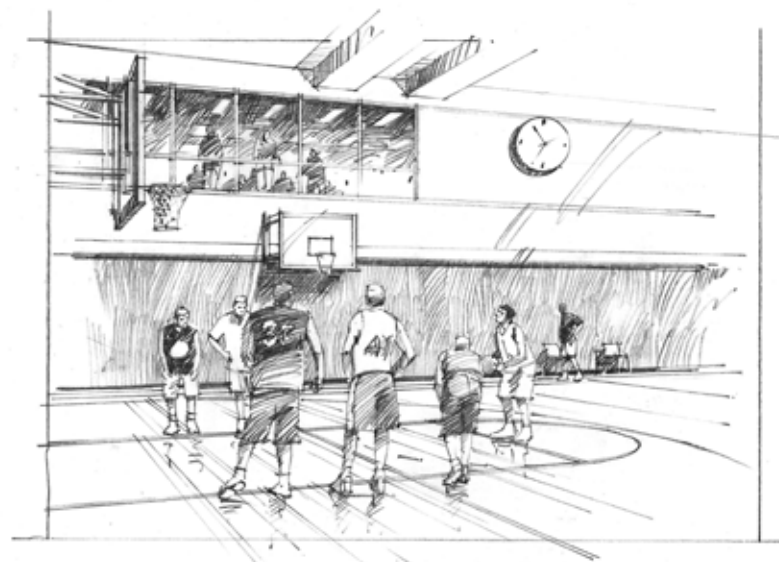
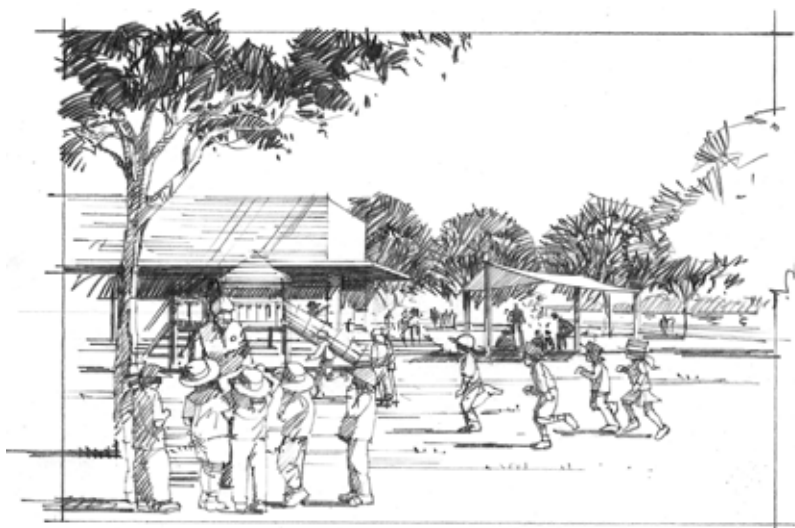


Rhodes West Master Plan 2009



DRAFT

August 2009

Contents

1.0 Overview	1
2.0 Study Area	2
3.0 Urban design and planning principles	3
4.0 Public domain	4
5.0 Built form	5
6.0 Public benefits	13
7.0 Shadow analysis	14

1.1 Purpose

The Rhodes West Master Plan 2009 has been prepared on behalf of Mirvac, Renewing Homebush Bay, Billbergia Developments and Meriton in response to a request from the City of Canada Bay Council (Council) to supplement the Rhodes Floor Space Review submission prepared by Architectus dated March 2009.

Council considered the March 2009 submission by the development groups at its 7 April 2009 meeting and resolved the following:

“That after consideration of the draft proposals for Billbergia, Meriton, Mirvac and Multiplex [Renewing Homebush Bay], Council give consideration to the matters raised in the draft proposals subject to full details of the public benefit including specific solutions to reduce private motor vehicle dependency and improve mobility being properly assessed and documented and being in accordance with Council’s policy”.

Council’s letter of the 24 April 2009 provides an explanation of what information Council seeks for the Rhodes West Master Plan 2009, as follows:

“All developers agree that Architectus will prepare the Master Plan which will be mainly a set of plans that show changes to the existing urban form and the revised building height, layout, open space etc as well as tables which compare existing scenarios with the proposed scenarios, highlighting the public benefits which will be gained under the Master Plan”.

The Rhodes West Master Plan 2009 consolidates the draft developer proposals into a single document to illustrate the existing/approved urban form with the proposed revisions to building forms, public open space and the street network.

1.2 Structure

The Rhodes Master Plan 2009 is structured as follows:

- **Section 1.0** provides an overview of the Rhodes West Master Plan 2009 including the purpose and structure.
- **Section 2.0** describes the study area which is covered by the Rhodes West Master Plan 2009.
- **Section 3.0** provides the urban design and planning principles that underpin the Rhodes West Master Plan 2009.
- **Section 4.0** provides a comparison of the existing/approved areas of public domain with the revised public domain including additional public open space and proposed modifications to the street layout.
- **Section 5.0** provides a comparison between existing/approved built form with the revised built form that includes the additional density.
- **Section 6.0** identifies on a map of Rhodes the location of the additional public benefits, which are gained under the Rhodes West Master Plan 2009.
- **Section 7.0** provides an analysis of the proposed overshadowing effects of the existing/approved and revised Master Plan layouts.



Fig 1 - 3D perspective A - View of the revised development scenario looking south east



Fig 2 - 3D perspective B - View of the revised development scenario looking north west

2.0

Study Area



Fig 3 - Aerial photograph of the study area
Rhodes Peninsular is strategically located, close to the geographic centre of Sydney. The Rhodes area is well serviced by existing infrastructure including trains, buses and ferries and is adjacent arterial roads with close links to the M4 Motorway. Rhodes is identified as a Specialised Centre with Sydney Olympic Park under the Sydney Metropolitan Strategy. Rhodes comprises a commercial core close to the railway station with high density residential development fronting Parramatta River and Homebush Bay. The area to the east of the Northern Railway line composes the established residential suburb of Rhodes, Rhodes Corporate Park and the Leeds Street Industrial Precinct with Brays Bay further to the east.

3.0

Urban design and planning principles

The following is a summary of the performance based urban design and planning principles prepared by Council to guide the Rhodes West Master Plan 2009. The principles build on the current planning principles and controls under SREP 29: Rhodes Peninsula and the Rhodes DCP 2000:

Land use and activity

- Land use permissibility is to remain consistent with SREP 29.
- Active street frontages with retail, home-based business and commercial uses are to be located on the Walker Street and Rider Boulevard street frontages.

Built form

- Compliance with SEPP 65 and the NSW RFDC 2002.
- Use different building types and heights in strategic locations to achieve greater variety in form and scale.
- Use of building heights to distinctively reflect and emphasize the topography of Rhodes Peninsula. Building heights should allow for view sharing, with lower buildings at the foreshore and taller buildings adjacent to the railway line.
- Use a variety of building forms from 4-8 storey street edge buildings to taller tower forms, where more consolidated open space at ground level is achieved.
- Retain the predominant building height adjacent to the foreshore at 4 storeys.
- With consideration of points d. and e. above, maintain the existing 6-8 storey height limit so buildings define surrounding streets.
- Locate taller buildings generally along or adjacent to Walker Street to reinforce the ridgeline and the railway corridor.
- Residential buildings that have a height of more than 8 storeys, are to have floor plates of no more than 750sqm. Alternatively, residential buildings above 8 storeys may sit above a podium of maximum 8 storeys of large floor plates.
- Taller buildings are to be oriented to avoid excessive overshadowing of the public and private domain and have significant architectural merit. They should contribute to a new skyline identity for Rhodes Peninsula.
- The height, form, orientation and separation of buildings are to take into account solar access, ventilation, wind impact, views and the amenity and privacy of residents.
- Design to ensure that proposed revisions to built form do not result in negative impacts on the public and private domain. Overall benefit must be demonstrated as a result of the changes.
- Buildings are to be setback from Walker Street, Shoreline Avenue and Rider Boulevard, in accordance with the Rhodes DCP 2000. Building setbacks to secondary and tertiary east west streets may vary from the DCP setback controls with deeper setbacks encouraged to increase articulation of building facades and provide landscaped frontages for better residential amenity
- Buildings are to be oriented to face public open space and surrounding streets to maximize casual surveillance and safety, and to help define the space.

Open Space

The provision of additional open space under the Rhodes West Master Plan 2009 has considered the following principles, having regard to the opportunities and constraints of the remaining developemnt parcels:

- Provide well distributed spaces that add to the diversity of civic and recreational experiences, that are accessible and central to recreational users and contribute towards an open space network.
- Provide space that is suitable for the intended purposes with a sufficient size of minimum 0.3 ha and some parks of 1.0+ ha.
- Integrate safer by design principles with passive surveillance from surrounding dwellings and streets with a clear distinction between public open space and private open space.
- Ensure scenic quality and civic amenity is enhanced with high quality landscape design which responds to site topography, view corridors and vistas and local context.

Connectivity and accessibility

- Existing pedestrian connectivity (in the approved development) is not to be reduced or compromised as a result of any proposed changes to building height, siting or changes to the road system.
- A reduction in the number of roads is to be considered in circumstances where it can be demonstrated that the road(s) are not essential for vehicle access and where additional open space is provided to enhance the public domain.
- Improvements to through street block links for pedestrians are encouraged.

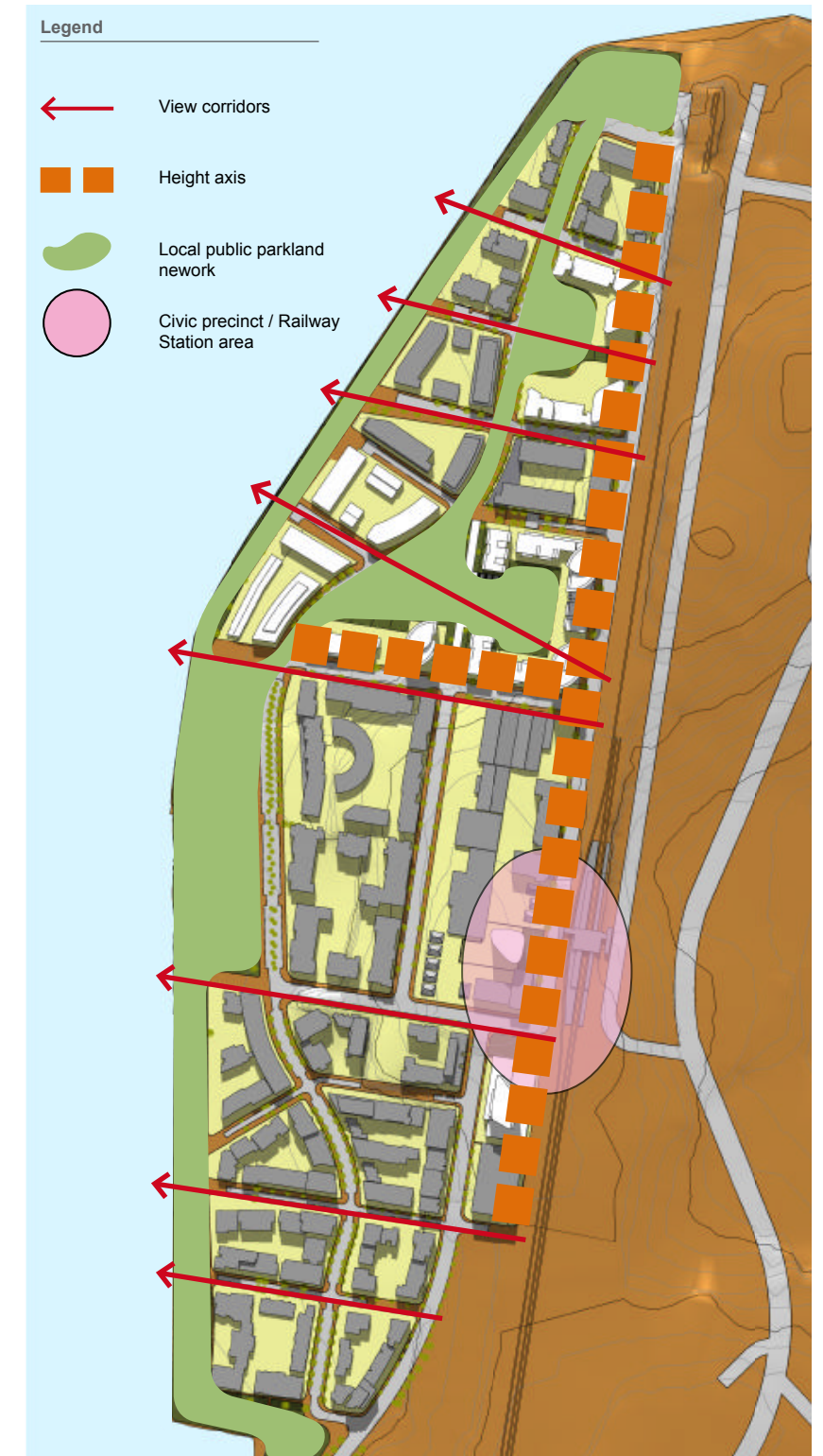


Fig 4 - Urban design and planning principles

4.0 Public domain

This section of the Rhodes West Master Plan 2009 provides a comparison between the existing/approved and the proposed public domain arrangements. Public domain includes public open spaces and the network of streets, pedestrian paths and bicycle ways.

4.1 Public open space

Sydney Regional Environmental Plan No. 29: Rhodes Peninsula (SREP 29) and the Rhodes DCP 2000 provides for 6,15 ha of public open space comprising a 20 metre wide foreshore reserve, consolidated areas of foreshore parkland and neighbourhood pocket parks.

There is a lack of diversity of public open space and Council have identified a need for additional open space. Different types of public space are needed to complement existing/approved open spaces, particularly:

- Civic plazas adjacent to the Railway Station that provide a high quality sense of arrival at Rhodes.
- Consolidated areas of local parkland for a range of recreational needs.

Lifting current height limits allows for additional public open space to be provided at ground level that increases building separation, improves amenity in terms of sunlight access and views, and enhances pedestrian and bicycle way connections. **Table 1** provides a summary of the additional public open space areas for each Precinct. A total of 1.723 ha of additional public open space is provided under the Rhodes West Master Plan 2009, which is a 28% increase in public open space.

Table 1 - Additional public open space

Precinct	Developer	Additional public open space	Area (m ²)
B	RHB	Consolidated local parkland	3505
	Billbergia		8325
C	Meriton	Consolidated local parkland	4600
D	Billbergia	Civic Plaza	800
Total			17,230

4.2 Street, pedestrian path and bicycle way network

The current Rhodes DCP 2000 provides a good interconnected network of streets, pedestrian paths and bicycle ways. The Rhodes Master Plan 2009 builds on and enhances the existing/approved network in the following ways:

- Enables the deletion of unnecessary tertiary streets not essential for vehicle access whilst maintaining view corridors;
- Provides additional north-south and east-west pedestrian and cyclist connections and enhances existing connections.

Existing/approved public open space: 6.15 Ha



Fig 5 - Existing/approved public open space plan

Proposed public open space: 7.873 Ha



Fig 6 - Revised public open space plan

5.0 Built Form

Summary

Existing/approved gross floor area:	543,250m ²
Additional gross floor area:	66,000m ²
Percentage increase:	12%
Existing/approved dwellings:	4,500
Additional dwellings:	787*
(Note *: Indicative subject to final dwelling mix and size)	
Existing/approved building heights:	4-12 storeys
Revised building heights:	4-33 storeys
Existing/approved public open space:	6.150 ha
Additional public open space:	1.723 ha
Percentage increase:	28%



Fig 7 - Existing/approved building height plan
Sites that are affected by the Rhodes West Master Plan 2009 revisions are shown with building heights in numbers of storeys.



Fig 8 - Revised building height plan

5.0 Built Form

Sections



Fig 9 - Section locations

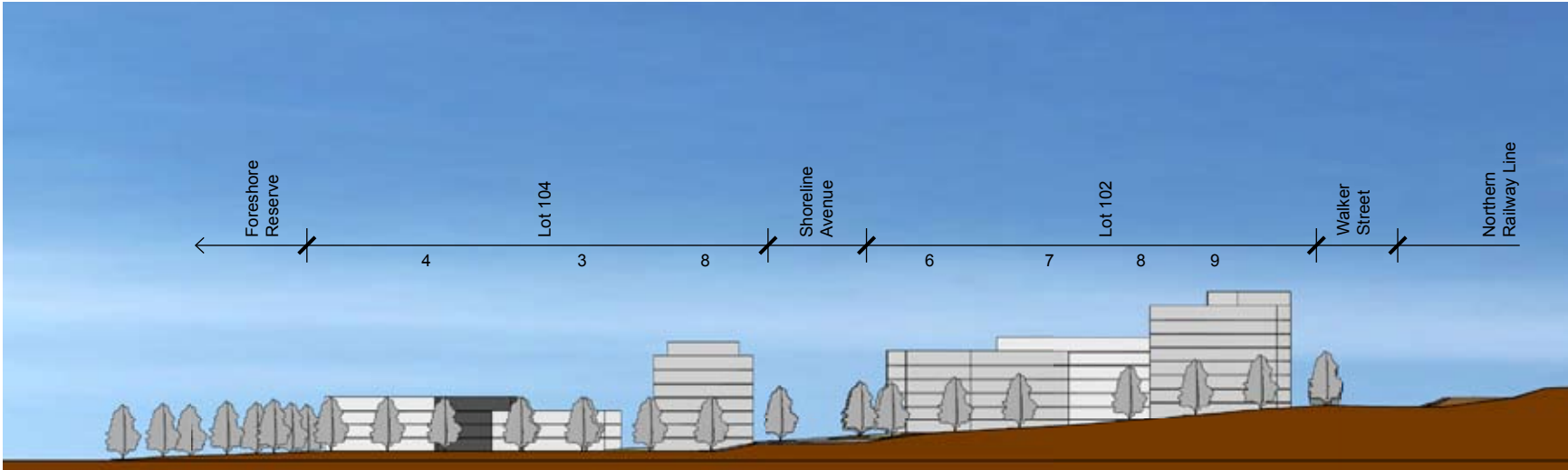


Fig 10 - Existing/approved Section A-A Scale 1:1500 @ A3

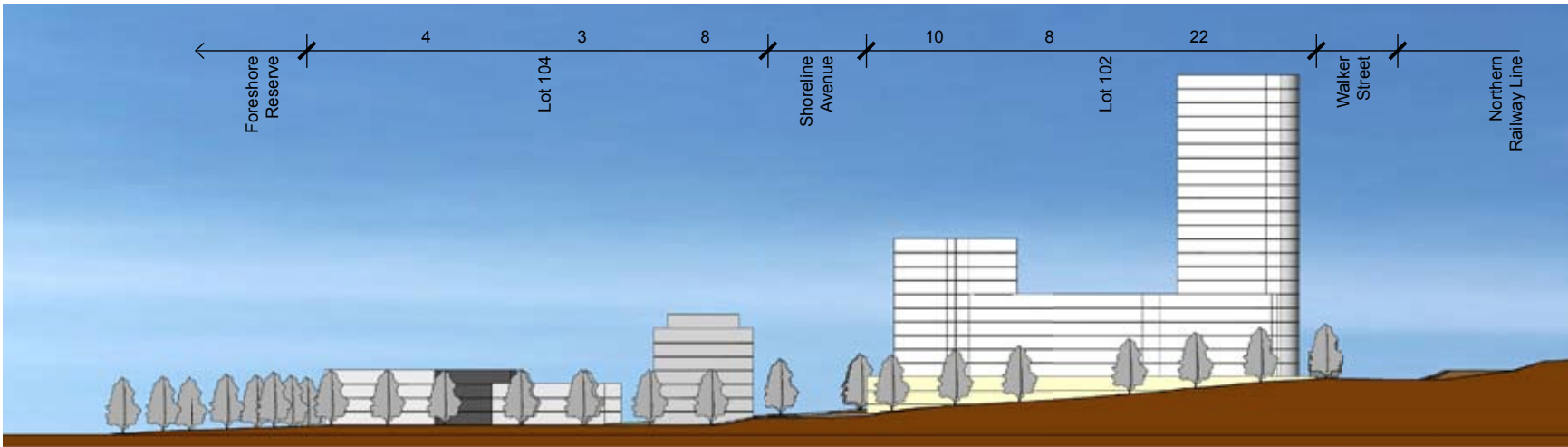


Fig 11 - Revised Section A-A Scale 1:1500 @ A3



5.0
Built Form

Sections



Fig 12 - Section locations

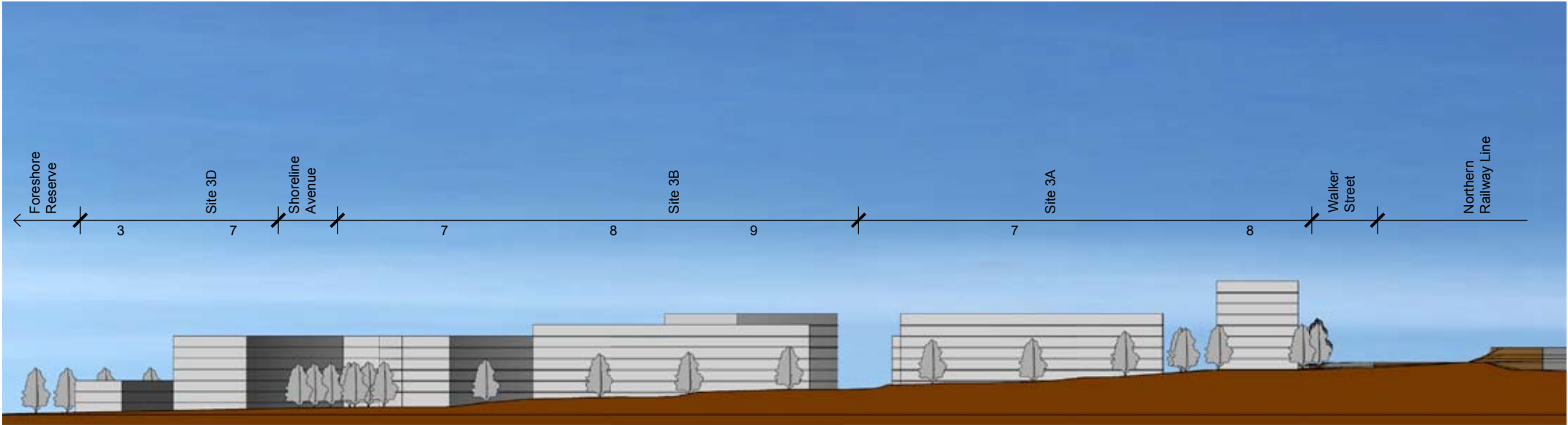


Fig 13 - Existing/approved Section B-B Scale 1:1500 @ A3

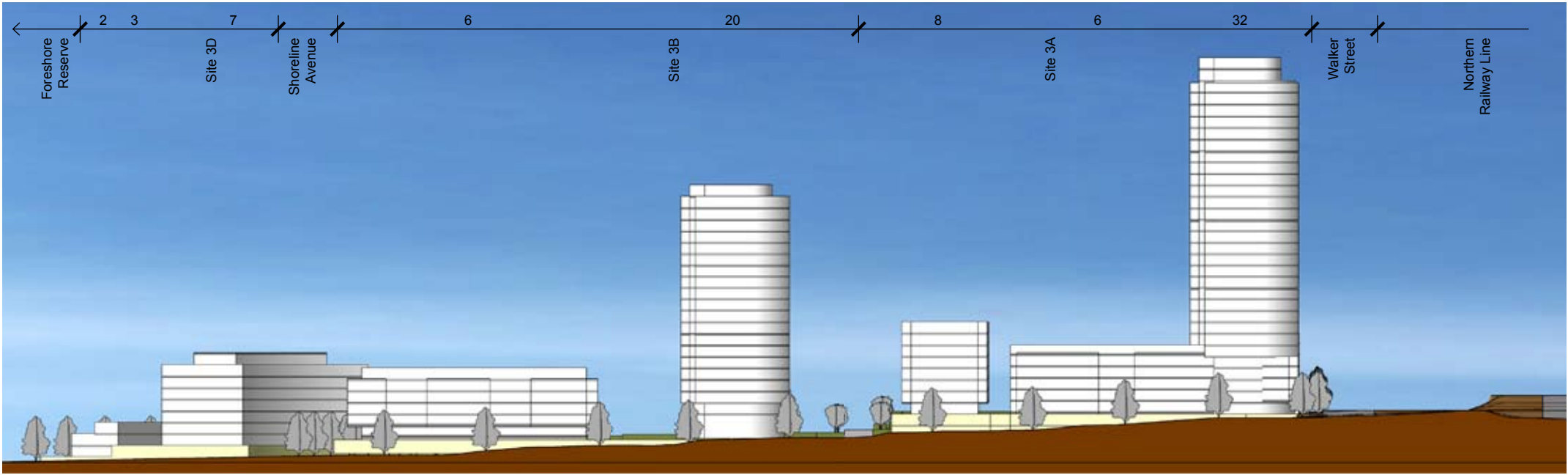


Fig 14 - Revised Section B-B Scale 1:1500 @ A3



5.0 Built Form

Sections

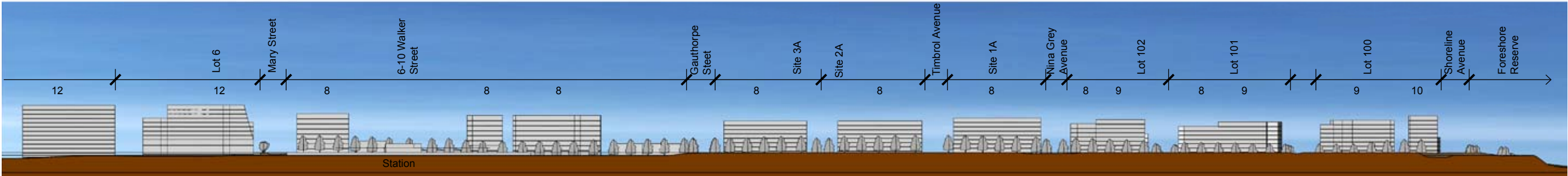


Fig 18 - Existing/approved Section D-D Scale 1:3000 @ A3

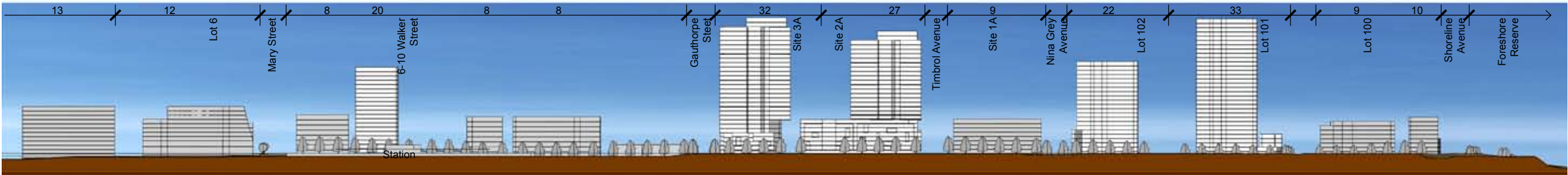


Fig 19 - Revised Section D-D Scale 1:3000 @ A3

0 10 40 100 200m



Fig 20 - Section locations

5.0
Built Form

Overview perspectives



Fig 21 - Perspective locations



Fig 22 - 3D perspective A - View of the existing/approved development scenario looking south east



Fig 23 - 3D perspective A - View of the revised development scenario looking south east

5.0 Built Form

Overview perspectives



Fig 24 - Perspective locations



Fig 25 - 3D perspective B - View of the existing/approved development scenario looking north west



Fig 26 - 3D perspective B - View of the revised development scenario looking north west

5.0 Built Form

Precinct perspectives



Fig 27 - Perspective locations

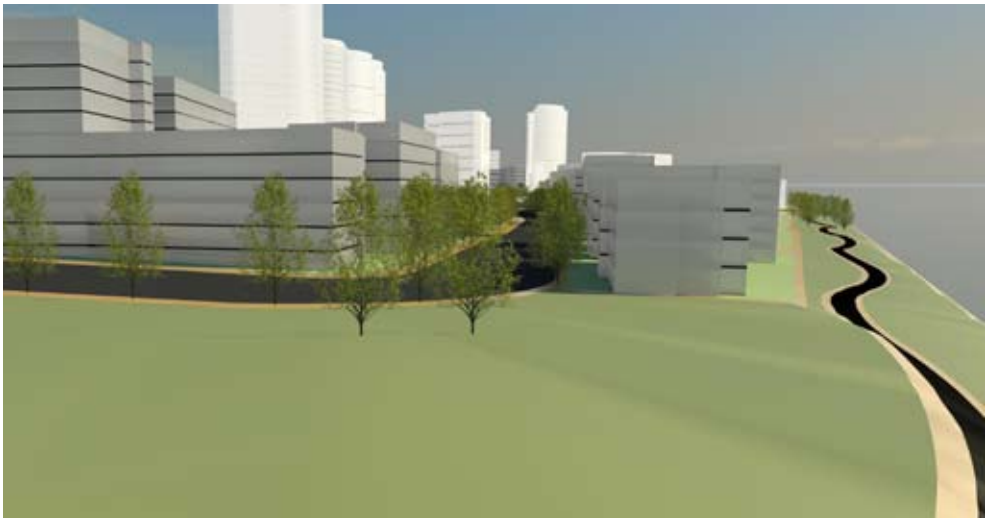


Fig 30 - VIEW C - 3D perspective view of the revised development scenario from Point Park looking south along Shoreline Avenue (centre) and the Foreshore Reserve (right)



Fig 28 - VIEW G - 3D perspective view of revised development scenario looking north from Marquet Street to the new local park and pedestrian walkway in Precinct B



Fig 29 - VIEW D - 3D perspective view of the revised development scenario looking north east over the new local park within Precinct C



Fig 31 - VIEW E - 3D perspective view of the revised development scenario looking east over the new local park within Precinct B



Fig 32 - VIEW F - 3D perspective view of the revised development scenario looking west over the Railway Station to the new civic plaza space at Precinct D

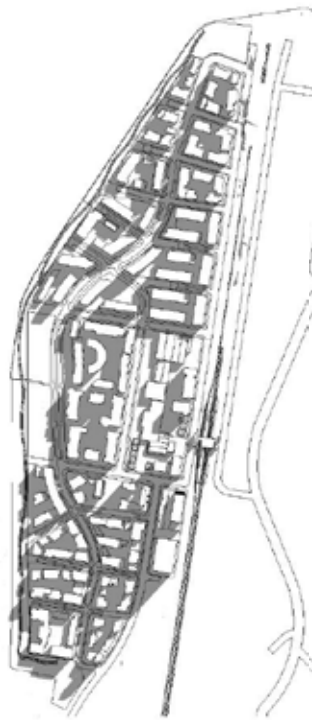
6.0 Public Benefit



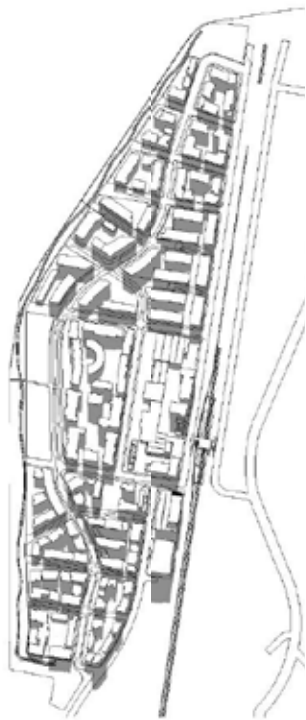
Fig 33 - Public benefits plan
The plan shows the location of additional public benefits achieved under the Rhodes West Master Plan 2009

7.0 Shadow Analysis

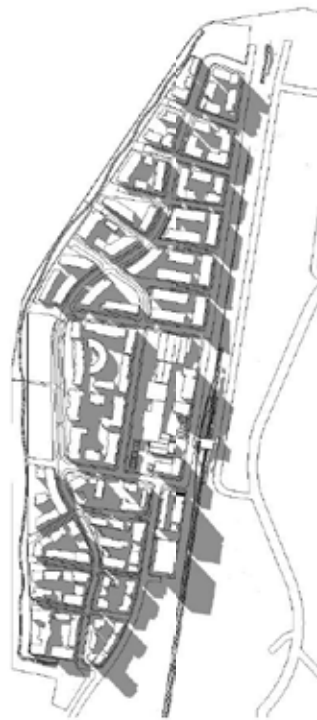
Existing/approved
Shadows in the morning at midwinter cover the majority of common courtyard open space within residential developments.



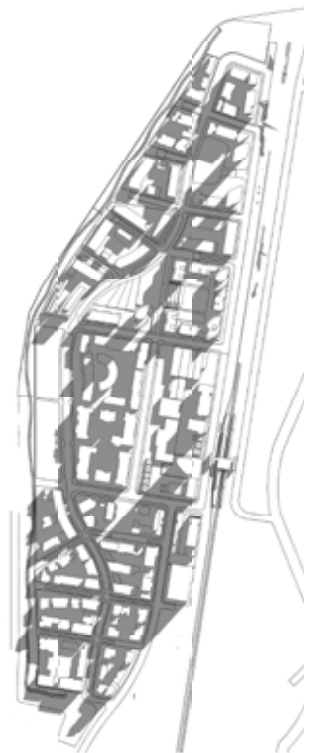
Existing/approved
Major of the common courtyard open spaces within residential developments are still in shade at midday during midwinter.



Existing/approved
The majority of private courtyard open spaces are in shadow throughout the afternoon at midwinter. Buildings fronting Walker Street cast a shadow over the railway corridor to the east and over part of the Rhodes Corporate Park.



Revised
No additional shadowing impacts will result from the Master Plan revisions on the Foreshore Reserve. Large areas of the new civic plaza and local parks will have sunlight access in the morning at midwinter.



Revised
New local parks will have good sunlight access at midday during midwinter due to the deletion of approved buildings and the reduction in the height of buildings to the north of these spaces.



Revised
Parts of the new civic plazas and local parks will receive sunlight access in the afternoon hours at midwinter.

Taller buildings along the eastern height axis of Walker Street will cast long narrow shadows. Shadows from buildings within Precinct B and C will start to be cast over the residential properties to the east on Blaxland Road from 1.20pm during midwinter. The revisions to Precinct A and D will cast long narrow shadows over parts of the commercial development at Rhodes Corporate Park.



Fig 34 - Shadows at 9am, 21 June (mid winter)

Fig 35 - Shadows at 12pm, 21 June (mid winter)

Fig 36 - Shadows at 3pm, 21 June (mid winter)

7.0

Shadow analysis

Existing/approved
Shadows in the morning at midwinter cover the majority of common courtyard open space within residential developments.



Existing/approved
Common courtyard open spaces within all residential developments are have sunlight access at midday during midwinter.



Existing/approved
The majority of private courtyard open spaces are have sunlight access afternoon at midwinter. Buildings fronting Walker Street cast a shadow over the full width of Walker Street.



Revised
No additional shadowing impacts will result from the Master Plan revisions on the Foreshore Reserve during the equinoxes. The new civic plazas in Precinct A and D will be in full sun and large areas of the new local parks in Precinct B and C will have sunlight access in the morning at midwinter.



Revised
New local parks and civic plazas will be in full sunlight access at midday during midwinter due to the deletion of approved buildings and the reduction in the height of buildings to the north of these spaces.



Revised
The new civic plaza in Precinct A and local parks in Precinct B and C will receive sunlight access in the afternoon hours at midwinter. The new civic plaza in Precinct D will receive some sunlight access.

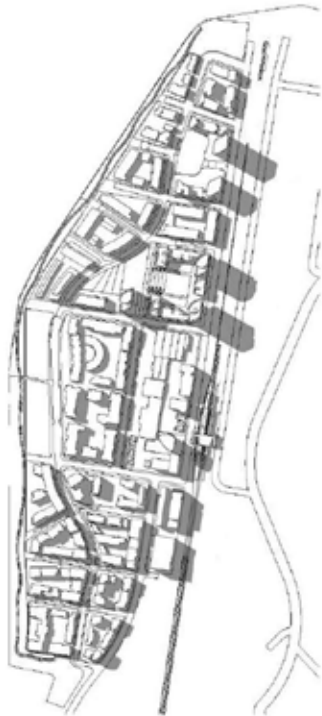


Fig 37 - Shadows at 9am, 21 March/21 September (equinox)

Fig 38 - Shadows at 12pm, 21 March/21 September (equinox)

Fig 39 - Shadows at 3pm, 21 March/21 September (equinox)