

2.5.5 Implications

Given the low rate of multi-unit housing currently provided in North Ryde, combined with the increase in employment in Macquarie Park and the opening of the Epping-Chatswood rail link, demand exists for a greater range of housing options.

2.6 History of the Area

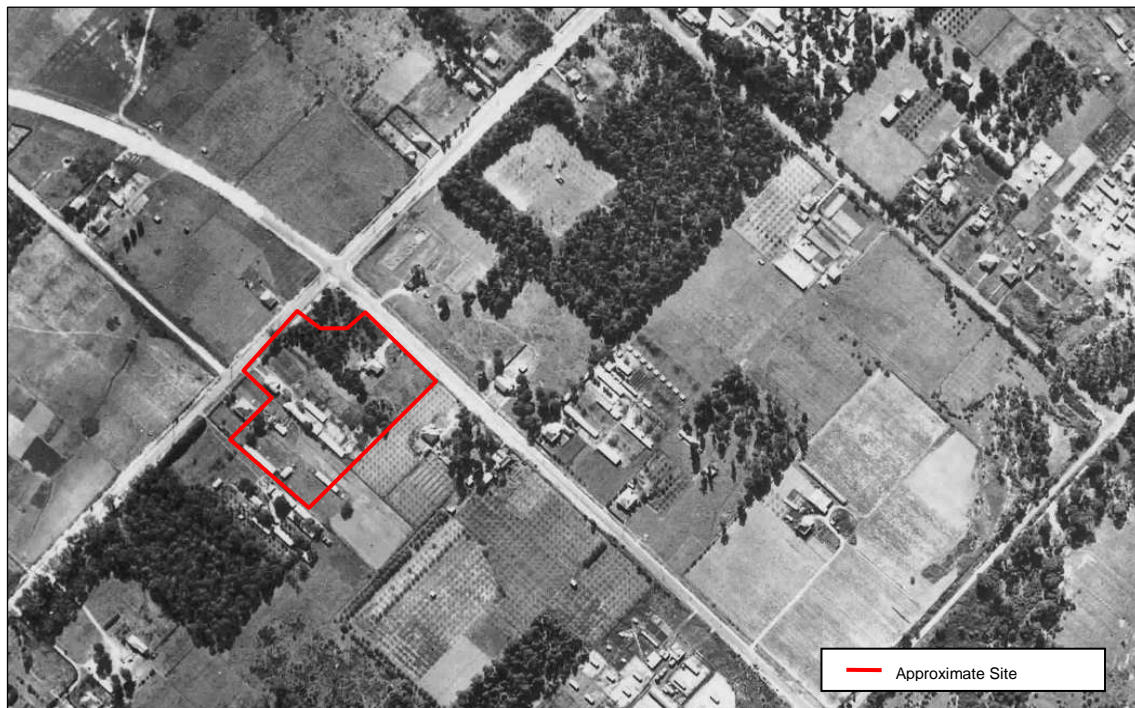
The area from Sydney Cove to Parramatta, on the northern side of the Parramatta River, was originally known as Wallumetta and belonged to the aboriginal Wallumede people.

White settlement first occurred in the area, then named 'Field of Mars,' around 1792 as a result of grants given to eight marines.

Throughout its history the area has had a rich association with the early cinema movement, a number of shipyards and significant orcharding and market gardening as illustrated in Figure 7.

Significant urbanisation of the area began in the late 1940s with the Ryde Housing Scheme. Throughout the 1950s the area continued to become more urbanised and the establishment of Macquarie University in the 1960s set the scene for the development of the Macquarie Park technology precinct.

Figure 7 – North Ryde 1943



2.7 Transport

The project will be well serviced by a range of transport options.

The site benefits from excellent access to public transport and is serviced by both rail and bus. As shown in Figures 8 and 9 the Macquarie Park train station is located within 400m of the site, as are a number of regional bus routes, which have stops adjacent to the site.

Figure 8 – Walking Distance to Macquarie Park Station

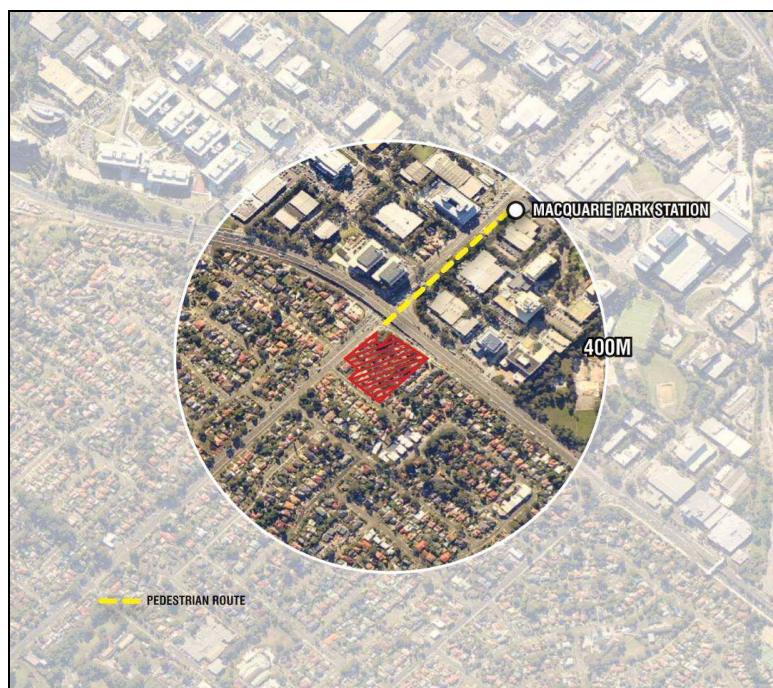
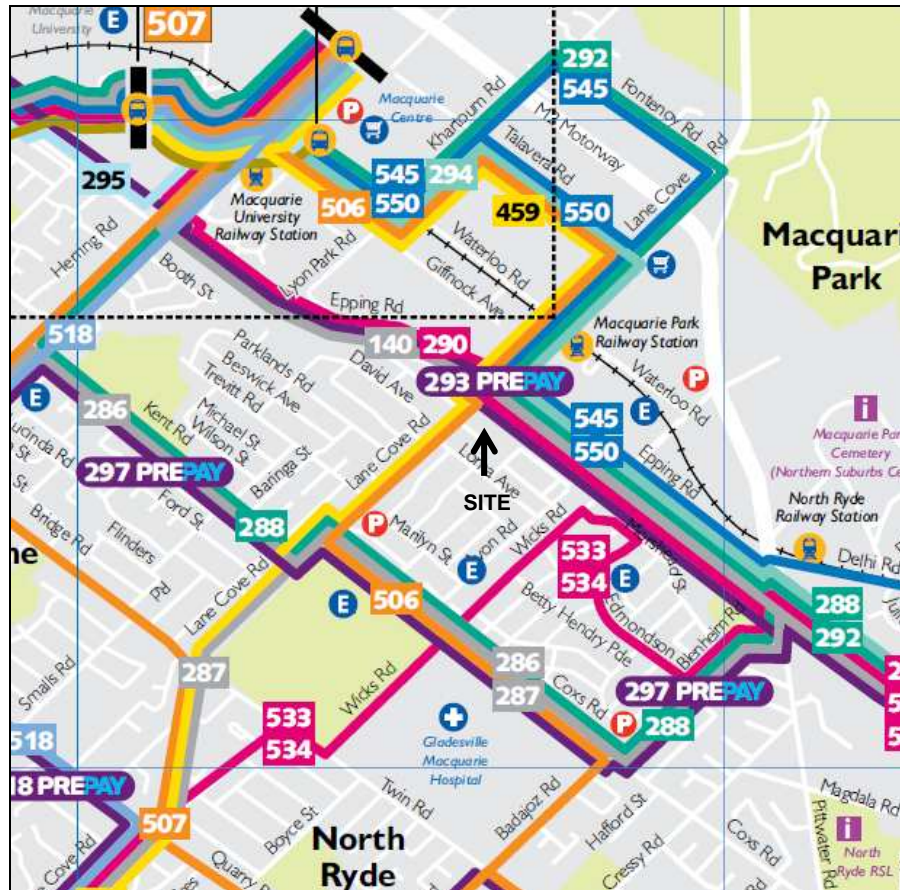


Figure 9 – Bus Routes Servicing the Site



Source: STA Bus Network Map, Western Region Guide

The project is also well located to benefit from active transport opportunities with a network of bike paths passing the site on Epping Road which provides access to a number of locations across the wider Sydney region (refer to Figure 10).

Figure 10 – Bike Path Network



Source: Ryde Bicycle Strategy and Masterplan 2007 (Map 2, Page 14)

As previously discussed in Section 2.4 and illustrated in Figure 4, a range of facilities are located within walking distance of the site including park and recreation opportunities, schools and local shopping.

An existing established road network also services the site including direct access to arterial roads (Lane Cove Road and Epping Road).

3 Strategic Context

3.1 Metropolitan Plan for Sydney 2036

The Metropolitan Plan for Sydney 2036 (“The Metro Strategy”) is the first comprehensive update of the 2005 Metro Strategy which was recently made available to the public on 16 December 2010. It is an integrated, long-term planning framework that will seek to sustainably manage Sydney’s growth and strengthen its economic development to 2036 while enhancing its unique lifestyle, heritage and environment.

The updated Plan seeks to respond to the key challenges facing Sydney such as a growing and changing population, the need to locate more jobs closer to home, more efficient transport, tackling climate change and enabling a more sustainable city. Central to achieving these challenges is a focus on developing a ‘City of Cities’ structure which is defined by a compact, multi-centred and connected city structure enabling people to spend less time travelling to access work, services, markets or regional facilities.

A key direction of the Strategy is to aim to build at least 70 per cent of new homes in existing urban areas, increasing the proportion of homes within 30 minutes by public transport of jobs in a major centre, and enabling residential and employment growth in areas where there is available or planned public transport capacity.

As a broad policy approach the Metro Strategy encourages higher density housing (i.e. more than 60 net dwellings per hectare) in larger centres and Action D2.1 clarifies that *“new apartment blocks in larger centres will also be a significant component of future housing”*.

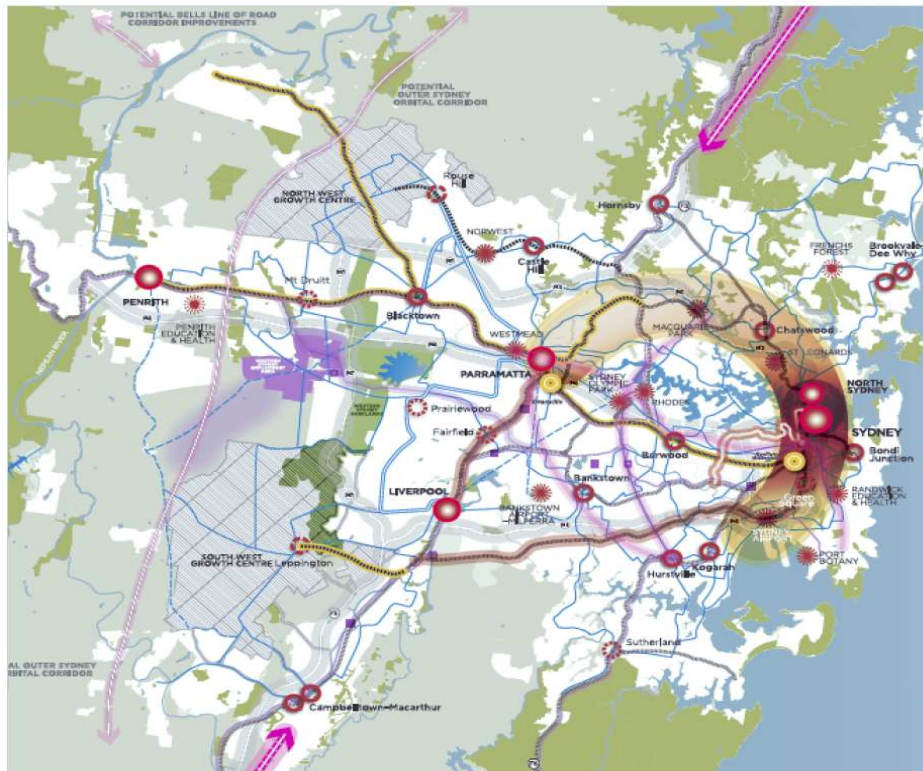
The Metro Strategy therefore positively encourages well designed, higher density housing in walking distance of centres.

3.1.1 Global Economic Corridor

The site is located across Epping Road from the Macquarie Park Industrial / Technology Park. This area is recognised at all levels of government as a critical component of the Global Economic Corridor, which extends from Epping through the Sydney CBD, to the airport and Port Botany (refer to Figure 11). The strategic economic importance of Macquarie Park has recently been reinforced by the completion of the Epping to Chatswood rail link, including three new railway stations in the Macquarie Park locality. The Metro Strategy describes the Global Economic Corridor as:

“The corridor of concentrated jobs and activity in centres, from North Sydney to Macquarie Park and the City to Sydney Airport and Port Botany has been the powerhouse of the Sydney and Australian Economy”

Figure 11 – Global Economic Corridor



Source: The Metropolitan Plan for Sydney 2036 (Page 19)

The Metro Strategy also identifies a number of key strategic objectives to ensure the viability of its subregions. These include:

- The attainment of specific regional and subregional housing targets.
- The efficient utilisation of existing/new infrastructure.
- The concentration of housing density in and around corridors and centres, particularly railway stations.
- The creation of vibrant mixed use centres that accommodate both working and living.

The combined effect of the above considerations strongly supports significant residential density increases in locations that are outside the Macquarie Park employment precinct, but still within close proximity of the new railway stations.

3.2 Draft Inner North Subregional Strategy

The site falls within the Inner North Subregion of the Metro Strategy. The Draft Inner North Subregional Strategy (the Subregional Strategy) provides the intended outcomes and specific parameters for the development of the subregion.

3.2.1 Centres and Corridors

The Subregional Strategy identifies the site within both the Macquarie Park Specialised Centre and the North Sydney to Macquarie Park Economic Corridor (the northern portion of the Global Economic Corridor).

The Macquarie Park Specialised Centre represents one of two specialised centres in the Inner North Subregion. The future intent of the Macquarie Park Specialised Centre is:

“Macquarie Park to continue to evolve as Australia’s leading technology park, with jobs growth, further investment and improved public transport accessibility.”

It is anticipated that the Macquarie Park Specialised Centre will provide a total of 55,300 jobs by 2031 and the newly opened Epping to Chatswood rail line and its associated stations is hoped to:

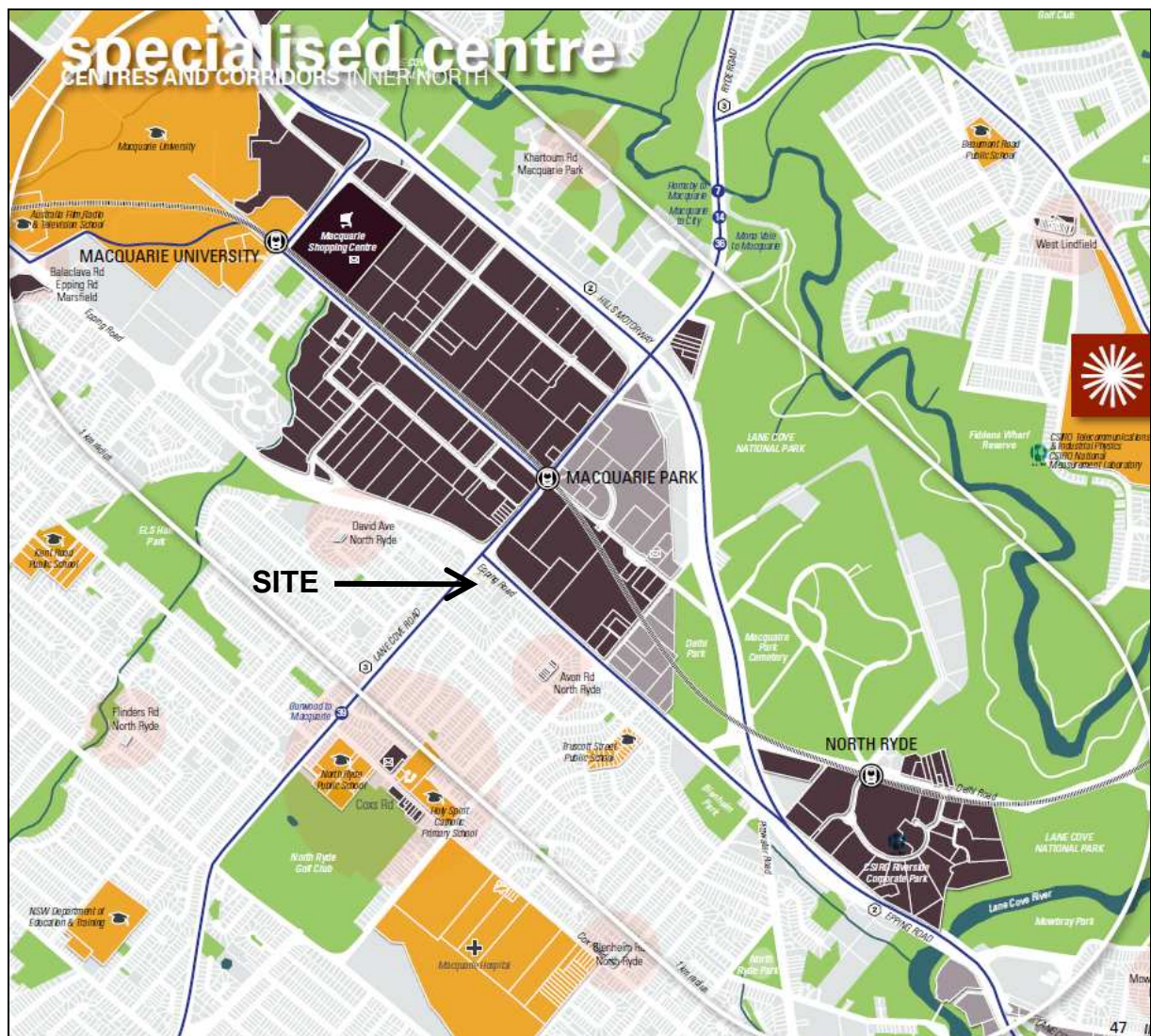
“... aid in furthering the economic role of Macquarie Park and improve accessibility to a broad labour market and suppliers.”

As illustrated in Figure 12, most land in the corridor has been reserved for the achievement of this intent with employment lands taking up most of the land along the newly created stations on the Epping to Chatswood railway. The principal objective of the Macquarie Park area is to promote employment, however in doing this the potential for housing development is limited. In order to ensure the full utilisation of the train line, and subsequently the sustainable development of the area, additional residential uses are required within easy access to transport options.

Figure 12 also shows the network of smaller centres located around the site, providing local services and facilities within walking distance. Specifically, the Coxs Road shopping centre is identified as a Small Village and the Avon Road and David Avenue shops are both identified as Neighbourhood Centres. However, the David Avenue and Avon Road shops do not appear to be trading strongly. Increased residential density within the area will improve the viability of these smaller centres.

Figure 12 also demonstrates the parkland, medical services and education facilities within the area.

Figure 12 – Macquarie Park Specialised Centre



Source: Draft Inner North Subregional Strategy (Figure 17, Page 47)

3.2.2 Housing Provision

The Subregional Strategy outlines a range of key directions and actions with respect to housing. The four key directions to the housing strategy are summarised as follows:

- To provide more housing opportunities to support a diverse workforce and population.
- To increase housing choice as part of the housing targets.
- Plan for 30,000 new dwellings.
- Enable communities to 'age in place'.

The Concept Plan proposal seeks to add 196 new dwellings to the residential dwelling supply within the Ryde LGA. The new dwellings will contribute to achieving the actions noted in Table 2 as identified in the 'Housing Strategy' chapter of the Subregional Strategy:

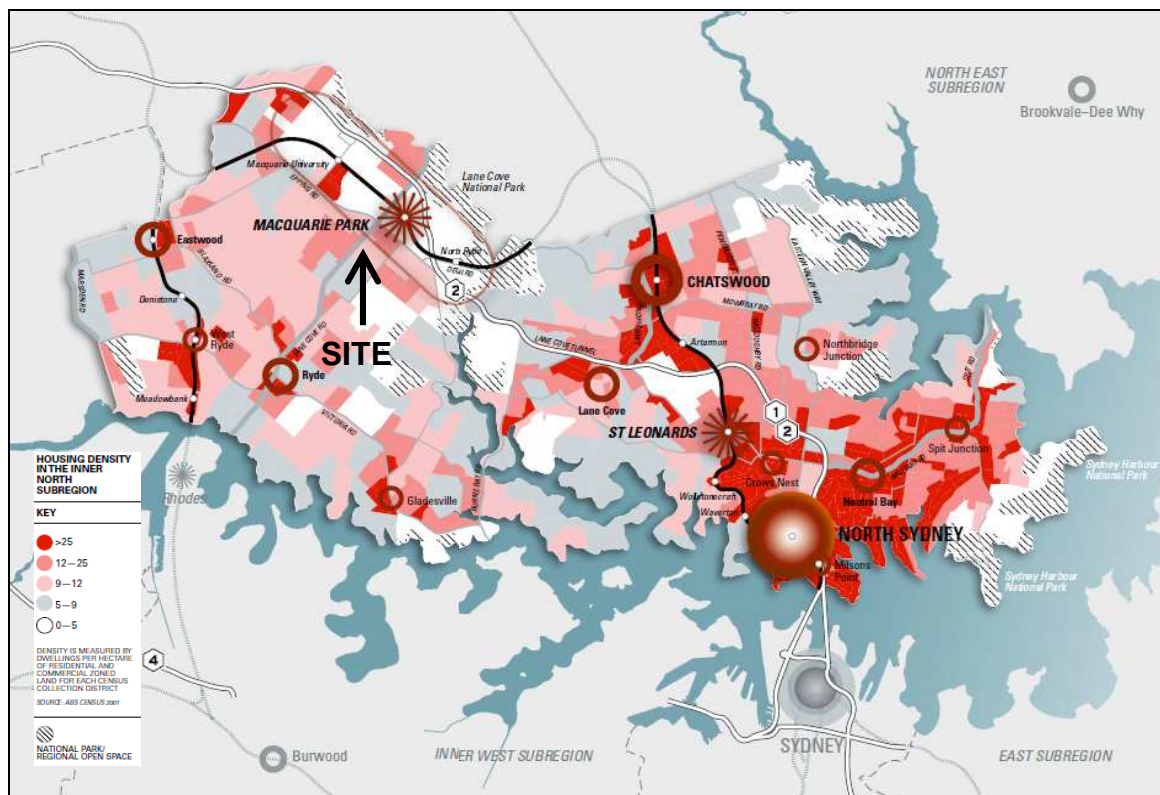
Table 2 – Project Contribution to the Metro Strategy Housing Actions

Action	Project Contribution
<i>C1 – Ensure adequate supply of land and sites for residential development</i>	<ul style="list-style-type: none"> ▪ Maximises the potential for the site to contribute to the housing supply within the subregion and assist Council in identifying appropriate sites to achieve its target dwelling growth of 12,000 new homes by 2031. ▪ Provides new housing product within the LGA which benefits from the site's strategic location. ▪ Provides residential development within an existing serviced area directly adjacent to other residential land
<i>C2 – Plan for a housing mix near jobs, transport and services</i>	<ul style="list-style-type: none"> ▪ Provides a range of dwelling types offering between 1 and 3 bedroom dwellings responding to the average household size. ▪ Responds to the site's close proximity to major new rail infrastructure. ▪ Expands the housing supply within a walkable distance from the train station, bus routes, education facilities, medical services and shopping opportunities.
<i>C5 – Improve the quality of new development and urban renewal</i>	<ul style="list-style-type: none"> ▪ Provides high quality architectural design with high quality materials and finishes. ▪ Incorporates a cohesive landscape concept for the project and public domain. ▪ Designs each residential apartment building in accordance with SEPP 65 and the RFDC. ▪ Provides a logical approach to housing diversity in a highly serviced existing urban area

In addition, the Subregional Strategy seeks to concentrate residential development to strengthen centres and corridors and notes that the majority of residential growth should be accommodated within existing urban areas.

As evidenced in Figure 13, very low residential density exists around the Macquarie Park Specialised Centre and the Epping to Chatswood Railway stations. Given the objectives of the Subregional Strategy in terms of dwelling provision, the proposal represents the opportunity to provide increased housing within close proximity to both an existing centre and a range of transport options assisting with the attainment of dwelling targets.

Figure 13 – Existing Housing Character – Inner North Subregion



Source: Draft Inner North Subregional Strategy (Figure 20, Page 60-61)

3.3 Residential targets

The 2005 Metro Strategy planned for an additional 30,000 dwellings in the Inner North Subregion by 2031. This figure has increased to 44,000 in the revised Metro Strategy, providing an additional 14,000 dwellings to be achieved by 2036. The current Subregional Strategy sets a target of 12,000 additional dwellings up to 2031 within Ryde LGA. At this stage, the Inner North Subregional Strategy (released in 2007) has not been updated to reflect the revised Metro Strategy.

Ryde City Council has prepared a draft Housing Study (endorsed by the Council for consultation on 3 August 2010) in response to the housing targets set by the Subregional Strategy, and to inform the Draft Comprehensive LEP 2011 and DCP 2011. The Draft Study indicates that approximately 3,260 potential additional dwellings will be accommodated within Macquarie Park Corridor by 2031 (pg 4-29).

Notwithstanding, the proposal will provide additional opportunities for transit oriented development which responds positively to the objectives of the Inner North Subregional Strategy.

4 Part 3A of the Act – Major Projects

The project was declared one to which Part 3A of the *Environmental Planning and Assessment Act* (the Act) applies on 21 April 2010. The Minister has also authorised the submission of a Concept Plan that outlines key development parameters, such as land use, building envelopes, landscape concept, car parking numbers and vehicular access arrangements for the proposal. Subject to approval of the Concept Plan, separate Project Approval will be sought for the detailed design of the project.

The Director-General (DG) of Planning has also issued Environmental Assessment Requirements (EARs) for the preparation of the Environmental Assessment (EA) of the project. The Concept Plan and EA have been prepared in accordance with these requirements.

The NSW Government recently announced that it will introduce a Bill to repeal Part 3A of the EP&A Act. The Minister for Planning and Infrastructure has put in place a number of interim arrangements pending that repeal. Included in the arrangements is to amend the State Environmental Planning Policy (Major Development) 2005 to remove the following class of development:

“Development for the purpose of residential, commercial or retail projects with a capital investment of more than \$100 million.”

However, the Department has clarified that projects which have valid DGRs issued on or before 8 April 2011 (where the DGRs are less than two years old as of that date) will remain as Part 3A projects.

Therefore, while the project does fall within the above class of development, transitional arrangements ensure that Part 3A still applies. We understand that the Minister will delegate his Part 3A determination role to the Planning Assessment Commission (PAC) or senior officers of the Department for applications made on behalf of private proponents.

Section 75F of the Act requires the preparation of EARs by the DG which prescribe the matters which must be considered in the preparation of a Major Project application. The Minister’s declaration was accompanied by the DG’s EARs on which the EA is based.

In addition, Section 75M of the Act allows for (and may require) the preparation of a project Concept Plan for approval. In accordance with Section 75M (2) the Concept Plan must:

- (a) outline the scope of the project and any development options, and*
- (b) set out any proposal for the staged implementation of the project, and*
- (c) contain any other matter required by the Director-General.*

At the proponent’s request the Minister’s declaration also authorised the submission of a Concept Plan.

5 Consultation and Response to Submissions

This PPR represents an evolution of the original scheme proposed in the submitted and exhibited Environmental Assessment Report. Design evolution has occurred in direct response to issues raised in consultations undertaken by both the applicant and the Department of Planning, and technical assessments undertaken by the Department of Planning, Ryde City Council and various public authorities to which the Department of Planning referred the original application.

5.1 Applicant's Community Consultation

In accordance with the Department of Planning Guidelines, the applicant commissioned a community consultation process to *"engage with the local community to raise awareness and understanding of the proposal as well as seek their collective feedback on the development"*.

Community consultation included:

- Allengrove website serving as an online tool for the local community and stakeholders to understand the proposal and provide feedback or share concerns.
- A free enquiry telephone line for interested parties to enquire or provide feedback.
- A Community Information Day held on 29 November 2010. The Information Day provided attendees the opportunity to provide feedback on the proposal.
- A survey was undertaken with local residents and businesses to determine perceived attitudes towards the project.

The findings of the consultation are contained within the *"Allengrove Community Consultation: Overview & Outcomes"* document which is included at Appendix T. The key matters which arose at the consultation were:

- Impacts on local parking and traffic infrastructure
- Scale of the development is out of sync with neighbouring buildings
- The height will impact local residents privacy and cause overshadowing
- There will be adverse impacts during construction
- The development will destroy the house value of other dwellings in the area

As discussed in Section 5.3 below, a response to each of these matters has been addressed through the revisions to the Concept Plan in the PPR, which is discussed in relevant sections of the EA.

5.2 Statutory Exhibition Period

The Environmental Assessment Report for the project was formally submitted to the Department of Planning on 26 November 2010. The project was publicly exhibited by the Department of Planning from 1 to 31 December 2010. Submissions received were provided to the proponent. Our response to these submissions is provided at Section 5.3.

5.3 Response to Public Submissions

Issue	Applicant's Response
Public Exhibition & Community Consultation The submission deadline stretched over the Christmas holiday period. Community consultation	As discussed above, the applicant has undertaken community consultation in accordance with the Department's Guidance on community consultation.

has been inadequate.	<p>The project was publicly exhibited by the Department of Planning, and submissions made past this date have still been considered through the PPR submission.</p> <p>See section 5.1. The findings of the consultation process are also included at Appendix T.</p>
<p>Height & Scale</p> <p>The proposal does not integrate with the local environment in regards to height. Current highest buildings in the area are 2 storeys, as opposed to the proposed 7-11 storey building envelopes.</p> <p>The proposed heights are excessive and out of character with the surrounding area.</p>	<p>The overall building heights in the Concept Plan have been reduced from heights ranging between 4-11 storeys to 4-8 storeys (i.e. deletion of all previously proposed levels above 8 storeys). This provides an effective transition in terms of reduced heights stepping down from Epping Road to Allengrove Crescent.</p> <p>The south-eastern end of central building has been deleted to reduce impacts to provide a better interface with surrounding residential properties. Building form is now considerably set back from the south-east boundary to reduce impacts to adjoining properties.</p> <p>There is a reduction in height of the central building from 11 storeys to 7 storeys to create a better transition to the proposed communal open space.</p> <p>The proposed building adjacent to Allengrove Crescent has been split into 2 separate buildings with a space of 7 metres between them. This is to reduce the scale of the building to Allengrove Crescent.</p> <p>See Section 7 of the report for further discussion.</p>
<p>Traffic Generation</p> <p>There is only one access from Allengrove Crescent onto Lane Cove Road. An additional 200 cars will increase existing difficulties exiting onto the busy Lane Cove Road. The intersection of Lane Cove Road and Epping Road is a known traffic hotspot.</p>	<p>The number of car spaces has been reduced from 394 to 273 given the reduced apartment numbers and accessibility to public transport options.</p> <p>The proposed south east boundary service lane is to be replaced by a considerably shorter service vehicle access facility. The previously proposed access lane will be replaced with mounded landscaping to better screen the adjacent townhouses.</p> <p>Extensive traffic studies have been conducted to assess the potential impact. These studies concluded that the traffic impact on the immediate area will be minimal. See Traffic Report at Appendix K.</p>
<p>Privacy</p> <p>The proposed development has not addressed issues with visibility into adjoining residents' backyards.</p>	<p>The deletion of the building on the south east boundary and the reduction in density positively responds to amenity concerns of surrounding neighbours.</p>

<p>Devaluation</p> <p>The scale and density of the development will reduce the value of surrounding dwellings.</p>	<p>It is considered that the development will in fact positively influence the value of surrounding houses as it provides new amenities and contributes to the gentrification of the area.</p>
<p>Overshadowing</p> <p>The height and scale of the development will result in excessive shadowing.</p>	<p>The reduced height, bulk and scale of the revised design will be a positive response to these concerns. As discussed in Section 7, all adjoining properties will receive at least 3 hrs sunlight in mid-winter.</p> <p>The Preferred Project Concept Plan has been designed with overshadowing as a key consideration. See shadow diagrams at Appendix D.</p>

5.4 Referrals to Agencies

As part of the statutory assessment process, a range of agencies provided comments in relation to the project to the Department of Planning. Agencies that have provided a submission include:

- Ryde City Council
- Transport NSW
- DECCW
- Roads and Traffic Authority
- Sydney Water

The submissions received are summarised in Appendix S and addressed at Section 5.5.

5.5 Response to Agencies

Issue	Applicant's Response
Ryde City Council	
<p>Community Consultation</p> <p>Community consultation was not undertaken in accordance with the DoP Guidelines for Major Project Community Consultation (October 2007). Council are seeking further consultation to the 31 January 2010.</p>	<p>As discussed above, consultation activities were undertaken in accordance with the Department's Guidelines. The findings of the consultation are provided at Appendix T.</p> <p>Additional consultation has not been requested by the Department of Planning in relation to the project.</p>
<p>Housing Targets</p> <p>Figures in relation to housing targets need to be updated to reflect the draft Housing Study which was endorsed by Council for exhibition in December 2010 (i.e. post EA submission).</p>	<p>The Ryde Housing Study was made available with the public exhibition of the Draft LEP on 19 January 2011. The EA was on public exhibition 26 November 2010 and therefore could not take into account the Housing Study.</p> <p>Having now considered this document, the PPR has been updated to include and address this document.</p>

<p>SIA</p> <p>EA omits the submission of a Social Impact Assessment which considers the impact on current residents, services, needs of future residents, and how the proposal will link to other community facilities.</p>	<p>As discussed in Section 2.4 of the EA, the area is well serviced by social infrastructure and demographic analysis has indicated demand for the proposed housing.</p> <p>The DGRs did not require a Social Impact Assessment to be undertaken and the Department of Planning were satisfied with the commentary within the EA.</p>
<p>Height</p> <p>Height is excessive, particularly in relation to Allengrove Crescent and a better transition to these houses is required.</p>	<p>As discussed above, the height has been reduced to provide an effective transition in terms of reduced heights stepping down from Epping Road to Allengrove Crescent.</p> <p>This is discussed in more detail in Section 7 of the report, and the SEPP 65 design statement.</p>
<p>Traffic</p> <p>Improved traffic management measures are warranted to cater for additional demand. Existing carriageway of Allengrove Crescent is too narrow and should be widened.</p>	<p>As discussed above, improved traffic management measures have been proposed.</p> <p>These matters are addressed in the Transport Report at Appendix K.</p>
Transport NSW	
<p>Traffic</p> <p>A reduction in car parking rates should be considered given the site's close proximity to Macquarie Park railway station, major bus routes and cycling network.</p> <p>Bicycle racks should be provided for visitors at ground level, near entrances, in a visible and weather protected location subject to casual surveillance.</p> <p>The preparation of a sustainable travel plan, as identified in the Concept Plan, should be included as part of the draft Statement of Commitments.</p>	<p>The proposed provision of car spaces is less than the amount of spaces required under Council's DCP. This has been reduced in response to the sites proximity to public transport.</p> <p>Bicycle facilities will be provided in accordance with Council's requirements at Project Application stage. Bicycle facilities including lockers or racks will be provided in convenient locations near to main pedestrian access locations and within the basement car park. See Appendix K.</p> <p>Sustainable travel plans are more relevant to commercial development than residential development. The proposal is located near to public transport and is to provide safe pedestrian access and bicycle facilities.</p>
DECCW	
<p>Reviewed environmental assessment. No comments and no further interest in being involved.</p>	<p>Noted.</p>
Roads and Traffic Authority (RTA)	
<p>Traffic</p> <p>The layout of proposed car parking areas should be in accordance with AS 2890.1 - 2004 and AS</p>	<p>The layout is in accordance with the relevant Australian Standards. See Traffic Report at</p>

<p>2890.2 – 2002 for heavy vehicle usage.</p> <p>The applicant is required to upgrade the footpath along the site's frontage to Lane Cove Road and Allengrove Road to match existing works recently undertaken by the RTA along the Epping Road off-ramp.</p> <p>Subject to Local Traffic Committee approval the RTA suggests a pedestrian refuge at the intersection of Allengrove Crescent and Lane Cove Road.</p> <p>A construction zone for demolition and construction vehicles is not permitted on Lane Cove Road or the Epping Road off-ramp.</p> <p>All redundant driveways along Lane Cove Road and Epping Road off-ramp shall be removed and replace with kerb and gutter to match existing. The design and construction of the gutter crossing shall be in accordance with RTA requirements and detailed plans are to be submitted to the RTA for approval prior to issue of the Construction Certificate and commencement of any road works.</p> <p>The proposed development should be designed to mitigate road transport noise from Lane Cove Road and Epping road in accordance with EPA criteria for new land use developments.</p> <p>All works are to be at no cost to the RTA.</p>	<p>Appendix K.</p> <p>Noted. The following matters are detailed design matters which are likely to be a condition of consent at the Project Application stage. These will be subject to the final agreement of the Ryde Traffic Committee.</p>
<p>Sydney Water</p>	
<p>The proponent must fund any adjustments needed to Sydney Water infrastructure as a result of any development.</p>	<p>Noted – this has been added to the Statement of Commitments (see Appendix C).</p>

6 Key Changes to the Concept Plan in the PPR

Key differences between the originally submitted Concept Plan and the Concept Plan the subject of this Preferred Project Report are:

Density

- The overall floor space on the site has been reduced from 27,634m² (FSR 2.25:1) to 19,916m² (FSR 1.6:1) and the number of apartments has been reduced from 269 to 196 based on a further analysis of density options. The revised density will respond positively to the surrounding low scale residential context.

Height, site layout and setbacks

- The overall building heights in the Concept Plan have been reduced from heights ranging between 4-11 storeys to 4-8 storeys (i.e. deletion of all previously proposed levels above 8 storeys). This provides an effective transition in terms of reduced heights stepping down from Epping Road to Allengrove Crescent.
- The south-eastern end of central building has been deleted to reduce impacts to provide a better interface with surrounding residential properties. Building form is now considerably set back from the south-east boundary to reduce impacts to adjoining properties.
- There is a reduction in height of the central building from 10 storeys to 7 storeys to create a better transition to the proposed communal open space.
- The proposed building adjacent to Allengrove Crescent has been split into two separate buildings with a space of 7 metres between them. This is to reduce the scale of the building to Allengrove Crescent.

Open space and amenity

- The proposed open space has been reconfigured to create a larger, central contiguous area of communal open space on the site, which incorporates the previous location of the community garden. This provides opportunities for deep soil zones and enhanced landscaping.

Traffic

- The number of car spaces has been reduced from 394 to 273 given the sites reduced apartment numbers and accessibility to public transport options.
- The proposed south east boundary service lane is to be replaced by a considerably shorter service vehicle access facility. The previously proposed access lane will be replaced with mounded landscaping to better screen the adjacent townhouses.

All supplementary plans, such as stormwater and landscape, have been amended to reflect the above modifications.

7 The Preferred Project Concept Plan

7.1 Introduction

The Concept Plan seeks approval for building envelopes, parking numbers and driveway crossovers. Specifically, the Concept Plan proposes the demolition of the existing 15 dwellings and the construction of 196 apartments in several buildings, ranging from four to eight storeys, above basement parking for 273 cars.

The Concept Plan envelopes do not include landscaping items, ancillary buildings (e.g. garden sheds), entry porticos, roof plant or lift overruns. Such building/landscaping elements will be outside the Concept Plan envelope, but will be limited to a maximum single storey in height. Balconies are included within the Concept Plan envelopes.

Figure 14 – Concept Plan

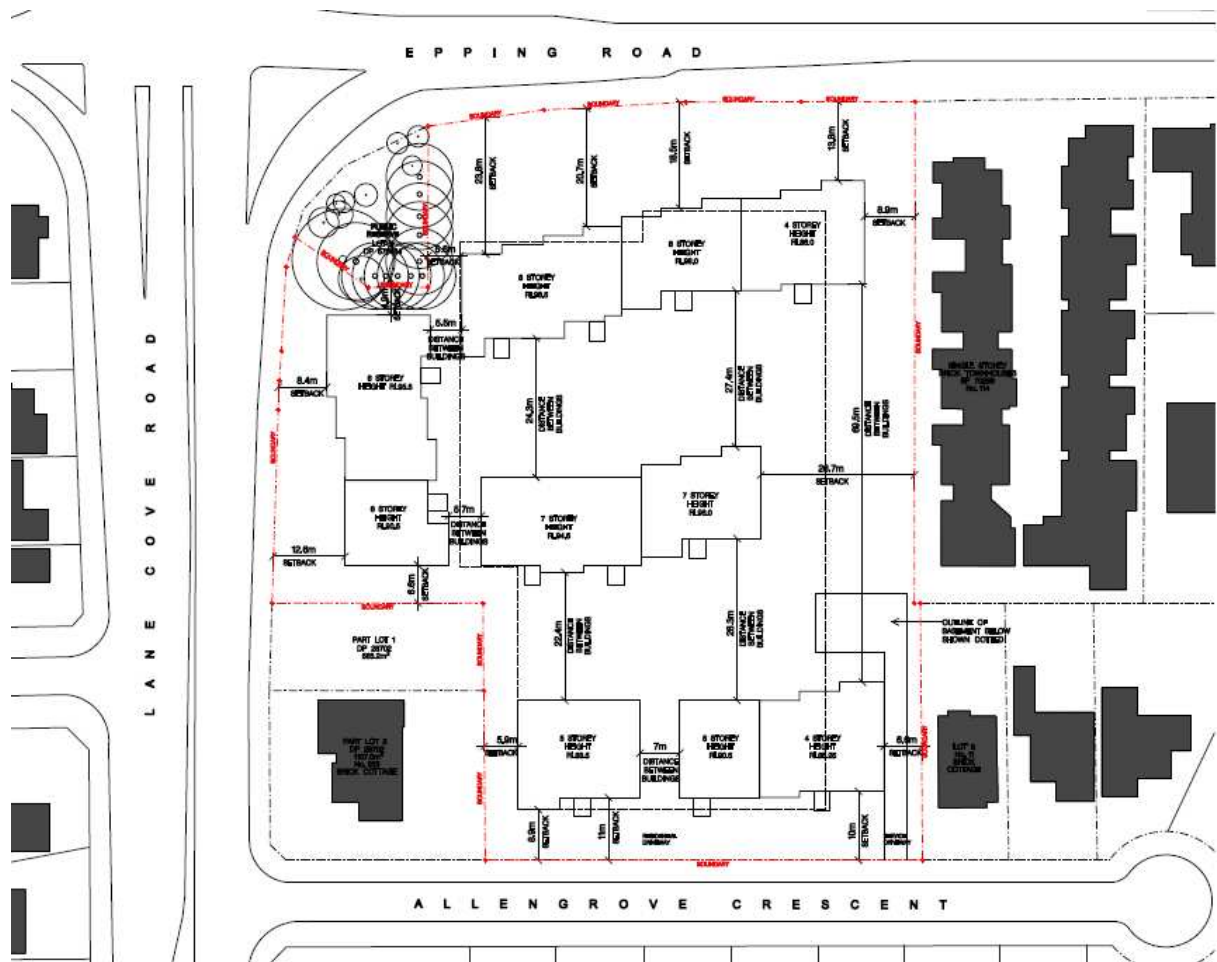
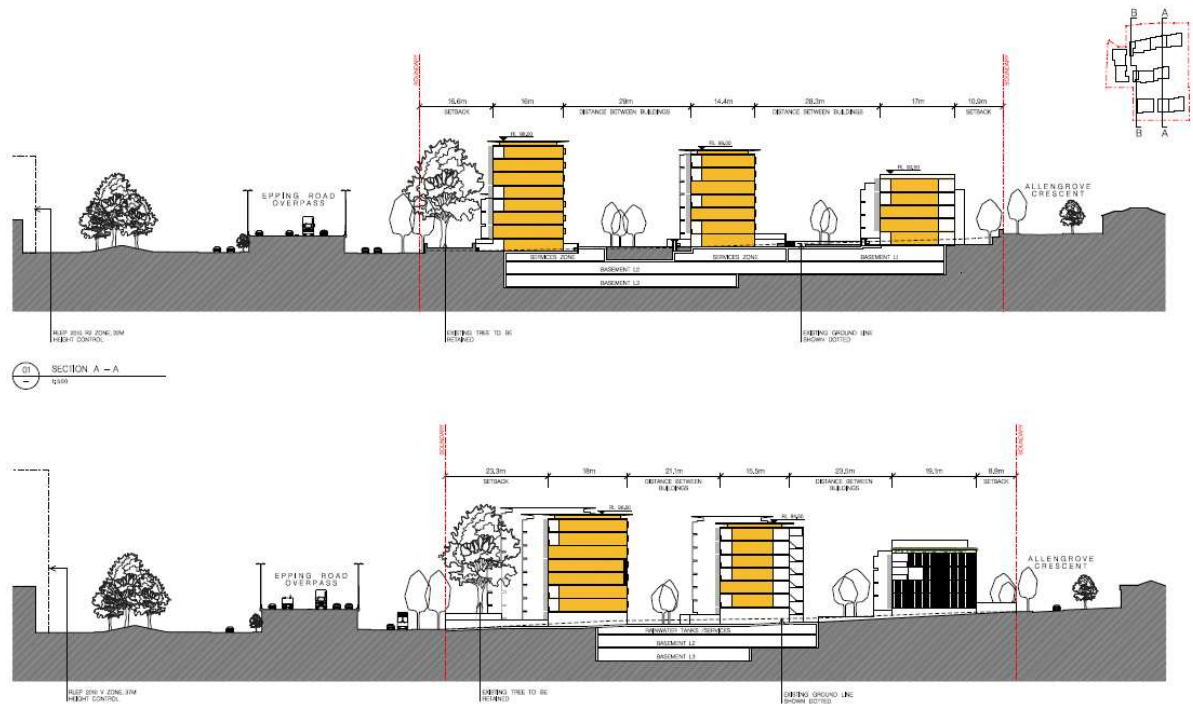


Figure 15 – Concept Plan Sections



7.2 Illustrative Design

While approval is only sought for the key parameters of the project as indicated in the Concept Plan, Figures 16-18 illustrate a scheme that would be facilitated by the Concept Plan.

Figure 16 – Indicative Photomontage: Corner of Lane Cove and Epping Roads



Figure 17 – Indicative Photomontage: Looking East from Lane Cove Road



Figure 18 – Indicative Ground Floor & Landscape Plan



7.3 Numeric Overview

A numeric overview is provided in Table 3.

Table 3 – Numeric Breakdown

Site Area	12,297.1sqm
Gross Floor Area¹	19 916sqm
Floor Space Ratio²	1.62:1
Building Height³	4 – 8 storeys / 10m – 26.25m
Total Number of Units	196
▪ Number of 1 Bedroom Units	47
▪ Number of 2 Bedroom Units	122
▪ Number of 3 Bedroom Units	27
Average 1 Bedroom Unit Size	50sqm
Average 2 Bedroom Unit Size	75sqm
Average 3 Bedroom Unit Size	105sqm
Parking Spaces	273
Total Landscape Area	5334 sqm
Private Landscaped Area per Unit	40sqm. (average) – ground floor 9sqm. (average) – upper floors

7.4 Landscape

A landscape concept has been prepared by Aspect Studios providing an indicative landscaping scheme for the proposal.

The landscape concept is included at Figure 19 and a supporting landscape statement is included at Appendix L.

¹ **gross floor area** means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

- a) the area of a mezzanine, and
- b) habitable rooms in a basement or an attic, and
- c) any shop, auditorium, cinema, and the like, in a basement or attic,
- d) but excludes:
- e) any area for common vertical circulation, such as lifts and stairs, and
- f) any basement:
 - i. storage, and
 - ii. vehicular access, loading areas, garbage and services, and
- g) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
- h) car parking to meet any requirements of the consent authority (including access to that car parking), and
- i) any space used for the loading or unloading of goods (including access to it), and
- j) terraces and balconies with outer walls less than 1.4 metres high, and
- k) voids above a floor at the level of a storey or storey above.

² **floor space ratio** of buildings on a site is the ratio of the gross floor area of all buildings within the site to the site area.

³ **building height** (or **height of building**) means the vertical distance between ground level (existing) at any point to the highest point of the building, including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

The indicative landscape scheme seeks to:

- Provide a 'green buffer' to the proposed development to assist in integrating the buildings into the surrounding urban and residential fabric.
- Unify the various open spaces within the site through material choice, colour, spatial geometry and planting selection.
- Provide adequate privacy through walls, fences, screens and planting.
- Provide sufficient soil depths for intended plants.
- Utilise robust materials and planting to avoid intense maintenance regimes.
- Adhere to WSUD and ESD principles in terms of stormwater management, selection of low water-use plants and porous paving materials.
- Revitalise the existing public reserve to create a more appealing open space.
- Provide communal spaces that allow and encourage gardening activities for residents.

In order to achieve these objectives the landscape concept provides several key elements including communal courtyards, private courtyards, bio-detention parks, a community garden, orchard walk planting and public domain and buffer planting.

In addition, the landscape concept proposes upgrades to the council reserve on the corner of Lane Cove Road and Epping Road in order to improve the amenity and usability of this space. Whilst the proponent commitment is to upgrade the public reserve at its own expense, they do not own this land. Accordingly, this proposal is a commitment (refer to Section 5.9) and not a part of the project to which this application formally applies.

Figure 19 – Indicative Landscape Plan

Landscape Plan

Landscape Key

1. Shade tolerant planting in raised planter beds
2. Communal open spaces with turf areas, small trees on mounds, seating and planting areas
3. Private courtyards with raised planters for a small tree and understory planting
4. Biodatation and filtration area with macrophyte planting
5. Community garden with mounded fruit tree buffer to service lane
6. Outdoor dining, BBQ and community garden facilities
7. Avenue planting - "Orchard Walk" of ornamental trees
8. Proposed street trees to Lane Cove Road, *Lophospermum confertus* with new turf verges and concrete footpath
9. Existing trees to be retained
10. Existing public reserve upgraded with new wall, path, bench and native grass planting
11. Potential play area
12. Mounded buffer planting to adjacent residences with *Ceanothus australis* trees
13. Planting along service lane, *Spigelia australis*
14. Proposed street trees to Epping Road and Allengrove Crescent, *Ceanothus australis* with new turf verges and concrete footpath

Legend

- Existing trees to be retained
- Proposed Orchard walk planting
- Shade tolerant species
- Proposed Street trees
- Shrubs and grasses
- Turf
- Swale planting
- Thick masonry walls (1m width)
- Masonry walls (200mm width)
- Communal paths
- Paving in Private Courtyards
- OSD Tank Under
- Existing Levels
- Proposed Levels
- Proposed Top of Wall Levels
- Palisade fence (1800mm high)
- Extant of basement under
- Boundary



7.5 ESD

The Concept Plan adopts a number of measures to minimise water and energy use, and the discharge of pollution including:

- Water efficient fixtures and fittings
- Rainwater tanks
- Natural ventilation and the inclusion of ceiling fans
- Fluorescent or LED lighting
- Gas cook tops
- 3 star energy rated dryers and 3.5 star energy rated dishwashers

To optimise the social sustainability of the project, the landscape concept has been designed around the use of food producing species, and includes a communal market garden to:

- Reflect the market gardening and orcharding history of the locality.
- Mitigate the environmental costs of food transport by allowing on-site food production.
- Increasing opportunities for community engagement, and reducing potential for social isolation in high density living.
- Create opportunities to positively engage the cultural diversity of the locality through productive gardening.

The envisaged community garden is illustrated in Figure 19 above.

A complete description and analysis of the ESD measures proposed for the project is provided in the ESD Strategy prepared by Built Ecology (Appendix M).

7.6 Public Domain Improvement

The project incorporates public domain improvements to the adjoining reserve and footpaths.

7.6.1 Public Reserve

Proposed improvements to the public reserve aim to rejuvenate the space to ensure it is better utilised than at present. It is anticipated that such improvements will include:

- Low understorey planting will complement the existing tree plantings and create and retain sightlines important for security.
- A new low concrete wall and stairs to replace the existing timber wall and a concrete path with bench seating
- The park will be widened slightly to protect the existing vegetation, borrowing space from the residential development, which in turn benefits from the green outlook and tree plantings through palisade fences, providing views between the park and the common areas.

However, the reserve is owned by Ryde City Council. While the proponent commits to implement these works, such implementation will be at the discretion of Ryde City Council.

7.6.2 Public Domain

The project proposes a double row of street planting along Lane Cove Road whilst Epping Road and Allengrove Crescent will be planted with *Canastospermum australe* (Blackbean).

In addition, upgrades to the turf verge and pedestrian footpath bounding sections of Epping Road, Lane Cove Road and Allengrove Crescent are also proposed.

It is noted that the footpaths are owned by Ryde City Council. While the proponent commits to implement these works, such implementation will be at the discretion of Ryde City Council.

Additional details relating to public domain improvements are described in the Landscape Report at Appendix L and the SEPP 65 Design Verification Statement at Appendix E.

7.6.3 Provision for widening Allengrove Crescent

The Preferred Project Concept Plan takes into account Council's desire to increase the width of Allengrove Crescent by 2 metres adjacent to the site, should this be required. It is emphasised that the existing carriageway width within Allengrove Crescent is considered adequate and will accommodate all future traffic volumes as a result of the development and that a "No Stopping" restriction adjacent to the site on the northern side of Allengrove Crescent would also achieve Council's objectives (See Traffic Report at Appendix K). However the proponent does not object to a Condition of Consent requiring the dedication of this land to Ryde City Council and the dedication of the land for road widening is included within the Statement of Commitments (see Appendix C). The proposal has taken this potential dedication of land into account in the setback of the proposed buildings.

7.7 Access and Transport

The project incorporates three split basement car park levels comprising 273 car spaces accessed via a new driveway crossing to Allengrove Crescent. Disabled car parking will be provided in accordance with relevant standards and will be detailed at a further design stage of the project.

A service lane on the eastern side of the development accessed via Allengrove Crescent will be provided for use by service vehicles including garbage trucks. The service lane will be 4m wide and will accommodate one-way flow with designated areas for passing.

Parking has been designed in accordance with required standards and will provide 2.6m wide parking bays and 6.2 m wide aisles. Visitor parking location will be addressed at the detailed design phase of the process but will be consolidated into a single area.

Bicycle facilities will be included to Council standards at the detailed design phase of the development and will include secure parking racks.

7.8 Drainage and Flooding

A Stormwater Management and Flood Assessment has been undertaken by Worley Parsons. The report details flooding, stormwater management, hydrology and Water Sensitive Urban Design matters proposed as part of the project and is included at Appendix N. In summary:

- The project will adopt standard best practice for managing stormwater quantity, quality and flooding.
- Adequate drainage and appropriately designed overland flow paths will be constructed across the development to ensure stormwater flows are conveyed safely from the site into Council's existing stormwater infrastructure network.
- Stormwater runoff generated across the site will be controlled and reduced with the implementation of on-site detention.
- Water quality will be managed on site through the implementation of Water Sensitive Urban Design (WSUD) best practices principles. WSUD initiatives will include rainwater tanks, litter baskets, OSD tanks and bio-retention basins.

The Concept Stormwater Management Plan prepared by Worley Parsons as part of the Stormwater Management and Flood Assessment is included at Figure 20.

Figure 20 – Concept Stormwater Management Plan



7.9 Statement of Commitments

A copy of the Draft Statement of Commitments table is included in Appendix C. The Statement of Commitments includes the following initiatives:

- **Contributions:** Section 94 Contributions to be made for the project will be in accordance with calculations provided in Section 8.8.
- **Car share:** Discussions will be undertaken with car share providers and a parking space will be made available for use by shared vehicles.
- **Bicycle facilities:** The project will provide for bicycle facilities and parking in accordance with Council's standards
- **Public reserve:** The upgrade of the adjoining public reserve is proposed at the proponent's cost (it is noted that the proponent does not own the public reserve and as such this proposal is a commitment only and not a part of the project to which this application formally applies).
- **Public domain:** A commitment is made to establish street trees along Lane Cove Road, Epping Road and Allengrove Crescent. In addition, upgrades to the turf verge and pedestrian footpath bounding sections of Epping Road, Lane Cove Road and Allengrove Crescent are also proposed (it is noted that the proponent does not own the public reserve and as such this proposal is a commitment only and not a part of the project to which this application formally applies).
- **Community Garden:** A community garden will be provided in accordance with the Landscape Plan and Landscape Report at Appendix L.
- **Public art:** It is proposed to incorporate functional and aesthetic public art installations in the public domain under the Epping Road overpass. Artwork will be selected from works prepared by Macquarie University art students and as part of this commitment a design competition will be run. Both the installations and the design competition will be provided at the proponent's cost. It is noted

that the proponent does not own the public domain space under the overpass and as such this proposal is a commitment only and not a part of the project to which this application formally applies). Details of this commitment are to be negotiated with Council and the RTA.

- WSUD: WSUD measures will be implemented in accordance within the Stormwater Management and Flood Assessment prepared by Worley Parsons (refer to Appendix N).
- Transport management: A single and one-off yearly rail pass from Macquarie Park to the Sydney CBD will be provided to the purchaser/s of each apartment. One (1) rail pass only will be provided per apartment.
- Dilapidation report: A Dilapidation report will be prepared on surrounding buildings, roads, pavements and structures prior to the commencement of any excavation works, to document existing conditions, so that claims for damage due to vibrations or construction related activities can be accurately assessed
- ESD: ESD principles and measures will be implemented for the project in accordance with the ESD Strategy prepared by Built Ecology and located at Appendix M.
- Construction Management Plan: The proponent agrees to prepare a Construction Management Plan outlining the methods of construction, traffic management, crane height and location details and the like.
- Compliance with the Building Code of Australia: All buildings will be designed in accordance with the Building Code of Australia.
- Augmentation of services: The approval of all existing utility service providers (e.g. gas, electricity, telephone, water, sewer) will be obtained and any required augmentation works undertaken.
- Noise mitigation: Noise mitigation measures will be implemented in accordance with the Noise Impact Assessment prepared by Heggies (refer to Appendix Q)
- Remediation of Land: If necessary a Remedial Action Plan will be submitted for approval and audited upon implementation.
- Allengrove Crescent road reserve: Provision of land to take into account Council's desire to increase the width of Allengrove Road by 2 metres adjacent to the site, should this be required.

8 Director General's Environmental Assessment Requirements

8.1 Relevant EPIs, Policies and Guidelines to be addressed

Planning provisions applying to the site, including permissibility and the provisions of:

- *Objects of the EP&A Act 1979;*
- *NSW State Plan 2010;*
- *Draft Inner North Subregional Strategy;*
- *Metropolitan Transport Plan 2010, Integrating Land Use and Transport – A Planning Policy Package 2001 and Planning Guidelines for Walking and Cycling 2004 and Ryde City Council's Macquarie Park Traffic Study – Final Report;*
- *Ryde Planning Scheme Ordinance 1979, Ryde LEP 137 – Macquarie Park, Draft Ryde LEP 2010, relevant Development Control Plans, Ryde Bicycle Strategy and Master Plan 2007, Macquarie Park Pedestrian Movement Study 2009 and Macquarie Park Public Domain Technical Manual;*
- *SEPP 55 - Remediation of Land;*
- *SEPP 65 - Design Quality of Residential Flat Development and the Residential Flat Design Code (RFDC);*
- *SEPP (Infrastructure) 2007; and,*
- *Nature and extent of any non-compliance with relevant environmental planning instruments, plans and guidelines and justification for any non-compliance, including a consideration of the accessibility and traffic/transport principles detailed in the Ryde DCP 2006 and draft LEP 2009, including the "Ryde Bicycle Strategy and Master Plan 2007."*

8.1.1 Environmental Planning and Assessment Act 1979

The objects of the Act are provided in Table 4 along with an assessment of the proposal against them:

Table 4 – Assessment of the Proposal against the Objects of the Act

Object	Project
a) to encourage:	
i. the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,	The project represents good urban management as it will provide additional dwellings which can utilise existing transport infrastructure (in particular spare capacity on the Epping to Chatswood rail line), leverage off the employment opportunities presented by Macquarie Park and make use of existing utilities and facilities.
ii. the promotion and co-ordination of the orderly and economic use and development of land,	The project will facilitate the development of much needed housing in close proximity to public transport and the Macquarie Park Specialised Centre.

Object	Project
<i>iii. the protection, provision and co-ordination of communication and utility services,</i>	The project is in an existing urban area and as such will utilise existing services. If necessary, the project will provide for the augmentation of these services.
<i>iv. the provision of land for public purposes,</i>	The project will provide for the upgrade of an existing public reserve ⁴
<i>v. the provision and co-ordination of community services and facilities, and</i>	Given the site's proximity to a range of local services and facilities including schools, parklands, medical and shopping the additional population will be adequately catered for.
<i>vi. the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and</i>	The project will not result in any adverse impacts to native animals, plants, populations, ecological communities, or their habitats.
<i>vii. ecologically sustainable development, and</i>	The project will provide best practice ESD measures as discussed in Section 8.6
<i>viii. the provision and maintenance of affordable housing, and</i>	The project will contribute to the diversity and availability of housing stock in an accessible and well-connected location.
<i>b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and</i>	The project represents a Major Project and as such is assessed by the Minister. Ryde Council has been consulted as part of the community consultation program.
<i>c) to provide increased opportunity for public involvement and participation in environmental planning and assessment</i>	A community consultation program was undertaken during the Minister's consideration of the application as discussed in Section 8.10

8.1.2 NSW State Plan 2010

The NSW State Plan 2010 replaces The State Plan, A New Direction for NSW 2006 as a set of priorities for the NSW Government. The NSW State Plan 2010 provides targets for creating 'better transport and liveable cities'. Relevant priorities and targets are outlined below.

Improve Public Transport System

"Increase share of commuter trips made by public transport to and from the Sydney CBD within peak hours to 80% by 2016"

By providing for 196 dwellings within close walking distance to the Macquarie Park train station and regional bus services, this project will positively contribute to the government's target.

⁴ It is noted that the reserve is owned by Ryde City Council. While the proponent therefore commits to implement these works, such implementation will be at the discretion of Ryde City Council.

Increase the number of jobs closer to home

"Increase the percentage of population living within 30 minutes by public transport of a city or major centre."

The proposal satisfies this target given its proximity to the Macquarie Park corridor and metropolitan rail services linking the site to Chatswood and the CBD within 30 minutes travel time.

Grow cities and centres as functional and attractive places to live, work and visit

The proposal is entirely consistent with this priority as the proposal provides for housing adjacent to the Macquarie Park Corridor, where future additional housing growth opportunities are limited. The inclusion of new residents in the locality will add to the vibrancy of the area.

8.1.3 Draft Inner North Subregional Strategy

The site falls within the Inner North Subregion of the Metro Strategy. The Subregional Strategy provides the intended outcomes and specific parameters for the development of the subregion.

The Subregional Strategy identifies four key directions for its housing component as follows:

- To provide more housing opportunities to support a diverse workforce and population.
- To increase housing choice as part of the housing targets.
- Plan for 30,000 new dwellings.
- Enable communities to 'age in place'.

Specifically, the Housing Strategy component of the Subregional Strategy provides the following actions:

- C1 – Ensure adequate supply of land and sites for residential development through:
- C2 – Plan for a housing mix near jobs, transport and services by:
- C5 – Improve the quality of new development and urban renewal through:

The project will contribute to the outcome of these actions by:

- Providing a range of dwelling types offering between 1 and 3 bedroom dwellings responding to the average household size.
- Responding to the site's close proximity to major new rail infrastructure.
- Providing new housing product within the LGA which benefit from the site's strategic location.
- Expanding the housing supply within a walkable distance from the train station, bus routes, education facilities, medical services and shopping opportunities.
- Maximising the potential for the site to contribute to the housing supply within the subregion and assist Council in identifying appropriate sites to achieve its target dwelling growth of 12,000 new homes by 2031.
- Providing residential development within an existing serviced area directly adjacent to other residential land.
- Providing high quality architectural design with high quality materials and finishes.
- Incorporating a cohesive landscape concept for the project and public domain.
- Designing each residential apartment building in accordance with the SEPP 65 and the RFDC.
- Providing a logical approach to housing diversity in a highly serviced existing urban area.

The subregional strategy is further discussed in Section 3.2.

8.1.4 Metropolitan Transport Plan 2010

The Metropolitan Transport Plan is to be fully integrated within the NSW Metropolitan Strategy. The Plan presents a 10 year funding guarantee in order to achieve four ideal transport qualities:

- Commuting to work easily and quickly.
- Transport and services accessible to all members of our community.
- An efficient, integrated and customer focused public transport system.
- Revitalised neighbourhoods with improved transport hubs.

Of relevance to the proposal is the implementation of the North West Rail Link. It is anticipated to connect regional commuter car parks and bus interchanges and offer a fast direct route connecting population centres and strategic locations between the north west of Sydney, Macquarie Park and the CBD.

The Plan's current estimates indicate that by 2024 the North West Line will carry 18.7 million passengers each year. By creating greater linkages to Macquarie Park, this area may be expected to increase in population. In this way, the provision of multi-unit housing near employment and a recently constructed train station will complement the Metropolitan Transport Plan.

8.1.5 Integrating Land Use and Transport – A Planning Policy Package 2001

Integrating Land Use and Transport – A Planning Policy Package 2001 seeks to reduce private vehicle use and promote active and public transport options instead. The site's proximity to both a range of public transport options and local facilities is directly consistent with the intent of the policy package.

8.1.6 Planning Guidelines for Walking and Cycling 2004

The Planning Guidelines for Walking and Cycling 2004 aim to ensure the provision of pedestrian and cycle access locations within close proximity to major crossings and desire lines. The proposal is appropriately placed to ensure this, allowing access from three street frontages and providing ease of connectivity given its location immediately adjacent to a regional cycle route (see Figure 10). It is also within walking distance of a range of local services and facilities and is adjacent to a major cycleway network.

8.1.7 Ryde City Council's Macquarie Park Traffic Study – Final Report

A Paramics micro simulation assessment has been undertaken as part of the Traffic Report (Appendix K). This modelling has been conducted in accordance with the Macquarie Park Traffic Study. As outlined in the Traffic Report this modelling determined that;

“... the queues and average delays at key intersections as a result of the development would remain at existing levels and would continue to operate as currently occurs.”

Figures 21 to 23 are extracted from the Traffic Report and demonstrate that with the exception of the Wicks Road and Epping Road intersection, each of the intersections analysed as part of the Traffic Report will remain generally unchanged in regards to their Level of Service⁵:

⁵ Level of Service: a comparative measure which provides an indication of the operating performance of an intersection.

Figure 21 – Level of Service Criteria

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way and Stop Signs
A	less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode	At capacity and requires other control mode
F	More than 70	Unsatisfactory and requires additional capacity.	Unsatisfactory and requires other control mode or major treatment.

Figure 22 – Existing Intersection Performance: AM and PM Peak Periods

Intersection Description	Period	Control Type	Degree of Saturation	Intersection Delay	Level of Service
LCR & Epping Rd	AM	Signal	1.10	80.6	F
	PM		0.93	59.2	E
Wicks Rd & Epping Rd	AM	Signal	0.96	59.4	E
	PM		1.03	70.3	E
Allengrove Cr & LCR	AM	Priority	0.09	22.9	B
	PM		0.15	33.2	C
Wicks Road & Barr St	AM	Priority	0.21	29.2	C
	PM		0.20	22.7	B

Figure 23 – Future Intersection Performance: AM and PM Peak Hour

Intersection Description	Period	Control Type	Degree of Saturation	Intersection Delay	Level of Service
LCR & Epping Rd	AM	signal	1.10	81.9	F
	PM		0.93	59.3	E
Wicks Rd & Epping Rd	AM	signal	1.00	64.5	E
	PM		1.06	70.8	F
Allengrove Cr & LCR	AM	priority	0.37	27.3	B
	PM		0.37	36.6	C
Barr Street & Wicks Rd	AM	priority	0.34	29.2	C
	PM		0.21	16.3	B

8.1.8 Ryde LEP 2010

Ryde Local Environmental Plan 2010 (the LEP) is the consolidating plan for the City of Ryde. It translated existing provisions under Ryde Planning Scheme Ordinance, LEP 173 (Macquarie Park) and some development controls contained in Ryde Development Control Plan 2006 into the State Government's Standard LEP Instrument. It was gazetted on the 30 June 2010.

Under the LEP, the site is zoned R2 Low Density Residential. One of the key objectives of the zone is:

"To ensure that the general low density nature of the zone is retained and that development for the purposes of dual occupancy (attached) and multi dwelling housing (attached) do not significantly alter the character of a location or neighbourhood."

Development for the following purposes is permitted in the R2 zone:

Home-based child care; Home occupations Bed and breakfast accommodation; Boarding houses; Business identification signs; Child care centres; Community facilities; Dual occupancies (attached); Dwelling houses; Educational establishments; Group homes; Health consulting rooms; Hospitals; Multi dwelling housing (attached); Places of public worship; Recreation areas; Residential care facilities; Roads

All other development is prohibited.

As the proposed use is defined as a residential flat building⁶ under the LEP, it is prohibited in the R2 zone. However, pursuant to Section 75O and 75R of the Act, in deciding whether or not to give approval for a Concept Plan, the Minister may (but is not required to) take into account the provisions of any environmental planning instrument, other than State Environmental Planning Policies (SEPPs). While the above LEP prohibition, and the following development standards, must be 'considered', they are not strictly applicable to the proposed Concept Plan.

In terms of land use, the site is clearly zoned for predominantly residential purposes. The prohibition of residential flat buildings therefore relates to density, not underlying use. The proposed residential use is therefore not inconsistent with the underlying purpose of the zoning, notwithstanding its increased density, and the stated objective of not significantly altering the existing character of the location.

⁶ Pursuant to the LEP "Residential flat building means a building containing 3 or more dwellings, but does not include an attached dwelling or multi dwelling housing."

Development standards under the LEP that are applicable to the site include:

- Floor Space Ratio – Maximum 0.5:1 (1.62:1 proposed).
- Building Height – Maximum building height of 9.5m (26.25m proposed)

However, pursuant to Clause 4.4A of the LEP, the maximum floor space ratio shown for a building on land in Zone R2 Low Density Residential only applies to development for the purposes of a dwelling house or attached dual occupancy, not to 'residential flat buildings', as is proposed.

Notwithstanding, the project clearly exceeds the underlying development standards. However, the project is proposed on the basis of the strategic context of the site relative to the Macquarie Park Corridor and railway station. The height and FSR of the project has therefore been established with reference to the underlying standards within the corridor.

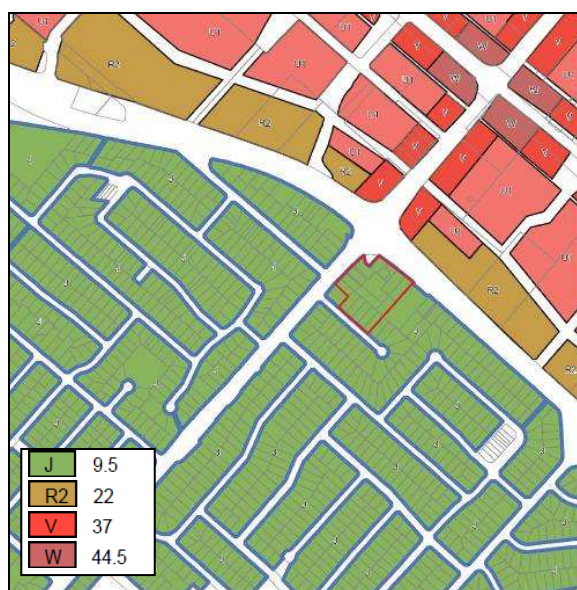
Around Macquarie Park railway station, an FSR of 3.0:1 applies, reducing to 2:1 along major roads, including Lane Cove Road, and down again to 1:1 along Epping Road away from the intersection of Lane Cove Road. Similarly a maximum height standard of 44.5 metres applies around the railway station, reducing to 37 along major roads, including Lane Cove Road, and down again to 20 metres along Epping Road away from the intersection of Lane Cove Road.

The project has a maximum height of 26.25 metres, stepping down considerably to adjoining low density development. This maximum height reflects a stepping down from the underlying 37 metre height standard along Lane Cove Road. Similarly, with a FSR of 1.62:1, the proposed development reflects a stepping down from the underlying 2:1 FSR standard along Lane Cove Road, noting that a residential development has significantly less building bulk and intensity of use than a commercial or industrial development with a comparable FSR. This is largely due to the taller ceiling height of commercial and industrial development, and the greater density of people accommodated within these uses.

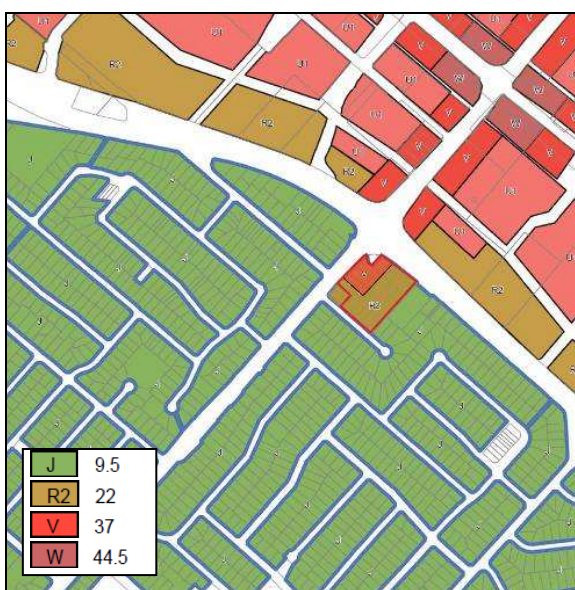
The relationship of the proposed height and FSR to the underlying controls within the Macquarie Park Corridor is conceptually illustrated at Figures 24 and 25 below.

While the proposed use, height and density clearly exceeds the underlying R2 zone standards, the residential use is consistent, and the built form and density represent a logical extension of the standards applicable within the Macquarie Park corridor.

Figure 24 – Height Controls

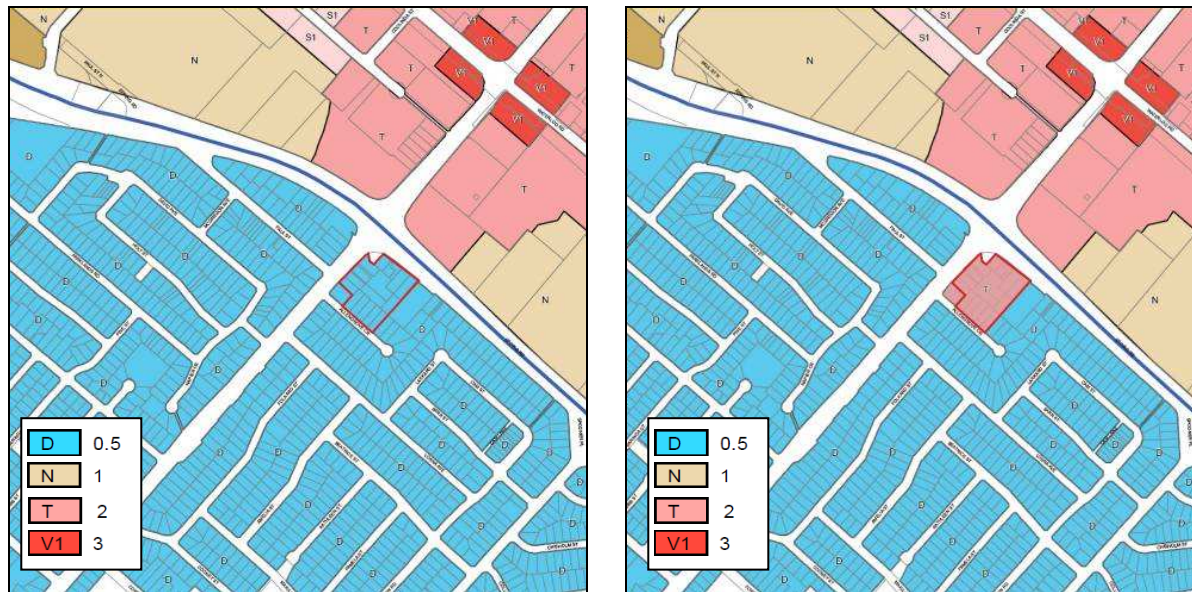


Extract: Ryde LEP Building Heights Map



Relationship of height proposed to underlying controls

Figure 25 –FSR Controls



Extract: Ryde LEP FSR Map

Relationship of FSR proposed to underlying controls

8.1.9 Ryde Development Control Plan 2010

Council adopted the City of Ryde Development Control Plan 2010 on 16 June 2009 and the Plan came into effect on 30 June 2010.

The project achieves the intent of the DCP and provides for a diversity of housing types. In particular, the indicative scheme design provides for 47 one bedroom units out of the total 196 units, representing just 24% of the units and as such, meets the DCP control for a maximum of 50% of the total dwellings on site to be small one bedroom dwellings.

It is noted that some of the setback controls specified in the DCP have not been achieved; however, as discussed in the SEPP 65 design verification statement and the RFDC compliance table, the Concept Plan has been appropriately designed, orientated and sited to ensure appropriate amenity is maintained.

As discussed in Section 8.5, the car parking provision has been reduced to lower than DCP controls outlined in Section 2.1 of Part 9.3 of the DCP.

A complete assessment of the relevant components of the DCP is provided in the compliance table located at Appendix I.

8.1.10 Ryde Bicycle Strategy and Master Plan 2007

As addressed in the Traffic Report (located at Appendix K) and Section 2.7 of this report, the site is provided with comprehensive access to the regional bike path network (refer to Figure 10). In addition the provision of bicycle facilities will be appropriately incorporated at the detailed design phase of the development in accordance with Council's standards.

8.1.11 Macquarie Park Pedestrian Movement Study 2009

The Ryde Park Pedestrian Movement Study 2009 does not propose any significant upgrades to the pedestrian or bicycle environment surrounding the site. Convenient pedestrian access exists between the site and Macquarie Park train station, Avon Road shops and Cox Road shops.

8.1.12 Macquarie Park Public Domain Technical Manual

As discussed in the SEPP 65 Design Verification Statement included at Appendix E, the Concept Plan has been designed in accordance with the intent of the Macquarie Park Public Domain Technical Manual. As this proposal seeks approval for the Concept Plan only, further compliance with the manual will be demonstrated at later detailed design stages of the project.

8.1.13 SEPP 55 - Remediation of Land

The key objective of this policy is:

To promote the remediation of contaminated land in order to reduce the risk of harm to human health or any other aspect of the environment:

- *by specifying when consent is required for remediation work and when it isn't*
- *by specifying considerations that are relevant in rezoning and development applications for consent to carry out remediation work*
- *by placing certain standards and notification requirements for remediation work.*

The SEPP states that land must not be rezoned or developed unless contamination has been considered and, where relevant, land has been appropriately remediated.

A Phase 1 Environmental Site Assessment undertaken by Environmental Investigation Services has found that, as the site and surrounding area has predominantly been used for residential purposes, no activities which could be expected to generate significant soil or groundwater contamination were obvious.

Whilst the results of some onsite tests showed elevated levels of contaminants in some soil samples it is not expected that these levels will inhibit the suitability of the site for residential development.

Further investigation will be completed upon demolition of existing buildings. If remediation is found to be required a Remedial Action Plan will be submitted for approval and audited upon implementation.

8.1.14 SEPP 65 - Design Quality of Residential Flat Development and the Residential Flat Design Code (RFDC)

The Concept Plan meets the requirements of SEPP 65 and the Residential Flat Design Code (RFDC) as depicted in the SEPP 65 Design Verification Statement located at Appendix E and the RFDC compliance table located at Appendix G, both prepared by Candalepas Associates.

The Concept Plan provides a minimum setback of 13.8m to Epping Road, aligning with the neighbouring town house development. The building then steps at each unit to a maximum of 23.8m setback. The stepping of this building at each unit creates a scale similar in proportions to the single dwellings characterised in the area.

The building alignment on Allengrove Crescent aligns with the setback of the residences on either side of the development. The form of this building has been divided up into 3.5m vertical elements reducing the scale of the building to proportions reflective of the neighbouring streetscape.

The development has been sited to maximise the distance from the south east boundary which is setback 6.6m to 26.7m. These setbacks provide 3 hours of sun access to the northern windows and to the private open space of the development and neighbouring dwellings in mid winter.

The Concept Plan allows for environmental design initiatives including:

- The orientation of all units to the north east, allowing living spaces to optimise solar access, reduce heating and artificial lighting requirements;
- Sun-screening devices and strong shuttering elements to reduce solar gains and increase control of the internal environment against late afternoon sun; and

- Cross ventilation to all units and approximately two thirds of dwellings have dual aspect apartments.

8.1.15 SEPP (Infrastructure) 2007

The aim of this Policy is to facilitate the effective delivery of infrastructure across the State of NSW by:

- Providing greater flexibility in the location of infrastructure and service facilities, and
- Identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development), and
- Identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development.

Schedule 3 of the policy relates to traffic generating development to be referred to the RTA. Of relevance to the subject proposal, any development that has capacity for 200 or more motor vehicles must be referred to the RTA. As part of the statutory period, the proposal was referred to the RTA.

8.1.16 Nature and extent of any non-compliance

As previously discussed, the proposal does not meet the height and FSR standards of the LEP. The extent of these non compliances is as follows:

- The Concept Plan seeks heights ranging from 10m – 26.25m, exceeding the allowable standard of 9.5m by up to 16.75m)
- The Concept Plan seeks an FSR of 1.62:1 exceeding the allowable standard of 0.5:1 by 1.12:1.

While the project significantly exceeds the height and density provisions of the R2 Low Density Residential zone under Ryde Local Environmental Plan 2010, the proposed intensification of the site is directly consistent with the principles of a range of broader strategic planning considerations, such as the NSW State Plan 2010, the Draft Inner North Subregional Strategy, the Metropolitan Transport Plan 2010 and Integrating Land Use and Transport – A Planning Policy Package 2001. Aside from the LEP controls, the project is consistent with all other relevant guidelines and controls, including the Residential Flat Design Code.

As the proposed use is defined as a residential flat building under the LEP, it is prohibited in the R2 zone. However, pursuant to Section 75O and 75R of the Act, in deciding whether or not to give approval for a Concept Plan, the Minister may (but is not required to) take into account the provisions of any environmental planning instrument, other than State Environmental Planning Policies (SEPPs). While the above LEP prohibition, and the following development standards, must be 'considered', they are not strictly applicable to the proposed Concept Plan.

In terms of land use, the site is clearly zoned for predominantly residential purposes. The prohibition of residential flat buildings therefore relates to density, not underlying use. The proposed residential use is therefore not inconsistent with the underlying purpose of the zoning, notwithstanding its increased density, and the stated objective of not significantly altering the existing character of the location.

8.2 Built Form, Urban Design/Public Domain and Environmental and Residential Amenity

The EA shall address the height, bulk and scale of the proposed development within the context of the locality. In particular, detailed envelope / height and contextual studies should be undertaken to ensure the proposal integrates with the local environment. The EA shall also provide the following documents:

- *Comparable height study to demonstrate how the proposed height relates to the height of the existing/approved developments surrounding the subject site and in the locality;*

- Visual and view analysis to and from the site from key vantage points; and,
- Options for the siting and layout of the building envelopes, massing and articulation, with particular consideration given to the impact upon residential amenity arising from different options.

The EA shall address the design quality with specific consideration of the massing, setbacks, building articulation, landscape setting, and public domain, including an assessment against the CPTED Principles.

The EA shall consider the interface of the proposed development and public domain and public domain improvements needed to provide a high level of residential and pedestrian amenity.

The EA must address solar access, acoustic privacy, visual privacy and view loss and demonstrate that the Concept Plan development will achieve a high level of environmental and residential amenity.

The EA shall address the siting of the development in relation to any existing significant landscaping on site and provide a site tree survey and detailed arborist report.

The EA should address the issue of noise impacts and provide details of how these will be managed and ameliorated through the design of the building, in compliance with relevant Australian Standards and the Department's Interim Guidelines for Development near Rail Corridors and Busy Roads.

8.2.1 Height Study

A Visual and View Analysis has been prepared by Candalepas Associates and is provided at Appendix F. The Visual and View Analysis provides an examination of comparable height within the area and illustrates that the proposed Concept Plan heights are justifiable within the local context.

Notably, the Visual and View Analysis identifies that the proposal presents a comparable height with the development on the northern side of Epping Road.

In relation to development on the southern side of Epping Road, the Visual and View Analysis concludes that:

"The forms of the buildings as proposed, whilst large, are reduced from their potential impact by:

- a. The proposed landscape setting which is an important design element to this proposal; and*
- b. The façade articulation"*

8.2.2 Visual and View Analysis

The Visual and View Analysis included at Appendix F demonstrates that the Concept Plan is appropriate for the site with regard to visual impact. The Visual and View Analysis concluded that whilst the project will have impacts on the visual environments of the surrounding area, these impacts are considered to be acceptable both in terms of the design outcome and the establishment of a more suitable form of development:

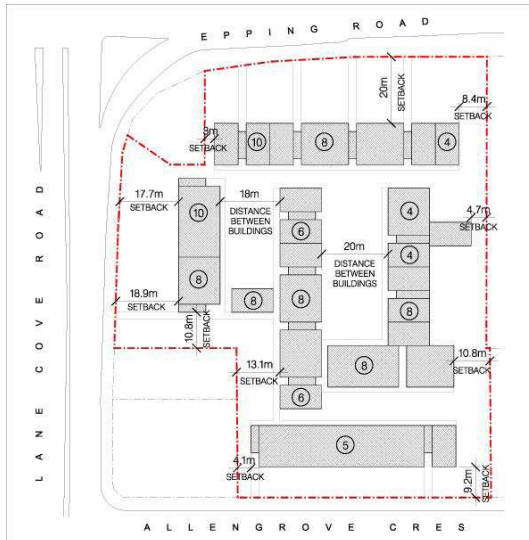
"The impact of the development does not outweigh its relevance in creating an appropriate built form for the roadway intersection and the removal of what, arguably, is an inappropriate residential form for the size of the intersection and street."

8.2.3 Consideration of Options

The various options considered in the evolution of the current proposal are described below. The building height and massing of each option was assessed in terms of the scale and existing built forms in the locality, resulting in lower buildings addressing the neighbouring properties and or Allengrove Crescent to create a contextual outcome.

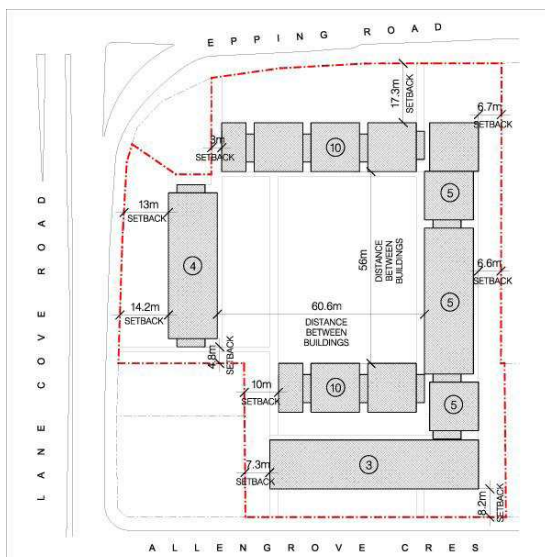
Option 1

The building separation and scale of this initial option was derived from analysis of extant built forms. Consideration was given to the height of building; in particular the blocks are much lower in scale along the south eastern boundary and on Allengrove Crescent where the project interfaces with single storey dwellings. Although the scheme provided amenity for neighbouring properties it lacked the necessary building separation to ensure suitable amenity for building occupants of the project in terms of sun access, natural ventilation and open spaces.



Option 2

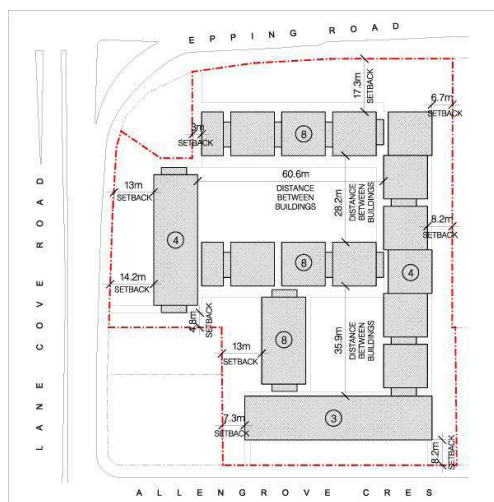
Option 2 created greater private open space and amenity to most of the units through a general increase in height and setbacks to a majority of the building. The buildings of greatest height were located on Epping Road and on the south west of the site.



Option 3

Option 3 (the option that was described in the Preliminary Environmental Assessment) created smaller more useable open spaces that were defined by the building blocks. This scheme increased the

setback to the south eastern boundary whilst reducing the height of the buildings. This improved the amenity of existing properties to the immediate south-east of the site

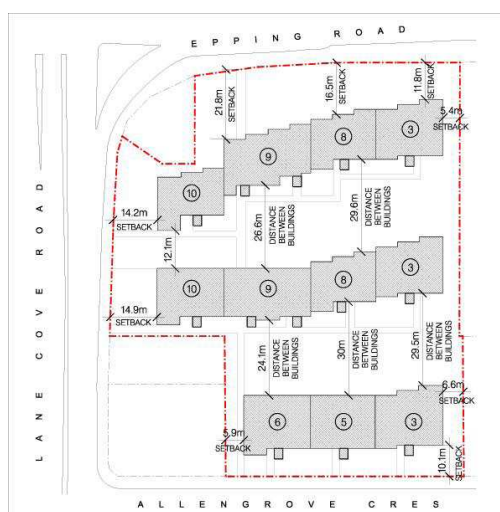


Option 4

The conceptual approach was reconsidered in Option 4. The orientation and layout of the blocks resulted in greater amenity for the site. Daylight access and natural ventilation was achieved to a greater number of units and provisions of open spaces with appropriate sizes and proportions were provided.

Previous options proposed a single building along the south eastern boundary adjacent to the low scale residential developments, compromising their amenity and daylight access.

Increasing the setback to the south eastern boundary achieves daylight access for 3 hours in mid-winter to the open space and north facing windows of the adjacent dwellings. The long continuous wall presented to existing properties to the immediate south-east of the site is also replaced with long views into the site and landscape proposed therein. The limited building separation in previous options compromised amenity in terms of sun access and natural ventilation. The provision of three rows of buildings, one fronting Epping Road, one fronting Allengrove Crescent and one in between provides larger communal open spaces and visual and acoustic privacy.



Option 4 was further developed into Option 5 by increasing setbacks to improve the amenity of proposed dwellings and those to the south-east. Building mass (i.e. height) was shifted away from the remnant property on the corner of Allengrove Crescent and Lane Cove Road towards the centre of the site to create a more contextual transition to the remnant property. The setbacks to Epping Road were further considered to better define the street edge, stepping the block up towards the busy intersection and overpass, creating a more articulated form.



Option 6 was developed to set the building height at a maximum 8-storey height limit to increase the overall amenity to the subject site and adjacent properties. The massing of the buildings was shifted to provide a larger, more singular communal open space. The resulting building configuration was further developed to allow for a better transition to the south-east boundary, and improved amenity to the adjoining property.

The building façade along Allengrove Crescent was broken into two separate buildings, providing a better transition from the site to the adjoining residential properties.



8.2.4 Design Quality

As discussed in the SEPP 65 Design Verification Statement (refer to Appendix E), the Concept Plan has been designed to ensure quality built form, urban design and public domain outcomes which are sympathetic to the surrounding environment. The SEPP 65 Design Verification Statement specifies that:

“The intent of the design is that both on a macro and micro level the detailing of the finishes and planning of the site will lift the standard of the surrounding area into the future and provide a high quality example for development in the area.”

The bulk, height and scale of the development as well as the range of materials and textures proposed have been carefully considered to address the surrounding buildings, scale of the street and the nature of the residential streetscape.

The Concept Plan has been designed to provide maximum amenity to the dwellings. All units are orientated to the north east and more than 70% of proposed units will receive a minimum of three hours solar access to the living areas and private open spaces during mid winter.

8.2.5 Crime Prevention through Environmental Design Principles

Candalepas Associates has prepared an assessment of the proposal against the Crime Prevention through Environmental Design (CPTED) principles.

The CPTED Assessment is included at Appendix P. The report demonstrates that the proposal has been designed to adhere to the CPTED principles. Design elements which support the CPTED principles include:

- Building layout and orientation which promotes passive surveillance;
- Appropriate separation of private and communal open space from Lane Cove Road and Epping Road through the provision of gabion walls;
- Comprehensive lighting plan providing appropriate design and lux levels to ensure safety in all internal and external communal areas of the development;
- Secured entrances to the site; and
- The use of light coloured painting and transparent materials to enhance light and visibility.

As illustrated in the CPTED report, the massing, setbacks, building articulation, landscape setting, and public domain effectively promote implementation of CPTED principles across the development.

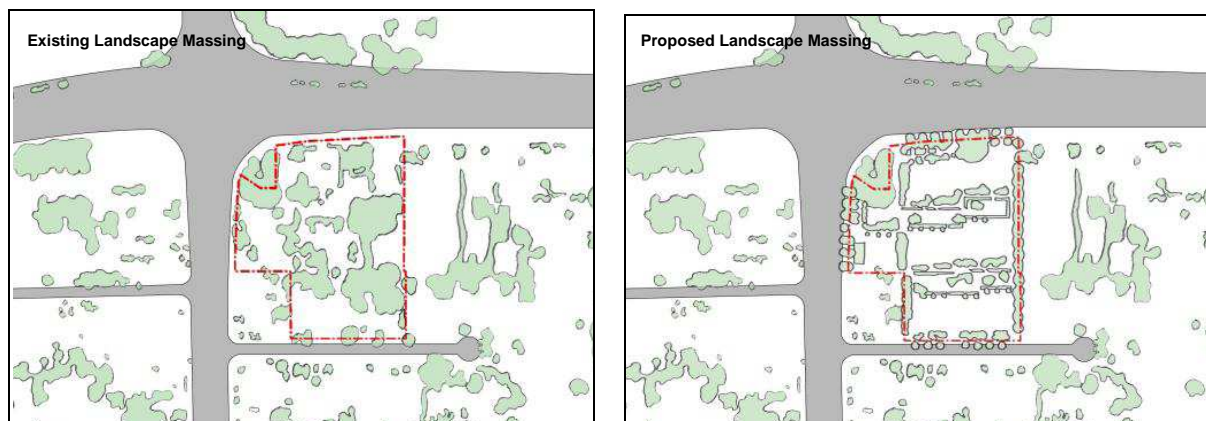
8.2.6 Public Domain Improvements

Public domain improvements proposed as part of the development are addressed in Section 5.6 of this report as well as the Landscape Report at Appendix L and the SEPP 65 Design Verification Statement at Appendix E. As outlined in these documents, improvements to the public domain proposed as part of the project incorporate both the upgrade of the Council reserve on the corner of Epping Road and Lane Cove Road and the introduction of street trees.

The implementation of these improvements will transform what is currently an under utilised, unattractive and unsafe public park into a useable space which coordinates and integrates with the proposal to establish a seamless interface with the development. Further, the introduction of street trees along Lane Cove Road, Epping Road and Allengrove Crescent combined with the upgrade of the turf verge and pedestrian footpath bounding sections of these roads, will contribute to a much improved streetscape which fosters a positive residential and pedestrian amenity.

Figure 26 demonstrates that the landscape concept proposed for the site will establish a greater amount of vegetation in the public domain than currently exists.

Figure 26 – Existing and Proposed Landscape Massing



8.2.7 Privacy

The Concept Plan has been designed to ensure residential privacy both within the development and on adjoining sites. As outlined in the SEPP 65 Design Verification Statement at Appendix E and the RFDC compliance table at Appendix G, design measures such as orientation, setbacks and building separation, as well as the incorporation of shutters, will contribute to visual privacy.

Through its stepped design and north-east orientation, the Concept Plan allows for angled and offset placement of dwelling units, preventing cross-viewing. This design has been developed in accordance with the requirements of the RFDC.

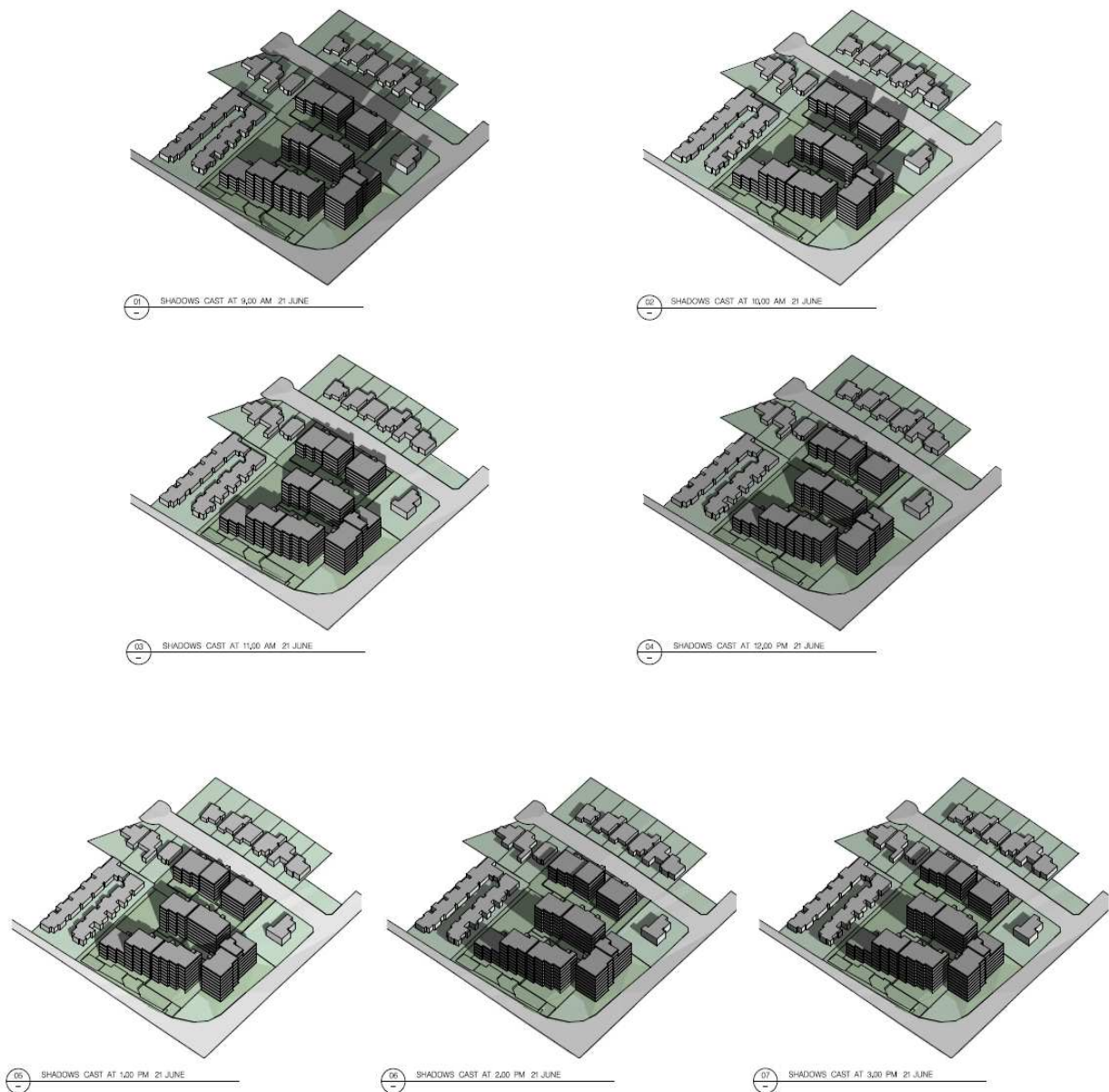
Further, significant building separation of 12m-30m is provided, once again meeting the standards of the RFDC. This building separation, coupled with the proposed landscaped areas between the buildings, will facilitate privacy within the development.

8.2.8 Sunlight and Overshadowing of Neighbours

As illustrated in the Solar Access drawing at Appendix D and discussed in the SEPP 65 Design Verification Statement, the indicative design of the proposal will have limited impacts on sunlight access to adjoining properties and will ensure appropriate levels of sunlight access are achieved within the proposal. More than 70% of the apartments in the development receive a minimum of three hours of solar access to the living areas and private open spaces during mid winter.

Whilst some overshadowing occurs to adjoining residences, all of these properties will retain a minimum of three hours of sunlight in mid winter to northern windows and private open spaces. As shown in Figure 27 below, all overshadowing of adjoining properties has ceased by 11 am in mid winter.

Figure 27 – Solar Access in Mid Winter



8.2.9 Noise

A Noise Impact Assessment has been completed by Heggies Pty Ltd. The Noise Impact Assessment notes that the DoP Interim Guideline Noise Criteria sets a building façade traffic noise level of 35 dBA for sleeping areas (between 10pm and 7am) and 40 dBA for habitable rooms at any time. Figure 30 is extracted from the Noise Impact Assessment and demonstrates the predicted building façade traffic noise levels.

Figure 28 – Building Façade Predicted Traffic Noise Levels

Building	Facade	Predicted Daytime/Night Noise Level in dBA	Mechanical Ventilation	Required Building Noise Reduction
Northern	North - east end	67/62	Y	27
	North - west end	68/63	Y	28
	West	69/65	Y	30
	South - west end	65/61	Y	26
	South - centre	58/53	Y	18
Central	North - west end	65/61	Y	26
	North - centre	58/53	Y	18
	West	68/64	Y	29
	South - west end	65/61	Y	26
	South - centre	62/58	Y	23
Southern	North - west end	60/56	Y	21
	North - centre	57/53	Y	18
	West	66/62	Y	27
	South - west end	60/56	Y	21
	South - centre	61/57	Y	22
Notes	1. The predicted noise levels are for upper levels and do not include the effects of topography, or any potential shielding at the lower building levels.			

The Noise Impact Assessment states that:

“The typical outdoor to indoor noise reductions provided by most standard dwellings (i.e. without special acoustic treatment) is generally accepted to be 10 dBA with windows open (allowing for natural ventilation) and 25 dBA with windows closed ... A reduction of outdoor to indoor noise of 30 dBA can be achieved through the upgrading of glazing. It is anticipated that this will be required in some parts of the project.”

The Noise Impact Assessment confirms that mechanical ventilation will be required for most dwellings. However this ventilation should be designed to ensure windows can be opened. It is not anticipated that all windows in all apartments will need to be closed, but rather that mechanical ventilation be provided to allow additional acoustic impact attenuation during particularly noisy times.

An alternative is to incorporate ductwork between the outside and inside (that needs to include either an attenuator or have sufficient length of internal acoustic lining and be constructed not to compromise the acoustic integrity of the building), and incorporate a fan if necessary. It is proposed to determine details for the mechanical ventilation requirements during the detailed design phase of the project.

The Noise Impact Assessment is included at Appendix Q.

8.2.10 Vegetation

The site contains numerous trees consistent with a typical urban environment. An arborist report has been prepared by Footprint Green to assess the condition and significance of existing vegetation on the site. The Arborist Report is provided at Appendix J.

In summary the arborist report identifies three trees as having Significant Landscape Significance. These include:

- 1 *Eucalyptus sp.*
- 1 *Pinus patula* (Mexican Yellow Pine)
- 1 *Corymbia maculate* (Spotted Gum)

The *Eucalyptus sp.* will be retained. However the Mexican Yellow Pine and the Spotted Gum will be removed. Whilst these two trees are healthy and in good condition, retaining them within the scale of development is not feasible.

In total, the arborist report proposes the removal of 109 trees from the site. Of these, five are considered to be of High Landscape Significance. These specimens have been established in a highly varied and uncoordinated arrangement given the previously fragmented ownership of the site and the single dwelling allotments. These trees will be replaced with comparable density and number as part of the coordinated landscape theme proposed for the development.

Of the remaining trees proposed for removal, 38 have been identified as noxious weeds and the rest are only of Low-Moderate Landscape Significance. These will be replaced as part of the coordinated landscape plan prepared for the site.

It is also noted that the arborist report proposes to remove ten trees from the adjacent reserve. Whilst these trees are not located on the site the removal of the trees has been proposed to enhance the existing poor conditions in the reserve. The project is not contingent on this occurring and the trees will only be removed with the approval of Ryde City Council.

8.3 Isolated Sites

The proposal should seek to amalgamate with the adjacent properties known as 253-257 Lane Cove Road so that there is a more appropriate and reasonable relationship with future developments in the locality. The EA shall include details outlining negotiations with the owners of the affected properties. In the event that amalgamation is not possible, the EA shall address development potential of the isolated sites if they cannot be included within this proposal.

The Land and Environment Court established a planning principle in this regard in the matter of *Melissa Grech v Auburn Council* [2004] NSWLEC 40.

This planning principle provides that when a proposal will isolate an adjoining property, negotiations to amalgamate the site should commence as soon as possible. Where amalgamation cannot be achieved, details of the negotiations should be provided as part of the development application.

The judgement also states:

“A reasonable offer, for the purposes of determining the development application and addressing the planning implications of an isolated lot, is to be based on at least one recent independent valuation.”

Finally, the judgment states that the level of negotiation and any offers made can be given weight in the consideration of the development application:

“The amount of weight will depend on the level of negotiation, whether any offers are deemed reasonable or unreasonable, any relevant planning requirements and the provisions of s 79C of the Environmental Planning and Assessment Act 1979.”

Whilst the project will ‘isolate’ the property on the corner of Allengrove Crescent and Lane Cove Road (253-257 Lane Cove Road), the proponent has made numerous documented offers (refer to Appendix R) to acquire this site over a considerable period of time. As these reasonable offers have all been declined, the scheme has been designed to step down towards this property to reasonably protect its amenity and context, and the Concept Plan illustrates how a future redevelopment of this site could occur in a co-ordinated manner.

8.4 Staging

The EA shall include details regarding the staging of the proposed development including the provision and timing of all required infrastructure works, including a schedule of works and infrastructure to be available for each stage.

The proposal will be developed as a single project and as such no staging plan has been prepared. Construction phasing will be required to ensure the orderly and efficient delivery of the project. This phasing will see the building closest to Epping Road constructed first, followed by the middle building, and then the building fronting Allengrove Crescent.

The proposal is located within a highly urban area with all services available. Augmentation of these services will be detailed at construction certificate phase of the process if required.

8.5 Transport and Accessibility (Construction and Operational)

The EA shall address the following matters:

- Demonstrate the provision of minimal levels of on-site car parking for the proposal having regard to local planning controls, RTA guidelines, and the high public transport accessibility of the site, and include opportunities for car sharing.*
- Provide an estimate of the trips generated by the proposed development and identify measures to manage travel demand, increase the use of public and non-car transport modes, and assist in achieving the objectives and targets set out in the NSW State Plan 2010;*
- Provide a Traffic and Accessibility Impact Study prepared with reference to the RTA's Guide to Traffic Generating Developments and Australian Standards, considering traffic generation including trip generation (daily and peak traffic movements), any required road/intersection upgrades, service vehicle generation and movements, access, loading dock(s), car parking arrangements, and measures to promote public transport usage and pedestrian and bicycle linkages; particularly between the site and Macquarie Park train station and the nearest bus stops and the potential for implementing a location specific sustainable travel plan; and*
- Provide an assessment of the implications of the proposed development for non-car travel modes (including public transport, walking and cycling), including an assessment of existing and proposed pedestrian and cycle movements within the vicinity of the subject site;*
- Details of the potential impacts on the local road network and in particular, the intersections identified in the RTA response (25 May 2010). Consideration should also be given to the Macquarie Park 2007 Base Paramics Model, where appropriate; and*
- Consideration of future pedestrian/vehicular/cycle connectivity with adjoining sites and to and from the Macquarie Railway Station.*

A Traffic Report has been prepared by Traffix. The Traffic Report addresses the issues raised in this DGR and concludes that the proposal is suitable on traffic grounds. In addition, the Traffic Report concludes that the traffic impacts on the existing network associated with the development will be negligible.

As discussed in Section 8.1.7, the Traffic Report determines from the results of Paramics modelling that with the exception of the Wicks Road and Epping Road intersection, each of the intersections analysed as part of the traffic assessment will remain generally unchanged in regards to their Level of Service.

In addition, the Concept Plan provides for appropriate levels of car parking as detailed in the Traffic Report. Figure 29 has been taken from the Traffic Report and provides a breakdown and calculation of the proposed car parking numbers:

Figure 29 – Car Parking Provision

Type	Number Attending	Council Parking Rates	Spaces Required	Spaces Provided
One Bedroom	47	1.0 spaces per unit	47	41
Two Bedroom	122	1.2 spaces per unit	146	146
Three Bedroom	27	1.6 spaces per unit	43	43
Visitor	196	1 space per 4 units	49	43
Totals			285	273

Visitor parking, disabled parking and cycle facilities will be provided in accordance with Council's requirements as outlined in the Traffic Report.

The site provides excellent opportunities for walking and cycling, being located within walking distance to Macquarie Park train station as well as a range of services and facilities and being situated adjacent to the regional bike path network.

The Traffic Report concludes that the proposal can be accommodated within the existing transport infrastructure and further, that the proposal is strategically placed to represent a Transit Oriented Development. Full details are included in the Traffic Report at Appendix K. Matters raised during public exhibition, as discussed in Section 5 are included with the report.

8.6 Ecologically Sustainable Development (ESD)

The EA shall detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.

The EA should include a commitment to a likely minimum standard of ESD to be attained and provide detail of how those standards can be met.

The underlying principle of concentrating new development around major transport nodes in existing areas is one of the most important sustainability objectives for the future development of Sydney, and significantly contributes to:

- Containment of the urban footprint of Sydney.
- Better utilisation of existing infrastructure.
- Reduced private car use and associated congestion and CO² emissions.

As discussed in Section 5.5 of this report, a comprehensive ESD analysis of the proposal has been undertaken by Built Ecology (refer to Appendix M). The report describes how the proposal incorporates ESD principles and outlines a series of commitments relating to the proposed ESD measures to be incorporated in the development.

In addition, the proposal endeavours to uphold the principles of ESD through a range of initiatives including a communal market garden, upgrade of the adjoining public reserve, and establishment of street trees.

The proposal will not only meet the minimum standard of ESD, but will include a number of best practice initiatives. Refer to the ESD Strategy prepared by Built Ecology (located at Appendix M) for a complete description and analysis of the ESD measures proposed for the development.

8.7 Drainage, Stormwater Management and Flooding Potential

The EA shall include a Stormwater/Drainage/Flood Study addressing drainage/groundwater/flooding issues associated with the development and the site, including consideration of any required infrastructure upgrades and stormwater/flooding management strategies/mitigation measures for development of the site and adjacent lands.

The EA shall address the requirements for additional drainage infrastructure and the incorporation of Water Sensitive Urban Design measures.

A Stormwater Management and Flood Assessment has been undertaken by Worley Parsons. The report details flooding, stormwater management, hydrology and Water Sensitive Urban Design matters affecting or proposed as part of the development and is included at Appendix N along with a Stormwater Management Concept Plan.

As outlined in the report, the proposal is appropriate with regard to drainage, stormwater and flooding potential as there are no flooding issues on site, appropriate drainage and stormwater control measures will be implemented and no additional infrastructure will be required.

It is proposed that overland flow paths will be constructed to ensure stormwater flows are conveyed into the existing stormwater network. The proposed development has led to identification of three sub-catchments on the site.

Further, the Stormwater Management and Flood Assessment proposes the establishment of on-site detention (OSD) tanks to control and limit stormwater runoff generated across the site. These tanks will include a discharge control outlet to control peak flows. Discharge controls will be designed to cater for all storm events up to the 100 year average recurrence interval (ARI) storm event.

The implementation of Water Sensitive Urban Design best practice principles is proposed, including rainwater tanks, litter baskets, OSD tanks and bio-retention basins. Through the implementation of these measures, the Department of Environment, Climate Change and Water pollutant reduction targets for urban stormwater management will be achieved.

8.8 Contributions

The EA shall address the provision of public benefit, services and infrastructure having regard to Council's Section 94 Contribution Plan, and provide details of any Planning Agreement or other legally binding instrument proposed to facilitate this development.

In accordance with the Ryde City Council Section 94 Development Contributions Plan 2007 and the 2010 Contribution Rates for development outside the Macquarie Park area, the following rates are applicable to the proposal:

- 1 bedroom dwelling: \$9,313.13 per dwelling
- 2 bedroom dwelling: \$11,175.75 per dwelling
- 3 bedroom dwelling: \$14,280.11 per dwelling

Based on these rates, the Section 94 Contribution for the proposal has been calculated as follows (based on indicative dwelling numbers in accordance with the Concept Plan):

Table 5 – Section 94 Contributions

Dwelling Type	Number of Units	Rate per Dwelling	Cost per Dwelling Type
1 bedroom dwelling	47	\$9,313.13	\$437,717.11
2 bedroom dwelling	122	\$11,175.75	\$1,363,441.50
3 bedroom dwelling	27	\$14,280.11	\$385,562.97

TOTAL:	\$2,186,721.58
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Contributions will be paid in accordance with these calculations.

8.9 Statement of Commitments

The EA must include a draft Statement of Commitments detailing measures for environmental management, mitigation measures and monitoring for the project.

The Statement of Commitments is contained in Section 5.9 of this report and at Appendix C.

8.10 Consultation

Undertake an appropriate and justified level of consultation in accordance with the Department's Major Project Community Consultation Guidelines October 2007.

The consultation process for the project, issues arising there from, and the proponent's response to these issues are detailed at Section 5.

9 Conclusion

The Macquarie Park Corridor is a critical component of the future employment potential of Sydney, and significant public investment has recently been made to serve the corridor by heavy rail. While it is important to protect the future employment potential of land within the corridor, key aspects of the Metro and Draft Subregional strategies emphasise the importance of concentrating future housing in centres and along transport corridors, in view of a wide range of transport, environmental, sustainability and liveability objectives.

The provision of significant densities of housing on the very limited locations that are outside the Macquarie Park Corridor, but within walking distance of the new railway stations, will achieve many significant strategic planning objectives.

This PPR represents an evolution of the original scheme proposed in the submitted and exhibited Environmental Assessment Report. The Environmental Assessment was placed on public exhibition by the Department of Planning from 1 to 31 December 2010. In response to issues raised through this process and further consultation, the scheme has been amended to comprise 196 apartments, ranging from four to eight storeys, above basement parking for 273 cars. The design evolution has seen the proposal significantly decrease in height and density and provides an improved transition to adjacent properties.

While the project will transform the existing low density detached dwelling character of the locality, existing dwellings on the site fronting Lane Cove Road and Epping Road are significantly compromised by noise levels associated with traffic on these roads. The Concept Plan will facilitate high quality redevelopment adopting measures to suitably mitigate this impact, providing renewal of compromised housing stock. The significantly enlarged built forms step down to surrounding lower scale development, and at their tallest point reflect a logical extension of the existing and planned built forms along the adjacent length of Lane Cove Road within the Macquarie Park Corridor.

Detailed traffic modelling demonstrates that the project will not perceptibly alter the traffic performance of any surrounding road intersections, and the proximity of the site to a range of rail, bus, car, cycle and walking transport options, in addition to a range of local services and facilities, will assist in reducing private vehicle reliance, and associated pollution and congestion impacts across the city.

Suitable measures have been implemented to mitigate potential overshadowing, privacy and visual impacts upon surrounding residential properties. While the project will significantly alter the existing context of these properties, it will nevertheless provide an alternative high quality environment and one which is more appropriate on the intersection of arterial roads of such scale.

In view of the above, we conclude that the project represents an ideal opportunity to provide transit oriented housing to complement the significant public and private investment in the Macquarie Park Corridor and rail. While transformational, the project will not result in any unreasonable adverse impacts but will provide very significant urban benefits. We therefore commend the Concept Plan to the Minister for approval.

Appendix A Director General's Environmental Assessment Requirements

Appendix B Quantity Surveyor's Report

Appendix C Draft Statement of Commitments Table

Appendix D Concept Plan and Indicative Scheme Drawings

Appendix E SEPP 65 Design Verification Statement

Appendix F Visual and View Analysis

Appendix G RFDC Compliance Table

Appendix H LEP Compliance Table

Appendix I DCP Compliance Table

Appendix J Arborist Report

Appendix K Transport and Accessibility Impact Study

Appendix L Indicative Landscape Plan and Supporting Landscape Report

Appendix M ESD Strategy

Appendix N Stormwater Management and Flood Assessment

Appendix O Phase 1 Environmental Site Assessment

Appendix P CPTED Report

Appendix Q Noise Impact Assessment

Appendix R Site Amalgamation Details

Appendix S Submission Summary

Appendix T Allengrove Community Consultation

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