3.7 ESD

The environmental performance and any development must consider the following matters:

- Energy: demand reduction, use efficiency, and generation. Refer figure 3.07.
- Water: reduction in potable water use, water reuse and use of other water sources
- Management: sustainable development principles throughout the life of the project
- Indoor Air Quality: enhanced building performance and well-being of occupants
- Transport: reduction in demand for private car usage and encouraging alternative forms of transportation
- Building Materials: reduction in resource consumption through material selection, reuse and management practices
- Land use and Ecology: reduction in the impact on the ecosystem
- Innovation: innovative strategies and technologies. Refer figure 3.08.
- Emissions: mitigating point source pollution from buildings & building services to the atmosphere, watercourse, and local ecosystems. Use water sensitive landscape design to facilitate the management of the overland storm water flow. Refer figure 3.09.
- Any residential development should commit to achieving a 4-Star Multi-Unit Residential v1 Green Star rating for design, which is considered 'Best Practice' in sustainable design.

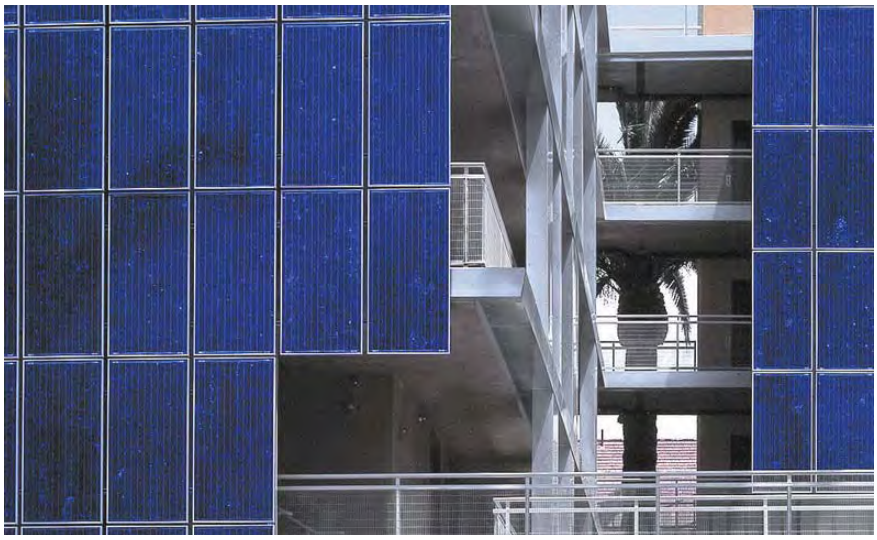

Figure 3.07 - Design Principle_ESD precedents

Figure 3.08 - Design Principle_ESD precedents

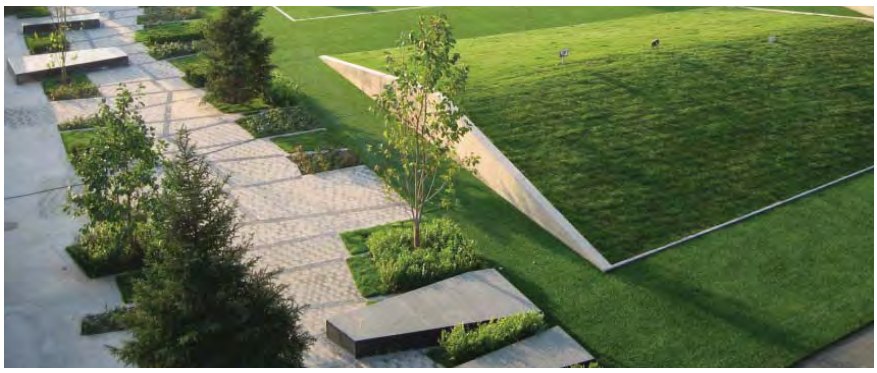

Figure 3.09 - Design Principle_ESD precedents

3.8 Flood Management

Based on civil engineering advice set out in *Civil and Structural Planning Report_April 2013*, which was prepared by Brown Smart Consulting and lodged with the original planning proposal, adopt the flood level (RL42.765) and set minimum flood protection levels to thresholds and habitable floor levels based on this reference level.

Provide a minimum flood protection level of RL43.27.

Note: The proposed access road from Wicks Road is being raised to RL 44.5 as a minimum by taking into account that overland flows from the adjoining NRSUAP may be directed through this proposed road.

Refer to figure 3.10.

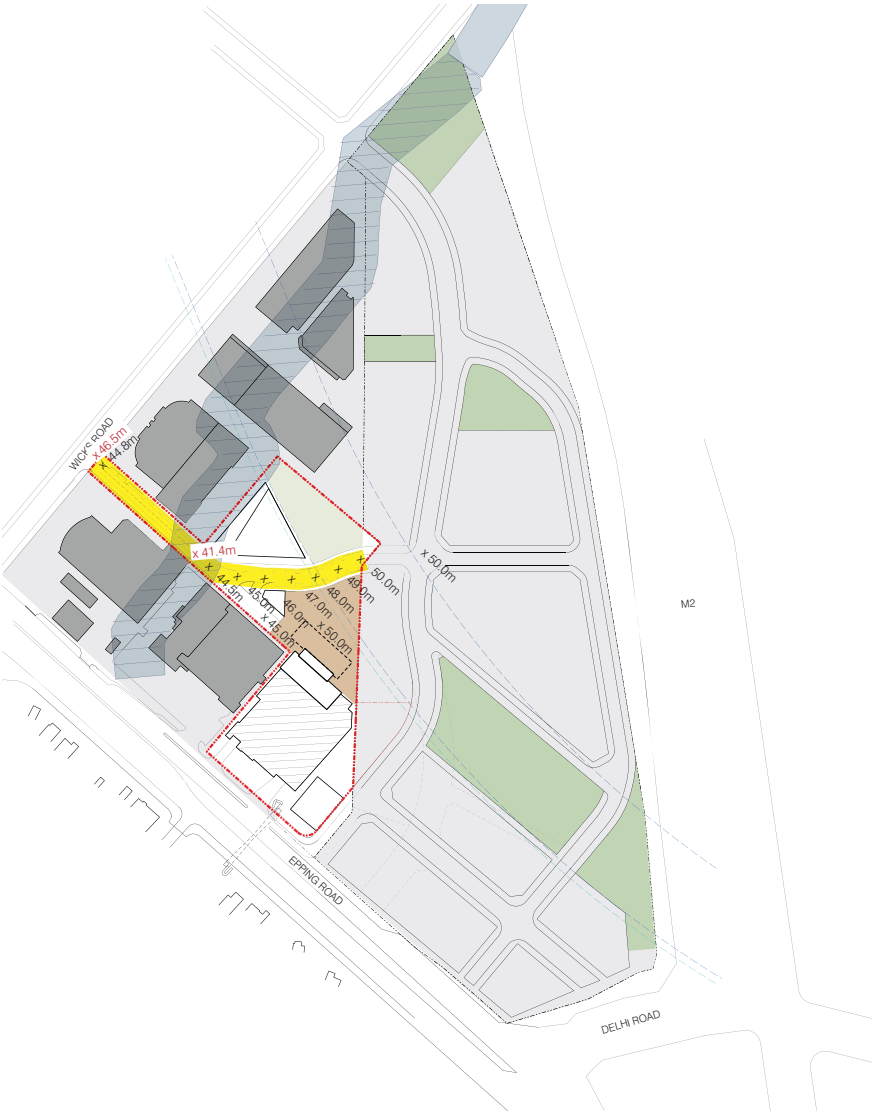

Figure 3.10 - Design Principle_flood management

Legend

	planning proposal site boundary	x 41.1m	existing RLs
	proposed site boundary	x 45.0m	proposed RLs
	railcorp stratum boundary		proposed access road with new levels
	railway tunnel second reserve line		
	NRSUAP site original road network proposal		
	existing commercial building to be expanded		
	existing building		
	proposed building		

3.9 Land Dedication

The design principle is to dedicate the proposed through site street to council for community benefit.

Refer to figure 3.11.

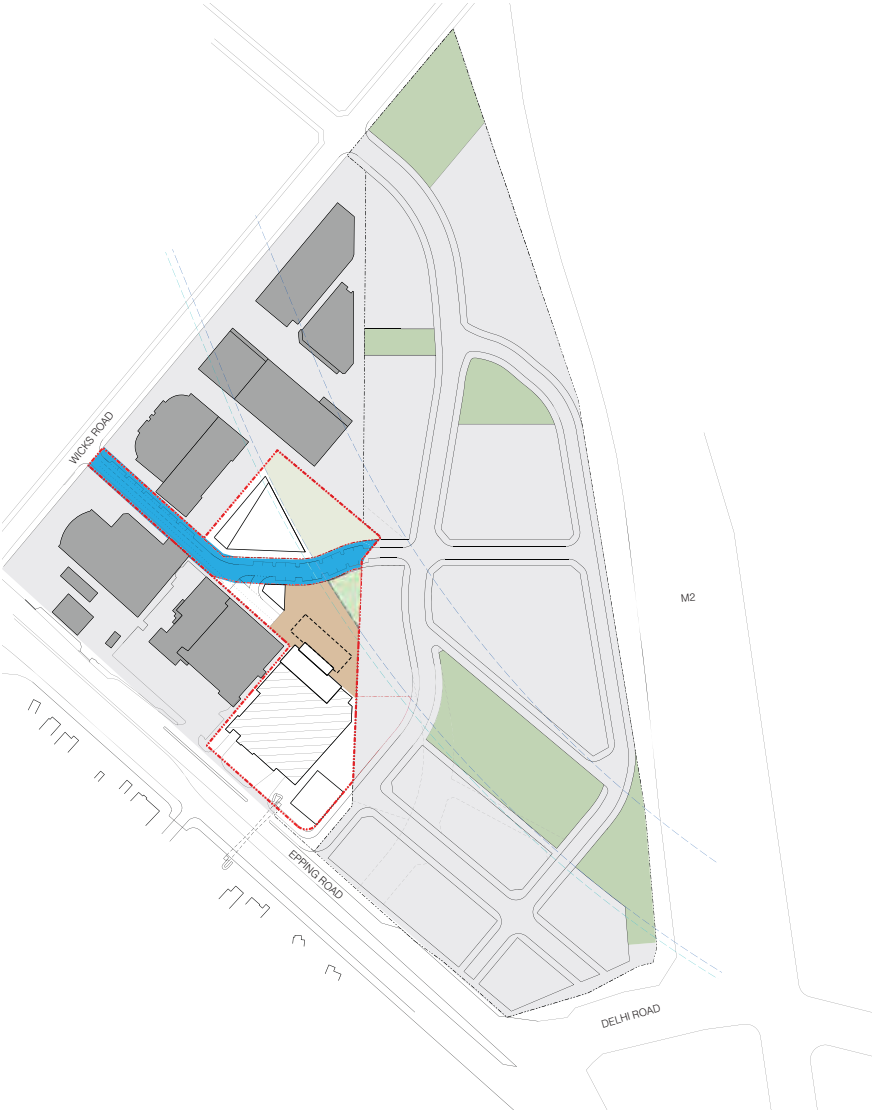

Figure 3.11 - Design Principle_land dedication

Legend

- planning proposal site boundary
- proposed site boundary
- railcorp stratum boundary
- railway tunnel second reserve line
- NRSUAP site original road network proposal
- existing commercial building to be expanded
- existing building
- proposed building
- land dedication

Concept Masterplan 4

4.1 Summary

The site is located in a transition zone between the proposed civic spine along Waterloo Road of Macqurie Park Corridor and the NRSUAP, which is proposed to mainly comprise high density residential.

Accordingly, this concept masterplan proposes a mixed use development with a maximum FSR of 2.45:1, of which approximately 70% will be non-residential uses.

The intensification of the employment uses, including 13,580 sqm commercial, 9,325sqm retail/childcare and 200 room hotel/serviced apartment development, will contribute to the growth target of 21,000 new jobs in the Ryde Local Government Area.

The other 30% of the development will consist of a residential component. This contributes to the City of Ryde's target of 12,000 new dwellings by 2031 and reducing state government pressure to accommodate growth elsewhere in Ryde.

This concept master plan is put forward on the basis of an in principle agreement for a site area exchange between the site and the NRSUAP (Refer to section 2.3.6). The new site boundary would make it feasible to relocate the spine road entry point so that the access to both NRSUAP and the site could be consolidated into an appropriate and safe gateway to the precinct and more efficient development solutions could be achieved on the NRSUAP.

The concept master plan proposes a new public through site street connecting between Wicks Road and the NRSUAP which helps to maximise site permeability and vehicular connections to the site.

The site will also provide additional diversity to the adjacent network of public open spaces by proposing a series of open spaces at different levels, such as an urban plaza, urban park and publically accessible private open space etc.

The concept masterplan proposes to locate the high towers away from all major road frontages to ensure no impacts are imposed on the surrounding amenities and neighbourhoods.
A flood management solution is also proposed for the site.

Refer the following subsections of Chapter 4 for the elaboration of individual topics.

Figure 4.01 - Illustrative Concept Masterplan

4.2 Pedestrian + Vehicular Movement

Pedestrian Access

A new tree lined through-site link connecting Wicks Road to the NRSUAP spine road is proposed with an overall average gradient for the pathway no more than 1:14, to encourage pedestrian access.

A desire line for a pedestrian link from the proposed public open space in the NRSUAP to Wicks Road is also created via a proposed civic urban plaza.

Vehicular Access

This concept masterplan proposes a new through site link from the site to the NRSUAP site, which becomes one of the natural extensions of the NRSUAP new streets grid. This will maximise site permeability and vehicular connections. Vehicular access to the site can be made either via Wicks Road or the proposed spine road on the NRSUAP.

Apart from the new through-site street, there is another vehicle access point to the site from the existing Harvey Norman car park entry on Epping Road, which leads directly into the commercial car park.

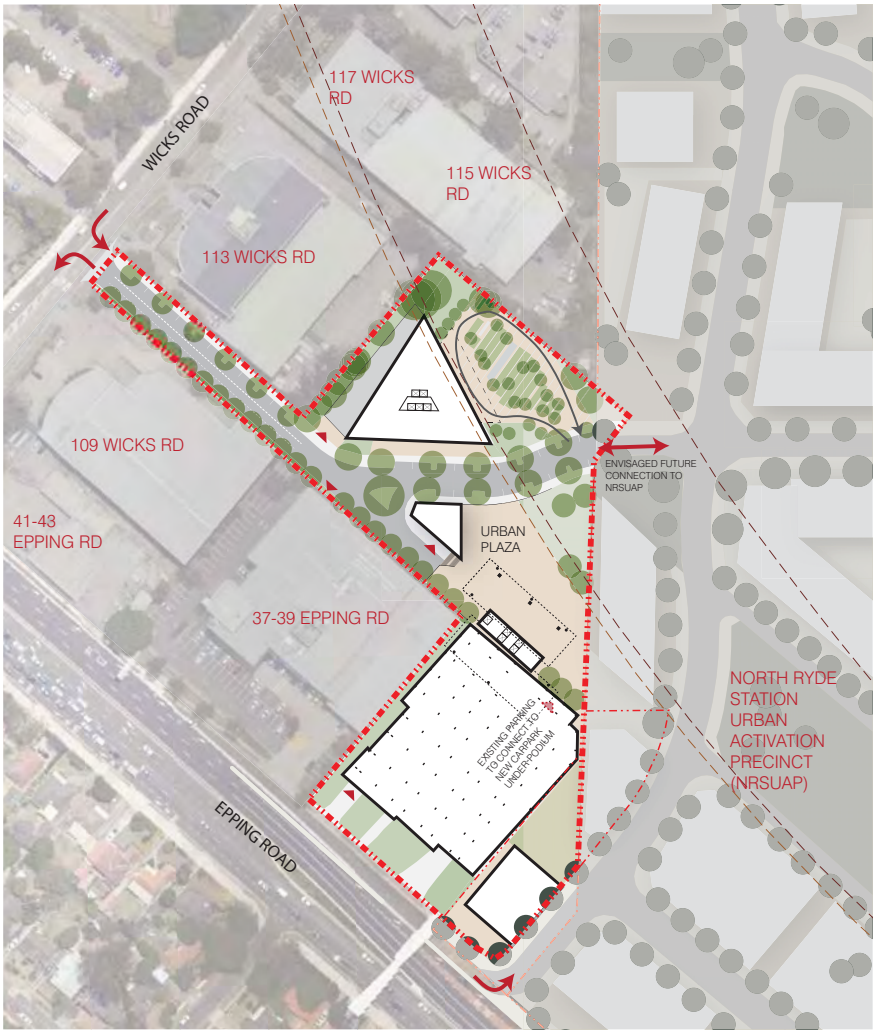

Figure 4.02 - Pedestrian + Vehicular Movement

Concept Masterplan 4

4.3 Open Space Network

A series of open spaces at different levels, such as an urban plaza, a small urban park and publically accessible private open space, are proposed for the site. The approximate areas of each type of open space are listed in figure 4.04.

This series of proposed open spaces forms a natural extension of the network of open spaces within the NRSUAP.

The new urban plaza is proposed in the centre of the site, adjacent to the proposed community centre on the NRSUAP, which defines and activates the eastern edge of the site. Refer ① of figure 4.03.

The urban plaza will become a meeting place catering for the needs of both workers and local residents.

A small urban park to the north of the urban plaza can provide a different type of space for relaxation and recreation. Refer ② of figure 4.03.

A publically accessible private open space is proposed over the railway tunnel serving the proposed hotel/serviced apartments and the residential above. This private open space is able to be connected to the remnant bushland/deep soil zone at the east north corner of the site. Refer ③ of figure 4.03.

Another private open space of approx. 500sqm is proposed for the childcare facility near the entry point of the spine road. Refer ④ of figure 4.03.

Figure 4.03 - Open Space Network

	Area (m²)	Site %
urban plaza	2,233	12%
urban park	695	4%
private open space	2,655	14%
Open Space Total	**5,583**	**29%**

Figure 4.04 - Open Space Area Calculations

4.4 Building Heights and Setbacks

It is acknowledged that the main street height corridor along Waterloo Road forms a civic spine between Macquarie University and North Ryde Railway Stations. Refer to the *City of Ryde DCP 2010_Part 4.5 Macquarie Park Corridor.*

The NRSUAP extends the main street height corridor into its site by proposing a series of high density residential buildings, including two 30-storey towers around the middle section of the NRSUAP at approx. RL 55.0.

A similar strategic approach has been adopted in the concept masterplan which proposes a 23 to 27 storeys high stepped tower to the north of the site, which relates to the proposed scale of the NRSUAP.

The proposed 23 to 27 storeys high stepped tower is set back from all major road frontages to avoid significant impact on the surrounding amenities and is located at a natrual ground level minimum 6m lower than the NRSUAP. The top roof level at RL 129.90 of the proposed stepped tower on the site is almost 20m lower than the proposed 30 storey tower on NRSUAP with its roof level of RL 149.50.

Additionally the building heights step down from 27 storeys to 12 storeys then to 6 storeys as they approach Epping Road to the south. Refer to figures 4.05 and 4.06.

The building heights and the built form are arranged so that solar access is maintained to the existing residential properties on the south side of Epping Road between 9.30 am and 3 pm and solar access is ensured to the proposed urban plaza between 12 pm and 2 pm in mid winter. Refer to 6.2 Appendix 2 - shadow diagrams and 6.3 Appendix 3 - suneye diagrams.

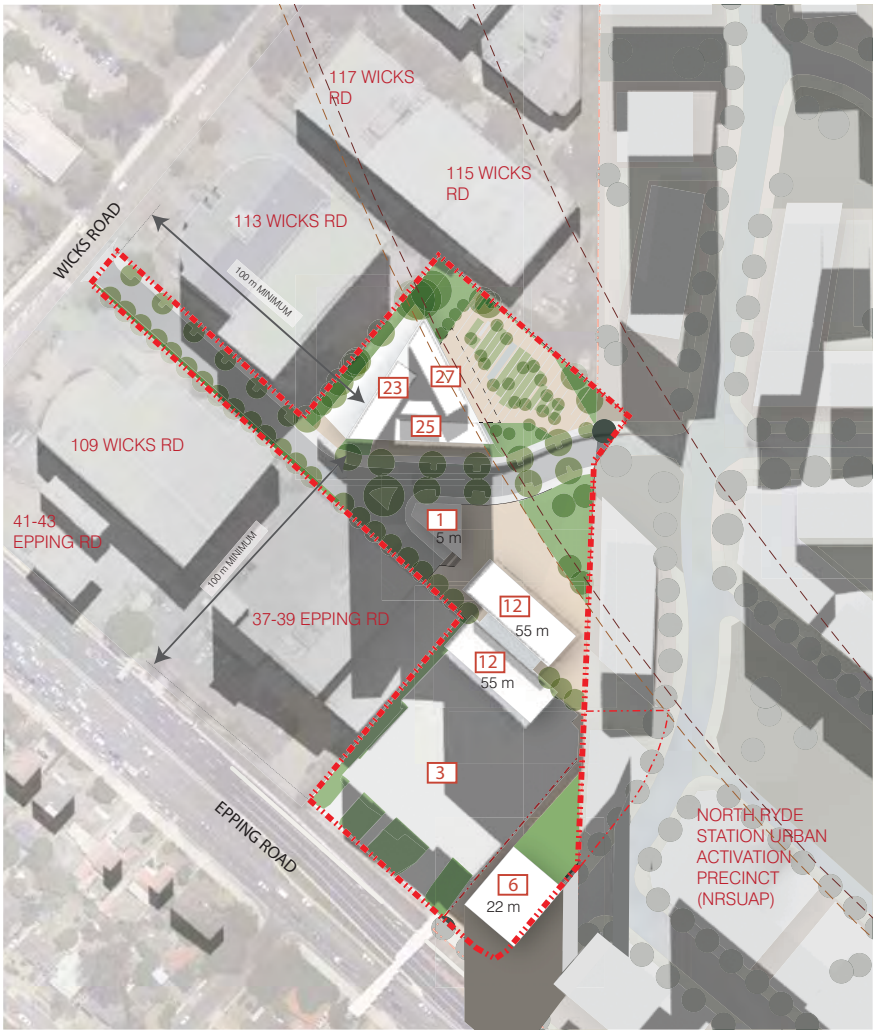

Figure 4.05 - Solar Access + Built Form

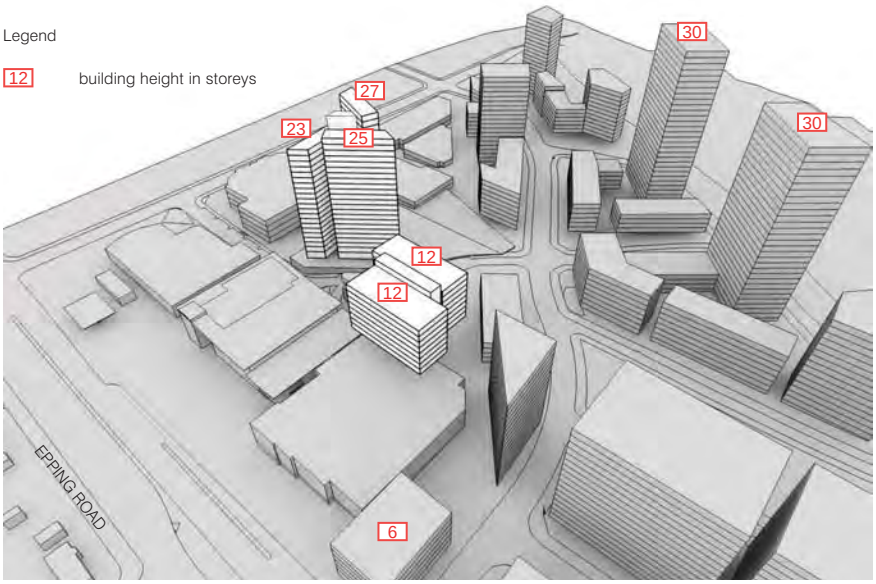

Figure 4.06 - Building Heights and Built Form

Concept Masterplan 4

4.5 Use and Density

This concept masterplan proposes a mixed use development with a maximum FSR of 2.45:1, of which approximately 70% will be non-residential uses with the remaining to be residential accommodation.
Refer to figures 4.08 and 4.09 for the FSR testing and area calculations.

The non-residential component includes

- commercial premises, which consist of commercial office space accommodated within an eight storey addition to the existing bulky goods retail warehouse.
- retail premises, which consist of a cafe located on the corner of the proposed urban plaza and the existing bulky goods retail warehouse along Epping Road.
- a childcare centre located on the ground floor of the 6-storey commercial building adjacent to the entry point of the spine road along Epping Road.
- hotel/serviced apartments, which occupy the lower 10 levels of the 27-storey tower proposed in the northern portion of the site, providing 200 hotel rooms.

The residential accommodation is proposed within the upper 17 levels of the 27-storey tower located to the north of the site. The residential accommodation proposes to provide 162 dwellings.

Refer to figure 4.07 for the distribution of use.

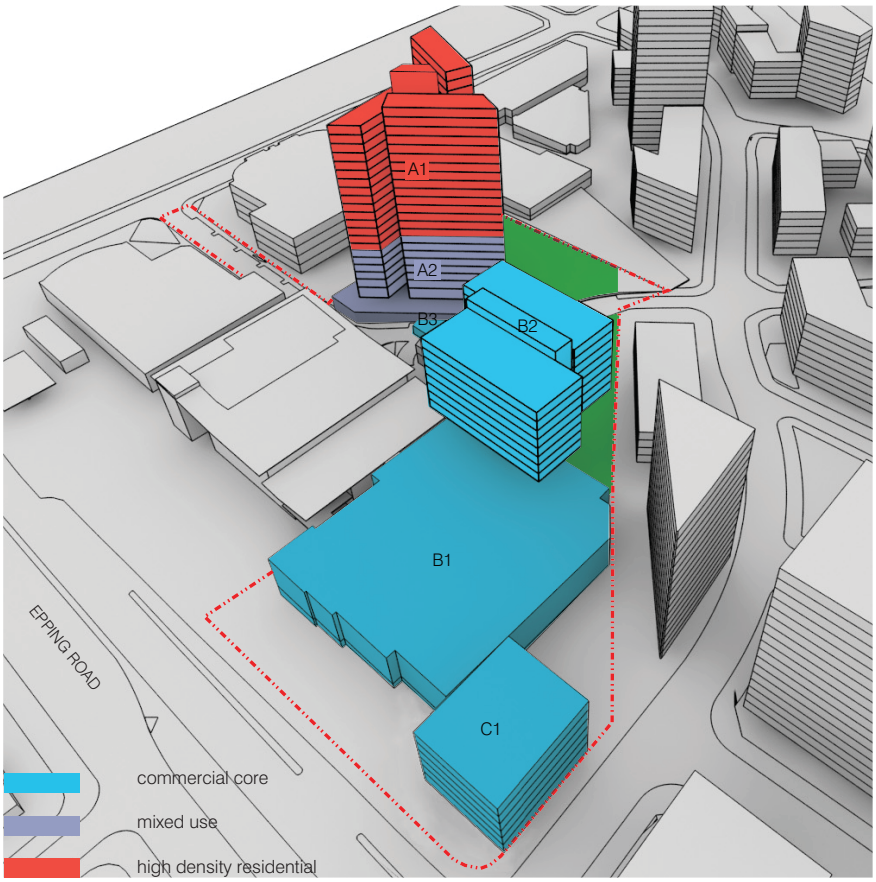

Figure 4.07 - Distribution of Use

Residential Areas

Site-Use	Storeys	GFA	Dwelling nos.
A1 - Residential	17	14,840	162
		14,840	**162**

Non Residential Areas

Site - Use	Storeys	GFA
A2 - Hotel / Serviced Apartments	10	9,144
B1 - Existing Retail	4	8,663
B2 - Commercial	12	10,860
B3 - Cafe	1	150
C1 - Childcare	1	512
C1 - Commercial	5	2,720
Total		**32,049**

Site Summary

Total GFA	**46,889**
Site Area	**19,139**
FSR	**2.45 :1**
No. of hotel suites	**200**
No. of apartments	**162**
No. of car spaces	**755**

Site Subdivision	Site Area		GFA	
111 Wicks Road	9,805	A1 - Residential	14,840	
		A2 - Hotel / Serviced Apartments	9,144	
111 Wicks Road Total	9,805		23,984	2.45
31-35 Epping Road	7,718	B1 - Existing Retail	8,663	
		B2 - Commercial	10,860	
		B3 - Cafe	150	
31-35 Epping Road Total	7,718		19,673	2.55
29 Epping Road (B3 zone portion)	1616	C1 - Commercial	2,720	
		C1 - Childcare	512	
29 Epping Road Total	1,616		3,232	2.00
Total	**19,139**		**46,889**	**2.45**

Disclaimer — This is for high level feasibility study only and all projections are approximate

Figure 4.08 - FSR Testing

	Area (m²)	Site %
Open Space	5,583	29%
Streets	3,945	21%
Setbacks	2,801	15%
Development Blocks	6,810	35%
Total Site Area	**19,139**	**100%**

Figure 4.09 - Area Calculations

Precedents 5

5.1 Mixed Use


Figure 5.01 - Undercroft to lobby of commercial


Figure 5.02 - Cafe


Figure 5.03 - Child care


Figure 5.04 - Mixed use development with activate ground floor


Figure 5.05 - Child care


Figure 5.06 - Mixed use development, active street level


Figure 5.07 - Mixed use development with active street frontage

5.2 Open Space

Figure 5.08 - Landscaped plaza

Figure 5.09 - Landscaped plaza

Figure 5.10 - Parkland

Figure 5.11 - Landscaped port cochere

Figure 5.12 - Terraced park

Figure 5.13 - Landscaped plaza

Figure 5.14 - Parkland

Appendices 6

6.1 Appendix 1: Illustrative Concept Masterplan + Sections


119-127
WICKS RD
WICKS ROAD
117
WICKS RD
115
WICKS RD
113 WICKS RD
109 WICKS RD
41-43
EPPING RD
37-39 EPPING RD
M2 MOTORWAY
NORTH RYDE STATION
URBAN ACTIVATION
PRECINCT
EPPING ROAD
DELHI ROAD
A
B
RL44.8
RL50.0
RL45.0
23
75 m
27
85 m
25
80 m
89 m
1
5 m
12
55 m
12
55 m
3
06
22 m
0 10 20 40 60m
Macquarie Park Planning Proposal _ Supplementary Report - Concept Masterplan
Harvey Norman Group
12_019 Rev_D January 2014
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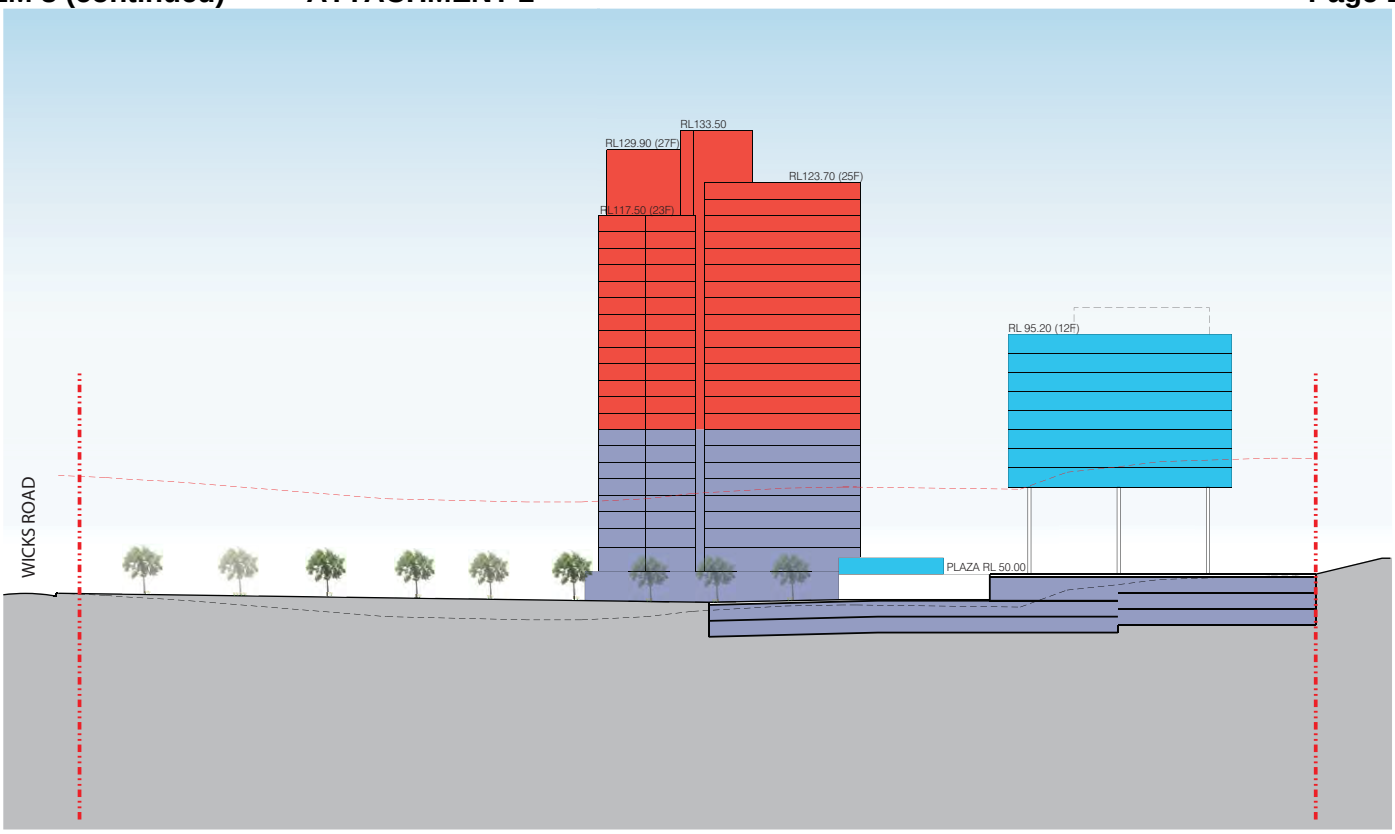
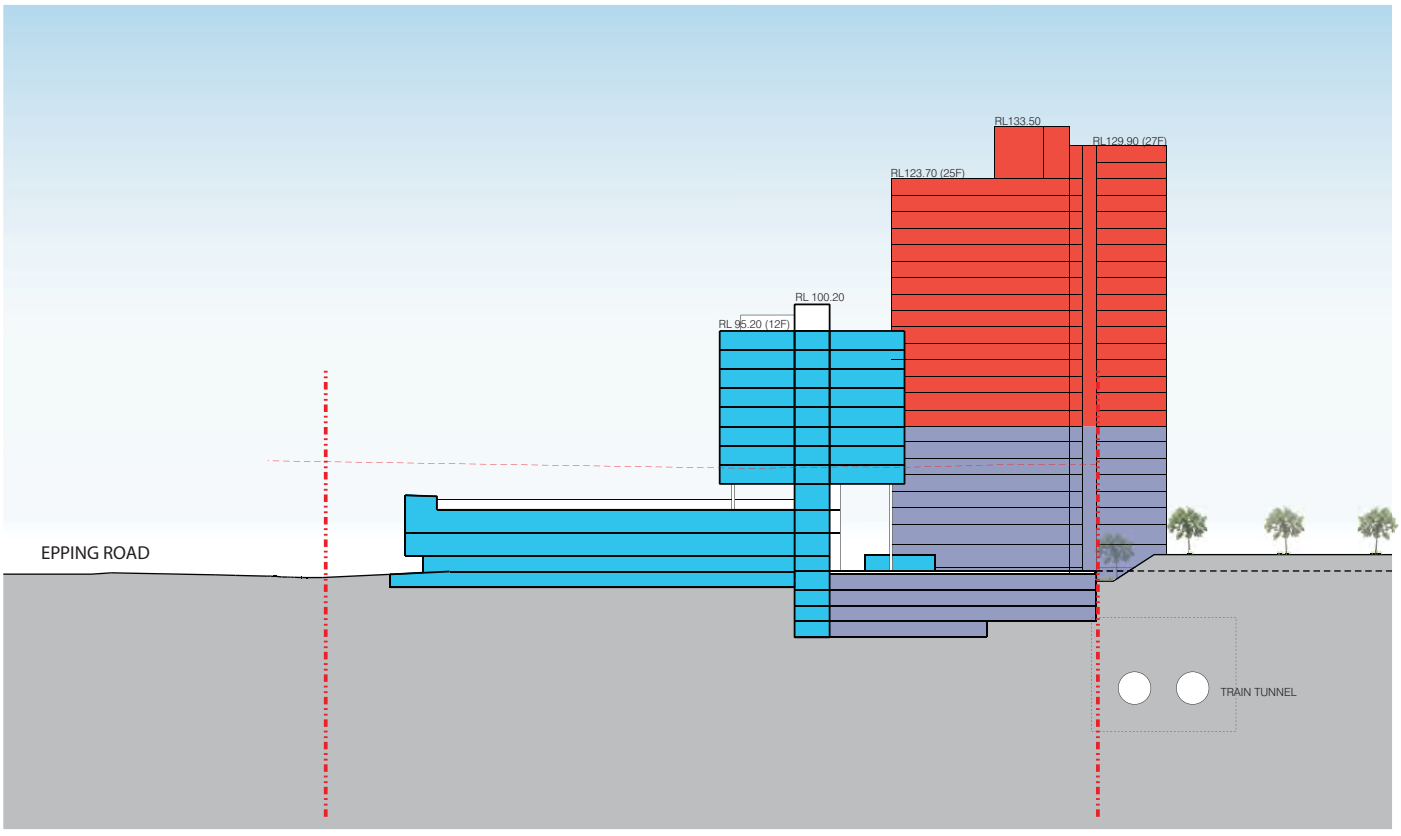
AJ+C
Allen Jack+Cottier



SECTION A



SECTION B

B3 commercial core

B4 mixed use

R4 high density residential

0 10 20 40 60m

6.2 Appendix 2: Shadow Diagrams

9.30 am, 21st June - Winter

Figure 6.21 - Shadow Diagram: 9:30 am, 21st June

6.2 Appendix 2: Shadow Diagrams

12 pm, 21st June - Winter

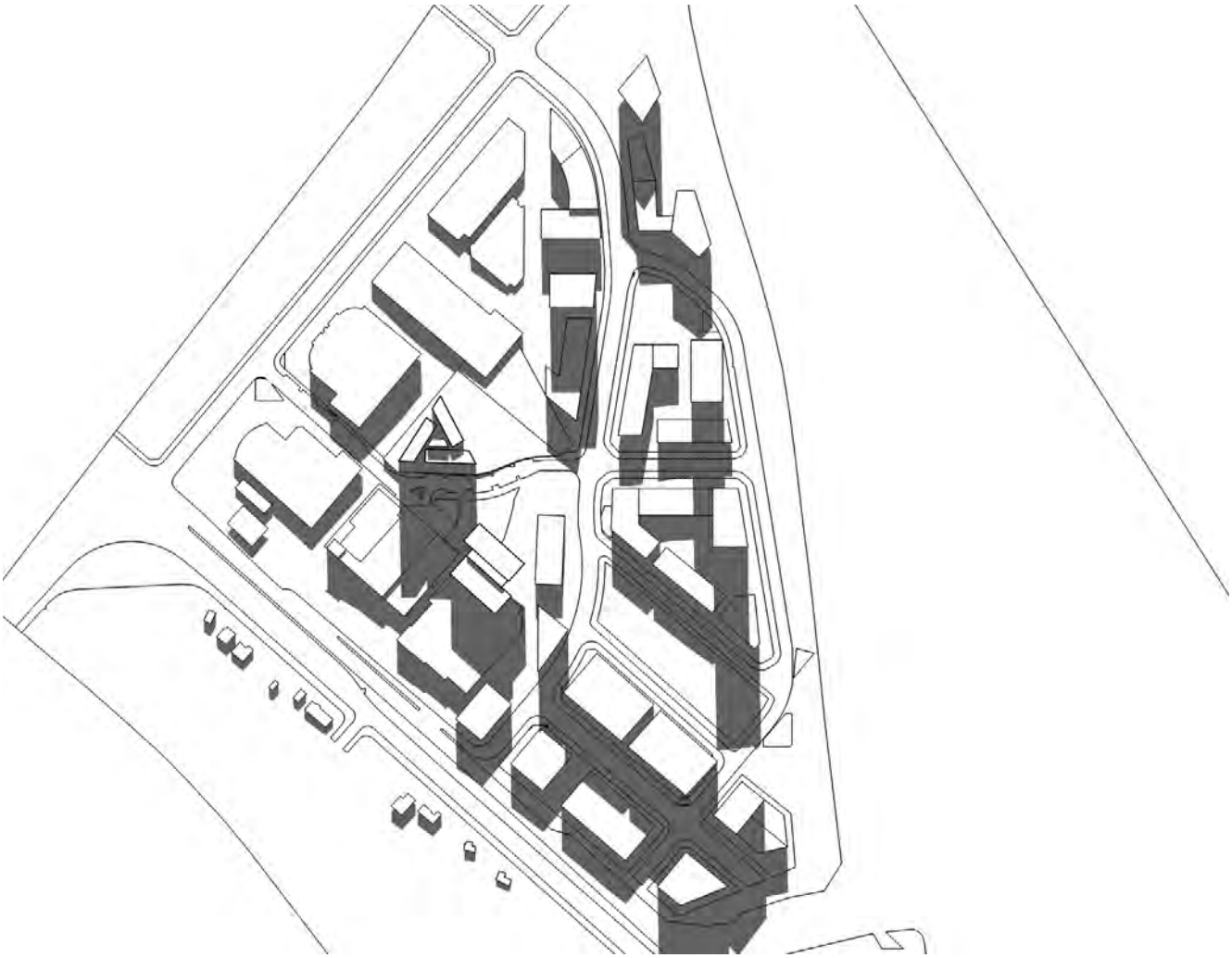


Figure 6.22 - Shadow Diagram: 12 pm, 21st June

6.2 Appendix 2: Shadow Diagrams

3 pm, 21st June - Winter

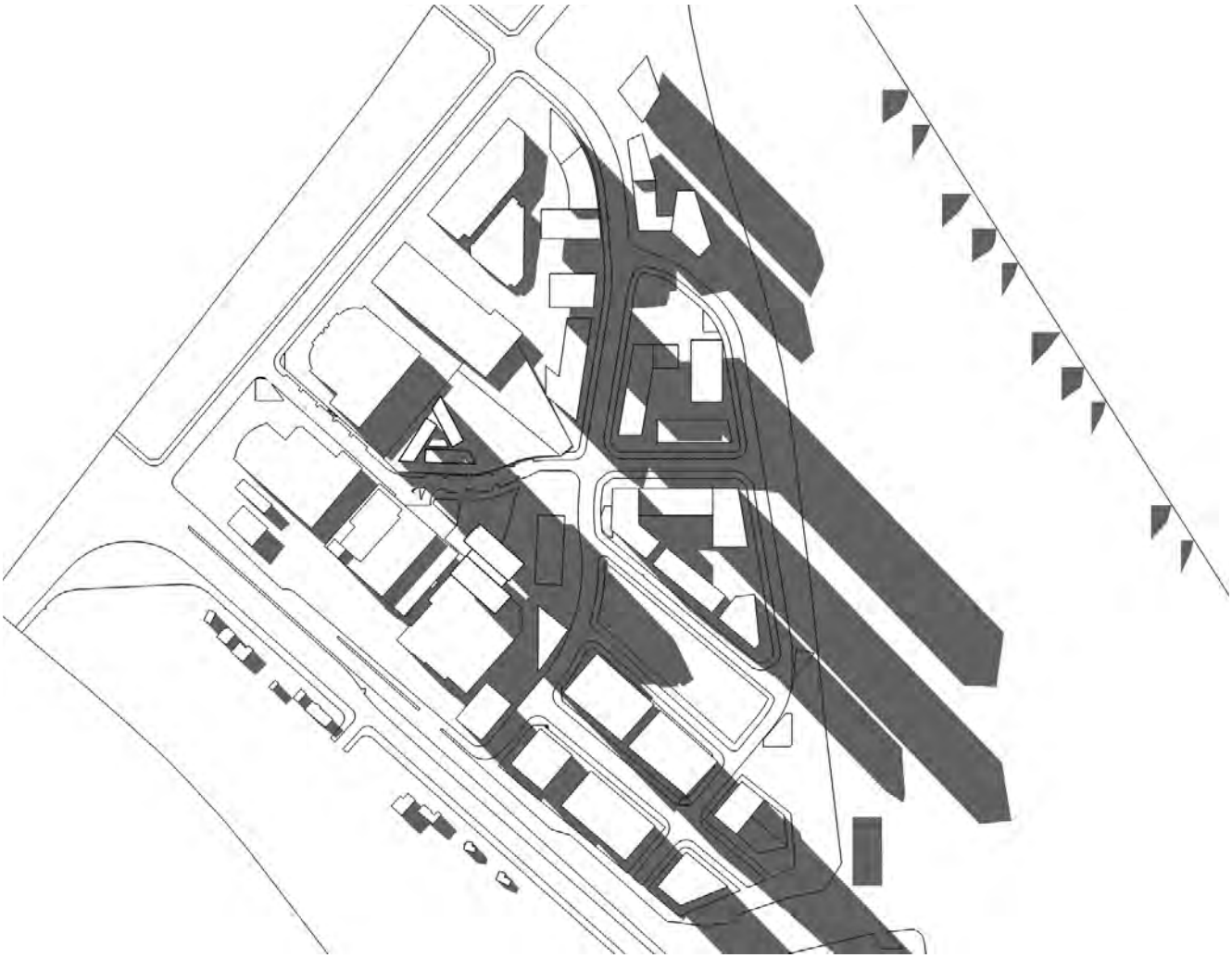


Figure 6.23 - Shadow Diagram: 3 pm, 21st June

6.2 Appendix 2: Shadow Diagrams

9 am, 21st March/September - Equinox

Figure 6.24 - Shadow Diagram: 9:00 am, Equinox

6.2 Appendix 2: Shadow Diagrams

12 pm, 21st March/September - Equinox

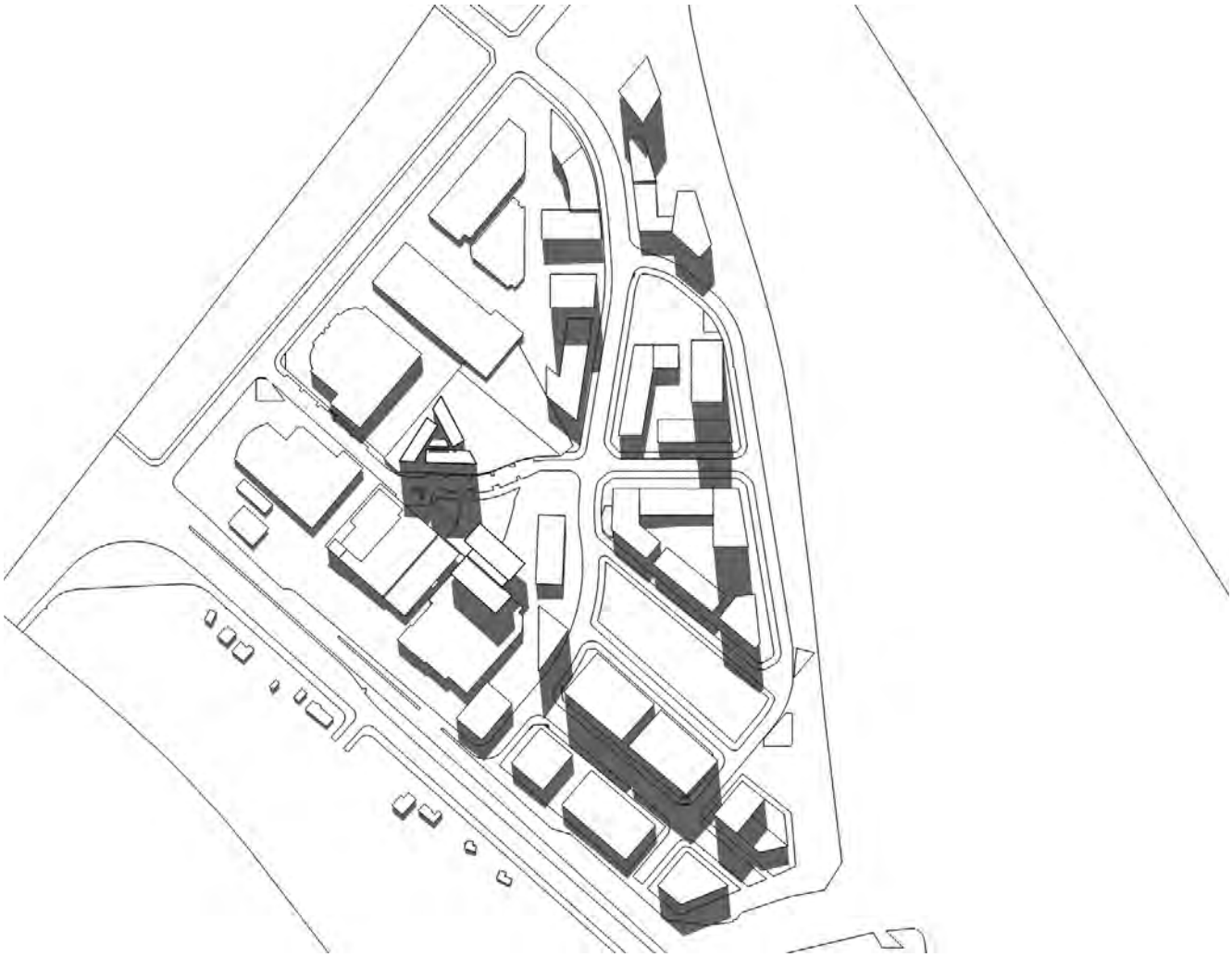


Figure 6.25 - Shadow Diagram: 12 pm, Equinox

6.2 Appendix 2: Shadow Diagrams

3 pm, 21st March/September - Equinox

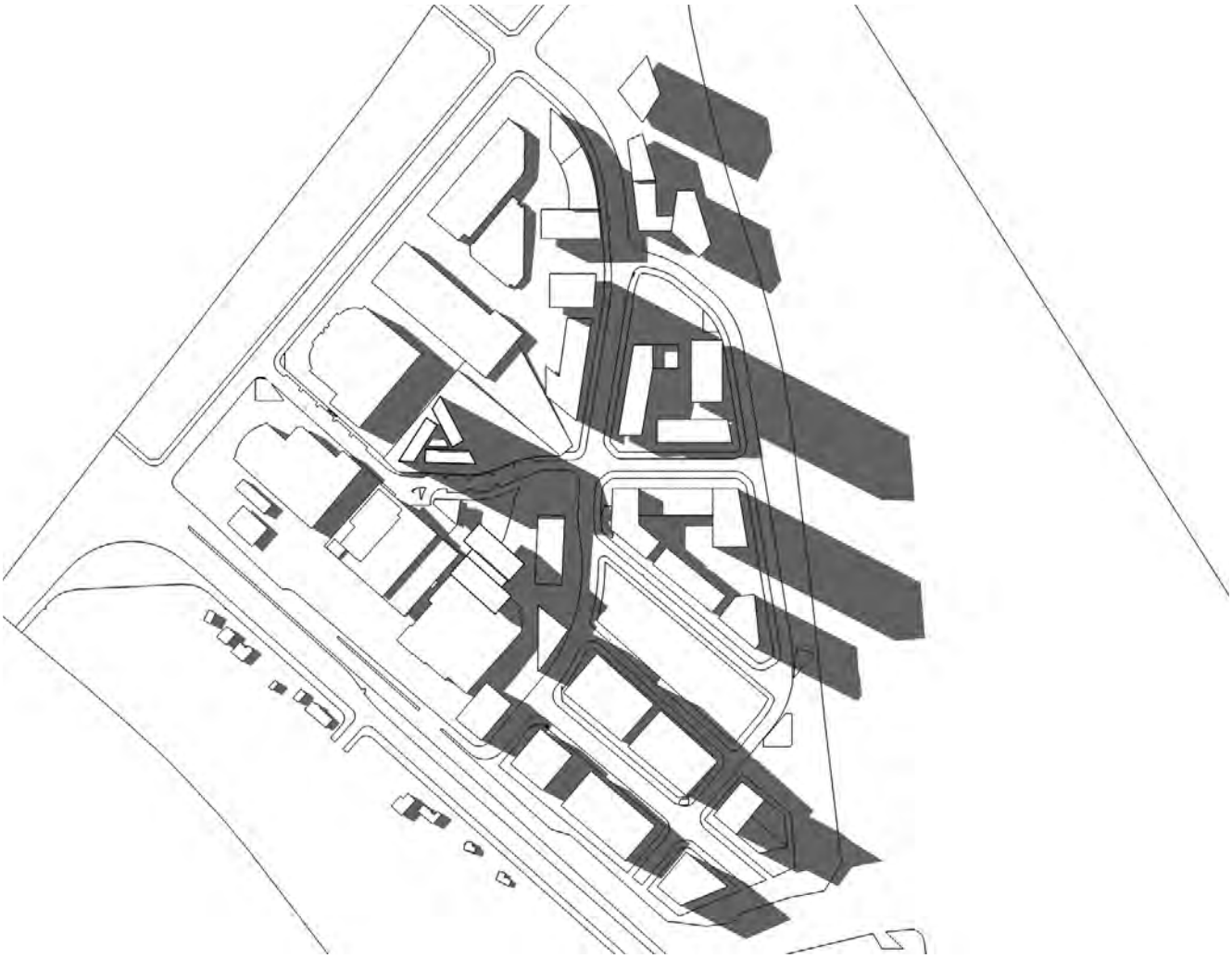


Figure 6.26 - Shadow Diagram: 3 pm, Equinox

6.2 Appendix 2: Shadow Diagrams

9 am, 21st December - Summer

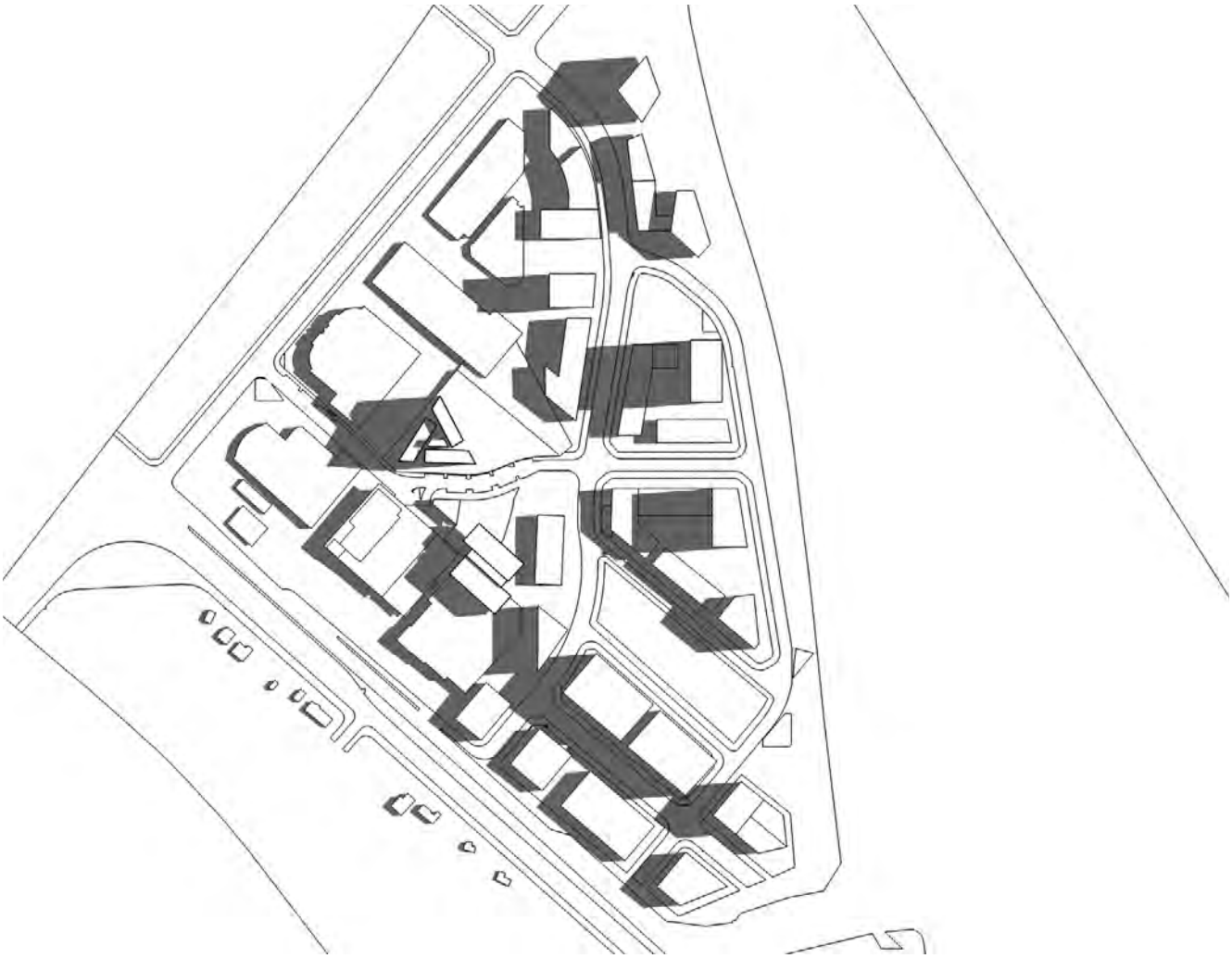


Figure 6.27 - Shadow Diagram: 9 am, 21st December

6.2 Appendix 2: Shadow Diagrams

12 pm, 21st December - Summer

Figure 6.28 - Shadow Diagram: 12 pm, 21st December

6.2 Appendix 2: Shadow Diagrams

3 pm, 21st December - Summer

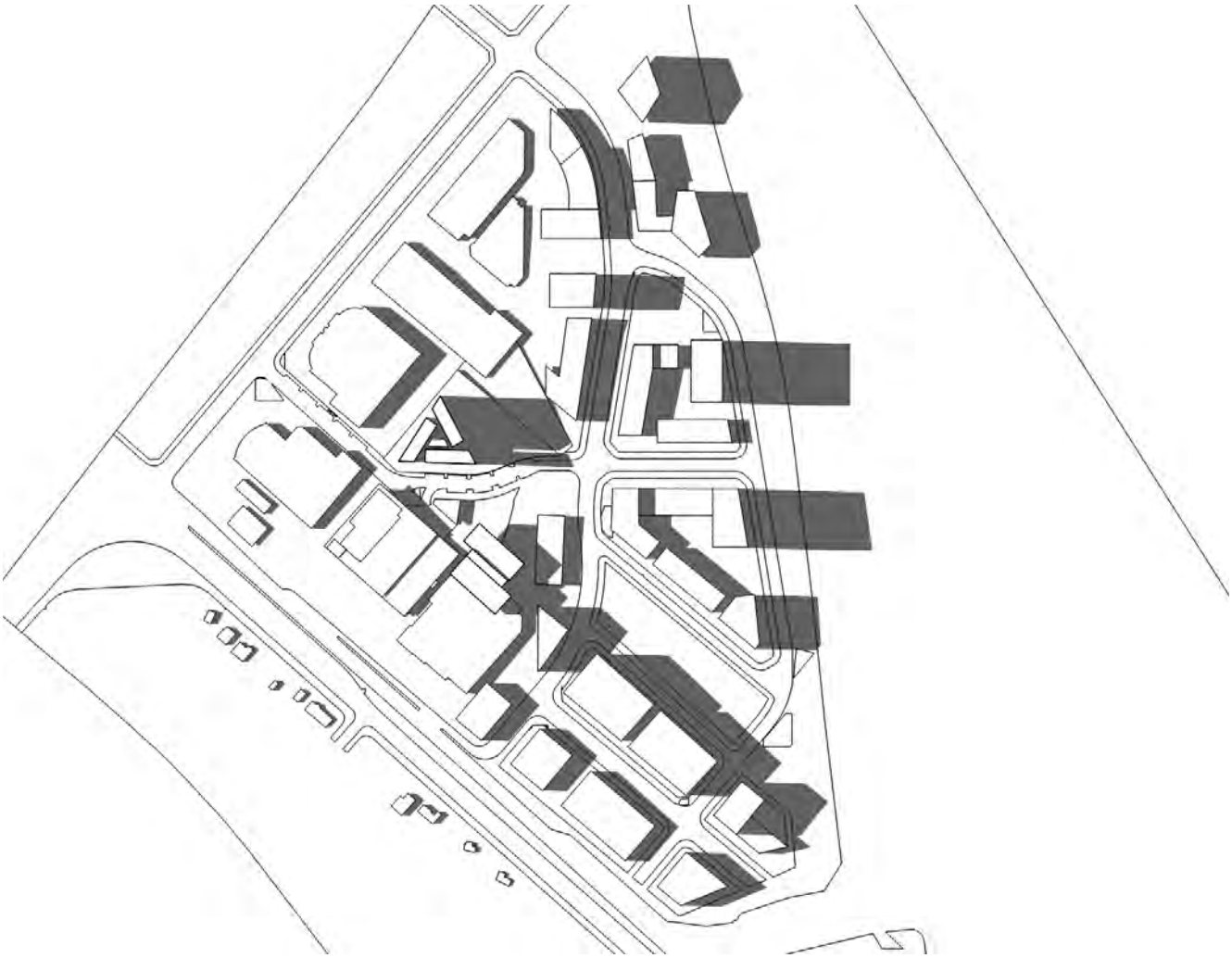


Figure 6.29 - Shadow Diagram: 3 pm, 21st December

6.3 Appendix 3: Suneye Diagrams

9.30 am, 21st June - Winter

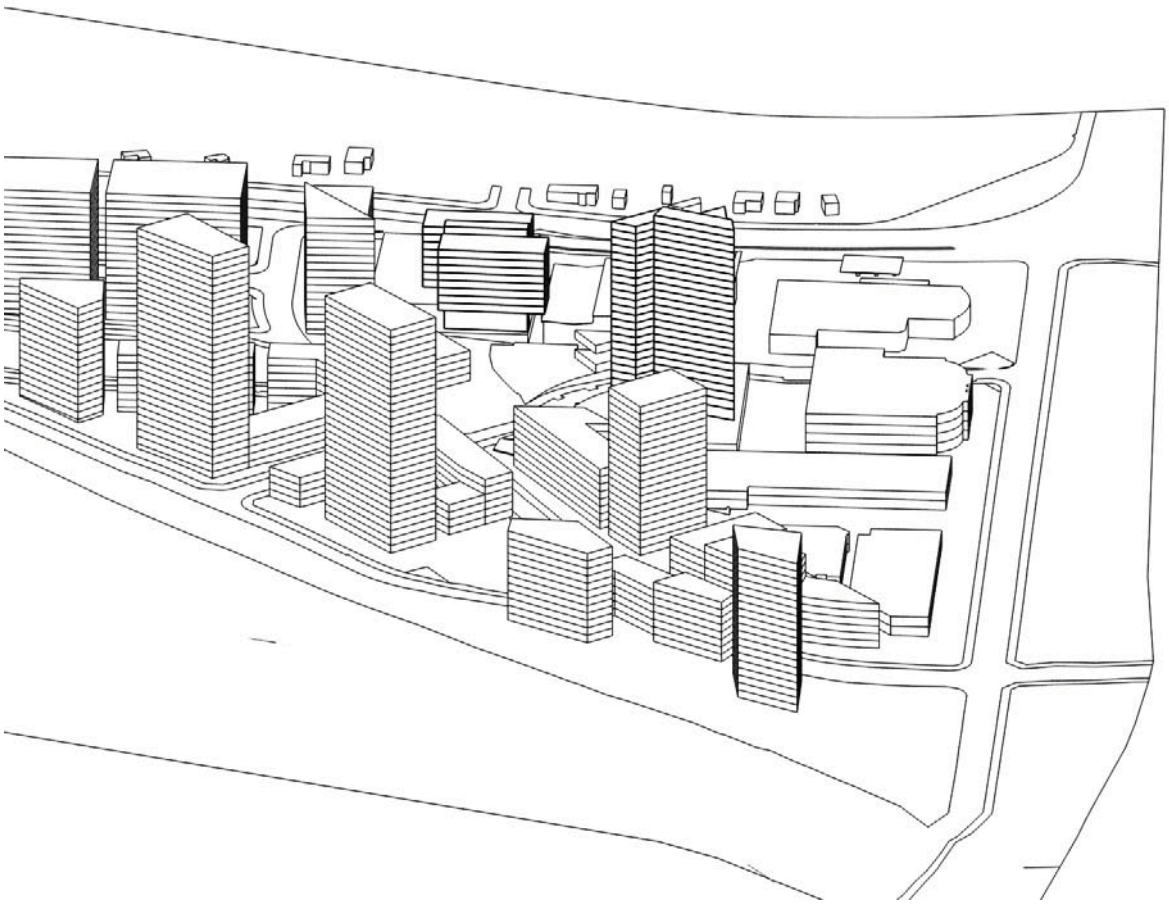


Figure 6.31 - Suneye Diagram: 9:30 am, 21st June

6.3 Appendix 3: Suneye Diagrams

12 pm, 21st June - Winter

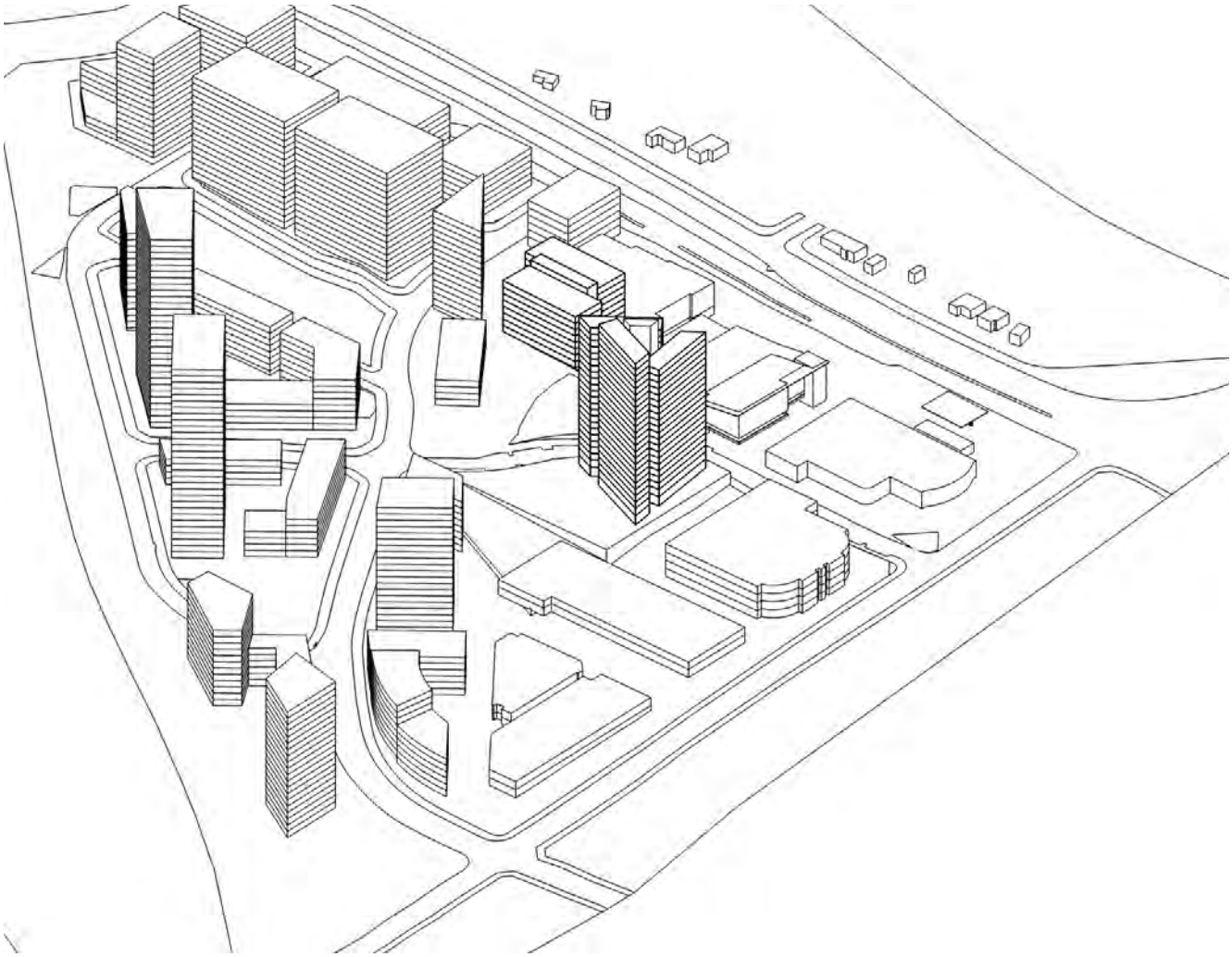


Figure 6.32 - Suneye Diagram: 12 pm, 21st June

6.3 Appendix 3: Suneye Diagrams

3 pm, 21st June - Winter

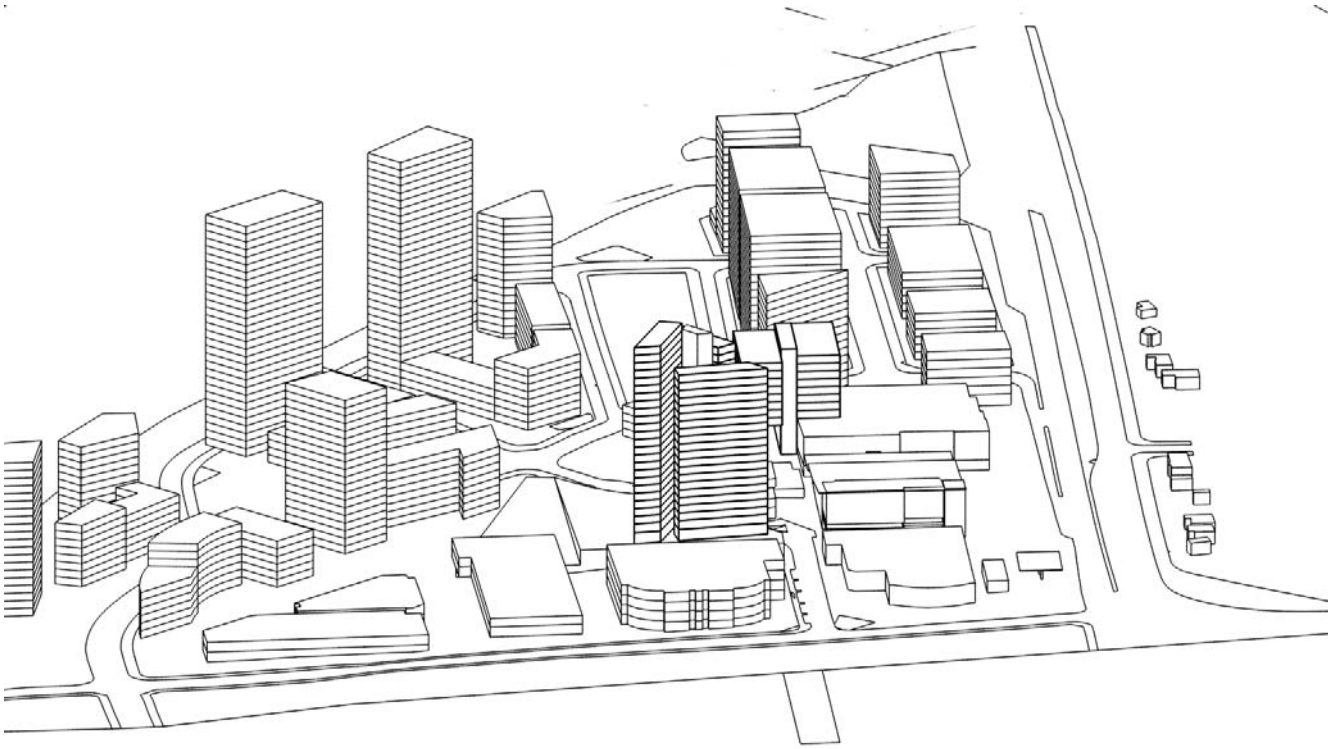


Figure 6.33 - Suneye Diagram: 3 pm, 21st June

6.3 Appendix 3: Suneye Diagrams

9 am, 21st March/September - Equinox

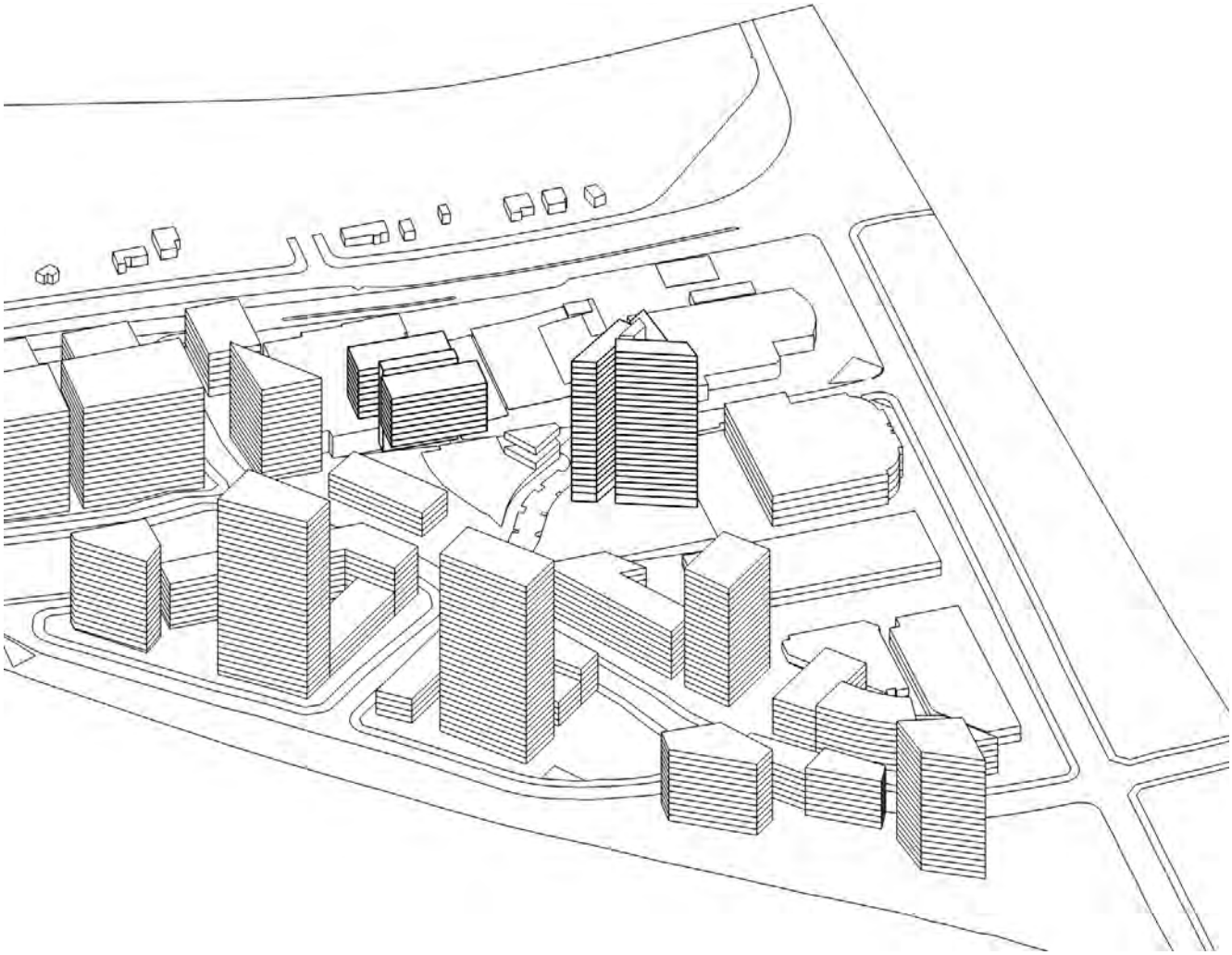


Figure 6.34 - Suneye Diagram: 9 am, Equinox

6.3 Appendix 3: Suneye Diagrams

12 pm, 21st March/September - Equinox

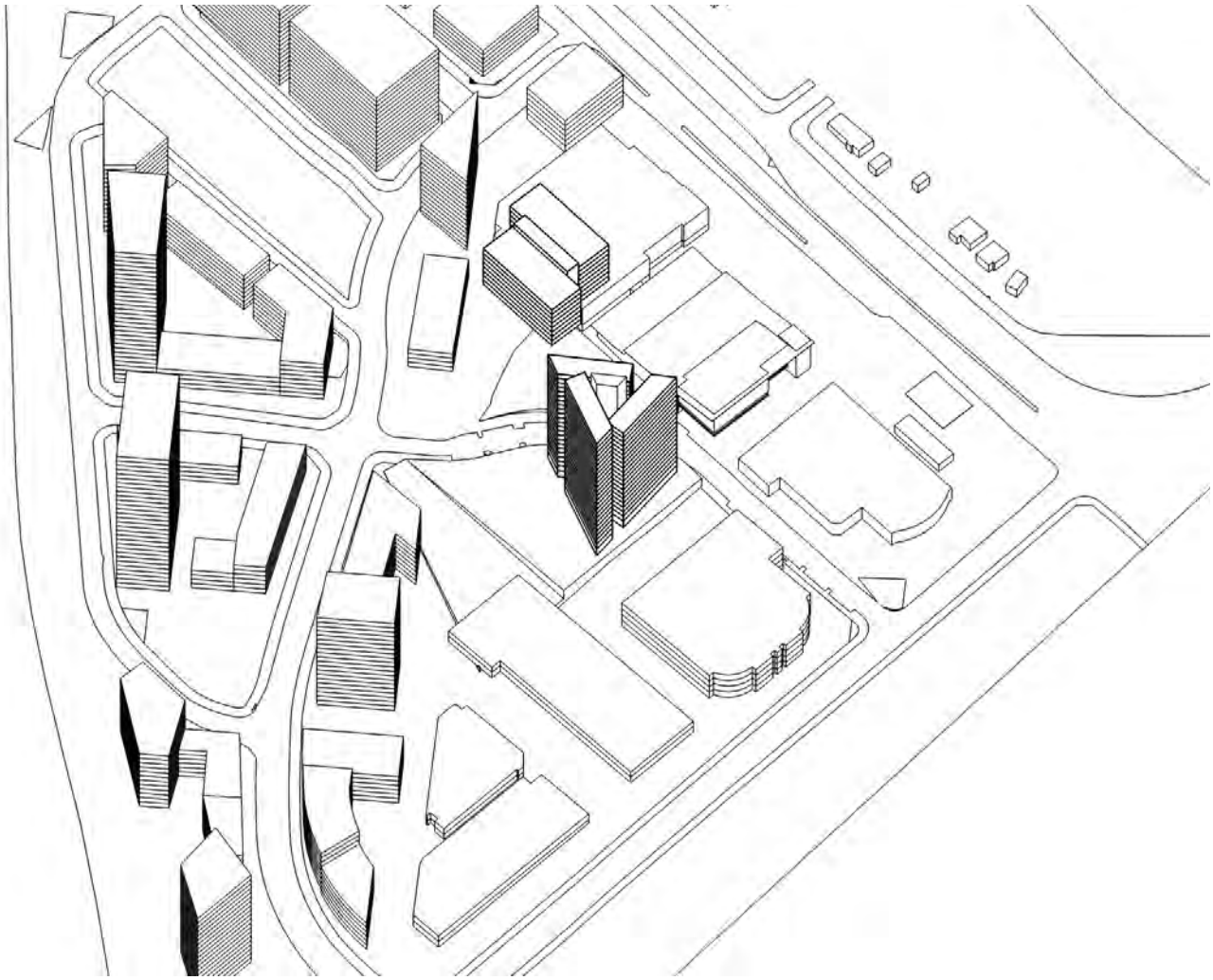


Figure 6.35 - Suneye Diagram: 12 pm, Equinox

6.3 Appendix 3: Suneye Diagrams

3 pm, 21st March/September - Equinox

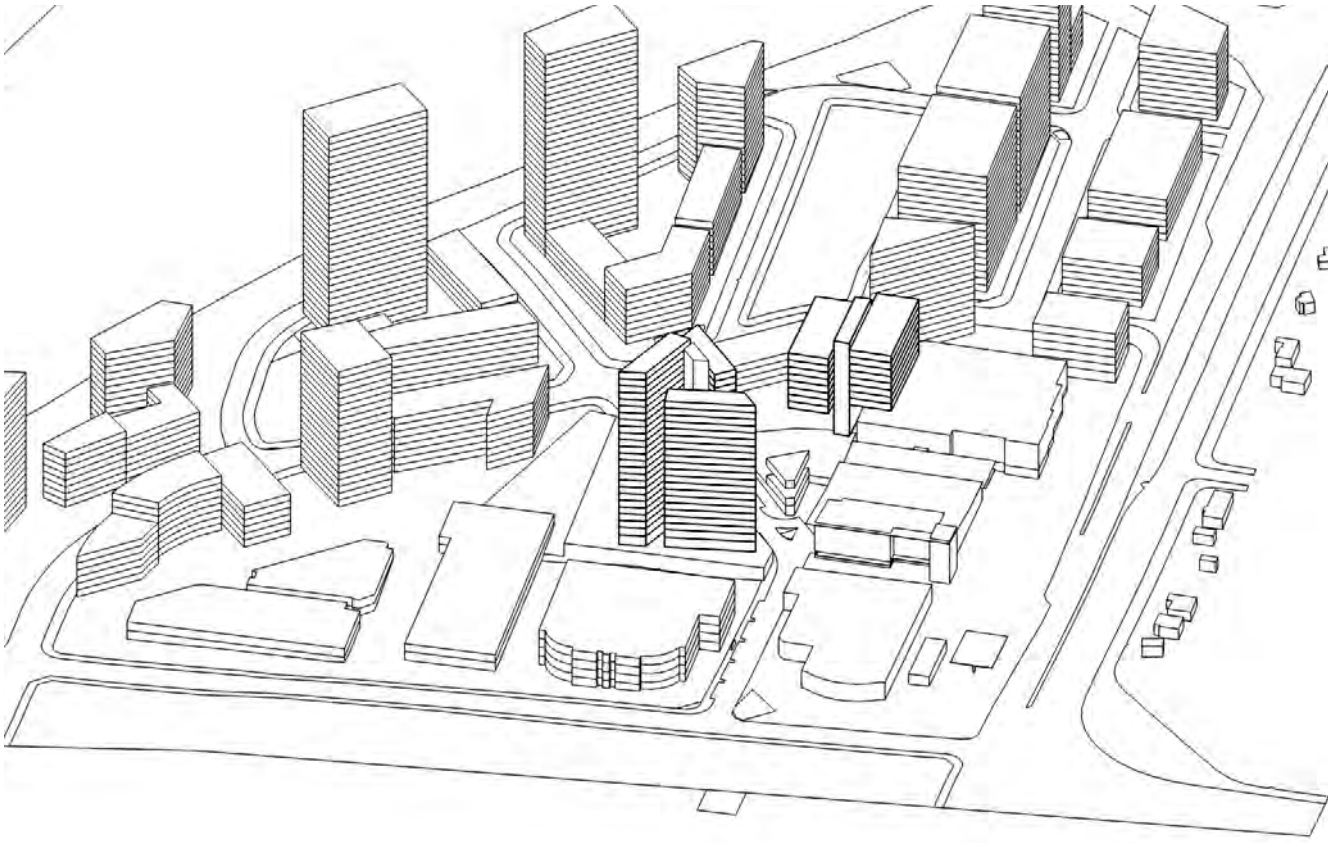


Figure 6.36 - Suneye Diagram: 3 pm, Equinox

6.3 Appendix 3: Suneye Diagrams

9 am, 21st December - Summer

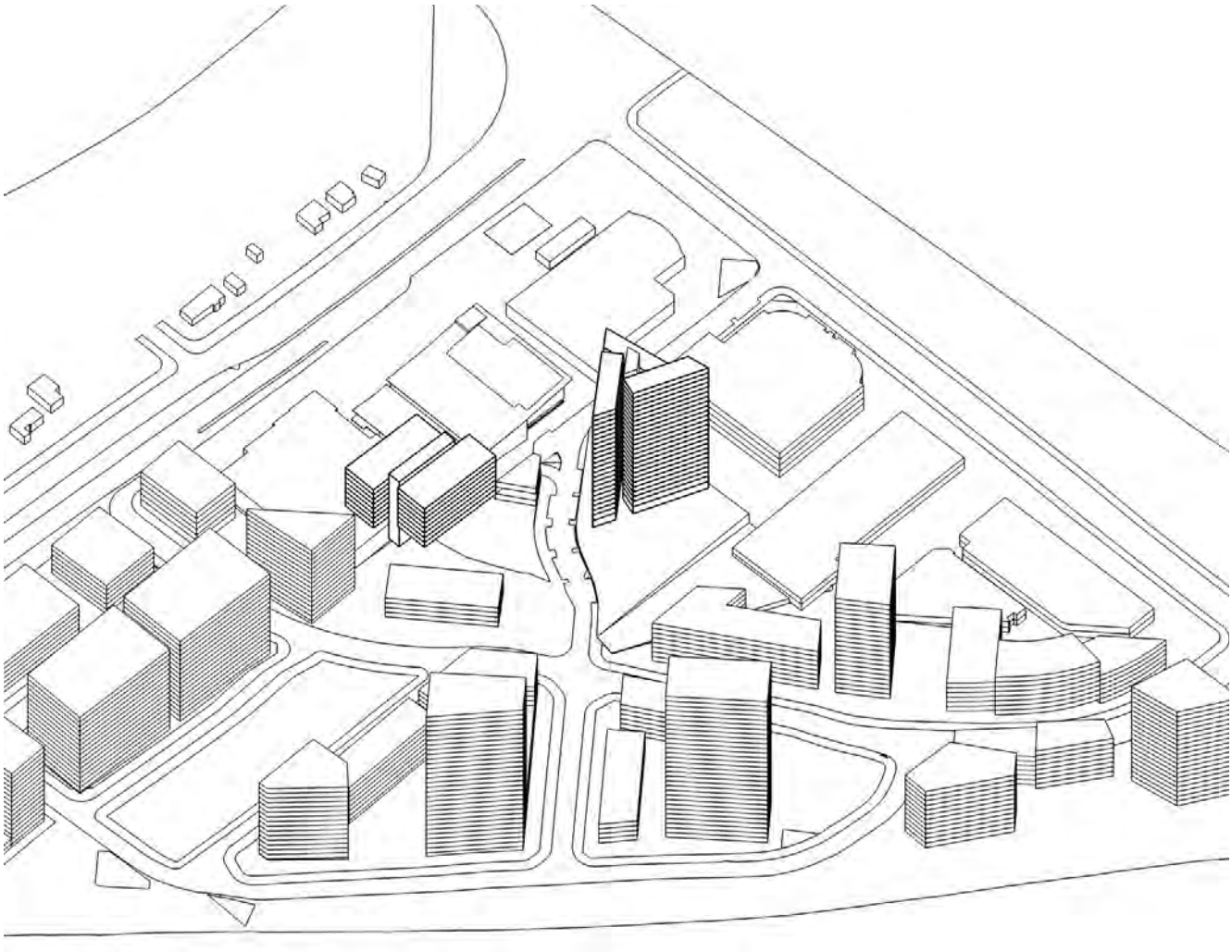


Figure 6.37 - Suneye Diagram: 9 am, 21st December

6.3 Appendix 3: Shadow and Suneye Diagrams

12 pm, 21st December - Summer

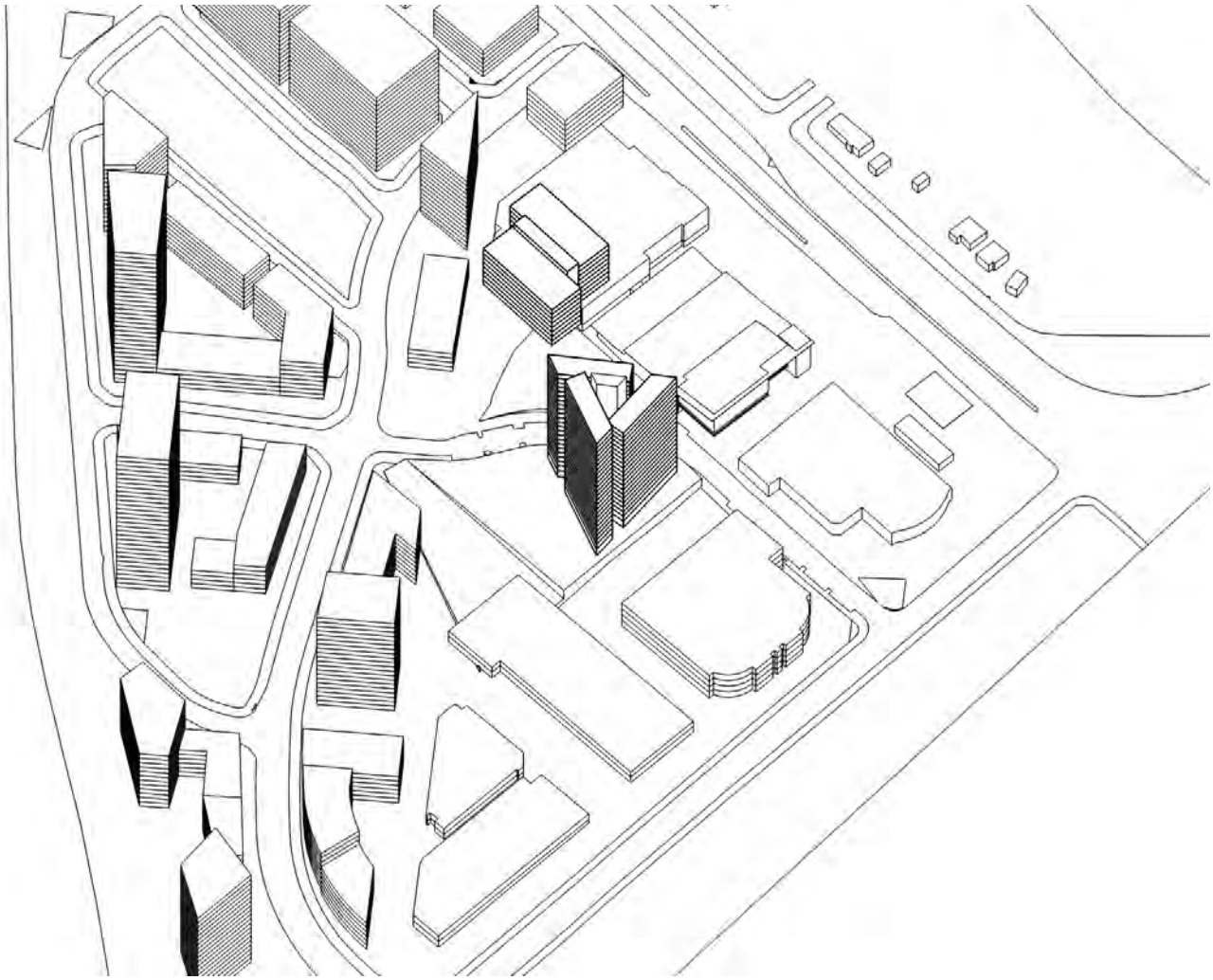


Figure 6.38 - Suneye Diagram: 12 pm, 21st December

6.3 Appendix 3: Suneye Diagrams

3 pm, 21st December - Summer

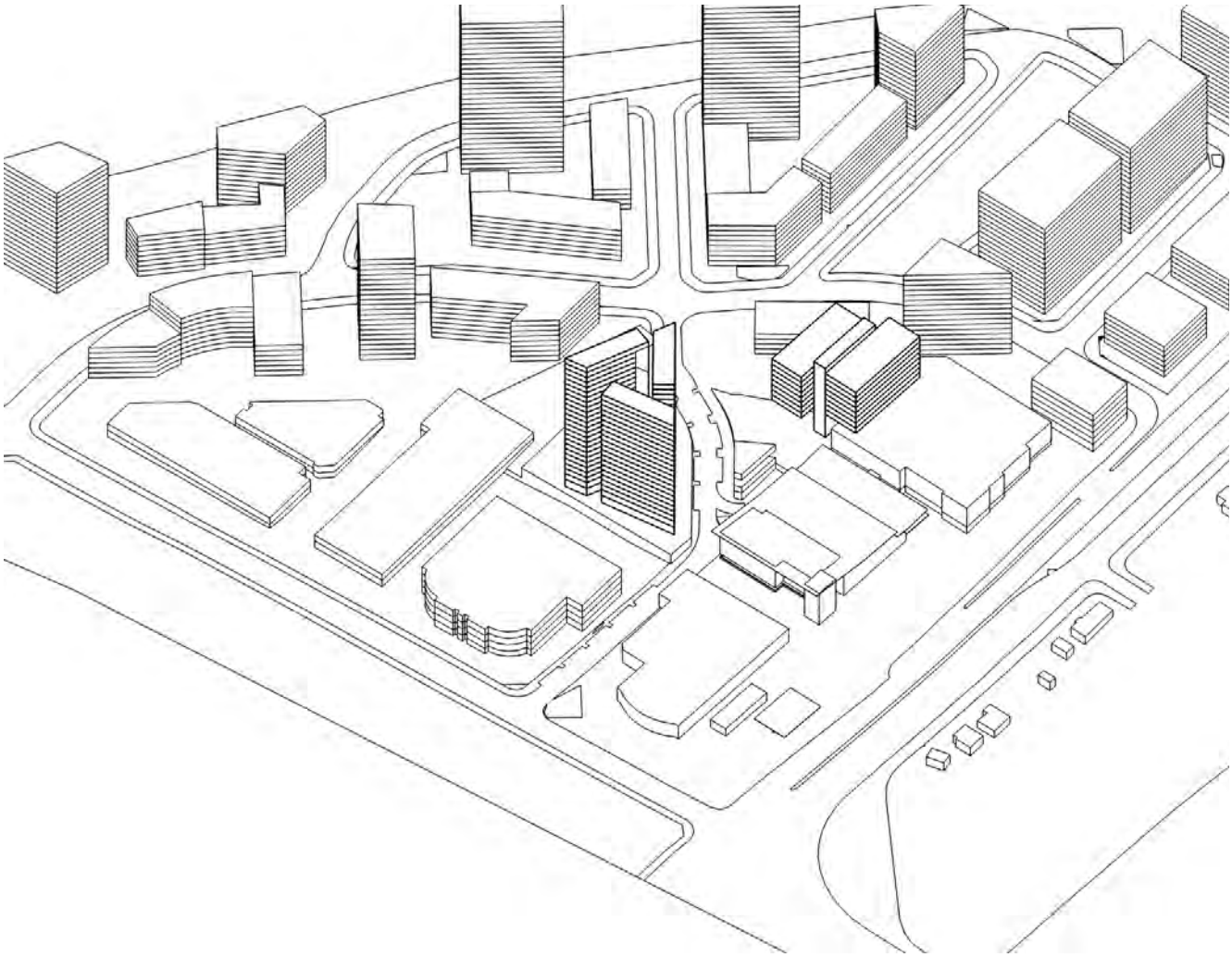


Figure 6.39 - Suneye Diagram: 3 pm, 21st December

6.4 Appendix 4: 3D Rendered Views

Macquarie Park Planning Proposal _ Supplementary Report - Aerial Perspective
Harvey Norman Group
12_019 Rev_D January 2014
56
Legend
Site Boundary
AJ+C Allen Jack+Cottier

Macquarie Park Planning Proposal _ Supplementary Report - Perspective of Urban Plaza

Harvey Norman Group

Employment Potential of Proposed Development

111 Wicks Road, 29 Epping Road, 31-35 Epping Road, Macquarie Park – December 2013

Prepared for the Harvey Norman Group

urbis

TABLE OF CONTENTS

Responsible Staff:

Clinton Ostwald, Director, Urbis
David Wilcox, Associate Director, Urbis
Ryan McKenzie, Consultant, Urbis
Maria Yu, Analyst, Urbis

December 2013

Executive Summary

Urbis has been engaged by Harvey Norman to assess the contribution of the proposed development of the site at Macquarie Park (111 Wicks Road, 29 Epping Road, 31-35 Epping Road) towards meeting employment targets for the Macquarie Park Corridor (MPC).

The proposed mixed use development incorporates new commercial office floorspace (including a national headquarters for Harvey Norman), a 200 room hotel, ancillary child care and café facilities and up to170 residential apartments, as well as the retention of the existing Domayne business.

There are approximately 75 jobs provided on the subject site at present. The proposed development has the potential to deliver around **920** jobs - a twelve fold increase of **845 jobs** compared to current employment.

The number of jobs created would be close to the maximum theoretical employment capacity of the site under the current planning controls which we estimate at around 1,100 jobs.

The net additional employment that would be generated on the subject site would equate to **6%** of the draft Metropolitan Plan for Sydney's total employment target for the MPC (a minimum of 61,000 jobs by 2031, equating to an increase of **13,500 jobs** from 2011). This would deliver in excess of one years supply of targeted new jobs in a single development. The proposed development can therefore make a positive contribution to meeting and exceeding MPC employment targets.

We estimate that around 8,300 of the targeted 13,500 additional jobs required within the MPC will be office-based (based on Urbis employment benchmarks). This would generate a requirement for **166,000 sq.m** additional office floorspace based on applying typical office employment densities.

In addition the proposed development provides **13,580 sq.m** office floorspace which can contribute to around **8%** of this office floorspace target.

The additional demand for office floorspace needed to achieve the minimum employment target will be met and substantially exceeded by the existing pipeline of commercial development. Our market analysis indicates that there is between **510,000 sq.m** (excluding the proposed Macquarie University development) and up to **1,100,000 sq.m** commercial floorspace (including the Macquarie University Concept Plan) currently being planned for development within the Macquarie Park Corridor.

City of Ryde Council's analysis indicates that the Macquarie Park Corridor contains over 800,000 sq.m commercial floorspace with the capacity to reach over **2 million sq.m.** *(Source: City of Ryde Council website).*

The addition of up to 1,100,000 sq.m additional commercial floorspace (plus the 13,580 sq.m proposed on the subject site) would take the total close to the capacity identified by City of Ryde and would result in the employment targets for Macquarie Park Corridor being exceeded several times over.

Executive summary (contd.)

Contribution to Macquarie Park Corridor Employment Targets
2011 to 2031, MPC

	2011-2031 Growth
MPC Additional jobs target 2011-2031	+13,500
Subject site additional employment	+845
Contribution to target (%)	6%

Source: draft Metropolitan Strategy for Sydney (NSW Department for Planning & Infrastructure, Harvey Norman, Urbis

Contribution to Macquarie Park Corridor Employment Targets
2011 to 2031, MPC

	2011-2031 Growth
MPC Additional jobs target 2011-2031	+13,500
Office based jobs (@60%)	8,300
Floorspace requirement (1 job per 20 sq.m GLA)	166,000 sq.m
Proposed development – office floorspace	13,580 sq.m
Contribution to target (%)	8%
Plus office development pipeline	+1,100,000 sq.m

Source: NSW Department of Planning & Infrastructure, Cordell Connect, City of Melbourne Census of Land Use and Employment (2012), City of Sydney Floorspace and employment survey (2007). Urbis NLA employment benchmark has been converted to GFA

Executive Summary (continued)

In addition to making a positive contribution to Macquarie Park Corridor employment targets the proposed development offers a range of other economic benefits including:

- Development of an under utilised site in an orderly and efficient manner.
- Potential to deliver around 920 jobs - a twelve fold increase of 845 jobs compared to current employment.
- Potential to deliver 650 construction jobs and 1,020 supplier jobs linked to construction activity.
- Attracting Harvey Norman's head office - a leading Australian business to located at Macquarie Park will further strengthen and enhance the reputation of the area as a location of choice for potential 'blue chip' employers.
- The provision of a 200 room hotel which will effectively replace the hotel rooms that would be lost by the redevelopment of the Stamford Hotel site. Providing good quality hotel accommodation is an essential component of a successful large scale business park. We understand that the receipts from the development of the residential apartments will provide the necessary funds to enable the development of the hotel that would otherwise be of marginal viability.
- Linked to the above, the provision of the Harvey Norman head office on site is expected to result in a significant number of visitors and franchisees from interstate and overseas creating demand for hotel accommodation. The provision of a hotel is therefore very important as part of the Harvey Norman HQ relocation.
- The provision of up to 170 residential apartments to contribute toward City of Ryde's housing target of 12,000 additional dwellings between 2004 and 2031 (based on the draft Inner North Subregional Strategy) within walking distance of major employment, retail and further education facilities and excellent public transport connectivity.
- The addition of ancillary café and child care uses to meet the daily needs of workers on site.
- Improved integration with adjoining planned residential uses through the creation of a mixed use environment.

1. Context

Introduction

Urbis has been engaged by Harvey Norman to assess the contribution of the proposed development of the site at Macquarie Park (111 Wicks Road, 29 Epping Road, 31-35 Epping Road) towards meeting employment targets for the Macquarie Park Corridor (MPC).

The purpose of the assessment is to:

- Consider the site attributes.
- Review the Macquarie Park Corridor office market
- Review employment targets for the Macquarie Park Corridor.
- Consider the potential for Macquarie Park Corridor to meet these targets based on proposed developments and trends in development activity.
- Review current employment on the site and compare this to the employment which will be generated by the proposed redevelopment.
- Assess the contribution that the proposed development can make to meeting employment targets.
- Consider the theoretical employment potential of the site based on compliance with existing and draft planning controls.
- Consider the economic benefits of the proposed development.

We note that Council-wide employment targets will be set out in the new Subregional Strategy document being prepared by the NSW Department of Planning and Infrastructure. The Macquarie Park Corridor is expected to be the focal point for employment within the LGA.

Subject site

The subject site measures 1.97 hectares and is located at the south eastern edge of Macquarie Park, close to the North Ryde rail station.

The key attributes of the subject site can be summarised in the following points:

- Existing uses are shown on the plan below and include (1) industrial warehouse, (2) Domayne store and (3) North Ryde smash repairs.
- The site is highly accessible by train, bus and road networks and benefits from direct frontage to Epping Road. The site is closely situated to the intersection of Epping Road and the M2 motorway, providing connections to Sydney CBD and northwards to the North West Growth Centre.
- High frequency bus connections operate along Epping Road (bus stops are located to the front of the site), Herring Road and Waterloo Road providing direct services to Chatswood, Epping, Parramatta, North Sydney and Sydney CBD. There are also three railway stations (Macquarie Park, Macquarie University and North Ryde) adjacent to the subject site.
- The site is located within Sydney Global Economic Corridor and North Ryde Station and Herring Road Urban Activation Precincts. It benefits from convenient access to a range of employment, retail, entertainment, medical, education, cultural, sporting, recreation and other services and amenities.

Proposed development

The proposed development is a high quality mixed use development concept incorporating the following uses:

- A 12 storey commercial building above the rear of the existing Domayne / Harvey Norman store which is intended to be the national office headquarters for Harvey Norman.
- An additional commercial office building at the south west corner of the site adjacent to Domayne.
- Retention of Domayne store.
- Construction of a residential / hotel tower including 17 levels of apartments within a 27 storey building (total dwelling yield up to170 apartments).
- The lower 10 levels of the building to be used as hotel (providing 200 rooms).
- Neighbourhood facilities including a café and child care centre.

Summary of Proposed Development

Element	111 Wicks Road		31-35 Epping Road		29 Epping Road	
Land use	Residential Hotel Cafe		Commercial Bulky goods retail		Commercial Child care	
Indicative yield	Apartments	170				
	Hotel rooms	200				
Gross floor area	Apartments	17,000 sq.m	Bulky Goods	8,663 sq.m	Commercial	2,720 sq.m
	Hotel	10,000 sq.m				
	Café	150 sq.m	Comemrcial	10,860 sq.m	Child care	510 sq.m
Building heights	27 storeys		3-12 storeys Single storey cafe		6 storeys	

Source: AJ&C Concept Masterplan November 2013

Proposed development

2. Macquarie Park Corridor Office Market Overview

Employment trends: Ryde LGA employment profile

Ryde LGA is increasingly moving towards a knowledge-based economy, which brings with it demand for office floorspace.

In 2001 20% of the Ryde LGAs jobs base were employed in industrial sectors (i.e. manufacturing, construction, warehouse) and retail trade.

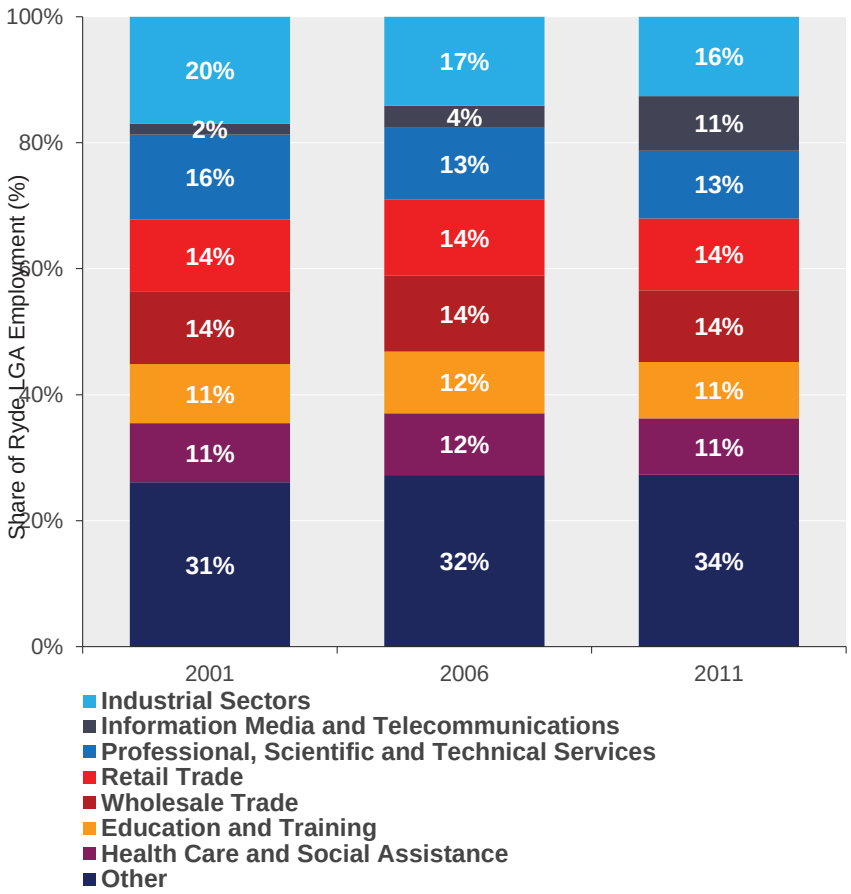
This changed between 2001 and 2011, with the Ryde LGA attracting a significant amount of I.T, professional services and public sector jobs.

- Information, media and telecommunications replaced industrial sectors share of local jobs, increasing from 2% of jobs in 2001 to 11% in 2011. This equates to an increase of around 6,900 jobs over this period.
- Public administration and Professional services jobs (within the 'other' category) increased by 1,300 and 1,700 jobs between 2001 and 2011. This combined with the significant increase in Information, media and telecommunications, reflects the Ryde LGAs development as a location for office base employment, over the last 10 years.

This expansion in office based jobs was supported by the ongoing development of the Macquarie Park Corridor providing the floorspace capacity for these sectors to grow.

Industry Share of Employment

Ryde LGA 2001 to 2011



Source : Urbis; Bureau of Transport Journey to Work 2013; ABS Census 2001, 2006 and 2011

Macquarie Park Corridor (MPC)

The Macquarie Park Corridor is a 340 hectare precinct incorporating the business park precincts of Macquarie Park and North Ryde. It is located equidistant between Sydney and Parramatta CBD.

As shown in the adjacent table it comprises around 64% of Ryde LGA's employment and has sustained the majority of growth in office based employment within the Ryde LGA between 2001 and 2011.

In 2011 it comprised a significant proportion of the Ryde LGAs office based employment, namely:

- 96% of Information, Media and Telecommunication jobs
- 79% of Professional Scientific and Technical Services jobs

Its role as a major suburban office location is reflected in the NSW Governments Sydney Metropolitan Strategy, where it identified as a 'specialised precinct'.

City of Ryde Council's analysis indicates that the Macquarie Park Corridor contains over **800,000 sq.m** commercial floorspace with the capacity to reach over **2 million** *sq.m (Source City of Ryde Council website, 2013)*

The area is currently home to a broad mix of tenants within these industry sectors including BOC Gases, Oracle, Honeywell, Telstra, Optus, Komatsu, Dexion, Sony, Toshiba, Ericsson, Hyundai, Orix, Dupont, Canon, Hitachi, Brother and Datacom. Leasing deals have recently been executed with tenants such as Cochlear, Schneider Electric and Boehringer Ingelheim.

The attraction of these tenants has been underpinned by ongoing investment in infrastructure development, which includes the completion of three railway stations significantly improving public transport accessibility and direct access to the M2 Motorway, Epping Road, Lane Cove Road providing either direct or connecting access to the Sydney CBD, north to the central coast and west / south to suburban locations.

Employment Profile
Ryde LGA and MPC 2011

Industry Sectors	Ryde LGA	MPC	% of Ryde LGA Jobs
Industrial	11,600	7,500	65%
Professional, Scientific and Technical Services	9,900	7,800	79%
Information Media and Telecommunications	8,000	7,700	96%
Health Care and Social Assistance	8,200	3,200	39%
Education and Training	6,600	3,700	56%
Wholesale Trade	10,500	9,300	89%
Retail Trade	5,800	2,600	45%
Balance of Jobs	14,000	5,700	40%
Total	74,600	47,500	64%

Source: Journey to Work, BTS 2013; BTS Employment Forecasts 2012; draft Metropolitan Strategy for Sydney; Urbis

Macquarie Park Corridor

Macquarie Park Corridor office market - location, size and positioning

The historic jobs growth seen in I.T and the professional services sector was supported by the development of approximately 279,600 sq.m of office space at Macquarie Park / North Ryde between 2007 and 2013. This was primarily made up of A grade stock, comprising 98% of total floorspace developed (274,000 sq.m).

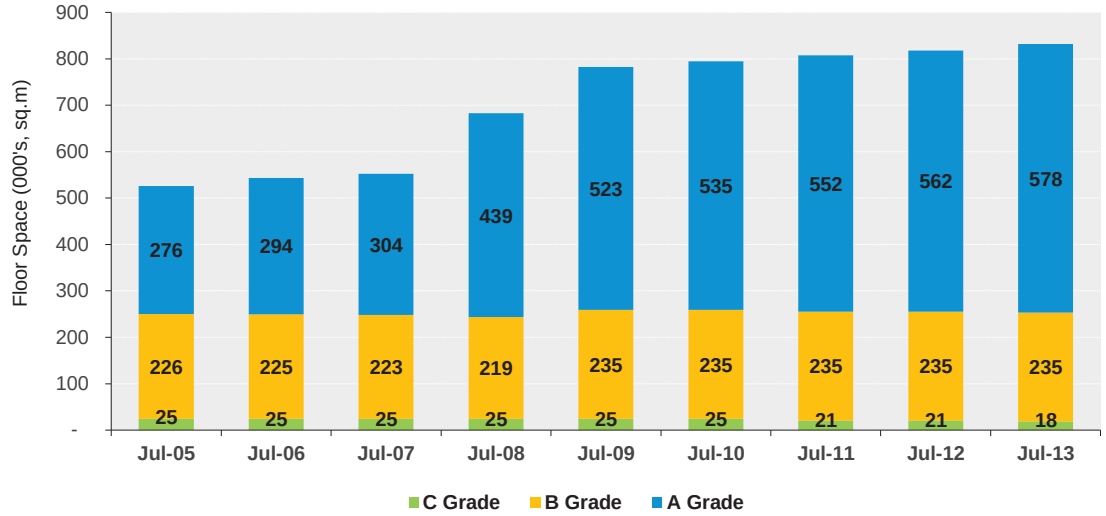
Recent development identified in the latest Office Market Report (OMR) (Property Council of Australia) indicates that this trend has continued with the development of additional 16,000 sq.m of A grade office space and the withdrawal of 2,000 of C grade space in the year prior to July 2013.

This increase in high quality office stock has been a key factor in the expansion in office based employment and the attraction of major anchor tenants between 2006 and 2011, and has positioned it as the office market in Sydney with the highest % of A grade office stock.

The development of this high quality stock, has contributed to attracting a significant amount of Information, Media and Telecommunication companies such as BOC Gases, Oracle, Honeywell, Telstra, Optus, Komatsu, Dexion, Sony, Toshiba, Ericsson, Hyundai, Orix, Dupont, Canon, Hitachi, Brother and Datacom.

Office Stock

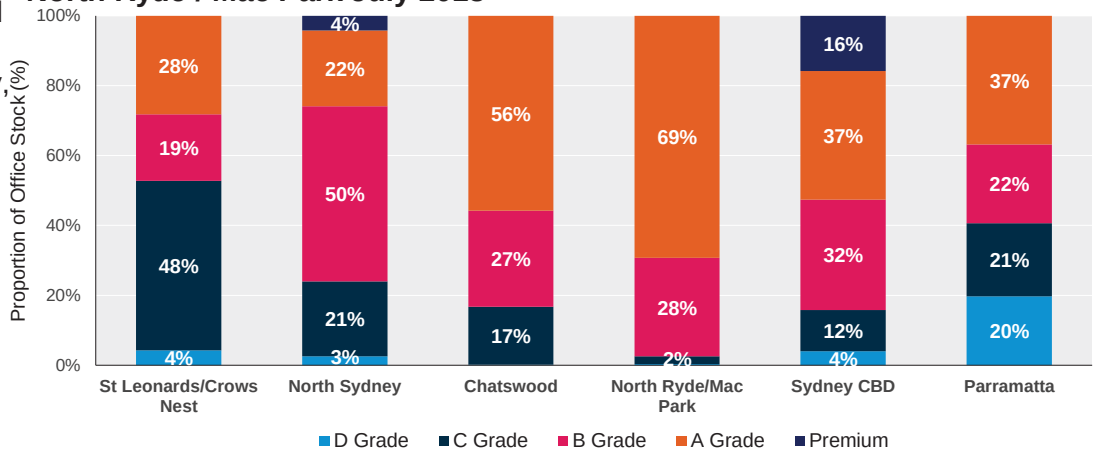
North Ryde / Mac Park July 2005 to July 2013



Source : Urbis; PCA Office Market Report Jul-13

Grade / Quality of Office Stock

North Ryde / Mac Park July 2013



Source : Urbis; PCA Office Market Report Jul-13

Macquarie Park Corridor office market - historic demand and vacancy

The attraction of office based jobs into the Macquarie Park Corridor is reflected in its historic absorption rate over the last 8.5 years, which was on average approximately 37,200 sq.m per annum.

Over the past 5 years vacancy rates at North Ryde / Macquarie Park have varied from a low of 6.1% in January 2008 to a high of 12.2% at the height of the global financial crisis in July 2009. The current rate indicates a stabilisation of the market and renewed tenant interest. In addition there have been few development completions in recent years (prior to July 2013) with the slight increase in vacancy considered a result of continued addition to the office stock.

Vacancy in office floorspace appears to be focused primarily amongst lower grade product. This was illustrated in the July 2013 PCA Office Market report which showed that 28.9% of C grade, 12.8% of B grade and 5.2% of A grade stock was vacant.

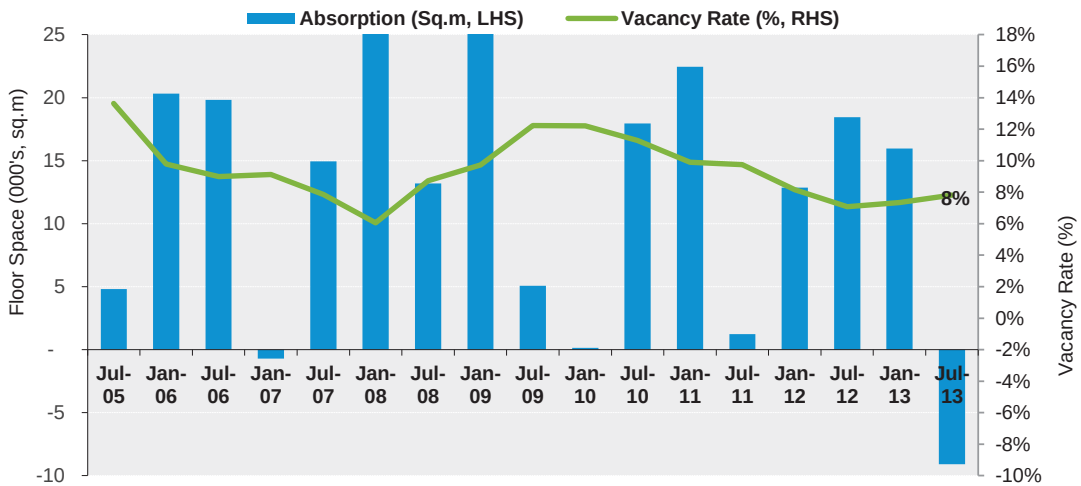
The higher vacancy amongst C grade stock, albeit it off a small base further highlights that demand for office space within the MPC is largely for higher quality stock, this indicates that continued investment and development within this grade of office space (such as the proposed development) will be necessary to continue to attract major businesses / employers into the area underpinning future jobs growth within the MPC.

This will likely mean the ongoing redevelopment of under utilised sites to create higher grade, higher density office space to meet market demand.

This approach is consistent with the approach to redevelopment of the subject site which will add **13,580 sq.m** office space.

Grade / Quality of Office Stock

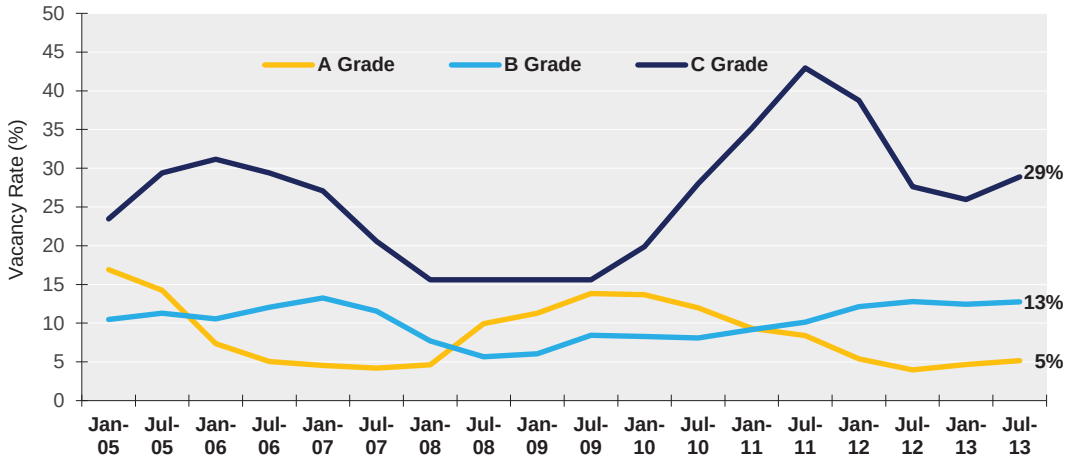
North Ryde / Mac Park July 2013



Source : Urbis; PCA Office Market Report Jul-13

Office Space Vacancy Rate

North Ryde / Mac Park July 2013



Source : Urbis; PCA Office Market Report Jul-13

MPC office market – affordability

In addition to the quality of floorspace, rental cost is a significant consideration for tenants in deciding where to locate their business. The rental data opposite illustrates that Macquarie Park / North Ryde seeks significantly lower average rents compared with competing suburban centres such as Chatswood, North Sydney, St Leonards and Parramatta, positioning it as an affordable location.

- The lower rental cost in the MPC is primarily driven by the cost of construction of office development compared to more built up / denser suburban location such as St Leonards and North Sydney. This has an impact on the eventual rent sought, with the higher cost driving up the yields required to justify development, and the subsequent rent sought for office space.
- It also impacts the format / type of space provided allowing for larger consolidated floor plates which appeal to larger anchor tenants.
- As with Chatswood, St Leonards and Parramatta, there is not a significant spread between A and B grade office rents in Macquarie Park / North Ryde compared to North Sydney.

Overall it illustrates that the Macquarie Park / North Ryde office market is more affordable than other competing locations, with a flexible format / floor plate attracting tenants that are seeking to consolidate their operations / workforce. This makes the office product in Macquarie Park / North Ryde more attractive to larger tenants, more likely to anchor new developments underpinning future supply of office floorspace.

To maintain this cost advantage ongoing development of office floorspace within the MPC will be required, ensuring there will adequate supply of office space to meet demand from future growth sectors. The office component within the proposed development will contribute to the supply of office space.

Targeted Jobs by Land Use
2011 to 2031, MPC

Market	Grade / Quality	Average Net Facing Rent ($)
North Ryde/Mac Park	A	$330
	B	$283
	Total	**$316**
St Leonards	A	$468
	B	$383
	Total	**$419**
North Sydney	A	$606
	B	$489
	Total	**$519**
Chatswood	A	$413
	B	$359
	Total	**$389**
Parramatta	A	$378
	B	$294
	Total	**$336**

Source: Urbis; Knight Frank Research

Office market – development pipeline

The table overleaf outlines the identifies current office development proposals within the Macquarie Park Corridor providing an indication of the potential supply of office floorspace over this period (excluding development on the subject site).

The amount of new projects has increased significantly over a twelve month period since Urbis last undertook a development pipeline review.

Our analysis indicates that there is between **510,000 sq.m** (excluding the proposed Macquarie University development) and **1,100,000 sq.m** commercial floorspace (including the Macquarie University Concept Plan) currently being planned for development within the Macquarie Park Corridor. These projects are at varying stages of the development process, with many in early planning or seeking approval. The timing of delivery of these projects will be subject to a number of factors including:

- Market conditions, and demand for floorspace
- Achieving pre-commitment from anchor tenants
- Acquiring project financing
- Achieving development approval

If constructed, this new office development would increase the total supply within the MPC to close to 2,000,000 million sq.m, in line with City of Ryde Council's estimates. These figures do not include the proposed office development on the subject site, which would deliver an additional 14,400 sq.m office space

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Future office development - MPC

Macquarie Park / Ryde Proposed Supply

Project Name	Address	Status	Completion Date	GFA (sq.m)
75 Talavera Road	75 Talavera Road	Construction	2013	3,700
Giffnock Av Office Development - Links Business Park*	22 Giffnock Av	Contract Let	2013	9,700
Precinct Corporate Centre	105 Delhi Rd	Contract Let	2013	10,000
Talavera Rd Commercial Development	118 Talavera Rd	Contract Let	May 2014	13,000
The Park - 5 Talavera Rd Commercial Building - Canon*	5 Talavera Rd	Construction	May 2014	28,000
Waterloo Rd Commercial & Industrial Building - Canon*	26-32 Waterloo Rd	Development Approval	April 2015	1,700
Macquarie Park Commerce Centre*	396 Lane Cove Rd, 32-46 Waterloo Rd & 1 Giffnock Av	Early Planning	February 2017	81,000
Waterloo Rd Commercial Building	52-58 Waterloo Rd	Development Application	November 2017	9,900
Commercial Development MCentral*	63-71 Waterloo Rd	Development Approval	November 2018	12,000
North Ryde Station Urban Activation Precinct	Delhi Rd	Rezoned September 2013	December 2018	64,000
1 Rivett Road (Stage 2)	1 Rivett Road (Stage 2)	DA Approved	Mooted	12,500
Epicentre (Riverside Corporate Park)	Lot 8 & 9 Julius Avenue	DA Approved	Mooted	37,500
80 Waterloo Road	80 Waterloo Road	DA Applied	Mooted	16,500
88 Talavera Road	84-92 Talavera Road	Construction	Mooted	31,000
Global Business Park - Stages 1 & 2	27-37 Delhi Road	DA Approved	Mooted	37,400
IQ Macquarie Park	34 Waterloo Road	DA Approved	Mooted	37,400
Former Peter Board High school	144 Wicks Road	DA Approved	Mooted	89,000
112 Talavera Road	112 Talavera Road	DA Approved	Mooted	13,200
Macquarie University Concept Plan - Overall Project	Bounded by Culloden Rd, Epping Rd, Herring Rd & Talavera Rd	Early Planning	July 2031	600,000
		Total (excluding Macquarie University)		**507,500**
		Total (including Macquarie University)		**1,107,500**

Source: Cordell; PCA; Urbis

3. Macquarie Park Corridor Employment Targets

Overview

- The Sydney Metropolitan Strategy employment targets for the Macquarie Park Corridor require the provision of 61,000 jobs by 2031, which equates to an increase of **13,500** from 2011 employment numbers (equal to 675 new jobs per annum over the period). Individual LGA employment targets are currently being revised and are expected to accompany the next draft Subregional Strategies.
- We forecast that around **8,300** of these jobs will be provided within commercial office floorspace (based on Urbis employment benchmarks), creating demand for around **166,000 sq.m** additional commercial floorspace over the period (based on benchmark employment densities for commercial office floorspace).
- Net absorbsion for office floorspace within the MPC over the last eight and a half years has averaged around **37,200 sq.m** per annum.
- Our analysis indicates that there is between **510,000 sq.m** (excluding the proposed Macquarie University development) and up to **1,100,000 sq.m** commercial floorspace (including the Macquarie University Concept Plan) currently being planned for development within the Macquarie Park Corridor (refer to Future Office Development – MPC table, page 19) .
- The 166,000 sq.m office floorspace required to meet the forecast 8,300 office based jobs at MPC will be met and substantially exceeded by the existing pipeline of commercial projects.

Employment targets – Macquarie Park Corridor

The Sydney Metropolitan Strategy sets out a minimum future job target of **61,000** jobs by 2031 for the Macquarie Park Corridor. Bureau of Transport Statistics (BTS) indicate that there were around **47,500** people employed within the MPC in 2011. The Metropolitan Strategy therefore sets a target of **13,500** additional jobs between 2011 and 2031, equal to **675** jobs per annum.

BTS forecasts indicate that the sectors expected to make the largest contribution to the target include:

- Professional, Scientific and Technical Services
- Education and training
- Health care and social assistance
- Wholesale trade
- Construction
- Retail trade

Main Employment Sectors
2011 to 2031, MPC

Industry Sector	2011	%	2031	%	2011-2031 Growth	Annual Growth 2011-2031 (%)	Annual Growth 2011-2031 (Number)
Professional, Scientific and Technical Services	7,800	16.5%	16,400	26.8%	8,600	4%	430
Health Care and Social Assistance	3,200	6.8%	5,300	8.8%	2,100	3%	105
Wholesale Trade	9,400	19.7%	11,600	18.6%	2,000	1%	100
Education and Training	3,800	7.9%	5,200	8.5%	1,400	2%	70
Construction	1,700	3.6%	3,100	5.1%	1,400	3%	70
Retail Trade	2,700	5.7%	3,700	6.1%	1,100	2%	50
Balance	18,900	39.8%	15,900	26.1%	-2,900	-0.8%	-145
Total	**47,500**	**100%**	**61,000**	**100%**	**13,500**	**1%**	**675**

Source: Journey to Work, BTS 2013; BTS Employment Forecasts 2012; draft Metropolitan Strategy for Sydney; Urbis

Employment – Demand for Office Floorspace

Industry sectors have varying floorspace requirements to operate their respective businesses. An estimate of office-based employment derived from the total employment forecast (13,500 additional jobs) is presented below.

Industry sectors that require office floorspace are varied, from businesses that are predominantly accommodated in offices, to those that have the majority of their operations in non-office floorspace but with a head office / administrative function.

Urbis has undertaken a number of employment studies that have benchmarked the proportion of staff based in office locations. Applying these benchmarks to the overall employment growth forecast for Macquarie Park Corridor suggests that around **8,300** future jobs within the MPC will be office based.

Office based jobs growth
Macquarie Park Corridor 2011-2031

Industry Sector	2011-2031 Growth	% Demand for Office Floorspace	Office Based Jobs
Professional, Scientific and Technical Services	8,600	98%	8,360
Health Care and Social Assistance	2,100	10%	210
Wholesale Trade	2,000	0%	0
Education and Training	1,400	5%	70
Construction	1,400	5%	70
Retail Trade	1,100	0%	0
Balance	-2,900	14%	-410
Total	**13,500**	**61%**	**8,300**

Source: Journey to Work, BTS 2013; BTS Employment Forecasts 2012; draft Metropolitan Strategy for Sydney; Urbis

Office floorspace supply / demand - Macquarie Park Corridor

The floorspace required to accommodate the office jobs target has been compared to the known pipeline of office developments in the table below.

The 8,300 office based jobs will generate demand for 166,000 sq.m of office floorspace at a rate of one job per 20 sq.m based on typical employment density benchmarks.

The table demonstrates that the floorspace capacity required to meet the forecast 8,300 office based jobs at MPC will be met and substantially exceeded by the existing pipeline of commercial projects.

While many of the projects are still in early planning stages or seeking development approval, they nevertheless demonstrate sufficient development capacity within the MPC to accommodate the Sydney Metropolitan Plan employment targets.

Demand for office floorspace based on Sydney Metropolitan Plan employment target
2011 to 2031, MPC

	2011-2031 Growth
Additional jobs target	+13,500
Office-based jobs	+8,300
% of Total Jobs	61%
Employment Density	20 sq.m per employee
New Demand for Office Floorspace	+166,000 sq.m
Office floorspace pipeline (including Macquarie University Concept Plan)	1,100,000 sq.m*
Pipeline supply vs. target	+934,000 sq.m

Source: Journey to Work, BTS 2013; BTS Employment Forecasts 2012; draft Metropolitan Strategy for Sydney; Cordells 2013; Property Council of Australia July 2013; Urbis
**rounded figures*

[1]*Based on City of Melbourne Census of Land Use and Employment (2012), City of Sydney Floorspace and employment survey (2007) NLA benchmark has been converted to GFA*

4. Subject Site - Employment Potential

Overview

In order to consider the employment impact of the proposed development we have considered:

1. Existing employment on the subject site (Chapter 4)
2. An assessment of the employment potential of the proposed scheme based on benchmarking comparable developments and information supplied by the proponent.
3. The theoretical employment yield that could be achieved on the subject site under the current LEP planning controls - based on achieving the maximum permissible floor space ratio

Our assessment indicates that:

- The proposed development will result in a **twelve-fold increase** in the number of jobs across the site. The number of jobs created (**920**) would be close to the maximum theoretical employment capacity of the site under the current planning controls.
- The net additional employment that would be generated on the subject site (**845** jobs) would equate to 6% of the total employment target for the Macquarie Park Corridor. This would deliver in excess of one years supply of targeted new jobs in a single development.
- The proposed development could also deliver around 8% of the total office floorspace required to meet the employment target for the MPC.

The employment assessment is set out in the following pages

Employment Potential Summary – Subject Site (operational employment)

Existing	Jobs under proposed Scheme	Net additional jobs	Maximum jobs under current planning controls
75	**920**	**+845**	1,100

**subject to payment of developer contributions*

Source: Harvey Norman, Urbis

Existing employment

Information provided by the proponent demonstrates that there are approximately 75 jobs provided on the subject site at present. This is broken down as follows:

- Domayne 60 jobs
- Warehouse 10 jobs
- Smash repairs 5 jobs
- **Total** **75 jobs**

The demolition and redevelopment of the warehouse and smash repair operations and the comprehensive redevelopment of the site therefore provides an opportunity for a significant uplift in employment generation on the site

Employment potential of proposed scheme

We calculate that the proposed development has the potential to deliver around **920** jobs as shown in the table below. This is an increase of **845 jobs** compared to current employment, **(a twelve-fold increase**) This is based on the following assumptions:

- Domayne will remain in its current location.
- Harvey Norman have advised that its office headquarters will employ up to 600 staff, incorporating a range of management, administration and contact staff. The inclusion of this range of uses within the building is therefore expected to drive above average employment densities
- The hotel will employ around 100 staff (using the benchmark of 1 job per 2 guest rooms).

Employment Potential – Proposed Development

Use	Size	Employment Density (FTE jobs)	Jobs
Domayne	8,663 sq.m	1 job per 145 sq.m	60
Office (Harvey Norman HQ)	10,860 sq.m	1 job per 18 sq.m	600
Office	2,720 sq.m	1 job per 20 sq.m	135
Hotel	200 rooms	1 job per 2 guest rooms	100
Cafe	150 sq.m	1 job per 25 sq.m	6
Child Care	510 sq.m	1 job per 25 sq.m	20
Total			**920**

Source: Harvey Norman, Urbis

Based on an estimated construction cost of approximately **$150 million** employment during construction has the potential to generate **650** direct and **1,020** multiplier jobs (offsite), as shown in the following table

	Direct Employment	Supplier employment multiplier effects	Total
Construction Phase	650	1,020	**1,670**

Source: Urbis based on ABS Australian Input-Output (I-O) employment multiplier tables 1996-97. Cost estimate provided by Altus Page Kirkland, February 2013

Contribution towards MPC employment targets

The net additional employment that would be generated on the subject site (845) would equate to 6% of the total employment target for the Macquarie Park Corridor. This would deliver in excess of one years supply of targeted new jobs in a single development.

Contribution to Macquarie Park Corridor Employment Targets
2011 to 2031, MPC

	2011-2031 Growth
MPC Additional jobs target 2011-2031	+13,500
Subject site additional employment	+845
Contribution to target (%)	6%

Source: Draft Metropolitan Strategy for Sydney (NSW Department for Planning & Infrastructure, Harvey Norman, Urbis

The proposed development could also deliver around 8% of the total office floorspace required to meet the employment target for the MPC. This is shown in the table below

Contribution to Macquarie Park Corridor Employment Targets
2011 to 2031, MPC

	2011-2031 Growth
MPC Additional jobs target 2011-2031	+13,500
Office based jobs (@60%)	8,300
Floorspace requirement (1 job per 20 sq.m GLA)	166,000 sq.m
Proposed development – office floorspace	13,580 sq.m
Contribution to target (%)	8%
Plus office development pipeline	+1,100,000 sq.m

Source: NSW Department of Planning & Infrastructure, Cordell Connect, City of Melbourne Census of Land Use and Employment (2012), City of Sydney Floorspace and employment survey (2007). Urbis NLA employment benchmark has been converted to GFA

Ryde LEP planning controls - employment potential

The Ryde Local Environmental Plan 2010 (RLEP 2010) currently zones the site B3 Commercial Core. A small portion of the site (Wicks Road access handle) is zoned B7 Business Park. Commercial, retail and bulky goods are all permissible uses. Residential development is currently prohibited.

The following development standards apply:

- Floor space ratio (FSR) – maximum 1.5:1
- Building height – maximum building height 30 metres

With a site area of 1.97 hectares and a 1.5:1 FSR there is a maximum floorspace potential of **29,645 sq.m** gross floor area.

Assuming the retention of the existing Domayne store (8,663 sq.m) this means that an additional **20,982 sq.m** gross floor area could be accommodated on the site until the maximum FSR is achieved.

On the basis that the balance of the site were to be developed for office floorspace (which typically provides the highest employment densities), the theoretical employment capacity of the site under current planning controls is **1,100 jobs**.

The employment expected to be generated by the proposed development (**920** jobs) is therefore broadly in alignment with the maximum theoretical employment permissible under the current planning controls.

Draft LEP Amendment No.1 proposes bonus height and FSR incentives for sites within Macquarie Park in exchange for financial contributions towards roads and open space delivery. This allows for:

- Bonus floorspace of up to 2:1 FSR
- Maximum building height up to 45 metres

The potential to achieve any additional floorspace uplift through the draft LEP amendment would depend on the extent to which the requisite financial contributions affect the viability of further expansion.

Existing planning controls – employment potential

	Existing planning controls – employment potential assuming commercial development								
	A	B	C	D	E	F	G	H	I
	Site Area (sq.m)	**FSR**	**Total achievable gross floor area (sq.m)**	**Less Domayne (sq.m)**	**Additional achievable gross floor area (sq.m)**	**Jobs per sq m (commercial office)**	**Total Jobs** (E ÷ F)	**Plus Domayne jobs**	**Total Jobs** (G+H)
Existing LEP	19,763	1.5:1	29,645	-8,663	20,982	20	1,050	60	**1,110**

Source: Urbis, based on City of Melbourne Census of Land Use and Employment (2012), City of Sydney Floorspace and employment survey (2007). NLA employment benchmarks converted to equivalent GFA

5. Economic Benefits of the Proposed Development

Benefits of the proposed development

- Development of an under utilised site in an orderly and efficient manner.
- Potential to deliver around 920 jobs - a twelve fold increase of 845 jobs compared to current employment.
- Potential to deliver 650 construction jobs and 1,020 supplier jobs linked to construction activity.
- Attracting Harvey Norman's head office - a leading Australian business to located at Macquarie Park will further strengthen and enhance the reputation of the area as a location of choice for potential 'blue chip' employers.
- The provision of a 200 room hotel which will effectively replace the hotel rooms that would be lost by the redevelopment of the Stamford Hotel site. Providing good quality hotel accommodation is an essential component of a successful large scale business park. We understand that the receipts from the development of the residential apartments will provide the necessary funds to enable the development of the hotel that would otherwise be of marginal viability.
- Linked to the above, the provision of the Harvey Norman head office on site is expected to result in a significant number of visitors and franchisees from interstate and overseas creating demand for hotel accommodation. The provision of a hotel is therefore very important as part of the Harvey Norman HQ relocation.
- The provision of up to 170 residential apartments to contribute toward City of Ryde's housing target of 12,000 additional dwellings between 2004 and 2031 (based on the draft Inner North Subregional Strategy) within walking distance of major employment, retail and further education facilities and excellent public transport connectivity.
- The addition of ancillary café and child care uses to meet the daily needs of workers on site.
- Improved integration with adjoining planned residential uses through the creation of a mixed use environment.

6. Conclusion

Conclusion

The proposed development will make a significant contribution to employment within the Macquarie Park Corridor. It has the potential to deliver around **920** jobs - a twelve-fold increase of **845** additional jobs compared to current employment.

Around 650 construction jobs and 1,020 supplier jobs linked to construction activity could also be generated during the construction period.

The number of operational jobs created would be close to the maximum theoretical employment capacity of the site under the current planning controls.

The proposed development can therefore make a positive contribution to meeting and exceeding Macquarie Park Corridor employment targets. The net additional employment that would be generated on the subject site would equate to **6%** of the Draft Metropolitan Strategy for Sydney's total employment target for the Macquarie Park Corridor. This would deliver in excess of one years supply of targeted new jobs in a single development

The proposed development provides **13,580 sq.m** office floorspace which can contribute to around **8%** office floorspace needed to meet the MPC employment target.

The additional provision of office floorspace needed to achieve the minimum employment target will be met and substantially exceeded by the existing pipeline of commercial development, which will be further augmented by the proposed development.

The proposed development has the potential to deliver a range of economic benefits for the Macquarie Park Corridor and the City of Ryde through the development of an under utilised site in an orderly and efficient manner. These include:

- Attracting Harvey Norman, a leading Australian business to located at Macquarie Park will further strengthen and enhance the reputation of the area as a location of choice for potential employers
- The provision of a 200 room hotel which would effectively replace the hotel rooms that would be lost by the redevelopment of the Stamford Hotel site. Providing good quality hotel accommodation is an essential component of a successful large scale business park. We understand that the receipts from the development of the residential apartments will provide the funds to enable the development of the hotel
- The provision of up to 170 residential apartments to contribute toward City of Ryde's housing target, within walking distance of major employment, retail and further education facilities and excellent public transport connectivity
- The addition of ancillary café and child care uses to meet the daily needs of workers on site

Disclaimer

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7th January 2014

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Attention: Stephen White

Re: Planning Proposal for Harvey Norman Group Macquarie Park Planning Proposal Supplementary Report relating to proposed amendments

Dear Stephen,

This Supplementary Report has been prepared by TRAFFIX on behalf of the Harvey Norman Group and relates to land at 111 Wicks Road, 29 Epping Road and 31-35 Epping Road , at Macquarie Park. This report follows upon the report prepared by TRAFFIX dated 30th April 2013 in support of a Planning proposal for the site. The original report was considered by Ryde Council at a meeting held on 27th August 2013, at which time the matter was deferred for further consideration, at the request of the proponent. This further consideration relates to the in principle land swap agreement between the proponent and Urban Growth NSW which results in a significantly improved road network and delivers the solution that was in fact identified as the Preferred Alternate Scheme and discussed in principle in the original April 2013 Traffic Report prepared by TRAFFIX.

It is noted that the original Traffic Report was subject to a Peer Review by Bitzios Consulting, undertaken on behalf of Ryde City Council. That report was generally supportive of the assessment undertaken, raising relatively minor issues that would not prevent the Planning Proposal proceeding to Gateway. These matters were also separately addressed in the response to the submission prepared by SJB on behalf of Council, which incorporated the Bitzios Consulting report.

Outline of Changes

Since the Planning Proposal was submitted to Council, the planning controls that pertain to the UrbanGrowth NSW site have been established. The most important change relates to the integration of the UrbanGrowth NSW site and the (subject) proponent site to enable to traffic planning solution to be delivered that meets the objectives of both sites, with safer and more efficient access and improved permeability for both pedestrians and vehicular traffic.

The in principle land swap agreement provides the following opportunities:

- A consolidated left turn public road entry from Epping Road which serves the need of both the subject site and the NRSUAP site. This incorporates a deceleration lane that minimises conflicts while providing separation from the adjacent traffic lane in Epping Road; and
- Internal connectivity that provides an improved dispersal of traffic onto the wider road network, avoiding local traffic concentrations.

The in principle land swap agreement also has land use implications which are the subject of a separate report by Urbis. Briefly, the land swap would transfer 624m^2 of land to UrbanGrowth NSW. This land is therefore the subject of this Planning Proposal. The proponent would benefit from the return of 1,212m^2 of UrbanGrowth NSW land which is not the subject of this report and has already rezoned as part of the rezoning of the NRSUAP site.

Proposed Road Network

The proposed road network is shown in **Figures 1 and 2** below. The portion of the land swap that is included in the subject Planning Proposal is shown in red in Figure 1.

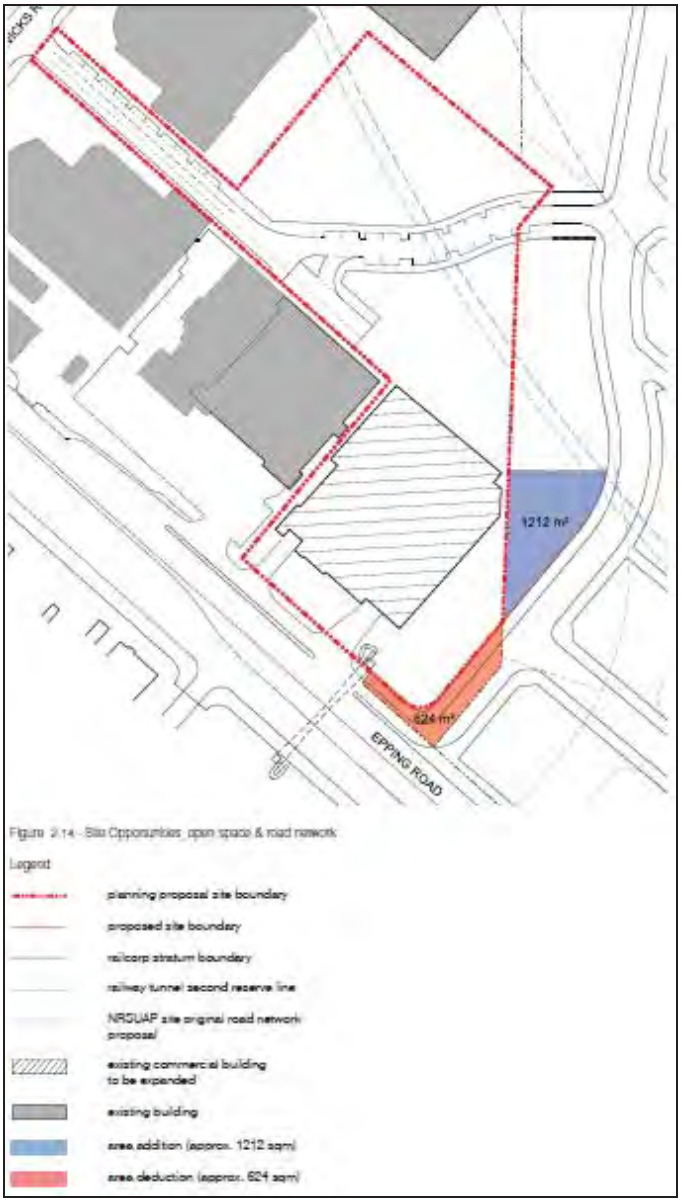

Figure 1: Road Network and Land Swap

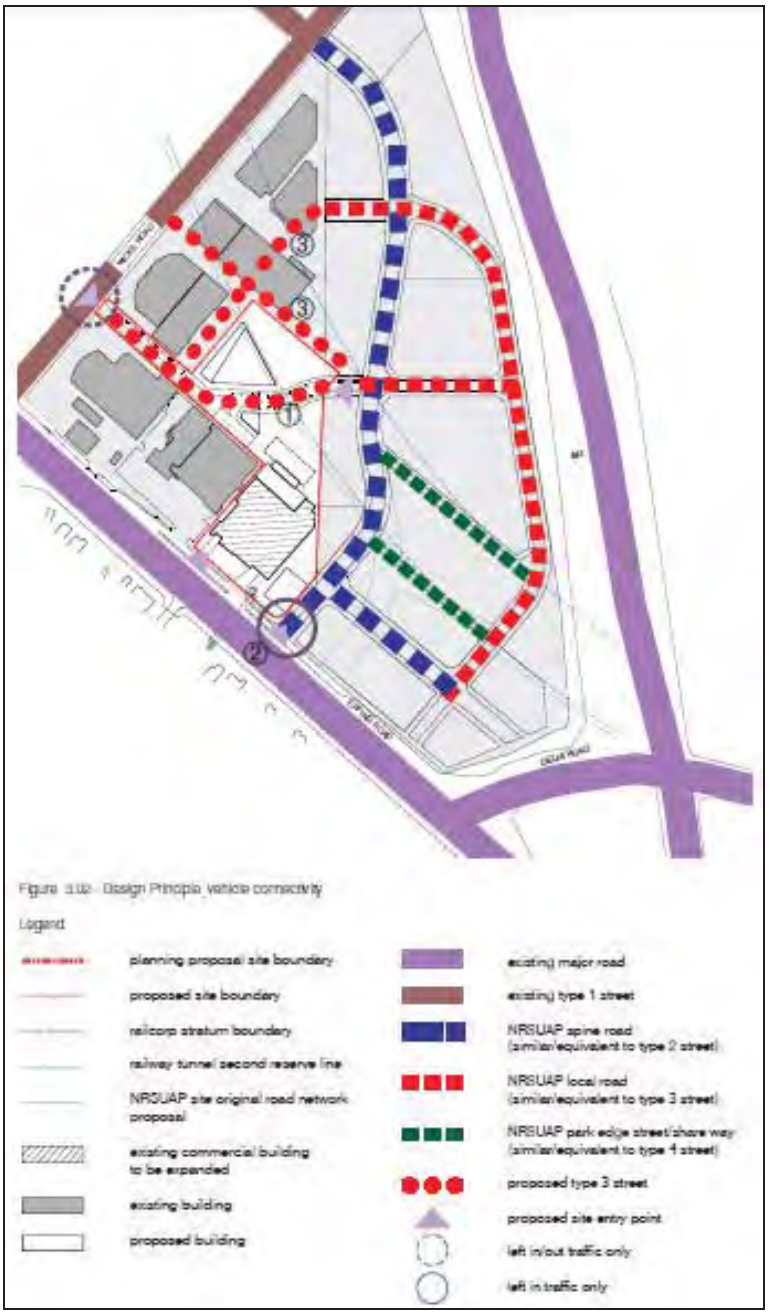

Figure 2: Road Hierarchy and Connectivity

The following points are noteworthy from Figures 1 and 2:

- The consolidated public road entry (at Location 2 in Figure 2) serves both sites and is an extension of the existing service road. This overcomes the need for two separate entry

driveways as would have occurred under the Primary Scheme that was previously submitted. It is however in full accordance with the Preferred Alternate Scheme which was always the optimal outcome, the delivery of which was only dependent on a suitable mechanism being identified, being the in principle land swap agreement with Urban Growth NSW.

- The spine road that is accessed via this new entry road remains the principal access for the NRSUAP site, so that the traffic distributions associated with the NRSUAP site remain unchanged and therefore valid;

- The proposed new public road access onto Wicks Road North remains an important access to the subject site. This would be retained as a left-in/left-out access, which is also underpinned by the improved internal connectivity. The left-in/left-out access provides sufficient capacity to accommodate the needs of the subject site. This road is proposed as a Type 3 Road which is consistent with its intended function and delivers the requisite permeability as envisaged under Council's DCP;

- Internal connectivity would be available between the subject site and the NRSUAP via this road connection between the Wicks Road North access and the spine road. This would improve the ability of traffic to redistribute should the need arise. This would include any unforeseen events such as, for example, delays caused by an accident. In this context, the new internal connection may be regarded as a 'safety valve' providing more flexibility; and

- The opportunity will be available in the longer term to establish an additional road access onto Wicks Road North, generally mid-block between Epping Road and Herring Road, which is the optimal location. This intersection would be capable of accommodating all turning movements and would potentially be under traffic signal control. This future link would similarly support the road hierarchy envisaged in Council's DCP.

In summary, while the access principles will be improved through the delivery of a consolidated site access, the traffic movements on the road network will remain essentially unchanged when account is taken of the cumulative traffic associated with both sites.

It is acknowledged that traffic associated with the subject site wishing to travel north will use the Spine Road to access Herring Road and then Lane Cove Road. However, traffic associated with the NRSUAP site that previously used the Spine Road to access Wicks Road North at Herring Road and then Epping Road, will also be able to use the new access onto Wicks Road North, through the subject site. These volumes are likely to 'balance' with the result that the traffic volume through the critical local intersection of Herring Road/the Spine Road and Wicks Road North will not change significantly. Indeed, this outcome can be actively pursued through appropriate turn restrictions at the intersection of the Spine Road with the new Wicks Road Access, should the need arise.

Hence, the traffic distribution under the current amendments is not expected to change significantly and can be managed in any event. This is a matter that can be addressed in further detail at development application stage/s, when detailed traffic management measures will be developed.

Traffic Generation

The land use that are now the subject of the original Planning Proposal are shown in **Figure 2** below (from Table 2 of the Urbis Supplementary Planning report).

TABLE 2 – KEY ELEMENTS OF THE PLANNING PROPOSAL

ELEMENT	PLANNING PROPOSAL LAND USE ELEMENTS
Commercial	8 Storey addition above the rear of the existing Domayne / Harvey Norman store (three storey building). 6-Storey commercial building on 29 Epping Road.
Bulky goods retail	Domayne / Harvey Norman store as existing
Retail	Neighbourhood facilities including shops, cafes
Residential accommodation	17 levels of apartments within 27 storey building. ***Total Dwelling Yield: 160 - 170 apartments***
Hotel	Lower 10 levels of 27 storey building. 200 rooms
Child care centre	**Potential for child care centre at ground floor level of building on 29 Epping Road.**
Gross Floor Area	**46,889m²**
- ***Commercial***	***13,580m²***
- ***Hotel***	***9,144m²***
- ***Bulky goods retail (existing)***	***8,663m²***
- ***Residential***	***14,840m²***
- ***Cafe***	***150m²***
- ***Childcare Centre***	***512m²***

Figure 2: Proposed Land Use Scenario

It will be noted that there is a slight reduction in the commercial floor area from 14,477m^2 to 13,580m^2 (6.2%) compared with the original scheme. The total traffic generation under the original scheme was predicted to be 205 veh/hr in the AM peak and 226 veh/hr in the PM peak (from all uses), based on the same trip rates as adopted in the NRSUAP traffic report. This generation included 113 veh/hr associated with the commercial component during both peak periods. The reduced commercial area will therefore reduce trips slightly (by about 7 veh/hr).

The proposed child care centre is the only additional use and this is expected to serve residents and employees in the locality. Those people who drive to the child care centre (who will be the majority given the need to transport children) will therefore do so as a 'linked trip', which is to say that this traffic will be on the road network in any event. These are not additional trips and they will simply divert to the centre as appropriate. In the case of residents, many will also walk.

Having regard for the above, the overall change in traffic conditions is therefore expected to be negligible and accordingly, the discussion and conclusions made in the original traffic report remain valid. This is also reinforced by the fact that traffic volumes through critical intersections are not expected to change to any significant extent, as also discussed above.

Parking

There are no parking implications that arise from the proposed changes, with a slight adjustment required to reduce the commercial parking in line with the reduced area; and the provision of additional parking for the child care centre. The latter will depend upon the number of child care places provided and these are matters that will be addressed at development application stage.

Summary

The traffic planning impacts associated with this Planning Proposal are considered to be manageable and able to be accommodated by the road network. In particular, the impacts as identified in the original Planning Proposal are unchanged, but will be offset by the improved access arrangements onto Epping Road; as well as the improved internal connectivity between the subject site and the NRSUAP following the rezoning of the NRSUAP site and the in principle land swap agreement between the proponent and Urban Growth.

Specifically, the improvements now provided will be generally as discussed under the Preferred Alternate Scheme that was the subject of the original traffic report, as follows:

- The proposed arrangement delivers a high standard access solution for the subject site as well as the NRSUAP site;
- The access to both sites occurs via a consolidated public road intersection (entry only). Consolidation of driveways is a key objective under Section 1 of the RMS policy document entitled “Guide to Traffic Generating Developments;”
- The access provides a landscaped ‘gateway’ to the overall precinct from Epping Road. This is in contrast to the Primary Scheme as originally submitted, which proposed separate driveways. While the original scheme was supportable, the solution now delivered is the best outcome for the precinct as well as the public more generally;
- This access arrangement is the subject of an in principle land swap agreement between the proponent and UrbanGrowth NSW; and
- The provision of a new road connection to Wicks Road North is retained, while connectivity to the Spine Road will provide a more flexible road network that will disperse traffic onto the external road network more efficiently.

Other Matters Raised by Ryde City Council

As mentioned above, the original Planning Proposal report was the subject of a Peer Review by Bitzios Consulting on behalf of Ryde Council. The matters raised were the subject of a separate response to Council. It is however noted that there are no matters that have been raised which would prevent this Planning Proposal proceeding to Gateway. The following points are noteworthy:

Access from the East via Epping Road

The site will have the ability to be accessed from the east in the same way as the NRSUAP site, via a right turn into Wicks Road North and a right turn into the Spine Road.

Access to the North via Lane Cove Road

The site will have the ability to access the north in the same way as the NRSUAP site, via the Spine Road. Hence, traffic signals at the intersection of the new access onto Wicks Road North will not be required.

Mode Share Targets

The mode share targets are the same as adopted for the NRSUAP site, so that a consistent approach has been taken. This should however be seen in the context where the subject site generates only about 15% of the traffic generated by the NRSUAP site, so that the overall traffic outcome for the precinct will not be significantly affected by the modal splits for the subject site, even if these were not achieved in the short term. It is noted that the assumed modal splits are said in Council's submission to be 'aspirational.'

We consider that this is a fundamental aspect of the imposition of 'targets' because desired changes in travel behaviour can only occur over time, as behaviour is influenced. In that context, it is not considered problematic that targets may not be reached in the short term and a long term view is required. Nevertheless, the rail network has capacity to accommodate further growth in the short term in any event. It is also expected that development will occur over many years, with the ability to monitor conditions at the various development application stage/s.

Parking Over-provision

The development concept presents a 'special case' in relation to the commercial office component and is attuned to the specific needs of the Harvey Normal Head Office. Specifically, the operations involve several hundred franchisees attending the site on an occasional (but regular) basis, the vast majority of whom use cars. Nevertheless, the management opportunities that may be available to minimise parking supply can be further considered at future development application stage.

All other uses provide parking in accordance with Council's DCP controls and are generally supported. These are also a matter that would be dealt with at development application stage.

Conclusions

In conclusion, the Harvey Norman Group Macquarie Park Planning Proposal is considered to be supportable on traffic planning grounds and the benefits foreshadowed in the original traffic report relating to the Preferred Alternate Scheme will deliver the optimal traffic planning outcome for the overall precinct.

Please contact the undersigned should you have any queries or require any further information or assistance.

Yours faithfully,

traffix

Graham Pindar
Director