BUILDING TYPOLOGIES (Cont.)

The Concept Plan envisages two basic building typologies, the Slender Central Tower over Podium and the Perimeter Block form.

1. SLENDER CENTRAL TOWER OVER PODIUM

A Slender Central Tower over Podium is a multi unit high rise residential flat building with a central service core surrounded by units over a repetitive number of floors. It has an 8 storey base with a larger footprint as podium with smaller more slender 4 storey tower setback from the main building line. Podiums can be used as private communal green open spaces for the residents.

The tower is generally setback by 3 to 4m along the street front to present a human scale sized development along the edges. The height of the towers varies across the Concept Plan site as detailed on the Height Map.

Within its envelope, the tower has the freedom to vary in overall shape and facade design to create interest and variety within the broader master plan.

2. PERIMETER BLOCK APARTMENTS

A Perimeter Block is a residential flat building that wraps around the site boundaries enclosing a central communal landsaped open space.



FIGURE 42. EXAMPLES OF RESIDENTIAL TOWER LAYOUTS AND LANDSCAPED PODIUMS



FIGURE 43. EXAMPLES OF PERIMETER BLOCK RESIDENTIAL APARTMENTS. environmental assessment report | 07 January 2011 | REV G The width of the buildings are 25m from glass line to glass line.

The heights of the perimeter blocks vary from five storeys to nine storeys as shown in the height plan diagram.

This building typology is applied in Council's DCP and is reflected in the recent building forms in Shepherds Bay







33. BUILDING SETBACKS

LEGEND:



The Concept Plan building envelopes have been set back from all street frontages to retain human scale and maximise solar access in the public streets. A generous setback is also required to the foreshore consistent with nearby development.

Residential buildings are to be setback a minimum of 25m from Church Street consistent with relevant standards and The Department of Planning Interim Guidelines for Development near Rail Corridors and Busy Roads.



FIGURE 44. INDICATIVE BUILDING SETBACKS

34. OPEN SPACES

One of the main objectives of the Concept Plan is to consolidate development into taller, smaller building footprints where appropriate to maximise the amount of open space for the site and to enhance the existing natural areas. Approximately 4,125sqm of the site is to be dedicated as public open space. This is approximately 2,625sqm more open space than the base case under Council's DCP development scenario illustrated on **Figure 66** in Section F of this EA.

The landscape design vision is for an integrated residential/ parkland environment reflecting the natural history and culture of the site. Water usage and movement will be reflected throughout the landscape design in both public and communal spaces. Retention and rehabilitation of significant existing vegetation, integration with the natural riparian environment and creation of view corridors through existing and proposed open spaces are key components of the landscape design.

34.1 Public Open Spaces

The Concept Plan comprises a number of north-south public through-site pedestrian linkages to break up the development and enhance and strengthen foreshore access. The open space concept has been integrated with recent foreshore upgrades, adjoining open space network and riparian vegetation.

The public domain will consist of a number of public spaces that support passive and active recreation including childrens play equipment. The new neighbourhood will have access to small pocket parks, widened footpaths, pedestrian through-site links and large foreshore parks. The major open spaces along the waterfront provide opportunities for events which would encourage activity to return to the waterfront making the area vibrant, lively and people orientated.

The natural landform is recognised throughout the landscape design with split-level designs throughout. A large 9m cascade waterfall is proposed on the central promenade to define the upper and lower levels of the site and provide a dramatic entrance to the proposed waterfront plaza at the waters edge. The main plaza area at the base of the waterfall will comprise outdoor dining areas, landscaping and radial water features.

34.2 Communal and Private Open Spaces

Central communal spaces will be provided to each building in the new development. These spaces will be accessible and will be high quality attractive spaces that will comprise landscaping, paving, lighting and water features. The communal spaces will be linked to the public domain and defined by fencing and landscaping.



FIGURE 45. LANDSCAPE PLAN

34.3 Concept Plan - Public Domain 'Fit'

The Concept Plan proposes approximately 10,000sqm of the site to be public domain, incorporating approximately 4,125sqm of new parkland to be dedicated to Council.

The proposed public domain areas within the Concept Plan have been designed to take into account the foreshore location of the site, changing demographics, existing open spaces in the locality, the findings of Council's Plan - *"Parks on Track for People 2025"*, the Ryde Bicycle Strategy and Regional Bike Plan, the Ryde Riverwalk Strategy and discussions with Council officers and Councillors.

The Concept Plan Landscape Master Plan proposes a range of formal and informal parks for passive recreation, children's play, cycle and pedestrian links opening up vistas, walking and cycling. In addition, it is proposed to remove rubbish from the foreshore mangroves and retain the majority of native trees on the site. After discussions with Council it was decided not to include any formal sporting parks due to the proximity of the Meadowbank Park. Refer **Annexure 13** for copy of Landscape Master Plan. The following is a summary of the findings of Council's Parks Plan which informed the design and type of parks proposed.

Council's Parks Plan 2025

As reported in Council's Plan - "*Parks on Track for People 2025*", places for recreation and leisure are important to the well-being and lifestyle of the residents of the City of Ryde and specifically in Shepherds Bay as the new residential area continues to evolve. Open spaces provide not only areas for relaxation and exercise but also play an important role in creating a sense of community. It is important that open spaces provided in an area meet the needs of the specific local community first. Council's Plan addresses the provision of public open spaces in the LGA into the future through an assessment of trends in physical activity, changing demographic profile projections to 2025 and community consultation responses.

The City of Ryde has a large amount of open space, with 3.5 hectares per 1000 people, exceeding the widely used industry benchmark of 2.83 hectares per 1000 people. However, the LGA is deficient in children's play space against accepted standards. The LGA is also located adjacent to significant parklands Lane Cove National Park, Sydney Olympic Park and Bicentennial Parklands, with surrounding LGA's providing further substantial passive and active open spaces.

The Plan recommends at least one formal garden be established in every neighbourhood to cater for the ageing population. Visual parks, at major junctions and vistas are also recommended, together with the completion of the foreshore reserve area at Shepherds Bay linking to other foreshore parklands along the Parramatta River. The Plan notes that in terms of economic sustainability, funding for parks and recreation in Ryde must compete with other facilities provided for the community by Council. This sentiment was stressed in recent discussions with Council's General Manager.

The Concept Plan site is located in close proximity to the 26 hectare Meadowbank Park. This large foreshore park forms part of the Ryde Riverside Reserve and is used predominantly for active sports but does include children's play areas, walking trails, areas for passive recreation and picnic and barbecue facilities. As recommended in the Concept Plan, Council's Plan recommends the passive recreation facilities in this park be "substantially expanded" due to its regional value and waterfront, noting:

"large components of the community use playgrounds, passive open space, picnic and barbecue facilities and walking / cycling trails at far greater rates than sporting facilities."

The Concept Plan Landscape Master Plan supports Council's vision for parks in the LGA contained in their Plan is as follows:

"The parks and open spaces of Ryde will be multipurpose facilities providing sustainable leisure and recreational opportunities to meet the changing needs of the community.

Environmental protection and sustainability principles will be observed in relation to the management and administration of parks and open spaces, thus ensuring that natural resources (including water, soil, flora, fauna and scenic quality) are conserved."

Demographic Profile Implications for Open Space Needs

Existing population and projections for the Ryde LGA between 2006 and 2026 cited in the Plan indicate:

- A decrease in the population aged 0 19;
- Substantial growth in population aged 50-69 (39.4% increase);
- Substantial growth in population aged 70 years or more (36.2% increase);
- Culturally diverse community with slightly higher proportion of people born overseas that Sydney average, with the largest group being from China;
- Meadowbank will see an increase in the number of people aged 20-44 years; and
- Trend towards higher density dwelling types in areas such as Meadowbank.

On the basis of this profile and other financial pressures on Council the report adopts the option of intensifying the use of existing sporting fields and other open spaces. In this regard, ongoing maintenance of parklands is a significant budgetary load on Council every year.

General Recreation Participation Trends and Council advice

The Plan notes that the ageing demographic suggests residents and visitors need more informal open spaces as proposed in the Concept Plan, where semiorganised activities and leisure pursuits can take place, such as walking, cycling, Tai Chi, informal play, picnic etc within easy walking distance of residences. The Plan also recognises the need for more children's play areas as the MEA is redeveloped. The Plan also notes the need for parks to be accessible to people of all disability levels.

Council recognises that City of Ryde community value highly the conservation of natural flora and fauna habitats. Accordingly the preservation of native bushland and rehabilitation of degraded areas of bush and foreshore area is a high priority of Council.

Recommended Development Principle

Open spaces across the Concept Plan site are to be provided generally in accordance with the Landscape Plan and Report at **Annexure 13**.

35. VEHICULAR ACCESS AND STREETS

LEGEND:



The existing grid-style road typology has been adopted with additional connections proposed in compliance with Council's DCP. This will facilitate better connections, greater legibility and improved access for vehicles, pedestrians and cyclists.

Street designs are to generally comply with Section 5 (Meadowbank) of Council's Public Domain Technical Manual.

35.1 Existing Streets to be Upgraded

The urban renewal project will involve upgrading landscaping of the streets to improve the attractiveness and usability of the public domain and strengthen linkages. Improved streets will be an important element in the creation of character and sense of place for the new residential neighbourhood.

35.2 New Roadways or Realignments Proposed

The proposed upgrading and extension of Nancarrow Avenue to Belmore Street will be integrated with the streetscape upgrades of the adjoining roads within the site. The new roadway will provide significant benefits including strengthening east-west connections and improving access, circulation, legibility and safety.

35.3 Provision of Street Lighting

Street lighting will be provided to streets, pathways, cycleways, public open spaces and communal areas in accordance with Council's Public Technical Domain Manual (Section 5 - Meadowbank).

Refer to road designs at **Annexure 2** and Landscape Plan at **Annexure 13**.

Recommended Development Principle

Streets and accessways in the Concept Plan site are to be provided generally in accordance with the Access Plan at **Figure 46**.



FIGURE 46. VEHICULAR ACCESS AND PUBLIC TRANSPORT PLAN

36. SIGNIFICANT VIEWS

LEGEND:



The sloping land form affords excellent views of Shepherds Bay and beyond to properties in the area. It is important that appropriate view sharing is maintained in the redevelopment of the subject lands.

The subject lands are highly visible from the Parramatta River and its foreshores, particularly from the eastern waterways and the Ryde Bridge beyond. It is also visible to some extent from the northern end of the Rhodes peninsula. Council's DCP identifies significant views to be retained in the redevelopment of the Concept Plan site. Currently a number of these views are blocked by existing industrial buildings.

One of the primary objectives of the Concept Plan is the protecting of existing and maximising additional views to Shepherds Bay and beyond from within the Concept Plan site and the surrounding area.

Recommended Development principle

View corridors identified on **Figure 47** Significant View Corridors are to be protected or created in any redevelopment within the Concept Plan site.



FIGURE 47. SIGNIFICANT VIEW CORRIDORS

37. PEDESTRIAN WAYS, CYCLEWAYS AND SHARED ZONES

LEGEND:



The Concept Plan requires the provision of clear, legible pedestrian access through the site. Four (4) north-south pedestrian spines are provided through the new public open spaces and roads. These have been designed to provide attractive and direct linkages through the development and connect to the east-west pathways which run along Constitution Road, Nancarrow Avenue and the foreshore. The extension of the foreshore pedestrian and cycle connections across the foreshore park frontage will complete the link as planned in Council's Riverwalk Plan. This will provide direct off-road access to a number of existing parks along the foreshore, Meadowbank Ferry wharf and beyond. The openness of the paths and their location close to residential development and roads will create opportunities for passive surveillance and maximise the safety of public domain users. At night lighting will be provided to pedestrian paths to enhance safety.

The development of a shared path/ cycleway through the site along the foreshore linking the development to the existing network and public transport will help to promote alternate modes of transport. The installation of cycle racks/ bicycle rooms in the buildings and open spaces in and around the development will encourage a healthy lifestyle.

Recommended Development Principle

Pedestrian ways, cycleways and shared zones across the Concept Plan site are to be provided generally in accordance with the Pedestrian and Cycle Access Plan and Report at **Figure 48**.



FIGURE 48. PEDESTRIAN AND CYCLE ACCESS PLAN

38. INTERFACE OF THE PROPOSED DEVELOPMENT AND PUBLIC DOMAIN

Perspective Views:



FIGURE 49. INDICATIVE PERSPECTIVE VIEW OF NANCARROW AVENUE

39. FLOODING

A number of areas within the Concept Plan site are subject to localised flooding. This issue has been taken into account in the design of the building envelopes, floor levels and reshaped topography and is addressed in the engineering reports at **Annexures 16 and 17**.

40. STORMWATER MANAGEMENT

Council's existing area-wide stormwater infrastructure in the area is inadequate and in need of upgrading between Constitution Road and the waterfront.

A Stormwater Management Plan has been prepared for the Concept Plan site and Stage 1 Project which makes recommendations for infrastructure upgrading required to accommodate the new development envisaged in the concept Plan and Stage 1 Project. Refer Integrated Water Management Plans at **Annexure 17**.

The benefits of the proposed stormwater management include:

- a reduction in environmental impacts on the riparian vegetation along the foreshore of the site (including debris which is washed downhill)
- improved water quality for stormwater entering the Parramatta River
- improved flood mitigation
- removal of current risk of flood inundation of private properties in Ann Thorn Park

Recommended Development Principle

Stormwater upgrades in the Concept Plan site are to be provided generally in accordance with the Integrated Water Management Plan and stormwater Management Plan at **Annexures 2 and 17**.

41. SAFETY BY DESIGN

The Concept Plan has incorporated Crime Prevention through Environmental Design (CPTED) principles and strategies to minimise risk. A Crime Risk Assessment Report has been prepared by PLACE Design Group, refer to **Annexure 7**. The report addresses surveillance (passive and active), access control, territorial re-enforcement and space management for both the Concept Plan and Stage 1 Project.

It is recommended that a Crime Risk Assessment accompany all applications for the construction of each development stage of the Concept Plan.

42. PUBLIC ART

Public art is a key component of the Concept Plan that will contribute to creating a character for the new neighbourhood. The Ryde Riverwalk Master Plan provides a comprehensive guide to the future development of the foreshore and makes recommendations on the use of public art in the landscape to interpret the colourful early uses of Shepherds Bay. This has been incorporated into the Landscape Plan for the site, refer to **Annexure 13**.

43. UTILITIES

Underground utility lines will be installed throughout the development. Consultation with Energy Australia has confirmed that underground cabling is feasible on the site. The benefits of installing underground cabling include improved sight lines, better streetscape treatment and enhancement of site aesthetics.

A Utility Services Report is attached as Annexure 20.