Concept Masterplan 4

4.1 Summary

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

Accordingly, this concept masterplan proposes a mixed use development with a maximum FSR of 2.5:1, of which approximately 70% will be non-residential uses. This is compliant with current zoning provisions.

The intensification of the employment uses, including 14,477sqm commercial, 8813sgm retail 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.

The concept master plan proposes a new public though site street connecting between Wicks Road and the NRSP. This new public street together with another proposed driveway along the eastern site boundary of 31-35 Epping Road will maximise site permeability and vehicular connections to the site.

The site will also provide a great addition to the adjacent network of public open spaces by proposing a series of open spaces at different levels, such as an urban civic



Figure 4.01 - Illustrative Concept Masterplan

plaza and private open space.

The concept masterplan proposes to locate the high towers further back from all major road frontages to ensure no impacts are imposed on the surrounding amenities and neighbourhoods.

A better flood management solution is also proposed for the site.

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

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Concept Masterplan 4

4.2 Pedestrian + Vehicular Movement

Pedestrian Access

A new tree lined through-site link connecting Wicks Road to the NRSP 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 NRSP to Wicks Road is also created via a proposed civic Urban Square.

Vehicular Access

The NRSP contains a proposed network of new streets, including an extension of Waterloo Road through the NRSP to Epping Road. This main spine connects a grid of new streets within the NRSP. This grid will provide good accessibility throughout the site and may connect seamlessly to the M2 on-ramp or long term extensions from Wicks Road, through redevelopment of adjacent sites.

This concept masterplan proposes a new through site link from the site to the NRSP, which becomes one of the natural extensions of the NRSP 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 NRSP.

Apart from the new through-site street, there are another two vehicle access points to the site from Epping Road via an existing slip road. One is the existing Harvey Norman car park entry, which leads directly into the commercial car park, the other is a 5.5m wide one-way driveway proposed

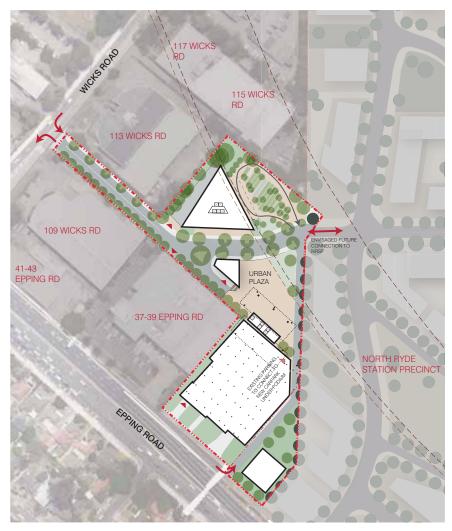


Figure 4.02 - Pedestrian + Vehicular Movement

along the eastern site boundary of 31-35 Epping Road connecting to the new through-site street to form a loop around the site.

This driveway enables coaches and buses to access the hotel forecourt without having to make a right turn into the site from Wicks Road.



4.3 Open Space Network

A series of open spaces at different levels, such as an Urban Square, a small urban park and 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 NRSP.

The new Urban Square is proposed in the centre of the site, adjacent to the proposed community centre on the NRSP, which can define and activate the eastern edge of the site.

The Urban Square will become a great meeting place catering for the needs of both workers and local residents.

A small urban park to the north of the Urban Square can provide a different type of space for relaxation and recreation.

A private open space is proposed over the railway tunnel serving the proposed hotel/ service apartments and the residential above. This private open space is connected to the remnant bushland/deep soil zone at the east north corner of the site.

A publicly accessible private open space is proposed at rear of the proposed 6-storey commercial building along Epping Road, mainly catering for the needs of the workers.

Refer to figure 4.03 for the locations of the proposed open spaces.



Figure 4.03 - Open Space Network

	Area (m²)	Site %
urban plaza	1,985	10%
urban park	625	3%
private open space	2,885	15%
Open Space Total	5,495	28%

Figure 4.04 - Open Space Area Calculations





Concept Masterplan 4

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 NRSP 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 NRSP.

A similar strategic approach has been adopted in the concept masterplan which proposes a 27-storey high tower to the north of the site, which relates to the proposed scale of the NRSP.

The proposed 27-storey tower is set back from all major road frontages to avoid significant impact on the surrounding amenities. 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 figure 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 Square between 12 pm and 2 pm in mid winter.

Refer to 7.2 Appendix 2 - shadow diagrams and 7.3 Appendix 3 - suneye diagrams.

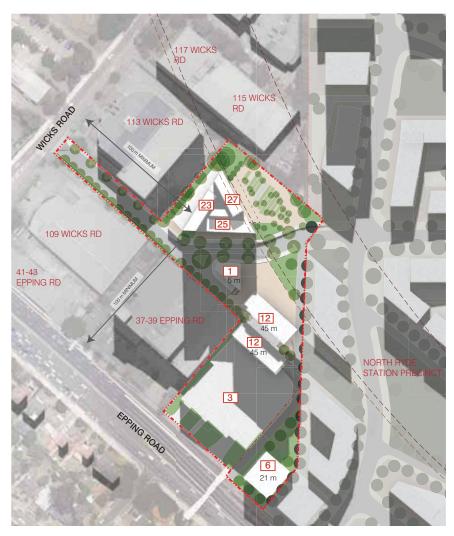


Figure 4.05 - Solar Access + Built Form

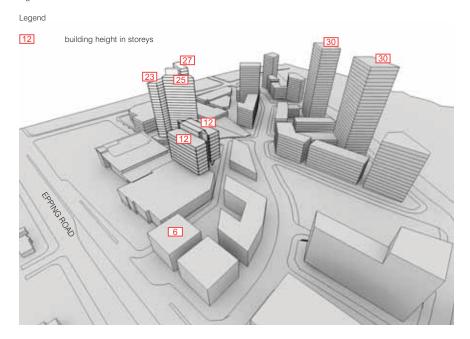


Figure 4.06 - Building Heights and Built Form







4.5 Use and Density

This concept masterplan proposes a mixed use development with a maximum FSR of 2.5:1, of which approximately 70% will be non-residential uses with the remaining to be residential accommodation.

Refer to figure 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 and a
 6-storey building proposed at the
 gateway of the site along Epping
 Road.
- retail premises, which consist of a cafe located on the corner of the proposed Urban Square and the existing bulky goods retail warehouse along Epping Road.
- hotel/service 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.

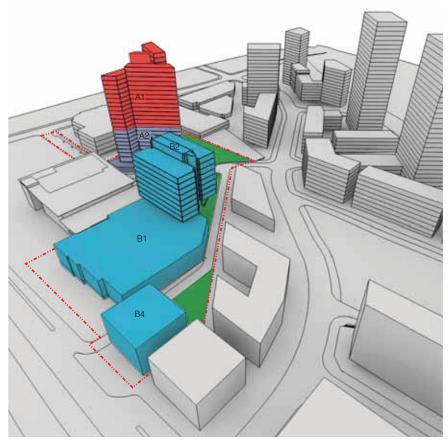


Figure 4.07 - Distribution of Use

egend

B3 commercial core

B4 mixed use

R4 high density residential

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 / Service Apartments	10	9,144
B1 - Existing Retail	4	8,663
B2 - Commercial	12	11,289
B3 - Cafe	1	150
C1 - Commercial	5	2,656
C1 - Retail/Childcare	1	500
Total		32,402

47,242
19,763
2.4 :1
200
162
715

Disclaimer

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

 Area (m²)
 Site %

 Open Space
 5,495
 28%

 Streets
 5,070
 26%

 Setbacks
 2,403
 12%

 Development Blocks
 6,795
 34%

 Total Site Area
 19,763
 100%

Figure 4.08 - FSR Testing

Figure 4.09 - Area Calculations

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4.6 Flood Management

The concept masterplan proposes a better flood management solution compared with the existing one.

According to the concept masterplan proposal, the stormwater will mainly be managed underground through the proposed stormwater drainage system.

There will be the same or less overland flow than existing along the new proposed road through the site, which connects between Wicks Road and the proposed spine road of the NRSP.

Refer to *Civil and Structural Planning Report* prepared by Brown Smart Consulting.



Figure 4.10 - Flood Management

Legend

overland flow



Preferred Alternate Concept Masterplan 5

5.1 Summary

This alternate preferred concept master plan is proposed on the basis of the site area exchange between the site and the NRSP.

Refer to section 2.3 and figure 2.14.

The new site boundary gives the site a more efficient shape for future development.

The alternate preferred concept master plan proposes a mixed use development with an FSR of 2.5:1, of which approximately 60% will be non-residential uses. This is compliant with current zoning provisions.

The intensification of the employment uses, including 10,860sqm office tower, retail 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 40% of the development will consist of a residential component. This contributes 200 dwellings to the City of Ryde's target by 2031 and reducing state government pressure to accommodate growth elsewhere in Ryde.

The site will provide a new public through site street connecting between Wicks Road and the NRSP to maximise site permeability and vehicular connections to the site.

This preferred alternate concept master plan will also provide the similar benefits and improvements to site as the concept master plan, such as a great addition to the



Figure 5.01 - Illustrative Concept Masterplan adjacent network of public open spaces, nil impacts to the surrounding amenities and neighbourhoods and a better flood management solution to the site.

Refer the following subsections of Chapter 5 for the elaboration of individual topics.







Preferred Alternate Concept Masterplan 5

5.2 Pedestrian + Vehicular Movement

Pedestrian Access

A new tree lined through-site link connecting Wicks Road to the NRSP 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 NRSP to Wicks Road is also created via a proposed civic Urban Square.

Vehicular Access

This preferred alternate concept masterplan proposes a new through site link from the site to the NRSP site, which becomes one of the natural extensions of the NRSP 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 NRSP.

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.

The advantage of this preferred alternate concept masterplan is that the community centre on the NRSP will be open to the proposed civic Urban Square on the site without being interrupted by the driveway proposed in the concept masterplan.

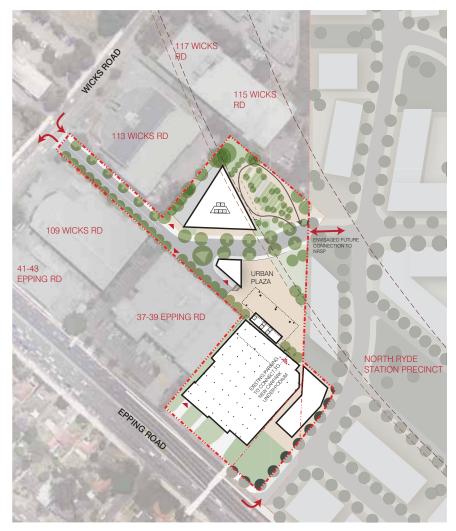


Figure 5.02 - Pedestrian + Vehicular Movement





5.3 Open Space Network

A series of open spaces at different levels, such as an Urban Square, a small urban park, a gateway park and private open space, are proposed for the site. The approximate areas of each type of open space are listed in figure 5.04.

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

The new Urban Square is proposed in the centre of the site, adjacent to the proposed community centre on the NRSP, which can define and activate the eastern edge of the site.

The Urban Square will become a great meeting place catering for the needs of both workers and local residents.

A small urban park to the north of the Urban Square can provide a different type of space for relaxation and recreation.

A gateway park is proposed adjacent to the northern end of the existing pedestrian bridge on Epping Road to create a welcoming transition zone for the pedestrians on the way to or from the North Ryde Station.

A private open space is proposed over the railway tunnel serving the proposed hotel/ service apartments and the residential above.

The private open space is connected to the remnant bushland/deep soil zone at the east north corner of the site.



Figure 5.03 - Open Space Network

	Area (m²)	Site %
urban plaza	2,233	11%
public park	1,605	8%
private open space	2,155	11%
Open Space Total	5,993	30%

Figure 5.04 - Open Space Area Calculations

Note: public park includes urban park and gateway park.







Preferred Alternate Concept Masterplan 5

5.4 Building Heights and Setbacks

The alternate preferred concept master plan uses the same design principle of solar access and the similar design approach as the concept master plan.

The 27-storey high tower is proposed to the north of the site, which relates to the proposed scale of the NRSP.

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 Square between 12 pm and 2 pm in mid winter.

The building heights step down from 27 storeys to 12 storeys as they approach Epping Road to the south.

The proposed highrise buildings, including the 27-storey hotel/residential tower, the 12-storey commercial buildings over the existing bulky goods retail warehouse and the 12-storey residential building along the proposed NRSP spine road, are set back from all major road frontages to avoid significant impacts on the surrounding amenities.

Refer to 7.4 Appendix 4 - shadow diagrams and 7.5 Appendix 5 - suneye diagrams.

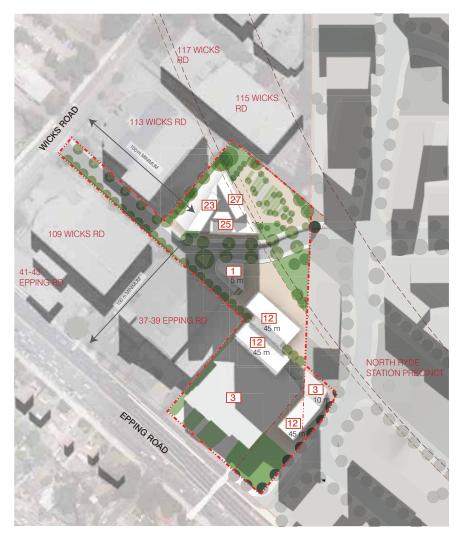


Figure 5.05 - Solar Access + Built Form

Legend

12 building height in storeys

Figure 5.06 - Building Heights and Built Form





5.5 Use and Density

This preferred alternate concept masterplan proposes a mixed use development with an FSR of 2.5:1, of which approximately 60% will be non-residential uses with the remaining to be residential accommodation. Refer to figure 5.08 and 5.09 for 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 childcare centre located on
 the ground floor of the 12-storey
 residential building adjacent to the
 community centre of the NRSP,
 a cafe located on the corner of
 the proposed Urban Square and
 the existing bulky goods retail
 warehouse along Epping Road.
- hotel/service 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 two separate buildings. One is a 12-storey tower located on the eastern edge of the site, along the proposed spine road of the NRSP. The other occupies the upper 17 levels of the 27-storey tower located to the north of the site. The residential accommodation proposes to provide 223 dwellings.

Refer to figure 5.07 for the distribution of

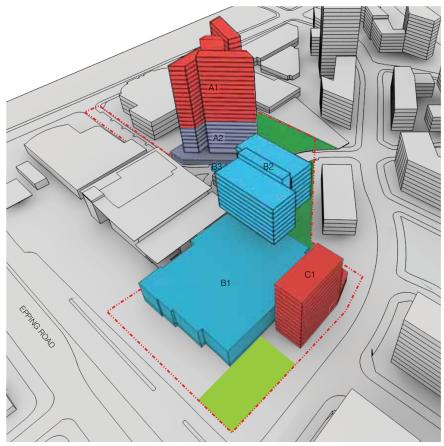


Figure 5.07 - Distribution of Use

egend

B3 commercial core

B4 mixed use

R4 high density residential

Residential Areas

Site-Use	Storeys	GFA	Dwelling nos.
A1 - Residential	17	14,840	162
C1 - Residential	12	5,280	60
·	·	20.120	223

Non Residential Areas

Storeys	GFA
10	9,144
4	8,663
12	10,860
1	150
1	480
	29,297
	10

Site Summary	
Total GFA	49,417
Site Area	19,763
FSR	2.5 :1
No. of hotel suites	200
No. of apartments	223
No. of car spaces	779

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

Figure 5.08 - FSR Testing

	Area (m²)	Site %
Open Space	5,993	30%
Streets	3,945	20%
Setbacks	2,920	15%
Development Blocks	6,905	35%
Total Site Area	19,763	100%

gateway park

Figure 5.09 - Area Calculations

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6.1 Mixed Use



















6.2 Open Space

















Appendices 7

7.1 Appendix 1: Illustrative Concept Masterplan + Sections



Illustrative Concept Masterplan



May 2013



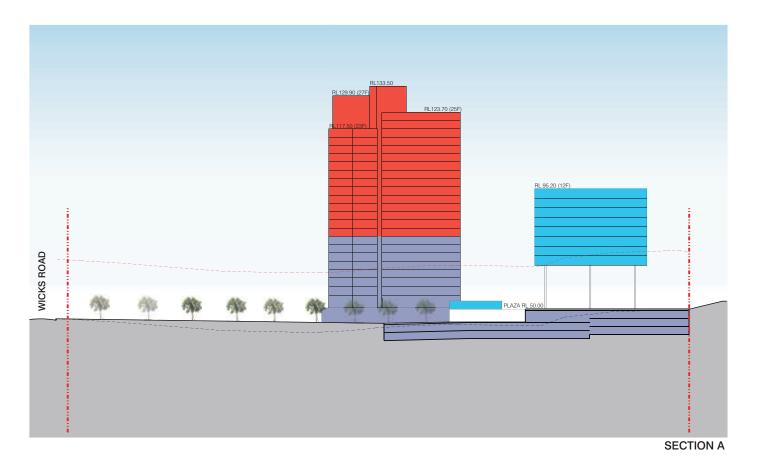
Illustrative Preferred Alternate Concept Masterplan

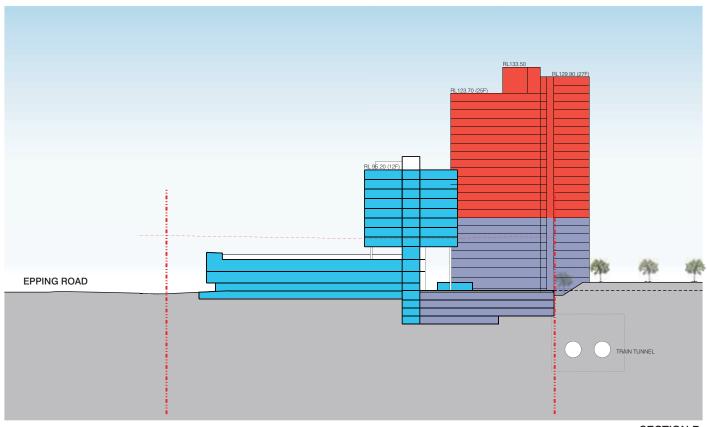




Sections







SECTION B

B3 commercial core

B4 mixed use

R4 high density residential



