

**Proposed Mixed Commercial & Retail Development
6 Australia Avenue, Sydney Olympic Park
(Stage 1A, Site 43/44)**

July 2013

Prepared for Capital Corporation Properties Pty Ltd



**State Significant Development SSD 12_5677
Environmental Impact Statement**

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Quality Assurance

Reviewed by



Michael Harrison

Director
Urban Design and Planning
Architectus Sydney Pty Ltd

July 2013

Date

This document is for discussion
purposes only unless signed.

Appendices

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- B Director-General's Requirements**
- C Site survey and land ownership**
Prepared by Chadwick Cheng
- D Capital Investment Value**
Prepared by Newton, Fisher & Associates Pty Ltd
- E Site 43/44 Design Competition Jury Report**
- F Design Competition Architectural Scheme Panels**
Prepared by Architectus Group Pty Ltd
- G Phase 1 Environmental Assessment**
Prepared by Environmental Investigation Services (EIS)
- H Traffic Impact Assessment**
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- I Integrated Water Management Plan**
Prepared by Insync Services Pty Ltd
- J Acoustic Assessment**
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- K Pedestrian Wind Environment Statement**
Prepared by Windtech
- L Waste Management Plan**
Prepared by Taylor Construction Group
- M Accessibility Report**
Prepared by Morris Goding Accessibility Consultants
- N Ecologically Sustainable Development (ESD) Report**
Prepared by Green Planning Australia
- O Statement on capacity of existing utilities and services**
Prepared by Insync Services (hydraulic) and Haron Robson
- P Geotechnical Investigation Report**
Prepared by Geotechnique Pty Ltd
- Q Preliminary Construction Management Plan**
Prepared by Taylor Construction Group
- R Structural Report**
Prepared by SCP Consulting
- S BCA Deemed-to-Satisfy Assessment report**
Prepared by Building Certificates Australia Pty Ltd
- T Summary of Consistency with Sydney Olympic Park Master**

Plan 2030

Prepared by Architectus Group Pty Ltd

- U Record of Consultation**
- V Environmental Site Assessment for Silex Solar**
Prepared by SGA Environmental
- W Letter dated 18 July 2013 regarding sediment and erosion control**
Prepared by Insync Services Pty Ltd
- X Letter dated 18 July 2013 regarding acoustic impacts from major events**
Prepared by Acoustic Logic

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STATEMENT OF VERACITY

Submission of Environmental Impact Statement:

Prepared under Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

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In respect of:

Environmental Impact Statement for State significant development
Application for 6 Australia Avenue, Sydney Olympic Park (SSD 12_5677)

Declaration:

It is declared that this Environmental Impact Statement has been prepared:

- in accordance with Schedule 2 of the Environmental Planning and Assessment Regulation 2000; and
- the statement contains all available information that is relevant to the environmental assessment of the proposed development; and
- to the best of my knowledge the information contained in this report is neither false nor misleading.



July 2013

Michael Harrison
Director, Urban Design and Planning
Architectus Group Pty Ltd

EXECUTIVE SUMMARY

This Environmental Impact Statement supports a State significant development (SSD) application for a mixed commercial and retail development at 6 Australia Avenue, Sydney Olympic Park (Stage 1A of site 43/44). The registered property description of the site is Lot 56 in DP773763 and Part Lot 72 in DP 1134933.

A design competition was held for Site 43/44 at Sydney Olympic Park and the winning design by Architectus was endorsed by the Competition Jury on 31st May 2010. This master plan shows two distinct building forms on the site for commercial/retail development that are separated by new north-south and east-roads that link into the existing and proposed road structure for the central precinct of Sydney Olympic Park. The proposed Stage 1A building that forms this application is realising the completion of the development vision for site 43/44 that is contained in the master plan.

This State significant development application is to be considered alongside concurrent applications lodged to the Department of Planning and Infrastructure for the site. These include a State significant development application for the Stage 2 building, and a Section 75W Modification to the Project Application approved for the Stage 1 building on site.

The proposed development is for Construction of Building C and its use for commercial offices and retail tenancies comprising 6,920m² Gross Floor Area, redistribution of car spaces provided in Section 75W Modification and the Stage 2 State significant development and their allocation to the Stage 1A building, and 9 at-grade visitor bicycle parking spaces.

Note that excavation and construction of two levels of basement parking to serve Stages 1 and 1A will be facilitated as part of a concurrent Section 75W Modification to the Project Approval for the Stage 1 building to the Department of Planning and Infrastructure.

This Environmental Impact Statement has been prepared in accordance with the State significant development provisions of the Environmental Planning and Assessment Act 1979 (EP&A Act), the requirements of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 and the Director General's Requirements issued for the project. It also has been prepared in accordance with the requirements of the *State Environmental Planning Policy (Major Development) 2005* and the Sydney Olympic Park Master Plan 2030 which comprise the key planning framework for the development.

This Environmental Impact Statement:

- Describes the site and context;
- Provides a detailed overview of the proposed development;
- Evaluates the proposal in the context of the planning framework (strategic and statutory);
- Provides an overview of the consultation undertaken for the application with the Sydney Olympic Park Authority, their design review panel, and utility and service providers;
- Evaluates the environmental impacts;
- Provides mitigation measures to ameliorate the environmental impacts; and
- Provides justification for the project in terms of outlining feasible development alternatives and reasons for carrying out the development.

As a result of this analysis, the proposed development was found to be

consistent with the strategic and statutory planning framework, with the design competition master plan and with the provisions of Sydney Olympic Park Master Plan 2030. It was also found that the environmental impacts do not represent significant adverse impacts. Any adverse environmental impacts can be ameliorated by mitigation measures.

The key environmental impacts of the development relate to traffic during construction and operation, in terms of impact on the road network; positive impacts upon environmental sustainability through achievement of a 5 Star Green Star rating and 5 Star NABERS energy rating; construction noise impacts; and positive impacts upon the Sydney Olympic Park visual environment as a result of the design excellence of the development.

This Environmental Impact Statement for the State significant development for the Stage 1A building has been prepared in accordance with the Architectural Drawings at **Appendix A**, the Director-General's Requirements provided at **Appendix B**, and the additional plans and documentation provided at **Appendices C - X**.

It is recommended that this State significant development application be approved subject to the mitigation measures at Section 8 because it represents the type and scale of development that is intended for the site, it is in accordance with the strategic and statutory planning framework for Sydney Olympic Park, and any potentially adverse environmental impacts will be appropriately mitigated.

1 INTRODUCTION

1.1 Project Overview

This Environmental Impact Statement has been prepared by Architectus Group Pty Ltd on behalf of Capital Corporation to accompany a State significant development (SSD) application for a mixed commercial and retail development at 6 Australia Ave, Sydney Olympic Park (Stage 1A of site 43/44).

The site comprises 12,022m², of which 927m² constitutes Stage 1A. The site is shown on the location plan at **Figure 1**.

A design competition was held for Site 43/44 at Sydney Olympic Park and the winning design by Architectus was endorsed by the Competition Jury on 31st May 2010. This master plan shows two distinct building forms on the site for commercial/retail development that are separated by new north-south and east-west roads that link into the existing and proposed road structure for the central precinct of Sydney Olympic Park.

The master plan provides for a Stage 1 commercial/retail building at the corner of Australia Avenue and Herb Elliott Avenue which was approved as a Project Application on 31 July 2012 (MP 10_0168). A Stage 2 commercial/retail building is shown in the south-western part of the site that has three street addresses, with primary frontage to New Road 16. The proposed Stage 1A building that forms this application completes the Stage 1 building to envelope the courtyard and provides address to New Road 10. It is shown as Stage 3 on the Design Competition Panels at **Appendix F**.

Concurrent applications for State significant development for Stage 2 commercial building, and Section 75W Modification to the Stage 1 Project Application are being considered with this application for Stage 1A. This is discussed more at Section 1.4 below.



Figure 1. Location Plan

The application seeks consent for:

- Construction of Building C and its use for commercial offices and retail tenancies comprising 6,920m² Gross Floor Area;
- Redistribution of car spaces provided in Section 75W and Stage 2 State significant development and their allocation to the Stage 1A building; and
- Provision of 9 at-grade visitor bicycle parking spaces.

Note that excavation and construction of two levels of basement parking to serve Stage 1A will be facilitated as part of a concurrent Section 75W Modification to the Project Approval for the Stage 1 building and the Stage 2 State significant development .

This Statement is submitted to the Department of Planning and Infrastructure by Architectus on behalf of Capital Corporation under the State significant development provisions of the Environmental Planning and Assessment Act (EP&A Act) 1979. This Statement is to be read in conjunction with the architectural drawings provided at **Appendix A** and the documentation and supporting information provided at **Appendices B to X**.

1.2 Proponent and Project Team

The proponent for the application is Capital Corporation. The project team comprises:

Architect	Architectus
Urban planner	Architectus
Landscape architect	Scott Carver Pty Ltd
Electrical engineer	Haron Robson
Surveyor	Chadwick Cheng
Mechanical engineer	DSA Consulting
Stormwater engineer	Insync Services
Hydraulic and fire services	Insync Services
BCA consultant	Building Certificates Australia Pty Ltd
Structural engineer	SCP Consulting
Contamination	Environmental Investigation Services
ESD consultant	Green Planning Australia
Traffic consultant	Traffix
Arborist	Urban Tree Management
Quantity surveyor	Newton, Fisher & Associates Pty Ltd
Wind consultant	Windtech
Acoustic consultant	Acoustic Logic
Accessibility	Morris Goding Accessibility Consulting
Surveyor	Chadwick Cheng Consulting Surveyors
Geotechnical engineer	Geotechnique Pty Ltd

1.3 Director General's Requirements

The Director-General's Requirements (DGRs) for the proposal were provided to Capital Corporation under Schedule 2 of the *Environmental Planning and Assessment Regulations 2000* (the Regulations) on 12 December 2012.

Table 1 below summarises the DGRs and provides references to where the various issues are addressed in this EIS. A full copy of the DGRs is found at **Appendix B**.

Table 1. Director General's Requirements

REQUIREMENT	Section of Report
The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000. The EIS must address the following specific matters below.	Section 6.1
1. Environmental Planning Instruments (EPIs)	
2. Policies, Guidelines and Planning Agreements	
3. Built Form and Urban Design	
4. Amenity	
5. Ecologically Sustainable Development (ESD)	Section 6.3

6. Major Events	Section 6.2
7. Noise	Section 6.3
8. Transport and Accessibility (Operation)	Section 6.3
9. Transport and Accessibility (Construction)	Section 6.3
10. Sediment, Erosion and Dust controls (Construction and Excavation)	Section 6.3
11. Utilities	Section 3.3
12. Staging	Section 1.4
13. Contributions	Section 3.3
14. Drainage	Section 6.3
15. Servicing and Waste	Section 6.3
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. In addition, the EIS must include the following:	Appendices B - V
• Quantity Surveyors Certificate	Appendix D
• Stormwater Management Plan	Appendix I
• Landscape Plan	Not applicable
• Public Domain Interface Plan	Not applicable
• Preliminary Construction Management Plan, inclusive of a Construction Traffic Management Plan.	Appendix Q
• Geotechnical and Structural Report.	Appendix P and Appendix R
Consultation	
Description of 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.	Section 5

1.4 Related and concurrent applications

The following applications have either been determined on site 43/44 or are currently under consideration.

Project Approval MP 10_0168

Project approval for the Stage 1 commercial/retail building at the corner of Australia Avenue and Herb Elliott Avenue, was granted by a delegate of the Minister of Planning and Infrastructure on 31 July 2012 (MP 10_0168). The Instrument of Approval describes the project for an eight storey mixed commercial and retail development including 16,450 sqm of gross floor area, and two levels of basement car parking. It also included:

- Tree removal; and
- Part construction of new east-west street.

This building has not yet been constructed.

Development Application for demolition of warehouse

A Development Application for the demolition of the existing warehouse (DA09-05-2013) on the site was lodged to the Sydney Olympic Park Authority (SOPA) on 15th May 2013. This was approved by SOPA under

delegation of the Minister for Planning on 05/06/2013. The application proposes demolition of:

- Warehouse and office building;
- Metal shed and associated structures;
- Hard surface areas (at-grade parking, paths and the like).

The warehouse building physically overlaps with the site area of the proposed Stage 1 and Stage 2 buildings on site.

Section 75W to Project Approval (Stage 1 building)

This State significant development application for the Stage 2 building and associated works should be considered with the concurrent Section 75W Modification to the Project Approval for the Stage 1 building.

The Section 75W proposes a raft of changes to the Stage 1 building. The more substantial changes include:

1. Expansion of area of excavation for basement carpark and construction of extended basement car park at two levels to accommodate a total of 280 car spaces (55 additional car spaces).
2. Changes to landscaping of the courtyard and undercroft area.
3. Removal of kiosk to undercroft area.
4. Removal of vertical blades from building façade and their replacement with timber soffit to the balconies and other façade treatment.

State significant development for Stage 2 building

This State significant development application for the Stage 1A building and associated works should be considered with the concurrent State significant development application for the Stage 2 building.

The proposed Stage 2 building and associated works includes:

- Construction of Building D and its use for commercial offices and retail tenancies comprising 17,152m² Gross Floor Area;
- Excavation and construction of new basement parking over two levels to accommodate 222 car spaces for allocation of 210 spaces to the Stage 2 building and allocation of 12 spaces to the Stage 1A building;
- Two new driveways, one to New Road 10 and one to Herb Elliott Avenue;
- Landscaping to site.

It should be noted that the architectural plans for the Stage 2 State significant development application show a modified Stage 1 building (Section 75W scheme).

State significant development for Stage 1A building

The Stage 2 building is being designed and serviced completely separately from the Stage 1 and Stage 1A building/s so that it can function autonomously. The basement carpark will be connected through the Stage 1 and Stage 2 car parking areas.

It should be noted that the architectural plans for the Stage 1A State significant development application show a modified Stage 1 building (Section 75W scheme).

2 THE SITE AND ENVIRONMENT

This section provides details about the site and its context including existing conditions, history, land uses and the relationship of the site to adjoining and nearby land uses.

2.1 Site details

The registered property description of the site is Lot 56 in DP773763 and Part Lot 72 in DP 1134933 (refer **Figure 2**).

The site is located to the south-east of the Olympic Park Railway Station on the western side of Australia Avenue (refer to location plan at **Figure 1**).

The site is described as Site 43/44 in the Master Plan (refer Figure 3). It is owned by the Sydney Olympic Park Authority (SOPA). The applicant is Capital Corporation Properties Pty Ltd.

Overall, the site has an area of 12,022m² with an approximately 84 metres frontage to Australia Avenue. A site survey is provided at **Appendix C**.

The site currently comprises a two storey commercial office and warehouse building, with at grade car parking. The site also includes a triangular shaped parking area, which is owned by SOPA and is publicly accessible.



Figure 2. Property description

Land use zoning

The site, 6 Australia Avenue, is within the Central Precinct of the Sydney Olympic Park Master Plan 2030. The Master Plan 2030 is a 22 year vision for the sustainable development of Sydney Olympic Park. One of the purposes of the Master Plan is to provide detailed planning and design principles and controls (refer **Section 3**). The site is identified as a commercial land use in the Master Plan.

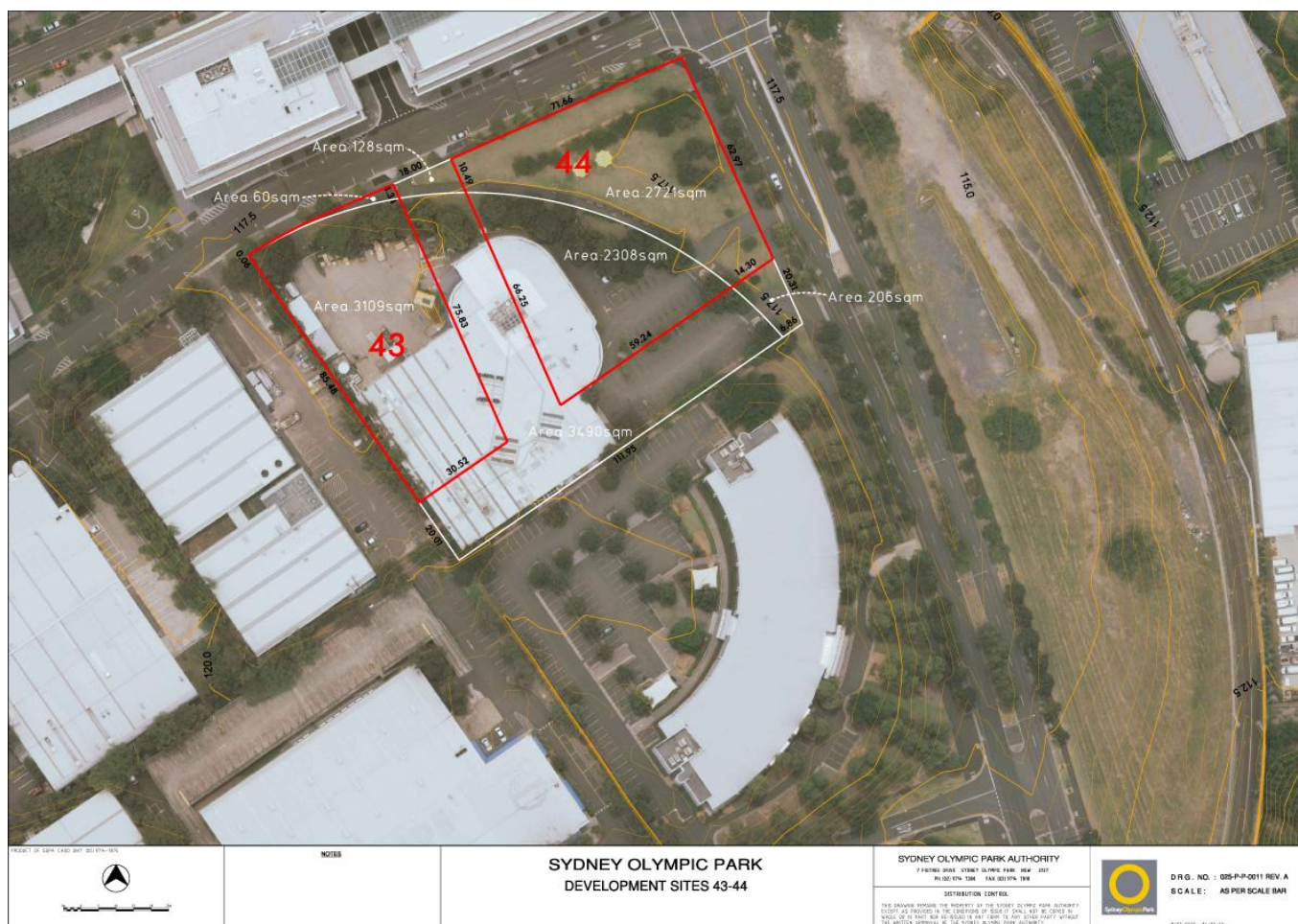


Figure 3. Development site 43/44

The development sites 43/44 are identified by a red outline. The 6 Australia Avenue site also comprises part of a new east/west road and the new north/south road. (Source: SOPA)

2.2 Context

Regional context

This information is sourced from the Sydney Olympic Park Master Plan 2030.

Sydney Olympic Park is centrally located in the rapidly developing corridor between the Parramatta and Strathfield/Burwood regional centres. Nearby town centres, including Ashfield, Burwood, Strathfield, Rhodes and Auburn, are sited along two major rail corridors and are the focus of intense development.

Older adjoining areas are also rapidly changing. The Parramatta Road corridor, the Carter Street Precinct, the North Strathfield corridor and the former Lidcombe Hospital site are developing new housing and employment uses at higher densities. Over the coming decades, the cumulative effect of these developments will alter the form and function of the region.

Given the availability of land, transport infrastructure and synergies with adjoining areas, Sydney Olympic Park 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.

Sydney Olympic Park's location at the geographic heart of Sydney and its infrastructure legacy from the Sydney 2000 Olympic and Paralympic Games have ensured excellent road and rail access from most places in

the greater metropolitan area. It occupies 640 ha and offers rich metropolitan attractions, extensive sporting and recreational facilities, and generous public spaces that are ideal for hosting major events. No comparable individual venue or cluster of facilities is found elsewhere in NSW.

Sydney Olympic Park embraces more than five kilometres of Parramatta River frontage. This includes the shores of Homebush Bay. Sydney Olympic Park's extensive parklands are of significance for the whole community and, as they mature, will play an increasingly important role in Sydney's recreational and environmental life. In the twenty-first century they will become a great green lung for Sydney along with other comparable open spaces such as Lane Cove National Park, Parramatta Park and Centennial Park.

The Sydney CBD is approximately 14 kilometres to the east of Sydney Olympic Park.

Local context

The subject site is located at a key corner within Sydney Olympic Park, with a frontage to Herb Elliott Avenue, one of the main east-west roads that extends through Sydney Olympic Park.

Site 43/44 is located within a business park setting adjacent to the sporting and recreational facilities established for the Sydney Olympic Games. This site is located within 250 metres of the Olympic Park Railway Station. Adjacent is the future commercial and retail core of the town centre which will evolve over the next 20-25 years as a Specialised Centre guided by the Sydney Metropolitan Strategy, West Central Subregional Strategy and the Sydney Olympic Park Master Plan 2030.

To the west

To the west of the site is an existing office building currently occupied by the Sydney Water Corporation data centre.

In the future it is expected that there will be eight storey commercial buildings to the west of the site.

To the north

North of the site are two 7 storey commercial buildings, one of which is occupied by the Commonwealth Bank. Further north is the Olympic Park railway station.

Herb Elliot Avenue is the main street frontage to the site and runs east west along the site's northern boundary. The street has two lanes of traffic with car parking and pedestrian footpaths on both sides of the street.

To the east

Located to the east of the site is Site 3 where a high rise residential development with ground floor retail uses and a child care centre, is currently under construction.

Australia Avenue is the eastern frontage of the site.



Figure 4. Commonwealth Bank building
View from subject site looking north west along Herb Elliott Avenue.



Figure 5. Olympic Park Railway Station
View from northern side of Commonwealth Bank building looking along Dawn Fraser Avenue.



Figure 6. Australia Avenue
View looking south along Australia Avenue.

To the south

South of the site is an existing two storey office development. A new east-west link road will be built with the Stage 2 redevelopment (2 Herb Elliott Ave) of the subject site along the southern boundary and, under the Master Plan 2030 there will be new eight storey commercial buildings on the adjacent site to the south.



Figure 7. Existing two storey commercial development to south

2.3 History

The information in this section is sourced from the Sydney Olympic Park Master Plan 2030.

Regeneration plans for Homebush Bay as an international sporting venue were first proposed in the early 1970s and renewal of the site began during the 1980s with the development of the Australia Centre Technology Park, Bicentennial Park and the State Sports Centre.

The most notable legacies of the Sydney 2000 Olympic and Paralympic Games at Sydney Olympic Park were:

- the development of world class event venues such as the Olympic Stadium (currently ANZ Stadium), Multi-Use Arena (currently Allphones Arena), Sydney Olympic Park Tennis Centre, Aquatic and Athletic Centres and Sydney Showground in the geographic centre of Sydney;
- the largest remediation project of its kind in the history of Australia - 9 million m³ of waste were remediated to transform a former rubbish dump into parklands;
- the creation of one of the largest metropolitan parklands in Australia;
- the establishment of one of the world's largest wastewater recycling systems, comprising a dual water reticulation network made up of separate potable and reclaimed water mains; and a water treatment plant to purify all reclaimed water, including stormwater and treated sewage;
- the creation of Newington, a new solar powered suburb neighbouring Sydney Olympic Park, to house the Athlete's Village (with the capacity to generate over one million kilowatt hours each year);
- a best practice approach to environmental sustainability, including water conservation and recycling, energy conservation, use of

renewable energy technologies, sustainable materials selection, waste management, and the protection of unique flora and fauna;

- high quality landscape reconstruction of the Haslams Creek and Boundary Creek corridors to mitigate flooding impacts;
- high quality architecture, public spaces and urban elements; and
- a business park hosting more than 50 companies by 2006.

The land now controlled by the Sydney Olympic Park Authority was formally recognised as 'Sydney Olympic Park' in 2002 by the Geographic Names Board.

2.4 Existing conditions

The site characteristics are described below. Refer to photos at **Figure 8** to **Figure 12**.

Land uses and existing improvements

The existing uses on the site consist of a two level warehouse/office building in the south-west corner of the site. Vehicle access to the site is obtained from Herb Elliott Ave. There is currently a park in the north-east corner of the site.



Figure 8. View of main entry to existing warehouse/office building



Figure 9. Northern elevation of existing warehouse/office building



Figure 10. Loading dock of existing warehouse/office building



Figure 11. Vehicle entry to site from Herb Elliott Ave



Figure 12. Existing park, corner of Australia Ave and Herb Elliott Ave

Soils, geology and geotechnical conditions

The Geotechnical Report prepared by Geotechnique Pty Ltd is attached at **Appendix P**. The information in this section is taken from the Geotechnical Report. Eight boreholes were drilled across the site as part of the field work for the investigation.

The topography of the site is generally flat. Reference to the Soil Landscape Map (1:100,000) of Sydney indicates that the landscape at the site belongs to the Blacktown Group, which is characterised by gently undulating rises on Wianamatta Group shale, with local relief to 30m, ground slope less than 5%, broad rounded crests and gently inclined slopes.

The sub-surface soil in this landscape is likely to be up to 3m thick, moderately reactive, highly plastic and with poor drainage.

With the exception of some seepage in one of the eight boreholes drilled on site at about 2.6m, groundwater and/or seepage were not encountered up to auger refusal depths. The use of water for coring in bedrock precluded further measurement of groundwater. However, levels of rock seepage might vary due to rainfall, temperature and other factors not evident during drilling.

Traffic, access and transport

Traffic have prepared a Traffic Impact Assessment and this is attached at **Appendix H**. The following information is summarised from the Traffic Impact Assessment.

Road network

Australia Avenue is a local road that generally runs in a north-south direction between Holker Street in the north and Homebush Bay Drive in the south.

Herb Elliott Avenue is a local road that generally runs in an east-west direction linking Australia Avenue in the east with Olympic Boulevard in the west.

The site is conveniently located with respect to the arterial and local road systems serving the region. It is therefore able to effectively distribute traffic onto the wider road network, minimising traffic impacts.

Site access

There are currently two driveway crossings accessing the site from Australia Avenue. There is also a loading area on the northern side of the development which is accessed via Herb Elliott Avenue. This access driveway is approximately 8 metres wide.

Existing intersection performance

The Traffic Impact Assessment sets out the existing intersection performance for the following intersections for the AM and PM peak hour:

- Herb Elliott Avenue and Australia Ave
- Herb Elliott Avenue and Olympic Boulevard
- Australia Avenue and Kevin Coombs Avenue
- Australia Avenue and Sarah Durack Avenue
- Hill Road and M4 Off-Ramp

The Assessment has found that the majority of these intersections operate satisfactorily with a Level of Service of B or better. The only exceptions are the intersection of Australia Ave and Sarah Durack Ave which is currently operating with a Level of Service of D during the PM peak period and the intersection of Hill Road and the M4 off-ramp which is currently operating with a Level of Service of F during the AM peak period.

Public transport

The site benefits from good access to the public transport system with the following amenities provided at Olympic Park:

- Bus services to Lidcombe, Parramatta and Chatswood via Ryde.
- Bus stops on Australia Avenue adjacent to the development and on Murray Rose Avenue adjacent to the railway station.
- The Olympic Park Railway Station is less than 200 metres to the north-west of the site from Australia Avenue. This line provides links to Lidcombe which in turn provides access to the overall metropolitan rail network.

These services will ensure a high level of public transport accessibility.

Utilities and services

Section 3 of this EIS contains a description of the existing services to the site and any required augmentation of services.

Visual environment

Figure 3.2 of the Sydney Olympic Park Master Plan 2030 identifies existing key views from and within Sydney Olympic Park. The Master Plan states that views assist in orientation and connect the town centre with the local and metropolitan environs. In addition, the town centre street network and open space setting was designed to enhance existing topography and define ceremonial vistas.

The Master Plan requires that the following important views be preserved and enhanced:

- Fig Grove to mark the high point of the urban core and of Olympic Boulevard;
- The vista to the Northern Water Feature and Newington Village along Olympic Boulevard;

- The vista to the Tennis Centre along Olympic Boulevard;
- Views to the surrounding parklands;
- The iconic skyline views of the former Olympic venues from the surrounding areas;
- Eastern views to Sydney CBD and Chatswood;
- Local views to the former Olympic stadium (currently ANZ Stadium);
- Regional views.

Refer to **Figure 13** below.



Figure 13. Key views and vistas at Sydney Olympic Park

Source: Sydney Olympic Park Master Plan 2030, Figure 3.2.

3 THE PROPOSAL

3.1 Overview

Proposed development

The proposal seeks State significant development (SSD) approval for Stage 1A of the development, comprising the following works:

The application seeks consent for:

- Construction of Building C and its use for commercial offices and retail tenancies comprising 6,920m² Gross Floor Area;
- Redistribution of car spaces provided in Section 75W and Stage 2 State significant development and their allocation to the Stage 1A building;
- Provision of 9 at-grade visitor bicycle parking spaces.

Note that excavation and construction of two levels of basement parking to serve Stage 1A will be facilitated as part of a concurrent Section 75W Modification to the Project Approval for the Stage 1 building and the Stage 2 State significant development .

Note the proposed development excludes the New Road 16 and New Road 10. The civil road design and the landscaping of the verge areas (including to Herb Elliot Avenue and Australia Avenue) is being designed and documented by SOPA.

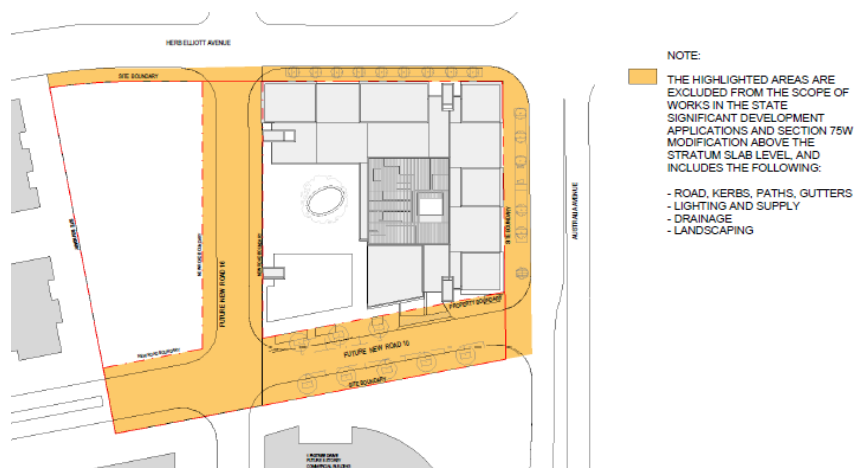


Figure 14. Areas excluded from scope of Section 75W Modification and State Significant Developments

Objectives of the development

The objectives of the development are:

- To provide a significant amount of new commercial floorspace within Sydney Olympic Park;
- To provide new jobs within easy walking distance of the Sydney Olympic Park railway station and bus services;
- To incorporate the principles of Ecologically Sustainable Development into the design, construction and operation of the development;
- To provide a building that makes a positive contribution to the

significant site, the public domain and the local character;

- To provide sufficient parking spaces for the development but not an over-supply, to encourage the use of sustainable transport modes;
- To incorporate a high standard of design and amenity within the development;
- To design a building that promotes use and enjoyment of the outdoor spaces around the building;
- To provide a safe and secure environment for employees and visitors; and
- To manage, minimise and mitigate potential impacts arising from construction and operation.

3.2 Permissibility

Permissibility of the proposed development is established through provisions of the EP&A Act 1979, State Environmental Planning Policy (Major Development) 2005 and State Environmental Planning Policy (State and Regional Development) 2011.

Part 4 of the EP&A Act applies to development that may not be carried out except with development consent.

Part 23 of Schedule 3 of the Major Development SEPP zones the site B4 Mixed Use zone. Clause 9(3) of Schedule 3 permits, with consent, the proposed development.

Clause 8 of the State and Regional Development SEPP declares development to be State significant development if

“(a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and

(b) the development is specified in Schedule 1 or 2.”

Schedule 2 of the SEPP lists development that has a capital investment value of more than \$10 million on land within Sydney Olympic Park as State significant development.

Therefore, by way of the provisions of the EP&A Act, SEPP (Major Development) 2005 and SEPP (State and Regional Development) 2011, the proposed development is permissible with development consent on the site.

3.3 Detailed description

Architecture and urban design

The Architectural drawings below illustrate the proposed Stage 1A development within the context of the overall site redevelopment. The drawings include the footprint of the concurrent Stage 2 application and Section 75W Modification to the Stage 1 building. Building footprints and heights are consistent with the Sydney Olympic Park Master Plan 2030 (MP 2030) and the site-specific master plan presented to the Design Jury.

The proposed Stage 1A development is an extension to the Stage 1 development increasing the commercial floor plates by 936m² per commercial floor level. The floor levels, roof level and building heights are consistent with the levels and heights in Stage 1.

Retail will be provided at ground floor level which will assist in activating and animating the ground floor level and the adjacent courtyard space.

Entrances to the retail tenancy will be provided from the southern elevation (to the new road) and the northern elevation (to the courtyard).

A through-site link is provided between the Stage 1A and Stage 1 building at ground level but the buildings are connected as one building overhead at upper levels. This provides for pedestrian permeability to/from the courtyard to New Road 10 that connects to Australia Avenue. It also provides a visual break in the building massing between Stages 1 and 1A.

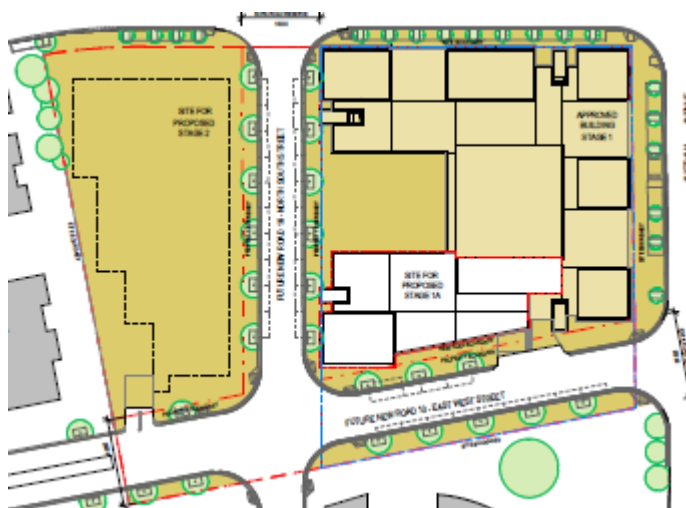


Figure 15. Site plan showing Stage 1A building within red boundary

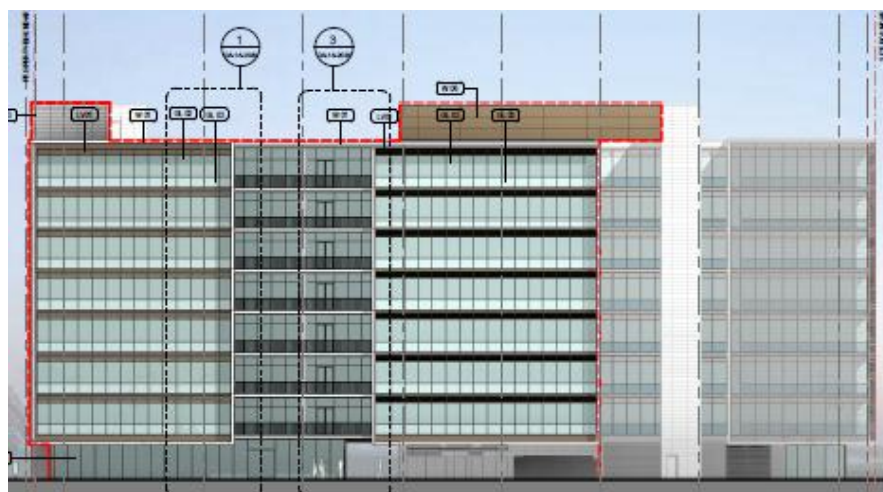


Figure 16. South elevation of Stage 1A building facing New Road 10



Figure 17. View south-east into courtyard with Stage 1A building shown on right

Built form and land uses

The Stage 1A building comprises an 8 storey building of 32.35 metres maximum height (to top of plant). The proposed land uses are retail at ground floor level and commercial over the remaining seven storeys.

Gross floor area

The total gross floor area (GFA) for the Stage 1A development is 6,920m². This is comprised of 409 m² retail and 6,489 m² commercial.

Materials

The proposed palette of materials consists of a combination of bronze coloured metals, glazed white terracotta tiles and white painted concrete for the external facades. They are high quality and consistent with Stage 1 and the contemporary architectural expression of the proposed development. Materials selections are indicated on the sample board and architectural drawings at **Appendix A**.

Traffic, transport, access and parking

The basement carpark to serve the Stage 1A building is being provided as part of the Section 75W modification (s75W) works. The s75W includes additional excavation and expansion of the basement carpark to provide 55 additional car spaces for the Stage 1A building. These car spaces for the Stage 1A building will be constructed as part of the s75W works. The additional 4 spaces are being provided as part of the Stage 2 State significant development.

Despite the basement carpark not being part of the scope of development works, aside from minor alterations, it is discussed below because the maximum rate for car parking is related to the Gross Floor Area of the building.

Access

The proposed building will have vehicular access to the basement carpark from New Road 10. This will comprise a Category 2 Driveway under AS 2890.1 (2004) of width 6.3 metres. AS 2890.1 requires a combined entry-exit driveway to be of width 6.0m to 9.0m.

Analysis has identified that there is sufficient space within the property boundary to accommodate 4 queued vehicles.

There is a separate vehicular entry point for retail parking to the basement. As there will be 27 retail spaces provided across Stages 1 and 1A, with 6 spaces allocated to Stage 1A, this requires provision for 2 cars to be queued, and this is provided within the basement level.

Car parking

The parking requirements for the development are set in the Sydney Olympic Park Master Plan. This provides for maximum parking rates for commercial use (1 space per 80 sqm GFA) and retail use (1 space per 50 sqm).

Based on a total GFA of 6,489 sqm for commercial use, this allows for a maximum of 81 car spaces. A total of 53 car spaces will be allocated to commercial use.

Based on a total NLA of 409 sqm this requires a maximum of 8 car spaces. A total of 6 car spaces will be allocated to retail use.

Therefore a total of 59 basement car spaces will be provided for the Stage 1A building.

Disabled parking

A total of 10 disabled car spaces will be provided across Stages 1 and 1A (out of a total of 282 car spaces). This complies with the requirement for 2-3% of spaces to be provided as disabled spaces.

Bicycle parking and facilities

A minimum of 52 bicycle parking spaces are required to serve the Stage 1A building. A total of 64 will be provided. Some of these will be provided within the Section 75W Modification scope of work, when the basement levels are constructed. Others will be put in place during minor alteration works that are required to the basement level as part of the Stage 1A development works.

A total of 9 bicycle parking spaces will be provided at ground level as part of the Stage 1A development to the north-western corner of the courtyard. Note that 21 at-grade visitor parking bicycle spaces will be provided as part of the Section 75W Modification. This means there will be 30 at-grade visitor parking bicycle spaces to serve the Stage 1A and Stage 1 buildings.

Motorcycle parking

The basement parking levels that serve both Stage 1 and Stage 1A will provide 25 motorcycle parking spaces. This represents 9% of total car spaces provided and is considered adequate.

Loading

Loading dock access is provided to the southern side of the development to New Road 10. This access was approved as part of the Project Application for the Stage 1 building. This access is suitable for use by a standard service vehicle of 8.8m. Note this will be used to service the supermarket. As discussed with SOPA officers previously for the Stage 1 Project Application, there are numerous examples of small supermarket/retail premises being approved with this design vehicle.

Ecologically sustainable design

Green Planning Australia were commissioned as an independent advisor by Capital Corporation to review the Green Star Office rating and NABERS Office rating of the building.

An Ecologically Sustainable Development Report has been prepared by Green Planning Australia and is attached at **Appendix N**.

The building and services have been designed to achieve:

- 5 Star Green Star Office V3 Design Rating prior to construction;
- 5 Star Green Star Office V3 As-built rating during construction;
- 5 Star NABERS Energy rating; and
- High performance in energy, water, waste and indoor environmental quality.

The following are the key ESD initiatives being developed:

Management

On-going operation of the development will be closely monitored through extensive pre and post commissioning with commitment to 12 months of building tuning and quarterly reviews to optimise the building performance. Waste, recycle and construction management plans are to be developed and applied during construction to minimise pollution and impact to environment quality.

Facade optimisation

A combination of high performance building fabric and effective shading devices on the facade are developed through the use of an energy simulation program to maximise energy efficiency and occupant comfort.

Indoor environment quality

Provision of natural daylight to the building occupants through the implementation of atrium.

Provision of carbon dioxide monitoring and control system to ensure delivery of optimum quantities of outside air.

Training of building operators and maintenance personnel

Training is to be provided to the building management staff to ensure the building operators have all the information and understanding needed to operate and maintain the features and systems in the building.

Efficient air-conditioning system

Gas fired heat recovery variable refrigerant flow (VRF) system is provided to reduce the carbon emissions and to reduce the peak electrical demand from grid.

Recycled water

Rainwater recycle system will supply recycled water to the cooling tower and all other non-potable requirements. High water efficient appliances and fittings are to be used throughout.

Lighting system

Efficient lighting and control systems will be used with separated and sub-divided perimeter and internal zones to switch off lighting where not required. PE sensors are to be installed to all perimeter zones and interlocked to the corresponding lighting zone circuit.

Materials

Low volatile organic compound (VOC) emission carpets and paints will be installed throughout. The use of PVC will be minimised.

Timber is to be sourced from sustainable plantations, have low formaldehyde emissions without arsenic treatment.

Structural

Structural Reports have been prepared by SCP Consulting Pty Ltd and these are attached at **Appendix R**. The Structural Project Report states that the proposed commercial building will be a framed multi-level building, consisting of post-tensioned floor slabs and beams. The floor slabs will be laterally braced by a combination of lift and stair shafts and frame action between concrete columns and floor slab beams.

A post-tensioned podium slab constructed over the basement carpark will support a variety of uses. Retail floor space and ancillary services will be located under the footprint of the buildings. The podium slab will also incorporate deep soil planters, the new Road 10 and Road 16 and large open areas for pedestrians and for social gatherings.

The basement car park will be surrounded by a permanent perimeter shoring/retaining wall. A temporary earth batter will occur at the demarcation between Stages 1 and 2.

The lowest basement car park level floor slabs will be poured directly onto the ground. The concrete columns and lift/stair shafts will be supported on bored piers and/or concrete pad footings founded on a rock.

The majority of the facades to the building will be lightweight framing, relying on the concrete floor slabs for support. Additional secondary structural steel framing will be introduced for any sun-shading and access for window cleaning.

All structural framing and structural components will be designed and documented to comply with the provisions and applicable Australian Standards from Section B, Part B1 of the BCA.

Integrated water management

An Integrated Water Management report has been produced for Stages 1 and 1A by Insync Services Pty Ltd. Refer to this report at **Appendix I**. The reason a joint report has been produced for the two stages is that for the purposes of hydraulic services, the Stage 1A building is not a building in its own right, but rather, a floor space extension to an existing building. And in terms of hydraulic and fire services it has no services of its own (not even an amenities core).

The Integrated Water Management report discussed the water supply, stormwater harvesting, water consumption (commercial and retail tenancy, heat rejection and outdoor water requirements), and estimates total water efficiency water consumption. The report provides that rainwater will be collected from roof areas that will be conveyed to a storage tank for non-potable use including toilet flushing, cooling tower makeup and un-controlled irrigation.

A "Hydraulic Services Site Plan Stage 1A" (stormwater plan) has been prepared by Insync Services Pty Ltd. Refer to this plan at **Appendix I**.

An Erosion and Sediment Control Plan has not been prepared specific to Stage 1A. Insync Services Pty Ltd has advised (refer letter dated 18 July 2013 at **Appendix W**) that no excavation will be carried out during construction of Stage 1A, therefore no sediment and erosion control plan is

required.

Stage 1A of the development will proceed after construction of Stage 1 has been completed. The entire basement carpark levels, and the entire ground level (podium) concrete slab will be constructed during Stage 1. As such, all excavation associated with the development will be completed during Stage 1, and conducted in accordance with the approved site sediment and erosion control plan that has previously been submitted.

Construction of Stage 1A is therefore limited to an extension of the commercial towers built form, from the existing podium level slab that will have already been constructed. As such a sediment and erosion control plan for Stage 1A is not required.

The Sediment and Erosion Control Plan that was produced for the Stage 1 development in the Project Application is provided at **Appendix I** for information purposes.

Utilities and services

Electrical

The Haron Robson report on the capacity of electrical services infrastructure (at **Appendix O**) refers to an email from Ausgrid advising that the existing precinct supply capacity will be sufficient to cater for the Stage 1A development.

The report also includes reference to the receipt of application from Telstra for the supply of telecommunications services for the Stage 1A development.

Building Code of Australia (BCA)

A BCA Deemed-to-Satisfy report has been prepared for the Stage 1A building by Building Certificates Australia Pty Ltd. Refer to this report at **Appendix S**.

This report provides a summary of the BCA Deemed-to-Satisfy non-compliances or areas of concern.

The building comprises the following classifications under the BCA: Class 5, 6 and 7a. The type of construction will be a "Type A Construction".

The effective height of the building is 24.95m. The report advises for the purpose of building height, Stages 1, 1A and 2 are considered one building for the purposes of the BCA and are measured at less than 25m. There is a direct link at basement levels between Stages 1/1A and Stage 2.

The report states:

"Collectively, identified non-compliances will apply to the whole building once the stages are completed, however, it should be acknowledged that some alternative solutions have been prepared by others on the basis of the design of Stage 1, therefore, they may be adopted where appropriate for Stage 1A proposal.

Notwithstanding the above, the following clauses should be considered to pursuant of this stage:

- 1. C2.2: General floor area and volume limitation (page 7),*
- 2. D1.5: Distances Between Alternative Exits (page 13)*
- 3. D1.7: Travel via Fire Isolated Exits (page 14),*
- 4. E2.2: Smoke Hazard Management (page 22)."*

Contributions

The Contributions Plan for Sydney Olympic Park is a confidential document, therefore further consultation with SOPA will be required to determine the level of contributions required for the proposed development. This is included as a mitigation measure at **Section 8** of this EIS.

4 PLANNING CONTEXT

4.1 Introduction

This section establishes the permissibility of the proposed development and outlines the strategic and statutory planning context within which the proposal is to be considered.

4.2 Strategic Context

NSW 2021 (State Plan)

NSW 2021 is a 10 year strategic plan to guide policy and other decisions for the state. The Plan is based on five strategies to rebuild the economy, provide quality services, renovate infrastructure, strengthen local environments and communities and restore government accountability.

The proposed development promotes the targets of the State Plan by providing additional commercial uses within the growing employment and mixed use centre of Sydney Olympic Park.

The proposed development also potentially enables more employees to use walking and cycling as travel modes if they choose to live close to work in the emerging mixed use town centre at Sydney Olympic Park.

Metropolitan Plan for Sydney 2036

The Metropolitan Plan for Sydney seeks to facilitate the implementation of the Sydney Olympic Park Vision 2025, which is supported by the SEPP (State and Regional Development) 2011 listing as a specified site and the Master Plan 2030. The Metropolitan Plan seeks to ensure that development achieves a balance between the core role as a regional sporting and specialised centre, and its potential for residential development.

A core economic principle that underpins the Metropolitan Plan is to plan and manage development to support the core economic role of Specialised Centres, including Sydney Olympic Park. The proposal will support the economic role of Sydney Olympic Park by increasing employment in the core commercial zone, supported by complementary retail uses that will provide amenities for workers, in a location well serviced by public transport services (and which also provides opportunities for living in the local area). Increasing employment will further support increasing the frequency of rail and bus services to Olympic Park.

Draft West Central Subregional Strategy

The Draft West Central Subregional Strategy identifies Sydney Olympic Park as a Specialised Centre and forms part of the Olympic Park-Rhodes Precinct.

The Strategy states that:

“This Specialised Centre provides metropolitan Sydney with high quality sporting and major even hosting facilities second to none in Australia. Excellent proximity to Parramatta Regional City to the west and Sydney City CBD to the east provides opportunity to broaden the range of residential, educational and business park type development within impacting on the centres primary role as a major sporting and cultural venue.”

In terms of employment, Sydney Olympic Park is identified in the West Central Subregional Strategy as having significant potential as a business park due to its ideal location within the metropolitan area and its good access to public transport infrastructure. The Commonwealth Bank has located a major office and training facility at Sydney Olympic Park which has led other businesses to relocate offices to Sydney Olympic Park.

Of the 61,000 additional jobs targeted for the West Central area by 2031, 12,000 of these are to be located within the Auburn Local Government Area.

Relevant objectives for Economy and Employment within the West Central Subregional Strategy include:

A1 Provide suitable commercial sites and employment lands in strategic areas.

A1.1 Provide a framework for accommodating jobs across the subregion.

A1.2 Plan for sufficient zoned land and infrastructure to achieve employment capacity targets in employment lands.

The overall vision of the West Central Subregional Strategy is that Sydney Olympic Park will develop as a major economic driver for the metropolitan area and will provide substantive new employment and dwelling opportunities as well as retail and recreational facilities, for the Sydney Region.

The proposed development at 6 Australia Ave will contribute significantly to the achievement of the employment targets for Auburn Local Government Area and Sydney Olympic Park. Based on an average rate of 1 employee per 15 sqm of Nett Lettable Area (NLA), the Stage 1A development will generate approximately 460 jobs. The overall development of site 43/44 will generate approximately 2,524 jobs based on total NLA of 37,901m²).

4.3 Regulatory Context

Environmental Planning and Assessment Act (EP&A Act) 1979 and Regulations

The EP&A Act and accompanying Regulations establish the legislative planning framework for NSW. The application is lodged under the State significant development provisions (Division 4.1) of the Act. Clause 89C(2) provides for a State environmental planning policy to declare any development, or any class or description of development, to be State significant development. Refer to the section below “*State Environmental Planning Policy (State and Regional Development) 2011*” for provision for the proposed development to be a State significant development.

Section 79C “*Evaluation*” of the Act applies, subject to this Division, to the determination of the development application.

This EIS is prepared in accordance with the relevant requirements of the Act and Regulations including Schedule 2 “*Environmental Impact Statements*” as set out in **Table 2** below.

Table 2. Schedule 2 EIS requirements

Requirement	Section of report
<i>Form of the EIS (Clause 6)</i>	
Name and details of the author, address of the land and description of the development	Statement of veracity Section 1

<i>Content of the EIS (Clause 7)</i>	
Summary of the environmental impact statement	Executive Summary
Statement of the development's objectives	Section 3.1
Analysis of feasible alternatives and consequences of not carrying out the development	Sections 7.2 and 7.3
Full description of the development	Section 3
Description of the environment with details of those aspects that are likely to be significantly affected	Section 2
The likely impact on the environment	Section 6.3
Full description of the measures proposed to mitigate adverse effects of the development	Sections 6.3
List of approvals that must be obtained under other Acts or law before the development may be lawfully carried out	Section 4
A compilation of the mitigation measures	Section 8
Principles of ecologically sustainable development	Section 7.3

State Environmental Planning Policies

State Environmental Planning Policy (Major Development) 2005

Part 23 of Schedule 3 of the SEPP (Major Development) 2005 contains development standards for Sydney Olympic Park. The site is zoned B4 Mixed Use.

The objectives of Zone B4 Mixed Use are as follows:

- (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,*
- (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,*
- (c) *to ensure that the Sydney Olympic Park site becomes an active and vibrant town centre within metropolitan Sydney,*
- (d) *to provide for a mixture of compatible land uses,*
- (e) *to encourage diverse employment opportunities,*
- (f) *to promote ecologically sustainable development and minimise any adverse effect of land uses on the environment,*
- (g) *to encourage the provision and maintenance of affordable housing.*

Commercial premises constitute development permitted with development consent in the B4 Mixed Use zone.

Key controls in SEPP (Major Development) 2005 for the site are:

- **Height:** 33 metres
- **Floor space ratio:** 3.5:1

Part 23 of Schedule 3 of the SEPP (Major Development) 2005 contains provisions relating to master plans and design excellence. Clause 26 of Schedule 3 specifies that development consent must not be granted for development within the Olympic Park site to which a master plan applies, without consideration of the Master Plan in relation to the proposed development.

Clause 30 of Schedule 3 requires that a consent authority must not grant consent unless they have considered whether the development exhibits design excellence. This provision includes that development consent must not be granted unless the erection of the building has been the subject of a design competition where required by the Master Plan. The Master Plan 2030 requires that a design competition be held. This design competition has been held in relation to the overall site. As the development of the subsequent stages to be approved, ie. Stages 1A and 2, are proposed to be in consistent with the Master Plan endorsed as part of this design competition, another design competition is not required to be held.

State Environmental Planning Policy (State and Regional Development) 2011

The aims of this Policy are as follows:

- (a) to identify development that is State significant development,*
- (b) to identify development that is State significant infrastructure and critical State significant infrastructure,*
- (c) to confer functions on joint regional planning panels to determine development applications.*

SEPP (State and Regional Development) 2011 states that development is declared to be State significant development for the purposes of the Act if:

- (a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and*
- (b) the development is specified in Schedule 1 or 2.*

The proposed development is not permissible without development consent under Part 4 of the Act and it is development specified in Schedule 2 of SEPP (State and Regional Development) 2011. Clause 2 of Schedule 2 requires development with a CIV in excess of \$10 million within the Sydney Olympic Park site to be considered as State significant development.

Clause 11 of SEPP (State and Regional Development) 2011 provides that development control plans do not apply to State significant development. Sydney Olympic Park Master Plan 2030 is considered a development control plan. However, this is contradictory to SEPP (Major Development) 2005 (as above) and its requirement to consider the Master Plan. Therefore, the Master Plan is given due consideration in this EIS (refer below).

State Environmental Planning Policy No. 55: Remediation of Land

SEPP 55 provides a State-wide planning instrument for the management of contaminated land and its remediation. The instrument ensures that all land which is known to be contaminated or has the potential for contamination to occur on sites, is to be investigated and if found to be contaminated must be remediated in accordance with a development consent.

A Phase 1 Preliminary Environmental Assessment has been undertaken. Refer **Appendix G**.

In summary, the Phase 1 Assessment identifies that potential contamination at the site would be anticipated to be associated with:

- Potentially contaminated, imported fill material;
- Potential asbestos contamination associated with demolition of

the former site building/sheds;

- Historical use of the site for commercial/industrial purposes; and
- Historical activities such as use of pesticides.

Imported fill was encountered during the site investigations, and recommendations for the removal of this fill from the site and its treatment are included in the Phase 1 Environmental Assessment report.

Further discussion of site contamination and remediation is provided in **Section 6** of this Environmental Impact Statement.

State Environmental Planning Policy (Infrastructure) 2007

This SEPP applies to all new development that generates large amounts of traffic in a local area and outlines consultation requirements. The SEPP establishes the former NSW Roads and Traffic Authority, now Roads and Maritime Services (RMS), as the sole traffic management authority to be consulted and ensures that it is given the opportunity to make a representation on a development application prior to its determination.

The RMS requested via the DGRs that a number of matters be addressed in the Traffic Impact Assessment. This has been done and the Traffic Impact Assessment is provided at **Appendix H**, which includes an assessment of the proposed traffic generation, service vehicle movements, access and loading, car parking arrangements and public transport accessibility. Also refer to **Section 6** of this EIS for the specific traffic and transport response to the DGRs.

Sydney Regional Environmental Plan 24 (Homebush Bay Area)

SREP 24 (now deemed SEPP) applies to the Homebush Bay Area including Sydney Olympic Park and provides planning principles that promote the area for employment, residential, recreational and tourist uses. The Plan provides for the coordinated development of the Sydney Olympic Park through a Master Plan, as well as environmental management guidelines.

Sydney Regional Environmental Plan (Sydney Harbour Catchments) 2005

This SREP (now deemed SEPP) provides a set of 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:

- Decisions with respect to the development of land are to take account of the cumulative environmental impact of development within the catchment;
- Development that is visible from the waterways or foreshores is to maintain, protect and enhance the unique visual qualities of Sydney Harbour; and
- 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.

The proposed development is consistent with the planning principles of the Sydney Harbour Catchment Deemed SEPP in that it reduces the quantity and frequency of stormwater runoff by collection of road water

into rainwater tanks for reuse on site instead of potable water supply. Overflow from the rainwater storage tank together with surface runoff will be directed through a sand filter prior to discharge into the stormwater system. Therefore adverse impacts are avoided on the local and regional water catchments, being close to Homebush Bay.

The proposed development is unlikely to be visible from Homebush Bay and Parramatta River, given the high rise residential development under construction to the east, which will screen views of the site from the water and foreshore areas.

Sydney Olympic Park Master Plan 2030

The Master Plan 2030 is a Master Plan under Section 12 of the Sydney Olympic Park Authority Act 2001 and is referenced in SEPP (Major Development) 2005, which, in conjunction with SEPP (State and Regional Development) 2011, are the principal planning documents regulating land use and development at Sydney Olympic Park.

The Master Plan is given effect under the *Sydney Olympic Park Authority Act 2001* and is regarded as a development control plan. It is noted that in accordance with Clause 11 of SEPP (State and Regional Development) 2011, development control plans do not apply to State significant development. However, a full assessment against the Master Plan is provided at **Appendix T**.

The Master Plan is a 22 year vision for the sustainable development of Sydney Olympic Park. It builds on the Sydney Olympic Park Vision 2025 and also complements the NSW Government's Metropolitan Strategy for Sydney, which was released in 2005.

The purpose of the Master Plan is to:

- a) *Provide a comprehensive approach to the development of Sydney Olympic park;*
- b) *Ensure Sydney Olympic Park becomes an active and vibrant town centre within Metropolitan Sydney;*
- c) *Protect the role of Sydney Olympic Park as the premier destination for Cultural, entertainment, recreation and sporting events;*
- d) *Protect and enhance the public domain;*
- e) *Protect and enhance the Sydney Olympic Park parklands; and*
- f) *Provide detailed planning and design principles and controls to encourage development that responds to unit's context and contributes to the quality of the built environment and the future character and cultural significance of the site.*

The Master Plan divides the Sydney Olympic Park town centre into nine (9) precincts. Site 43/44 is located within the Central Precinct, which is predominantly a mixed use precinct that is generally bounded by Australia Avenue to the East, the Sydney Showground Precinct to the north, the Olympic Boulevard to the west and Sarah Durack Avenue to the south.

The Central Precinct is envisaged as a high density mixed use precinct with commercial, retail and residential uses. The Central Precinct contains a commercial core to the town centre focused on Dawn Fraser Avenue and Herb Elliott Avenue. Other sporting, recreational, residential, entertainment and parkland precincts surround the town centre core.

The Master Plan 2030 provides detailed planning controls for each precinct as well as general controls that apply to all precincts. SEPP (Major Development) 2005 requires the consent authority, the Minister for Planning and Infrastructure, to only grant consent if it has first considered

the Master Plan 2030 and that development is consistent with the Master Plan.

A network of streets and through site links will create a walkable precinct with enhanced access to the railway station. Buildings fronting Herb Elliott Avenue will have a height of 8 storeys with residential buildings further south being 10 storeys in height.

Figure 18 identifies Sites 43 and 44 and the location of new roads on the subject site.

The key planning controls contained within Master Plan 2030 that are relevant to Site 43/44 are as follows:

- **Land use:** Commercial
- **Height:** 8 storeys
- **FSR:** 3.5:1
- **Building zones and setbacks including through site links:** (refer to **Figure 18**)

Under Clause 4.6.10(1) of the Master Plan 2030, the subject site is nominated as a design competition site. The Master Plan requires that the Proponent demonstrate that the proposed design is the result of a design competition undertaken prior to the application process. Master Plan 2030 provides that consent must not be granted to a new building on a nominated design competition site unless the consent authority has considered whether the proposed development exhibits design excellence and is the result of a design competition staged prior to the lodgement of a Project Application. Proponents are required to satisfy the requirements for design competition processes outlined in Appendix A of the Master Plan.

A Design Competition has been undertaken by the Proponent and Architectus has been commissioned as the winning architect. A copy of the Design Competition Jury Report is attached at **Appendix E**. A copy of the jury report has previously been submitted to the Director General of the Department of Planning and Infrastructure in accordance with the competition procedures. The Design Competition Jury made a series of recommendations and the Proponent is required to demonstrate how these recommendations have been addressed. The following section of this EIS provides the responses to the Jury Report recommendations.



Figure 18. Central Precinct built form controls

The Master Plan identifies the requirement for two new roads through the site and prescribes building setback requirements as follows:

- Herb Elliott Avenue and Australia Avenue: Build-to-Line (minimum 90%)
- New east-west Road: 3 metres

Source: Sydney Olympic Park Master Plan 2030

Design Excellence Competition Jury Report Design Responses

The Director-General's Requirements at **Appendix B** require the following:

“Demonstrate that the design responds to the Design Excellence Competition Jury Report dated 23 August 2010 and specifically the seven recommendations for the further development of the design.”

The Architectus scheme was selected by the Design Competition Jury as the winning scheme. The recommendations of the Jury for further development of the Architectus design are listed below with a response as to how each of the recommendations has been addressed:

1. *The volumes of the proposed design are satisfactory however the façade treatment should be developed and there is a desire by the jury for greater warmth and animation;*

Response:

The proposed façades have been reviewed following the completion of the design competition with a view to provide greater articulation and modulation. It is believed that the proposed façade design will provide

greater animation when viewed from the public domain. The use of predominantly darker tones and the inclusion of timber soffits to the balconies add greater 'warmth' to the building.

2. *The Jury supports the use of an alternate palette of materials in lieu of alpolic and metallic finishes;*

Response:

The proposed palette of materials consists of a combination of bronze coloured metals, glazed white terracotta tiles and white painted concrete for the external facades. They are high quality and consistent with Stage 1 and the contemporary architectural expression of the proposed development.

3. *The Jury accepts the vertical elements and use of solid façade elements;*

Response:

The proposed design includes a mix of solid and glazed elements.

4. *Further review is required as to the ongoing maintenance of the proposed Green Wall and Green Screen, and further evidence is required as to whether this will be an effective façade treatment into the future;*

Response:

The green wall elements that were included on the Herb Elliott (North) Elevation and Australia Avenue (East) Elevation were removed under the Stage 1 Project Application. It was considered that these elements would be problematic from a building management and maintenance perspective.

5. *Access from the Lift Core to the proposed Stage 3 is to be reviewed due to potential for tenants to be affected by inclement weather, particularly in the event that the typical office is transformed into multiple strata tenancies;*

Response:

The access bridge from the lift core to the area which is now referred to as Stage 2 has been removed from the project.

6. *Further resolution is required for the treatment of the roof, given its high visibility from residential apartments in the adjacent Australia Towers;*

Response:

The proposed roofscape has been designed having regard to the potential overlooking from the upper levels of surrounding buildings. The proposed cooling tower, hot water plant, generator room, lift overruns and plant rooms are proposed to be consolidated at the centre of the building, set back from street level. The design of the proposed arrangement of roof ballast incorporates a circular pattern which provides for a visually interesting roofscape.

7. *The Park Street extension must be maintained as a bitumen roadway (noting that the car park may still be constructed below). Kerbside parking is to be maintained however the threshold can be extended mid-block to encourage crossing of pedestrians in this location;*

Response:

The public domain works for the new Park Street extension through the site do not form part of this Stage 1A Project Application. The separate Stage 2 State significant development application seeks approval for the construction of the new roads.

8. *Demonstrate that the design responds to the approved design for Stage 1(MP 10_0168).*

Response:

As discussed in the above sections, Stage 1A is an extension to the approved Stage 1 development. The proposed design responds to Stage 1 by matching the articulation, forms, heights, materials, colours and all design elements.

Other planning policies

Other policies and guidelines identified in the DGRs are set out in the table below.

Table 3. Other planning policies

Policy	Section
Sydney Olympic Park Access Guidelines 2011	Section 6.2
Sydney Olympic Park Major Event Impact Assessment Guidelines	Section 6.2
Sydney Olympic Park Urban Elements Design Manual	Section 6.2
Sydney Olympic Park Environmental Guidelines	Section 6.2
Sydney Olympic Park Stormwater and Water Sensitive Urban Design Guidelines	Section 6.2

5 CONSULTATION

Meetings have been held with a range of agencies, authorities, service providers, community groups and landowners during preparation of the EIS. In particular, consultation has included meetings with the following agencies and stakeholders as required by the DGRs:

- SOPA; and
- SOPA's Design Review Panel.

SOPA's Design Review Panel (DRP)

A meeting was held with SOPA's Design Review Panel on 21 March 2013 (refer DRP advice sheet at **Appendix U**).

At this meeting, Capital Corporation and Architectus presented the proposed changes to the site master plan for Stages 1A and 2 and the proposed Section 75W Modification to Stage 1. Overall, the DRP was supportive of changes to Stages 1A and 2 and proposed modifications to Stage 1.

The DRP recommended that the following issues be addressed. The way in which the proposed development addresses each of these is noted below each point.

- *The width of the passageway (1.2 metres) between fire stairs and the building along Herb Elliott Avenue is too narrow. The proponent should consider an alternative fire stair configuration to increase the passageway width from 1.2m to at least 1.8m.*

The width of the passageway will be 1.6m.

- *Consider wind impact to the courtyard until Stage 2 has been completed.*

The street tree planting along New Road 16 will not be in place until the Stage 2 building and road construction is complete. Therefore there will not be any temporary wind barrier until such time as the Stage 2 building is in place, unless the consent authority wishes to recommend a temporary wind barrier is installed for protection to the courtyard, as a condition of consent as part of the Section 75W. Refer to the Section 75W planning report for details.

- *FSR calculations will be affected.*

Noted.

- *Deletion of Stage 1A through link should be considered.*

The link has been retained as it enhances permeability through the site to the southern road. It also visually breaks up the mass of the building.

- *Further detail to western façade of Stage 2 to be provided.*

Refer Stage 2 EIS.

- *Drainage to be considered. Proponent to consider the use of bio-swales as part of the drainage strategy for the site.*

Landscaping is not proposed as part of the Stage 1A development. Refer to the Stage 1 (Section 75W) and Stage 2 landscape plans.

- *Natural ventilation to atrium spaces.*

There is no atrium proposed as part of the Stage 1A development.

Refer to the Section 75W.

- *The ground floor plaza public domain interface plan be prepared in accordance with SOPA's Urban Elements Design Manual and should include tree planting and verge gardens (to both sides of Park Street) as part of the landscape design and potential drainage strategy for the site.*

This forms part of the Stage 1 (Section 75W) scope of work.

- *Temporary screening provided to courtyard as part of the Stage 1 development to minimize further wind impact.*

Refer to the Section 75W.

Letter from SOPA with Land Owner's Consent

A letter was received from SOPA dated 7 June 2013 requiring that the proponent provide further information prior to lodgement. The letter goes on to state, that with provision of the items specified in their letter, that SOPA has no objection to the development and could grant Land Owner's Consent.

- *Public Domain Interface Plan*

Not applicable to Stage 1A.

- *Waste and Contamination*

Section 2.24 of the Waste Management Plan at **Appendix L** refers that should unexpected materials be discovered on site, that works will cease immediately and plans for the safe handling, storage and disposal in accordance with relevant statutory guidelines will be developed. A detailed waste minimisation and management plan is to be prepared at the Construction Certificate stage (condition no. 20) which references "Emergency plans and contingency plans, including contingency plans for unexpected finds, such as asbestos and other wastes found during excavation works."

- *Waste Management Plan*

The Waste Management Plan at **Appendix L** has been updated in respect of this issue. It provides that A requirement that all weighbridge dockets and/or receipts from waste material transported off site will be kept as part of the waste register.

- *Water Quality*

Insync Pty Ltd has provided an addendum to their Integrated Water Management Plan in response to this issue. Refer to this addendum at **Appendix I**.

- *Car Parks*

Insync Pty Ltd has responded to this issue in an addendum to their report at **Appendix I**.

6 ENVIRONMENTAL IMPACT ASSESSMENT

6.1 Environmental planning instruments

State Environmental Planning Policy (State and Regional Development) 2011

Schedule 2 of SEPP (State and Regional Development) 2011 identifies development within Sydney Olympic Park with a capital investment value (CIV) of more than \$10 million as being State significant development.

The (CIV) of the project is confirmed as \$10,800,000.00 excluding GST (refer **Appendix D**). The application is therefore lodged as a State significant development application in accordance with the SEPP.

As a State significant development pursuant to the SEPP the following planning conditions are relevant to the application, development control plans do not apply to the application (clause 11).

State Environmental Planning Policy (Major Development) 2005

The objectives of Zone B4 Mixed Use are as follows:

- (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,*
- (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,*
- (c) to ensure that the Sydney Olympic Park site becomes an active and vibrant town centre within metropolitan Sydney,*
- (d) to provide for a mixture of compatible land uses,*
- (e) to encourage diverse employment opportunities,*
- (f) to promote ecologically sustainable development and minimise any adverse effect of land uses on the environment,*
- (g) to encourage the provision and maintenance of affordable housing.*

The proposed development of Stage 1A of sites 43/44 is in accordance with the objectives of SEPP (Major Development) 2005.

The proposed development will not adversely affect the major events capability of Sydney Olympic Park. The proposed development is a mixed use commercial and retail development in close proximity to the Sydney Olympic Park railway station, therefore it is in compliance with objective (b). The proposed development contributes to the objective of the Sydney Olympic Park site becoming an active and vibrant town centre. It provides for a mixture of compatible land uses (in accordance with the zoning of the Central Precinct) and will provide employment opportunities. The proposed development will achieve a 5 Star Green Star rating prior to and during construction, and a 5 Star NABERS Energy rating. Potential adverse environmental impacts are addressed at **Section 6.3** of this EIS and appropriate mitigation measures are recommended (refer **Section 8** for comprehensive list).

SEPP (Major Development) 2005 development controls for the site are:

- **Height:** 33 metres
- **Floor space ratio:** 3.5:1

The maximum height of the building is 32.35 metres (to top of plant) and the floor space ratio is 3.47:1 once construction of the total development is

complete (Stage 1 [Section 75W], Stage 1A and Stage 2). Therefore, the proposed development complies with the development controls of the Major Development SEPP.

State Environmental Planning Policy 55 (Remediation of Land)

SEPP 55 requires the consent authority to consider whether land is contaminated prior to granting consent to any development. The consent authority must be satisfied that any necessary remediation has occurred before use of the land is permitted.

A Phase 1 Contamination Assessment has been prepared and is included at **Appendix G. Section 6.3** of this EIS contains a summary of any potential contamination impacts and required mitigation measures for the proposed development.

State Environmental Planning Policy (Infrastructure) 2007

SEPP (Infrastructure) 2007 aims to facilitate effective and efficient delivery of infrastructure across the state.

The SEPP identifies different categories and types of infrastructure and in many instances identifies a range of land uses and activities that can occur without development consent.

The application will require referral to Roads and Maritime Services pursuant to clause 104 (Traffic Generating Developments). It is anticipated that the referral will occur as part of the assessment process.

The application is also expected to require referral to RMS under Clause 101 (Development with frontage to a classified road). This will occur as part of the assessment process if required.

6.2 Policies, guidelines and planning agreements

NSW 2021 (State Plan)

The proposal is consistent with the State Plan goal to “build liveable centres”. It assists in encouraging job growth in centres close to where people live and in a location where access by public transport is readily available.

Metropolitan Plan for Sydney 2036

Relevant objectives and actions of the Metropolitan Plan are considered in Table 4. The proposal will assist in meeting demand for additional commercial floor space in the city, and will provide additional employment towards the subregional employment target.

Table 4. Metropolitan Plan for Sydney 2036

Objective/Action		Comment	Consistency
B1	To focus activity in accessible centres	The proposed development contributes to the focussing of business activities in a centre which is well-served by public transport and the road network.	Consistent
B2	To strengthen major and specialised centres to support sustainable growth of the city	Sydney Olympic Park is a specialised centre and the proposal contributes to strengthening the role of the centre.	Consistent
E1	To ensure adequate	The proposal will assist in	Consistent

	land supply for economic activity, investment and jobs in the right locations	meeting demand for additional floor space in the city.	
E2	To focus Sydney's economic growth and renewal, employment and education in centres	The proposal will contribute to the employment lands targets for the Auburn LGA.	Consistent
H2	To ensure appropriate social infrastructure and services are located near transport, jobs and housing	Sydney Olympic Park has a unique mix of social infrastructure with its range of sports facilities, good public transport links, commercial, retail and housing.	Consistent

Draft West Central Subregional Strategy

Relevant considerations of the Draft West Central Subregional Strategy are set out in Table 5 below.

Table 5. Draft West Central Subregional Strategy

Objective/Action		Comment	Consistency
A1.1	Provide a framework for accommodating jobs across the subregion	The proposal will contribute towards the target of creating an additional 12,000 new jobs for the Olympic Park Specialised Centre.	Consistent
B1.2	Establish employment capacity targets for strategic centres	As above.	Consistent
B4.2	Support centres with transport infrastructure and services	The proposed development within the Sydney Olympic Park specialised centre is in close proximity to the Sydney Olympic Park railway station.	Consistent

Sydney Olympic Park Master Plan 2030

Relevant controls of the Master Plan include:

- Land use: Commercial
The proposed development is a predominantly commercial land use, with some retail at ground level, therefore being in accordance with the land use zoning of the Master Plan.
- Height: 8 storeys
The proposed development complies with the 8 storey height limit of the Master Plan.
- FSR: 3.5:1
The total development once completed (Stage 1 – Section 75W, Stage 1A and Stage 2) will comply. The total FSR will be 3.47:1.
- Building zones and setbacks
The proposed development complies with building zones and setbacks as shown in **Figure 18**.

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.

Part 1 of the Guidelines apply to all building works and infrastructure 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.

The Guidelines have been considered by Morris Goding Accessibility Consulting during preparation of the Accessibility Report at **Appendix M**.

Refer to **Section 6.3** of this EIS for assessment of accessibility impacts.

Sydney Olympic Park Major Event Impact Assessment Guidelines

These guidelines have been prepared for “understanding and mitigating the impacts from development on the capacity of Sydney Olympic Park to successfully host major events”. The guidelines apply to all developments within Sydney Olympic Park.

The guidelines require that a Development Application must include an Events Information Statement in order to facilitate SOPA's Place Manager undertaking a Major Event Impact Assessment. An Event Information Statement may contain any information considered relevant by the proponent of the development, however every such Statement must at least provide the following information relating to the Development Application.

- Number of residents and/or workers to be accommodated;
- Number of car-parking spaces required / provided;
- The location and capacity of entry and exit points to the premises, including delivery areas and car parks;
- Number, frequency, and timing, of service vehicle movements into and out of the premises;
- The extent and location of any encroachment into the Public Domain;
- Details of all requirements for works within the Public Domain;
- An overview of the scale, timing and nature of the Development in construction activity terms;
- The normal hours of business operations;
- Emergency evacuation routes and meeting places; and
- Other information as required by SOPA's Place Manager.

The Sydney Olympic Park Authority (SOPA) was consulted by the Director-General in preparing the DGRs. In relation to Major Events, SOPA specifically requested that the guidelines be considered in the preparation of the EIS and in the Minister's determination of the application.

An Events Information Statement will be prepared prior to the issue of an Occupation Certificate as set out in the Mitigation Measures at **Section 8** of this report. Some of the above listed information which is required for the Major Event Impact Assessment is already provided within this EIS. An Acoustic Report has been prepared by Acoustic Logic which

addresses potential noise generated by major events on building occupants and is attached at **Appendix H**. A further letter from Acoustic Logic regarding acoustic impacts from major events is attached at **Appendix X**. Refer also to acoustic impacts within **Section 6.3** of this EIS.

The Traffic Impact Assessment prepared by Traffix and submitted with this EIS at **Appendix J** includes consideration of traffic impacts associated with major events at Sydney Olympic Park on the operation of the site. In summary, the Traffic report states that:

“Access to Stage 1A of the development is provided via Australia Avenue/New Road 10 (left in, left out) and via Herb Elliott Avenue/ New Road 16. Plan 4 of the guideline (extract provided below in Figure 5) demonstrates that the Major Event Loop Road traverses Australia Avenue and ensures that access to the site will be available during these periods. It is recommended that a condition of consent is imposed requiring a major event traffic statement to be provided and this can be incorporated into a ‘Travel Access Guide’ whereby the various access routes during these events are provided to all employees/visitors associated with the development.”

A Preliminary Construction Traffic Management Plan has been prepared by the construction contractor and includes management measures to control construction related impacts on the operation of major events. This is attached at **Appendix Q**.

An Events Information Statement will be prepared prior to issue of an Occupation Certificate for the development. Refer Mitigation Measures at **Section 8** of this EIS.

Sydney Olympic Park Urban Elements Design Manual

The purpose of SOPA's UEDM is to deliver an integrated and consistently high quality public realm for Sydney Olympic Park with a particular focus on the urban core of the Town Centre.

The UEDM is a technical manual which sets standards of performance and design quality taking into account robustness, fitness for purpose, sustainability of material selection, operational efficiency and integration with the existing public domain as a legacy of the 2000 Summer Olympics. It also sets standards for public safety, amenity and universal access.

The UEDM has been taken into account in the development of the Landscape Plans and Public Domain Interface Plans for Stages 1 and 2 of the site development.

Sydney Olympic Park Environmental Guidelines

The Environmental Guidelines focus on highlighting key environmental issues for Sydney Olympic Park, defining the major challenges these issues present and stating the various commitments that SOPA has made to progressively enhance the sustainability of Sydney Olympic Park.

The Guidelines enable the adequacy of development proposals at Sydney Olympic Park to be checked by consent authorities in terms of the potential to enhance environmental sustainability outcomes.

The key objectives of significance to the proposed development are addressed in the table below:

Table 6. Key objectives from Sydney Olympic Park Environmental Guidelines

Objective	Response
Water Conservation	
Maximise opportunities for building design to incorporate water collection and recycling.	The Integrated Water Management Plan at Appendix I addresses the measures which are proposed for water collection and recycling for the Stage 1A development.
Avoid adverse impacts on water quality or quantity in local streams, wetlands and groundwater from operations, developments and major event activities at Sydney Olympic Park.	The Integrated Water Management Plan at Appendix I provides the water management measures to be employed on the site. The Erosion and Sediment Control Plans at Appendix I demonstrate how construction impacts on water quality will be managed.
Energy Conservation	
Prioritise the use of passive solar design, natural ventilation and selection of energy efficient materials to enhance thermal performance.	Refer to the ESD Report at Appendix N for a full description of the energy conservation measures proposed for the development. A 5 star Green Star rating and 5 Star NABERS Energy rating will be achieved for the development.
Require energy-efficient heating and cooling systems, building management systems, lighting, and energy consuming appliances to be incorporated in all new building projects.	Refer comment above.
Adapt and apply best available environmental design principles, technology, demand-management and procurement practices to progressively and significantly reduce greenhouse gas emissions.	Refer comment above.
Materials Selection	
Consider whole-of-life impacts on the environment when selecting materials for development and operations.	Refer to the ESD Report at Appendix N . Low VOC emission carpets and paints will be installed throughout. The use of PVC will be minimised. Timber is to be sourced from sustainable plantations and have low formaldehyde emissions without arsenic treatment.
Prioritise non-use of chlorine, fluorine and hydrogen based carbon gases.	Refer comment above.
Minimise use of known environmentally damaging or unhealthy products such as PVC, CCA etc.	Refer comment above.
Prioritise the use of low impact timber products including low emission composite timber in construction and timber from managed sustainable sources.	Refer comment above.
Waste Management	
Require waste management performance and recycling targets for all developments throughout design, construction and operational activities, with a minimum of 80% of construction and demolition waste to be recycled or re-used for each development.	Refer to the Waste Management Plan at Appendix L .
Transport Management	
Apply 'demand management' techniques (including integrated ticketing, car-parking controls, priority bus lanes etc) that encourage public transport use and discourage excessive road based private transport accessing Sydney Olympic Park – particularly during peak commuter times and major events periods.	Car parking maximums are applied by SOPA and the proposed development provides less than the maximum parking spaces allowable. A Transport Access Guide / Workplace Travel Plan will be undertaken for the development – refer Mitigation Measures at Section 8 .
Promote and support innovative transport modes, sustainable transport technologies and the use of alternative fuels.	Refer comment above.
Pollution Control	
Comply with all relevant statutes and regulatory requirements.	All relevant statutes and regulatory requirements for pollution control will be complied with.
Promote the design and physical construction of new buildings so that they mitigate environmental impacts associated with major events.	The Acoustic Report at Appendix J addresses acoustic impacts of major events on the proposed development.

Sydney Olympic Park Stormwater and Water Sensitive Urban Design Guidelines

The Integrated Water Management Report prepared by Insync Services is attached at **Appendix I**. This Water Management Report addresses stormwater harvesting and water sensitive urban design measures as required by SOPA's guidelines.

6.3 Analysis of environmental impacts

Built form and urban design impacts

The proposed development achieves design excellence through consistency with the design excellence provisions of the Sydney Olympic Park Master Plan 2030. The proposed Stage 1A is consistent with the approved Stage 1 development and the outcomes of the Design Competition, which was awarded to Architectus. Specifically, the proposed development exhibits design excellence through the following means:

- Demonstrates a high standard of architectural design, materials and detailing appropriate to the proposed commercial office and retail use of the building, and the façade design, materials and colours palette are consistent with the approved Stage 1 design;
- The form of the building and the articulation of building façades will improve the quality and amenity of the public domain consistent with SOPA's vision for the Central Precinct;
- The proposed design will achieve sustainable environmental development through the achievement of 5 Star Green Star rating and 5 Star NABERS rating;
- The proposed development will not impact on key views from the public domain identified in the Sydney Olympic Park Master Plan 2030;
- Appropriately activates the proposed Road 10, and creates a street façade parallel to Road 10;
- Becomes the third backdrop to, encloses the public courtyard and strengthens the east-west connection with Stage 2, whilst the retail units activate the southern edge of the public courtyard;
- Maintains views through the site to the Town Centre core via Park Street and the undercroft fronting Herb Elliott Avenue;
- Is consistent with the Crime Prevention Through Environmental Design (CPTED) principles;
- Conceals the additional mechanical plant on the roof behind a plant enclosure which is set back from the road elevations and is consistent in material to the Stage 1 plant enclosure.
- The ground floor retail units activate the southern edge of the courtyard and encourage a greater patronage of the courtyard. Stage 1A will also offer the third backdrop to the courtyard and will offer a more intimate space for the afterhours operations of the café within Stage 1.

Mitigation measures

No mitigation measures are proposed.

Visual privacy

The proposed development will maintain an acceptable level of visual privacy for building occupants of the proposed development as well as surrounding areas. Buildings are proposed to be separated by the proposed courtyard and by public streets, the subject of the separate Stage 2 Project Application.

Adjacent commercial offices, retail and residential uses, which are either under construction, in planning phase or are planned in the longer term have adequate separation to allow for visual privacy.

Mitigation measures

No mitigation measures are proposed.

View loss

The proposed development will not have any significant impacts on key views and vistas from the public domain identified in the Sydney Olympic Park Master Plan 2030. Some view loss is expected from the lower levels of the approved residential development to the east of the subject site. However, key views from the residential units are predominantly to the east towards the Central Sydney, North Sydney and Chatswood skylines.

It is noted that the proposed development complies with the maximum height limit for the site and is generally consistent with the required building setback controls of the Sydney Olympic Park Master Plan 2030. The level of view loss from the proposed development is therefore endorsed and expected through the development's consistency with the maximum development controls for building height and building setback.

Mitigation measures

No mitigation measures are proposed.

Environmental sustainability

The Ecologically Sustainable Development Report is attached at **Appendix N**.

The ESD strategies outlined in the ESD Report will be developed further and will be delivered via an Environmental Management Plan (EMP). The EMP will be developed for the construction and operational phases of the project.

Mitigation measures

Prepare an Environmental Management Plan for the construction and operational phases of the project, incorporating ESD measures as outlined in the ESD Report at **Appendix N**.

Solar Access and Overshadowing

Shadow diagrams of the proposed development have been prepared by Architectus and submitted with the architectural drawings at **Appendix A**. **Figure 19** illustrates the shadow impacts of the proposed development on the site and surrounding area at mid-winter (21 June) representing the worst overshadowing scenario.

Being on the southern portion of the site, the proposed Stage 1A will not adversely affect the central courtyard and the majority of the shadowing will occur on road 10. The central courtyard space will be shaded with a large ornamental tree and the under-croft area providing respite from the harsh effects of the full summer sun. Large areas of sunny public open

space are available in close proximity for workers to enjoy during winter months.

Good sunlight access will be available to building occupants and sun-shading devices which includes external horizontal shading louvres and internal automated internal blinds are incorporated into the façade design to control heat gain for optimal thermal comfort.

Mitigation measures

No mitigation measures are required.

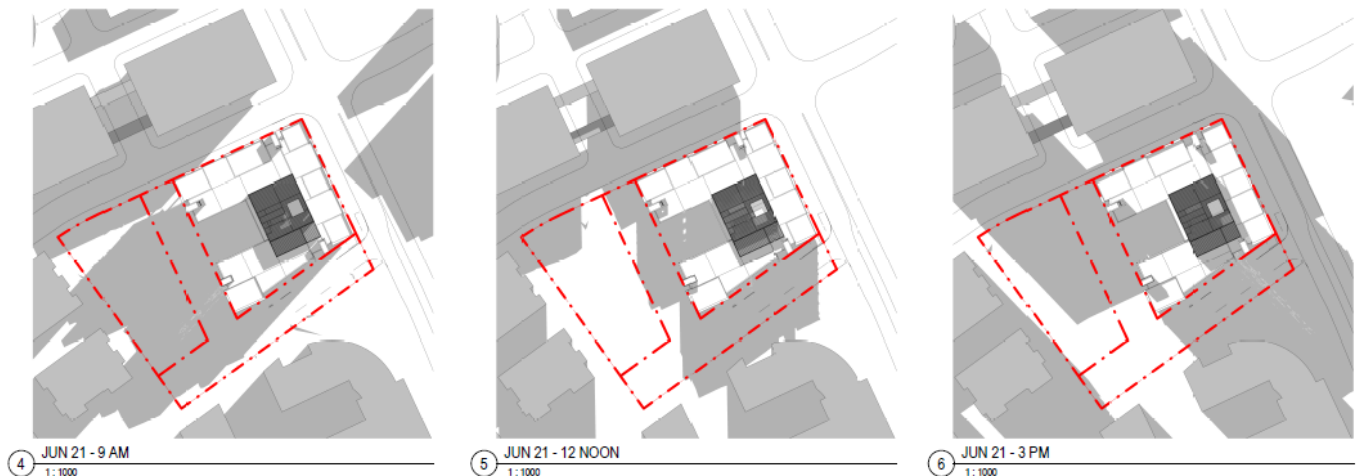


Figure 19. Shadow diagrams for Stage 1A

Traffic, transport, access and parking

The Traffic Impact Assessment has been prepared by Traffix. This report is at **Appendix H**.

The report documents the existing traffic conditions, assesses the parking requirements, assesses traffic impacts, and discusses access and internal design aspects.

The rate for car parking is a maximum figure that is based on the Gross Floor Area for commercial use and Nett Lettable Area for retail use. The report provides that based on proposed floorspace that a maximum of 89 car spaces can be provided for the Stage 1A building. A total of 59 car spaces will be provided for the Stage 1A building. This includes 27 retail parking spaces between Stage 1 and Stage 1A, of which 6 spaces will be allocated to Stage 1A.

It should be noted that the Stage 2 State significant development application proposes a surplus of parking spaces relative to the floorspace. Given the undersupply of parking spaces for Stage 1A, it is therefore proposed that the excess 12 parking spaces will be reallocated to the Stage 1A development.

Based on the total floorspace and use breakdown across the total site once developed (Stage 1 – Section 75W, Stage 1A and Stage 2), the maximum number of car spaces that can be provided is 522 spaces. The total development across the site will provide 504 car spaces.

The proposed Stage 1A development requires a minimum of 52 bicycle parking spaces for employees and visitors. The development will provide 64 in total, thereby complying with the requirement. This includes 9 visitor bicycle parking spaces which will be provided at ground level in addition to

the 22 bicycle parking spaces at ground level already provided in Stage 1.

Vehicular access to the Stage 1A development will be via the combined entry-exit driveway that was approved as part of the Project Application for the stage 1 building. This driveway will be a Category 2 Driveway and 6.3 metres wide, satisfying the requirements of AS 2890.1.

The driveway will be able to accommodate 4 queued vehicles within the property boundary.

Retail parking has a separate vehicular entry point.

Vehicular access via this driveway for parking and loading dock access will accommodate an 8.8m standard service vehicle. Swept path analysis has been determined compliance with AS 2890.2.

The overall site (including approved Stage 1), discounting for the warehouse on site which was operational at time of the traffic survey, is expected to generate 337 trips per hour in the morning peak and 402 trips per hour during the afternoon peak. These have been applied to assess intersection performance. These have been distributed on the existing road network at the following intersections:

- Herb Elliott and Australia Avenue;
- Herb Elliott and Olympic Boulevard;
- Australia Avenue and Kevin Coombs;
- Australia Avenue and Sarah Durack;
- Hill and M4 Off-Ramp.

The findings of this analysis were that the traffic impacts from the development will have a minor effect on the road network. It should be noted that this was a worse case assessment, and therefore, that the road network can comfortably accommodate the additional traffic. The exception to these findings was the M4 Off-Ramp which currently operates at a level of Service F which will continue until the RMS improves capacity at this location.

Traffic undertook some surveys of a comparable development at Site 8a on Murray Rose Avenue. This resulted in the following numbers of vehicles entering and exiting the development:

- 0.4 trips/space/hour (peak 7-8am);
- 0.2 trips/space/hour (peak 4:15-5:15pm).

These reduced trip rates resulted in the following traffic generation;

- 150 trips per hour (114 in, 36 out) in the morning peak; and
- 133 trips per hour (55 in, 78 out) during the afternoon peak.

If these trip rates were applied to the proposed development, which represent a more up to date trip rate than the RMS's rates, then the results would be a very satisfactory outcome at all intersections.

The impacts of the Stage 1A development on the intersection of New Road 10 and Australia Avenue together with the Stage 1 development have been determined. This shows that the intersection will continue to operate at a Level of Service A during the critical PM peak with a negligible increase in delay of 0.7 seconds, which represents a minor increase over the Stage 1 development impacts.

The internal design of the basement parking generally complies with AS 2890.1 (2004). A swept path analysis of the basement carpark and loading areas have been undertaken to inform this assessment.

A Transport Access Guide should be formulated as a condition of consent to encourage use of bus and rail services as well as bicycles and car

pooling.

Traffic has reviewed the Major Event Impact Assessment Guidelines for the proposed development. Access to the Stage 1A development will be via Australia Avenue/New Road 10 and via Herb Elliott Avenue/New Road 16. The Guidelines show that the Major Event Loop Road traverses Australia Avenue. This means that there will access to the site during these periods.

Mitigation measures

- A condition of consent should be formed requiring that a 'Travel Access Guide'/Workplace Travel Plan is prepared.
- A condition of consent should be formed requiring that a Major Event Traffic Statement should be provided and incorporated into a 'Travel Access Guide'.
- A condition of consent should be implemented imposing compliance with AS 2890.1 and AS 2890.2.
- A Detailed Demolition and Construction Traffic Management Plan should be prepared.

Wind impacts

A Pedestrian Wind Environment Statement has been prepared by Windtech and is provided at **Appendix K**.

An analysis of the wind environment impact with respect to the three principal wind directions for the Sydney region has been completed for the proposed Stage 1A development.

The conclusions of the report are based on an examination of the architectural drawings, dated 15th March 2013. No wind tunnel tests have been undertaken for the subject development.

As such, the report addresses the general wind effects and any localised effects that are identifiable by visual inspection. Any recommendations in the report are made only in-principle and are based on the consultant's significant experience in the study of wind environment effects.

The results of this study indicate that wind conditions for the balconies on the subject development will be acceptable for the intended balcony uses due to the recessed design of the balconies into the building form. There are several ground level areas within and around the site that are potentially exposed to the adverse wind conditions due to a number of factors such as the orientation/alignment of the roads and potential accelerations around the corners of the development.

To ensure adequate wind conditions are achieved for all trafficable outdoor areas within and around the site, it is recommended that the landscape plans for Stage 1 involving densely foliating trees within and around the site be retained in the final design of the development. If this is the case, wind conditions would be expected to be acceptable for the intended uses on the site.

The report notes that to ensure the densely foliating trees are effective in wind mitigation throughout the year, evergreen species should be used.

Mitigation measures

No mitigation measures are proposed.

Accessibility

An Accessibility Report has been prepared by Morris Goding Accessibility Consulting and is provided at **Appendix M**. The report finds that, in general, the development has accessible paths of travel that are continuous throughout. The proposed development has demonstrated an appropriate degree of accessibility.

The architectural drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible parking and adaptable units, can be readily achieved. The recommendations of the Accessibility Report are associated with detailed design and should be addressed prior to issue of the Construction Certificate.

Mitigation measures

The recommendations of the Accessibility Report are to be addressed during detailed design, prior to issue of the Construction Certificate.

Acoustic impacts

An Acoustic Report (**Appendix J**) has been prepared by Acoustic Logic. The Report has:

- Conducted an assessment on the impact of traffic noise, noise from major events, as well as train noise and vibration on the acoustic amenity of the proposed development;
- Determined the noise emission criteria from the proposed development based on on-site noise logging and NSW EPA Industrial Noise Policy; and
- Outlined the main noise sources during the construction stage and sets up the noise/vibration criteria based on the requirements of "Interim Construction Noise Guideline (DECC)" and "Assessing Vibration: A Technical Guideline 2006".

Impacts of noise on the proposed development

Site investigation indicated that the following external noise sources could potentially impact on the proposed development:

- Existing traffic noise along Herb Elliott Avenue with buses passing by and carpark immediately across road.
- Train noise from the rail corridor across Australia Ave.
- Typical event noise.
- Plant such as the cooling tower servicing the commercial building adjacent to the project site.

Internal noise levels will primarily be as a result of noise transfer through the windows and doors, as these are relatively light building elements that offer less resistance to the transmission of sound. The walls are proposed to be heavy masonry elements that will not require upgrading.

The predicted noise levels through the windows and doors are discussed in detail in the Acoustic Report. The predicted noise levels have been based on the expected level and spectral characteristics of the external noise, the area of building elements exposed to environmental noise, the absorption characteristics of the rooms and the noise reduction performance of the building elements.

Calculations were performed taking into account the orientation of windows, barrier effects (where applicable), the total area of glazing, facade transmission loss and the likely room sound absorption

characteristics. In this way the likely interior noise levels can be predicted.

The Report recommends specific building structures (glazing, roof/ceiling, external walls) to ensure that external noise intrusion into the proposed building fully complies with the internal noise criteria established within the Report. The recommended glazing is set out in the mitigation measures below.

Major events noise impacts

A letter dated 18 July 2013 has been provided by Acoustic Logic (refer **Appendix X**) which provides further information on major event impacts.

The letter advises that noise intrusion from typical major events within Olympic Park and Stadium has been reviewed and acoustic treatments recommended in the Acoustic Report at **Appendix P** are sufficient for acoustic impacts from major events and do not need to be upgraded.

Internal noise levels within Stage 1A will fully comply with the requirements of AS2107-2000 and Green Star Criteria with the recommended acoustic treatments in Section 4.6 of the Acoustic Report (refer acoustic mitigation measures below and in **Section 8** of this EIS).

Plant noise emissions from proposed development

Noise emissions from plant and equipment should comply with the provisions of the Protection of the Environment Operations Act 1997, EPA's Industrial Noise Policy and Noise Control Manual.

The NSW EPA's Industrial Noise Policy provides guidelines for assessing noise impacts from industrial developments. The EPA Industrial Noise Policy has two requirements which both have to be complied with, namely an amenity criterion and an intrusiveness criterion. In addition, in the EPA's Environmental Noise Control Manual states that noise controls should be applied with the general intent to protect residences from sleep arousal.

Table 13 within the Acoustic Report provides a summary of the assessment criteria applicable to the subject premises at the neighbouring potentially affected residential properties based on noise monitoring conducted for the subject site. The intrusiveness and amenity criteria for this project have been determined using the EPA guidelines and the noise monitoring results.

The Acoustic Report states that noise associated with the operation of the development site should comply with the criteria set out in Table 13 of the report.

Noise sources from construction

The construction associated with the proposed Stage 1A development includes construction of the commercial building. Demolition and excavation do not form part of the Stage 1A works and will be undertaken in accordance with the Stage 1 Project Approval.

There are several sources associated with the construction phases of the project building having the potential to increase the noise and vibration levels at nearest residential/commercial receivers.

No builders have been engaged on this project at this stage and no detailed construction work method or equipment is available at this stage.

The main noise producing activities will be that attributed to the forming and pouring of the concrete floor slabs, and crane operation. These would be managed by placing the plant as far as practicable from the sensitive receivers. It is expected that the adopted noise guidelines will generally be achieved during this phase except during louder activities such as stripping out of formwork which will occur from time to time.

Detailed noise and vibration management measures will be established at

Construction Certificate stage to ensure the noise and vibration levels comply with the criteria set out in the Acoustic Report.

Mitigation measures

The recommended glazing thicknesses for acoustic protection are:

Façade	Designated rooms	Recommended glazing	Acoustic seals (mohair seals are unacceptable)
North	All	10mm	Yes
East	All	10mm	Yes
West	All	10mm	Yes
South	All	10mm	Yes

Note 1: The glazing thicknesses recommended are those needed to satisfy acoustic requirements and do not take into account other requirements such as structural, safety or other considerations. These additional considerations may require the glazing thickness to be increased beyond the acoustic requirement.

A Construction Management Plan is to be prepared and submitted prior to Construction Certificate and this is to include detailed noise and vibration management measures.

Geotechnical

A Geotechnical Report is provided at **Appendix P**. Investigations undertaken included a walk-over survey; scanning borehole locations for underground services; drilling eight boreholes; conduction Standard Penetration Tests at regular depth intervals to assess strength and compressibility characteristics of sub-surface soils; and recovering soil and rock samples for visual assessment and laboratory testing.

Recommendations are summarised as follows.

Fill on site

The investigations undertaken for the report found that variably compacted and soft/loose fill is in place on part of the site. The fill is generally considered uncontrolled and not suitable for supporting load bearing structures. The fill is not expected to be exposed at the footing levels of the proposed structure, however it could be exposed at subgrade levels for the proposed pavements. Recommendations are made in the report for mitigation if fill is exposed at the pavement subgrade levels.

Excavation conditions

Excavations for basement construction are anticipated to reach depths of 9m to 10m below existing grade. Where excavation into medium to high strength and slightly weathered to fresh shale/siltstone is required, it is recommended in the Geotechnical Report that selection of rock cutting equipment be based on site access, desired smoothness of the excavated rock surface and acceptable ground vibration during rock excavation.

Subgrade preparation and placement of controlled fill

A number of recommendations are made in the Geotechnical Report for subgrade preparation. These recommendations should be followed during excavation and construction.

Retaining structures

Cut and fill during and after site preparation should be battered for stability or retained by engineering retaining structures. Recommendations for batters and retaining structures are provided in the Geotechnical Report/

Footings

Detailed recommendations for footings are provided in the Geotechnical

Report.

Soil aggressivity

Based on chloride test results, the soils at the site were generally found to be non-aggressive to steel/iron and concrete. pH and sulphate results indicate the soils at the site to be mild to non-aggressive to concrete.

Pavement design

Pavement profiles are recommended in the Geotechnical Report based on two California Bearing Ratio (CBR) tests conducted on borehole samples.

Earthquake parameters

An Acceleration Coefficient (a) of 0.08 for the Sydney region and a Site Factor of 0.67 for footings placed in shale/siltstone bedrock are recommended.

Impact of construction on railway line

The northern and eastern basement excavation faces are about 100m away from the railway lines. Ground settlement will be negligible at about 10-15m away from the face of excavation, therefore no impact of construction of the basements on the railway line are anticipated.

General

As the recommendations of the Geotechnical Report are based on information from eight boreholes and site observation, actual sub-surface conditions across the site may differ from those expected. If such differences are encountered during construction, it is recommended in the Report that the geotechnical engineers are contacted for further advice.

Mitigation measures

Construction work is to be undertaken in accordance with the recommendations of the Geotechnical Report at **Appendix P**.

Contamination

Phase 1 Environmental Site Assessment by EIS

A Phase 1 Environmental Site Assessment has been carried out by Environmental Investigation Services (EIS) and is attached at **Appendix G**. The Phase 1 Assessment assesses the likelihood of contamination of sub-surface soils on the site and assigns a waste classification to the soils to be excavated. As well as a desk-top review of applicable information on the site, a field sampling program was carried out involving 8 boreholes across the site, with up to 30 metres between each.

Soil contamination

Elevated concentrations of contaminants were not encountered in the soil samples analysed for the investigation. All results were below the site assessment criteria (SAC). Based on the results, EIS are of the opinion that the potential for significant widespread soil contamination at the site is relatively low.

Asbestos was not detected above the reporting limit in the analysed soil samples.

Groundwater

In the event groundwater is intercepted during excavation works, dewatering will be required. Council and other relevant approvals will be required prior to disposal of groundwater in the stormwater system.

Waste classification

Based on the results of the assessment, the fill material is classified as

“General Solid Waste (non-putrescible)” according to the criteria outlined in Waste Classification Guidelines 2009. The material should be disposed of to a suitably licensed NSW DECCW (EPA) landfill.

The natural silty clay and underlying shale bedrock at the site is considered to be virgin excavated natural material (VENM). The material is considered suitable for re-use on site, or alternatively, the information included in this report may be used to assess whether the material is suitable for beneficial reuse at another site as fill material. Where doubt exists about the difference between fill and VENM material an environmental / geotechnical engineer should be contacted. In the event the natural soils require disposal to a NSW DECCW (EPA) licensed landfill, the material can be disposed as ‘General Solid Waste (non-putrescible)’.

Environmental Site Assessment for Silex Solar

An Environmental Site Assessment was undertaken specific to the operation of the Silex Solar plant on site (refer to **Appendix V**). This was prepared in October 2012 by SGA Environmental to determine the impact of operations on site in terms of potential for impacts to soil or groundwater, upon vacating of the site. This is provided at **Attachment G**. This describes that the works undertaken included:

- Reviewing dangerous goods (‘chemicals of concern’ (COCs)) information relating to the operations;
- Site inspection and confirmation of borehole locations;
- Drilling of 24 boreholes across the site;
- Soil samples collected and analysed in NATA accredited laboratories.

Site-specific criteria were developed for use as a trigger level to prompt additional environmental works on the site. The potential CoC’s and chemical characteristics included pH (associated with the use and storage of acids at the site), isopropanol, phosphorus (associated with the use of phosphoric acid on the site), and soluble fluoride (associated with the use of fluoric acid on the site).

The results of analysis of samples found that:

- Concentrations of isopropanol and soluble fluoride were below the laboratory limits of reporting;
- Concentrations of phosphorus detected were within the site criteria and were considered to represent background concentrations only.

pH was found to be below the adopted criteria of 4.5. This recording was consistent across all borehole locations and was recorded for deep natural soil samples as well as fill material. It was therefore considered that the low pH was representative of natural conditions at the site, and that none of these pH recordings represented an environmental issue, and no further investigations were warranted.

No impacts to site soils which could be directly attributed to Silex Solar were identified by the assessment.

The site was therefore found to be considered suitable for continued industrial or commercial use from a human health perspective.

Mitigation measures

During demolition and excavation works, the site is to be inspected by experienced environmental personnel to assess any unexpected conditions or subsurface facilities that may be discovered between investigation locations. This will facilitate appropriate adjustment of the works programme and schedule in relation to the changed site conditions.

Any unexpected or unusual sub-surface features (including underground storage tanks, coloured or odorous soil) should be reported to the consulting environmental engineer immediately.

A hazardous building materials survey is to be undertaken of all site buildings and structures prior to demolition.

All excavated soil is to be disposed of appropriately.

Waste management

A Waste Management Plan has been prepared (refer **Appendix L**). The WMP sets out the construction and operational waste management processes that will be followed.

Construction

There are several sources of potential waste during the construction phase, including:

- Solid waste (clearance material);
- Solid waste ('domestic' debris);
- Solid waste (putrescibles); and
- Hazardous waste (oils and sludges).

No other hazardous wastes are anticipated on site. Should unexpected materials be discovered during the course of refurbishment, work will cease immediately and plans for the safe handling, storage and disposal in accordance with relevant statutory guidelines will be developed.

Operational

Waste will be managed through the provision of skip bins that will be maintained by an approved contractor on a weekly basis. Bins will be housed in a screened waste enclosure, in close proximity to the loading dock and be readily accessible by garbage collectors.

There is one large garbage room on the ground floor to service commercial office and retail waste. The garbage storage area is accessed via a doorway on the ground floor that leads directly to the loading dock. This process will involve a waste management routine to be undertaken by staff. This routine will include:

- Waste containers/wheelie bins will be covered at all times; and
- Waste containers/wheelie bins to be moved from the existing waste storage area to the designated collection area for pick-up.

The locations of waste servicing areas are shown on the Ground Floor Plan at **Appendix A**.

Mitigation measures

Detailed Waste Management Plan

A detailed waste management plan will be developed to form part of the Construction Management Plan, which will include:

- Designated stockpiles, recycling areas, bins and a clear indication of the waste streams associated with each one;
- Stripped topsoils, if any, generated through earthworks would be stockpiled for later use;
- Plans of protection measures for waste storage areas;
- Waste handling, management and storage procedures;
- Disposal procedures for each waste stream;

- Training for on-site staff on the contents of the WMP; and
- Emergency plans and contingency plan, including contingency plans for unexpected finds, such as asbestos and other wastes found during demolition and excavation works.

Waste tracking

Wastes generated on site that will require tracking include:

- Waste oils;
- Oil and fuel filters; and
- Oily water.

Waste register

A register of wastes will be kept throughout the refurbishment/construction project. The register will contain details pertaining to:

- The types and quantity of wastes for each load taken off site;
- The place to which the waste was taken for treatment or disposal; and
- The waste contractor used for each waste load.

Safety and security

For the proposed new office buildings on the site, access control will be provided to the car park, entrances and lifts via a Proximity Card System.

The commercial office space provided in the Stage 1A building will be accessed via the entrance lobby to the Stage 1 building. Only the retail tenancy will be accessible at the ground floor level of the Stage 1A building. The retail use will activate the ground floor level during its hours of operation and will provide surveillance to the adjacent courtyard and vice versa.

Mitigation measures

No mitigation measures are proposed.

Construction management

Construction impacts will be addressed through the preparation of a detailed Construction Management Plan, to be completed prior to issue of a Construction Certificate. A Preliminary Construction Management Plan, including a preliminary Construction Traffic Management Plan, is attached at **Appendix Q**.

Mitigation measures

Prior to issue of a Construction Certificate, prepare and submit to Council a detailed Construction Management Plan.

Utilities and services

Hydraulic services plans were prepared for the Stage 1A development by Insync Services Pty Ltd. Refer to these plans at **Appendix O**.

A report on the capacity of electrical and telecommunications site infrastructure servicing has been prepared by Haron Robson (refer **Appendix O**). The report refers to an email from Ausgrid which acknowledges that the existing precinct supply capacity will be sufficient to cater for the Stage 1A development.

Mitigation measures

No mitigation measures are proposed.

Integrated water management

An Integrated Water Management Report and Stormwater Plans were prepared for the combined Stage 1 and Stage 1A development by Insync Services Pty Ltd. Refer to these documents at **Appendix I**. This report determines site stormwater requirements and water sensitive urban design requirements in association with the development.

Stormwater detention is not required in accordance with SOPA's draft water sensitive urban design policy.

A rainwater harvesting system is provided for the development that collects rainwater from the roof for reuse on site. Only rainwater from balcony areas of the roof will be diverted to the stormwater system. Harvested rainwater will be used for toilet flushing, landscape irrigation and cooling towers.

The report estimates base building consumption of potable water for the development. It also evaluates water efficiency against building benchmarks for potable water consumption. Improvements will be made in water consumption efficiency by installing more efficient fixtures and tapware, and the non-potable water supply, harvested rainwater, referred to above. Compared against the benchmarks, this sees a reduction of 70% in potable water consumption.

Mitigation measures

No mitigation measures are proposed.

Sediment and erosion control

Erosion and sediment control plans are provided at **Appendix I**. Construction works are to be undertaken in accordance with these plans.

Mitigation measures

No mitigation measures are proposed.

Social and economic impacts

The proposed development will provide an additional 6,489 m² of commercial floorspace and 409 m² of retail floorspace. The proposal will contribute significantly to the achievement of the employment targets for Auburn Local Government Area and Sydney Olympic Park (refer **Section 6.2** of this EIS). Based on an average rate of 1 employee per 15 m² of Net Lettable Area (NLA), the Stage 1A development will generate approximately 460 jobs.

Additionally, during the construction phase of development, there will be approximately 70 construction jobs created, as there is estimated to be 70 person strong construction workforce during construction per day.

Beneficial social impacts include the workforce who will be brought into the area, resulting in enlivening of the area, helping to create a safer, more vibrant centre. In addition, jobs will be created which may be taken up by residents within Sydney Olympic Park, supporting increased walking and cycling within the local area.

Mitigation measures

No mitigation measures are proposed.

7 PROJECT JUSTIFICATION

The proposed development is justified on the grounds that it is permissible, consistent with the relevant controls and policies, makes a beneficial design contribution to the area and has no unreasonable environmental impacts. The proposed commercial and retail floor space will make a positive contribution towards the regional objective of creating an additional 12,000 new jobs for the Olympic Park Specialised Centre.

7.1 Project objectives

The objectives of the development are:

- To provide a significant amount of new commercial floorspace within Sydney Olympic Park;
- To provide new jobs within easy walking distance of the Sydney Olympic Park railway station and bus services;
- To incorporate the principles of Ecologically Sustainable Development into the design, construction and operation of the development;
- To provide a building that makes a positive contribution to the significant site, the public domain and the local character;
- To provide sufficient parking spaces for the development but not an over-supply, to encourage the use of sustainable transport modes;
- To incorporate a high standard of design and amenity within the development;
- To design a building that promotes use and enjoyment of the outdoor spaces around the building;
- To provide a safe and secure environment for employees and visitors; and
- To manage, minimise and mitigate potential impacts arising from construction and operation.

7.2 Feasible alternatives

The site has been identified for commercial development within the Sydney Olympic Park Master Plan. Capital Corporation is committed to developing the site for this purpose. As a result, no alternative locations were considered for the proposed development.

Alternative designs were considered for the site through the Design Competition process. The Architectus design was chosen as the most suitable for the site as it presented a design solution that best suited the items identified within the Design Brief. Reference should be made to the Design Competition Jury Report at **Appendix E**.

7.3 Reasons for carrying out the development

- The provision of commercial and retail floorspace is an essential component of a diverse and sustainable city. The proposed development will result in well-designed and well-managed commercial floorspace.
- The proposed development is a responsive, sensitive design and

does not represent an over-development of the site.

- The proposed development is in the public interest.
- The proposed development has been assessed by experts in the fields of ESD, water management, acoustics, traffic and parking and other areas addressed in this report, and found to have no unreasonable impacts.
- The architectural design will make a positive contribution to the Sydney Olympic Park area and local landscape.
- The proposed design has been development in consultation with the landowner, SOPA.
- The proposed development is an integral part of the redevelopment of Sydney Olympic Park as it becomes a vibrant mixed use area.
- Pursuant to Schedule 2, Section 7(4) of the *Environmental Planning and Assessment Regulation 2000*, the proposed development achieves the principles of sustainable development.
- The “precautionary principle” has been applied and experts have identified any environmental consequences of the development and recommended mitigation measures to avoid irreversible damage to the environment.
- “Inter-generational equity” is achieved in that the development maintains the quality of the environment for future generations.
- The proposed development ensures “conservation of biological diversity and ecological integrity” in that there will no adverse impacts upon biological diversity and ecological integrity resulting from the proposed development.
- The principle of “improved valuation, pricing and incentive mechanisms” has been considered by Capital Corporation who have determined that the need for the development to be financially viable is balanced against the need for the building to be sustainable. As such, ESD mechanisms such as stormwater harvesting are proposed as part of the development.

8 MITIGATION MEASURES

The mitigation measures that are required to mitigate the likely impacts arising from the proposal. The measures have been determined by the planning and environmental assessment in Section 6 and the specialist consultant reports appended.

Table 7. Mitigation measures

Mitigation measures

Environmental sustainability

1. Prepare an Environmental Management Plan for the construction and operational phases of the project, incorporating ESD measures as outlined in the ESD Report at **Appendix N**.

Traffic and transport

2. Prepare a Transport Access Guide / Workplace Travel Plan.

3. Prepare a Major Event Traffic Statement to be incorporated into a 'Travel Access Guide'.

4. Compliance with AS 2890.1 and AS 2890.2 is required.

5. Prepare a Detailed Demolition and Construction Traffic Management Plan.

Accessibility

6. The recommendations of the Accessibility Report are to be addressed during detailed design, prior to issue of the Construction Certificate.

Acoustic

7. The recommended glazing thicknesses for acoustic protection are:

Façade	Designated rooms	Recommended glazing	Acoustic seals (mohair seals are unacceptable)
North	All	10mm	Yes
East	All	10mm	Yes
West	All	10mm	Yes
South	All	10mm	Yes

Note 1: The glazing thicknesses recommended are those needed to satisfy acoustic requirements and do not take into account other requirements such as structural, safety or other considerations. These additional considerations may require the glazing thickness to be increased beyond the acoustic requirement.

8. A Construction Management Plan is to be prepared and submitted prior to Construction Certificate and this is to include detailed noise and vibration management measures.

Geotechnical

9. Construction work is to be undertaken in accordance with the recommendations of the Geotechnical Report at **Appendix P**.

Contamination

10. During demolition and excavation works, the site is to be inspected by experienced environmental personnel to assess any unexpected conditions or subsurface facilities that may be discovered between investigation locations. This will facilitate appropriate adjustment of the works programme and schedule in relation to the changed site conditions. Any unexpected or unusual sub-surface features (including underground storage tanks, coloured or odorous soil) should be reported to the consulting environmental engineer immediately.

11. A hazardous building materials survey is to be undertaken of all site buildings and structures prior to demolition.

12. All excavated soil is to be disposed of appropriately.

Waste management

Detailed Waste Management Plan

13. A detailed waste management plan will be developed to form part of the Construction Management Plan, which will include:

• Designated stockpiles, recycling areas, bins and a clear indication of the waste streams

Mitigation measures

- associated with each one;
- Stripped topsoils, if any, generated through earthworks would be stockpiled for later use;
- Plans of protection measures for waste storage areas;
- Waste handling, management and storage procedures;
- Disposal procedures for each waste stream;
- Training for on-site staff on the contents of the WMP; and
- Emergency plans and contingency plans, including contingency plans for unexpected finds, such as asbestos and other wastes found during demolition and excavation works.

Waste tracking

14. Wastes generated on site that will require tracking include:

- Waste oils;
- Oil and fuel filters; and
- Oily water.

Waste register

15. A register of wastes will be kept throughout the refurbishment/construction project. The register will contain details pertaining to:

- The types and quantity of wastes for each load taken off site;
- The place to which the waste was taken for treatment or disposal; and
- The waste contractor used for each waste load.

Construction management

16. Prior to issue of a Construction Certificate, prepare and submit to Council a detailed Construction Management Plan.

Major events

17. The Proponent commits to prepare an Event Information Statement and make this available for all building occupants prior to the issue of an Occupation Certificate.

Contributions

19. Further consultation with SOPA will be required to determine the level of contributions required for the proposed development.

9 SUMMARY AND CONCLUSION

This State significant development application seeks approval for:

- Construction of Building C and its use for commercial offices and retail tenancies comprising 6,920m² Gross Floor Area;
- Redistribution of car spaces provided in Section 75W and Stage 2 State significant development and their allocation to the Stage 1A building;
- Provision of 9 at-grade visitor bicycle parking spaces.

Note that excavation and construction of two levels of basement parking to serve Stage 1A will be facilitated as part of a concurrent Section 75W Modification to the Project Approval for the Stage 1 building and the Stage 2 State significant development.

A design competition was held for Site 43/44 at Sydney Olympic Park and the winning design by Architectus was endorsed by the Competition Jury on 31st May 2010. The proposed Stage 1A building that forms this application is realising the completion of the development vision for site 43/44 that is contained in the master plan.

This Environmental Impact Statement was prepared in accordance with the State significant development provisions of the Environmental Planning and Assessment Act 1979 (EP&A Act), the requirements of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 and the Director General's Requirements issued for the project. It has also been prepared in accordance with the requirements of the *State Environmental Planning Policy (Major Development) 2005* and the Sydney Olympic Park Master Plan 2030 which comprise the key planning framework for the development.

As a result of this analysis, the proposed development was found to be consistent with the strategic and statutory planning framework, consistent with the design competition master plan and the provisions of Sydney Olympic Park Master Plan 2030. It was also found that the environmental impacts do not represent significant adverse impacts. Any adverse environmental impacts can be ameliorated by mitigation measures.

This Environmental Impact Statement for the State significant development for the Stage 1A building has been prepared in accordance with the Architectural Drawings at **Appendix A**, the Director-General's Requirements provided at **Appendix B**, and the additional plans and documentation provided at **Appendices C - X**.

It is recommended that this State significant development application be approved subject to the mitigation measures at Section 8 because it represents the type and scale of development that is intended for the site, it is in accordance with the strategic and statutory planning framework for Sydney Olympic Park, and any potentially adverse environmental impacts will be appropriately mitigated.