

An architectural rendering of a modern residential development. The image shows several multi-story apartment buildings with a mix of white, grey, and brown facades. Large glass windows and balconies are prominent. The buildings are set against a clear blue sky with light clouds. In the foreground, there are green trees, a paved walkway, and a few people walking. A white car is parked on the right side. The overall scene is bright and sunny.

Environmental Impact Assessment

100 Bennelong Parkway, Sydney Olympic Park

June 2014

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Associate Director	Ian Cady
Senior Consultant	Alaine Roff
Job Code	SA5259
Report Number	SA5259_EIS

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Executive Summary

This Environmental Impact Statement (EIS) has been prepared on behalf of Karimbla Construction Services Pty Ltd (the proponent). It accompanies a State Significant Development application for demolition of the existing commercial/light industrial development on site and construction of a new residential development at No. 100 Bennelong Parkway, Sydney Olympic Park (hereafter referred to as the subject site). The subject site is identified in the Sydney Olympic Park Authority (SOPA) Master Plan 2030 as Lots 67A and 67B.

The proposal comprises two residential buildings, a child care centre, ground level and basement car parking and extensive landscaping (and new roads through the site being designed and constructed by SOPA). The development has a capital investment value (CIV) of more than \$10m and is located in Sydney Olympic Park. It is therefore a State Significant Development (SSD) for which the Minister is the consent authority, pursuant to State Environmental Planning Policy (State and Regional Development) 2011.

The SSD application is supported by specialist technical studies provided in the appendices of this report. These technical studies were undertaken to inform the design of the proposed works in the context of future land uses, urban structure and built form and to assess potential environmental impacts.

Consultation has been undertaken with a number of authorities in respect to the proposal, including SOPA and Auburn Council whose comments have been incorporated into the design.

The proposal has been assessed against the planning controls and principles within the applicable environmental planning instruments and relevant policies and guidelines consistent with the Director General's Requirements (DGRs) for the SSDA. The proposal has been designed to mitigate any potential impacts on the site and surrounding environment.

SITE AND CONTEXTUAL ANALYSIS

The subject site is known as No. 100 Bennelong Parkway, and is legally described as Lot 84 in DP 855929. The site is located within Sydney Olympic Park, which includes 430 hectares of open space, recreation areas, sporting and recreational facilities, wetlands and waterways. Since the 2000 Olympic Games, Sydney Olympic Park has developed to become a vibrant and integral suburb in Sydney.

The site contains a two storey commercial/light industrial building and car parking occupied by Jemena, which is a gas, water and electricity Company. Development in the surrounding area is characterised predominantly by residential tower development, commercial, sporting and entertainment uses. In particular, to the west on Australia Avenue is Site 3, which is currently under construction with residential tower buildings known as Australia Towers. These uses are located in designated precincts within Sydney Olympic Park. The site is in the Parkview Precinct.

DIRECTOR GENERAL'S REQUIREMENTS

The Director General's Requirements (DGRs) were issued 27 November 2013. A copy of the DGRs is included at **Appendix A**. A summary of the DGRs is provided in Section 3 of this report. The requirements are identified and a response to each is provided in Table 1 in Section 3, including the relevant technical/specialist report submitted with the EIS.

PROJECT OVERVIEW

The key components of the proposal include the following:

- Demolition of the existing building and car parking on the site;
- Construction of two buildings: Building A/B is located on Lot 67A and is eight to ten storeys; and Building C is on Lot 67B and is four to eight storeys.
- A total of 342 residential units, including 132 one bedroom units, 200 two bedroom units and 10 three bedroom units.

- A child care centre for 90 children.
- Two new vehicle roads, being built by SOPA, and a pedestrian road, consistent with the SOPA Master Plan 2030.
- A total of 504 basement car parking spaces, including 34 accessible spaces provided for residents and 3 spaces for visitors and the child care.
- Extensive communal open spaces and deep soil areas. Deep soil area totals of 2,140m² and communal open space areas total 2,442m².
- A total Gross Floor Area of 30,080m², which equates to an FSR of 2:1.

STATUTORY AND STRATEGIC FRAMEWORK

The following planning instruments and policy documents are relevant to the subject site and the proposed development:

- State Environmental Planning Policy (State and Regional Development) 2011.
- State Environmental Planning Policy (Major Development) 2005.
- State Environmental Planning Policy (Infrastructure) 2007.
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
- State Environmental Planning Policy No. 55 - Remediation of Land.
- State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development.
- Sydney Regional Planning Policy (Sydney Harbour Catchment) 2005.
- Auburn Local Environmental Plan 2010.
- Sydney Olympic Park Master Plan 2030.
- Sydney Olympic Park, Access Guidelines 2008.
- Sydney Olympic Park Major Event Impact Assessment Guidelines.
- NSW 2021.
- Draft Metropolitan Strategy for Sydney.

The principle site specific controls are contained in Schedule 3, Part 23 of SEPP Major Development and the Sydney Olympic Park Master Plan 2030.

A detailed assessment of the proposed development against the relevant statutory requirements and policies is provided in Sections 5 and 6 of this report.

ENVIRONMENTAL PLANNING ASSESSMENT

The EIS addresses the key issues identified in the DGRs and other relevant considerations. The proposed development represents a positive development outcome for the site and surrounding area for the following reasons:

- The proposal is generally consistent with the precinct controls contained in the SOP Master Plan 2030.
- The proposal will replace a redundant light industrial building with a residential development that will assist in creating a compact urban neighbourhood with a vibrant and leafy street character.
- The proposed network of new streets will assist in transforming the precinct into a walkable neighbourhood with good connections to the surrounding parklands.
- The proposal is consistent with the applicable local and state planning policies and complies with the relevant planning controls. It also satisfies the desired quality outcomes sought by SEPP 65 and the Residential Flat Design Code (RFDC).
- The design responds positively to the site conditions and the surrounding built environment.
- The proposal has been designed to have minimal environmental impact in terms of residential amenity, views, solar access and privacy.
- The proposal provides a significant number of new dwellings in a high density environment close to public transport options. This is consistent with best practice urban design and will assist in achieving housing targets set by the State Government.
- The proposal represents a positive design outcome and maintains the architectural quality of residential flat development within Sydney Olympic Park.
- The site's proximity to the high frequency public transport services of Sydney Olympic Park makes it a strategically appropriate location for high density residential development.

In our opinion, for the reasons outlined above and in the remainder of this report, the proposal is appropriate for the site and SOP.

CONCLUSION

In accordance with the matters for consideration listed in the Director General's requirements:

- The proposal is appropriate for the site and positively contributes to the emerging character and built form of Sydney Olympic Park.
- The proposal is generally in accordance with the provisions of the State and local planning policies applying to the site.
- The proposal will not give rise to any unreasonable environmental impacts in the locality.

Accordingly it is recommended that the Minister for Planning approve the proposed development.

1 Introduction

This Environmental Impact Statement (EIS) is submitted to the Department of Planning and Infrastructure in support of an application for State Significant Development (SSD) for a new residential development at No. 100 Bennelong Parkway, Sydney Olympic Park.

State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) identifies development which is declared to be SSD. Under Clause 2 of Schedule 2 of SRD SEPP, development within Sydney Olympic Park with a capital investment value (CIV) of more than \$10 million is identified as SSD. As the proposed development will have a CIV of approximately \$92,764,274, it is SSD. A copy of the Quantity Surveyor's report is attached at **Appendix B**.

The EIS has been prepared by Urbis on behalf of Karimbla Constructions Services (NSW) Pty Ltd (the proponent). The EIS relies on the Architectural Drawings prepared by Turner Architects, and other supporting technical information appended to the report (see Table of Contents).

This report describes the site, its environs, the proposed development, and provides an assessment of the proposal in accordance with the Director-General's Requirements (DGRs) issued for the proposal.

1.1 PROJECT OVERVIEW

The SSD application seeks approval for the demolition of the existing development on site and construction of new high density residential development. The proposal comprises demolition works, site remediation, subdivision and construction of three residential buildings with associated basement car parking and landscaping works. A detailed description of the proposal is provided in Section 4 of this report.

1.2 PROJECT OBJECTIVES

The proposal is seeking to provide high quality housing in a higher density environment, consistent with the Sydney Olympic Park Master Plan 2030. The specific objectives of the proposed residential development include:

- Promote well-designed residential accommodation for future residents of Sydney Olympic Park and assist in meeting housing targets set by the State Government.
- Provide a variety of dwelling types, including one, two and three bedroom units, to encourage a diverse and sustainable community.
- Create a development that is an appropriate size and scale that fits within the context of the desired future character of the precinct and surrounding development.
- Protect and enhance the amenity of open spaces and key views into and from the site and ensure that the built form will have minimal or no impact on adjacent development and parklands.
- Promote ESD and WSUD principles through the use of thoughtful urban design, technologies and sustainable materials.
- Provide new streets to reinforce and supplement the existing street hierarchy and create a connected, safe and legible public domain.
- Provide landscaping to enhance the environmental amenity of the site and precinct through thoughtful landscape design.
- Provide highly accessible accommodation close to public transport, facilities, services, recreation facilities and education establishments.

1.3 STRUCTURE OF THIS REPORT

The EIS provides the following sections:

- **Section 2 – Site and Contextual Analysis:** Provides a description of the site, the regional and local context and an assessment of the opportunities and constraints presented by the site.
- **Section 3 – Director General’s Requirements:** Provides a summary of the DGRs and a summary response to each requirement.
- **Section 4 – Development Description:** Provides a description of the proposed development.
- **Section 5 – Statutory and Strategic Context:** Provides a detailed review of the proposal against the State and local planning framework.
- **Section 6 – Policies:** Provides a review of the proposal in light of the applicable strategic policy documents.
- **Section 7 – Key Issues:** Provides an in-depth assessment of the existing environment, the potential impacts and mitigation measures for each of the key criteria in the SSDA DGRs.
- **Section 8 – Consultation:** Describes the consultation undertaken with the relevant agencies and service providers.
- **Section 9 – Conclusion.**

2 Site and Contextual Analysis

This section will describe the site, existing built form and the local context.

2.1 THE SITE

The subject site is located between Bennelong Parkway to the east and Australia Avenue to the west and is known as No. 100 Bennelong Parkway, legally described as Lot 84 in DP 855929 (see Figure 1 and Survey at **Appendix C**). The site is within the Auburn Local Government Area.

The site is irregular in shape and bound by Bennelong Parkway and the curved railway line to the west. The site has a frontage to Bennelong Parkway of 106.85m and a total area of approximately 1.504 hectares (see Figure 2).

2.2 LOCAL CONTEXT

Sydney Olympic Park is approximately 14 kilometres west of the Sydney CBD and 8 kilometres east of the Parramatta CBD. It has been identified as a specialist economic centre in the NSW Government's Metropolitan Strategy for Sydney. The Draft West Central Sub Regional Strategy has identified job and dwelling unit targets for Sydney Olympic Park.

Covering 640 hectares, Sydney Olympic Park includes 430 hectares of open space, recreation areas, sporting and recreational facilities, wetlands and waterways. The Park's green spaces and parklands are inhabited by threatened species, protected marine vegetation and endangered ecological communities.

The park has undergone extensive environmental remediation that has converted the previously industrial lands into a precinct of parklands, ecosystems and leading urban design. Since the 2000 Olympic Games, Sydney Olympic Park has developed to become a vibrant and integral suburb in Sydney with sustainability at the forefront of all decision-making affecting design, construction, and management of the built environments. Water recycling, solar energy and sustainable materials are key elements of existing and future design within the Precinct.

The Sydney Olympic Park Master Plan 2030 provides a vision for the sustainable development of Sydney Olympic Park. The Master Plan splits the town centre into nine precincts (see Figure 3). The precinct boundaries fall along natural edges created by the main streets, the parklands and surrounding suburbs. The subject site is located in the Parkview Precinct on the eastern edge of Sydney Olympic Park. Parkview will have direct links to parklands, and a new network of streets will create a pedestrian oriented residential neighbourhood. Parkview will be characterised by a transition in scale from larger development along Australia Street to lower built form along Bennelong Parkway, which connects with the parklands.

2.3 LAND CHARACTERISTICS

The topography of the surrounding land is characterised by undulating terrain with low hills to the west and low lying areas to the east. The site is located within the lower slopes of a hill and results in a moderate slope east towards the Bennelong Parkway frontage.

Turner Architects have provided an analysis of the opportunities and constraints of the site in the Architectural Drawings (**Appendix D**).

2.4 EXISTING LANDSCAPING

The site is mostly covered with structures and hardstand, with some landscaping around the perimeter and throughout the car park. The site contains 80 individual trees and five stands (clusters) of trees. The location, species and condition of the existing landscaping has been assessed in an Arboricultural Assessment, prepared by Tree and Landscape Consultants (TALC) and attached at **Appendix E**.

FIGURE 1 – SITE LOCATION, WITHIN SYDNEY OLYMPIC PARK



Source: Street Directory

FIGURE 2 – AERIAL LOCATION, WITHIN SYDNEY OLYMPIC PARK



Source: NSW Land and Property Information

FIGURE 3 – SYDNEY OLYMPIC PARK PRECINCTS



Source: Sydney Olympic Park Master Plan 2030

2.5 EXISTING BUILT FORM

The site contains a two storey commercial/light industrial building occupied by Jemena, an Australian infrastructure company that builds, owns and maintains a combination of electricity, gas and water assets. The existing development on the site is proposed for demolition. The existing building includes a narrow undercroft parking area on its eastern side and an attached warehouse on its western side. The building is bounded to the south by a two storey car park comprising a suspended upper concrete slab supported on concrete columns and masonry block walls. A large concrete hardstand area occupies the western portion of the site.

2.6 SURROUNDING DEVELOPMENT

Development in the surrounding area currently includes a mixture of predominantly residential, commercial, sporting and entertainment uses.

To the north of the site at No. 102 Bennelong Parkway is a four storey commercial building occupied by AREVA T&D Australia Limited, now registered as ALSTOM Grid Australia Limited. Alstom is an international company that provides power generation, power transmission and rail infrastructure. Further north are commercial, light industrial and educational uses in a business park style development surrounded by extensive parking and landscaped grounds.

To the east, on the opposite side of Bennelong Parkway, is Bicentennial Park which comprises extensive parklands and an education centre.

To the south, on the opposite side of Bennelong Parkway, is Bicentennial Park and Visitor Information centre. Further south is the Australia Avenue and Homebush Bay Drive crossover.

To the west is a curved railway line and grassed verge. Further west on the opposite side of Australia Avenue is Site 3, which is currently under construction with residential tower buildings known as Australia Towers (see Figure 4).

2.7 PUBLIC TRANSPORT

The Site is well serviced by public transport, as follows:

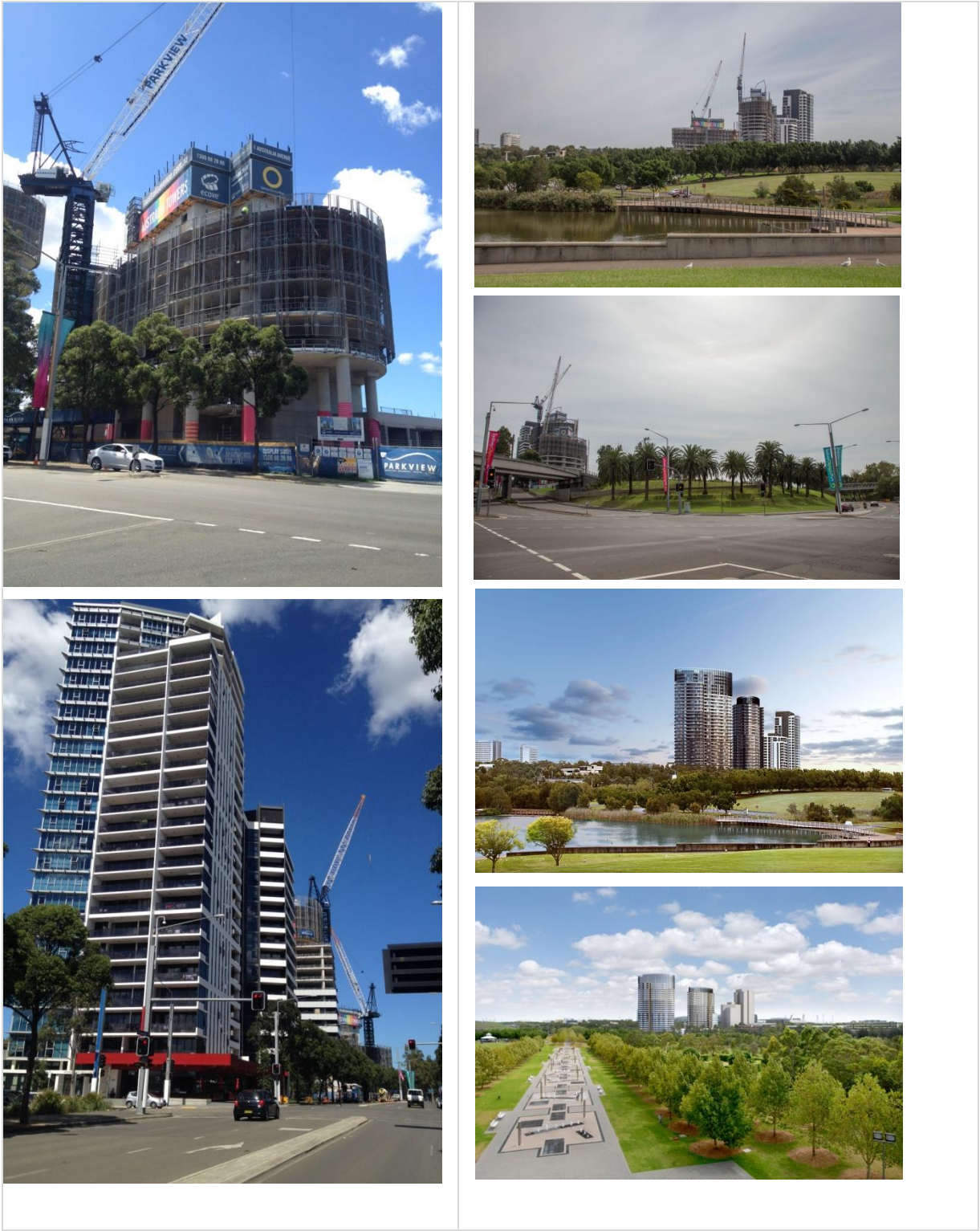
Rail: SOP rail services operate on a dedicated branch line off the Main Western Line with a rail loop to Olympic Park Station. Shuttle services to/from Lidcombe Station run every 20 minute on a regular basis. Infrequent direct services operate from Central Station via Strathfield for events at ANZ Stadium. Rail services are also available at Concord West Station (15 minute walk) and Strathfield Station (10 minute walk).

Bus: Sydney Buses operate a number of services through Sydney Olympic Park:

- Route 525 – Burwood to Parramatta via Sydney Olympic Park every ten minutes in the morning and afternoon peak.
- Route 401 – Lidcombe to Sydney Olympic Park Ferry Wharf every 20-40 mins in the morning and afternoon peak.
- Route 450 - Hurstville to Strathfield via Sydney Olympic Park every 15 minutes in the morning and afternoon peak.
- Route 534 – Chatswood to West Ryde via Sydney Olympic Park every 15 minutes in the morning and afternoon peak.

Ferry: Sydney Ferries operate to the Sydney Olympic Park Ferry Wharf at the end of Hill Road, which connects Rydalmere to Milsons Point and Circular Quay. Three services operate in the afternoon and morning peak and a 60 minute frequency at other times.

FIGURE 4 – AUSTRALIA TOWERS VARIOUS VIEWS UNDER CONSTRUCTION AND 3D PERSPECTIVES



3 Director General's Requirements (DGRs)

A request was made to the Minister for the Director General's Requirements (DGRs) under Section 75F of the Environmental Planning and Assessment Act 1979, for the preparation of an environmental assessment. The DGRs are addressed within this report and included in full at **Appendix A**. Table 1 below provides a summary of the Director General's Requirements and outlines where in the body of the report, or specialist consultants' reports, the DGRs are addressed.

TABLE 1 – DIRECTOR GENERAL'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the <i>Environmental Planning and Assessment Regulation 2000</i> .	EIS has been prepared in accordance with the Director General's Requirements and is structured accordingly.
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development. Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include: - adequate baseline data; - consideration of potential cumulative impacts due to other development in the vicinity; and Measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	EIS includes comprehensive assessment of environmental risks and impacts throughout the report.
The EIS must be accompanied by a report from a qualified quantity surveyor providing: - A detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; - An estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and - Certification that the information provided is accurate at the date of preparation.	Quantity Surveyor Report at Appendix B. \$92,764,274 400 construction and 5 operational jobs - Refer to QS Report at Appendix B.

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
Key Issues 1. Statutory and Strategic Context – including: Address the relevant statutory provisions applying to the site contained in all relevant EPIs, including:	
State Environmental Planning Policy (State and Regional Development) 2011.	Addressed in Section 5.1
State Environmental Planning Policy (Major Development) 2005.	Addressed in Section 5.2
State Environmental Planning Policy (Infrastructure) 2007.	Addressed in Section 5.3
State Environmental Planning Policy No 65— Design Quality of Residential Flat Development.	Addressed in Section 5.6
State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.	Addressed in Section 5.4
Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.	Addressed in Section 5.7
<i>Permissibility</i> Detail the nature and extent of any prohibitions that apply to the development.	The site is zoned B4 – Mixed Use. Residential accommodation, including ‘residential flat buildings’ are permissible in this zone with consent. The permissibility of the proposal is addressed in Section 5
<i>Development Standards</i> Identify compliance with the development standards applying to the site.	The proposal's compliance with the development standards are addressed in Section 5.5
<i>Contamination</i> Demonstrate that the site is suitable for the proposed use in accordance with SEPP 55.	The potential contamination has been addressed in a Contamination Report prepared by Consulting Earth Scientists included at Appendix N.
<i>Relevant Policies and Guidelines:</i> <i>Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP)</i>	
2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following:	
NSW 2021.	Addressed in Section 6.1
Metropolitan Plan for Sydney 2036.	Addressed in Section 6.2
Residential Flat Design Code.	Addressed in Section 5.6
Sydney Olympic Park Master Plan 2030.	Addressed in Section 6.3

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
Sydney Olympic Park Access Guidelines 2011.	Addressed in Section 6.4
Sydney Olympic Park Major Event Impact Assessment Guidelines.	Addressed in Section 6.5
Sydney Olympic Park Urban Elements Design Manual.	Addressed in Section 6.6
Sydney Olympic Park Environmental Guidelines.	Addressed in Section 6.7
Sydney Olympic Park Stormwater and Water Sensitive Urban Design Policy.	Addressed in Section 6.8
3. Built Form and Urban Design	
Address the height, bulk and scale of the proposed development within the context of the locality.	Built form, height and scale addressed in Section 7.1.
Demonstrate design quality, with specific consideration of the overall site layout, open spaces and edges, interface with the public domain, primary elements, gateways, façade, rooftop, massing, setbacks, building articulation, materials, choice of colours.	Public domain interface and landscaping addressed at Section 7.1.
Detail how services, including but not limited to, waste management, loading zones, and mechanical plant are integrated into the design of the development.	Services are addressed in Section 7.1.
Demonstrate how the design responds to any comments and recommendations made by the Sydney Olympic Park Authority Design Review Panel.	Consultation with Sydney Olympic Park Authority Design Review Panel addressed in Section 8.
4. Transport and Accessibility	
Detail access and parking arrangements at all stages of construction and measures to mitigate any associated pedestrian, cycle, public transport or traffic impacts.	Construction Access and Parking arrangements are addressed at Section 7.2.
Detail access arrangements at all stages of operation and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and cycle networks.	Operational access and impacts on public transport, pedestrian and cycle movements is discussed in Section 7.2.
Demonstrate how users of the development will be able to make travel choices that support the achievement of public transport modal split targets of Master Plan 2030.	Traffic impact resulting from the proposal described in Section 7.2 and Appendix J.

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
Detail existing pedestrian and cycle movements within the vicinity of the site and determine the adequacy of the proposal to meet the likely future demand for increased public transport and pedestrian and cycle access, including any connections to the new Parkview Drive or Bennelong Parkway.	Bicycle and pedestrian movements and integration with the surrounds is described in Section 7.2.
Describe the measures to be implemented to promote sustainable means of transport including public transport usage and pedestrian and bicycle linkages in addition to addressing the potential for implementing a location specific sustainable travel plan.	Sustainable public transport usage is addressed in Section 7.2 and Appendix J.
Demonstrate the provision of sufficient on-site car parking having regard to the availability of public transport and car parking controls of Master Plan 2030. <i>(Note: reduced car parking provision maybe supported in areas well serviced by public transport.)</i>	Parking adequacy assessed in Section 7.2, and Appendix J.
Estimate the total daily and peak hour trips generated by the proposed development, including accurate details of the current and future daily vehicle movements and assess the impacts of the traffic generated on the local road network, including intersection capacity and any potential need for upgrading or road works, having regard to local planning controls.	Traffic impact resulting from the proposal described in Section 7.2, and Appendix J.
<i>Relevant Policies and Guidelines:</i> - Guide to Traffic Generating Developments (RMS) - EIS Guidelines – Road and Related Facilities (DoPI) - NSW Planning Guidelines for Walking and Cycling.	
5. Environmental Amenity	
Provide information detailing the provision of solar access and the overshadowing impacts, acoustic impacts, visual privacy, view loss and wind impacts. A high level of environmental amenity must be demonstrated.	Amenity impacts, including solar access, overshadowing, view loss, privacy and acoustic addressed at Section 7.3.
6. Ecologically Sustainable Development (ESD)	
Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the design, construction and ongoing operation phases of the development.	ESD design is addressed in Section 7.4 and Appendix K.

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
Include a description of the measures that would be implemented to minimise consumption of resources, water and energy, including an Integrated Water Management Plan which details any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.	ESD design is addressed in Section 7.4 and Appendix K.
7. Major Events	
- Adequately address the impact of major events in the precinct as it relates to the proposed development within the Town Centre (SOP Major Event Impact Assessment Guidelines). - Demonstrate that the proposed development and future operation can work in major event mode. This will require clear understanding of the major event operating mode and implications for the development.	Impact of major events in the precinct and the proposal's ability to operate in major event mode is addressed in Section 7.5.
8. Noise and Vibration	
Identify the main noise and vibration generating sources and activities at all stages of construction, and any noise sources during operation. Outline measures to minimise and mitigate potential noise and vibration impacts on surrounding occupiers of land.	Acoustic impact and vibration of the proposal addressed on Section 7.6 and Appendix T. This report considers the impact of major event noise on the proposal.
Demonstrate how the proposed development aims to manage any impact from major event noise and noise from the rail corridor on the building occupants.	The impact of the adjacent rail line is addressed in Appendix T.
<i>Relevant Policies and Guidelines:</i> - NSW Industrial Noise Policy (EPA) - Interim Construction Noise Guideline (DECC) - Development Near Rail Corridors and Busy Roads (DoPI) - Assessing Vibration: A Technical Guideline 2006.	
9. Sediment, Erosion and Dust Controls	
Identify measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.	Addressed in Section 7.7 and Appendix U.

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
<i>Relevant Policies and Guidelines:</i> Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom) Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA)	
10. Utilities	
In consultation with relevant agencies, the existing capacity and any augmentation requirements of the development for the provision of utilities including staging of infrastructure shall be addressed.	Augmentation and requirements of the development for the provision of utilities is addressed in Section 7.8.
11. Staging	
Provide details regarding the staging of the proposed development (if proposed).	Section 7.9
12. Contributions	
Address any Contributions Plan and/or details of any Voluntary Planning Agreement.	Section 7.10
13. Flooding	
As assessment of any flood risk on site and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity.	Flood impact and other environmental impacts addressed in Section 7.11 and Appendix W.
14. Water Quality	
- Detail any drainage associated hydrological or ecological impacts on discharging stormwater into Bennelong Pond. - Identify the potential impacts of over shadowing on the Southern Water Quality Control Pond and impacts to the macrophyte beds and water quality improvement function.	Water quality addressed in Section 7.12 and at Appendix L and W.
15. Drainage	
Detail drainage associated with the proposal, including stormwater and drainage infrastructure.	Drainage addressed in Section 7.13 and Appendix L

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
16. Servicing and Waste	
Identify, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	- A Waste Management Plan has been prepared dealing with operational waste generated by the proposal in Section 7.14 and at Appendix X. - Construction waste is addressed in Appendix Y.
Plans and Documents	
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following:	All relevant drawings, diagrams and documentation under Schedule 1 have been provided and are attached to this submission in the Appendices.
Architectural drawings;	Appendix D
Plan of subdivision (if proposed);	Appendix H
Site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings;	Appendix C
Site analysis plan;	Appendix D
Shadow diagrams;	Appendix Q
Access Impact Statement;	Appendix O
View analysis/photomontage;	Appendix D
Stormwater Concept Plan;	Appendix L
Landscape Plan;	Appendix I
Public domain interface plan	Appendix L
Preliminary construction management plan, inclusive of a construction traffic management plan;	Appendices P and Y
Geotechnical and Structural Report; and	Appendix G
Schedule of Materials and Finishes.	Appendix D

DIRECTOR GENERAL'S REQUIREMENTS	COMMENT
Consultation	
During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with the Sydney Olympic Park Authority, including the Sydney Olympic Park Authority Design Review Panel. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.	▪ Consultation has been undertaken with SOPA, and the relevant agencies/service providers. ▪ Refer to Appendix V.
Further Consultation after 2 yrs.	
▪ If you do not lodge a development application and EIS for the development within 2 years of the issue date of these DGRs, you must consult further with the Director General in relation to the preparation of the EIS.	▪ N/A.

4 Development Description

4.1 OVERVIEW

Development consent is sought for the demolition of all existing structures on site and the construction of a new residential development. The proposal comprises construction of two residential buildings (with ground floor childcare centre), new roads, car parking and landscaping. The key features of the proposal include:

- Preparatory demolition and excavation.
- Subdivision.
- New pedestrian (and vehicular roads being built by SOPA) required under Sydney Olympic Park Master Plan 2030.
- Two residential buildings containing 342 dwellings and a child care centre for 90 children:
 - Building A/B (Lot 67A) is located on the western side of the site. Building A is a ten storey tower and Building B is eight storeys. Building A and B share a common structural wall and each building has its own lift core. The childcare centre is located on the ground level of Building B.
 - Building C (67B) is u-shaped building located on the east half of the site. The wings of the building are four storeys, stepping up to eight storeys along the proposed new road 4 frontage.
 - The childcare centre will accommodate 90 children with 15 staff and will cater to residents in the proposed development as well as the surrounding local community. The childcare centre provides a significant benefit to the area, particularly given the shortage of spaces across Sydney.
- 504 ground level and basement car parking spaces, including 30 spaces for the childcare centre;
- Landscaped area of approximately 3,455m², a 1,199 m² area of public space to the north of Building C and 2,140m² of deep soil.

The proposed architectural works are illustrated on the Architectural Plans prepared by Turner Architects and submitted under separate cover.

An Architectural Design Statement is submitted under separate cover (**Appendix F**).

4.2 DEMOLITION AND EXCAVATION

The existing structures are proposed to be demolished and will be undertaken in accordance with best practice standards and the conditions of consent. Waste minimisation and resource recovery will be employed during the demolition, consistent with ESD principles.

Excavation is required to accommodate the basement car park. The proposal involves excavation of fill, residual silty clays and weathered shale bedrock to a depth of approximately 11m (below Building B).

A Preliminary Geotechnical Assessment has been undertaken by JK Geotechnics to provide preliminary comments and recommendations on excavation conditions, shoring, retaining walls, footings and on-grade floor slabs (**Appendix G**).

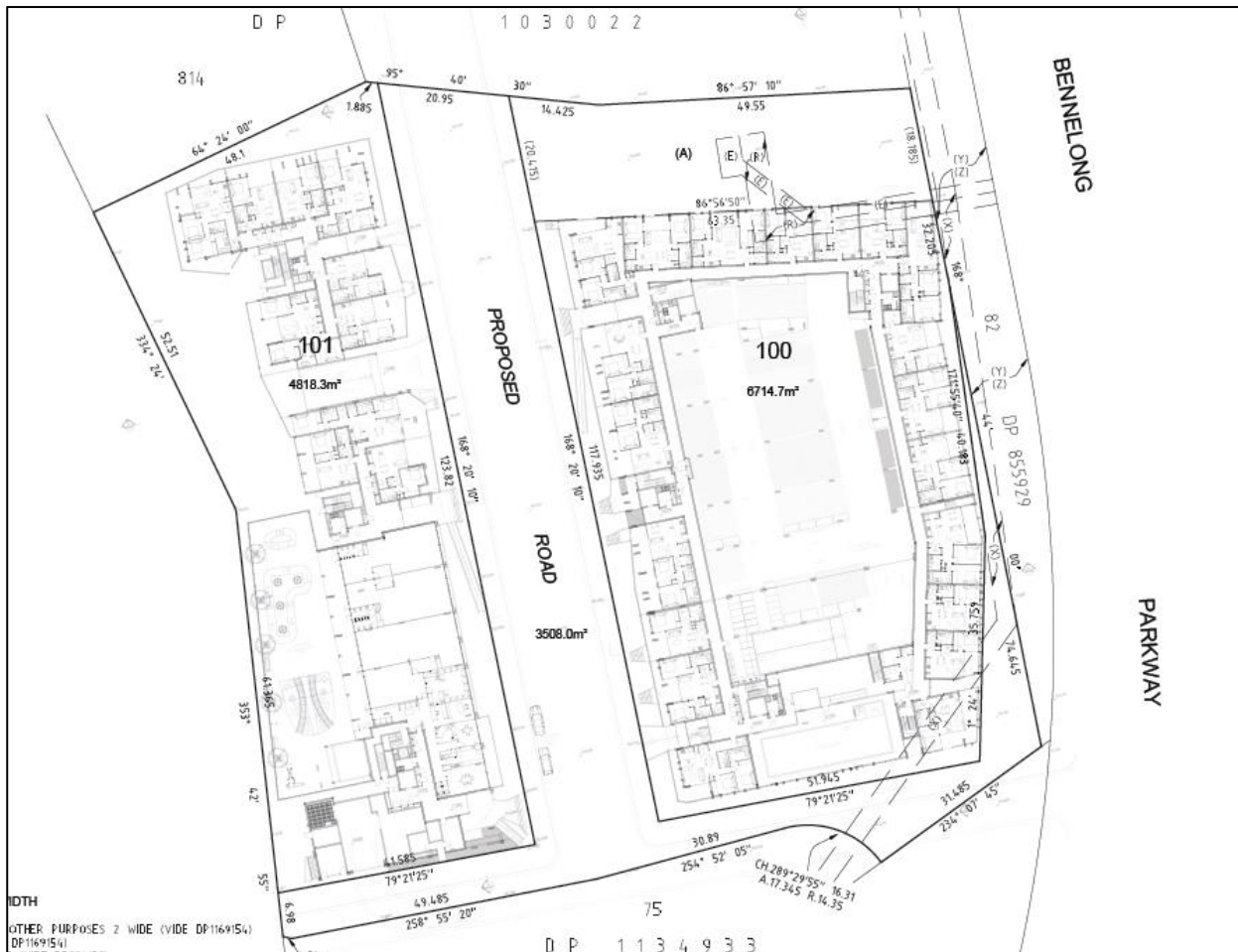
The Assessment considers that the site would be suitable for the proposed construction provided good engineering design, construction and maintenance practices are adopted. In order to maintain stability during excavation and in the long term, best practice methods will be adopted by the applicant. Further, excavation will be undertaken in accordance with the standard conditions of consent and the recommendations made by JK Geotechnics.

4.3 SUBDIVISION

Subdivision is proposed in accordance with the Subdivision Plan prepared by LTS Lockley (Figure 5 and **Appendix H**). The subdivision will create the following lots:

- Lot 100 6,714.7m²
- Lot 101 4,818.3m²
- Road 3,508m²

FIGURE 5 – SUBDIVISION PLAN



4.4 NUMERIC OVERVIEW

Table 2 provides a numeric overview of the proposal.

TABLE 2 – NUMERIC OVERVIEW

DEVELOPMENT ELEMENT	PROPOSAL
Site Area	15,042m ²
GFA	30,080m ²
Proposed Total FSR	2:1

DEVELOPMENT ELEMENT	PROPOSAL	
Building Height	Storeys	Metres/RL
Building A	10 storeys	32.4m (plant – RL 41.8), 29.9m (parapet - RL 39.5)
Building B	8 storeys	25.45m (lift overrun – RL 35), 23.7m (parapet - RL 33.2)
Building C	4-8 storeys	28.1m (plant – RL 36.2), 25.5m (parapet - RL 33.6)
Unit	Unit Mix	
1 bed	132 (39%)	
2 bed	200 (58%)	
Three bed	10 (3%)	
Adaptable (included)	35 (10%)	
TOTAL	342	
Parking	504	
Residential	474	
Visitor	86	
Accessible	37	
Childcare	30	
Bicycle	Bicycle storage provided in basement levels.	
Landscaping	4,654m ²	
Private Open Space	1,583m ²	
Communal Open Space	2,442m ²	
Deep Soil	2,140m ²	

4.5 BUILT FORM

The Sydney Olympic Park Master Plan includes an Illustrative Plan for the Parkview Precinct. The Plan envisages a long linear building on Site 67A and a U-shaped building on Site 67B. Site 67A is to have a maximum height of 10 stories for 30 per cent of overall building length. The remaining height should not exceed eight stories. Site 67B is to be a maximum of 4 stories at the Bennelong Road frontage stepping up to eight stories along the New Road 4 frontage.

The proposed built form is consistent with the Master Plan 2030 (see Figure 6). Building A/B is a long linear built form of eight stories to the south and ten stories to the north. Building C is U-shaped with four stories on the wings, stepping up to eight stories.

The proposed site layout and built form ensures that the precinct character is realised and the transition in scale from larger building forms on Australia Avenue to lower buildings along Bennelong Parkway is achieved.

FIGURE 6 – SITE CONFIGURATION



PICTURE 1 – SOPA MASTER PLAN 2030



PICTURE 2 – PROPOSAL

4.6 FAÇADE, MATERIALS AND FINISHES

A sample of materials and finishes is provided with the Architectural Drawings at **Appendix D**. A clear palette of materials has been selected to give definition to each building, while maintaining a holistic character (Figure 7).

FIGURE 7 – SAMPLE OF MATERIALS AND FINISHES



4.7 LANDSCAPING

The proposed landscaping includes many layers of private and communal open space, which responds to the need for a variety of different activities to occur within the site. The new pedestrian network links to the north and new street network and will provide amenity for the greater public and enhance the local pedestrian and cycle paths.

The proposal provides a significant amount of private and communal open space in the form of parks, courtyards and balconies. Generous communal areas are provided for residents and will offer significant outdoor amenity, as well as providing a pleasant outlook for residents in upper levels. A pool and barbeque will offer active recreation within the Building C courtyard. Private open space is provided to each unit in the development in the form of a ground floor terrace or balcony. Private open spaces are of generous depths that have been located to maximise light and views, whilst considering privacy.

Lot 67A comprises a deep soil area along the western boundary for communal use, which will be embellished with tree plantings. Lot 67B comprises a large open courtyard for communal use

In addition to onsite landscaping, there are nearby parks such as the Bicentennial Park immediately to the east of the site. The existing street trees will be protected and retained throughout project construction works.

A Landscape Plan has been prepared by Arcadia Landscape Architecture (refer to Figure 8). The key principles guiding the landscaping design as identified in the Landscape Plan are summarised as:

- Developing a positive identity.
- Activation and use all day and all year round.
- Adaptable and flexible outdoor spaces.
- Pedestrian scale with fine grain detail.
- Amenity for residents and visitors.
- Strong connections between spaces.
- Safe and accessible spaces for everyone, including people with disabilities.
- Maximise WSUD opportunities.
- Maximise solar access and wind impacts.

A copy of the Landscape Design is attached at **Appendix I**.

FIGURE 8 – CONCEPT LANDSCAPE DESIGN



Source: Arcadia Landscape Architecture

4.8 ACCESS

Vehicle access to Building A and B is provided by a 7m wide at grade driveway off proposed new road 4. The driveway is located at the southern portion of Building A and provides ramp access (1:5) to three levels of basement car parking. Vehicle access to Building C is via a 7m wide driveway off proposed new road 4. The driveway, located towards the eastern end of Building C, provides ramp access (1:20) to two levels of basement car parking. From parking level one, ramps provide access up to a ground level car park and down to car parking level two.

The location of these driveways in relation to nearby intersections and sight distances will comply with AS2890.1. Internal circulation paths and parking spaces comply with AS 2890.1 and AS 2890.1. Resident parking spaces will be clearly distinguished and separated from the visitor and child care spaces.

Loading docks for garbage trucks and service vehicles are provided at the rear of Building B off the new east-west road and in the basement below Building A/B. Swept path analysis of the loading areas is contained in the Traffic and Parking Report and these have confirmed its satisfactory operation.

Multiple pedestrian entry points off new road 3 are proposed to maximise access to the development. Building A has ramp access to a lobby and lift and stair core. Building B has two main ramp and stair access points. Building C has three similar access points. In addition, a fourth entry point to Building C is located on the northern elevation and provides pedestrian access to parking level one.

Further details of the access arrangements are provided in the Traffic and Parking Report at **Appendix J**.

4.9 NEW ROADS

The development works include a new pedestrian road to the north of Building C, as required by SOP Future Street Network. SOPA will design and construct the two new vehicular roads identified as New Road 3 and New Road 4 in Figure 6 and in the Architectural Drawings at **Appendix D**. Details of the roadways are provided in the Civil Drawings attached at **Appendix L**.

5 Statutory and Strategic Context

The following statutory planning policies and guidelines have been considered in the assessment of this proposal:

- State Environmental Planning Policy (State and Regional Development) 2011.
- State Environmental Planning Policy (Major Development) 2005.
- State Environmental Planning Policy (Infrastructure) 2007.
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.
- State Environmental Planning Policy No. 55 - Remediation of Land.
- State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development.
- Sydney Regional Planning Policy (Sydney Harbour Catchment) 2005.
- Auburn Local Environmental Plan 2010.

5.1 STATE ENVIRONMENTAL PLANNING POLICY (STATE AND REGIONAL DEVELOPMENT) 2011

State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) was gazetted on 1 October 2011, identifying various types of development and particular sites upon which certain development is defined as Stage Significant Development (SSD).

Schedule 2 of the SRD SEPP lists specific sites that where development has a capital investment value of more than \$10 million; works on those sites are state significant. Clause 2 of Schedule 2 identifies Sydney Olympic Park as a specific site. As the proposal has a CIV of over \$10 million, it is assessed as a SDD.

5.2 STATE ENVIRONMENTAL PLANNING POLICY (MAJOR DEVELOPMENT) 2005

State Environmental Planning Policy (Major Development) 2005 (SEPP Major Development) was gazetted on 25 May 2005 and aims to facilitate the development or protection of important urban sites of economic, environmental or social significance to the State for a public purpose.

Sydney Olympic Park is identified as a 'State Significant Site' in Schedule 3, Part 23 of SEPP Major Development. This schedule provides specific development controls for sites within Sydney Olympic Park site.

5.2.1 ZONING AND PERMISSIBILITY

The site is zoned B4 Mixed Use under Part 23 of SEPP Major Development. Clause 9 of Part 23 identifies the permissible and prohibited uses in the B4 zone. Clause 9(3) states that development for the purposes of roads and any other development not specified in subclause (2) or (4) is permissible with consent. As residential flat buildings are not specified in (2) or (4), the proposal is permissible with development consent.

5.2.2 OBJECTIVES

Clause 9(1) of Part 23 contains the objectives of the B4 zone. The relevant objectives and response to each is provided below.

- (a) To protect and promote the major events capability of the Sydney Olympic Park site and to ensure that it becomes a premium destination for major events.

Response: SOPA Master plan zones the site to permit a range of uses, including residential development, while other precincts will continue to develop as sport and entertainment precincts. This ensures that the major events capability of the Sydney Olympic Park is not impacted on.

- (b) To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.

Response: The residential and child care uses on the site are compatible and located in close proximity to public transport. The site is also well connected to roadways, walkways and cycle ways.

- (c) To ensure that the Sydney Olympic Park site becomes an active and vibrant town centre within metropolitan Sydney.

Response: The increased residential accommodation will bring with it young professionals and families, which will contribute to the economic vitality of the centre.

- (d) To provide for a mixture of compatible land uses.

Response: The residential use and child care centre are compliant land uses and permitted in the zone. Residential development is specifically envisaged in the B4 Mixed Use zone.

- (e) To encourage diverse employment opportunities.

Response: The child care centre will employ 15 staff. Further, employment opportunities will be created during the construction and on-going maintenance phases. New residents in the area will also support businesses in the surrounding precincts, potentially creating opportunities for new jobs.

- (f) To promote ecologically sustainable development and minimise any adverse effect of land uses on the environment.

Response: The proposal has been designed to have minimal environmental impact, as discussed in Section 7 of this report, and will employ ESD measures (**Appendix K**).

- (g) To encourage the provision and maintenance of affordable housing.

Response: The proposal is not required to provide any affordable housing. However, the proposal provides 342 dwellings, including 132 one bedroom apartments. Increased supply of dwellings will improve affordability in the area.

As detailed above, the proposed development is entirely consistent with objectives of the B4 zone.

5.2.3 HEIGHT

Clause 19 of Part 23 prescribes three height limits for the subject site. The height limit for Lot 67A is 30m. The height limit for Lot 67B is 15m at the Bennelong Parkway frontage, stepping up to 24m.

Under the SEPP, **building height** means “the vertical distance, measured in metres, between ground level (existing) at any point to the highest point of the highest habitable floor (including above ground car parking) of the building, excluding plant and lift overruns, communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.”

Building A has a maximum height of 29.9m and complies. Building B has a maximum height of 23.7m and complies. Building C has a maximum height of 25.5m to the top of the parapet at RL 33.6 and results in a minor non-compliance with the 24m height standard. However, Building C complies with the number of storeys in Master Plan 2030. This exception to the development standard is discussed in Section 5.2.5 of this Report.

5.2.4 FLOOR SPACE RATIO

Clause 20 of Part 23 prescribes a blanket FSR of 2:1 for the site.

The proposal has a GFA of 30,080m², and an FSR of 2:1m, which complies with the standard.

5.2.5 EXCEPTIONS TO DEVELOPMENT STANDARD

Clause 22 of the SEPP states:

(4) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:

(a) That compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and

(b) That there are sufficient environmental planning grounds to justify contravening the development standard.

(5) Development consent must not be granted for development that contravenes a development standard unless:

(a) The consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (4), and

(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and

(b) The concurrence of the Director-General has been obtained.

(6) In deciding whether to grant concurrence, the Director-General must consider:

(a) Whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and

(b) The public benefit of maintaining the development standard, and

(c) Any other matters required to be taken into consideration by the Director-General before granting concurrence."

The above considerations are addresses as follows.

Compliance with the development standard is unreasonable or unnecessary in the circumstances of the case and there are sufficient environmental planning grounds to justify contravening the development standard

Proposed Building C results in a minor compliance of 1.5m to the top of the parapet. Such a variation is reasonable on the basis of:

- The proposal complies with the FSR standard under the SEPP to ensure an appropriate bulk and scale is achieved;
- There is no tangible nexus between the height variation and the overall intensity of site use;
- Buildings A and B comply with the standard and the proposed heights are consistent with the number of storeys prescribed in the Master Plan 2030;
- The minor additional height is in response to the topography of the land, which falls from west to east towards Bennelong Parkway;
- The area of non-compliance relates to a part storey only and will not result in any unreasonable solar access or privacy impacts;
- SOPA DRP did not raise concerns with additional height in the pre-lodgement meetings.

- The proposed heights maintain the transition from Bennelong Parkway to Australia Avenue.
- The proposed built form and height is consistent with the desired future character of the Parkview Precinct and the Sydney Olympic Park Town Centre, as envisaged by the SEPP and the Master Plan 2030.

The objectives of the particular standard and the objectives for development within the zone

There are no specific objectives for the height standard under the SEPP Major Projects. The proposal has been designed having regard to the planning principles for Building Form and Height in the Master Plan 2030, which aims to:

- Protect and enhance the amenity of open spaces and key views into and from the site.
- Ensuring that new buildings have minimal or no impact on adjacent parklands, especially those with natural habitats.
- Group lower scaled residential buildings together in neighbourhoods close to the station and parklands to create communities and a finer grained urban form.

Key CBD and parkland views will be maintained as the area of non-compliance sits at the rear (east) of the main building bulk. The area of non-compliance will not result in any unreasonable shadow impacts on parkland, Bennelong Pond or adjoining dwellings, as demonstrated in the Shadow Diagrams attached at **Appendix D**.

The proposal is consistent with the built form envisaged in the Master Plan 2030 and ensures a fine grained urban environment is achieved along Bennelong Parkway, stepping up to Australia Avenue.

The non-compliance will not hinder the development's ability to satisfy the objectives of the B4 zone, as outlined in Section 5.2.2 of this report.

Whether contravention of the development standard raises any matter of significance for State or regional environmental planning

There are no matters of State or regional planning which would be affected by the variation.

The public benefit of maintaining the development standard

There is no public benefit in maintaining the development standard as there will not be any environmental or amenity impacts resulting from the area of non-compliance. Furthermore, the proposal is consistent with the built form and height controls in the Master Plan 2030.

For the reasons outlined above, strict compliance with the height standard is considered unnecessary and unreasonable in the circumstances.

5.2.6 PUBLIC UTILITY INFRASTRUCTURE

Clause 23 relates to public utilities and states that the consent authority must be satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when required. As the site is in an established area, public utility infrastructure, including water, electricity, natural gas and sewage disposal, is readily available.

The applicant has contacted Sydney Water, Ausgrid, Jemena Gas, Telstra and Optus to confirm that connections can be made for water, electricity, gas and telecommunications.

SOPA are preparing all civil documentation for the land that will be dedicated to them. AT&L have prepared on-site stormwater and OSD plans for the site (**Appendix L**).

Accordingly, all the necessary services are readily available and able to be connected for the development.

5.2.7 MAJOR EVENTS CAPABILITY

Clause 24 aims to protect and promote the major events capability of the Sydney Olympic Park site and to ensure that it remains a premium destination for major events. Consent must not be granted to development on land within the Sydney Olympic Park site during major events held within the Sydney Olympic Park site if:

- (a) Traffic generated by the development is likely to cause the local road network and connections to the regional road network to become saturated or otherwise fail.

Response: The Traffic Impact Assessment confirms that the proposed development generates less traffic than the existing development and will not adversely impact on the local road network and connections to the regional road network. A Traffic Construction Management Plan has also been prepared to manage traffic during construction, excavation and demolition phases of the development.

- (b) The development is likely to prevent the effective management of crowd movement and transport services.

Response: An Event Information Statement is to be prepared at Occupation Certificate stage with input from the construction contractor and building managers, which will be informed by construction traffic movement, the number of residents, car parking allocations, frequency of service vehicles, construction documentation of public domain and hours of the child care. This will effectively assist in preventing conflict with event crowds and transport services.

- (c) The development is likely to compromise the effective functioning of major event infrastructure.

Response: Access to the proposed development during construction and operation, is proposed from roads that will remain open during major events. Access to the site will therefore be available at these times. Construction of the development will be coordinated with SOPA to ensure construction activities are appropriate during major events. Therefore, the proposal is not likely to impact on road infrastructure during major events. Peak times of travel on public transport will typically not coincide with major events, ensuring there is no disruption to services.

- (d) The development conflicts with the emergency management plans of government agencies or the emergency evacuation plans of major event venues.

Response: The development site generates less traffic than the existing, reducing potential for conflicts with emergency services vehicles. The site is also located away from the major event facilities, also reducing potential for conflicts with emergency vehicles.

Clause 25 states that the consent authority must be satisfied that the development includes measures to promote public transport use, cycling and walking.

- The proposal provides bicycle storage in the basement levels to encourage bike ownership. New roadways and pathways will connect to the greater pedestrian and cycle networks.
- The proposal strictly complies with the car parking rates and does not over supply to encourage other modes of transport.
- The site is close to Olympic Park Railway Station. Olympic Park connects to the Western Lines - Emu Plains/Richmond to North Sydney via the City. Services through Olympic Park are every 10 to 20 minutes. During special events, services are more frequent.
- Bus stops are located on both sides of Australia Avenue, as well as in Dawn Fraser Avenue, adjacent to the station.
- Route 401 provides connection between Sydney Olympic Park, Newington, Olympic Park station and Lidcombe Station. Services are every 30 minutes in each direction on weekdays and every 60 minutes in each direction on weekends.

- Route 450 connects Hurstville, Beverly Hills, Roselands, Lakemba, Belfield, Strathfield and Sydney Olympic Park. Services to and from Sydney Olympic Park operate during morning and afternoon peak periods on weekdays.
- Ferry services from Homebush Bay Wharf provide links to and from the city and Parramatta.
- Sydney Olympic has excellent pedestrian and cycle routes, including a bicycle lane along Australia Avenue. All roads in the vicinity of the site have footpaths and major intersections are signalised. The paths within SOPA connect to the pathways and cycle ways in Bicentennial Park.

The proposed bike parking and pathways, as well as the proximity of the site will encourage the use of other modes of transport.

5.2.8 MASTER PLAN

Clause 26 states that development consent must not be granted for development on land within the Sydney Olympic Park site to which a master plan applies unless the consent authority has considered that master plan.

Sydney Olympic Master Plan 2030 and its provisions are considered in Section 6.3 of this Report. The proposal is consistent with the site design, land use and built form controls of the Master Plan.

5.2.9 DESIGN EXCELLENCE

Clause 30 states that the consent authority must consider whether the proposed development exhibits design excellence.

The proposal exhibits a high standard of architectural design, with sustainable materials and detailing appropriate to the building type and master planned precinct. The existing building commercial building does not address the street or contribute aesthetically to its setting. The proposal will replace the existing non-contributing building with a contemporary development that addresses all street frontages and provides a built form and external appearance that will improve the quality and amenity of the public domain.

The proposal incorporates sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency. This is outlined in detail in the ESD Report at **Appendix K**.

In our opinion, the proposal achieves design excellence by incorporating best practice urban design and sustainable principles.

5.2.10 SUMMARY

In summary, the proposal satisfies the objectives SEPP Major Development and is consistent with the provisions for height, FSR, transport, infrastructure, event capability and design excellence

5.3 STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

State Environmental Planning Policy (Infrastructure) 2007 came into force in December 2007 and aims to facilitate the effective delivery of infrastructure across the State. The SEPP identifies matters for consideration in the assessment of development adjacent particular types of infrastructure development, including all new development that generates large amounts of traffic in a local area.

The traffic generation of the existing and proposed developments has been assessed in a Traffic and Parking Assessment prepared by Transport and Traffic Planning Associates (TTPA) and is attached at **Appendix J**. The report indicates that the existing development generates in the order of 142 morning and 142 evening peak trips. The proposal generates significantly less (50% less) traffic, with 76 morning peak trips and 52 evening peak trips.

The Report notes that the proposed childcare centre will be very largely patronised by residents of the apartments on the site and adjoining sites and as a result the centre will only generate very minor vehicle movements.

The Report concludes that *“the traffic generated by the proposed development will not have any adverse impact on the surrounding road network.”*

Accordingly, the proposed development will not have any adverse traffic implications and satisfies matters for consideration in SEPP Infrastructure. Further, as the proposal is traffic generating development it will be referred to the RMS in accordance with Schedule 3 of SEPP Infrastructure.

5.4 SEPP (BUILDING SUSTAINABILITY INDEX: BASIX) 2004

The BASIX SEPP requires all future residential development facilitated by this proposal to achieve mandated levels of energy and water efficiency. The SEPP ensures consistency in the implementation of BASIX throughout the State.

The proposal has been designed to satisfy BASIX requirements and copies of the certificates are attached at **Appendix M**.

5.5 STATE ENVIRONMENTAL PLANNING POLICY NO. 55 – REMEDIATION OF LAND

This SEPP requires the consent authority to take into consideration contamination and remediation of land in determining development applications. The authority must be satisfied that land that is contaminated is suitable for the proposed use or will be suitable following remediation of the land. Site contamination is considered in the Preliminary Stage 1 Environmental Site Assessment Update at **Appendix N**. The Assessment Update concludes, inter alia:

“The findings of the Stage 1 ESA historical search for the site are summarised below:

- *The likely receiving water body of waterborne contaminants (if present onsite) is the Parramatta River– a moderately to highly disturbed ecosystem;*
- *Current land use is Zone B4 Mixed Use, allowing mixed commercial and residential land use;*
- *Historical land title search and recent lease holder search indicates that there appears to be no potential for site contamination from historical land uses;*
- *Historical aerial photograph search indicates that the site was vacant land until 1997 when a factory was built and remained until present; and*
- *The site is not registered as contaminated in the Auburn City Council planning certificates.*

The results of the site soil investigation are summarised below:

- *The soil testing program confirmed the presence of fill at the site (at depths of between 0.0 and 1.0 m bgl). Analytical results indicated that the fill was not significantly contaminated;*
- *The detected concentrations for all PAH's in all locations tested in this investigation were below the Site Assessment Criteria (SAC) for the proposed land use as multilevel residential development.*

Based on the findings of this Preliminary Stage 1 ESA Update site investigation (including a review of background information, site observations and the sampling and analysis programme), it is the opinion of CES that the site, in its present condition, satisfies the relevant SAC and therefore the site is suitable for the proposed development.”

Contamination has been addressed in the Preliminary Stage 1 ESA, in accordance with SEPP 55 and the site has been found to be suitable for the proposed development.

5.6 STATE ENVIRONMENTAL PLANNING POLICY NO. 65 – DESIGN QUALITY OF RESIDENTIAL FLAT BUILDINGS

State Environmental Planning Policy 65 – Design Quality of Residential Flat Development (SEPP 65) was gazetted on 26 July 2002 and applies to all residential flat buildings. The SEPP aims to improve the design quality of residential flat development. Part 2 of SEPP 65 outlines Design Quality Principles for new residential flat buildings that seek to guide building design.

The proposal has been designed with building massing, separation, orientation and floor plate widths in accordance with SEPP 65 and the accompanying Residential Flat Design Code (RFDC). Reference should be made to the SEPP 65 Design Verification Report included in the Design Report by Turner Architects, which provides assurance that the subject proposal has been prepared in accordance with the design principles of SEPP 65 and the RFDC (refer to **Appendix F**).

5.7 SYDNEY REGIONAL ENVIRONMENTAL PLAN (SYDNEY HARBOUR CATCHMENT) 2005

This SREP (deemed SEPP) provides planning principles for development within the Sydney Harbour catchment. Sydney Olympic Park falls within the Sydney Harbour Catchment area. Planning principles for land within the Sydney Harbour Catchment, of relevance to the proposed development of the site, include:

- Development is to improve the water quality of urban run-off, reduce the quantity and frequency of urban run-off, prevent the risk of increased flooding and conserve water.
- Development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour.
- Decisions with respect to the development of land are to take account of the cumulative environmental impact of development within the catchment.

The proposal is consistent with the relevant Planning Principles of the Sydney Harbour Catchment SEPP and will not have any significant adverse impact on the Sydney Harbour Catchment, having incorporated the necessary stormwater quality and quantity control measures into the development.

6 Policies

The following strategic planning policies and guidelines have been considered in the assessment of this proposal:

- NSW 2021.
- Draft Metropolitan Strategy for Sydney.
- Residential Flat Design Code.
- Sydney Olympic Park Master Plan 2030.
- Sydney Olympic Park, Access Guidelines 2008.
- Sydney Olympic Park Major Event Impact Assessment Guidelines.
- Sydney Olympic Park Urban Elements Design Manual.
- Sydney Olympic Park Environmental Guidelines.
- Sydney Olympic Park Stormwater and Water Sensitive Urban Design Policy.

6.1 NSW 2021

NSW 2021 is a 10 year plan to rebuild the economy, return quality services, renovate infrastructure, restore accountability to government, and strengthen our local environment and communities. In summary, the key objectives of the Plan are to:

- Increase use of walking and cycling.
- Increase the number of jobs closer to home and increase the percentage of the population living within 30 minutes by public transport of a city or major centre in Metropolitan Sydney.
- Grow cities and centres as functional and attractive places to live, work and visit.

The proposed development will contribute to achieving the objectives of NSW 2021 as it will:

- Improve pathways and connections to walkways and cycle ways, particularly in Bicentennial Park and beyond.
- Provide 342 new dwellings in close proximity to rail and bus services, connecting residents to the Sydney CBD and Parramatta City Centre. This increases opportunities for people to live within 30 minutes by public transport of a city or major centre in metropolitan Sydney.
- Improve housing supply and choice in the central western Sydney area and assist in achieving housing target of 25,000 new dwellings in Sydney per year.
- Landscaping, communal facilities, childcare and proximity to the facilities and services of Sydney Olympic Park make this an attractive place to live.

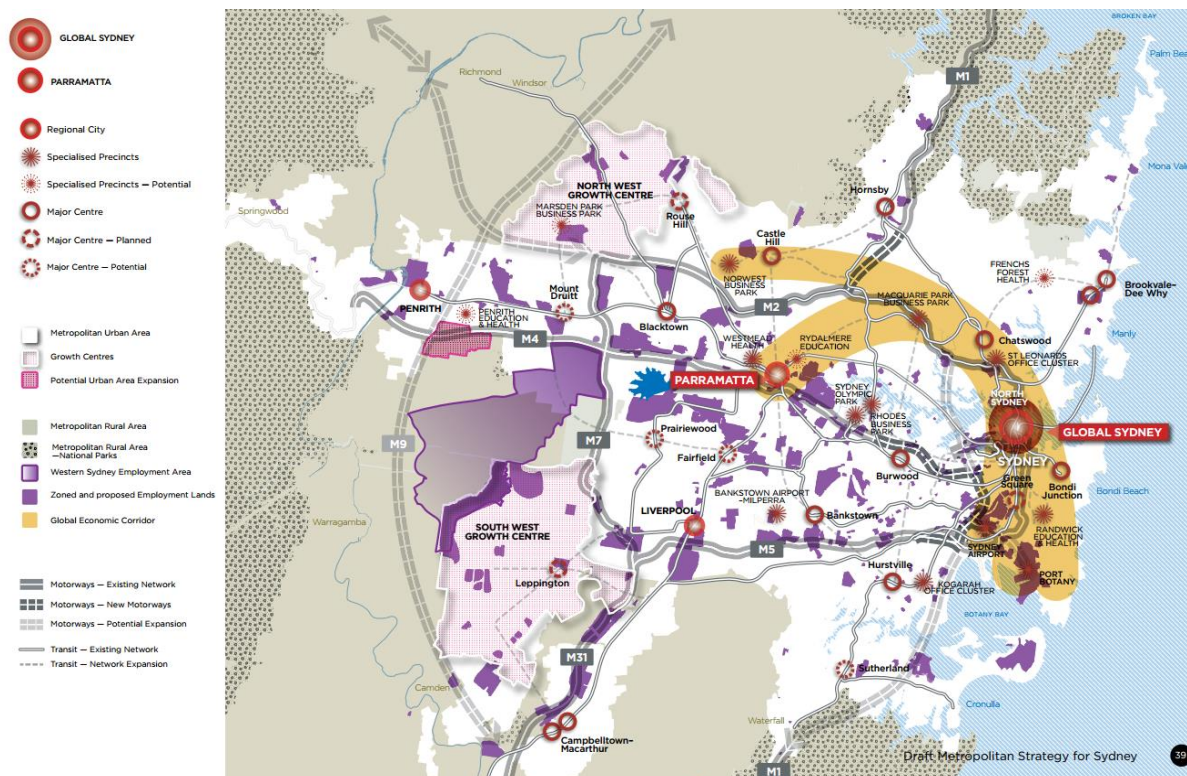
The proposal is consistent with the aims and objectives of NSW 2021 and will positively contribute to the growth of Sydney.

6.2 DRAFT METROPOLITAN STRATEGY FOR SYDNEY

The Draft Metropolitan Plan for Sydney expects Sydney will have around 1.3 million additional people by 2031. The Draft Strategy sets targets of 545,000 by 2031 and indicates new housing will be encouraged in areas close to existing and planned infrastructure.

Under the Draft Strategy, Auburn Council is within the West Central and North West Subregion. The Subregional Strategy identifies Sydney Olympic Park as a Specialised Centre, located close to the Global Economic Corridor, which extends to Parramatta (see Figure 9).

FIGURE 9 – DRAFT METROPOLITAN PLAN 2031



Source: Draft Metropolitan Strategy for Sydney

The Sydney Olympic Park as a Specialised Centre has the following priorities:

- Strengthen the specialised functions of this precinct as a destination for sport, recreation and events with world-class facilities.
- Broaden the Precinct's role as a major employment, recreation and housing area.
- Investigate improved transit connectivity especially with Silverwater and Parramatta.
- Provide capacity for at least 14,000 more jobs to 2031.

The proposal assists in meeting the objectives and targets of the Strategy:

- The proposal contributes 342 new dwellings, approximately 15 jobs for the childcare centre, 400 construction and 5 operational jobs, to the targets set by the Draft Strategy and will contribute to the Sydney Olympic Park's broader objectives.
- The provision of residential and childcare uses meets the objectives of providing additional employment and housing in Sydney near jobs, transport and services.
- The area is already well served by public transport, including buses and trains.

- The area is undergoing uplift in employment generating uses with recent approvals for higher intensity commercial uses in precinct. This will provide residents with opportunities to work closer to home.
- There are existing retail uses in the town centre area and it is intended that the town centre will increase in size and intensity as Olympic Park is redeveloped.
- Importantly, the proposal contributes passive and active recreation areas to the precinct and there are many recreational activities within walking and cycling distance of the site.

6.3 SYDNEY OLYMPIC PARK MASTER PLAN 2030

The Sydney Olympic Park Master Plan 2030 provides a comprehensive approach to the long-term development of Sydney Olympic Park to ensure it continues to evolve into an active, vibrant town within metropolitan Sydney. The Master Plan 2030 also seeks to protect Sydney Olympic Park's role as the premier destination for cultural, entertainment, recreation and sporting events, protect and enhance the public domain and parklands and provide detailed planning/design principles and controls to ensure appropriate development that responds to its context and which contributes to the quality of the built environment.

The site is described as Site 67A and 67B, and located in the *Parkview Precinct* of the Sydney Olympic Park Master Plan 2030, (as shown in Figure 10).

Parkview is envisaged as a high density mixed use precinct incorporating community, educational, commercial and residential uses, to replace existing industrial and commercial uses. A network of streets will transform the precinct into a walkable neighbourhood with good connections to the Bicentennial Parklands. This landscaped corridor is an extension of the open space spine that links the town to the parklands.

The precinct will be characterised by a transition in scale from larger tower building forms along Australia Avenue to the west, to lower scale buildings along Bennelong Road to the east.

The Master Plan contains site specific controls for the Parkview Precinct. The proposal's compliance with those controls is summarised in Table 3. Table also contains the proposal's consistency with the general controls of the Master Plan 2030.

FIGURE 10 – PRECINCTS WITHIN THE MASTER PLAN



Source: Sydney Olympic park Master Plan 2013

TABLE 3 – SOPA MASTER PLAN 2030 CONTROLS

PROVISION	CONTROL	PROPOSAL	COMPLIES
Site configuration	Sites 67A and 67B and new roads.	Proposed site layout is in accordance with Site 67A and 67B and provides two new vehicle roads and one pedestrian road to connect to broader precinct.	YES
FSR	2:1	2:1	YES
Land Use	Residential	Residential	YES

Building Height	The maximum height of 10 stories is permitted for up to 30 per cent of overall building length. The remaining height should not exceed eight stories. Refer to Figure 11	The maximum height of Building A is 10 stories and no more than 30 per cent of overall building length. The remaining height is a maximum of eight stories on Building B and C.	YES
Building Zone and setbacks	- Site 67A –Built to line (min. 50%). 6m setback to the railway line. - Site 67B –Built to line (min. 50%). - Public domain buffer required between proposed building on 67B and Bennelong Parkway. Refer to Figure 11.	- Building A and B built to new road frontage. 6m setback to the railway line. - Building C built to new roads 4 and 17. - Public domain buffer provided between proposed building on 67B and Bennelong Parkway.	YES
Event Controls	Ensure development can accommodate changes to access, is designed and built to accommodate the public domain closures and locate vehicle access points.	Site access is not affected by event and public domain closures, as indicated in 4.4.1 of the SOPA Master plan 2030.	YES
Car Parking	503 spaces required	504 spaces required	YES Refer to Appendix J.
Bicycle Parking	485 spaces required	144 designated bike spaces and 342 storage units are provided in the basements (486 total). Storage units capable of accommodating multiple bikes.	YES

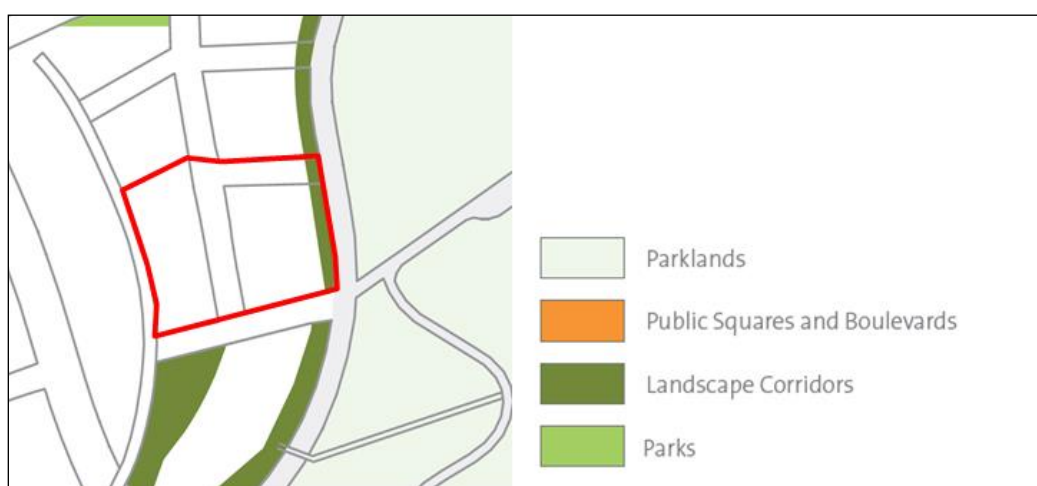
FIGURE 11 – SOPA MASTER PLAN 2030 CONTROLS



PICTURE 3 – BUILDING HEIGHTS



PICTURE 4 – BUILT TO ZONES AND SETBACKS



PICTURE 5 – PUBLIC DOMAIN

6.4 SYDNEY OLYMPIC PARK ACCESS GUIDELINES 2011

The purpose of these Guidelines is to provide information concerning the requirements for an accessible built environment that enables independent, equitable and inclusive access for people with disabilities.

These Guidelines apply to:

- All building works, infrastructure within Sydney Olympic Park.
- Temporary events (Temporary Overlay for Events).
- Parklands within Sydney Olympic Park.

These Guidelines are intended to provide guidance to Government agencies, architects, venue operators, event operators, designers and others who are involved in the design, construction, fit-out, planning and operations of facilities and venues within Sydney Olympic Park.

An Access Report has been prepared by Morris Goding Accessibility Consulting and this is attached at **Appendix O**. The development has been reviewed to ensure that ingress and egress, paths of travel, circulation areas and toilets comply with relevant statutory guidelines.

The Report states, inter alia:

“In general, the development has accessible paths of travel that are continuous throughout. In line with the report’s recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The Development Application drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible parking and adaptable units, can be readily achieved.

In addition to accessible paths of travel, the proposal provides 35 adaptable units, compliant with Sydney Olympic Park Authority DCP and AS1428.1 and AS4299.

The Access report considers the compliance of the proposal with the relevant Australian Standards, the SOPA Access Guidelines and the Disability Discrimination Act.

6.5 SYDNEY OLYMPIC PARK MAJOR EVENT IMPACT ASSESSMENT GUIDELINES

The Major Event Impact Assessment Guidelines apply to all Developments within Sydney Olympic Park. In accordance with Section 20 of the Act, the Authority must consider whether proposed development is consistent with the guidelines.

The Traffic and Parking Report has assessed the extent and nature of the impact on the local road traffic network and connections with the regional road network (**Appendix J**).

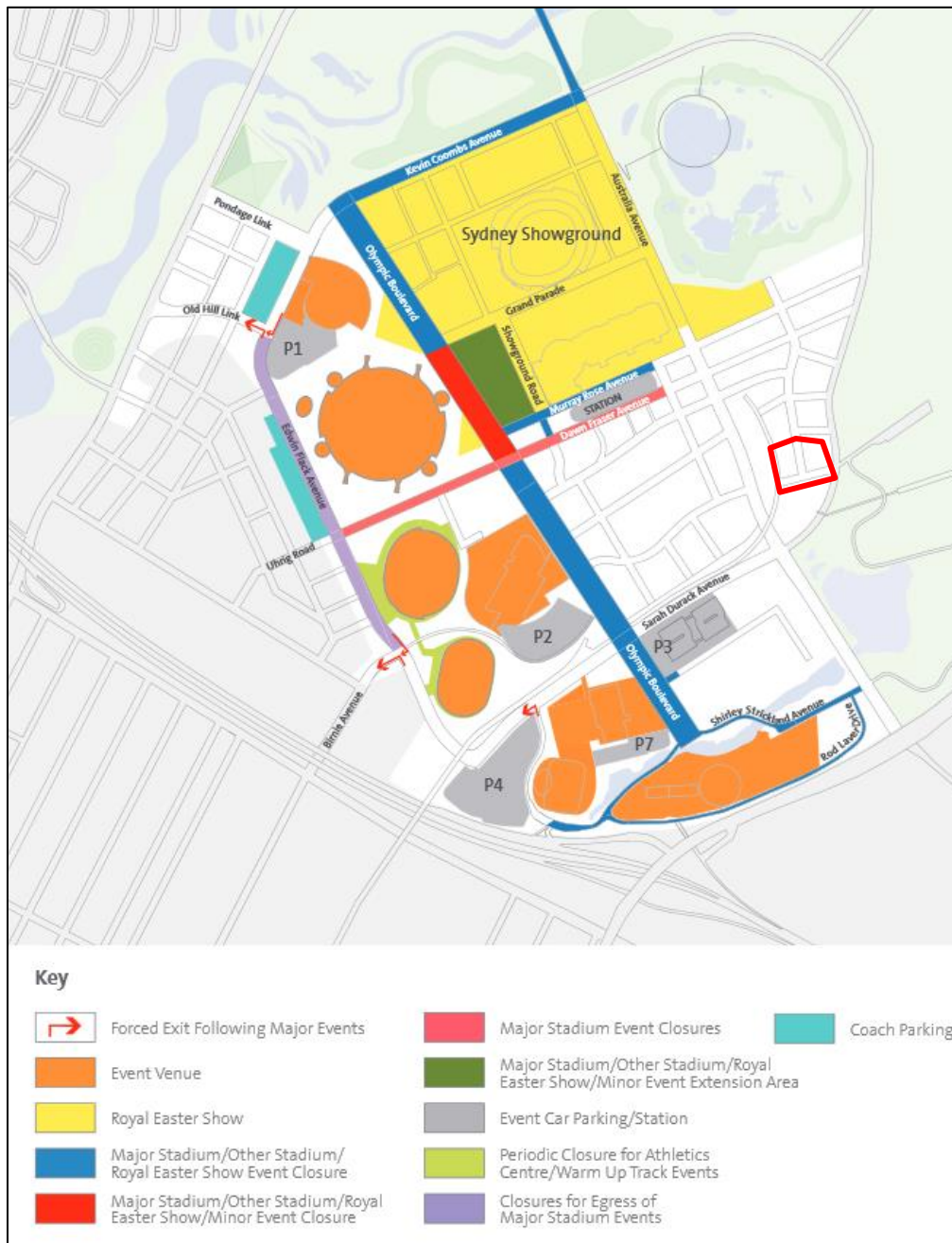
The Parkview Precinct will be affected by major ANZ Stadium events, the Royal Easter Show and other smaller events. The development can accommodate the changes to access required as described in Event Access Plan in the Master Plan 2030. The roadways surrounding the site are not subject to closures and access can be achieved along Australia Avenue and Bennelong Parkway (refer to Figure 12). The proposal will therefore be able to accommodate the public domain closures.

In order to best manage transport and parking related issues and in the interests of minimising negative Major Event Capability impacts:

- The proposal provides more than a single point of entry for residents, staff, visitors, deliveries, and service vehicles.
- The proposal locates vehicle access points generally in accordance with the Parkview Precinct Land Uses Plan in the Master Plan 2030.
- The proposal complies with the car parking requirement in order to provide sufficient parking is provided for residents, staff and visitors. This should ensure that parking required during events remains available.

- The site and the proposed development are located well away from major event venues; major event support infrastructure such as car parks and bus terminals; event transport routes and major event car-parking routes. This ensures there is no conflict during major events.

FIGURE 12 – EVENT ACCESS PLAN



A Construction Traffic Management Plan has been prepared for the demolition of the existing buildings and structures, excavation for basement parking and construction of the new buildings (**Appendix P**). The Plan indicates that peak days of construction will be managed around major events at Sydney Olympic Park so as not to add additional impact to surrounding roadways with event traffic increases.

A Plan of Management is likely to be prepared prior to the occupation of the building with input from building managers, who will have the benefit of information related to the number of residents, car parking allocations, frequency of service vehicles and construction documentation of public domain. This will ensure there are no conflicts around major events at Sydney Olympic Park.

6.6 SYDNEY OLYMPIC PARK URBAN ELEMENTS DESIGN MANUAL

The Sydney Olympic Park Urban Elements Design Manual (UEDM) sets out clear quality and performance standards for the public domain to ensure that Sydney Olympic Park continues to be an exemplar of high quality, sustainable urban development.

The UEDM sets standards for placement and coordination of streets and pathways, as well as street lighting, trees, street furniture and paving. The details of these urban elements will be finalised prior to the issue of a construction certificate and will be consistent with the UEDM.

6.7 SYDNEY OLYMPIC PARK ENVIRONMENTAL GUIDELINES

The Environmental Guidelines for Sydney Olympic Park (2008) set out a general scheme of environmental issues and commitments with regards to the care, control, management, and development of Sydney Olympic Park. The Environmental Guidelines address the key issues of significance for Sydney Olympic Park. The key issues in the Guidelines have been addressed in this EIS and the supporting documents in Table 4 as follows:

TABLE 4 – SOP ENVIRONMENTAL GUIDELINES

KEY ISSUE	COMMENT	REFER TO
Water Conservation	Maximise opportunities to incorporate water collection and recycling systems and avoid adverse impacts on water quality or quantity.	Appendix L
Energy Conservation	Proposed development meets the minimum requirements of BASIX	Appendix K and M
Material Selection	Materials and plant species have been carefully selected in accordance with the materials schedule and Landscape Plan.	Appendix D and I
Waste Management	Waste for demolition, construction and operation will be managed in accordance with Waste Management Plan.	Appendix V and W
Transport	The proposal reduces the traffic generation when compared to the existing and promotes walking and cycling with bike storage provision and new pathways to connect to the surrounding networks.	Appendix J
Pollution	Noise pollution impacts are addressed in the Acoustic Impact Statement	Appendix T
Biodiversity	A number of existing trees are to be retained and new planting is proposed throughout the site, which will encourage new ecosystems. Refer to Landscape Plan.	Appendix I
Public Open space	The proposal provides new pathways and roadways that connect to Sydney Olympic Park open space areas. The proposal also provides significant communal open spaces for the residents.	Appendix D and I

The proposal has addressed the key environmental issues contained in the Environmental Guidelines for Sydney Olympic Park (2008).

6.8 SYDNEY OLYMPIC PARK STORMWATER AND WATER SENSITIVE URBAN DESIGN POLICY

Stormwater Management & Water Sensitive Urban Design Policy sets Sydney Olympic Park Authority's requirements for stormwater management associated with development design, planning and construction. To properly meet the requirements of this Policy, development within Sydney Olympic Park must satisfy requirements under the following headings:

- Maximise harvest and reuse of roof-water.
- Minimise volume and frequency of stormwater discharge from hardstand areas such as paving, driveways and car parks, and maximise quality of any stormwater discharged.
- Water conservation.
- Riparian protection.

Stormwater Management and Water Sensitive Urban Design has been addressed by AT&L in on-site stormwater and OSD plan for the site (**Appendix L**).

6.9 SUMMARY

The assessment of development against the planning controls concludes that the scheme is permissible under SEPP (Major Development) 2005, Schedule 3, Part 23 Sydney Olympic Park site and consistent with the Sydney Olympic Park Master Plan 2030.

7 Key Issues

This section contains an assessment of the key issues identified in the DGRs.

7.1 BUILT FORM AND URBAN DESIGN

7.1.1 BUILT FORM

The proposal provides medium density perimeter urban block forms with significant communal open space areas. The linear form of Building A/B and the U-shape form of Building C is consistent with the built form envisaged in the Sydney Olympic Park Master Plan 2030.

The linear form of Buildings A/B addresses the new road and the 10 storey low density tower form of Building A acts as a strong termination to the end of the vista up the new pedestrian link. While Building B is physically linked to Building A, a recess breaks up the perceived overall length of the building and defines it as a legibly separate entity. Building B steps down to eight storeys.

Building C is U-shaped is four to eight storeys. The built form encloses an elevated communal courtyard, pool and BBQ area. A two storey base ties the building strongly with the ground and responds to the topography in this part of the site. The perceived bulk of the parking podium has been minimised by providing active uses to its perimeter treatment, where the topography allows.

The varying building heights comply with the controls on the Master Plan 2030. The lower built form along Bennelong buildings provides a transition in scale from larger development along Australia Street to the parklands (Figure 13). This is consistent with the desired future character of the Parkview Precinct, which is undergoing a transition.

The total site area is 15,040sqm. The overall development will have a GFA of 30,080m² and FSR of 2:1, which complies with the SEPP Major Project standard and ensures that the proposed scale of development is appropriate for the site and its context.

The built form and density also respects the existing natural environment and responds to the local and regional context and availability of infrastructure, public transport, community facilities and environmental quality.

FIGURE 13 – 3D VIEW VIEWED FROM THE EAST



7.1.2 DESIGN QUALITY

This section of the report describes how the proposed development achieves design quality in terms of, site layout, open spaces and edges, interface with the public domain, gateways, facades, rooftop, massing, setbacks, articulation, colours, materials and finishes.

- **Site layout:** The site layout is consistent with the Master Plan 2030, which provides new roads and locates the U-shaped building on Bennelong Avenue and the linear building towards the rail line.
- **Open spaces and edges:** Turner Architects and Arcadia have collaborated closely to provide a landscape strategy that clearly defines the communal podium courtyards, the public domain and site edges.
- **Interface with the public domain:** Building A/B is a linear building form that defines the edge of the new street. The U-shape of Building C allows the two new streets and the pedestrian link to be defined. The open side of Building C defines the large communal courtyard and opens out to the east to the natural landscape of Bicentennial Park.
- **Gateways:** Building entrances are clearly recognised with pathways and secure gateways. The gateways ensure the private and public realm is delineated. These clear design cues establish who is to use spaces and for what purpose.
- **Facades:** Each building has a different architectural language and uses varied materials, finishes, colours and design to achieve this. At the same time, the buildings are tied together in subtle ways to provide a cohesive and holistic development.

The northern elevation of Building A has a folding facade that changes between levels to reflect different apartment types. The building includes full height glazing to maximise views and thermal heating. Fixed screens provide the necessary shading. Building A and B are visually separated by a recess with this section of the building containing an offset pattern of glazing and screening.

Building C comprises a clear base, middle and top. The base is two/three storeys with white columns to provide a vertical element. This contrasts with the mid portion, which has a more horizontal element expressed by white precast spandrels/balustrades and punctuated with black/yellow window boxes.

The top is expressed by an undercut storey, and incorporates folds, similar to those on Building B.

- **Rooftop:** the rooftops are non-trafficable and contain plant and solar panels only. Building A/B will have a light floating roof form that includes folds to enliven the skyline.
- **Massing:** The development is massed to provide a transition from Bennelong Park to the taller development to the west along Australia Avenue. Building C on Bennelong Parkway is four storeys stepping up to eight storeys. Building B is eight storeys stepping up to ten storeys for Building A. The tower form of Building A appropriately marks the end of the vista up the new pedestrian link. The proposed massing is consistent with the Master Plan 2030.

Building A incorporates a strong two storey base to match the podium of Building C.

- **Setbacks:** Buildings are setback from all boundaries with landscaping or pedestrian pathways around the perimeter. The proposal also provides separation distances to adjoining future development consistent with the RFDC.
- **Articulation:** Each building is highly articulated with glazing, balconies, spandrels, folds, columns and a variety of materials and finishes. Recesses in Building A and B also assist in articulating the building, and break up the appearance of a lengthy façade. The high level of articulation has been chosen so as not to be lost against the large towers that provide a strong backdrop to the development.
- **Colours, materials and finishes:** Turner Architects have prepared a materials and finishes sample, submitted with the architectural drawings. The design report also prepared by Turner Architects that “a clear palette of materials and architectural language gives definition to each building”.

Materials selected including but not limited to:

- Clear glazing balustrades.
- Pre-cast concrete white balustrades.
- Pre-cast concrete masonry, spandrels and roof feature ranging from off white to dark grey.
- Metal cladding.
- Aluminium glazing.

7.1.3 INTEGRATION OF SERVICES INTO THE DESIGN

Building services have been integrated into the design of the building. Cables, pipes are integrated into the building and not visible from public view, where possible. Air conditioning condenser units are located on the roof in plant to minimise their visibility from the public domain.

7.2 TRANSPORT AND ACCESSIBILITY

A Traffic Impact Assessment has been prepared by TTPA and is attached at **Appendix J**. This assessment considers the adequacy of car parking provision, the proposal's impact on the local traffic network, the parking area's compliance with relevant access and circulation standards, and the provision of servicing areas within the development. The key issues are discussed below.

7.2.1 ACCESS ARRANGEMENTS

A Construction Management Plan (CMP) and Construction Traffic Management Plan have been prepared and submitted with this application (see Appendices P and Y). In particular, the CMP will cover management of the proposal construction and operation to manage and mitigate traffic and pedestrian impacts. The CTMP provides details on traffic control measures, truck routes, hoarding/fencing, materials delivery and storage.

From an operation point of view, the proposal generates less traffic than the existing development and therefore there will not be any adverse impacts. This is discussed in detail in Section 7.2.3 of this Report.

7.2.2 SUSTAINABLE TRAVEL

The site is well located close to a variety of public transport options that offer residents an alternative to the private vehicle. Sydney Olympic Park railway station is walking distance from the site and bus stops are located in close proximity on Australia Avenue. Trains and buses provide good connection to the surrounding area, nearby centres, the CBD and beyond.

New footpaths along the proposed new access roads will connect to the pedestrian and cyclist networks within Sydney Olympic Park and Bicentennial Park. The pedestrian and cyclist connections will be focused near the intersection of Australia Avenue and Bennelong Road with the traffic signal controlled crossings and the bridge crossing of Bennelong Road. Bicycle storage/parking has been provided in the basements to encourage bicycle ownership and use.

The proposed development will increase the population of the local area and increase residential density in proximity public transport. There will therefore be an increased demand for transport services, consistent with the objectives of the Master Plan 2030.

Details of the public transport and pedestrian and cycle networks is provided in the Traffic and Parking report.

A Sustainable Travel Plan will be undertaken for the development and is to be formulated under a suitable condition of consent.

7.2.3 TRAFFIC GENERATION

The Traffic and Parking Assessment concludes:

“It is apparent that the projected total peak traffic movements for the proposed development of some 76 vtpm in the morning and some 62 btpm in the afternoon will be significantly (i.e 50%) of the existing traffic generation of the site. Accordingly the proposed development will not have any adverse traffic implications.”

The existing development generates in the order of 142 morning and 142 evening peak trips. The proposal therefore generates almost 50% less traffic than the existing. As the proposed childcare centre will be very largely patronised by residents of the apartments on the site and adjoining sites, it will only generate very minor vehicle movements.

The proposed development is therefore a less intense use of the site when compared to the existing. No environmental issues are anticipated to arise with respect to the local street capacity to support the proposal. Accordingly, the traffic generated by the proposed development will not have any adverse impact on the surrounding road network.

7.2.4 PARKING

The Sydney Olympic Park Master Plan 2030 sets maximum parking rates for development. Table 5 provides an assessment of the proposed car parking provision against the relevant controls of the Master Plan 2030.

TABLE 5 – PROPOSED PARKING PROVISION

TYPE	RATE (MAXIMUM)	UNITS	MAXIMUM	PROVIDED
Studio & 1 Bed	1 / Unit	132	132	133
2 Bed	1.2 / Unit	200	240	240
3 bed	1.5 / Unit	10	15	15
Visitor spaces	1 / 4 dwellings	342	86	86
Child Care	1 / 4 Children	90	22.5	22.5
	1 / 2 staff	15	7.5	7.5
TOTAL			503	504

The proposal will provide a total of 504 on-site car spaces for residents. This includes 34 adaptable spaces for residents and 3 adaptable spaces for the child care centre. Parking provision complies with the Master Plan controls, which is a constrained parking rate to reduce traffic generation, to come extent.

The proposal provides 144 designated bicycle parking spaces and 342 storage units in the basements that are capable of accommodating bicycles.

The proposal does not include the provision of any on-site car share spaces. The provision of car share spaces is considered unnecessary as there are numerous car share spaces in highly accessible locations within a 10 minute walk from the site.

In relation to car parking, the Traffic Impact Assessment concludes that the proposed parking satisfies the Master Plan 2030 provisions:

“The proposed parking provision will comply with SOPMP 2030 and represents a relatively constrained contemporary outcome which has regard for:

- *the convenient proximity of public transport services*

- *the convenience and amenity of walking and cycling*
- *the retail, entertainment, employment and services which will be available in walking distance.”*

Accordingly, the proposed parking provision will comply with the SOPMP criteria and is appropriate given the excellent public transport services available to the site.

7.3 ENVIRONMENTAL AMENITY

The design of the proposal has aimed to provide higher density residential development in this prime location, enhancing energy efficiency through reduction of urban sprawl.

The proposed buildings achieve a high standard of environmental performance and will provide comfortable and efficient living spaces for residents. In particular, the proposal is appropriate in terms of privacy, overshadowing, solar access, cross ventilation and wind as discussed in the following sections.

7.3.1 AURAL AND VISUAL PRIVACY

The proposal has been designed and sited with due consideration to the privacy of adjoining and future incoming residents.

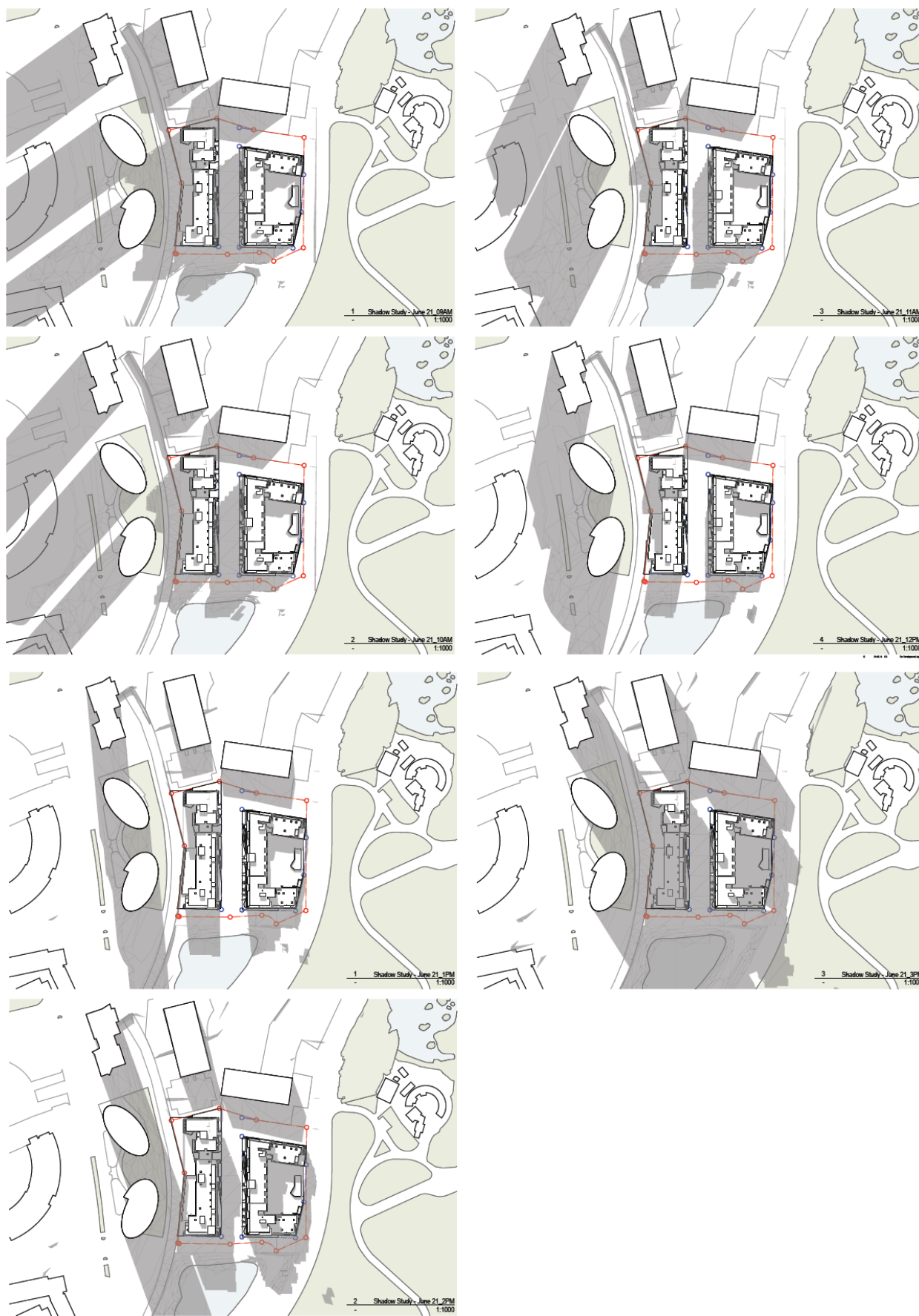
- To the north of Building A is a car park. Future development to the north is likely to be oriented to the north, rather than the south, which will minimise privacy impacts.
- Building C is separated from existing and future development to the north by a proposed new road. Distances of approximately 22m separate Building C with future development, indicated on the architectural drawings in accordance with the Master Plan 2030.
- To the west, Building A/B is separated from Australia Towers by the railway. Distances of between 31-37m to the Australia Towers development (currently under construction) provides sufficient to ensure privacy is maintained to its future residents.
- Buildings A/B and C are approximately 25m from each other, separated by a new roadway. Not only is there sufficient separation, balconies and windows are off set as much as possible to reduce potential for privacy impacts.
- Separation distances comply with the RFDC Rules of Thumb.
- The proposal locates the lift core and services in the internal corner of Building C to mitigate impacts between apartments.
- Further, on Levels 1, 2 and 3 of the northern wing, louvres and angled screens will be fixed to the bedroom windows of corner apartments.
- Landscaping throughout the site will provide visual buffers.
- Detailed building design will incorporate screening where appropriate.

In summary, appropriate setbacks, building separation, balcony orientation and use of landscaping have been incorporated into the design to minimise privacy impacts. The use of materials and privacy screening at the detailed design stage will further enhance these proposed privacy measures.

7.3.2 SHADOW IMPACTS

Shadow diagrams have been prepared to assess the proposed impact on solar access to neighbouring properties between 9am and 3pm for the Winter Solstice (June 21) (Figure 14 and **Appendix Q**). The subject site adjoins Bennelong Parkway and Bicentennial Park and the proposal will not cast significant or unreasonable shadow over the public open space.

FIGURE 14 – SHADOW DIAGRAMS FOR WINTER SOLSTICE



The site to the south is currently vacant, with the exception of a large water quality control pond. The proposal will cast minor additional shadow to the south during the day. Significant shadow is cast by Australia Towers in the afternoon hours. Currently, the proposal will not impact on north facing windows as the site is yet to be developed.

The only property to be impacted on is Australia Towers to the west. However, it should be noted that this development casts significant shadow on itself.

- At 9am, the proposed built form will cast shadow over the southern tower of the Australia Towers development.
- At midday, the north facing windows and open space areas of Australia Towers receives full sun.
- At 3pm, given the east west orientation, all developments in this part of Precinct are overshadowed. North facing windows and open space areas receive sunlight for 2-3 hours throughout the rest of the day.
- Both towers will receive sunlight between 10am and 1pm.

Accordingly, the proposal maintains a minimum of two hours of direct sunlight between 9 am and 3 pm on 21 June to adjoining properties, in accordance with RFDC (See **Appendix Q**).

7.3.3 SOLAR ACCESS

The Residential Flat Design Code (RFDC) requires that living rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid-winter. In dense urban areas a minimum of two hours may be acceptable.

Sydney Olympic Park Master Plan requires that a minimum of three hours of direct sunlight be provided to living rooms and private open spaces in at least 75% of dwellings within a residential development on 30 June.

A Solar Access Study has been undertaken by SLR Consulting Australia Pty Ltd (**Appendix R**). The Report provides information on the solar access through the living areas windows and open private areas of residential apartments on June 30 between the hours of 7.30 am and 4.30 pm with and without the Australiana and SOP Towers and June 21 between the hours of 9.00 am and 3.00 pm.

The Report concludes,

“On the basis of the current Solar Access Analysis of the proposed development, SLR has concluded the following:

Results in Accordance with SOPA Requirements:

*70% of the apartments receive at least 3 hours of sunlight on June 30
83% of the apartments receive at least 2 hours of sunlight on June 30*

Results in Accordance with SEPP 65 Requirements:

*66% of the apartments receive at least 3 hours of sunlight on June 21 between the hours of 9.00 am and 3.00 pm
81% of the apartments receive at least 2 hours of sunlight on June 21 between the hours of 9.00am and 3.00pm.”*

While the proposal does not quite comply with the 75% control under the Master plan, this is a consequence of the relative location of the Australia and SOP towers. Notwithstanding this, the proposal achieves compliance with the RFDC to ensure sufficient solar access is provided to the units.

7.3.4 SINGLE ASPECT APARTMENTS

The RFDC also requires development to limit the number of single-aspect apartments with a southerly aspect (SW-SE) to a maximum of 10% of the total units proposed. The proposal has been designed to limit the number of single aspect south facing apartments. The overall majority of proposed dwellings will enjoy dual aspects, with only 2.6% (9/342) of the proposed apartments having a southerly single aspect. The proposal therefore satisfies the RFDC Rule of Thumb.

The single aspect apartments are oriented to the roadways and vacant site to the south. They do not directly face a building. As the site will be separated by a new roadway, sufficient separation is provided to future buildings on the southern site, which will ensure that these south facing apartments receive diffuse daylight penetration now and into the future. Further, the single aspect south facing apartments are largely open with balconies and glazing, which maximises daylight penetration.

Accordingly, there are very few proposed single aspect apartments and the proposal satisfies the RFDC Rule of Thumb. The south facing units will receive sufficient diffuse sunlight and other factors, including outlook, contributes to their amenity.

7.3.5 NATURAL VENTILATION

Natural ventilation is also a key consideration of SEPP No. 65, which requires 60% of residential units to be naturally cross ventilated. The purpose of the natural ventilation requirement is to ensure dwellings have access to fresh air and assist in promoting thermal comfort to occupants. This will reduce energy consumption by minimising the reliance on air conditioning.

The proposal will provide cross ventilation to 61.50% of apartments in Building A and B, and 58.3% in Building C. Overall, 60% of apartments (206/342) achieve cross ventilation, which complies with the requirement of RFDC.

Accordingly, the proposal is consistent with the Rules of Thumb in the RFDC in terms of cross ventilation.

7.3.6 VIEWS

Sydney Olympic Park Master Plan 2030 identifies existing views from and within Sydney Olympic Park. Eastern views are identified from the site towards Sydney CBD. The proposed buildings are generally consistent with the height controls in the SEPP and Master Plan 2030 and the consistent built form ensures that future development can maximise opportunities for views across the site. The through site link will connect the township with the parklands and local environs, as well as provide easterly vistas towards the park and the CBD.

7.3.7 WIND

SLR Consulting Australia Pty Ltd (SLR) has assessed the environmental impact of the proposal with respect to the wind environment in and around the site (**Appendix S**).

Sydney's wind climate is characterised by dominant (prevailing) north-easterly, westerly and southerly winds. While northeast winds are the more common prevailing wind direction (occurring typically as offshore land-sea breezes), southeast and south winds generally provide the strongest gusts during summer. West quadrant winds (southwest to northwest) provide the strongest winds for the whole year.

Existing street level wind conditions in the vicinity of the site are considered to have a *walking comfort* for some prevailing wind directions given the orientation of the site and the upstream shielding afforded to the site by surrounding buildings and vegetation.

In terms of future wind environment and the proposed development, the Wind Assessment notes the following significant features:

- *There is a significant amount of existing and planned vegetation around the development. The current landscaping around the site and on the podium should be retained in order to gain the maximum shielding effect.*
- *There is a large development currently under construction to the west.*

- *Some balconies will occasionally experience stronger upper level winds that may exceed the dining criterion. Movable louver screens or pull down screens will be required to protect these balconies from stronger. The practical wind treatment will be investigated during the detailed design stage of the project.”*

The south facing balconies on Level 6-9 balconies may require additional shielding, either with partial sliding shutters or pull down screens. The detailed design of the screening will be resolved at the Construction Certificate stage.

The Wind Assessment concludes, inter alia:

“Accordingly, it has been predicted that ground levels wind speeds within all public access areas surrounding the development should remain at their present levels or be reduced with the addition of the proposed development and its wind mitigation treatments.”

The proposal is considered to be appropriate in terms of future wind, and may improve the existing situation with new buildings acting as mitigation.

7.4 ECOLOGICAL SUSTAINABLE DEVELOPMENT

A Sustainability Strategy has been prepared by ARUP that identifies a list of commitments for the project and demonstrates a mechanism to ensure that the development delivers on the sustainability requirements established in the SOPA Environmental Guidelines (2008) and the 2030 SOPA Master Plan (refer to **Appendix K**).

The intention is that during the next stages of the project, the identified sustainability commitments will be incorporated into a Sustainability Management Plan for the project. This will monitor progress to achieving the commitment through the design, construction and operation of the development.

The following is a summary of the initiatives to be implemented during design, construction and operation:

- Façade treatment: reduce energy used by air conditioning and improve occupant comfort;
- Smart metering: provided for each apartment to indicate to the residence the real time energy consumption and when power tariffs are peak;
- Renewable energy: PV solar electric panels, maximum natural day light and efficient lighting within all corridors;
- Natural ventilation: natural ventilation to all corridors and to apartments;
- Recycled water: maximise use of recycled water through water efficient appliances, local recycling of roof rainwater for the irrigation of landscaping and supply the WRAMS water to the non-potable water sources;
- Embodied carbon: reduce embodied carbon content of construction materials.
- Timber: Eliminate the use of virgin timber material products.

In addition to the above initiatives, a BASIX certificate has been submitted with the Development Application (refer to **Appendix M**). It indicates that the proposal can meet the minimum requirements for water, thermal comfort and energy efficiency.

7.5 MAJOR EVENTS

Major events capability and the SOP Major Event Impact Assessment Guidelines have been addressed in Sections 5.2.7 and 6.5 of this Report.

7.6 NOISE AND VIBRATION

An Acoustic Report has been prepared by Acoustic Logic, which assesses the potential impact associated with noise generated on Bennelong Road, with noise and vibration generated on the railway corridor to the South and potential noise emitted by the proposed development on surrounding receivers (**Appendix T**). The Report makes a number of recommendations:

- All external walls are proposed to be heavy masonry elements that will not require upgrading;
- Noise intrusion through the masonry walls will be negligible and will not contribute to internal noise levels.
- Glazing thicknesses has been recommended to satisfy acoustic requirements;
- Internal acoustic levels cannot be achieved with windows open and air conditioning should be installed to meet AS 1668.2 requirements.
- Vibration generated by a train pass-by below the proposed development will potentially generate structure born vibration which will be radiated through internal building elements such as walls, floors and ceiling as audible noise.
- The measured internal rail vibrations comply with the relevant daytime and night-time criteria for the residential development.
- Vibration isolation will be required for the Building A and B. Vibration isolation of the building structure will be required to comply with vibration goals. Detailed design of any structural vibration isolation systems should be conducted at the Construction Certificate stage of this development.
- A detailed review of all external mechanical plant should be undertaken at construction certificate stage (once plant selections and locations are finalised). Acoustic treatments should be determined in order to control plant noise emissions.

The Acoustic Report concludes, inter alia:

“Provided that the treatments set out in this report are employed, internal noise levels shall comply with the requirements of the Department of Planning.

Trains induced ground born vibration measurements have been carried out and vibration isolation of Building A and B is required to mitigate structure borne noise into habitable space within the project. Detailed vibration isolation solutions shall be determined at CC stage.”

The proposal can comply with the relevant standards and guidelines, and as such, we consider that there will be no adverse noise impacts for the future occupants or surrounding residents as a result of the proposed development.

7.7 SEDIMENT, EROSION AND DUST CONTROL

A Sediment, Erosion and Dust Control Plan has been prepared by Brown Consulting and is attached at **Appendix U**. The recommended soil and sediment control measures include:

- A stockpile located in the northern portion of the site with a sediment fence around it;
- A sediment basin located in the north eastern corner of the site with a level spreader for basin discharge;
- Portable sediment pump tanks for basement car park excavation;
- An earth bank and sediment fence along the site boundary.

These control measures are to be carried out prior to the commencement of works.

7.8 UTILITIES

The following utilities services are proposed for the development:

- Electrical services
- Gas
- Telecommunications
- Water
- Sewer
- Stormwater

Consultation has been undertaken with the relevant service providers and copies of the correspondence for each are provided at **Appendix V**.

7.8.1 ELECTRICITY

Alterations will need to be made to the network to provide electricity to the development. Ausgrid anticipate that the following alterations will be required two kiosk substations will be required. An Accredited Service Provider (ASP) will be engaged to undertake the design and construction of electricity network.

7.8.2 GAS

Jemena will supply and install pipework from the gas main in the street to a path valve at the boundary of the site at a suitable location identified by Jemena. Jemena will also supply all necessary metering equipment including remote metering. Jemena will require a dedicated analog telephone line for the remote metering modem.

7.8.3 TELECOMMUNICATIONS

Preliminary investigations indicate that a fibre optic and/or major network is present in the location of the proposed basement. The cable network will be required to be relocated to accommodate basement excavation. The applicant will consult with Telstra and Optus on the relocation of the network prior to the commencement of any works.

Telstra and Optus will be consulted on the services and reticulation required to service the development. These service providers will be notified of the details of the development in order to allow the necessary service arrangements to be made and local network augmentation to be carried out.

7.8.4 WATER

Sydney Water has advised the following in relation to the existing capacity and required works:

- *The existing ON 150 potable water main in Bennelong Parkway has sufficient capacity to service 352 residential apartments and does not need to be amplified The proposed development can connect to the existing DN225 inlet on the 900mm trunk main located on the property*
- *The developer may be required to carry out additional works on the existing sewer mains on the property to facilitate their development and protect the sewer mains where the works are in close proximity to the sewer main assets (manhole, pipes, vent shafts) Building plans shall be stamped and approved by Sydney Water prior of any building construction starting on site.*

A Section 73 application to Sydney Water will be made to Sydney Water after the consent for the development is obtained. Mott MacDonald has been engaged to design and manage the Sydney Water existing DN90 recycled water main amplification to a DN150 recycled water reticulation main from the existing DN300 main in Australia Avenue and provide full frontage to the development.

7.8.5 SEWER

The proposal will not require deviation of the existing sewer main as it is concrete encased and the development has been designed to avoid the main. The existing main is currently built over and it is proposed to build over the same thrust board sewer. This will be subject to conditions of consent. The basement floor level is such that it will clear the existing sewer main, avoiding the need for relocation.

A clearance of 4.5m will be provided over the existing manhole and 24/7 unimpeded access will be provided from the road. A minimum 150mm diameter private recycled water main will service the development.

7.8.6 STORMWATER

Details of stormwater management and onsite detention are provided in the Stormwater Concept Plan prepared by AT&L attached at **Appendix L**.

7.9 STAGING

The proposed development does not seek staged development consent. The approval being sought is for the whole of the proposal and the development will be constructed in one stage.

7.10 CONTRIBUTIONS

SOPA has prepared the Sydney Olympic Park Master Plan 2030 (Master Plan 2030) to control the future development of Sydney Olympic Park. The Infrastructure Contribution Framework outlines the contributions that SOPA will seek to include in planning agreements to be negotiated with developers of land in Sydney Olympic Park.

Monetary Contribution

Sydney Olympic Park Site 67A/67B in the Parkview precinct has an area of 15,042m². Under Master Plan 2030 the site has a maximum development potential of 30,084m². The proposal has a GFA of 30,080m² (585.2m² for a childcare centre is not dedicated to Council). The contributions floor space credit is 15,042m², in accordance with the ICF the total monetary contribution calculation applicable to this site is based on the residual GFA less the community GFA:

- $30,080 - 15,042 = 15,038\text{m}^2$

The total monetary contribution is therefore:

- $15,038\text{m}^2 \times \$250 \text{ per square metre} = \$3,759,500$

The contribution is subject to indexation from 12 March 2012.

Land Contribution

Part of Sydney Olympic Park Site 67A/67B is proposed to accommodate two new streets, a pedestrian street and a new community facility. These will be required to be dedicated to Council.

7.11 FLOODING

The site drains towards a crossing under Bennelong Parkway. The inlet to this crossing is elevated above road level. Overland flow from the site (in excess of the capacity of the drainage pipe) potentially bypasses this crossing and flows north to next major crossing under the Bennelong Park.

A Flood and Water Quality Assessment was undertaken by Brown Consulting (NSW) Pty Ltd, which states, inter alia:

"The site does not have upstream catchments. As such, overland flows can be managed internally. The ground floor level is RL8.0 m AHD as shown in Figure 3 and is typically above the surrounding elevation by more than 1.1 m. The underground car park ramp level is RL6.9 m AHD which is 0.3 m above the road elevation. In accordance with Section 5.4 of the Auburn City Council Auburn Development Control Plan 2010, the flood planning levels for the site are more than 250 mm above

the predicted 100 year ARI flood level and the basement car park ramp is more than 100 mm above the 100 year ARI flood level.”

A full copy of the Flood Assessment is attached at **Appendix W**. In summary, the proposed envelopes and site layout are considered to be appropriate in terms of flood affectation.

7.12 WATER QUALITY

The Flood and Water Quality Assessment details the drainage impacts on discharging stormwater into Bennelong Pond. The Report states, inter alia:

“The proposed development at 100 Bennelong Parkway, Sydney Olympic Park does not increase the impervious area of the existing site. As such, the discharge from the site will not affect the water quality of Bennelong Pond. Discharge from the proposed development does not drain towards the Southern Pond and will not affect the water quality of the pond.”

The Assessment also addresses the potential impacts of overshadowing on the Southern Water Quality Control Pond. The Assessment notes that the proposed building to the north of the pond is 35m, and will result in some overshadowing. The degree of overshadowing varies depending on the season, as stated in the Report:

- *During summer, there is no overshadowing caused by the proposed development or nearby buildings.*
- *During autumn and spring, the development causes minor overshadowing over the Southern Pond during the afternoon as shown in Figure 5. The majority of the overshadowing is caused by separate future developments to the west.*
- *During winter, there is complete overshadowing of the Southern Pond during the afternoon caused by the combination of the proposed development and other future developments to the west.*

In relation to the overshadowing of the pond, the report states, inter alia:

There is the potential to effect plant growth and could adversely affect the ability of the pond to provide water quality treatment. However, in the existing condition without overshadowing, the pond does not provide adequate water quality treatment. Additionally, it is understood that the pond may be removed in future. As such, the overshadowing impact of the proposed development is not considered to be significant.

The Flood Assessment is attached at **Appendix W**.

7.13 DRAINAGE

Drainage details are provided in the Stormwater Concept Plan prepared by AT&L attached at Appendix L.

SOPA are preparing all civil documentation for the land that will be dedicated to them.

7.14 SERVICING AND WASTE

Elephants Foot have prepared a Waste and Recycling Management Plan concerning construction and operational waste management for the proposal, as follows:

The waste management plan has three key objectives:

- Ensure waste is managed to reduce the amount of waste and recyclables to land fill.
- Recover, reuse and recycle generated waste wherever possible.
- Compliance with all relevant codes and policies.

The residential waste and recycling will be guided by the services and acceptance criteria of the Auburn City Council. The residential waste and recycling will be collected by council. The commercial waste will be collected by private contractor.

Using council's waste generation rates, the total waste generated by the development can be calculated as follows:

- Waste: 660L per 5 units.
- Comingled Recycling: 660L per 5 units.

Waste will be collected as follows:

- Waste 63 x 660L bins collected weekly.
- 21 x 660L collected three times per week.
- Collections will occur on Monday/Wednesday and Friday each week.
- Recycling 69 x 660L bins collected weekly (Thursdays).

There are seven garbage chutes servicing the development. Building A has one chute; Building B has two chutes and Building C has four waste chutes. Garbage from all chutes fall directly into 660L bins located under each chute in the waste rooms located on parking level 1. Waste from Building A and B will be transferred via hoist to the bin holding rooms at ground level, Building B loading dock awaiting collection. Building C bins will be transferred from each waste room to the bin holding rooms and loading dock, Building C parking level 1.

Recycling bins for Buildings A, B and C are located in each residential waste compartment. Full waste and recycling bins for Buildings A and B will be transferred to the bin holding rooms near the loading dock on ground level; Building C will be transferred to the bin holding rooms near the loading dock on parking level 1.

Using council's waste generation rates, the child care centre is expected to generate 292.6L each of waste and recycling. Waste will be collected as follows:

- Non-recycle Waste: 1 x 360L or 2 x 240L MGB collected weekly.
- Recycle Waste: 2 x 240L MGB collected weekly.

It is expected that the contract cleaners appointed by the childcare centre will remove bagged waste and separated recycling from the allocated collection points and deposit it into the appropriate bins. The child care centre will also appoint its own private waste services provider for garbage and recycling services which may be conducted on a walk in/walk out basis for the centre.

A copy of the Waste Management Plan is attached at **Appendix X**. A separate waste management plan submitted for construction waste (**Appendix Y**).

7.15 ADDITIONAL MATTERS

7.15.1 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

The Crime Prevention Through Environmental Design (CPTED) guidelines were prepared by the NSW Police in conjunction with the Department of Planning. CPTED provides a clear approach to crime prevention and focuses on the '*planning, design and structure of cities and neighbourhoods*'. The main aim of the policy is to:

- Limit opportunities for crime.
- Manage space to create a safe environment through common ownership and the encouraging the general public to become active guardians.

- Increase the perceived risk involved in committing crime.

The guidelines provide four key principles to limit crime, including. These are:

- Surveillance.
- Access control.
- Territorial re-enforcement.
- Space/activity management.

Principle 1 - Surveillance:

The attractiveness of crime targets can be reduced by providing opportunities for effective surveillance, both natural and technical.

- The proposed buildings and balconies are oriented in order to provide natural surveillance of the communal open space areas, pathways and roadways.
- The proposed landscaping design and plant species are likely to enhance surveillance within the communal areas or along the road frontages.

Principle 2 - Access Control

Access Control can be defined as physical and symbolic barriers that are used to *'attract, channel or restrict the movement of people'*.

- Secure basement car parking will be provided for residents as part of future DAs with safe, direct lift access between to residential levels.
- Public spaces have been designed to attract, rather than discourage people from gathering.

Principle 3 - Territorial Reinforcement

Community ownership of public space sends positive signals. People often feel comfortable in, and are more likely to visit, places which feel owned and cared for. Well used places also reduce opportunities for crime and increase risk to criminals.

- The provision of security-controlled entrances to the building and basement car park will emphasise the separation between the private and public domain.
- Landscaping around the buildings will differentiate the public areas from the private.
- Well maintained planters, gardens and pavers will indicate the development is well-used and cared for to reduce criminal activity.

Principle 4 - Space Management

Space management strategies include activity coordination, site cleanliness, rapid repair of vandalism and graffiti and the replacement of decayed physical elements.

- The buildings will be maintained by Management. Continued repairs and maintenance will discourage vandalism.
- High quality materials, varied façade treatments and landscaping along boundaries will assist in discouraging vandalism and graffiti.

A Crime Risk and Security Report has been completed by Meriton, which concludes, inter alia:

"The development has been designed with close consideration to the crime minimisation measures identified in the Crime Prevention and the Assessment of Development Applications.

The proposal will provide a high level of site security at its public domain interface. The development has been designed to provide for a high level of casual surveillance and clear definition of communal and private spaces.”

A copy of Meriton's Crime Risk and Security Report is attached at **Appendix Z**. The proposal will provide a high level of security and design elements will deter criminal behaviour. Secure pedestrian entries to each building block will maintain safety and security. Casual surveillance is also available over the private open space and entry areas from units and common areas. The proposal is therefore consistent with CPTED principles.

8 Consultation

This section describes the consultation that has been undertaken by the project team during the preparation of this Environmental Assessment. Consultation has been carried out with Government agencies, in particular the Sydney Olympic Park Authority and the Sydney Olympic Park Authority Design Review Panel, and the relevant service providers, as required by the DGRs. As there are currently no residents in the immediate area, community consultation was not considered necessary.

8.1 CONSULTATION WITH SOPA DESIGN REVIEW PANEL

On 27 February 2014, the project's Consultant Team met with the Sydney Olympic Park Design Review Panel (SOPA DRP) to present the preliminary scheme for the proposed development. At that meeting, a number of issues were raised by the DRP, including unit layouts, ground floor units and street interface, façade treatment of Building B, cross ventilation and incorporation of ESD principles into the design. The DRP requested that the proposal be amended and resubmitted for further review.

In accordance with the DRP's advice, the proposal was revised and resubmitted for review. A meeting was held on 14 April with the SOPA DRP to discuss the amended proposal. The DRP's comments and a response are provided in Table 6 below.

The proposal has been refined taking into consideration the comments and recommendations made by SOPA DRP where practicable.

TABLE 6 – DRP COMMENTS

ISSUE	DRP COMMENT	PROPOSAL/COMMENT
Unit Layout	Unit layout could still benefit from minor refinement. The Panel maintains its position that Sydney Olympic Park is not a dense urban environment and therefore 3 hours of direct sunlight should be provided to 70% of units as required by SEPP 65.	- Unit layout has been revised; 66% of the apartments receive at least 3 hours of sunlight on June 21 between the hours of 9.00 am and 3.00 pm 81% of the apartments receive at least 2 hours of sunlight on June 21 between the hours of 9.00 am and 3.00 pm. - Solar access is difficult to achieve for 3 hours for 70% of units due to Australia Towers development.
Privacy	Privacy impacts between units, in the internal north western corner (overlooking courtyard) remain unacceptable.	- Screening is provided to the bedrooms of Units 152, 252 and 352; - Service area located in internal facing corner of Building B; - Solid western wall to Units 154, 254 and 354 to prevent privacy impacts; - Solid corner wall for bedroom in Units 147, 247 and 347.
New Pedestrian Street	Stormwater management, passive recreation, children's play area, BBQ areas, edible gardens, and fitness stations appear to over complicate the	Discussion has been undertaken with SOPA to determine how this space fits into the overall public open space requirements of SOP.

ISSUE	DRP COMMENT	PROPOSAL/COMMENT
	through site link. Little consideration has been given to the future development site to the north (site 65) and how it will interface with this area.	- Some of these elements, such as play areas and active recreation zones are now more suitably located within the open space of the development site. - Based on the discussions undertaken, the proposed approach to the pedestrian link has been modified, with more emphasis placed on creating links and reducing the number of active recreation zones in the through site link. - A new water feature has been introduced, as well as more planting beds and turfed areas - The same approach has been taken with the treatment of the northern edge of the through site link, with dense planting to provide privacy screening to ground level apartments for the future development. Both sides of the through site link have been designed with the same approach, to provide for integration of any future development of the north site with the new pedestrian link and the proposed development
Social Isolation	Provide opportunity for casual meetings/ encounters in foyer/ lobbies, carwash area, at mailboxes etc. All main entrance areas should be large enough to allow for seating, notice boards etc. Deeply recessed entrance doors should be eliminated in the interest of security.	Impromptu socialisation opportunities have been maximised through: - The Foyers have been sized to allow for fixed or loose seating, to facilitate casual meetings between residents. - Detailed design of the foyer areas, car wash and mailbox areas will allow for casual meetings and encounters, through the provision of fixed/loose furniture where appropriate, locations for notice boards, and space for gathering. - Ground level entries with recessed doors are wider to allow for more passive surveillance of entries from the street and to provide for better visibility and legibility at street level.
Communal Roof Space	The site has magnificent views to the east, consider addition of rooftop communal spaces, desirably with small enclosed areas fitted with basic tea-making facilities.	Communal roof areas are not proposed for the following reasons: - There is already provision for communal open spaces on Ground level for all buildings and on Level 1 of Building C as well as the new pedestrian link. - The proposed dense screening for level 1 communal area on Building C has been removed to maximise outlook over the east and take advantage of the magnificent views to the east.

ISSUE	DRP COMMENT	PROPOSAL/COMMENT
		The design of the Level 1, with planted beds and large turfed areas, is much better suited to provide communal spaces than the narrow footprint of the rooftops and there is better amenity, with connections to the outdoor pool and indoor pool and gym on ground level.
Visualisations	Visualisations and plan imagery should represent reality. Ensure shadows are cast in the right directions, planting is achievable	Visualisations and plan imagery is accurate and represents reality. Shadow diagrams have been prepared and certified by Turner Architects. Shadows are cast in the right directions and proposed plantings are achievable on the site.

8.2 CONSULTATION WITH SERVICE PROVIDERS

Consultation was undertaken by specialist consultants in the project team with government agencies and service providers. The consultation and service requirements are discussed in detail in Section 7.8 of this Report. Copies of the correspondence between the relevant consultants and service providers are attached at **Appendix V**.

9 Summary and Conclusion

This EIS has assessed the proposed development in light of Director General's Requirements and the relevant State and Local planning policies.

There are compelling reasons why a positive assessment and determination of the project should prevail:

- The proposal is permissible in the B4 Mixed Use zone and is consistent with the relevant zone objectives.
- The proposal is consistent with the key development standards for height and FSR, and the proposed built form is consistent with the Master Plan 2030 to ensure the desired future character of the Parkview Precinct is achieved.
- The proposal is consistent with State and subregional strategic planning objectives. The proposal will deliver high-quality residential development in close proximity to public transport infrastructure that provides high levels of connectivity. The proposal reinforces the position and function of Global Sydney by providing residential accommodation within easy access to the CBD. It represents an optimal utilisation of urban space, without reducing the overall amenity of public space surrounding the site.
- The proposal has been designed to satisfy the desired quality outcomes and Rules of Thumb sought from SEPP 65 and the Residential Flat Design Code.
- The architectural design is the result of an extensive process with SOPA and Council to ensure design excellence. The proposal respects its context and is of a contemporary style which makes a positive contribution to the existing built form of Sydney Olympic Park.
- The proposal provides diversity in housing choice in a highly accessible location, with an increased number of smaller more affordable dwelling types.
- The proposal is environmentally sensitive, being carefully designed to minimise environmental impacts on neighbouring properties and public domain areas.
- Provides a high level of residential amenity and liveability, with residents having access to extensive pedestrian and cycle networks, communal and private open space, parklands and facilities such as a pool and gym. The site is also well serviced by transport, infrastructure and services of Sydney Olympic Park.
- The proposal will provide social and economic benefits provide both during construction, operation and maintenance in terms of employment opportunities and flow on benefits for local businesses.
- The proposal is appropriately located and suitable for the site.

Having regard to the above benefits and in light of the relevant issues listed in the Director General's Environmental Assessment, the proposal is a sound design and planning outcome for the site and is worthy of support. The proposal contributes a significant number of new dwellings and supports greater housing choice, as well as proving a new child care centre to benefit the community. The proposal upholds the visions for Sydney Olympic Park and will positively contribute to the civic life of the precinct with minimal environmental impacts.

Accordingly it is recommended that the Minister for Planning and Environment approve the proposed development subject to the appropriate conditions of consent.

Disclaimer

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

Appendix A

Director General Requirements

Appendix B

Quantity Surveyor Report

Appendix C

Survey Plan

Appendix D

Architectural Plans, Photomontages & Materials and Finishes

Appendix E

Arboricultural Assessment Report

Appendix F

SEPP 65 Report and Design Verification Statement

Appendix G

Geotechnical Report

Appendix H

Subdivision Plan

Appendix I

Landscape Plan

Appendix J

Assessment of Traffic and Parking Implications

Appendix K

ESD Report

Appendix L

Stormwater, WSUD and SOPA Civil Drawings

Appendix M

BASIX

Appendix N

Contamination Report

Appendix O

Access Report

Appendix P

Construction Traffic Management Plan

Appendix Q

Shadow Diagrams

Appendix R

Solar Access Study

Appendix S

Wind Assessment

Appendix T

Acoustic Report

Appendix U

Erosion, Sediment and Dust Control

Appendix V

Correspondence with Service Providers

Appendix W

Flood Study

Appendix X

Waste Management Plan

Appendix Y

Construction Management Plan

Appendix Z

Crime Risk Assessment

Sydney

Tower 2, Level 23, Darling Park
201 Sussex Street Sydney, NSW 2000
t +02 8233 9900
f +02 8233 9966

Brisbane

Level 7, 123 Albert Street
Brisbane, QLD 4000
t +07 3007 3800
f +07 3007 3811

Melbourne

Level 12, 120 Collins Street
Melbourne, VIC 3000
t +03 8663 4888
f +03 8663 4999

Perth

Level 1, 55 St Georges Terrace
Perth, WA 6000
t +08 9346 0500
f +08 9221 1779

Australia • Asia • Middle East
w urbis.com.au **e** info@urbis.com.au