

Proposed Mixed Commercial and Retail Development 2 Australia Avenue, Sydney Olympic Park (Site 43/44)

October 2011

Prepared for **Capital Corporation**



Major Project Application MP10_0168
Environmental Assessment

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Cover image: 3D perspective of proposed development viewed from corner of Australia Avenue, Herb Elliott Avenue and Parkview Avenue looking south west.

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Quality Assurance

Reviewed by

.....
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DateThis document is for discussion
purposes only unless signed.

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Statement of Veracity

Submission of Environmental Assessment

Prepared under Part 3A of the *Environmental Planning and Assessment Act, 1979*.

Environmental Assessment prepared by:

Names:

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Address:

Architectus Sydney Pty Ltd
L3/341 George Street
Sydney NSW 2000

In respect of:

Major Project Application MP10_0168
Environmental Assessment of proposed construction of a mixed commercial and retail development

Certification:

I certify that we have prepared the contents of this Project Application Environmental Assessment. To the best of my knowledge, the information contained in this report is neither false nor misleading.

(Signature and date)

Murray Donaldson, Associate and Urban Planner, Architectus

Executive summary

This Environmental Assessment has been prepared by Architectus on behalf of Capital Corporation, the Proponents for Major Project MP10_0168.

The report has been prepared in accordance with the Director General's Requirements (DGRs) issued by the Department of Planning on 9 November 2010.

Major Project Application MP10_0168 seeks the Minister for Planning's Project Approval for the following development:

- An eight storey commercial building of 16,749m² GFA comprising:
 - Removal of existing trees and vegetation;
 - Relocation of 30 at-grade car spaces into the proposed basement carpark levels;
 - Two levels of basement car parking for 225 cars;
 - Retail uses at ground floor level;
 - Commercial entry lobby, garbage and recycling rooms, and loading dock at ground level;
 - Landscaped open space areas at ground level;
 - Commercial office space at Levels 1 - 7 with balconies;
 - Building identification signage; and
 - Plant on the building roof.

The Stage 1 Project Application is proposed following extensive consultation with SOPA to achieve design excellence on the site, having gone through a design competition in accordance with the Design Excellence provisions of the Sydney Olympic Park Master Plan 2030.

The assessment of the proposal has demonstrated that the proposal will result in positive economic, social and environmental benefits and is the result of an exhaustive analysis of the site's opportunities and constraints to achieve the optimal outcomes for future occupants in terms of environmental amenity. It is generally consistent with the provisions of the Major Development SEPP and the Sydney Olympic Park Master Plan 2030, and will make a valuable contribution to the development of the commercial core of Sydney Olympic Park.

ESD principles have guided the design of the development, and furthermore there are no environmental impacts as a result of the proposal in relation to amenity, traffic, contamination or flora and fauna that are unmanageable. The proposed development will not significantly impact on, or be impacted by, major events in the vicinity of the site.

The Stage 1 Project Application facilitates the orderly development of the site in accordance with the staged redevelopment illustrated in the accompanying plans for the overall site redevelopment. Staging of buildings, public domain and support services have been adequately considered. **Section 6** of this report describes the proposed staging of the overall site development in response to the Director General's Environmental Assessment Requirements (DGRs). A future Project Application will seek approval from the Minister for Planning for the Stage 2 development on the remainder of the site.

1 Introduction

1.1 Preliminary

This Environmental Assessment has been prepared by Architectus on behalf of Capital Corporation, the Proponents for Major Project MP10_0168.

The report has been prepared in accordance with the Director General's Requirements (DGRs) issued by the Department of Planning on 9 November 2010.

This section of the report provides a description of the site and a legal description, outlines a background to the project application, identifies the key environmental, social and economic benefits, references the Director General's Requirements and identifies where in the Environmental Assessment report responses are provided, identifies the key relevant statutory requirements and policies, provides the consultant team, describes the consultation undertaken and outlines the structure of the report.

This report should be read in conjunction with **Appendices A - V**.

1.2 Structure of this report

This report comprises the following eight (8) sections:

Section 1 – Introduction

This section of the report provides a description of the site, outlines a background to the project application, identifies the key environmental, social and economic benefits, provides the Director General's Requirements and identifies where in the Environmental Assessment report responses are provided, identifies the key relevant statutory requirements and policies, provides the consultant team, describes the consultation undertaken and outlines the structure of the report.

Section 2 – Site and Contextual Analysis

Section 2 provides a site description, local context including surrounding land uses, legal description and easements, development consent history, land use zoning, transport and accessibility, vegetation, topography, and visual environment.

Section 3 – Strategic Justification and Consideration of Alternatives

Section 3 provides a strategic justification of the proposal as well as a consideration of alternatives to the project.

Section 4 – The Proposal

Section 4 provides a description of the proposed development including a numerical overview, the relevant architectural, landscape and public domain design and stormwater concept plans, use, gross floor area, height, car parking, waste management and building services and fire safety.

Section 5 – Regulatory Context

Section 5 outlines the applicable statutory planning instruments and policies of relevance to the project, consistency with the relevant instruments and policies, and provides justifications for any non-compliance.

Section 6 – Environmental Assessment

Section 6 provides an Environmental Assessment of the proposal against the key issues identified in the Director General's Requirements.

Section 7 – Draft Statement of Commitments

Section 7 outlines the Draft Statement of Commitments which will be adopted by the proponent in the construction and operational phases of the development to mitigate and manage impacts.

Section 8 – Conclusion

Section 8 concludes the report with a brief summary of the key findings of the Environmental Assessment.

1.3 The site and location

The site is located at 2 Australia Avenue, Sydney Olympic Park. It is within 200 metres south east of the Sydney Olympic Park railway station and is on the western side of Australia Avenue. Refer to location map at **Figure 1**. The site is known as site 43/44 under the Sydney Olympic Park Master Plan 2030.

Overall, the site has an area of 12,022m² with an approximately 104 metres frontage to Australia Avenue. A survey of the site is attached at **Appendix B**.

The site is owned by the Sydney Olympic Park Authority (SOPA). Landowner's consent will be obtained prior to determination of the Project Application as required under Clause 8F(2) of the Environmental Planning and Assessment Regulation 2000.

The registered property description of the site is Lot 56 in DP773763 and Part Lot 72 in DP1134933.

The site currently comprises a two storey commercial office and warehouse building, with at grade car parking. Refer to **Figure 4**, **Figure 5** and **Figure 6**. The site also includes a triangular shaped parking area, which is owned by SOPA and is publicly accessible. Refer to **Figure 8**.

The site is located approximately 14 kilometres from the Sydney CBD and 8 kilometres from the Parramatta CBD. It is within the Auburn Local Government Area. Surrounding land uses currently include a mix of predominantly commercial, residential, sporting and entertainment uses.



Figure 1. Site Lot and Deposited Plan

The site comprises two lots being Lot 56 DP773763 and Part Lot 72 DP1134933.

1.4 Director General's Requirements (DGRs)

A request was made to the Minister for the Director General's Requirements (DGRs) under Section 75F of the Environmental Planning and Assessment Act 1979, for the preparation of an environmental assessment.

The DGRs are addressed within this report and included in full at **Appendix C**. The table below provides a summary of the Director General's Requirements and outlines where in the body of the report, or specialist consultants' reports, the DGRs are addressed.

Table 1. Director General's Requirements

Director General's Requirements	Comment
Response to Director General's Requirements	
Environmental Assessment (EA) <ol style="list-style-type: none"> 1. An executive summary; 2. A thorough site analysis including site plans, aerial photographs and a description of the existing and surrounding environment; 3. A thorough description of the proposed development; 4. An assessment of the key issues specified above and a table outlining how these key issues have been addressed; 5. An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project; 6. The plans and documents outlined below; 7. A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading; 8. A Quantity Surveyor's Certificate of Cost to verify the capital investment value of the project (in accordance with the definition contained in the Major Development SEPP); and 9. A conclusion justifying the project, taking into consideration the environmental impacts of the proposal, the suitability of the site, and whether or not the project is in the public interest. 	<p>This report has been prepared in accordance with the Director General's Requirements and is structured accordingly.</p> <p>Section 5 of this report addresses compliance with all the relevant, applicable State and Local Government planning policy.</p> <p>A QS report is provided at Appendix D.</p>
Tasks / Appendices to the EA in response to key issues	
1. Relevant EPIs, Policies and Guidelines to be addressed	The relevant Environmental Planning Instruments, policies and guidelines are addressed in Section 5 of this report.
2. Built Form and Urban Design	Built form and urban design is addressed in Section 6 of this report.
3. Environmental Amenity	Environmental amenity is addressed in Section 6 of this report.
4. Transport and Accessibility Impacts (Construction and Operational)	Transport and Accessibility Impacts are addressed in Section 6 of this report.

Director General's Requirements	Comment
5. Rail Corridor	Rail Corridor is addressed in Section 6 of this report.
6. Ecologically Sustainable Development (ESD)	Ecologically Sustainable Development is addressed in Section 6 of this report.
7. Drainage	Drainage is addressed in Section 6 of this report.
8. Utilities	Utilities are addressed in Section 6 of this report.
9. Staging	Staging is addressed in Section 6 of this report.
10. Contributions	Contributions are addressed in Section 6 of this report.
11. Consultation	Consultation is addressed in Section 1 of this report.
12. Major Events	Major events are addressed in Section 6 of this report.
Plans and documents of the development	
1. Existing site survey plan	Appendix B
2. Site Analysis plan	Appendix A
3. Locality / context plan	Appendix A
4. Architectural drawings	Appendix A
5. Other Plans	
A. Stormwater Concept Plan	Appendix K
B. Erosion and Sediment Control Plan	Appendix K
C. Geotechnical Report	Appendix Q
D. Electrolysis Report	Not considered relevant to proposed development given distance of rail corridor from subject site.
E. Acoustic Assessment	Appendix J
F. View Analysis	Section 2 and 3
G. Wind Impact Assessment	Appendix O
H. Landscape Plan	Appendix T
I. Concept Street Plan	Appendix T
J. Shadow diagrams	Appendix A
K. Material Samples Board	Submitted under separate cover

1.5 Project team

The following consultants were engaged to provide input into the preparation of this Environmental Assessment:

Table 2. Consultant team

Discipline	Consultant
Architecture and urban design	Architectus
Planning	Architectus
Landscape architecture	Scape
Surveying	Chadwick Cheng
Transport, traffic and access	Traffix
ESD Consultant	David Shreeve & Associates
Quantity surveying	Altus Page Kirkland
Hydraulic engineering	Neil Lowry & Associates
Acoustics	Acoustic Logic
BCA Consultant	Dix Gardner
Wind analysis	Windtech
Waste management	Capital Corporation
Access consultant	Morris Goding Accessibility Consultants
Environmental Engineer	Environmental Investigation Services
Geotechnical Engineer	Geotechnique
Arborculturalist	Urban Tree Management
3D graphic artist	Artelier Illume

1.6 Consultation undertaken

The DGRs require the Environmental Assessment to address the following key issues related to consultation:

- *Undertake an appropriate and justified level of consultation in accordance with the Department's Major Project Community Consultation Guidelines October 2007.*

This section of the report describes the consultation that has been undertaken by the consultant project team during the preparation of this Environmental Assessment. Consultation has been carried out with government agencies as required by the Director General of the Department of Planning (DGRs).

Community consultation

There has been no consultation with surrounding landowners (other than Sydney Olympic Park Authority). There are no occupied residential buildings in the immediate vicinity of the site. Surrounding landowners and tenants will be notified as part of the statutory exhibition process, and provided with the opportunity to comment on the project at that time.

Government agencies and service providers

Consultation undertaken by specialist consultants in the project team with government agencies and service providers is documented in the specialist consultant reports that accompany this Environmental Assessment.

The Project Application was the subject of a design excellence competition under the Sydney Olympic Park Master Plan 2030. The Design Jury Report made up of members from Sydney Olympic Park Authority, the NSW Government Architect, Peter Mould, Tony Caro and Capital Corporation prepared a Jury Report and recommendations for the appointment of Architectus to prepare the Project Application.

It is understood that the Department of Planning will refer the proposal to SOPA for comment during the exhibition period. Capital Corporation propose to meet the SOPA Design Review Panel to present the proposal and encourage feedback on the proposal.

Capital Corporation and Architectus met with Andrew Brown, Planning Manager of Sydney Olympic Park Authority prior to the lodgement of the Project Application to discuss how the proposed development had responded to the design competition jury report and recommendations.

It is understood the RTA will be referred the Project Application and the Sydney Regional Development Advisory Committee will provide comments and will be provided to the Department of Planning for consideration in their assessment and determination.

1.7 Capital Investment Value

The Capital Investment Value (CIV) of the proposed development is \$43,313,743. This CIV is calculated using the definition from Clause 3(2)(a) of State Environmental Planning Policy (SEPP) (Major Projects) 2005 as follows:

*“the **capital investment value** of development includes all costs necessary to establish and operate the development, including the design and construction of buildings, structures, associated infrastructure and fixed or mobile plant and equipment (but excluding GST, as defined by a New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth, and land costs)”.*

Refer to the CIV estimate by Altus Page Kirkland at **Appendix D**.

1.8 Consent authority

The Minister for Planning is the consent authority for the proposed development. The Director General as a delegate of the Minister for Planning confirmed that under Clause 6 of the Environmental Planning and Assessment Act 1979 was a project to which Part 3A applied. Refer to **Appendix E** for copy of letter from Director General dated 15 October 2010.

1.9 Disclosure of political donations

Capital Corporation have provided a statement of disclosure of political donations, which is attached at **Appendix F**.

1.10 Statutory requirements and policies

The following statutory requirements and policies that are relevant to the subject site and the proposed development are the following:

NSW Legislation

- Environmental Planning and Assessment Act 1979

NSW State Plan

Metropolitan Planning Strategy

- Sydney Metropolitan Strategy: City of Cities
- West Central Subregional Strategy

State Environmental Planning Instruments (SEPPs)

- SEPP (Major Development) 2005
- SEPP (Infrastructure) 2007
- SEPP 55 Remediation of Land
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Sydney Olympic Park Master Plan 2030

Sydney Olympic Park Guidelines

- Sydney Olympic Park, Guidelines for Outdoor Advertising, Identification and Promotional Signage
- Sydney Olympic Park, Access Guidelines 2008
- Sydney Olympic Park, Major Event Access Guidelines
- Sydney Olympic Park, Urban Elements Design Manual

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

2 Site and contextual analysis

2.1 Introduction

This section of the report provides an analysis of the site and the context of the development. The site is part of the Sydney Olympic Park which is evolving into an important economic centre and urban parkland within metropolitan Sydney. The Sydney CBD is approximately 14 kilometres to the east of Sydney Olympic Park.

An analysis of the site is described in terms of local context and surrounding land uses; legal description and easements; development consent history; land use zoning; transport and accessibility; vegetation; topography; and visual environment.

2.2 Site Description

The site is generally rectangular in shape and is located on the south-western corner of the intersection of Australia Avenue and Herb Elliot Avenue. The site has a total area of 12,022m² and has a frontage to Australia Avenue of approximately 104 metres. The site is described as Site 43/44 in the Sydney Olympic Park Master Plan.

A survey plan prepared by Chadwick Cheng is provided at **Figure 3**. The site survey is reproduced at A3 size at **Appendix B**.



Figure 2. Site plan
Source: SOPA



Figure 3. Survey Plan by Chadwick Cheng



Figure 4. View of main entry to existing warehouse/office building



Figure 5. Northern elevation of existing warehouse/office building



Figure 6. Loading dock of existing warehouse/office building



Figure 7. Vehicle entry to site from Herb Elliot Avenue



Figure 8. Existing park corner Australia Avenue and Herb Elliot Avenue

2.3 Local context and surrounding land uses

This section of the report describes the surrounding area in terms of orientation and proximity to the subject site.

The subject site forms part of a key focal point for Sydney Olympic Park, with a frontage to Australia Avenue, one of the main access roads that extends through to Sydney Olympic Park.

The site 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 200 metres of the Sydney Olympic Park railway station. Refer to the Location Map at **Figure 9**.



Figure 9. Location Map

Lot boundaries are shown with a thin yellow line.

To the west

To the west of the site is an existing office building current occupied by the Sydney Water Corporation data centre. 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 recently adopted Sydney Olympic Park Master Plan 2030.

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.



Figure 10. Dawn Fraser Avenue



Figure 11. Sydney Olympic Park Railway Station



Figure 12. Park Street and CBA development
Two buildings are linked by elevated pedestrian walkways crossing Park 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 between 2 Australia Avenue and Site 3.

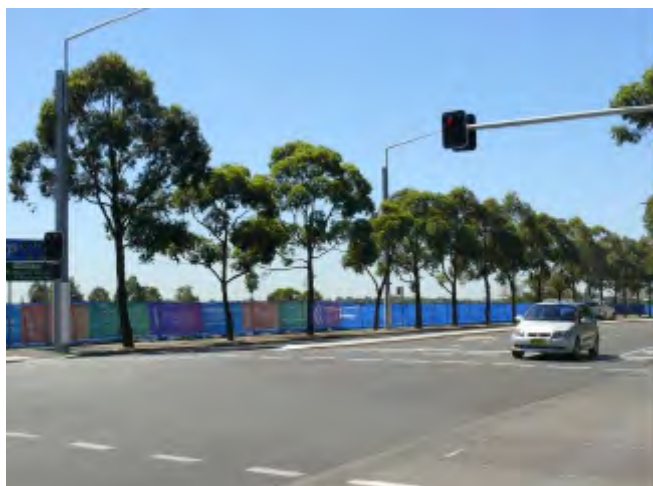


Figure 13. Site 3, Sydney Olympic Park
Currently, a 24 storey mixed residential and retail development is under construction.



Figure 14. Sydney Olympic Park Railway Line
Site 3 is currently, a 24 storey mixed residential and retail development is under construction.

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 of the subject site along with southern boundary and under the MP 2030 there will be new eight storey commercial buildings on the adjacent site to the south.



Figure 15. Existing established Fig tree to south



Figure 16. Existing two storey commercial development to south

2.4 Legal description and easements

Lot and DP number

The site is legally described as Lot 56 in DP773763 and Part Lot 72 in DP1134933 (refer to Lot and Deposited Plan at **Figure 17**).



Figure 17. Lot and Deposited Plan

2.5 Land use zoning

The site, 2 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 5**). The site is identified as a commercial land use in the Master Plan.

2.6 Transport and accessibility

Traffix have prepared a Transport and Accessibility Report and this is attached at **Appendix G**. The following information is summarised from the Transport and Accessibility Report.

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. The site accesses are currently situated on Australia Avenue.

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 Transport and Accessibility Report at **Appendix G** 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 Report has found that these intersections operate satisfactorily with a Level of Service of C or better, with the exception of 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.

2.7 Vegetation

There are a total of 123 trees within and adjacent to the site, including street trees, which are considered in the Arboricultural Impact Assessment at **Appendix I**.

The report states that the site supports planted and self-sown, indigenous and exotic, evergreen and deciduous trees. Most trees are young to early mature, approximately 10 – 20 years old, planted prior to or during the lead up to the Sydney Olympics. Most trees along the south/west boundary are located within the neighbouring property – No 4 Australia Avenue – Sydney Water.

Of these trees, 92 are proposed to be removed and 31 retained. Where appropriate, the Landscape Plan will include the planting of new trees. Refer to the Landscape Plan at **Appendix T**. Refer to **Section 3** of this report for further information on the proposal tree removal and new plantings.

2.8 Topography and Geology

The Geotechnical Report prepared by Geotechnique Pty Ltd is attached at **Appendix Q**. The information in this section is taken from the Geotechnical Report.

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.

2.9 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.

The proposed development will not impact on the key views identified in the Sydney Olympic Park Master Plan 2030. Refer to **Figure 18**.



Figure 18. Key views and vistas at Sydney Olympic Park
Source: Sydney Olympic Park Master Plan 2030, Figure 3.2.

2.10 Site analysis

This section of the report describes the opportunities and constraints that have informed the proposed development.

Opportunities

- Remediate site through the removal of contaminated fill;
- Implement the State Government's vision under the Sydney Olympic Park Master Plan for high quality mixed commercial office and retail development;
- Optimise work place amenity through sunlight access and control, views, outlook and privacy;
- Allow for the ultimate achievement of the design competition winning development of the overall site including new roads through the site and central courtyard; and
- Protect existing significant street trees, where possible to provide a sense of permanence for the site and development.

Constraints

- Allow for the continued operation of the existing warehouse and ancillary office development;
- Allow for the relocation of existing at grade car parking spaces for workers and visitors to the existing warehouse and ancillary office development;

Further detailed outline of site opportunities and constraints was provided in the design competition brief, which this Project Application has responded to.

Figure 19 illustrates the site analysis plan submitted with the architectural drawing set at **Appendix A**.



Figure 19. Site analysis plan

3 Strategic justification and consideration of alternatives

3.1 Strategic justification

This section sets out the strategic justification for the proposed development of 2 Australia Avenue.

The Sydney Olympic Master Plan 2030 identifies nine precincts for Sydney Olympic Park. The site is located within the Central Precinct. The Central Precinct is principally a commercial area, and it also includes associated retail and residential uses.

Commercial uses have been located within this precinct because of its proximity to the Sydney Olympic Park railway station. The commercial buildings will also act as a noise buffer between the venues and the southern parts of the precinct, which will become a compact residential neighbourhood.

The Master Plan sets out detailed planning controls for each precinct as well as general controls that apply to all precincts. SEPP (Major Development) 2005 requires that the consent authority only grant consent if it has first considered the Master Plan 2030 and that development is consistent with the Master Plan.

The proposed development is for a mixed use commercial and retail eight storey building, as envisaged in the Master Plan for the site. The scale of the building proposed for the site is in accordance with the controls of the Master Plan, which considered this an appropriate scale to support a vibrant town centre at Sydney Olympic Park.

3.2 Alternatives to the proposal

In developing the buildings and other aspects of the site, design excellence has been identified in the Master Plan as a critical issue. The Master Plan requires that a design competition be held to generate alternative design options for development proposals in order to respond to the Design Excellence Controls in the Master Plan. The Master Plan states as follows:

“All buildings affect Sydney Olympic Park’s character and public domain. Design quality or ‘design excellence’ is a fundamental consideration in the assessment of all development proposals. In most situations this is achieved when a building responds sensitively to its context. Design excellence is particularly important for key sites that interact with the town’s major event and public domain areas such as tower development and all developments along Olympic Boulevard and Australia Avenue which have significant impacts at street level and from a distance.”

Design Competition

A design competition for the site was conducted in accordance with the brief prepared and submitted by the Proponent, endorsed by the Competition Jury on 31st May 2010 and approved by the Director General of the Department of Planning.

The design competition sought to appoint the winning architects to the design team. The Project Application must be consistent with the preferred design.

Three architectural firms were short-listed as a result of the designs they submitted. The three short-listed architectural schemes were presented to the Jury on 23rd July 2010. The Jury decided on a winning proposal by unanimous agreement, being the scheme by Architectus Group Pty Ltd. This scheme was considered to achieve the highest level of consistency with the Design Brief. Refer to the Jury Report at **Appendix H**.

Design objectives for the project

The key urban design and architectural objectives presented in the brief are summarised below:

Urban design

- Together with the CommBank site, the Australia Towers residential development at site 3 and future developments at site 2B, define the Herb Elliott and Australia Avenue intersection as a coherent urban space;
- Together with the CommBank site, signify a threshold to the Town Centre's retail core along Herb Elliott Ave;
- Privacy and separation from future residential uses opposite Australia Avenue;
- Presentation of the development from the downhill approach vista along Australia Avenue;
- Provide the next stage of the Park Street corridor, linking future residential developments to the south of the Central precinct with the civic core of the Town Centre;
- The Park Street frontages to be used for outdoor dining;
- Resolve vehicle access issues, given that the preferred access points identified in MP2030 may not be achievable in the first stage of development. Alternative access off the future east west street is permissible provided that there is minimal impact on the footpath;
- Driveway width is minimized and footpath treatments, as required in the Authority's Urban Elements Design Manual (UEDM) can be achieved; and
- Building volume and building resolution facing site 45 to the south, complement the existing fig tree which is to be retained and incorporated into landscaped setbacks in the future development of site 45.

Public Domain

- New streets are in accordance with GHD concept street designs;
- The Park Street view corridor which aligns with an axial vista of the Bicentennial Marker to the south and the eastern entry of the Sydney Olympic Park railway station to the north;

- There is adequate deep soil for street tree planting in locations where underground parking may extend under future streets;
- Streets and footpaths are in accordance with the Authority's UEDM.

Architectural Design

- Achieve exemplary design outcomes that set the standard for future development in Sydney;
- Olympic Park as a unique, innovative and sustainable urban landscape;
- Respond to the site's transitional role at the interface of a residential neighbourhood and a commercial precinct;
- Natural ventilation of individual tenancies;
- Natural light penetration into the core of this deep site;
- Resolve the roofscape as a 'fifth elevation', given its high visibility from residential apartments in the adjacent Australia Towers; and
- Successfully resolve and exploit site constraints including but not limited to level changes across the site, maintaining view corridors from the Station to the Bicentennial Marker, etc.

Architectus scheme

The Architectus Group Pty Ltd scheme proposed a total of four stages of construction with Stage 1 located parallel to Australia Avenue with a core on the western side. Stage 2 was attached to the northwest corner of Stage 1 and Stage 3 to the southwest corner. The footprint of Stage 2 was parallel to Herb Elliot Avenue, and Stage 3 was parallel to the new East/West Street which created a central courtyard. Stages 2 and 3 utilised the core of Stage 1 for vertical transport and amenities.

Stage 4 of the development occupied a majority of the Site 43 footprint with the commercial tower remaining independent of the earlier stages.

The total Gross Floor Area of Stages 1 – 4 equated to 40,698m². A total Gross Floor Area of 42,077m² is permissible under the Sydney Olympic Park Master Plan 2030.

A total of three basement car parking levels was proposed which upon completion of the four stages would connect to enable a highly efficient car parking design. Construction of the car parking levels would be staged with the commercial office staging plan. Compliance with the Sydney Olympic Park Master Plan 2030 for car parking numbers was to be maintained for all stages. Access to the car parking levels was proposed in two locations along the new East/West Street.

The external façade used terracotta cladding, aluminium composite cladding, aluminium framed glazing, horizontal tubular aluminium sun screening and green planting screens. The green screen provided an alternate aspect to the façade by providing colour and sun-shading in one element.

Ground Floor included multiple retail tenancies spread across the four stages of the development. The retail tenancies faced toward Australia Avenue, Herb Elliot Avenue, Park Street extension and the new East/West Street therefore complying with the Sydney Olympic Park Master Plan 2030. Adjacent to Australia Avenue but beneath street level was the proposed supermarket, which was accessed via an escalator and stair located on the Herb Elliot Avenue.

The entry foyer for proposed Stages 1 to 3 was located on the corner of Australia Avenue and Herb Elliot Avenue with entry from Herb Elliot Avenue and the central courtyard area. A two storey void was provided within the Entry Lobby and a business lounge, meeting rooms and space for Concierge was provided within the entry lobby complying with the requirements of the Brief. Stage 4 of the design submission also provided these amenities and provides a separate street address.

Adjacent to the entry lobby a café could be accessed either from the lobby during normal business hours or directly from the street after business hours.

The submission considered the impact of the new development on the existing office / warehouse by including a three storey void which enabled views from Herb Elliot Avenue to that structure. This would maintain a street presence during the initial development stages.

Ground floor activity was provided by a bar and restaurants for use during and after business hours.

Stairs from the Ground Floor courtyard to Level 1 and Level 2 of the Commercial tower provide informal access to these levels.

The length of corridors from the lift core to the tenancies were kept to a minimum due to the location of the core and inclusion of atrium balconies which overlook the public courtyard to one side of the atrium. These provided an alternative social/work space, and allow natural light to the corridors.

Architectus Group Pty Ltd linked to the existing landscape features on adjacent properties by including a significant planting within the courtyard space. The courtyard area had bands of additional planting.

The submission also considered the operational aspects of the development by effectively concealing services and back of house areas (garbage room, loading dock, chamber substation etc).

Recommendations of the Jury for further development of the Architectus Design

The Jury was satisfied that the Architectus scheme met the ambitions of the Competition Brief and was nominated as the preferred proposal having regard to the recommendations listed and addressed in Section 6 of this report.

Conclusion

Alternatives to the proposed development were considered at the Design Competition stage and the Architectus scheme was selected as it most effectively met the requirements of the brief.

Strategically, the project is justified for the following reasons:

1. Consistent with the Metropolitan Strategy, Inner West Sub-Regional Strategy, Major Development SEPP and Sydney Olympic Park Master Plan 2030;
2. Provides employment opportunities for Western Sydney within a key Specialised Centre; and
3. Consistent with the outcomes of the design competition.

4 The Proposal

4.1 Introduction

The proposal seeks consent from the Minister for Planning for the development of Stage 1 of the development of 2 Australia Avenue, in Sydney Olympic Park. The development proposes a commercial building, with retail uses at ground level, and one retail space at Level 1.

The development, within Auburn Local Government Area, meets the non-discretionary criteria under Schedule 1, Group 5, Clause 13 and Schedule 3, Part 23, clause 5 of the *State Environmental Planning Policy (Major Development) 2005*. Therefore, it can be considered as a major project to which Part 3A of the Environmental Planning and Assessment Act 1979 applies.

4.2 Project overview

Major Project Application MP10_0168 seeks the Minister for Planning's Project Approval for the following development:

An eight storey commercial building of 16,749m² GFA comprising:

- Removal of existing trees and vegetation;
- Relocation of 30 at-grade car spaces into the proposed basement carpark levels;
- Two levels of basement car parking for 225 cars plus four service vehicle spaces;
- Retail uses at ground floor level including a supermarket;
- Commercial entry lobby, garbage and recycling rooms, and loading dock at ground level;
- Landscaped open space areas at ground level;
- Commercial office space at Levels 1 - 7 with balconies; and
- Plant on the building roof.

A detailed description of the various elements is provided below.

Section 6 of this report describes the proposed staging of the overall site development in response to the Director General's Environmental Assessment Requirements (DGRs). The Architectural drawing set includes floor plans and elevations showing how the proposed Stage 1 development fits into the overall site redevelopment. These drawings are provided for illustrative purposes only. A future Project Application will be submitted seeking approval from the Minister for Planning for the Stage 2 development of the remainder of the site.



Figure 20. 3D perspective view looking south west
View from Australia Avenue, Herb Elliott Avenue and Parkview Avenue intersection.



Figure 21. 3D perspective view looking south
View from Herb Elliott Avenue.



Figure 22. 3D perspective view looking north
View from Australia Avenue.

4.3 Architectural drawings

This section of the report describes the proposed development and is based on architectural drawings prepared by Architectus. **Table 3** provides a schedule of architectural drawings that have been referred to in the preparation of this Environmental Assessment. All drawings are dated 17 December 2010. Reduced copies of these plans are included at **Appendix A**. A1 sets of architectural drawings are submitted with the development application under separate cover.

Table 3. Architectural drawings

Drawing number	Description	Revision
DA0000	Cover sheet	A
DA0001	Site survey	A
DA0002	Locality and context plan	A
DA0003	Site analysis plan	A
DA0004	Site demolition plan	A
DA0005	Site plan – Stage 1	A
DA0020	GFA area plan	A
DA0021	NLA area plan	A
DA0250	Masterplan – typical basement	A
DA0251	Masterplan – ground floor	A
DA0252	Masterplan – level 1	A
DA0253	Masterplan – typical floor	A
DA0254	Masterplan – roof levels	A
DA0255	Elevation Masterplan	A
DA0256	Aerial perspective Masterplan	A
DA1001	Basement level 2 plan	A
DA1002	Basement level 1 plan	A
DA1003	Ground floor plan	A
DA1004	Level 1 plan	A
DA1005	Level 2 plan	A
DA1006	Level 3 – 7 plan	A
DA1007	Plant level plan	A
DA1008	Roof level plan	A
DA2000	North east elevation	A
DA2001	North west elevation	A
DA2002	South west elevation	A
DA2003	South east elevation	A
DA2005	Section 1	A
DA2006	Section 2	A
DA2010	Detail sections 1 - 2	A
DA2011	Detail sections 3 - 4	A
DA3000	Shadow studies	A
DA3001	Shadow studies	A
DA5000	Material finishes	A
DA9000	Perspective	A
DA9001	Perspective	A
DA9002	Perspective	A

4.4 Numerical overview

Table 4 provides a numerical overview of the proposed development.

Table 4. Numerical overview

Site area	12,022m ²
Maximum building height	28.6 metres (8 storeys)
New Gross Floor Area	16,749m ²
Existing Gross Floor Area	6056.7m ²
Floor Space Ratio (FSR)	1.9:1 for Stage 1 (maximum FSR of 3.5:1 permitted)
Car parking	115 (basement level 2) 110 (basement level 1)
Motor cycle parking	10 (basement level 2) 10 (basement level 1)
Bicycle parking spaces	52 (basement level 2) 52 (basement level 1) 20 (ground level)

4.5 Urban Design and Planning objectives and principles

This section of the report outlines the key urban design and planning objectives and principles that form the basis of the Project Application.

Urban Design and Planning objectives

The key objectives that have guided the design are to provide a high quality commercial development with some retail uses at ground level, which:

- have a **high level of design and amenity**;
- **demonstrate leadership in ecologically sustainable development** for a mix of uses through energy and water efficiency initiatives;
- enhance the **walkability and safety of the area** with strong connections between the buildings and the street edge;
- **complement the Sydney Olympic Park landmark** structures without dominating them.

4.6 Demolition

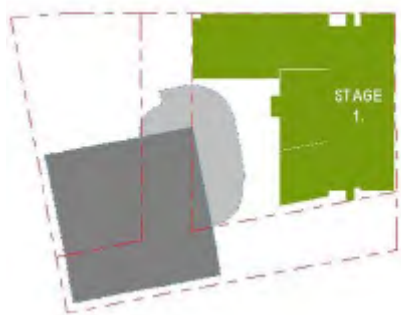


Figure 23. Stage 1 Project Application
The existing warehouse and ancillary office building is proposed to be retained in Stage 1 of the overall site redevelopment.

Figure 24 illustrates the proposed site clearing and demolition works required prior to the construction of the Stage 1 building. The existing at-grade car parking areas are proposed to be cleared and replaced with temporary car parking for staff and visitors to the existing warehouse and ancillary office building.

Some existing site vegetation will also be removed. Urban Tree Management have undertaken an assessment of the 123 trees within and adjacent the site, which is provided with this Stage 1 Project Application at **Appendix I**. Of the 123 trees assessed, 92 trees are proposed to be removed and 31 retained.

The existing warehouse and ancillary office building is proposed to be retained in Stage 1 of the overall site redevelopment. Refer to **Figure 23**.



Figure 24. Demolition plan

4.7 Proposed uses

The proposed mixed use development comprises the following uses:

Commercial

The predominant use in the building is for commercial offices, which is proposed on all levels except ground level. Refer to plans DA1005 and DA1006 at **Appendix A**.

Retail

There are retail uses on the ground floor including a supermarket retail tenancy and cafe. Refer to plans DA1003 (**Figure 25**) and DA1004 (**Figure 26**) at **Appendix A**.



Figure 25. Ground floor plan with retail uses
Retail uses are shown shaded dark yellow.



Figure 26. First floor plan with retail uses
Retail uses are shown shaded dark yellow.

Permissibility of proposed uses

State Environmental Planning Policy (Major Development) 2005

The site is zoned B4 Mixed Use zone under the State Environmental Planning Policy (Major Development), Part 23 of Schedule 3 for the Sydney Olympic Park. The objectives of Zone B4 Mixed Use include:

“(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,”

and

“(d) to provide for a mixture of compatible land uses,”

The proposed commercial / retail development is the type of development that is envisaged by the objectives of SEPP (Major Development) for the B4 Mixed Use zone.

Clause 9(3) of Part 23 of Schedule 3 of the SEPP (Major Development) provides for commercial and retail uses as permitted uses with consent in the B4 Mixed Use zone.

Sydney Olympic Park Master Plan 2030

The site at 2 Australia Avenue has a commercial land use prescribed under the Master Plan 2030. In the commercial land use zone, office premises and retail uses are permitted, subject to compliance with development controls.



Figure 27. Central Precinct Land Use Plan

Source: Sydney Olympic Park Master Plan 2010

4.8 Gross Floor Area

Table 5 provides a level by level break-down of the proposed Gross Floor Area (GFA) and total GFA of the proposed Stage 1 Project Application. The total GFA of the proposed development is 16,749m². The existing warehouse and ancillary office has a GFA of 6,056.7m². The total GFA of the Stage 1 GFA is 22,805.7m². The proposed Floor Space Ratio (FSR) of the development is 1.9:1, which complies with the maximum 3.5:1 FSR for the site under the Major Development SEPP.

Table 5. Proposed Gross Floor Area

Building level	Gross Floor Area (m ²)
Ground Level	1,452
Level 1	1,296
Level 2	1,800
Level 3	2,443
Level 4	2,433
Level 5	2,445
Level 6	2,446
Level 7	2,436
Total	16,749 (rounded)

4.9 Materials and finishes

Materials and finishes proposed for the building are set out on elevation drawings DA2000 to DA2003. The majority of the building consists of curtain wall with aluminium light shelf in dark bronze anodised finish. The colours to be used on the building are charcoal with white highlighting around the stepped façade. **Figure 28** reproduces the proposed materials and finishes sample board submitted with the project application under separate cover.



Figure 28. Materials and finishes sample board

4.10 Site access

The development will make reliance on the proposed combined entry-exit driveway onto Australia Avenue. Access will be altered in the future stages of development when the new Road 10 is constructed. The proposed site access has sufficient capacity to accommodate all entry volumes for Stage 1 and the entry driveway is indicated on the plans. The use of a temporary ramp is proposed as this will provide safe and direct access to the basement parking levels.

The future redevelopment of the remaining part of the site proposes an entry-exit driveway onto the new Road 10 and this will be constructed in the future stages. This is located adjacent to Park Street about 70 metres from its intersection with Australia Avenue.

4.11 Car and motorcycle parking

Additional car parking will be provided on Basement Levels 1 and 2 with 110 spaces at Basement Level 1 and 115 spaces at Basement Level 2. Access to the basement levels is from Australia Ave along the eastern boundary of the site. A total of 30 existing at-grade car spaces are proposed to be relocated into the basement car park levels as a result of the Stage 1 Project Application. Car parking is detailed as shown in **Table 6** and **Table 7** below.

Table 6. Parking Schedule – Basement Level 2

Type	Spaces
Car parking	99
Car parking – disabled	4
Small car parking	12
Total	115

Table 7. Parking Schedule – Basement Level 1

Type	Spaces
Car parking	94
Car parking – disabled	4
Small car parking	12
Total	110

In addition, there will be motorcycle parking for 10 motorbikes on each of Basement Levels 1 and 2.

4.12 Bicycle parking

There will be a total of 124 bicycle parking spaces, with 52 at each of Basement Levels 1 and 2 and 20 at ground level. At the basement levels, these spaces will be provided adjacent to the lifts and in the north-east corner of the two basements. Change rooms will also be provided adjacent to the lifts at both basement levels. At ground level the bike parking will be in the north-west corner of the site adjacent to the undercroft area.

4.13 Public transport

The proposed pedestrian connection to Olympic Park railway station and the nearby bus stops has the most significant potential to improve traffic conditions and reduce car dependency. In addition, it is expected that a Workplace Travel Plan and/or a Travel Access Guide would be prepared in support of the application at a later time (refer draft Statement of Commitments at **Section 7**). This would include the promotion of alternate travel modes and travel demand measures including car sharing, public transport availability (bus, rail and taxi), cycle and pedestrian routes and linkages, bicycle end-user facilities and motorcycle parking.

The provision of a drop-off area within the site will be of particular benefit to taxi use.

This Travel Access Guide would address the primary objective of increasing public transport use to achieve the 40% Journey to Work public transport mode share target that is identified in Master Plan 2030. Refer to the Draft Statement of Commitments at Section 7 of this report.

Existing public transport services are shown in **Figure 29** below.



Figure 29. Public transport adjacent the site

A loading dock is provided on the southern side of the development with access from a driveway via Australia Avenue. It is suitable for use by a standard service vehicle as required under AS 2890.2(2002) which is an 8.8m (MRV). 'Silex' car park has two loading docks of which one is currently in use. With the proposed car park layout, both loading docks are still accessible.

The proposed Stage 1 landscape works are illustrated in the landscape plan prepared by Scape and included at **Appendix T** of this Environmental Assessment. This plan is reproduced at **Figure 30**.

The existing trees planted along the Herb Elliott Avenue and Australia Avenue frontages of the site will not be impacted by the proposed development. An Arboricultural Impact Assessment of the impact of demolition and construction works on these streets trees is included at **Appendix I**. The Proponent commits to adopting the recommended tree protection and management measures. Refer to the Draft Statement of Commitments at Section 7 of this Environmental Assessment.



The proposed Stage 1 Project Application does not propose any additional public domain areas. The new roads, required under the Sydney Olympic Park Master Plan 2030 are to be delivered in the future Stage 2 Project Application.

Figure 31 provides the ground floor plan with landscape design concept for the public and private domain areas within the overall development of the site.

The Landscape Design Report prepared by Scape and submitted with this Environmental Assessment at **Appendix T**, describes the design approach and principles that have informed the proposed landscape design for the overall site development including the proposed Stage 1 Project Application as follows:

Public ‘square’

The public square is a central space which acts as a gathering node and meeting place for the development. A large feature tree is proposed to the centre of the site to provide shade amenity and visual interest in the space. The species is nominated as Magnolia grandiflora and is to be installed as an ex ground specimen tree. The tree will be located above podium and sufficient concrete slab set down is proposed to accommodate the tree rootball to ensure adequate growth and establishment. Above ground, the tree will sit in a 450mm high landscape planter incorporated with a timber seating surround to create a shaded seating element at the centre of the square. This element will double as protection for the tree trunk in an urban environment. A visual connection will be established between the existing fig tree to the south and the proposed feature tree.

Landscape strips are proposed in the square to break up the extent of paving. The planting species will be a selection of low growing species to 600-700mm height to ensure that sight lines are not restricted across the square. Typical species selections are nominated in the plant schedule. The landscape strips will be incorporated with timber seating elements which run east west across the square to allow pedestrian activity between the two buildings.

The proposed main paver for the development is a concrete unit paver fixed with mortar over concrete base. The colour selection is a reflective of existing grey toned concrete pavers used elsewhere within Sydney Olympic Park. The two pavers selected are Urbanvue ‘Langwarren Blue’ and Terravue ‘Dromana White’ both with a shotblast finish. The public square, which includes the feature tree and outdoor café zone areas, is defined by the main paver with a highlight paver in a contrasting colour in a random diagonal pattern to define the square as a focal element to the development. This pattern continues across the New Road 16 to link the two active public open spaces together.

Australia Avenue frontage

The existing street trees Eucalyptus microcorys will be maintained along the majority of the Australia Avenue frontage, with trees to be removed to make way for the new road intersection. The proposed paving is nominated as the main granite paver to be used in the public square from

building edge to the edge of the existing trees in turf.

Herb Elliot Avenue frontage

*The existing street trees *Corymbia maculata* will be maintained along the majority of the Herb Elliot Avenue frontage, with trees to be removed to make way for the new road intersection. The proposed paving is nominated as the main granite paver to be used in the public square from building edge to kerb in order to maintain pavement consistency across the site. New groundcover planting beds will be created at the base of each existing street tree to match the treatment on the other side of the road.*

New Road 10

*New Road 10 creates the southern boundary of the site. The nominated species is *Elaeocarpus eumundii* in accordance with the Sydney Olympic Park Street Tree Master Plan (Urban Elements Design Manual Section 3.5).*

New Road 16

*New Road 16 cuts through the centre of the site in a north south direction. The street is unique in that it is to be constructed above podium with sufficient soil depth and slab set down to allow the trees to be planted at ground level. This will enable provision of shade to the footpath and a positive pedestrian experience. The nominated street tree species is *Elaeocarpus eumundii* in accordance with the Sydney Olympic Park Street Tree Master Plan (Urban Elements Design Manual Section 3.5). Outdoor café spaces are nominated on the western side of this road outside the Stage 2 building, with low hedge planters nominated to provide definition to the spaces.*

Stage 1 works

Temporary carpark and ramp works are required as part of the Stage 1 works. These are proposed for removal to make way for the Stage 2 buildings. Large potted trees are proposed in the locations recommended by the Pedestrian Wind Environment Statement by Windtech. Details will be developed in the detailed landscape plans for Stage 1 construction.

Atrium green wall

A proposed green wall will be constructed in the atrium space from ground to top floor. The concept for the wall is to install a series of planters along the edge of each floor with hanging plants in each planter to provide a green outlook from the centre of the building. A species has been selected which is suitable as a hanging plant in an indoor environment. Permanent irrigation will be provided to each planter using recycled water from tank supply.



Figure 31. Overall site landscape concept plan

New Road 10 and New Road 16 and the central courtyard will be delivered in the future Stage 2 Project Application.

4.16 Building identification signage

Building identification signage is proposed on the North-East, North-West and South-West elevations. The signs will have the word “Axis” and are positioned on the facades to be visible from Australia Avenue and Herb Elliot Avenue at the tops of the building and at ground floor level. Refer to architectural elevations and 3D photomontages at **Appendix A**.

5 Regulatory context

The Director General's Requirements require that the Proponent address the relevant EPI's, policies and guidelines which include planning provisions applicable to the site, including permissibility and the provisions of the following plans and policies:

- *Objects of the Environmental Planning and Assessment Act 1979;*
- *SEPP (Major Development) 2005;*
- *SEPP (Infrastructure) 2007;*
- *SEPP 55 Remediation of Land;*
- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;*
- *Sydney Metropolitan Strategy and the Draft West Central Subregional Strategy;*
- *NSW State Plan;*
- *Sydney Olympic Park Master Plan 2030;*
- *Sydney Olympic Park, Guidelines for Outdoor Advertising, Identification and Promotional Signage;*
- *Sydney Olympic Park, Access Guidelines 2008;*
- *Sydney Olympic Park, Major Event Access Guidelines (Major Event Impact Assessment Guidelines); and*
- *Sydney Olympic Park, Urban Elements Design Manual*

The following section outlines the applicable statutory planning instruments and policies of relevance to the application. The DGRs also require the Proponent to address the nature and extent of any non-compliance and to provide justification.

5.1 Objects of the EP&A Act

The Environmental Planning and Assessment Act 1979 has the following objects:

"5 Objects

The objects of this Act are:

(a) to encourage:

- (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- (iii) the protection, provision and co-ordination of communication and utility services,*
- (iv) the provision of land for public purposes,*
- (v) the provision and co-ordination of community services and facilities, and*

- (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- (vii) *ecologically sustainable development, and*
- (viii) *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment."*

The proposal meets the relevant objects of the EP&A Act as it proposes development which will promote the social and economic welfare of the community through further developing the commercial / mixed use centre of Sydney Olympic Park and enabling greater employment opportunities within the centre.

In addition, it will be developed in a way that improves the existing quality of the environment on the site through appropriate landscaping of the site, use of good quality materials, and design excellence. Ecologically sustainable development principles will be an integral part of the design.

5.2 State Legislation

State Environmental Planning Policies address matters of state significance in relation to new development. They can be applied to an entire site or to particular geographical areas, or to particular development types. The SEPPs that are applicable to the proposed development and relevant comments concerning their application are outlined below.

State Environmental Planning Policy (Major Development) 2005

State Environmental Planning Policy (SEPP): Major Development provides the criteria that identify the types of projects that are to be determined under Part 3A of the EP & A Act. It also sets out specific development controls for Sydney Olympic Park.

Sydney Olympic Park is identified as a 'State Significant Site' to which Part 3A of the EP & A Act applies under Schedule 3. Clause 6(1)(b) of the SEPP identifies projects, that in the opinion of the Minister, are development of a kind:

"that is described in Schedule 3 as a project to which Part 3A of the Act applies"

Schedule 3, Part 23, Clause 5 of the SEPP (Major Development) 2005 states that:

"Development within the Sydney Olympic Park site, including any associated subdivision of land, that has a capital investment value of more than \$10 million is a project to which Part 3A of the Act applies."

Altus Page Kirkland, Quantity Surveyors have advised that the Capital Investment Value for the first stage of development is \$43,313,743 therefore the project is one to which Part 3A of the Act applies.

Development controls

Part 23 of Schedule 3 State Significant Sites contains specific development controls for Sydney Olympic Park.

Zoning

The site is zoned B4 Mixed Use zone. 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 meets the objectives of Zone B4 Mixed Use as it is a commercial development within easy walking distance of the Olympic Park train station and is also close to future residential uses in the Olympic Park centre. The proposed development therefore encourages the use of public transport, walking and cycling as modes of transport. Ecologically sustainable development principles are incorporated into the design of the proposed development.

Height limit

The height limit for the site is 33 metres. The definition of height within Sydney Olympic Park is the following:

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

The proposed development is 28.6 metres in height excluding plant on top of the building. Therefore, the proposed development complies with the height limit within SEPP (Major Development).

Floor Space Ratio

The Floor Space Ratio (FSR) is 3.5:1 for the site under the controls in SEPP (Major Development). The total gross floor area for the proposed development is 16,749m². The site area is 12,022m². The existing warehouse and ancillary office building, which is proposed to be retained in the Stage 1 Project Application has a gross floor area of 6,056.7m². The total GFA for the Stage 1 Project Application is therefore 22,805m².

This results in a floor space ratio for Stage 1 of the site development of 1.9:1, which complies with the maximum FSR under the Major Development SEPP.

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 NSW Roads and Traffic Authority (RTA) 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 RTA requested that the following matters be included in a transport and traffic impact assessment:

- Transport & Accessibility Impact Assessment to be prepared in accordance with the RTA'S Guide to Traffic Generating Developments and other relevant EPIs;
- Include consideration of traffic generation, including estimate of vehicle trips, daily and peak traffic movements, service vehicle movements (including vehicle type and arrive times), and any required road/intersection upgrades, access and loading dock(s).

Comment:

A transport and traffic impact assessment is provided in **Appendix G** including an assessment of the proposed traffic generation, service vehicle movements, access and loading and car parking arrangements which addresses the RTA's Guide to Traffic Generating Development 2002. Also refer to Section 6 of this report for specific response to the DGRs.

SEPP 55 - Remediation of Land

This SEPP requires the consent authority to take into consideration contamination and remediation of land in determining development applications. The authority must be satisfied that land that is contaminated is suitable for the proposed use or will be suitable following remediation of the land. A Phase 1 Preliminary Environmental Assessment has been undertaken by EIS. Refer **Appendix R**.

Comment:

In summary, the Phase 1 Environmental Site 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. A further detailed assessment of site contamination and remediation is provided in **Section 6** of this Environmental Assessment, specifically in response to the DGRs.

State Regional Environmental Plan (Sydney Harbour Catchment) 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.

Comment:

The proposed development is consistent with the planning principles of the Sydney Harbour Catchment Deemed SEPP in that it detains stormwater flowed on the site to avoid impacts on the local and regional water catchments, being close to Homebush Bay. The proposed development will unlikely be visible from Homebush Bay and Parramatta River, given the high rise residential development under construction at the east, which will screen views of the site from the water and foreshore areas.

5.3 Metropolitan planning context

Sydney Metropolitan Strategy: City of Cities

The Sydney Metropolitan Strategy provides a target of 61,000 additional jobs for the West Central area by 2031. Sydney Olympic Park is identified as a “Specialised Centre” in the Strategy. The Strategy identifies Specialised Centres as:

Areas containing major airports, ports, hospitals, universities, research and business activities that perform vital economic and employment roles across the metropolitan area. The way they interact with the rest of the city is complex and growth and change in and around them must be planned very carefully.

The Strategy contains objectives for the metropolitan area. Those which apply to the West Central Subregion are reviewed in the following section of this report.

The proposed development is consistent with the core planning principles of the Sydney Metropolitan Strategy, in that:

- The proposed predominantly commercial offices on an underutilised site within the Australia Centre business park, which will enhance employment opportunities in Western Sydney;
- Strengthen the existing employment base in Sydney Olympic Park and contribute to a lively commercial environment, supported by ancillary retail uses;

- Increases employment opportunities in Sydney Olympic Park to assist in achieving the State Government's target of achieving the employment capacity in the year 2031 for Sydney Olympic Park and Rhodes of 25,000 jobs, which represents an 83% increase from 2001 levels;
- Support the use of existing public transport services and promoted the increased frequency of train and bus services by increasing the number of workers in Sydney Olympic Park;
- Supports the development of the Commercial Town Centre core area of Sydney Olympic Park;
- Provides medium – to –large floor plates for a range of businesses to establish in Sydney Olympic Park with good access to support services and amenities; and
- Floor plate designs that can be easily and efficiently subdivided in the future to allow emerging businesses to be established in Sydney Olympic Park.

The proposed development is consistent with the Department of Planning review of the Sydney Metropolitan Strategy, released in December 2010.

West Central Subregional Strategy

The 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 event 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 without impacting on the centre's primary role as a major sporting and cultural venue."

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.

Comment:

The proposed development supports the objectives of the West Central Subregional Strategy by providing additional employment opportunities in the Auburn Local Government Area of the West Central Subregion, within a recognised strategic employment centre.

5.4 NSW State Plan 2010

Priorities and targets

The NSW State Plan contains the following priorities and targets which are relevant to the proposed development of the site.

- *Increase business investment and support jobs*
Double new business investment from around \$40 billion in 2006 to around \$80 billion a year in 2016.
- *Increase walking and cycling*
Increase the mode share of bicycle trips made in the Greater Sydney region, at a local and district level, to 5% by 2016.
- *Increase the number of jobs closer to home*
Increase the percentage of the population living within 30 minutes by public transport of a city or major centre in Metropolitan Sydney.

Comment

The proposed development promotes the targets of the State Plan in a number of ways. It provides additional commercial uses within the growing employment and mixed use centre of Sydney Olympic Park. In addition to supporting business and jobs in the State it also allows for increasing numbers of employees to use walking and cycling as travel modes if they choose to live close to work in an emerging mixed use town centre.

5.5 Sydney Olympic Park Master Plan 2030

The Sydney Olympic Park Master Plan 2030 was adopted by the NSW Government following the gazettal of the State Significant Site listing under Schedule 3 of the Major Development SEPP.

The Master Plan 2030 is a master plan under Section 18 of the Sydney Olympic Park Authority Act 2001 and amendment number 20 of SEPP (Major Projects) 2005, which are the principal statutory planning instruments regulating land use at Sydney Olympic Park.

The Master Plan 2030 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;

- 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 2030 provides detailed planning controls for each precinct as well as general controls that apply to all precincts. SEPP (Major Development) 2005 requires that the consent authority (in the case of Stage 1 development at 2 Australia Avenue, the Minister for Planning), may only grant consent if it has first considered this Master Plan 2030 and that development is consistent with the Master Plan.

Nine Precincts

The Sydney Olympic Park Master Plan 2030 provides a vision for the sustainable development of Sydney Olympic Park. The Master Plan splits the town centre into nine precincts. The precinct boundaries fall along natural edges created by the main streets, the parklands and surrounding suburbs.

The Master Plan envisages that Sydney Olympic Park provides the opportunity to establish a best practice example of sustainable urban development as well as remaining available for major sporting and entertainment events. The park's sporting and recreational facilities and 425 hectares of parkland ensure its unique place in offering a solution to Sydney's population growth.

The main commercial areas are encompassed in the Central Precinct, which is also the new commercial heart, the Parkview Precinct and the Boundary Creek and Tennis Precinct. These precincts also include associated retail and residential uses. The site is located in the Central Precinct.

Central Precinct

It is envisaged that the Central Precinct will be progressively transformed into a high density mixed use neighbourhood with commercial offices, retail and residential uses. The majority of new commercial and retail development is within the precinct and this will create a hub adjoining the railway station. The commercial buildings will also act as a noise buffer between the venues and the southern parts of the precinct, which will become a compact residential neighbourhood.

A zone of slender towers, 20-30 storeys high, defines Olympic Boulevard. Office buildings fronting Herb Elliot and Dawn Fraser Avenues and the new East West Street will be up to eight storeys high. New residential buildings are up to ten stories high and will be concentrated along Figtree Drive.

Land use controls for the Central Precinct under the Sydney Olympic Park Master Plan 2030 are illustrated in **Figure 32**. The proposed development is consistent with the commercial land use prescribed for the site.

Maximum building height controls are illustrated in **Figure 33**. The proposed development complies with the maximum height limit for the site. Built form controls are illustrated in **Figure 34**. The proposed development generally complies with the built form controls including building setback controls for the site.



Figure 32. Central Precinct Land Use controls

The subject site has a commercial land use in the Master Plan.

Source: Sydney Olympic Park Master Plan 2030



Figure 33. Central Precinct building height controls
 The maximum height under the Master Plan 2030 for the site is 8 storeys.
 Source: Sydney Olympic Park Master Plan 2030



Figure 34. 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

General controls for all precincts

The general controls of the Sydney Olympic Park Master Plan 2030 are considered in Table A of **Appendix U**. Non-compliances are identified and justified.

Precinct-specific controls

The precinct-specific controls for the Central Precinct, that apply to the subject site are considered in Table B of **Appendix U**. Non-compliances are identified and justified.

5.6 Sydney Olympic Park Guidelines

Sydney Olympic Park, Guidelines for Outdoor Advertising, Identification and Promotional Signage

These Guidelines are intended to encourage well designed and well positioned signs, which contribute positively to the vitality and vibrancy of Sydney Olympic Park. They are also designed to protect the characteristics of significant buildings, public spaces, urban elements and landscape elements, important streetscapes and vistas and the amenity of future residents and park users.

The Guidelines relate to **advertising** signage used for the promotion of businesses, products and activities; **identification** signage used for the identification and naming of sites, buildings, building uses and tenants; and **promotional** signage used to provide key and distinctive information to the public of particular events, activities and facilities at Sydney Olympic Park.

The objectives of the Guidelines are to ensure that signage for outdoor advertising, identification and promotion is compatible with and contributes to the desired character of Sydney Olympic Park; provides effective communication and wayfinding in suitable locations; and is of high quality design and finish.

The site is within the Australia Centre Precinct for the purposes of these Guidelines. The specific objectives related to signage within this precinct are:

- To enhance hi-tech, commercial, light industrial and residential uses in the precinct;
- To promote high quality identification signage on commercial and hi-tech buildings or sites in the Australia Centre that have regard for streetscape context and architectural design;
- To minimise the cumulative impact of signage so as not to create visual or physical clutter; and
- To provide for wayfinding and navigation in the streetscape.

Comment

Consent is sought for building identification signs on the north-east, north-west and south-west elevations of the building. The identification signs proposed show the name of the building; "Axis". The signage guidelines illustrate where a commercial building, building identification signage are permitted. The signs are integrated into the fire stairs, which visually articulate the facades.

The signage is consistent with the architectural of the building, if of high design quality and well proportioned to the scale of the building. One sign is proposed per north-west, north-west and south-west elevation in the top 20% of the building, consistent with the SOPA Signage Guidelines will not exceed more than 5% of the building elevations. A second sign is proposed at the main entry at ground floor level and at the fire stair at the north west corner of the building.

Consent for signage designs for tenants will be sought in separate tenancy applications.

Sydney Olympic Park, Access Guidelines 2008

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

These Guidelines apply to:

- Buildings within Sydney Olympic Park, residential and non-residential;
- Parkland, public transport and public domain infrastructure within Sydney Olympic Park; and
- Temporary events (see also the Sydney Olympic Park Authority Access Guidelines, Temporary Overlay for Events).

A number of Australian Standards were used in developing the Guidelines. The Guidelines state that they do not attempt to cover all key areas outlined under the Disability Discrimination Act 1992.

The Guidelines cover access and circulation to buildings and venues; amenities such as toilets, auditorium seating and general seating; communication including signage and lighting; public domain and outdoor access; venue management; and transport.

Comment

An Access Report has been prepared by Morris Goding Accessibility Consulting and it is attached at **Appendix N**.

The development has been reviewed to ensure that ingress and egress, paths of travel, circulation areas and toilets comply with relevant statutory guidelines.

The Access Report states that in general, the development has accessible paths of travel that are continuous throughout. In line with the report's recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The architectural drawings indicate that compliance with statutory requirements, pertaining to site access, common area access, accessible parking and accessible sanitary facilities, can be readily achieved.

The main issues that have arisen from the access review include:

- Ensure that the end of the corridor leading to the accessible toilet is in line with the DDA Premises Standards. A minimum 2070mm (L) x 1540mm (w) is required along all corridor ends (outside the accessible toilet door) to allow wheelchair users to turn 180 degrees.
- Ensure a hinged door with minimum 850mm clear width (920mm door leaf) is installed adjacent to the revolving entry door on the western edge of the building, compliant with AS1428.1- 2009. A revolving door cannot be incorporated into the accessible path of travel.
- Ensure there are at least 8 accessible car parking bays allocated in the basement car parking, in compliance with the Sydney Olympic Park Access Guidelines.

All recommendations from the access review are to be implemented by the Proponent. Refer to the draft Statement of Commitments at **Section 7** of this Environmental Assessment.

Sydney Olympic Park Major Event Impact Assessment Guidelines

These guidelines have been prepared for “understanding & 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 Environmental Assessment and in the Minister's determination of the Project Application.

Comment:

An Events Information Statement will be prepared prior to the issue of a Construction Certificate as set out in the Draft Statement of Commitments in **Section 7** of this report. Some of the above listed information which is required in the Major Event Impact Assessment is already provided within this Environmental Assessment. 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 J**.

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

“Events of varying scales and duration are a regular occurrence in Sydney Olympic Park. On these occasions, road closures will generally have only a minor effect on the proposed development. Specifically, the Sydney Olympic Park Master Plan 2030, identifies Kevin Combs Avenue, Olympic Boulevard and the northern section of Australia Avenue, which would normally be popular routes to access/depart the site, are the main closures

which would affect the proposed development.

Nonetheless and most importantly, the southernmost part of Australia Avenue remains open throughout the year and is most direct route to the development for vehicles travelling from the north, south and east. Vehicles travelling from the west access Sydney Olympic Park from Hill Road and therefore will be affected by road closures. The access off Australia Avenue provides the best arrival and departure route during these events for Stage 1 of the development”.

A Construction Traffic Management Plan is to be prepared with input from the construction contractor and include management measures to control construction related impacts on the operation of major events. Refer to the draft Statement of Commitments at **Section 7**.

Sydney Olympic Park Urban Elements Design Manual

Sydney Olympic Park Authority (SOPA) has developed the Urban Elements Design Manual, which sets out “quality and performance standards for the public domain, with an emphasis on the seamless integration of new urban spaces within the Town Centre with the existing public realm designed to serve major sporting and leisure venues”.

Comment:

A Landscape plans and design report has been prepared and submitted at **Appendix T**. This addresses the public domain elements proposed as part of the development. Also refer to **Section 4** of this report which includes the landscape design principles and approach from Scape.

6 Environmental Assessment

This section of the report provides an Environmental Assessment of the Proposal against the key issues identified in the Director General's Requirements. A copy of the Director General's Requirements (DGRs) is provided at **Appendix C**. The key issue of consultation has been addressed in **Section 1** of this report.

The relevant Environmental Planning Instruments (EPIs), policies and guidelines are addressed in **Section 5** under the regulatory context. The following key issues are addressed in this section.

- Built form and urban design
 - height, bulk and scale
 - design quality
 - integration of services into the design
 - open space, landscaped areas and interface with public domain
 - access standards for travel paths
 - Design excellence competition
- Environmental and residential amenity
 - solar access and overshadowing
 - acoustic privacy
 - visual privacy
 - view loss
 - wind impacts
- Transport and accessibility impacts (construction and operational)
- Rail corridor
- Ecologically Sustainable Development (ESD)
- Drainage
- Utilities
- Staging
- Contributions
- Major events

Other issues identified during the preparation of this Environmental Assessment include:

- Contamination; and
- Geotechnical impacts

These additional issues are addressed following responses to the key issues.

6.1 Built form and urban design

The DGRs require the Environmental Assessment to address the following key issues related to built form and urban design (shown in *italics*):

Height, bulk and scale

- *The height, bulk and scale of the proposed development within the context of the locality.*

The Architectural drawings at **Appendix A** illustrate the proposed Stage 1 development within the context of the overall site redevelopment, showing buildings that are to be subject of a future Stage 2 Project Application. Architectural drawings show buildings on surrounding sites in plan and elevation to illustrate the context of the proposed Stage 1 Project Application, under the Sydney Olympic Park Master Plan 2030 (MP 2030).

Figure 35 illustrates the proposed Stage 1 buildings in plan with the future context of surrounding buildings shown with grey shading. Building footprints and heights are taken from the MP 2030.



Figure 35. Overall site development plan and future context

The proposed Stage 1 Project Application building is shown shaded dark yellow. Future staged buildings on the subject site are shown shaded light yellow. Buildings in the surrounding future context are shown shaded grey.



Figure 36. Overall site development elevations

Elevation showing heights of buildings on the remaining parts of the site, which will be the subject of a separate future project application.

Design quality

- *Design quality with specific consideration of the building facades, massing, setbacks, articulation, colours, materials / finishes; visual impacts including views; and safety by design.*

The proposed development achieves design excellence through consistency with the design excellence provisions of the Sydney Olympic Park Master Plan 2030. The proposed Stage 1 Project Application is consistent with 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 for the proposed commercial office and retail use of the building;
- The form of the building and the articulation of building facades 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 Australia Avenue and Herb Elliott Avenue frontages with retail uses;
- Maintains views through the site to the Town Centre core via Park Street and the undercroft fronting Herb Elliott Avenue; and
- Consistent with the Crime Prevention Through Environmental Design (CPTED) principles.
- Satisfies the recommendations of the Design Competition Jury, as outlined in this Environmental Assessment.

Integration of services into proposed design

- *Details of the integration of services including waste management, loading zones, mechanical plants etc into the proposed design.*

Waste management

Capital Corporation has provided a Waste Management Plan with the Project Application at **Appendix M** of this Environmental Assessment. The proposed development includes a designated on-site waste and recycling storage area. Waste and recycling will be stored in the designated area until such time as it will be collected via the adjoining loading area within the site.

Waste and recycling bins are to be stored in a screened waste enclosure close the loading dock and readily accessible by garbage collectors. The garbage room is located at ground floor level and is to be accessed via a doorway that leads to the loading dock.

Loading zones

The proposal included on-site spaces for parking of service vehicles in the loading area at the ground floor level accessed from Australia Avenue via the proposed internal driveway. The internal driveway is to be demolished with the construction of the new Road 10. Refer to **Figure 37**.



Figure 37. On-site loading area accessed from internal driveway

Mechanical Plant

Mechanical plant is located in the basement levels and on the roof of the proposed building. Roof top plant is concealed when viewed from the streets by screens. The roof top has been designed to create a visually interesting roofscape when viewed from the upper levels of adjacent residential and commercial developments. Refer to **Figure 38**.



Figure 38. 3D perspective view of proposed roofscape
Surrounding context is based on the MP 2030.

Open space, landscaped areas and interface with public domain

- *Details of proposed open space, landscaped areas and interface with public domain.*

Details of the proposed open space areas, landscape design and the interface with public domain areas are shown on the landscape plans for the Stage 1 Project Application and concept design for the ultimate site development at **Appendix T**. A landscape design report prepared by Scape is included with landscape drawings that explains the landscape design approach, species selection for plantings and other proposed landscape treatments.

Refer to **Section 4** of this Environmental Assessment for a description of proposed landscape works for the Stage 1 Project Application and the overall site redevelopment.

Access standards for travel paths

- *Demonstrate that the maximum gradients of the travel paths comply with the relevant access standards (Premises Standard 2010) for travel paths leading into a building.*

The proposed development has been designed in accordance with the Australian Standards AS1428 series, Building Code of Australia (BCA) and the Commonwealth Disability Discrimination Act (DDA). Morris Goding Accessibility Consulting has prepared an Access Report that includes an assessment of the ingress and egress, paths of travel, circulation areas and toilets to ensure that the development complies with the relevant statutory access guidelines. Refer to **Appendix N**.

In summary, the Morris Goding Access Review states that:

“the development has accessible paths of travel that are continuous throughout. In line with the reports recommendations, the proposed development has demonstrated an appropriate degree of accessibility. The Development Application drawings indicate that compliance with statutory requirements, retaining to site access, common area access, accessible parking and accessible sanitary facilities, can be readily achieved”.

Specifically, in relation to paths of travel, the Morris Goding Access Review provides the following commendations, that are to be satisfactorily addressed in the design development phase of the project:

General

- *“Ensure the corridor door opposite the amenities door on the ground floor has an internal latch side clearance of 530mm, compliant with AS1428.1-2009. Currently there does not appear to be any internal latch side clearance”.*

Lifts

- *“Lift car components (grab rail, control buttons, lighting) to comply with AS1735.12”.*

Retail tenancies

- *“Ensure there are accessible entries with a clear width of 850mm into the two retail areas along Australia Avenue and the western edge on the ground level, compliant with AS1428.1-2009”.*

These recommendations will be adopted in the design development prior to the issue of a Construction Certificate. Refer to Draft Statement of Commitments at **Section 7** of this Environmental Assessment.

Design Excellence Competition

- *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 to be developed for the Part 3A Project Application. 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 have 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 horizontal sun shading devices and 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:

A mix of charcoal and white painted concrete is proposed for the external facades, along with modular and baguette terracotta and with matte finish. Louvers are proposed with a charcoal colour and windows and doors are framed with aluminium with a dark bronze anodised finish. The proposed palette of materials are of a high quality consistent with the contemporary architectural expression of the proposed development.

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

Response:

Noted. The proposed design includes a mix of solid and glazed elements. Solid elements are used to define the vehicle circulation in the building consistent with the design competition winning scheme.

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 have been removed in the Stage 1 Project Application. It was considered these elements would be problematic from a building management and maintenance perspective. Alternative façade treatments are proposed which provide greater texture and animation to the building. Refer to comments above.

A green wall has been maintained in the atrium space, which is within a controlled environment and will be maintained by the building managers

The proposed green wall will be constructed from ground to top floor. The concept for the wall is to install a series of planters along the edge of each floor with hanging plants in each planter to provide a green outlook from the centre of the building. A species has been selected which is suitable as a hanging plant in an indoor environment. Permanent irrigation will be provided to each planter using recycled water from on-site tank supply.

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 is proposed with an operative louvre wall to the external façade to allow natural ventilation of the atrium space for natural cooling the interior office spaces. The louvre system will be controlled by the building management system which will restrict rain from entering the building.

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, setback from street level. The design of the proposed arrangement of roof ballast incorporates a circular pattern which provides for a visually interesting roofscape. Refer to **Figure 38**.

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 does not form part of this Stage 1 Project Application. A separate future Stage 2 Project Application will seek approval for the construction of the new roads. An illustrative landscape concept plan for the overall site redevelopment including new roads has been prepared by Scape and is included at **Appendix T**. Refer also to

Figure 31.

6.2 Environmental amenity

The DGRs require the Environmental Assessment to address the following key issues related to environmental amenity:

- *The proposal must address solar access, acoustic privacy, visual privacy, view loss and wind impacts and achieve a high level of environmental amenity.*

A high level of environmental amenity will be provided for future occupants of the building. Solar access and overshadowing, acoustic privacy, view loss, and the pedestrian wind environment are addressed in this section of the report.

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 39** illustrates the proposed shadow impacts of the proposed development on the site and surrounding area at mid winter (21 June) representing the worst overshadowing scenario.

Little sunlight will be available to the central courtyard proposed as part of the Stage 2 redevelopment. This space will be shaded with a large ornamental tree 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 are incorporated into the façade design to control heat gain for optimal thermal comfort.

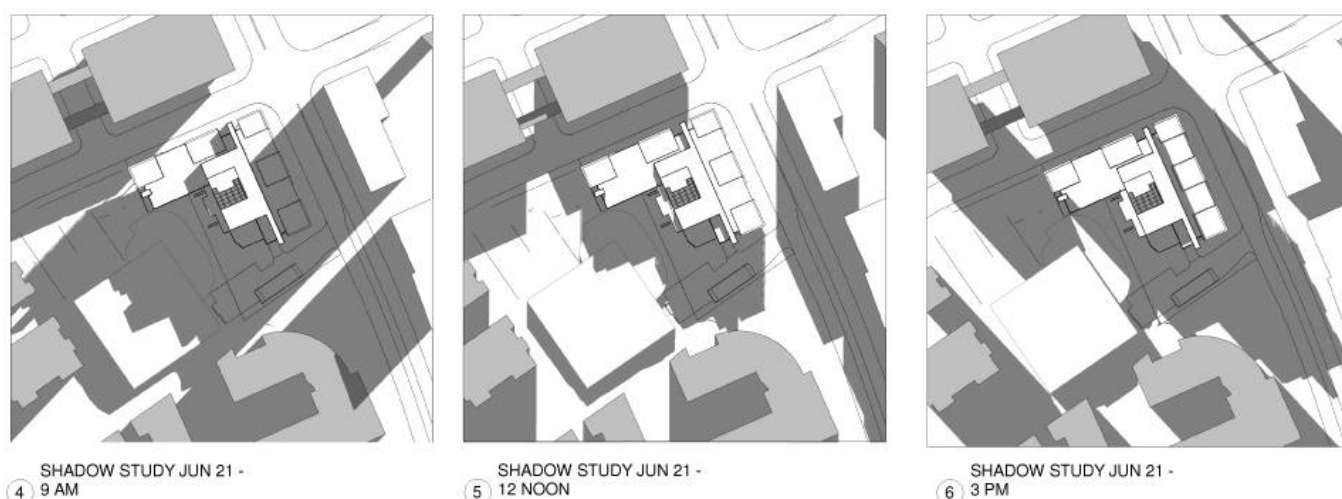


Figure 39. Shadow study at mid winter (June 21)

Acoustic privacy

An acoustic impact assessment has been prepared by Acoustic Logic and is submitted with this Environmental Assessment at **Appendix J**. An assessment of the impact of noise assessed with traffic, the railway and major events is included. In summary, the Acoustic Impact Assessment states that:

“Provided acoustic treatment in Section 4 of this report the internal noise levels shall fully comply with the requirements of AS2107-2000 and NSW Development Near Rail Corridors and Busy Roads – Interim Guidelines”.

The Proponent commits to adopting the recommendations for acoustic treatment to glazing, as outlined in the Acoustic Logic report. Refer to the Draft Statement of Commitments at **Section 7** of this report.

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 a separate and future Stage 2 Project Application. The retention of the existing warehouse and ancillary office building is a temporary situation until it is demolished to make way for the future Stage 2 development.

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.

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. 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 sanctioned and expected through the development's consistency with the maximum development controls for building height and building setback controls.

Wind impacts

An analysis of the wind environment impact has been prepared for the proposed development by Windtech Consultants Pty Ltd. Refer to **Appendix O**. The results of the study suggest that the wind conditions for all trafficable areas within and around the site will be acceptable with the proposed retention of the existing trees along Herb Elliott Avenue, Australia Avenue and the southern edge of the frontage of the site.

The wind environmental impact study also recommends the strategic placement of trees on the south-western aspect of the proposed

development to mitigate potentially adverse southerly winds to the undercroft area. Refer to landscape plans at **Appendix T**.

The wind conditions for the proposed balconies on the northern and eastern aspects of the development will be ideal due to the use of recesses and building setbacks.

6.3 Transport and accessibility impacts

The DGRs require the Environmental Assessment to address the following key issues related to transport and accessibility impacts (construction and operational) (shown in italics):

- *Provide a Transport and Accessibility Impact Assessment, to be prepared in accordance with the RTA's Guide to Traffic Generating Developments and other relevant EPIs. Traffic generation, including an estimate of the total trips, daily and peak traffic movements, service vehicle movements (including vehicle type and arrival times) and any required road / intersection upgrades, access, loading dock(s) are to be considered.*

A Transport and Accessibility Report has been prepared by Traffix and is provided at **Appendix G**.

Trip generation

The trip rate used for assessment purposes has been based on the surveys of the underground car park for Site 8a on Murray Rose Avenue which is considered to be very similar. This survey provided the following results for vehicles entering and exiting the car park:

AM Peak: 0.4 trips/space/hr (peak 7-8am)

PM Peak: 0.2 trips/space/hr (peak 4:15-5:15pm)

These rates have also been validated by additional surveys of Sites 6 and 7 (8 Herb Elliott Avenue) which is directly opposite the site. These developments have 712 spaces (although this included retail and public parking components) but nevertheless yielded lower trip rates than at Site 8a, which was therefore adopted to assess a worst case scenario. It is acknowledged that the master plan for this development will be implemented in stages and subject to additional Project Applications. For the purpose of this Stage 1 Project Development, the opportunity has been taken to assess conditions based on a worst-case scenario with full site development. With a total 532 parking spaces provided in the long term when Stage 1 and 2 are completed, the development will generate trips as follows:

AM Peak 217 trips per hour (174 in, 43 out) during the morning peak (7-8am) and;

PM Peak 109 trips (22 in, 87 out) during the afternoon peak (4:15-5:15pm).

These trips will be associated exclusively with the access driveways onto Herb Elliott Avenue and Australia Avenue (with a left-in and left-out arrangement). It is emphasised that this level of activity is comparable to the previous generation associated with the Site 8A Murray Rose Avenue.

Peak period intersection performances

The external traffic impacts arising from the development have been based on the trip rates discussed above, with 213 veh/hr in the AM peak and 109 veh/hr in the PM peak. These trips have been distributed onto the existing road network on the basis of journey to work data and having regard for the attractiveness of available routes with the following distributions:

- 38% of trips to the west via Hill Road;
- 26% of trips to the north via Australia Avenue and Homebush Bay Drive;
- 20% of trips to the south and 16% of trips east via Australia Avenue, Homebush Bay Drive and the Western Motorway.

It should be noted that assumed travel paths have been identified for vehicles arriving and departing to/from the site. These trips have been distributed on the route assumptions and modelled accordingly.

Table 8. Existing plus development intersection performance

Intersection Description	Period	Control Type	Degree of saturation	Intersection delay	Level of service
Herb Elliott & Australia Ave	AM	Signals	0.472	17.2 (17.0)	B
	PM		0.518 (0.451)	15.9 (15.6)	B
Herb Elliott & Olympic Blvd	AM	Give way	0.064 (0.045)	5.6 (4.5)	A
	PM		0.716 (0.674)	11.8 (11)	B
Australia Ave & Kevin Coombs	AM	Stop (Two-way)	0.281 (0.255)	9.1	B
	PM		0.379 (0.367)	10.1	A
Australia Ave & Sarah Durack	AM	Signals (Actuated)	1.041 (0.976)	54.4 (39.7)	D (C)
	PM		1.185 (1.157)	36.1 (35.2)	C
Hill and M4 Off-Ramp	AM	Give way	1.228 (1.08)	85.5 (37.7)	F
	PM		0.740 (0.730)	8.3 (8.1)	B

It is evident that the traffic impacts from the proposed development have a minimal effect on the road network. The 213 trips generated in the AM peak and the 188 trips in the PM peak are readily accommodated with the exception of the M4 Off-Ramp which is currently operating at a level of Service F and this will continue. The actuated intersection of Australia Avenue and Sarah Durack Avenue reduces slightly to a level of service D in the AM Peak and this is primarily due to the increase in northbound vehicles. Nevertheless it is considered that the intersection will operate satisfactorily and can accommodate the increased traffic demand. The intersection of Australia Avenue with Homebush Bay Drive has not been separately assessed as it has been extensively assessed by others; and improvements are already proposed and have been funded to provide increased capacity.

The Master Plan 2030 also identifies a number of the intersections analysed in this report to be upgraded gradually and as required. They include the following intersections which have been mentioned above:

- new M4 East Facing ramp; and
- intersection upgrades for Sarah Durack/Australia Avenue, Herb Elliott Avenue/Australia Avenue and Kevin Coombs Avenue/Australia Avenue.

Loading dock

The development incorporates a loading facility which is expected to accommodate all demands. The largest design truck is an 8.8m MRV, which is the 'standard' design truck based on AS 2890.1 (see Transport and Accessibility Report at **Appendix G** for swept path analysis).

Car parking

- *Demonstrate a minimalist on-site car parking strategy for the proposal. Consideration should be given to the accessibility of the site to public transport and mode share targets, including parking provision for shared cars, under the Sydney Olympic Park Master Plan 2030, local planning controls, RTA guidelines and Australian Standards relating to turn paths, sight distance requirements, aisle widths etc.*

The Transport and Accessibility Report at **Appendix G** sets out the following information about car parking. The Sydney Olympic Park Authority requires parking for commercial uses to be determined at the rates shown in **Table 9**.

Table 9. SOPA parking rates and provision

Type	GFA	SOPA parking rates	Spaces required	Spaces provided
Stage 1	16,749m ²	1 space per 80m ²	209	225
Stage 2	25,873m ²	1 space per 80m ²	324	295
		Totals	533	520

The SOPA Master Plan 2030 requires a maximum parking of 209 spaces and 225 are proposed. This provision however includes 30 parking spaces which are temporarily relocated from the existing warehouse and will be displaced in subsequent stages of development.

In summary, the provision of 520 parking spaces as proposed will ensure that all demands will be readily accommodated on site, whilst remaining below the maximum number of parking spaces under the SOPA Master Plan 2030. The adoption of the SOPA rates is also premised upon a high reliance on non-car modes of transport so that these objectives are met.

Car share provision

Car share arrangements will form a part of future Project Applications having regard to relevant guidelines when available. The draft Statement of Commitments commits to this in **Section 7** of this report.

In general, a parking system such as "GoGet" is contemplated which has potential application to all non-resident land uses and this will be effective in reducing retail and commercial tenant parking demands.

As a general proposition, one "GoGet" car is able to meet the needs of many users, substantially reducing the need for a 'designated' car and thereby reducing parking demands. Based on the experience of "GoGet", one shared space is equivalent to 5 'normal' spaces. It is therefore recommended that consideration be given to the dedication of one or two car share spaces within the site, subject to discussion with candidate operators.

The implementation of a car share policy is a matter that is included in the draft Statement of Commitments having regard to relevant guidelines in

association with individual applications.

- *Assess the implications of the proposed development for non-car travel modes including the provision of facilities to manage travel demand, increase the use of public and non-car transport modes including pedestrian and bicycle linkages.*

Safe pedestrian crossing opportunities are available on all major desire-lines, most importantly including the pedestrian crossing at the intersection of Herb Elliott Avenue and Australia Avenue which provides access to bus and rail services.

Australia Avenue incorporates a dedicated cycle path along its eastern and western side and connects directly to the development access. Bicycle paths are also found on Sarah Durack Avenue, Kevin Coombs Avenue and Holker Busway. It is clear that Sydney Olympic Park is well facilitated with bicycle paths and these dedicated paths along with the provision of bicycle parking bays and changing facilities will encourage employees to make use of the excellent facilities in the locality. Bicycle storage facilities and changing rooms are indicated on plans DA1001, DA1002 and DA1003 at **Appendix A**.

The site is very accessible to public transport as discussed in **Section 4** of this report.

- *Address the potential for implementing a location specific sustainable travel plan, such as a Workplace Travel Plan (WTP) for workers and/or a Travel Access Guide (TAG) for visitors to the site.*

A Workplace Travel Plan and/or a Travel Access Guide will be prepared in support of the application prior to the issue of an Occupation Certificate. This is an appropriate time for such a document to be prepared with the benefit of input from future building occupants (refer draft Statement of Commitments at **Section 7**). This document will aim to promote alternate travel modes and travel demand measures including car sharing, public transport availability (bus, rail and taxi), cycle and pedestrian routes and linkages, bicycle end-user facilities and motorcycle parking to building occupants.

- *Prepare a Construction Traffic Management Plan (CTMP) to mitigate any potential impacts to accessibility, amenity, safety of pedestrians and cyclists during construction, including access arrangements for emergency vehicles and workers and an estimation of the number of truck movements expected during the construction phase.*

A Construction Traffic Management Plan (CTMP) will be prepared by the Proponent with input from the elected building contractor. Refer to the draft Statement of Commitments at **Section 7** of this report. It is anticipated that all such activity will be focussed on Australia Avenue and the CTMP will need to be prepared in consultation with the appointed builder. It will need to address requirements during each stage (demolition, site preparation, excavation, construction, fit-out and landscaping) and will need to include consideration of times of operation, truck access routes, site access, average truck frequencies, truck sizes, parking for construction workers, work zone requirements, pedestrian control, traffic management plans and any road occupancy applications.

These are matters that cannot be addressed at this time although in principle, there are considered to be no obvious constraints to the preparation of a safe and efficient CTMP.

6.4 Rail corridor

The DGRs require the Environmental Assessment to address the following key issues related to the rail corridor (shown in *italics*):

- *Demonstrate how the proposed development will comply with the Development Near Rail Corridors and Busy Roads – Interim Guidelines.*

An assessment of the potential acoustic and vibration impact of the adjacent railway corridor on the proposed development has been prepared by Acoustic Logic and is submitted with this Environmental Assessment at **Appendix J**.

The noise intrusion into the project will comply with the requirements of the Department of Planning's publication "*Development Near Rail Corridors and Busy Roads – Interim Guidelines*". Compliance will be achieved through the adoption of the recommendations for glazing in **Table 10**.

Table 10. Acoustic recommendations for glazing

Facade	Designated rooms	Recommended glazing	Acoustic seals
North	All	10.38mm Lam	Yes
East	All	10.38mm Lam	Yes
West	All	10mm	Yes
South	All	10mm	Yes

The design of the window mullions, perimeter seals and the installation of the windows/doors in the building openings shall not reduce the STC rating nominated below:

- 10mm: Minimum STC of Installed Window - 33
- 10.38mm Laminated: Minimum STC of Installed Window - 35
- *Address the issues of rail-related noise, vibration and electrolysis risk from stray currents from adjacent rail-corridor operations.*

Rail related noise has been addressed above through compliance with the Department of Planning guidelines for development adjacent railway corridors.

Rail-related vibration has been addressed in the Acoustic Logic report at **Appendix J**. Train vibration measurements indicated trains that induce ground borne vibration fully comply with the requirements of British Standard BS 6472:1992 "Evaluation of Human Exposure to Vibration in Buildings", which is recommended by the Infrastructure SEPP.

Electrolysis and stray currents are not expected to impact the site or proposed development given the 50m distance from the rail corridor.

6.5 Ecologically Sustainable Development (ESD)

The DGRs require the Environmental Assessment to address the following key issues related to Ecologically Sustainable Development:

- *Detail how the proposal will incorporate ESD principles in the design, construction and ongoing operation phases of the development.*

The proposed development has been designed in accordance with the principles of ecologically sustainable development. Ecologically Sustainable Development is defined under Clause 6(2) of the *Protection of the Environment Operations Act 1991* to mean:

- (2) *... ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:*
 - (a) *the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*
In the application of the precautionary principle, public and private decisions should be guided by:
 - (i) *careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*
 - (ii) *an assessment of the risk-weighted consequences of various options,*
 - (b) *inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,*
 - (c) *conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,*
 - (d) *improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:*
 - (i) *polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,*
 - (ii) *the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,*
 - (iii) *environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.*

Comment:

The proposed development will implement the above ESD principles, through the following means:

- This Environmental Assessment of the development has not identified any serious or irreversible ecological impacts or environmental damage;
- No adverse impacts on human health are expected to result from the proposed development. The reverse is more likely in that the proposed development has been designed to accord with modern work place environmentally design principles for healthy work environments;
- No significant pollution will result from the proposed development. Waste materials will be minimised during construction phases, and air pollution including greenhouse gas emissions will be minimised through the implementation of the initiative proposed to achieve a 5 Green Star Rating and 5 Star NABERS rating;

Green Planning Australia (GPA) has reviewed the proposed development to determine the Green Star rating and NABERS rating for the commercial offices. The project is committed to achieve 5 stars Green Star and NABERS. The report by DSA summarises a number of measures that are incorporated into the proposed development to achieve ESD compliance. Refer to **Appendix P**.

The DSA report also includes a Green Star Summary Table to identify the actions taken in the design of the proposed development to bring about 5 star Green Star Rating Compliance.

6.6 Drainage

The DGRs require the Environmental Assessment to address the following key issues related to drainage:

- *The proposal shall address drainage / flooding issues associated with the development / site, including: stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures.*

Stormwater Concept Plans have been prepared for the proposed development by Neil Lowry & Associates Pty Ltd. Refer to **Appendix K**. A stormwater management plan has also been prepared for implementation throughout the construction phase of the development.

The purpose of the stormwater management plan is to design and carry out works in the planned phases to attempt to prevent pollution to water and avoid erosion, contamination and sedimentation. The second purpose is to control the quality of surface water leaving the construction site to minimise unacceptable impact occurs to adjoining wetlands and waterways. Refer to **Appendix K**.

6.7 Utilities

The DGRs require the Environmental Assessment to address the following key issues related to utilities (shown in *italics*):

- *In consultation with relevant agencies, identify the existing capacity and requirements of the development for the provision of utilities including staging of infrastructure works.*

Electrical services

Electricity supply to the Stage 1 development will be from a new Padmont Kiosk Substation to be constructed on the site. An additional kiosk substation will be required for the future Stage 2 development and constructed on a separate part of the site, to be determined during the Stage 2 design process. Applications for the kiosk substations will be submitted to Energy Australia. Negotiations with Energy Australia will be undertaken for the establishment of the substation and associated high voltage network as well as plan for the future Stage 2 development.

Low voltage services will be installed via the underground heavy duty UPVC conduits and suspended cable ladders to the electrical main switch room in the Stage 1 development. Refer to the Electrical Services report at **Appendix W**.

Potable and recycled water

Potable water will be connected to the Sydney Water mains within the surrounding public streets. An application for potable water connections will be made to Sydney Water Corporation following the usual statutory processes. Connection to the Sydney Olympic Park reclaimed water system (WRAMS) will be undertaken to allow for potential use in toilet flushing and landscape watering.

Telecommunications

Arrangements will be made with Telstra to provide network supply to the buildings to cater for future communications needs. All telecommunications infrastructure works will be carried out with the Australian Communications and Media Authority's requirements and regulations. Refer to the Electrical Services report at **Appendix W**.

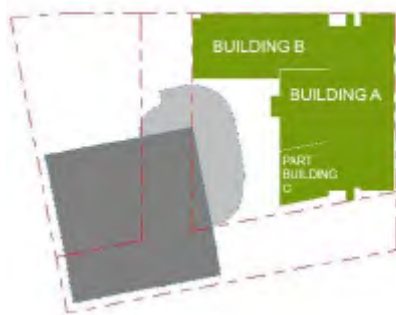


Figure 40. Stage 1 Project Application



Figure 41. Future Stage 2 development

6.8 Staging

The DGRs require the Environmental Assessment to address the following key issues related to staging (shown in *italics*):

- *Details are to be included regarding the staging of the proposed development.*
- *The proposal shall include the detailed design of both the proposed new roads, including the associated public domain.*

This Project Application is stage 1 of a larger master planned commercial office and retail development on the subject site. The following stages are currently contemplated:

- **Stage 1:** Tree removal, demolition works and Construction of Building A and B and part Building C; and
- **Stage 2:** Tree removal, demolition of existing commercial office and warehouse building, construction of the remaining part Building C and Building D and the construction of Road 10 and Road 16.

The proposed Stage 1 Project Application includes the retention of the existing light industrial warehouse and ancillary offices. The construction of the proposed Stage 1 development requires the relocation of some of the existing car parking spaces located in the south-eastern corner of the site to the north-western corner of the site.

The Stage 1 development includes a temporary driveway access from Australia Avenue, which will be replaced with Road 10 in the Stage 2 development. The access to the basement level car parking facilities will be relocated with the construction of Building D as part of the Stage 2 construction.

6.9 Developer contributions

The DGRs require the Environmental Assessment to address the following key issues related to contributions:

- *The proposal shall address the provision of public benefit, service and infrastructure having regard to Council's Section 94 Contributions Plan and the draft Sydney Olympic Park Authority Infrastructure Contribution Framework and/or details of any Voluntary Planning Agreement.*

No Section 94 Contribution Plan applies to Sydney Olympic Park.

Contributions under the Infrastructure Contributions Framework 2030 will be a commercial discussion between Capital Corporation and SOPA and will address all commercial matters relevant to the project.

The proposed new roads, the subject of a separate and future Stage 2 Project Application will be delivered at the time of occupation of the final stages of development. These two new roads are referred to in the Sydney Olympic Park Master Plan as Infrastructure Contributions Framework funded Connecting Streets. Capital Corporation will enter into the Voluntary Planning Agreement that will outline the timing for the dedication of the roads to SOPA.

6.10 Major Events

The DGRs require the Environmental Assessment to address the following key issues related to major events:

- *Demonstrate how the proposed development will be constructed and operated during Major Event periods at Sydney Olympic Park with reference to the Major Event Impact Assessment Guidelines 2007.*

Impacts from major events such as the Royal Easter Show and V8 Supercar races to the proposed development include:

- Event noise impact; and
- Traffic and parking

These issues are discussed below:

Noise and vibration

Noise levels from various events have been used to assess the likely impact of events from building occupants. The glazing recommendations listed in **Table 10** of this Environmental Assessment, provided by Acoustic Logic are to be adopted in the construction of the development.

Traffic and parking

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

“Events of varying scales and duration are a regular occurrence in Sydney Olympic Park. On these occasions, road closures will generally have only a minor effect on the proposed development. Specifically, the Sydney Olympic Park Master Plan 2030, identifies Kevin Combs Avenue, Olympic Boulevard and the northern section of Australia Avenue, which would normally be popular routes to access/depart the site, are the main closures which would affect the proposed development.

Nonetheless and most importantly, the southernmost part of Australia Avenue remains open throughout the year and is most direct route to the development for vehicles travelling from the north, south and east. Vehicles travelling from the west access Sydney Olympic Park from Hill Road and therefore will be affected by road closures. The access off Australia Avenue provides the best arrival and departure route during these events for Stage 1 of the development”.

A Construction Traffic Management Plan is to be prepared with input from the appointed construction contractor and include management measures to control impacts on the operation of major events. Refer to the draft Statement of Commitments at **Section 7**.

6.11 Contamination

A Phase 1 Preliminary Environmental Site Assessment has been carried out by Environmental Investigation Services (EIS) and is submitted with this Environmental Assessment at **Appendix R**. The report 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;
- Historical activities such as use of pesticides.

Soil samples obtained for the preliminary investigation were analysed for potential contaminants of concerns. Elevated levels of contaminants were not encountered in the soil samples analysed for the investigation. All levels of contaminants were below site assessment criteria. The EIS report states that:

“Based on the results, EIS are of the opinion that the potential for significant widespread soil contamination at the site is relatively low”.

In terms of asbestos on site, the EIS report states that:

“Asbestos was not detected above the reporting limit in the soil samples analysed for the investigation”.

Fill materials were encountered by EIS. The fill materials are classified as ‘General Solid Waste (non-putrescible)’ according to the criteria outlined in Waste Classification Guidelines 2009. The report recommends that the material should be disposed of to a suitably licensed NSW DECCW (EPA) landfill.

The EIS report concluded that that site can be made suitable for the proposed development provided the following recommendations are implemented:

- *“During demolition and excavation works, the site should be inspected by experienced environmental personnel to assess any unexpected conditions or subsurface facilities that may be discovered between investigation locations. This should facilitate appropriate adjustment of the works programme and schedule in relation the changed site conditions. EIS deems this investigation necessary due to the unknown location of previous UST associated with the state abattoir. Any unexpected or unusual sub-surface features (including underground storage tanks, coloured or odorous soil) should be reported to EIS immediately”.*
- *A hazardous building materials survey is undertaken of all site buildings and structures prior to demolition”.*
- *All excavated soil is disposed of appropriately”.*

These recommendations are adopted by the Proponent. Refer to the draft Statement of Commitments at **Section 7** of this Environmental Assessment.

6.12 Geotechnical impacts

A geotechnical investigation of the site has been carried out by Geotechnique Pty Ltd and is submitted with this Environmental Assessment at **Appendix Q**. This section of the Environmental Assessment provides a summary of the key findings of the geotechnical assessment. The geotechnical investigation has been carried out to assess sub-surface conditions in the footing of the proposed development in order to provide geotechnical recommendations for the design and construction of the development.

The subsurface conditions of the site are described in detail in the geotechnical report with attached borehole logs. Subsurface conditions on the site are described as follows:

“With the exception of some seepage in BH1 at about 2.6m, groundwater and/or seepage were not encountered up to auger refusal levels. The use of water for coring in bedrock precluded further measurement of groundwater. However, it should be noted that levels of rock seepage might vary due to rainfall, temperature and other factors not evident during drilling”.

An assessment of the acid sulphate soil conditions of the site was undertaken by Geotechnique Pty Ltd and the results are provided in their report. The report states that:

“Based on chloride test results, the soils at the site were generally found to be non-aggressive to steel/iron and concrete. pH (BH3, 5 and 8) and sulphate results indicate the soils at the site to be mild to non-aggressive to concrete”.

Acid-sulphate soils will not likely adversely impact the construction of the proposed development.

In relation to the impact of the construction on the railway line on the proposed development, the Geotechnique Pty Ltd report states that:

“Based on the drawings provided, the northern and eastern basement excavation faces are about 100m away from the railway lines. Considering that ground settlement will be negligible at a distance of about 10m to 15m from the face of the excavation, we do not anticipate any impact of construction of the basements on the railway line”.

The recommendations for excavation, sub-grade preparation and placement of controlled fill retaining structures, footings and pavement design are to be incorporated into the design and construction of the development. These recommendations are adopted by the Proponent. Refer to the draft Statement of Commitments at **Section 7** of this Environmental Assessment.

7 Draft Statement of Commitments

Implementation of the following development commitments are recommended as part of this application.

7.1 Future applications

The Proponent commits to submitting separate future applications:

- Stage 2 Project Application in accordance with proposed site redevelopment staging outlined in the Environmental Assessment; and
- Development Applications for building identification and tenant signage, commercial office fitouts and retail tenancies.

7.2 Rail-related noise mitigation measures

The proponent commits to adopting the glazing recommendations of the Acoustic Impact Assessment report prepared Acoustic Logic and submitted with the Environmental Assessment for mitigating noise intrusion.

7.3 ESD initiatives

The proponent commits to achieving a 5 Star Green Star rating and 5 Star NABERS rating.

7.4 Wind environment impact mitigation measures

The proposed development is to adopt the recommendations of the Wind Environment Study prepared by Windtech with the Environmental Assessment to mitigate wind environment impacts.

Prior to issue of Construction Certificate

7.5 Geotechnical recommendations for construction

The Proponent commits to adopting the recommendations from the Geotechnical Investigation submitted with the Environmental Assessment for the excavation and construction of the proposed development.

7.6 Construction Environmental Management Plan (CEMP)

The proponent commits to prepare a CEMP prior to the issue of a Construction Certificate for the development.

7.7 Construction Traffic Management Plan

The Proponent commits to prepare a Construction Traffic Management Plan prior to the issue of a Construction Certificate.

7.8 BCA Compliance

The proposed development is to satisfy the relevant provisions of the Building Code of Australia.

Prior to the commencement of demolition

7.9 Hazardous building materials survey

The proponent commits to undertaking a hazardous materials building survey of all site buildings prior to demolition commencing.

During demolition and excavation works

7.10 Environmental site investigations

The proponent commits to implement the recommendations of the Phase 1 Preliminary Contamination Assessment prepared by EIS and submitted with the Environmental Assessment in relation to undertaking an site inspection by experienced environmental personnel to assess any unexpected conditions or subsurface facilities.

7.11 Tree management

The Proponent commits the implementing the following recommendations from Urban Tree Management in the Arboricultural Impact Assessment submitted with the Environmental Assessment:

- Trees 1-5, 8-22, 26-28, 93, 102, & 118-123 are to be retained and protected within Tree Preservation Zone/s. These are to be maintained and protection works undertaken as detailed 5.15 – 5.26, Appendices B, E and I and maintained until all building works are completed;
- Where Tree Protection Zone fences are to be modified or relocated this must be undertaken in consultation with the Project Arborist to ensure that tree protection is maintained.
- No cut and fill is to be undertaken within the TPZ of any tree to be retained, unless specified by the Consulting Arborist.
- Excavation for the basement wall adjacent to Tree 93 should be maintained at or near vertical with no batter as detailed in 5.24.
- Obtain owners consent to remove trees 104, 105, 106, 111, 113 & 114; and
- Trees 6, 7, 23-25, 29-92 & 94-101, 103-117 are proposed to be removed and undertaken in accordance with Section 4.0.

7.12 Disposal of excavated soil

The proponent commits to dispose of all excavated soil appropriately in accordance with the recommendations of the Phase 1 Preliminary Site Assessment submitted with the Environmental Assessment.

Prior to issue of Occupation Certificate

7.13 Car share

The proponent commits to undertaking an investigation into the feasibility of operating a car share scheme for occupants of the development. Evidence of these investigations are to be provided to the Principal Certifying Authority prior to the issue of an Occupation Certificate.

7.14 Workplace Travel Plan and /or Travel Access Guide

The proponent commits to preparing a workplace travel plan and or Travel Access Guide, which is deemed appropriate by the Consent Authority for occupants of the development. A copy of the workplace travel plan and or Travel Access Guide investigations is to be provided to the Principal Certifying Authority prior to the issue of an Occupation Certificate.

7.15 Event Information Statement

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.

8 Conclusion

The Stage 1 Project Application is proposed following extensive consultation with SOPA to achieve design excellence on the site, having been prepared following a design competition in accordance with the provisions of the Sydney Olympic Park Master Plan 2030.

The assessment of the proposal has demonstrated that the proposal will result in positive economic, social and environmental benefits and is the result of an exhaustive analysis of the site's opportunities and constraints to achieve the optimal outcomes for future occupants in terms of environmental amenity. It is generally consistent with the provisions of the Major Development SEPP and the Sydney Olympic Park Master Plan 2030, and will make a valuable contribution to the development of the commercial core of Sydney Olympic Park.

ESD principles have guided the design of the development, and furthermore there are no environmental impacts as a result of the proposal in relation to amenity, traffic, contamination or flora and fauna that are unmanageable. The proposed development will not significantly impact on, or be impacted by, major events in the vicinity of the site.

The Stage 1 Project Application facilitates the orderly development of the site in accordance with the staged redevelopment illustrated in the accompanying plans for the overall site redevelopment. Staging of buildings, public domain and support services have been adequately considered.

The built form of the new building is appropriate for its mixed use town centre context both in the future redevelopment stages, and the immediate vicinity.

The site is considered suitable for the proposed development for the following reasons:

- It is zoned for the proposed uses;
- It achieves design excellence consistent with the Design Competition Jury report and their recommendations;
- It will form a key part of the development of the Central Precinct being a prominent location fronting Australia Avenue; and
- It achieves a highly standard of environmental performance in that it will achieve 5 Star Green Star Office design rating and 5 Star NABERS Energy and Water Performance rating in design.

It is therefore respectfully requested that the Minister for Planning approve this Project Application.